



INTERNATIONAL CONFERENCE

Employment, Education
and Entrepreneurship

**EMPLOYMENT, EDUCATION AND
ENTREPRENEURSHIP**

16-18 October 2013 Belgrade Serbia

**EDUCATION AND EMPLOYMENT
OPPORTUNITIES FOR
ENTREPRENEURS**





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EDITOR'S NOTE

The third book of the Second International conference, organized by Faculty of Business Economics and Entrepreneurship from Belgrade, under the title "Education and Employment – opportunities for entrepreneurs", represents the result of the research activities of numerous researchers and scientific workers from Serbia and countries of the world, who gave an enormous contribution to clarifying the number of thematic questions by their participation and presentation of expert and scientific papers, and who enabled the drawing of the conclusions of this conference by their discussions.

The presented papers signify the continuity of affirmation of the scientific thought, in the broader context, by the commitment to multidisciplinary consideration of the current phenomena and paradigms in the sphere of education, entrepreneurship and employment which were the topics of the First conference held in 2012. By defining the appropriate solutions it is our wish to contribute to positive changes. The reason for this is that the necessary changes of reality are faster than the reflexive thought and at the same time they are burdened by the excess of expectations in the life and work conditions as well as in life opportunities of people. Today the question of the purpose of the changes is the question of life quality.

For developed countries the economy represents the conglomerate of two inseparable activities:

1. Development of entrepreneurship, which initiates and intensifies, through the action of the many factors of organizational culture (people, goals, strategies, activities, technologies, traditions, innovation, environment, ownership etc.), rational creating of the future, the way of economic freedoms and
2. Industry of knowledge, which implies all forms of education and scientific research, as the lever of development and the most profitable investment.

Educated people, above all, influence the social environment, the accepted values, attitudes, behavior and through the transformation of values and attitudes and through entrepreneurial initiative and business inventiveness, they have direct implications on socio-economic development and economic performances of the society. They also contribute to preserving the cultural heritage, to increased literacy and to improvement of the communication. Globally considered, the world is in the condition of constant changes, and education and the development of entrepreneurship are the key factors of those changes. In order to set in motion the development of our society towards the learned society and to increase the professional mobility, it is necessary, besides the regular education, to develop the abilities for continuous professional development and learning, as a corrective of regular education and obsolescence of knowledge, and with the same goal, we should develop the innovative mechanism of education which implies the transfer of skills and knowledge, new visions of multidisciplinary and trans disciplinary competence.

There is also no economic development and the getting over the crisis, without entrepreneurial initiative, without the way of economic freedoms and rational and systematic creation of the future based upon the appropriate scientific knowledge, which implies the integration in the modern world trends and an adequate cooperation with all the key members of the international community.

The aim of the organizer of the international conference, the Faculty of Business Economics and Entrepreneurship from Belgrade, is to in an argumentative, competent, critical and permanent way show the essential phenomena which generate the crisis (social, economic, transitional, welfare crisis) that has been representing the basic sign of economic and social ambiance in which we exist for a long time now, as well as to show the possible ways of overcoming the crisis through innovative entrepreneurial and integration processes, so we are grateful to all the authors for their contribution to the realization of the stated aim.

October, 2013.

Belgrade, Serbia

Academician Prof. Slavko O. Karavidić

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INTERNATIONAL CONFERENCE

Employment, Education
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PART ONE

EDUCATIONAL ENTREPRENEURSHIP



HIGH EDUCATION MARKET AND ENTREPRENEURSHIP

Radmila Grozdanic¹

Dragica Jovancevic²

Zorana Djuricic³

Abstract: Entrepreneurship education is critical for developing entrepreneurial skills, attitudes and behaviors that are the basis for economic growth. Access and exposure to entrepreneurship within educational systems at all levels are important as they are the outreach to target audiences outside of traditional educational systems. In both respects, the role that technology can play in delivering entrepreneurship education is essential. With this the objective of this paper is to underline the development of innovative new tools, approaches and delivery methods in entrepreneurship education through consolidating the existing knowledge and good practices. This paper has put the high education approach in its focus to support further growth/opportunity entrepreneurship and social inclusion in high education market valuable for economic prosperity based on innovation and creativity.

Key words: High Education, Entrepreneurship, Human Capital, Market Requirements

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INTRODUCTION

The world is experiencing one of the most extraordinary periods in history. The power equation continues shifting across countries and regions, while rapid changes unfold in the marketplace reshaping both the political landscape and the interactions between governments and businesses. The financial crisis, combined with rising inflation and the consequent slowdown in global demand, has engendered significant insecurity about the outlook of the world economy, and increased anxiety about its potential implications on the accomplishment of the Millennium Development Goals by 2015. However, it is in difficult times when the power of collaboration bears fruit, helping us better understand the challenges we face and encouraging us to unleash our imagination and capitalize on the opportunities ahead.

Entrepreneurship and education are two such extraordinary opportunities that need to be leveraged and interconnected if we are to develop the human capital required for building the societies of the future. Entrepreneurship is the engine fuelling innovation, employment generation and economic growth. Only by creating an environment where entrepreneurship can prosper and where entrepreneurs can try new ideas and empower others can we ensure that many of the world's issues will not go unaddressed. Equally important is the power that education has in developing the skills that generate an entrepreneurial mindset and in preparing future leaders for solving more complex, interlinked and fast-changing problems. Education needs to come back to the top of the priorities of governments and the private sector and be seen as the fundamental mechanism for attaining sustainable economic development and societal progress. More than ever, the world needs effective global leaders and stronger educational systems that prepare the current and future generations of entrepreneurs, workers, teachers, managers and individuals with the skills needed to succeed and help others.

The education is the engine that fuels personal development, and societal and economic progress. The entrepreneurship results in increased innovation and sustained economic growth could have a big impact, as there is enormous potential in investing in entrepreneurship education in order to nurture talent and develop the next wave of leaders and innovators who will not only create jobs and value for society, but also empower others to create a better future. Entrepreneurial skills, attitudes and behaviors also can be learned, so the exposure to entrepreneurship education throughout an individual's lifelong learning path, starting from youth and continuing through adulthood into higher education –as well as reaching out to those economically or socially excluded – is imperative.

This paper addresses entrepreneurship education from this broader perspective. Recognizing these opportunities, the authors of this paper tried to consolidate existing knowledge and good practices in entrepreneurship education around higher education, as one of the three focus areas that cover the: lifelong learning process of an individual: youth, higher education and social inclusion.

THEORIES REVIEW

According to Peter Drucker, most of what we hear about entrepreneurship is all wrong. It's not magic; it's not mysterious; and it has nothing to do with genes. It's a discipline and, like any discipline, it can be learned. Entrepreneurship education provides a mix of experiential learning, skill building and, most importantly, mindset shift through different segments of the educational lifespan or system from youth to higher education to those socially excluded. Certainly, the earlier and more widespread the exposure to entrepreneurship and innovation, the more likely students will become entrepreneurial, in one form or another, at some stage in their lives.

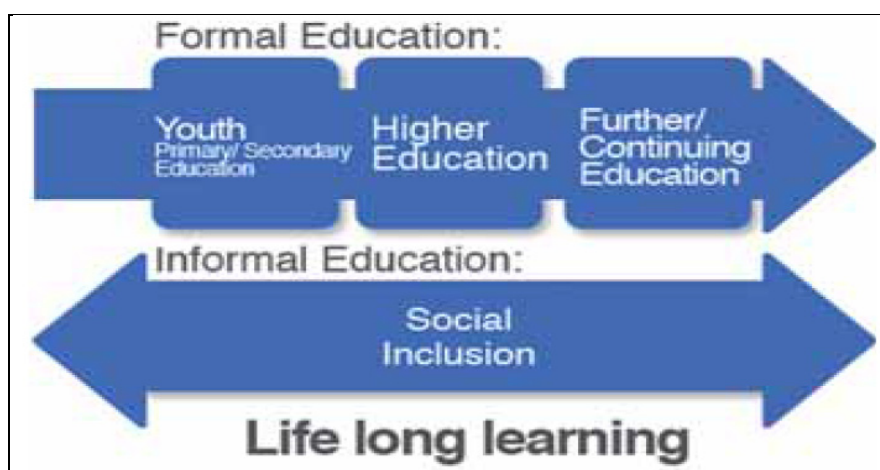


Figure 1: Educational Lifespan

Source: Authors according to Drucker, 2001

DEFINITION

There are many working definitions, but for the purposes of the paper, entrepreneurship is defined as: “The pursuit of opportunity beyond the resources you currently control.” (Stevenson, 1983, 1985 ; Stevenson and Jarillo, 1991).

Entrepreneurship is a process that results in creativity, innovation and growth. Innovative entrepreneurs come in all shapes and forms ; the benefits are not limited to startups, innovative ventures or new jobs. Entrepreneurship refers to an individual's ability to turn ideas into action and is therefore a key competence for all, helping young people to be more creative and self-confident in whatever they undertake (EC, 2008).

There are many other words often used as substitutes for entrepreneurship including enterprise, innovation, small business, growth companies, and so on.

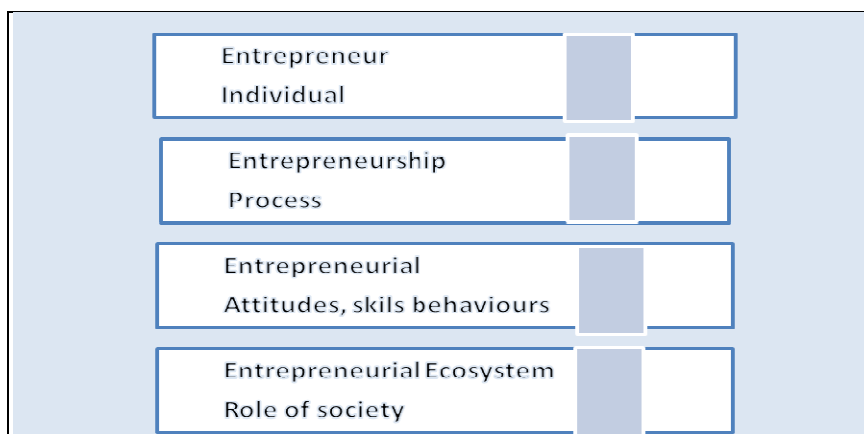


Figure 2: Meanings of the entrepreneurship

Source: Authors according to EC, 2008

ENTREPRENEURSHIP EDUCATION

THE EVOLUTION OF ENTREPRENEURSHIP EDUCATION

Entrepreneurship education started over a century ago, with organizations such as Junior Achievement as pioneers. However, entrepreneurship has only been part of the curriculum in higher education institutions for 50 years. The first graduate course in entrepreneurship was offered at Harvard University in 1947 (Katz, 2003) by Professor Miles Mace. Today, entrepreneurship courses are offered at most universities across the United States and increasingly at universities all over the world (Radovic Markovic et al., 2012).

The demand has been driven by the students themselves, who are eager to take courses ranging from business planning and start-up, to entrepreneurial finance and technology management. This section briefly traces the origins of three sources of entrepreneurship education. These approaches have influenced the pedagogical developments in entrepreneurship education and development:

- The role of management and business education in creating content for managers and leaders.
- Training for self-employment and new ventures in order to cope with large-scale unemployment and underemployment in many countries (Grozdanic, et al., 2012)
- Personal development for creating a more democratic society through leadership development, practical skills and community building.

Each of these three sources of entrepreneurship education, as we understand it today, has led to the creation and development of teaching materials, methods and frameworks for the future.

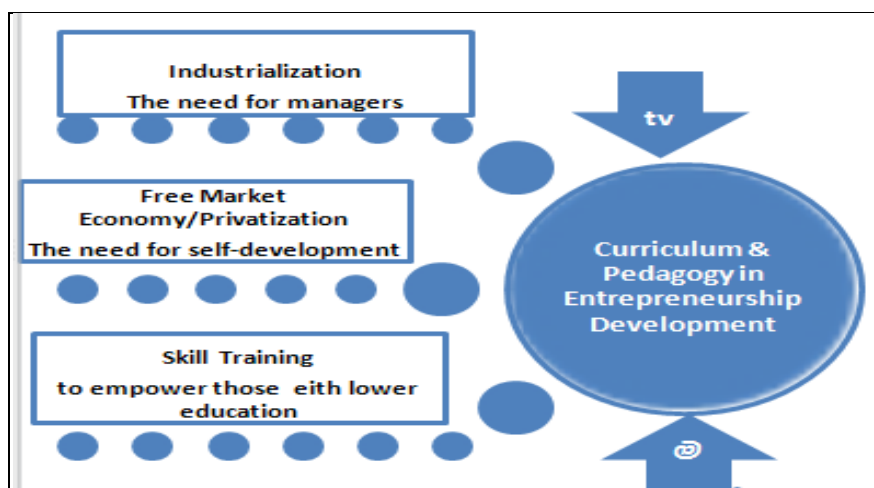


Figure 3: The evolution of Entrepreneurship Education

Source: According to Vyakarnam, Centre for Entrepreneurial Learning University of Cambridge

The convergence of globalization, technological innovations, knowledge-based economies and demographic trends has led to an increased focus on the effects and importance of entrepreneurship. In this context, entrepreneurship is a driving force of economic development, structural change and job creation. It is also a way to address the challenge of poverty reduction. The process of renewal, in which old companies evolve or go out of business and are replaced by more dynamic firms, is important for the vitality of economies (Birch, 2002).

Today, Entrepreneurship thrives in ecosystems in which multiple stakeholders play key roles. Academic institutions are central in shaping young people's attitudes, skills and behaviors.

However, actors outside of the education systems play an increasingly critical role in working with formal and informal educational programmes as well as reaching out to underserved and socially excluded targets groups.

This requires collaboration and multi stakeholder partnerships. First and foremost, entrepreneurship education requires close cooperation between academia and business. Past barriers to academic collaboration with business need to be broken down and outreach both encouraged and supported.

As demonstrated later in the report through the case studies, companies and entrepreneurs play instrumental roles in promoting entrepreneurial education by providing knowledge, expertise, mentoring, social capital and financial support. In

addition, businesses with an entrepreneurial culture contribute directly to the entrepreneurial education process by providing employees with the opportunity to cultivate entrepreneurial skills and aptitudes at work.

Policy-makers at the international, national, regional and local levels all have important roles to play in setting the appropriate legal and fiscal frameworks to encourage entrepreneurship and in filling market gaps as necessary.

Higher education institutions have a critical role as intellectual hubs in entrepreneurial ecosystems by serving as incubators for innovation and research, and focal points for collaboration among researchers, students, professors, companies and entrepreneurs.

Foundations, NGOs and other organizations can play important facilitation or intermediary roles, often helping to link various stakeholders.

Most important are the champions (often serial entrepreneurs but also educators, staff or students) who leverage their social capital and serve as catalysts for building the entrepreneurial ecosystem.

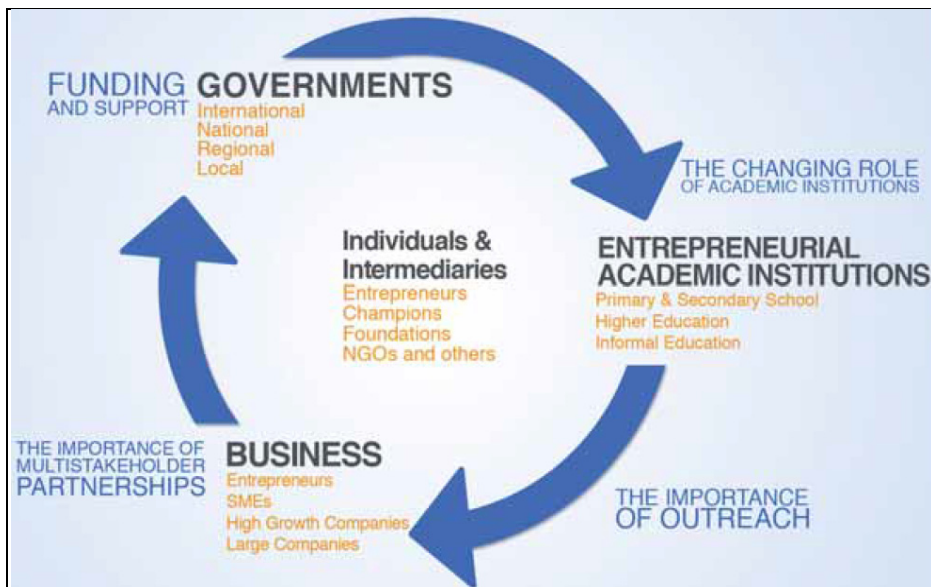


Figure 4: Entrepreneurial Ecosystem

Source: Authors projection according to World Economic Forum

EFFICIENCY AND EFFECTIVENESS

The early years of management education and development focused on more effective and efficient managers – as loyal workers for large corporations. Many business schools and management departments were established alongside well-respected universities, including Wharton, Harvard and Sloan, to name a few. The view held at the start of the 20th century was that large corporations created efficiencies of scale and that they were required to solve the big problems of the time – unemployment and the need for infrastructure.

A different and more atomized view emerged in the mid-1970s from two unlikely sources. The first came in Schumacher's seminal work, "Small is Beautiful." Schumacher, recognizing the very high levels of unemployment and poverty across the world, argued that the focus on large-scale projects and organizations created a huge divide between the haves and the have-nots.

According to Schumacher, individuals matter. With training, education and support, individuals can regain their dignity, work towards self-employment and become active members of the national economy. These views were more in line with earlier philosophers like John Ruskin and Mahatma Gandhi than with Schumacher's early mentor, John Maynard Keynes.

The goals of entrepreneurship education should be based on a broadly defined set of outcomes, not only on narrow measures such as the number of start-ups created. Entrepreneurship education is about developing attitudes, behaviors and capacities at the individual level. Inherently, it is about leadership. It is also about skills and attitudes that can take many forms during an individual's career, creating a range of long-term benefits to society and the economy.

Developing a broader framework for assessing entrepreneurship education is necessary to capture a richer and more nuanced set of outcomes. Measuring intangible outcomes is difficult. However, applying only simple measures of the potentially wrong things can result in falling far short of the intended outcomes and impact. Even worse, anecdotal stories of "best" practices could lead to the replication of programmes that actually are not working, resulting in wasted time and money for little to no impact.

To measure effectively, better data is needed. While there have been many studies and research projects on entrepreneurship, to date, there has not been enough empirical research on entrepreneurship education itself and its impact.

Longitudinal studies are not easy to design and implement, but they could provide better evidence of the impact of entrepreneurship education. Internationally comparable statistics and data collection are imperative as well, as well as new ICT technologies (Jevtic, et al., 2012) Technology in delivering entrepreneurship education is evident, particularly in creating greater access and scalability. The IT and telecommunications industries have entered the fray and created dramatic changes in the landscape of opportunity. The growth of the Internet and use of computers and mobile phones have also made a huge impact, particularly with small businesses and education.

The role of the media is also important for raising awareness and creating role models. Radio and television have grown across the world, especially after satellite television. This parallel development of ICT and media has created new infrastructure and opportunities, and changed the landscape.

The ICT industry has been proactive in working with users, content developers, educational institutions, policy-makers and others to frame opportunities that can be disseminated to those who would benefit most from them. Those in the entrepreneurship education field tend to be early adopters of the latest technology. The full range of implications for enterprise and entrepreneurship education needs to be further developed, particularly in developing economies where scaling is critical.

Entrepreneurship programmes and modules can have various objectives, such as :

- developing entrepreneurial drive among students (raising awareness and motivation) ;
- developing the entrepreneurial ability to identify and exploit opportunities ;
- training students in the skills they need to set up a business and manage its growth (European Commission, 2008).

In all of these contexts, it is important to encourage students to think and act entrepreneurially as well as ethically and socially responsible. Although the field is quite international, most studies to date focus on university entrepreneurship education in the United States and selected European countries (Rothaermel, et al., 2007). Students, as an essential part of the future work force, have to deal with an increasingly complex and uncertain world due to profound economic, social and technical structural change.

Indicators of these changes are shifts to service and knowledge-based economies, the rise of emerging economies as well as societal challenges such as environmental sustainability and aging populations. In addition, the explosive growth of social networks demonstrates that boundaries are less easy to define. This indicates that creating new conditions of work also requires new responses (Vyakarnam, 2005). It is a challenge for higher education institutions to prepare students to work in a dynamic, rapidly changing entrepreneurial and global environment. In this context there is a specific opportunity for high-growth entrepreneurship at higher education institutions.

Universities, especially technical universities, can be seen as engines of scientific invention and technological development. Invention and technological development can be transformed into innovation. Entrepreneurship is important as a diffusion mechanism to transform scientific inventions into new product and service innovations (Radovic-Markovic, et al.,2010) . Universities play a key role in promoting the talents of students, graduates and researchers. What distinguishes institutions of higher education from other institutions in society is their role in creating knowledge and producing high-potential graduates and researchers.

For entrepreneurship education, focusing on institutions of higher education offers the chance to develop knowledge intensive high-growth enterprises from all

academic disciplines, not just technical ones. Higher education institutions should create an environment that fosters entrepreneurial mind-sets, skills and behaviors across their organizations. Universities can teach students how to start and grow enterprises in ways that benefit society (Lindgren,2012).

Technical universities in particular provide potential breeding grounds for high technology and high-growth companies or “gazelles.” Entrepreneurship in higher education has grown significantly over the past 5-10 years, and strong growth is expected to continue.

However, more needs to be done, particularly in the areas of curriculum development, training and development of teachers, funding of entrepreneurship, cross-disciplinary research collaborations and the facilitation of spin-outs from higher education institutions (Twaalfhoven, Wilson, 2004). In addition, universities play a key role as entrepreneurial hubs, connecting researchers, students, entrepreneurs, companies and other stakeholders (Elyas,2012).

SOME EXAMPLES OF GOOD PRACTICE

The selection of examples is geared towards the key issues as: becoming an entrepreneurial university internally as an organization; and liaising with industry and regional businesses externally to facilitate the commercialization process in the market place via networks and university-industry links (that is, endogenous and exogenous elements of entrepreneurial activity at universities (Etzkowitz, 2003).

The following examples of good practice relate not so much to delivering entrepreneurship education in general, but rather to the challenge of nurturing technology-based, high-growth entrepreneurship up to the emergence of entrepreneurial gazelles. Therefore, the focus is to be on comprehensive entrepreneurship programmes.

In the US and UK, there are many high-quality programmes. In the US, for example, Babson College, Harvard University, University of Pennsylvania, and University of Texas at Austin, all have particular areas of excellence such as integration of alumni and entrepreneurs in teaching, funding support of new ventures, or collaboration with regional industry.

However, an essential prerequisite for “breeding” high-growth entrepreneurship appears to be the full-scale integration of all elements to encourage the discovery of high technology venture opportunities and their commercial exploitation in university contexts. The University of Cambridge, UK and Stanford University, US could be examples of established practice, which integrate almost all aspects of the entrepreneurial university’s value chain, ranging from a teaching curriculum for innovative entrepreneurship (in particular in the sciences and engineering) to the formation and support of new businesses in the context of extensive commercialization networks. In addition, we will highlight examples of “change practice” – the process of transforming higher-education institutions to build an integrated foundation for high-technology and growth entrepreneurship.

These examples, though drawn from different economic and cultural contexts, highlight how formerly non-entrepreneurial institutions have developed entrepreneurial elements of knowledge capitalization in their teaching and research output. The examples of change practice are located in Continental and Eastern Europe, Asia, Australia, South America and South Africa. Experiences in many countries, as in Serbia too, illustrate that there is still a considerable challenge in establishing entrepreneurship education throughout the university sector (Schramm, 2006).

DISCUSSION AND CONCLUSIONS

Entrepreneurship and entrepreneurial skills are core components to building socially inclusive and highly participatory economies in an increasingly global and competitive world. While this report highlights and raises awareness of the importance of entrepreneurship education in spurring economic growth and achieving the Millennium Development Goals, it also urges action.

It can be concluded that Entrepreneurship has never been more important than it is today in this time of financial crisis. At the same time, society faces massive global challenges that extend well beyond the economy. Innovation and entrepreneurship provide a way forward for solving the global challenges of the 21st century, building sustainable development, creating jobs, generating renewed economic growth and advancing human welfare.

The paper consolidates existing knowledge and good practices in entrepreneurship education around the world to enable the sharing and development of innovative new tools, approaches and delivery methods. It also provides recommendations to governments, academia and the private sector on the development and delivery of effective education programmes for entrepreneurship.

The entrepreneurial movement is well underway. There is a high and growing level of interest in entrepreneurship from students, faculty, university administrators, employers and policy-makers, as well as an increasing number of initiatives throughout the world. The moment is right for a significant evolution of entrepreneurship education. We cannot determine today the exact nature of the next wave of entrepreneurship, however, we do know that it will require more creative, innovative and entrepreneurial attitudes, skills and behaviors.

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EDUCATION IN THE PROCESS OF CREATING COMPETENCIES FOR THE FUTURE

Marta Ambrozi⁴

Abstract: The lifetime of products and services of organizations are becoming shorter and shorter, so the competitions between organizations in the future transform from their output into their capability to create new products and services. Creativity of any organization depends on its competencies so competition between organizations is going to be between their competencies by which new products and services are created.

New competencies, which are needed in the future, are to be discovered, developed, and applied. In this process, education has to play a vital role. That means, by discovering and developing new competencies for others, education has to developed its own competencies.

Key words: Education, Creating Competencies, Future Organizations

JEL classification: A20, L23

UDC 005.21:339.137; 37

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INTRODUCTION

Contemporary organizations assure their existence by competing with their output (products and services). Creation of any products or services requires certain capabilities, which appear in the form of competencies.

As the life times of products and services are getting shorter and shorter, the competition between organizations turns from their output into their capabilities, by which new products and services are created. In other words, competition transforms from output into competencies of organization.

When new products and services are created, it is very important to know, what kind of functions the new products and services have to provide. Only those functions have prospect for success which create value for society. Now, a vital question arises “what is the value for the society?”

Human society is a living organism and as any organism has problems of existence, development and governance. Solutions of these problems create value for society, and society is ready to compensate these values by its own earlier created values.

This way we have come to the solution that competition between organizations in the future will be in the field of capabilities for solution future problems.

In the process of discovery future problems of society and creation solutions to these problems, new capabilities are required. In the process of identification and provision new capabilities education has a vital role.

BASIC FUNCTIONS OF ORGANIZATION

When we approach to organizations we have to keep in mind, that they are LIVING ORGANISMS, with the numerous properties which living organisms have. All organizations belong to human society, which is also a living organism. When we intend to study organizations, we can't neglect the human society and the complex relations between these living organisms.

All living organisms possess certain properties, functions and structures. When we study behavior of living organisms we start by identifying complex functions of which these behavior consists. These functions are: survival (existence), development and governance (control).

Studying the functions of survival an autocatalytic process is identified in relations between the human society and an organization. This autocatalytic process is presented by two models (Figure 1 and Figure 2).

The model in Figure 1 consist of

- two components: society and organization;
- two properties of society: problems of society and value of society, and
- three relations: needs for problems solution, solution of problems and compensation of value by society.

By this model the next autocatalytic process can be presented: human society as a living organism may have a lot of problems. For existence of society there are permanent needs of great number of resources. Lack of some of these resources may endanger its existence. So, when this happens problems arise, which are needed effective and efficient solution. Organization which is capable to solve the emerged problem (after identifying and solving the problem with results that a society survives) creates value for society. Now society is ready to compensate the created value with its previously created value, which is necessary for organization to renew its consumed resources. After activating and maintaining this autocatalytic process, organization survives.

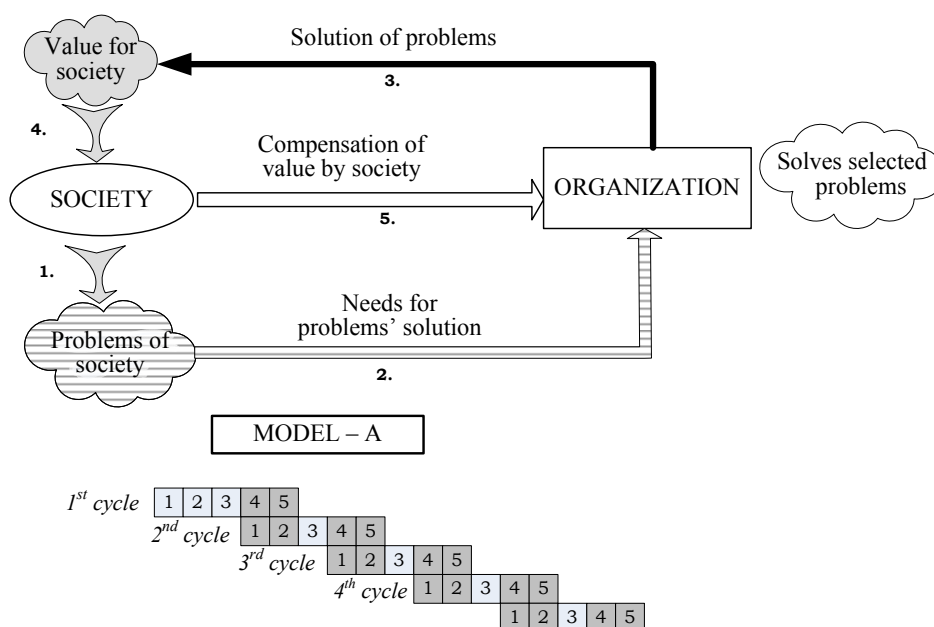


Figure 1: Autocatalytic processes for survival of organization

What essential conclusion may we have after identifying this autocatalytic process?

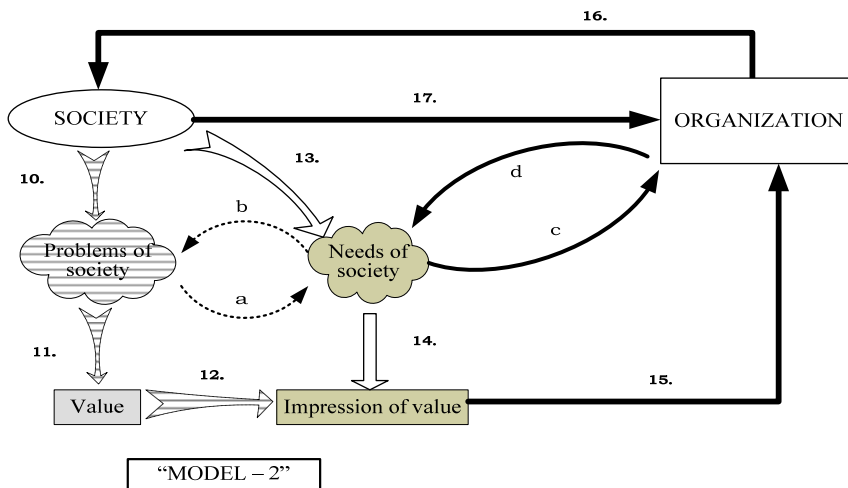
- First: basic function of any organization is PROBLEM SOLUTION.
- Second: autocatalytic processes are important in nature, because they are the foundation of life and they keep organism alive without outside interference.

Contemporary society becomes more and more complex and its problems less obvious. Organizations only try to identify "needs of society", and they are not aware of the problems which generate these needs, so the relations between the society and on organization takes the form which is presented by Figure 2.

This model consists of two components: society and organization; four properties of society: problems of society, needs of society, values of society and impression of value of society and the following relations:

1. mapping the problems of society into the needs of society
2. solving the problems of society by satisfying the needs,
3. identifying the needs of society,
4. meeting the needs of society,

then 10) problems identification, 11) value in solution of the problem, 12) relation between the value and the impression of value, 13) needs identification, 14) impression of value in needs satisfaction 15) expected compensation for achieved impression of value 16) creation of impression of value, 17) compensation of impression of value.



Legend:

- a. mapping the problem of society into the needs of society
- b. solving the problem of society by fulfilling the needs
- c. identifying the needs of society
- d. meeting the needs of society
10. problems identifications
11. value in problem solution
12. relation between the value and impression of value
13. needs identifications
14. impression of value in needs satisfaction
15. expected compensation for achieved impression of value
16. creation of impression of value
17. compensation for impression of value

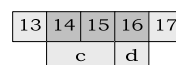
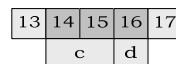
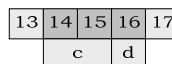


Figure 2: Transformation of autocatalytic process for the survival of organization

Chances for survival in long run have only those organizations which are capable to discover problems of society and formulate needs by which these problems can be solved, after the needs have been satisfied. After having analyzed all the processes, which the model presents, the following questions are arising:

- What is necessary to discover and identify real problems of human society?
- What kind of relations are between problems and needs of society, then how impression of value relates to value of solution.

So far, developed methods and tools, which are applied in identification of needs of society are not appropriate for discovering problems of society. Discovery and identification of the problems of society, as a complex system, requires adequate systems knowledge, information about the observed system and appropriate methods and tools for getting information.

The basic function of any organization is solving a certain problem of a human society. First step in this function is to discover and identify these problems.

PROBLEMS OF SOCIETY

Nature and characteristic of problems may have significant influence to the functions and structures of any organization. If we want to have a comprehensive view of the problem of society, it is necessary to apply complex approaches. One of such approaches comes from the General system theory. In the first step the problems of human society will be classified according its global functions:

- Problems concerning survival (existence) of society,
- Problems of society's development and
- Problems of governing society.

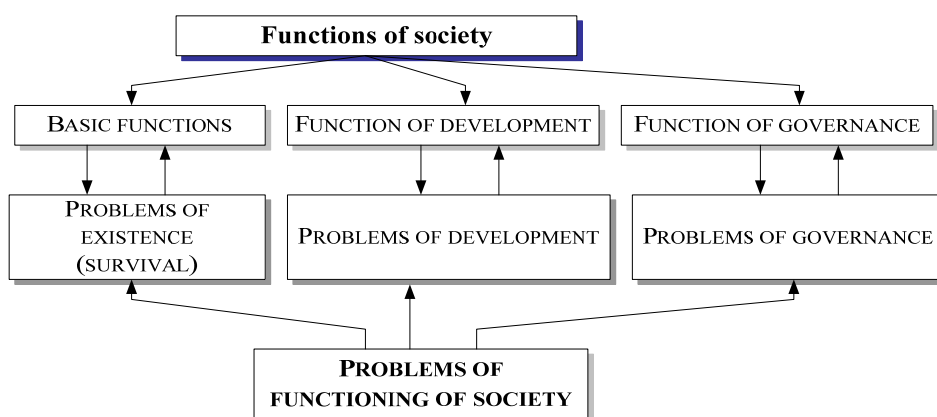


Figure 3: Classification of problems according to the functions of society

Figure 3 presents the relations between global functions of society and problems concerning this function.

Set of society’s problem include discovered (identified) problems and undiscovered (unidentified) problems. Undiscovered problems can endanger in great deal the survival and development of society. Science can have an important role in discovering unidentified problems. There are number of discovered problems which are not formulated precisely or they are unclear. These problems need farther examinations.

In Figure 4 problems are classified according to the responsibilities for their solution. From this prospect we can distinguish three levels of problems.

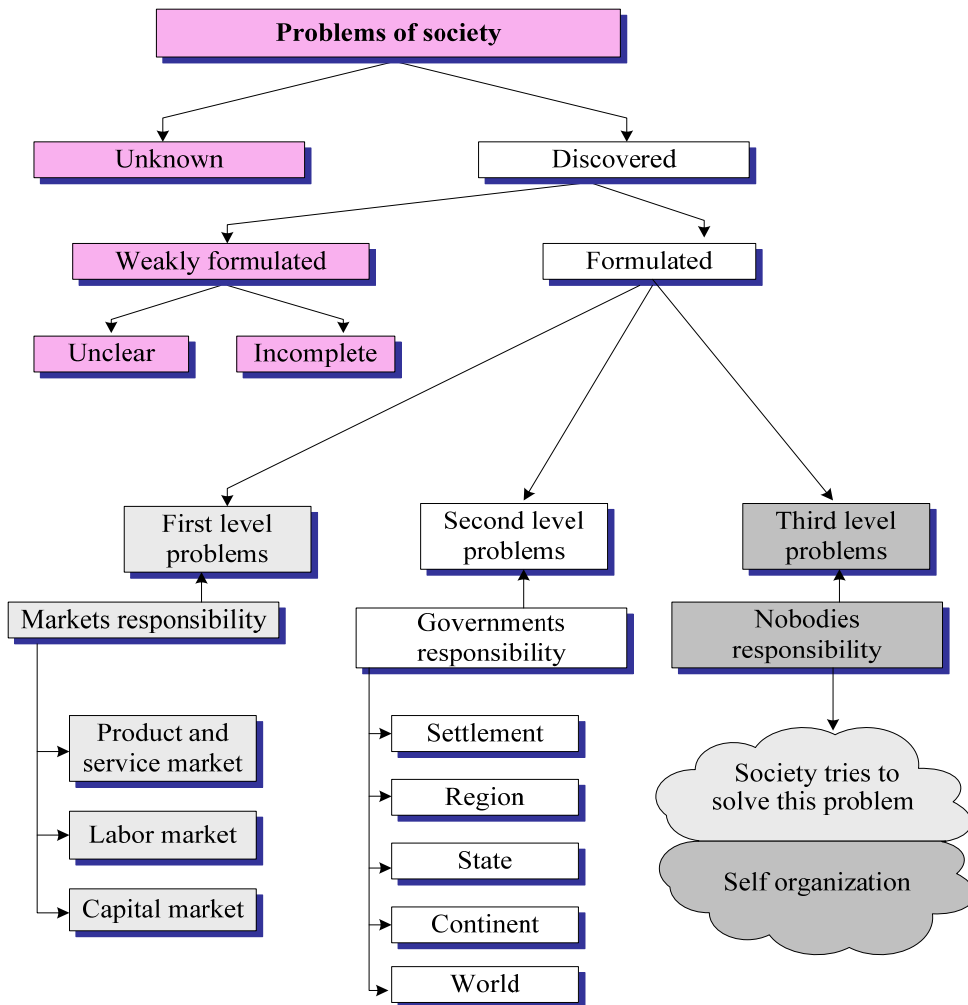


Figure 4: Classification of problems according the responsibility for their solutions

First level problems are those which are expected to be solved by the market. Second level problems are the responsibility of governments. There are a great number of problems for which solutions nobody is responsible. (In some cases some of these problems are being solved by self-organization of society).

ORGANIZATIONS IN THE PROCESS OF PROBLEMS SOLUTION

Whenever there are circumstances to appear an organization, it will be created. As soon as it is created, the organization has to struggle for its existence. By studying autocatalytic processes, we have identified two basic criteria for survival of any organization:

1. *First criteria: k1* – organization by solving certain problems of human society, creates value.
2. *Second criteria: k2* – compensation for created value is greater than the value of spent resources of organization.

As the human society develops, the number of its problem is becoming greater and greater, which generates circumstances for arising a population of organization. In this population every organization has certain dimension in space and time with complex properties. Each organization has its own life cycle in which may have significant transformations. These transformations are consequences of the changes in the human society.

Every organization, as a complex organism is unique. There are no two identical organizations, but they are similar, because they are created on the base of common knowledge and the experiences of the time in which they exist. Similarity of organizations appears in their functions (Φ), structures (σ) and governance (Γ)

To have a general view of the relation between the human society and the population of organization, a *new property is introduced*, the concept of organization (K), which is a qualitative universal property of each organization. This is a vector property, which include the next components: Φ - functions of organization, σ - structures of organization and Γ - government of organization.

$$K=K(\Phi, \sigma, \Gamma)$$

Each of conception of organization, which is in the mind of the employee of organization, has a potential for solving certain problems for human society. Every conception of organization has its own life cycle (incubation, emergence, rapid growth, growth, stagnation, decrease, disappearance)

The Figure 5 presents the way in which a potential of an organization conception behaves in its life time, while solving society's problems. In each period of society's development there is a dominant conception of organization, although at the same time there are disappearing older and emerging new conception of organization.

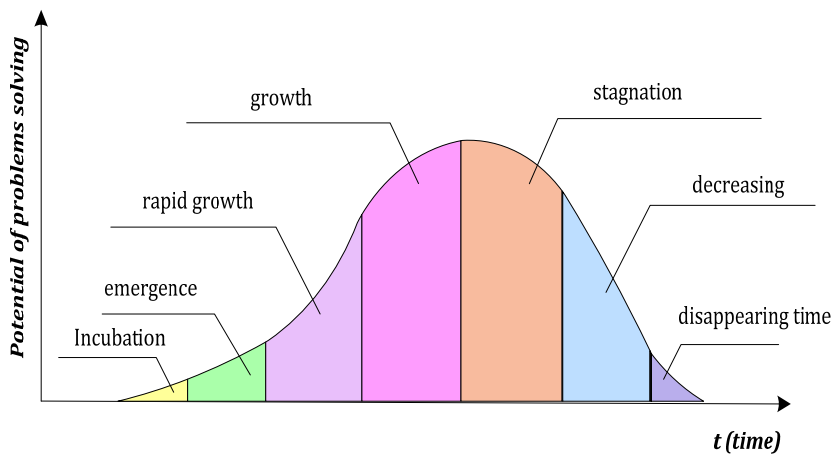


Figure 5: The life cycle of a concept of organization

Human society has its own potentials, energy, knowledge, capability and all kind of resources, which are very important for the development of the whole society. It is necessary to emphasize, that development of the society in great deal depends on new scientific information and new technology creation.

Science is not only interested in creation of new scientific information, but also in measuring the amount of generated information. To get an essential view of the process by which new information is generated, the intensity of information increments are measured by the time which is necessary for duplicating the amount of all earlier created information. First, there was necessary thousand of years, then hundreds, in the beginning of the twentieth century it was several decades, but now there is much less then ten years.

Creation and development of new technologies significantly depends on the application of the new scientific information, but also on the earlier created technology. Behavior of the processes of generation scientific information and new technology shows great similarity.

When these two processes are integrated, they largely determine the potential of society's development.

In the population of organizations, those organizations which more effectively and efficiently use the available potential of society have better choice for survival and development. In a certain period of time dominates the concept of organization which most efficiently and effectively uses the potentials of society's development.

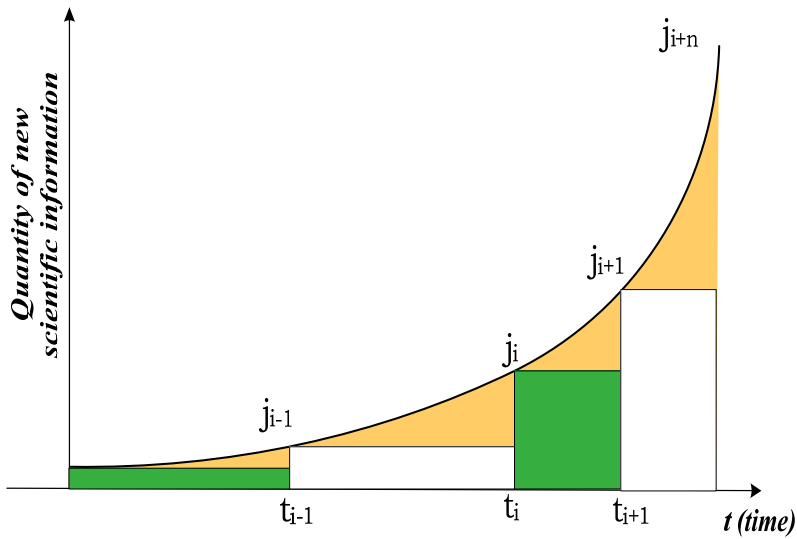


Figure 6: Generation (creation) of new scientific information during the time

Every conception of organization has its own life cycle, in which there is a maximum potential of development, after which there is a decrease. After a while another conception of organization emerges which is going to dominate in the new circumstances. As the potentials of society' development is rising rapidly, the life time of any conception of organization is decreasing. Figure 7 illustrates the behavior of the potentials of society's development and conceptions of organization.

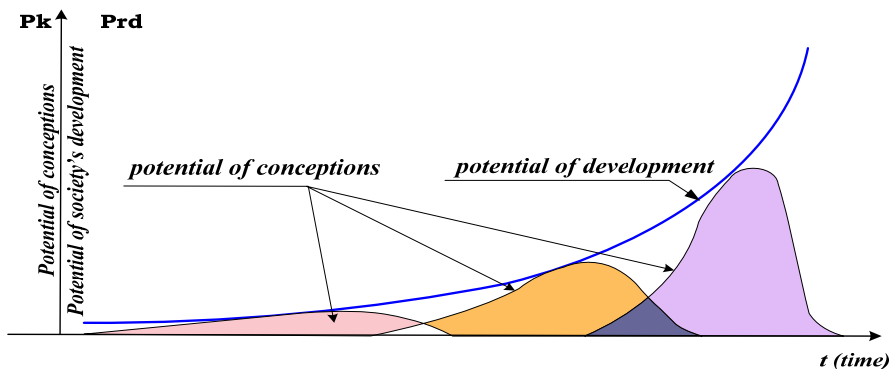


Figure 7: Relations between the potential of society's development and potentials of conceptions of organization

CREATION AND DEVELOPMENT OF COMPETENCIES FOR PERFORMING PROCESSES IN AN ORGANIZATION

An organization in order to survive needs certain capabilities of creation, development and maintenance of any organization. Identification of these capabilities, necessitate detailed study of autocatalytic processes for survival of organization (Figure 1, Figure 2), and also the components of these processes to identify the role of capabilities in performing these components.

PROCESS OF VALUE CREATION

Creation of value requires a complex process, which is illustrated by Figure 8. It consists of ten processes by which several systems are to be created. The process start with observation, study and research of society, as the environment of organization, and ends with an organization which is capable to produce goods and perform services for the society and at the same time is able to create its future.

- The first process (π_1) starts with observation of the environment of organization (the whole society), then slowly concentrates on certain segments of society and performs a general research to identify which part of environment is most convenient for farther activities. At the end of this process the selected part of society is defined.
- In the second process (π_2), application of system research, the behavior and composition of the selected environment is studied to identify malfunctions caused by the behavior of society. The outcomes of this process are the symptoms of malfunctions.
- When the symptoms are identified then a comprehensive research is done by the process (π_3) for identification and correct formulation of problems of the selected part of environment.
- Then starts the process (π_4) by which each identified problem is studied and estimated values V_0 which may be attained by the solution of the problem (in business field this estimation may be the profit potential – the profit which may be achieved if the problem is solved). After having estimated the value (V_0) it is necessary to identify needs (N_d) which may contribute to the solution of problem (or to the creation of value V_0).
- By the fifth process (π_5) is a very delicate thing is to be done. Needs have to be transformed (or translated) into functions (Φ_0) by which needs could be attained. This requires research, discovery, inventions and thinking in functions which is a new way of thinking.
- Actually the sixth process (π_6) constitutes of two subprocesses by which the system one (S_1) and system two (S_2) are to be created. System (S_1) is a

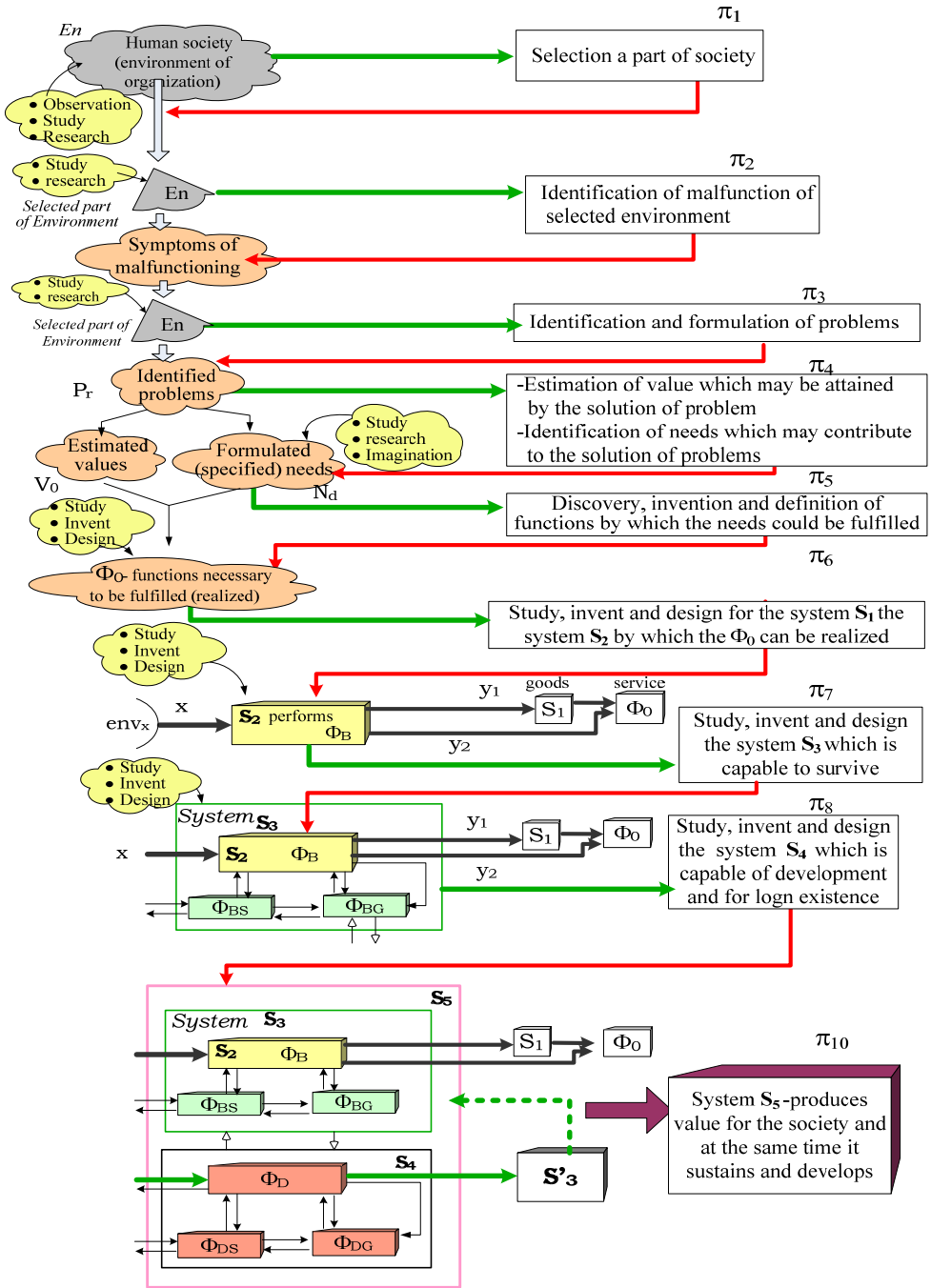


Figure 8: Process of value creation

carrier of function (Φ_0). Needs of environment can be fulfilled by function (Φ_0). When function can be built into a product (S_1), this product is a carrier of function (Φ_0). There are great number of functions which can't be built into a product, then these functions remain services.

After the system (S_1) is created, (which are the products and services by which the needs of environment is attained) then it is necessary to create the system (S_2) which is capable of producing goods (S_1) and giving services (Φ_0). The system (S_2) performs the basic function (Φ_B) of an organization, which directly creates values for the society.

- The seventh process (π_7) creates system three (S_3). System (S_2) performs (Φ_B) basic functions which can't sustain by itself. The continual existence of system (S_2) requires certain service function (Φ_{BS}) and governing function (Φ_{BG}), so when the system (S_2) is created, the process (π_7) starts to create the system (S_3) which integrates system with the carriers of service functions (Φ_{BS}) and governing function (Φ_{BG}).

System (S_3) is able to sustain as long as the needs of the environment of the organization is fulfilled. Now there arises the question "How long this system can be maintained?" Answer to this question might be "The organization is able to survive as long as it creates value to the society. In other words, as long as the offers of organization meets the needs of its environment." As the environment is in rapid change, the life cycle of the system (S_3) is getting shorter and shorter.

- If the organization as a whole is interested to survive longer than the system (S_3) it is required to create the system (S_4) by the process eight (π_8). System (S_4) performs research and development and creates a new system (S_3'). This system (S_4) constitutes of the carriers of function of research and development (Φ_D), service functions (Φ_{DS}) and governing function (Φ_{DG}).
- The system (S_4) by creating the new system (S_3') performs the process (π_9) which contains all the processes from (π_1) to (π_7).
- In the process (π_{10}) the system (S_5) produces value for the society and at the same time sustains and develops.

COMPONENT OF THE PROCESS: ACTIVITY

Processes are dynamic phenomenon which exist only in the time. They consist of activities which can be related to each other in different ways: consequently, parallelly and may be repeated in cycles. Relations between activities can be deterministic and undeterministic. The duration of activities may be either deterministic or stochastic. It means that there is always uncertainty about outcomes and duration of processes.

Activities exist only if they are executed by a system, which is called the carrier of activity. Model of this system is illustrated by Figure 9.

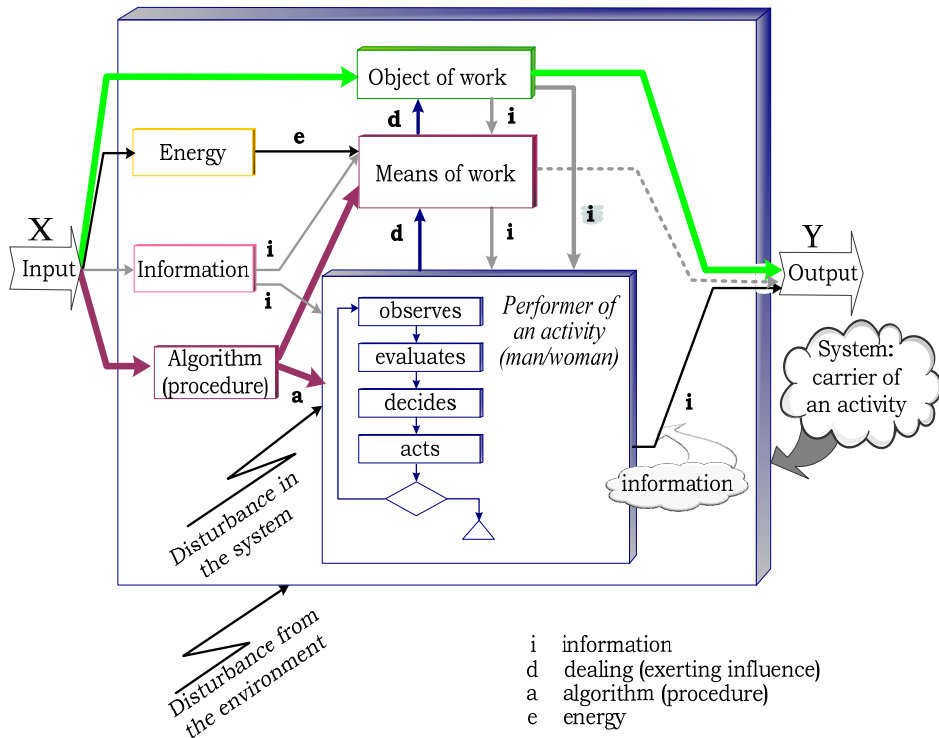


Figure 9: Model of the carrier (performer) of activity

Components of the system are:

- performer of activity (man/woman),
- algorithm (special knowledge by which the activity is executed),
- means of work (all necessities which are needed to perform the activity: instruments, tools, equipments etc.),
- object of work (object of transformation: materials, information, knowledge etc.),
- energy (without energy nothing can be happened),
- information (exists all the time while an activity is performed and have an important role in integration of other components of the system to execute an activity).

In order to carry out all the required transformation in an activity all the operations of the activity have to execute in certain order. The order of operations is defined in an algorithm, which is in the form of instructions. These instructions may be in the mind of the performer of an activity (the human being) or built in the means of work.

Knowledge which is required for execution an activity, in general can be possessed in part by the human being, the performer of an activity, then in part built in the means of work and in part in the written instructions.

In our contemporary world when information technology is widely applied, more and more activities are carried out by the knowledge workers. These people are very well acquainted with the means of work which are capable for doing complex work, and they themselves are able to create the algorithm by which the activity can be carried out.

In these new circumstances there is a need for introduction a new idea, the COMPETENCE of the person who performs an activity.

Execution of an activity required from a human being is:

- knowledge (to know what, how, with whom, where, when ...),
- skill (he can apply his knowledge according to the circumstances),
- capability (he is in good health and can perform the activity),
- willingness (he wishes, wants to carry out the activity).

Nowadays, the human being not only executes an activity but he is capable to conceive and create activities and take delicate decisions. According to the new circumstances, the concept of COMPETENCE is defined by the next vectors:

Competence = (knowledge, skills, creativity, decision taking,

Relations between components of an activity during the time while an activity is carried out are illustrated by figure 10.

Successful performance of an activity depends on the compatibility between PERFORMER of an activity, means of work and algorithm. In the Figure 10 essential properties of these components of activity are presented. For the means of work there are: 1) built in operation, with the variety of operations (v) and number of operations (n), 2) built in intelligence – this is the part of the general procedures (algorithm) of the whole activity.

For the performers of an activity essential properties are:

- competence (k_1, k_2, k_3, k_4, k_5)
 - k_1 – knowledge
 - k_2 – skills
 - k_3 – creativity
 - k_4 – decision making
 - k_5 – execution of decision
- roles in the performance of an activity (f_1, f_2, f_3)
 - f_1 – performance
 - f_2 – governance
 - f_3 – creations
- readiness to perform an activity
 - r_1 – can (able to work)
 - r_2 – will (want to work)

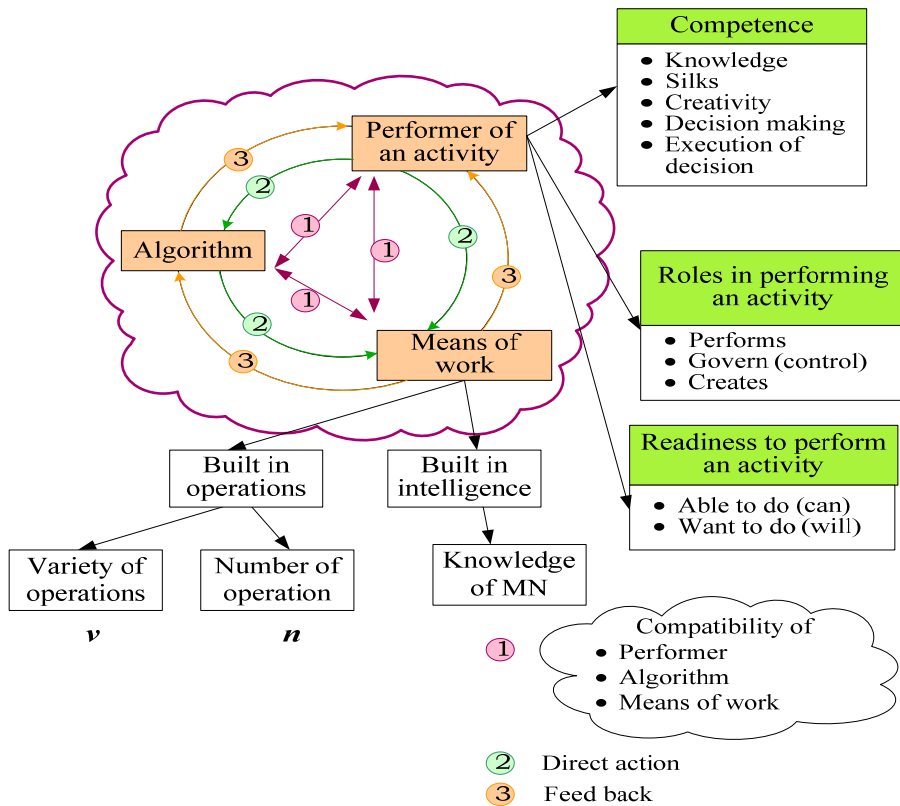


Figure 10: Essential properties of the components of activity and its compatibility

There are great number of roles of a performer in the activity.

The performer:

- p_1 – only executes activity
- p_2 – only governs (control) activity
- p_3 – only creates activity

then:

- p_6 – governs and executes activity
- p_7 – creates and governs activity
- p_8 – creates, governs and executes activity

The content of an activity (the work) exclusively depends on the process to which it belongs and contents of a process exclusively depend on the outcomes which the process is to achieve. It means that the designer (creator) of a process begins his work from identification of goals and objectives then defines the necessary outcomes which contribute to these goals and objectives, after that

designs the process and finally the activities. Only after that he decides about the role of the performer of activities.

In the case of complex processes, all kinds role of performers of activities may appear from p_1 to p_6 , so in complex processes a great number of different COMPETENCIES may be present.

Besides these competencies and roles of the performer's activities (which may be noted as special competencies), there are necessary competencies which integrate activities into a whole process. (These competencies may be noted as comprehensive competencies). All the competencies together make global competency, which is the base for the creation of competitive products and services on the market.

COMPETENCIES FOR PERFORMING PROCESSES AND ACTIVITIES OF AN ORGANIZATION

Competition between organizations is going from products and services to competencies, especially core competencies. A core competence is a synthesis of learning accumulated in individual skills and technologies by which an organization provides outstanding values to society. Competency is a dynamic phenomenon, exists only in acting, performance and making by which value is created to the environment. Core competence is a capability of creation by first rate outstanding knowledge. Every core competence is a critical factor for success of an organization.

We can identify special competencies, comprehensive competencies and global competencies. Core competencies mostly appear as global competencies.

Survival and development of an organization in the future in great deal depends on its core competencies, so the management of an organization has to take special attention for development and maintenance of its own core competencies.

Governing companies requires that management of an organization knows which of his competencies are competitive, obsolete and deficient. In short run the management has to develop the competitive competencies, abandon the obsolete and creates the competencies which are deficient in organization.

In long run the management has to identify the problems of society in the future and make plans for the creation of those competencies which are needed to solve the future problems. Then the management activates the process by which the new core competencies might be created. This is a complex demanding process in which decision makers and experts of all field of specialization have to do their best. In the first part of this process it is crucial to create the "common mental model" about core competencies of the organization. In creation of the "common mental model" it is very useful to present the basic definition in simple forms which are easy to apply. For example, the process which starts with the identification of the problems of society and lasts to the state when the ideas for the solutions for these problems are created may be replaced by the "process for value

creation” which may be interpreted as the process for creating pleasure or satisfaction. On the other hand, the basic product or services as a carrier of the problem solution may be replaced by the carrier of competence. This way we come to the next relation:

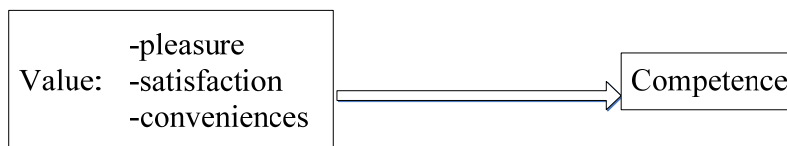


Figure 11: illustrates the replacement of the basic process by the process for identification competencies.

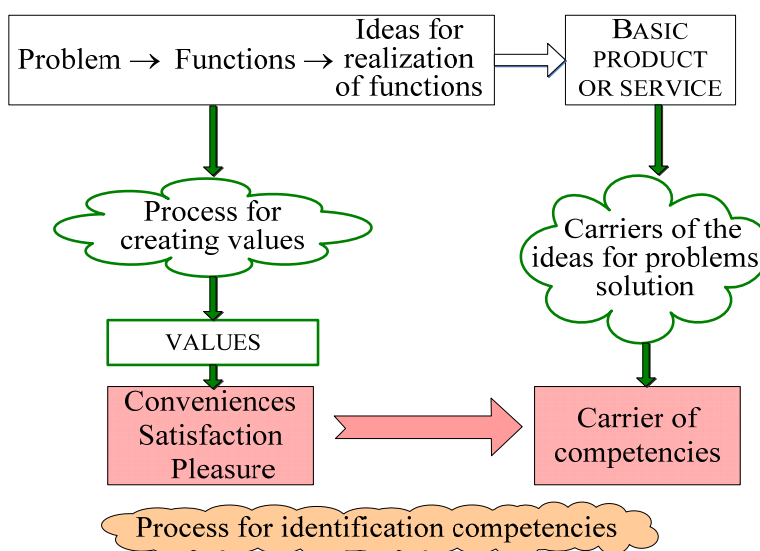


Figure 12: Replacement of basic process by the process for identification competencies

There are certain criteria which must meet a competence to be core competence:

Criteria: k_1 – value for the environment

There are knowledge and skills which provide essential conveniences, satisfaction or pleasure for the environment of the organization

Criteria: k_2 – competitively unique from the view of the environment

Criteria: k_3 – wide and varied application

Influence, power and profit of an organization in the world wide networks of organizations depends on relative importance of that organization's core competencies.

Competencies, as dynamic phenomena have life cycle, they emerge, develop, reach their summit, then slowly decrease until they disappear. Organization in order to survive and develop has to manage its own competencies. The governing cycle of competence management is presented by an algorithm (Figure 13)

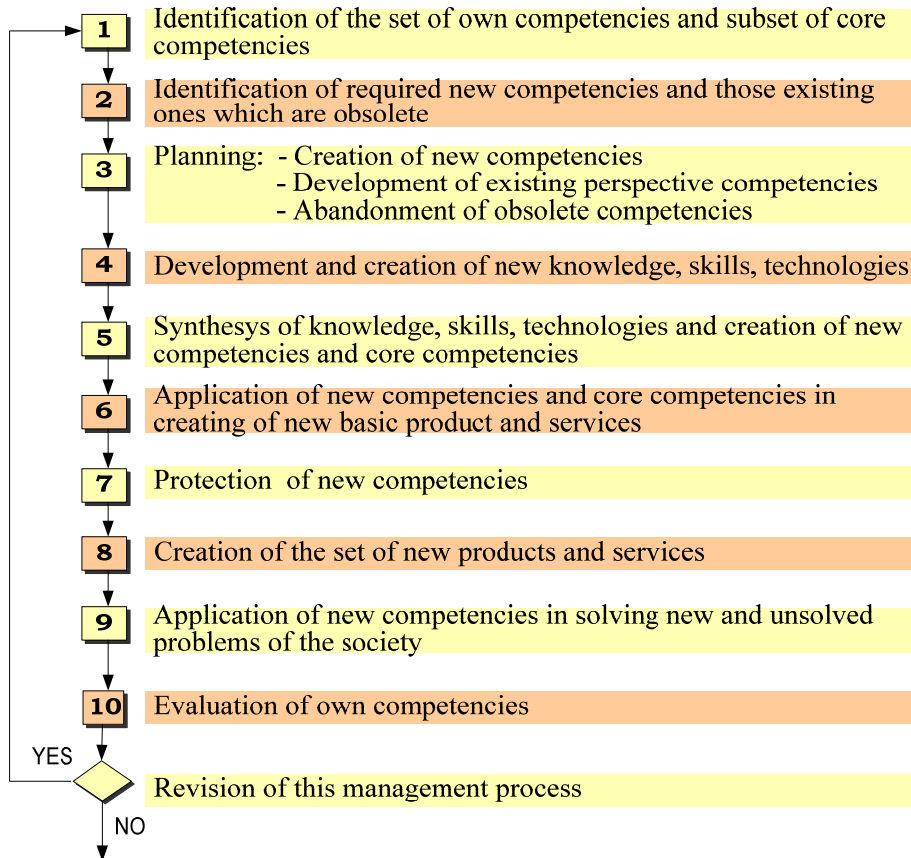


Figure 13: Algorithm of the competence management process

CREATING COMPETENCIES FOR THE SOLUTION OF THE SOCIETY'S FUTURES PROBLEM

Before dealing with the future problems and needed competencies in the future, it is necessary to develop a methodology for identification competencies for the solution of the society's present problems. In the previous parts of this paper, the autocatalytic process for survival is defined (Figure 1 and Figure 2.) and presented in details by the PROCESS OF VALUE CREATION (Figure 8).

By analyzing the process of value creation from the respect of needed competencies, we can identify, four cycles which requires different global competencies.

- In the first cycle which consists of processes ($\pi_1, \pi_2, \dots, \pi_7$) the system S_3 is created. The system S_3 can survive by solving certain problems of society. In this cycle we can identify: *research, creation, design, development and production processes*. Each of these processes requires not only different competencies, but also integrations and governance.
- In the second cycle, the created system S_3 produces goods and provides services. In this cycle there are beside *production and service processes, control and governance processes* as well.
- In the third cycle the system S_4 is created. This system is capable of creating new system S_3 , so it performs processes from π_1 to π_7 , which together creates the *process of development*.
- Finally, in the fourth cycle the two systems S_3 and S_4 is integrated into system S_5 , which requires new competencies in *integration and governance*.

In all these processes several systems appear: S_1 – is a product, S_2 – is a part of an organization, S_3 – is an organization which is able to survive, S_4 – is an organization which can create a new organization, S_5 – is an organization which is able to survive and develop. *These systems have some common properties, structures and behavior*, which are studied by Theory of complexity, General system theory, Cybernetic and so on. These disciplines provide a firm theoretical and practical background *for creation adequate knowledge and skills to create the required competencies*.

Figure 14 illustrates the process of core competencies creation. The process starts with the *identification of the processes* in an organization, then *for each activity* are formulated necessary competencies by which these activities can be correctly carried out. After having formulated these basic special competencies, by performing *analysis and synthesis* the aggregated competencies are created in which, beside the special competencies, the network and governing competencies appear. Similar process of integration can be repeated several times until the GLOBAL COMPETENCIES (C_G) of the organization is created. If this global competency is first rate, then it becomes CORE COMPETENCE (C_C), or the process of competence creation is repeated in part or in a whole.

Of course, an organization when wants to be a carrier of a certain core competence, can start with formulating the core competence which it wishes to achieve. Then identifies the competencies of the highest level of aggregation, studies the necessary relations between these aggregated competencies and identifies the network by which they are linked in a whole. Then this process is repeated with the aggregated competencies until the special or basic competencies are not identified.

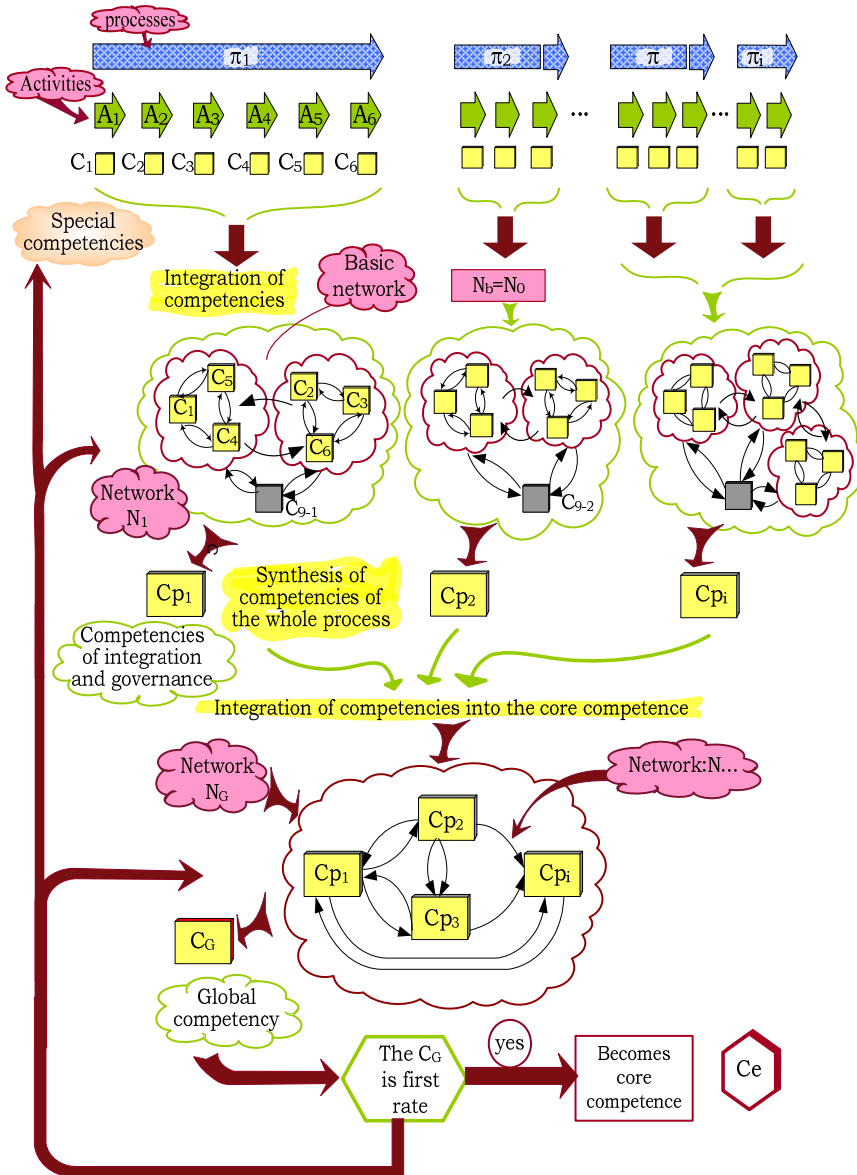


Figure 14: Core competencies creation

This process of core competence creation can be applied not only at present, but also in the future – but we should have insight into the future problems of society and the kind of knowledge and instruments of that time.

We are now able to create such insights in the future problems of society, by applying “foresight” into the future behavior of society and creating “*Comprehensive System Model of Human Society*”. By simulation this model we are able to get an insight, not only into the behavior of society but also into the society’s problems.

Application of “Foresight” and System models requires adequate competencies, instruments, resources and time. But without them at present we are able to get insight into the two processes which have a significant influence on the competencies, especially core competencies in the future. This process illustrates the essence of scientific development. So far the science has taken an analytic approach of development, which must be expressed by “*learn as much as possible of the smallest part of the world*”. This way the science rapidly produces new scientific information and at the same time the knowledge about a whole of the society and world has been lost.

The second process illustrates how the complexities of the problems are changing in respect of the time. At the beginning of this process, the problems can be solved by the available knowledge and information. As the problems are getting more complex, there are only partial solutions, then illusion of solution, and finally, the problems become unsolvable.

Outcome of these two processes are “*the more information we have the smaller number of complex problems we can solve*”.

The crucial question now is: “How to create competencies to solve complex problems: now and in the future?” The quest for the answer of this question generates a few more questions. “Why and when we have lost the ability of problems solutions?” to find the answer to these question we have to go back to the very beginning, when we was able to solve the problems (Figure 15).

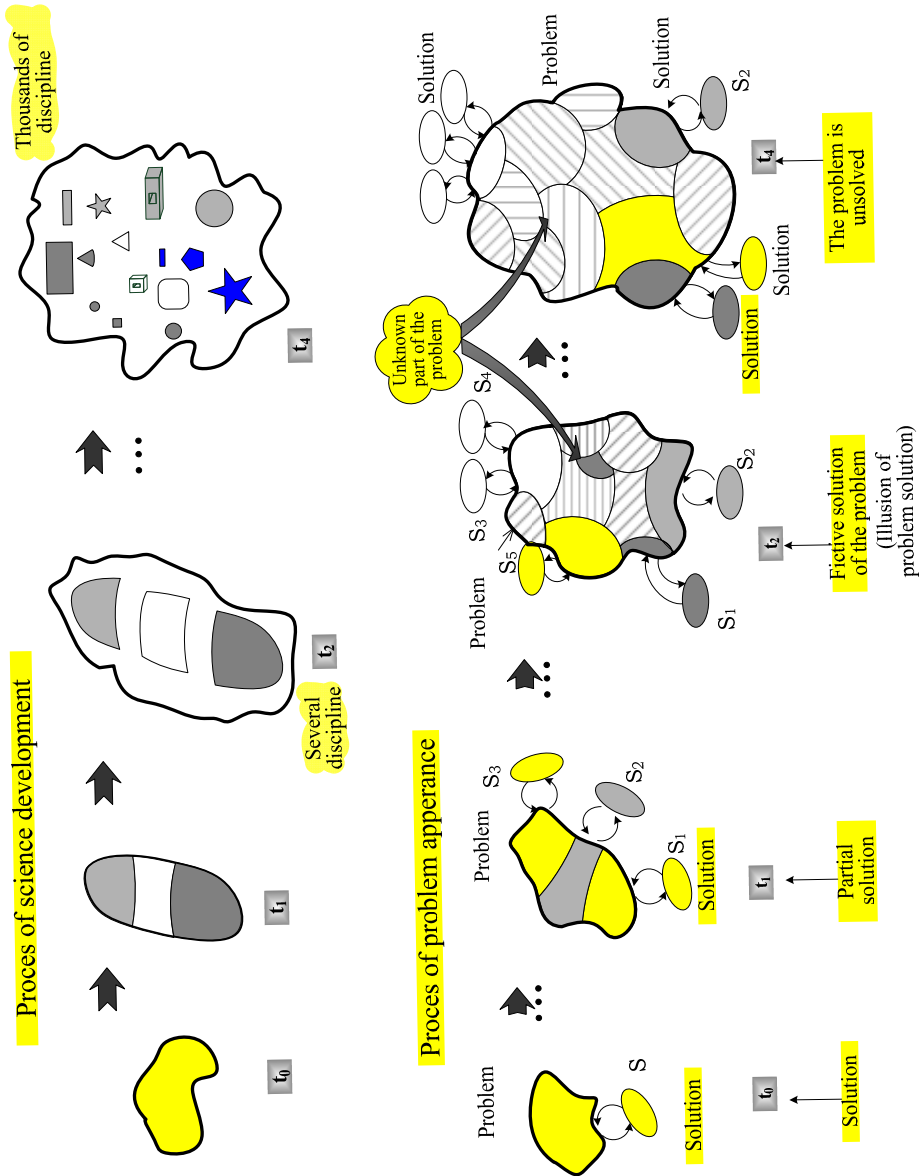


Figure 15: Process of science development and problem appearance

That time we was able to see the whole problems, but after that, at the same time slowly but surely we lost the whole by separating, dividing the whole into its parts, losing the whole and relations (links) between the separated parts. But if we had identified the lost links between the separated parts, we could have integrated the knowledge about these parts and by synthesis we could have integrated this knowledge and created the knowledge of the whole. What we have not done in

past, we have to do it now and we will have to do it in the future, but it requires several things to be done:

- First, we have to develop competencies to integrate our own special competencies with the special competencies of the others. (In other words, we have to be *compatible* with the others)
- Second, we have to develop competencies to *integrate* our competencies into aggregate competencies. This requires dealing with all kind of networks (human networks, physical networks and social networks).
- Third, we have to learn how to communicate effectively and efficiently, which requires common language – language by which *various kind of system* can be *communicated* without distortion. (This means – creation common mental models about systems)
- Fourth, we have to be open to the new scientific and other essential information. We have to develop competencies of effective learning and forgetting, which requires compatibility of evaluation of information.
- Finally, the fifth: we have to develop competencies not only in analysis but also in synthesis.

EDUCATION IN THE PROCESS OF FUTURE COMPETENCIES

We have to keep in mind that education is a service system in the integrated system of human society. It is a vital system because in great deal creates essential resources for the existence and development of human society. As a service system has to satisfy certain needs of society, which has more and more demand of competent knowledge and skills.

New knowledge and skills are generated in all part of the society, as well as in the Education system. The basic function of the education system is to collect, select this knowledge and create the competent knowledge for the society. We can identify three basic processes (Figure 16):

- knowledge creation processes,
- knowledge demanding processes and
- knowledge providing processes.

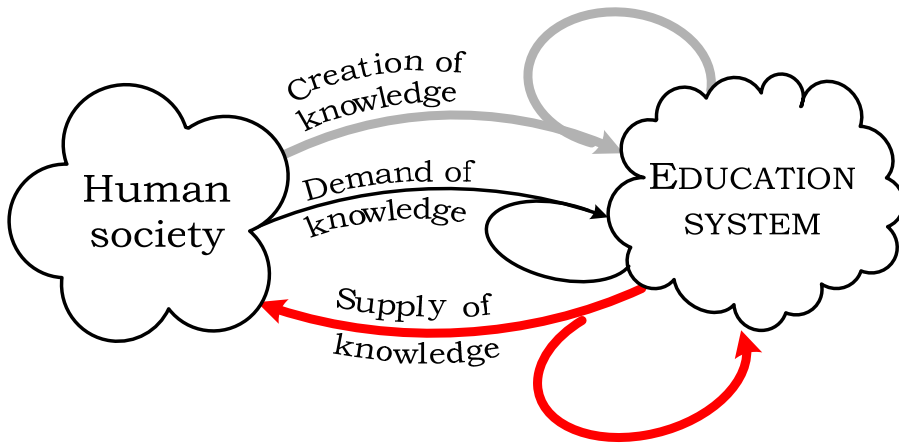


Figure 16: Basic relations between the human society and education system

In a well-organized state, the supply of knowledge satisfy the needs for that knowledge, but there are states where this is not the case. When there is a great discrepancy between the demand and supply of knowledge, the development and very often the existence of the state is endangered (Figure 17).

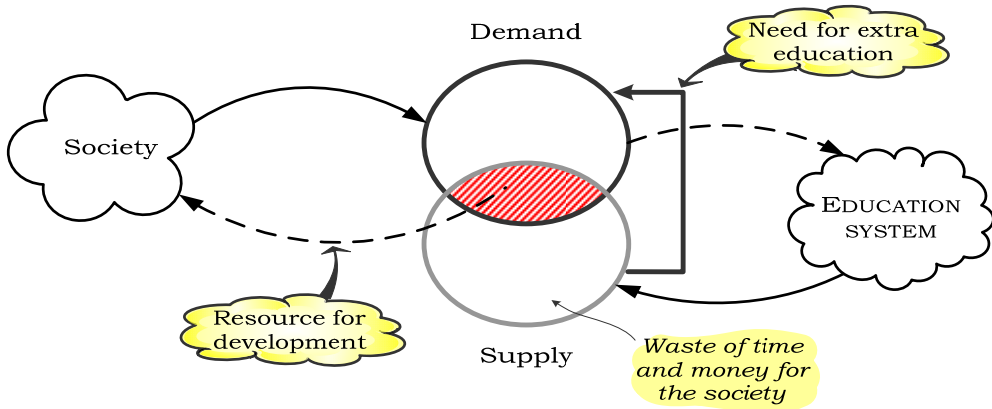


Figure 17: Discrepancy between the demand and supply of knowledge

Knowledge is a dynamic phenomenon, it changes during the time. The rise of knowledge is similar to the rise of scientific information which rises by exponential functions during the time. When we study this process we can come to some very interesting information.

1. During the time of study, so much new information is generated that at the end the learned things becomes obsolete. By the next Figure 16 we can have an insight of this process.

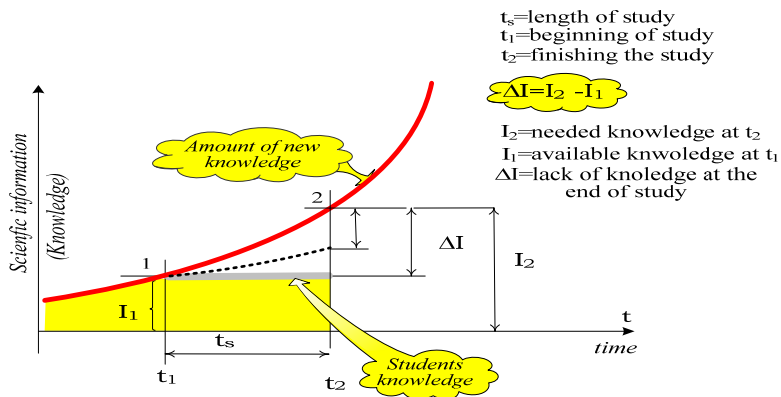


Figure 18: Exponential rises of new knowledge makes the learned knowledge obsolete

2. Unemployment is very common in our modern world. It has a very devastating influence to the unemployed knowledge and competency (Figure 19).

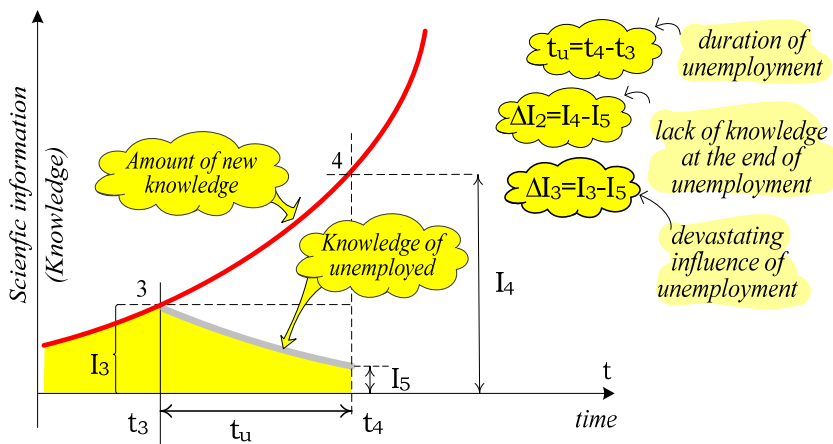


Figure 19: Influence of unemployment to the acquired knowledge

3. Present educational systems are not ready to deal with these new challenges of exponential rise of new scientific information and new knowledge.

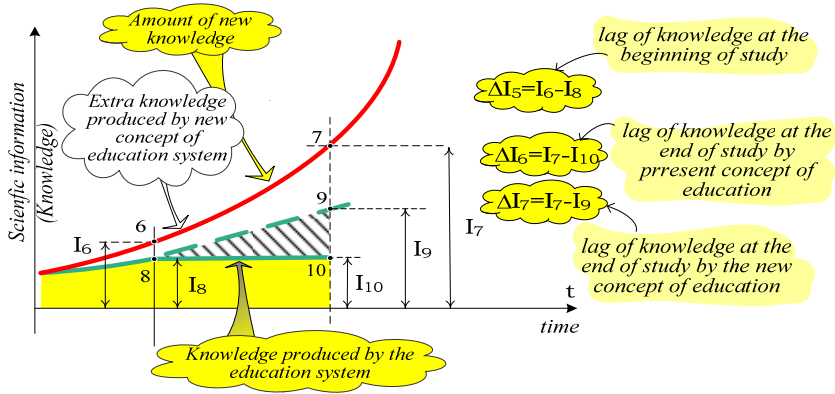


Figure 20: Lag of educational systems behind the rise of new scientific information and new knowledge

CONCLUSION

The number of problems, which the EDUCATIONAL SYSTEM has at the present, needs fundamental changing in the concept of this system, to meet the needs of creating future competency of the human society. The basic concept of education ought to be rethinking (not only reengineering), creating such “mental model” in society, which understood the importance of the wholes by integrating analysis and synthesis from the very beginning in the educational process. Firm background for this provides some disciplines such as Theory of complexity, General system theory, Chaos Theory and so on.

At present we already know that human organizations are co-evolution of three other evolution: genetics, memetics and monetics, then the nature sustains by number of autocatalytic processes (these are self-sustained processes), and all living things exists and develop by autopoietic processes (these are self-creating processes) etc. By the development of IT, networks become very important part of our life, still we forget that all the universe is a complex network.

We may conclude that the challenge is great to create a new concept of education system, but at the present there is enough knowledge and energy to do it so.

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INNOVATIVE MANAGEMENT IN EDUCATION USING COMMUNACATION INSTRUMENTS

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Abstract: In paper titled Innovative management in education using communication instruments is recorded existed communication practice and possible ways of its improvement in the educational system, seen through the prism of global and social changes. New strategies in application communication instruments should contribute easier adaptation of educational system to changes which are result of changed way of business and needs of environment for education. Empirical research which is carried out disproved that educational institutions use some kind of communication, professors recognize importance of changing information, but in the same time don't give significant support to placed it in the public.

Key words: Innovations, Communication, Management, Organizational Changes

JEL classification: I21, I29

UDC 005.342:37

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INTRODUCTION

Generally speaking, world is continuously changing and education is the key factor of those changes. New acknowledgements discover new horizons and require new efforts in the implementation of those changes.

Also, as the needs of a user expand, thus the trends which follow the changes and needs also grow.

Therefore, deep changes in doctrine and the application of management in education are necessary. In order to meet the requests which characterize a modern business it is necessary to use the concept of the active innovative management whose key of success is in the integration and communication, by applying the corresponding communication technology and communication instruments.

Education has a significant role in the creating of society as well as the relations in society and the influence on the socially-economical level of its development.

There are 3 points where they meet: the quality of education effects; the quality of the inner components of the process of education; the orientation of the education towards the development of qualities as the features of a certain level and value – the goal towards which the education is directed.

Jacques Delors, in his explanation of the conclusions of the International education commity for 12th century, underlines: education is not just one of many development instruments, but it is also one of its consisting parts and one of its crucial goals.

The goal is that the education institutions position themselves as reliable, organized and innovative institution which follows contemporary trends of education and in a qualitative manner meets the needs of the user and the society in general.

High level of integration is necessary for realization of that aim- both horizontal and vertical. That imposes huge number of questions. Does the education in Serbia integrate “densely”?

No! This has caused crisis of results, values and morality crisis. Who is the best representative of education- its problems and possibilities? It could be educational institutions, employees or students. Does the government (on state and local level) listen to their problems at work? No! Discrepancies between the system and sub-system of education have caused the disintegration that is manifested problems.

How much time and energy managers in education spend in attending transparency, openness and integrity between employees? It’s a very little time.

Do the parents take an active part in children’s education?

No!

And more other questions without answers.

If the disintegration is the cause of problems, what is the cure?

Integration!

One of the best ways to reach the integration and manage changes is to achieve different aims using effective communication by applying communication instruments - establish, keep and improve relations between participants in education. If we want to realize necessary changes in education, we need to change the way we think about them.

Opinions and attitudes about education, application of communication technics and instruments and implementation new model of communication in education we checked by empirical researches presented in this paper.

To obtain answers it was necessary to conduct an analysis of data and find answers to the following questions:

1. Do the schools plan communication?
2. Who is recognized as a target group by schools in communication?
3. What message is sent by schools to external public?
4. What are the new communication channels?

From the viewpoint of communication, it was very significant to consider the field of Ethos. For the purpose of this analysis targeted was to monitor the field directed both internal and external communication. The area ethos consists of the following sub-fields and data validation:

1. school reputation and promotion
 - reputation and features of schools;
 - expectations and success promotion;
 - culture behaviour.
2. ambience and interpersonal relationships
 - respect of a person;
 - equality and justness;
 - aesthetic and functional organization of school facilities.
3. Partnership with parents, school board and local community
 - communication with parents;
 - implementation of parents in school life and work and school learning;
 - relationship between the school and school board;
 - school role in local community.

METHOLOGICAL FRAMEWORK OF RESEARCH

Research subject: Planning and creating communication in education: do the schools plan their communication; who is recognized as a target groups; do they send messages to „external“ public and what that messages consist of; as well as what is the channels of communication?

Main research objective: Introducing transparency in institutions, and implementation of new types of communications which are based on permanent communication with target public, represent a new approach to communication in educational institutions in Serbia.

Specific research objective: explore attitudes and opinions of employees in education institution about: openness in communication, type and needs in public approachable data and directedness information about school.

Sample of research: Sample size was 117 primary schools (71, 3%) and 47 (28,7%) high schools, and by type of place where is the school located, in research participated 107 urban schools (65%) and 57 rural schools (35%). Sample size was 1269 examinees.

Sample structure: 834 (65, 7%) examinees from primary schools and 435 (34,3%) from high school. From rural area are 438 (34,5%) teachers and from urban schools 831 (65,5%) teachers. According to gender structure 427 (33, 6%) examinees are male and 818 (64,5%) female, while 24 (1,9%) is not endorsed belonging sex.

Age categories: 10% is from 20 to 30 years old, one-third of examinees are from 31 to 40 years old, the second-third are 41-50 years old, and the rest of examinees are over 50 years old.

According to position in school almost 70% examinees are teachers in older classes, about 15% teachers in younger classes and 15% are directors or research associate.

THE ANALYSIS AND THE RESEARCH INTERPRETATION

THE SELECTION OF SUBSECTIONS TO WHICH SCHOOLS PAY MOST ATTENTION

Regarding the monitored indicators ((table 1) schools mentioned two sections each) it appeared that schools pay most attention to the evaluation of the atmosphere and the interpersonal relationships in the organization (33 schools), while the insignificantly less attention was dedicated to the reputation and promotion of the school (26) and partnership (22).

Table 1: Chosing of subsections in valuation

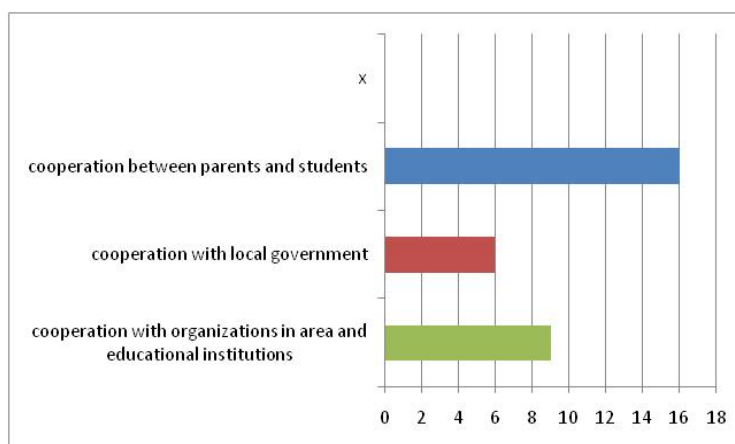
Section	Subsection	Number of choices	%	% of choices
School program and annual work program	School program	16	4,2	12,8
	Annual work program	22	5,8	17,6
Teaching process and learning	Planning and preparing	28	7,4	22,4
	Teaching process	27	7,1	21,6
	Learning	18	4,8	14,4
	Follow the improvement of students	20	5,3	16,0
School achievements	Quality of school achievements	24	6,3	19,2
Support to participants	Care for students	20	5,3	16,0
	Learning support	16	4,2	12,8
	Personal and social development	15	4,0	12,0
	Professional orientation	14	3,7	11,2
Ethos	Reputation and promotion of school	26	6,9	20,8
	Ambience and interpersonal relationships	33	8,7	26,4
	Partnership with parents, SB (school board) and LC (local community)	22	5,8	17,6
Resources	Human resources	21	5,6	16,8
	Materially tehcnical resources	26	6,9	20,8
	Financial resources	16	4,2	12,8
Leadership, organization and quality assurance	Leadership	5	1,3	4,0
	Organization of school work	4	1,1	3,2
	Quality assurance	2	0,5	1,6
	School plan development	3	0,8	2,4
Total number of choices		378	100,0	302,4

PLANNING OF KEY ACTIVITIES FOR THE IMPROVEMENT OF SCHOOL WORK

These relate first of all to the improvement of reputation and promotion of school (38,5%), then partnership with parents, school board and local community (23,1%) and, at the end, ambience and interpersonal relationship (28,2%).

In order to determine strategies to achieve improvement in those fields, we need to determine planning activities for reaching aims in three subsections, related to communication in organization and communication with certain groups in public and public communications (school promotion).

PARTNERSHIP WITH PARENTS, SCHOOL BOARD AND LOCAL COMMUNITY



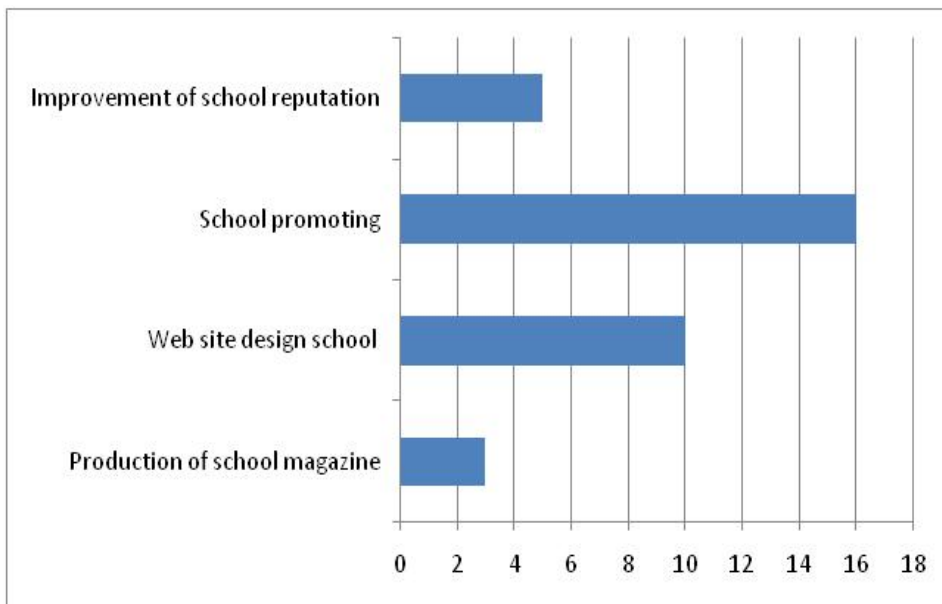
Graph 1: Partnership - high school

On graph 1 we can see that 31 school planned activities with different participants in education, but firstly with parents (16). It is necessary: to increase the level of parents' participation in school; to include parents in work and life of school via various educations; to modernize the parent meetings; to enable more active approach to parents in the realization of extracurricular activities; to involve parents and the members of a local community in the life of school via panels, lectures and organized meetings, to involve parents in the various school activities, to report to parents about various issues, for example, various purchases, to organize the Parents' day for the participation in the teaching, to organize Open door day, as well as the active participation of parents in quizzes and literature evenings.

It is also necessary to intensify the activities which refer to the cooperation of a school with other institutions (cultural and educational) and local municipality, (cooperation with schools in country and abroad, the improving of the cooperation with local municipality).

SCHOOL REPUTATION AND PROMOTION

Graph number 2 shows that 21 schools want to improve school reputation and promotion without specification of any activities, while 13 schools specified specific activities as design of web site (10) and school magazine (3).



Graph 2: Planned activities for improvement school reputation and promotion

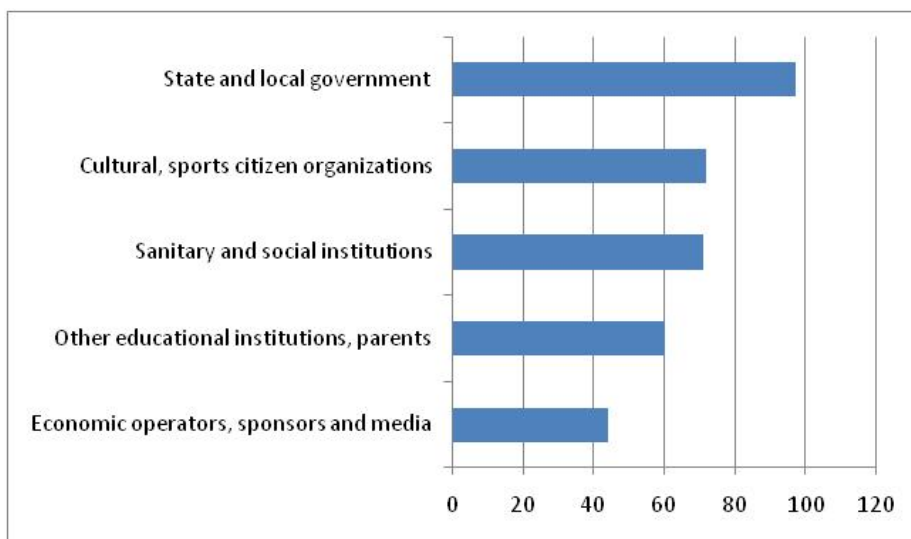
WHO IS RECOGNIZED AS A TARGET GROUP BY SCHOOLS IN COMMUNICATION?

The focus of communication was monitored by the segment of Communication with environment, where schools explicitly state target groups through open question. To this question answered 82, 3% schools. Out of that, 131 (79,9%) stated one or more organizations with which cooperates successfully, while (2,4%) stated only general statement (communication with environment is satisfactory, communication with the environment takes place continuously, communication with the environment is reciprocal, and in a very satisfactory level, the school ruled by good interpersonal relationships and good communication with the environment).

Schools gave responses which could easily be grouped into several categories, which pointed out the type of cooperation and communication which they accomplish (graph 3.). Most of the schools, in total 97 of them (59,1%) stated that they accomplished a good communication with state administration (Ministry of education, including school committee, Ministry of internal affairs and local municipality). Then there are, in the similar percentage, cultural institutions, sport

institutions or communions (43,9%), health and social services (43,3%), other educational services (schools and universities), parents (36,6%), while at least are represented industry, media and sponsors, not more than one quarter (26,8%) out of total number of schools.

The only difference is in the setup of highschools, which give more significance to the communication with the industry than with the other educational institutions, which is probably influenced by the number of trade schools which constitute the majority in the high school model.



Graph 3: High school with environment

WHAT MESSAGE IS SENT BY SCHOOLS TO EXTERNAL PUBLIC?

Out of 164 schools, 30 schools (18,3%) have no response. The remaining 134 (81,7%) schools sent message to the public.

Their messages were sent via two dimensions of message formation: structure (general / directed) and message contents.

From the point of view of message structure, 91 schools (55,5%) sent a general message, while 43 schools (26,2%) had structurally specific messages (table 2)

General messages in some cases represent a motto, vision and message which school sends to whole community.

Only one quarter of schools (table 3) had targeted communication, by sending their messages specifically towards certain groups, first of all parents and students (17,1%) and decision makers (9,1%).

Table 2: The message structure

<i>message structure</i>	frequency	%
Without message	30	18,3
General public	91	55,5
Target public	43	26,2
Total	164	100,0

Table 3: Directedness of messages

Directedness of messages	Frequency	%
Without message	30	18,3
To whole public	91	55,5
To the parents and students	28	17,1
To decisions makers	15	9,1
Total	164	100,0

Messages related to decisions makers are primary an appeal to everyone who can obtain resources for school improvement and development. From the viewpoint of message content almost half from whole number of school sent message with rational appeal (56,7%), while one-fifth had message with emotional (12,8%) and one-fifth with moral appeal, and the rest were without message.

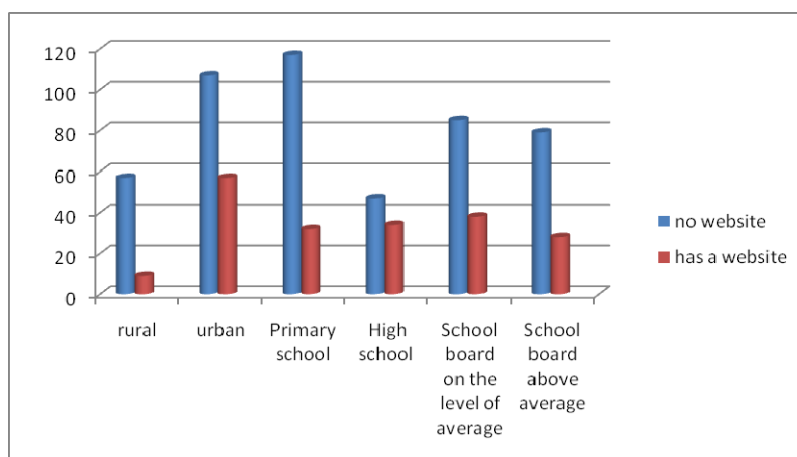
After analyzing the messages to the public, it can be said that the observed through independent variables there are small differences that are not statistically significant, so we can say that no matter what type or size of the institution or place from which they come, schools prefer appeal to the general public and send them messages with rational appeal.

NEW COMMUNICATION CHANNELS

Does the school have a website and email?

Out of 164 schools which participated in the research, they all have e-mails, but somewhat less than half of them, that is 66 schools, have their own websites (40,2%).

Analyzing the structure of those who have website related to place where school is located and level and type of educational institution, it's clear that the majority of schools that have website belong to urban area, although it is only 53,3% of the total number of schools in urban areas. The most unfavorable ratio is at rural schools, because only 15,8% schools in rural area have website. Regarding to level of education, 72,3% high schools have website, while the ratio of primary school is worse 27,3%.



Graph 4: Schools and websites

The scope of this research did not imply the school website analysis, but it is certainly a topic which can be started in the new researches. It would orient us towards how to use websites, the usability and the marketing orientation of schools.

Table 4: The attitude of teachers about importance of school info to the public

		disagree	undecided	agree
A b o u t s c h o o l	General data about school	57 (4,5%)	120 (9,5%)	1038 (81,8%)
	About school environment	94 (7,4%)	91 (7,2%)	1106(87,2%)
	About subjects and school activities	79 (6,2%)	31 (2,4%)	1203 (94,8%)
	About school safety	22 (1,7%)	77 (6,1%)	1095 (86,3%)
	About school specificities	55 (4,3%)	122 (9,6%)	1043(82,2%)
	About experiments/projects	88 (6,9%)	55 (4,3%)	1003(79,0%)
A b o u t	General data about students	153 (12,1%)	145 (11,4%)	946(74,5%)
	About SES of students	174 (13,7%)	175 (13,8%)	874(68,9%)
	About general students success	74 (5,8%)	66 (5,2%)	1122 (88,4%)
	About special (non) success	86 (6,8%)	113 (8,9%)	1056 (83,2%)

s t u d e n t s	About results of qualifying exams	67 (5,3%)	90 (7,1%)	1093 (86,1%)
	About special testing	123 (9,7%)	153 (12,1%)	973 (76,7%)
	About success and competitions	51 (4,0%)	58 (4,6%)	1148 (90,5%)
A b o u t r e s o u r c e s	About professors	146 (11,5%)	118 (9,3%)	997 (78,6%)
	About professors work experience	201 (15,8%)	146 (11,5%)	912 (71,9%)
	About competently training of professors	176 (13,9%)	124 (9,8%)	951 (74,9%)
	About financial resources	129 (10,2%)	140 (11,0%)	984 (77,5%)
	About the use of financial funds	145 (11,6%)	130 (10,2%)	974 (76,8%)
	About external evaluation	117 (9,2%)	163 (12,8%)	972 (76,6%)
	About self-evaluation	156 (12,3%)	177 (13,9%)	922(72,7%)
	About school development plan	119 (9,4%)	161 (12,7%)	978(77,1%)

THE ATTITUDE OF TEACHERS ABOUT THE AVAILABILITY OF SCHOOL INFO TO THE PUBLIC

First data group that is related to information about schools, include general information about school, and data about specific school and educational environment.

It seems that teachers mostly agreed about the communication and information which referred to safety. Even 94,8% thinks that they are significant for public (H 1256; M 4,88; $\alpha=0,60$).

More than 80% of teachers agree about the importance of the other info referring to the educational environment of a school. For example, there is a big compliance (87,2%) regarding the publishing of data about the specific features of a school (H 1252; M 4,68; $\alpha=0,95$). By researching the statistic importance of differences, it turned out that teachers from urban support it more (90,4%), than teachers from rural environments (84,5%) which record a higher percentage of indecision in that case (N 1252, $\chi^2=9,345$; df 2; Sig 0,01, Cramer's V =0,09).

Similar situation refers to the agreement about public information about subjects and activities in school (82,3% ; N 1251, M 4,62; $a=1,05$). There is again confirmed that consist significant statistic difference in attitudes between areas in favor of urban area.

For publishing of the info about the subjects and school activities more concurrent are teachers from urban (90,1%) than the teachers from rural areas (82,6%) (N 1251, $x^2=17,7^2$; $df=2$; Sig 0,01; Cramer's $V=0,12$).

There is also a big number of those who agreed about the school environment info 82,2% (N 1259; M 4,50; $a=1,16$) although here was the biggest number of dilemmas (9,6%). Those data are more supported by teachers from urban (86%), than rural areas (76,8%) (N 1259, $x^2=18,305^2$; $df=2$; Sig 0,01, Cramer's $V=0,12$), as well as the teachers from high schools (87,2%) in comparison to primary school (80,6%) (N 1259, $df=2$; Sig 0,05; Cramer's $V=0,10$).

Regarding experiments/projects data, note that 81,8% agreed, while 9,5% are indecisive (N 1246; M 4,52; $a=1,14$). Percentage of teachers who disagree with publishing these information is between 2% and 7%. It's interesting to see that exist statistically significant differences in all three groups of observed variables. In relation to school boards, according to this question those who comes from schools with average achievements of students are more indecisive (11,5% у односу на 6,5%; N 1246; $x^2=9,091$; $df=2$; Sig 0,01; Cramer's $V=0,09$), but this is more supported by the teachers from urban areas (86,1%, against 78%; N 1246; $x^2=21,708$ $df=2$; Sig 0,01, Cramer's $V=0,13$) and high schools (87,3% against 81,2%; N 1246; $x^2=14,233$; $df=2$; Sig 0,01; Cramer's $V=0,11$).

Least of examinees agreed that the info about school should be published (79%). If we know that less then one tenth of examinees aren't sure about this question or they disagree, and 12,1% were omitted to indicate, the explanation of this result is maybe in fact that this is the first item and graphic don't enough visible, which causes less percentage of answers.

The second data group involves teacher's attitudes about presentation information about students and their success.

Big percentage of compliances (90,5%) refers to the presentation of the students' achievement on the competitions (N 1257; M 4,75; $a=0,88$) – from urban environments (93,3%) on contrary to 87,6% from rural environments (N 1257, $x^2=12,164^2$; $df=2$; Sig 0,01, Cramer's $V=0,10$).

In total 88,4% of teachers agree that it is important for the public to present general achievement of students (N 1262; M 4,66; $a=1,02$). That is how there is a bigger percentage of teachers from urban environments 92,1%, on contrary to teachers from rural environments 82,8% (N 1262, $x^2=29,479^2$; $df=2$; Sig 0,01, Cramer's $V=0,15$). It is also something that highschool teachers would gladly talk about 92,8%, on contrary to primary school teachers 86,9% (N 1262; $x^2=11,560^2$; $df=2$; Sig 0,05; Cramer's $V=0,10$).

Also, there is somewhat less concordance among teachers (86,1%) regarding publishing of the qualifying examination results (N 1250; M 4,64; $a=1,01$),

particular success or failure (83,2%; N 1255; M 4,54; $a=1,12$) and information about particular testing (76,7%; N 1249; M 4,36; $a=1,29$), where was noted higher percentage of acceptance at high school teachers (82%) compared with primary school (75,8%, N 1249, $x^2=6,729$; df 2; Sig 0,05, Cramer's V =0,07). In these categories were the least indecisive.

Most of the discordances, as well as the indecisive choices referred to the general data about the students and the data about the socially-economical status of students.

Although 74,5 % of students thought that the data about the students were important to the public, even 12,1% did not agree with that, and 11,4% was indecisive (N 1244; M 4,27; $a=1,38$). Out of teachers which support it, greater percentage comes from highschoools 81,8%, than from primary schools 73% (N 1244, $x^2= 9,28^2$; df 2; Sig 0,05; Cramer's V=0,10).

The situation with the publishing of the data about the socially-economical status of students is even more disadvantageous. While 68,9% (N 1223; M 4,14; $a=1,45$) of teachers agreed that those were the data important for the public, even one third of all teachers does not agree with that (13,7%) or they are indecisive (13,8%), regardless of the kind of educational institution where they come from, or on the other hand, the size of the environment.

The only noted difference is between schools boards. Thus, teachers from schools that achieved average on national testing are more ready to publishing data about socially-economical status of students (73,8%) than schools from schools boards where were students attain better achievements

(67,5%) (N 1223, $x^2=6,992$; df 2; Sig 0,05, Cramer's V=0,08).

According to all this categories, exist statistically significant differences between the dimensions of urban and rural areas.

Very similar situation is in the rest data categories: data about particular success or failure, 86,6% from urban agains 79,4% rural area (N 1255, $x^2=10,954$ df 2; Sig 0,05, Cramer's V =0,09); data about qualifying examination results, 89,1% from urban, against 84,3% from rural area (N 1250, $x^2=13,484$ df 2; Sig 0,01, Cramer's V=0,10); data about particular testings, 80,9% from urban, against 72,4% from rural area(N 1249, $x^2=12,693$ df 2; Sig 0,01, Cramer's V=0,10), data about success on the competitions, 93,3% from the urban against to 87,6% from rural area (N 1257, $x^2=12,164$; df 2; Sig 0,01; Cramer's V=0,10).

The third group of data refers to the human and financial resources in schools. Within this group of data there is a lowest degree of discordance between teachers and it is from 71% and 79%. It can be said that they mostly agree about the significance of the data which refer to HR (78,6%; N 1261; M 4,35; $a=1,34$), financial resources (77,5%; N 1253; M 4,36; $a=1,30$) and the data about the school development plan (77,1%; N 1258; M 4,36; $a=1,27$). Then there are info about the expenditure of the financial assets (76,8%; N 1249; M 4,33; $a=1,35$) and the external evaluation (76,6%; N 1252; M 4,36; $a=1,27$), specialized training of teachers (74,9%; N 1251; M 4,24; $a=1,44$), work experience of teachers (71,9%; N

1259; M 4,13; $a=1,50$), as well as the school self-evaluation (72,7%; N 1255; M 4,22; $a=1,40$).

The percentage of those who are agree, and that is there abstemiously high and ranging between 72% and 75%, the most of them are those who disagree or indecisive with statements that are relation on data about self-evaluation school (12,3% are disagree and 13,9% are indecisive), work experience of teachers (15,8 are disagree and 11,5% are indecisive) and specialized training of teachers (13,9 are disagree and 9,8% are indecisive).

This result announced possibly higher variability within groups in three dimensions, what was realized afterwards.

Regarding the publishing of general data about the teachers, school teachers with higher achievements of students unexpectedly do not agree more about this issue (14,6%) than the teachers from schools with average achievements (9,8%) (N 1261, $x^2 = 9,180^2$; df 2; Sig 0,01; Cramer's V =0,09). Publishing is also supported by the bigger percentage of high school teachers (88,2%), than primary school teachers (74,3%) (N 1261, $x^2 = 33,910^2$; df 2; Sig 0,01; Cramer's V =0,16) and more approved by teachers from urban (82,8%), than rural environments (72,0%) (N 1261, $x^2 = 20,42^2$; df 2; Sig 0,01; Cramer's V =0,13).

It is a little bit different situation in relation to data about work experience of teachers. Teachers from schools boards with average achievements of students are more agree with that (75,4%), while the teachers from schools boards with achievements over average are more distanted about that (67,5%) (N 1259, $x^2 = 9,267$; df 2; Sig 0,01; Cramer's V=0,09).

In data about work experience of teachers and specialized training of teachers exist differences within dimensions of education and size of settlements. Then, teachers from high school give more support to data about work experience (77,8%) against primary school (69,6%) (N 1259, $x^2 = 13,278$; df 2; Sig 0,01; Cramer's V=0,10), as in urban area (77,1%) against rural area (63,7%) (N 1259, $x^2 = 27,117$; df 2; Sig 0,01; Cramer's V=0,15).

It is a similar situation with the specialized training of students, where the data about it are more supported by teachers from highschools 82,1% in relation to primary schools 72,8% (N 1251, $x^2 = 14,321^2$; df 2; Sig 0,01; Cramer's V =0,11), also more in urban (80,3%) than in rural environments (67,9%) (N 1251, $x^2 = 24,321^2$; df 2; Sig 0,01; Cramer's V =0,14).

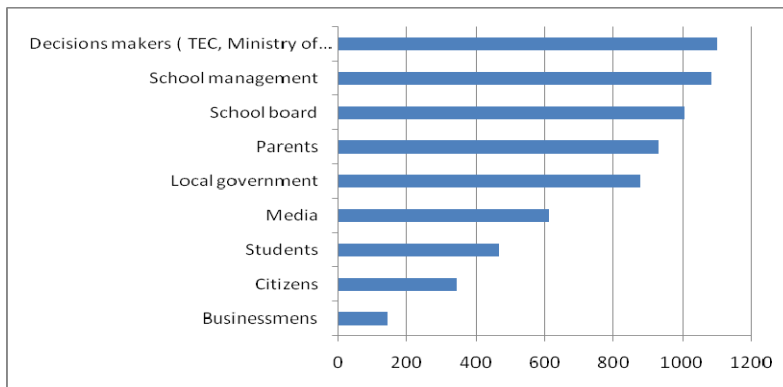
The group of data which referred to the evaluation divided teachers only regarding the size of the environment where they come from. Accordingly, the data about the external evaluation are more welcomed in the category of urban environment (81,4%) in comparison to rural one 70,5% (N 1252, $x^2 = 19,592^2$; df 2; Sig 0,01, Cramer's V =0,13), somewhat less in relation to the data about the school development plan, 80,3% on contrary to 72,8% (H 1258, $x^2 = 9,359^2$; df 2; Sig 0,01; Cramer's V=0,09), while the smallest difference is regarding the data about the self-evaluation (76,5% on contrary to 67,7%; N 1255, $x^2 = 12,190^2$; df 2; Sig 0,01; Cramer's V=0,10).

THE ATTITUDE OF TEACHERS ABOUT DIRECTEDNESS OF SCHOOL INFORMATION

The attitude of teachers about target groups which should know data of schools and their internal and external activities were researched by questionnaire too. Because of possibility of circling more than one answer, there were 6574 choices.

On graph 5 are choices data. The greatest number of choices related to decision makers (86,68%) and school board as an administrative unit of the state government (85,60%), than school board (79,28%), parents (73,52%) and local government (69,11%). Over half believe that data should be public for the media (63,12%), and rest believe that data should be public for the students too (48,38%). One third as a target group see total citizen (27,27%), while the economics operators as a target group are on the last place with only 11,26%.

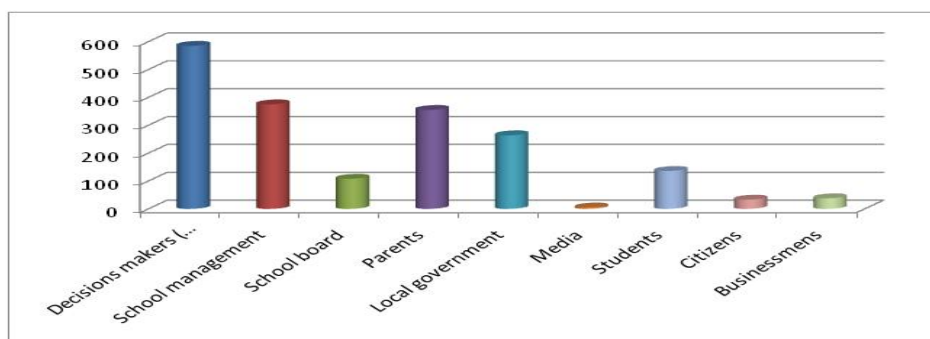
The last question was about identification of target groups which can have the most advantages of having access to information. Graph 5 shows that half of examinees state that the most advantages could have decision makers (46, 1% from the total number of examinees). School board (29, 6%) and parents (28, 0%) are almost equal and local government with 20, 8%. Significantly less number of teachers were identify students (11%) and school board (8,5%) as a target groups, and very little of them saw the economics operators (3%), citizens (2,6%) and media (0,4%) as a users of information.



Graph 5. Targeted groups which should have access to information

THE ATTITUDES OF THE TEACHERS REGARDING TARGET GROUPS WHICH CAN HAVE THE BIGGEST ADVANTAGE FROM HAVING INSIGHT TO THE OFFERED INFORMATION

Half of the examinees stated that the biggest advantage can have the decision makers (46,1% out of total number of examinees). School committee (29,6%) and teachers (28,0%) are almost equal, and then comes local municipality with 20,8%. Significantly smaller number of teachers identified students (11%) and school board (8,5%), and negligible number identified businessmen (3%), citizenship (2,6%) and media (0,4%) as users.



Graph 6. Targeted groups which can have the most advantages

EDUCATION MANAGEMENT KNOWLEDGE TEST

We believed that this research would not be complete if we do not come to certain acknowledgements through education management knowledge test as necessary to manage the innovative processes in education.

In that sense a research was done (a knowledge test) among 70 managing directors of the educational institutions, in the area of education management – test of basic skills, procedures, functions and the practice of management in education.

By statistic analysis of the education management test results and the importance of the test points the following results were obtained:

- Number of questions in the test: 14;
- Maximum number of points in the test: 21;
- The highest score: 13;
- The lowest score: 1;
- The number of examinees which got 50% and more points in the test: 11 (here are calculated also the examinees who achieved score 10).

It is important to mention that to some of the questions a number of examinees did not answer (even 13 out of 14 questions, which is the number of total questions in the test, were unanswered by a number of examinees). A great majority of

principals found the excuse in their lack of information about the literature from which they can meet with the education management. Considering that in addition to particular tasks necessary for the successful management of educational institutions certain psychological predispositions are also necessary, that is psychological characteristics: communication competence, emotional stability, conscientiousness, responsibility, intellectual efficiency, data processing speed, etc, it is necessary to convey the additional examinations, which will be helpful for the more precise defining of the preferable profit of manager/principal, as well as the defining of more precise criteria for the evaluation of the capability.

CONCLUSION

Complex reality requires a dynamic school which will flexibly adapt to the demands of society in order that young people prepare themselves properly for the world of frequent and permanent changes and to be capable to find their own place in such a world. The above mentioned implies that the quality standards of education institutions are to be raised in accordance to the always growing requests and expectations of the users, to demonstrate transparency in work and social responsibility from one side and to give positive and innovative responses to the requests of the society on the other side. Educational institutions and their employees gradually start to develop sensitivity towards various kinds of changes, especially the changes which relate to the accomplishment of the progress in communication with the environment in order to develop partnership relations and integrations with the social community.

Empirical research implies that: educational institutions use certain forms of communication, teachers recognize the importance of the information exchange, but in the same do not support significantly their placement to the public.

The obtained results say that teachers see the school data first of all as „rendering of accounts" to the authorities on a national level, because both the local and the school level are almost neglected.

Except parents, which are the main interlocutors in communication, the other users are not identified as the target groups which could benefit from the offered information, not even students as the most direct users. On one hand it can mean that teachers basically are not familiar with the moving potential which information have, about the lack of understanding of needs which various users can have in comparison to the possession of the information about the institution or implicit non-support of the necessity that the information are given to the public.

It is necessary to plan the activities (the training of students and teachers for the mediation of students of same age; seminars for teachers in the area of communication skills; establishing of the mutual cooperation between the experts within the school, etc.).

This research needs to be amended by the means of oral interview with examinees which would also enable the evaluation of their character and the strength of their motivation, which is a necessary precondition of the validation of the total research procedure.

The important thing is to define who and how will be the decision maker, which requires: precise defining of the preferable management profile; which managers/principals could be considered as successful, and which as unsuccessful in accordance to the experience characteristics, that is in accordance to the professional evaluations of their work, in order to implement the innovative management in education.

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ONE APPROACH TO CURRICULUM DESIGN FOR EDUCATION OF TECHNOPRENEURS

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Abstract: In the knowledge-based economy special attention is paid to the development of technical and entrepreneurial skills that are embodied in a new form of entrepreneurship - technopreneurship. Technopreneurship is defined as the entrepreneurial activities of companies operating in technology-intensive environments. Experiences of countries with fully developed technopreneurship have confirmed the necessity to apply a systematic approach to its development, where the most significant element is the development of study programs for technopreneurship, primarily in the field of technical sciences. The World Economic Forum Global Competitiveness Report has shown that human resources are among the greatest comparative advantages of Serbia, particularly in the technical field. Despite the fact that entrepreneurship has become an integral part of the curricula of many academic programs in the technical and technology science field, there are still no adequate study programs primarily intended to provide education for future technopreneurs. This paper highlights some relevant facts that must be taken into account when considering the principles on which technopreneurship curricula should be based, particularly with regard to the necessary competencies. Further on, based of the above described principles, projected curricula of academic study programs of the first and second level of higher education are presented, taking into account the specificities of the national system of higher education.

Key words: Technopreneurship, Design, Curriculum, Study Program, Higher Education

JEL classification: I25, L26

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INTRODUCTION

Current economic paradigm is the economy based on intensive application of knowledge, the main characteristics of which, according to (Tapscott, 1996), can be summarized as follows:

1. Economy of knowledge, where employees' knowledge, or intellectual property, becomes essential asset of business operators and which is focused on scientists, researchers and experts;
2. Digital economy, in which the internal and external communications have been transformed from analogue to digital communication, which has become predominant;
3. Virtual economy, in which the real, physical objects are gradually becoming virtual, while substantially changing the metabolism or the mode of operation in economy, institutions, relations and nature of economic activity as a whole, which is manifested through: virtual corporations; virtual sale; virtual job; virtual shopping malls; virtual market; virtual warehouse; virtual fair; virtual shops and so on.
4. Molecular economy, in which the business operator with the organizational structures of traditional type are gradually getting disaggregated and replaced by the new organizational structure design, which is based on the dynamic and innovative molecules and clusters of entities and individuals.
5. Internetworking economy, (re)integrating economic molecules into complex structures - clusters, which form networks with other economic actors for creation of new values (networking according to the Internet model).
6. Disintermediation economy, where the middleman functions in economic activities, i.e. the actors in between the producers and consumers (agents, brokers, wholesalers, retailers and other middleman business systems) are being gradually eliminated.
7. ICT Convergence Economy, in which the information and communication technologies or ICTs are converged to the fullest, and especially: computing (computers, software, services), communication (telephony, cable lines, satellite, wireless communications) and contents (entertainment, publishing, information providers).
8. Innovation economy, in which innovation becomes the key factor of competitiveness and the main driver of economic activity and business success.
9. Customized economy, based on the presumption that the mass production of a large number of homogenized products allows for consumers' involvement in creation of customized products in compliance with the specific requirements of product users.
10. Real Time Economy, in which time is an important variable in economic activities and business success, and within which there is a constant shortening of the product's lifespan.

11. Global Economy, where owing to the development and technological progress (predominantly due to the development of ICTs and traffic infrastructure), economic activities are being gradually implemented on the global level, and thus it can be said that under such circumstances the world has become a "global village".
12. Social Economy, where the current social issues can potentially cause different consequences, and even massive trauma and conflict.

Based on the above said, it is evident that, when it comes to the present-day economy, knowledge is not only coming to the fore, but is additionally becoming a factor of primary importance. Thus, the ways and means used to acquire the necessary knowledge have become significant and important. Today, relevant knowledge can be acquired in many different ways, and specifically: through education (formal and informal); from the things one learns from their own experience; through knowledge transfers from others; by means of purchasing of certain intellectual property (licences) or a business concept (franchising); through consulting, training and mentoring; through development of a joint product, process and so on. Among the listed ways and means to acquire knowledge, education is undoubtedly of the greatest significance.

Education has to be observed on the national level. Education in the Republic of Serbia is conditioned by numerous factors, among which the most important ones can be classified in the following categories: financial resources of the country; developmental challenges in scientific, humanities, social sciences and in other fields; huge technological changes that are being manifested through technological progress; globalization as a phenomenon of the new age; as well as the general mobility (of people, information, goods, energy, capital, etc.)

Strategy for Development of Education in Serbia by 2020 (RS Ministry of Education, Science and Technological Development, 2012) corroborates the above said as well; according to the Strategy document, "the basis of the further development of production system of the Republic of Serbia must be rapidly built on knowledge; entrepreneurship of the educated population; own and transferred technological innovations with no adverse environmental consequences; market economy, and international cooperation in the fields of business, technology, etc."

In order to provide for the necessary precondition for the above said, an integral, effective and efficacious educational system on the national level have to be established first, consisting of the following specific educational sub-systems:

Basic or undergraduate education:

1. Social care of children and preschool education;
2. Basic education;
3. General medium level school education and education in arts;
4. Medium level professional education;

Higher education:

5. Basic and master academic studies;
6. Doctoral studies;

7. Professional studies;
 8. Education of teachers;
- Postgraduate Education:
9. Adult education.

The educational subsystem of high education is of importance from the aspect of this paper, as a part of the educational system that pertains to the basic or undergraduate and master academic studies, or more precisely to its segment that pertains to the study programs.

Procedure used by any higher education institution intending to introduce a new study program is in general always the same and it is based on the following methodological approach of the organization, which, as a rule, consists of a number of steps (according to: Krstić, Skorup & Milosavljević, 2012), (Bojković & Krstić, 2007), which run smoothly one after another in a logical sequence, and specifically:

1. Mapping and identification of social needs for the realization of a study program;
2. Design of the study program curriculum;
3. Defining necessary resources for realization of the study program;
4. Production of a study paper for study program accreditation;
5. Accreditation and obtaining licence for the study program;
6. Preparation for study program implementation;
7. Study program implementation.

The initial design of the technopreneurship study programs have been presented in this paper, specifically for two study levels, with a special focus on step 2, Study program curriculum design.

ENGINEERING VERSUS ENTREPRENEURSHIP

ENGINEERING

Engineering is “the application of scientific, economic, social and practical knowledge in order to design, build and maintain structures, machines, devices, systems, materials and processes. Engineering may encompass using insights to conceive, model and scale an appropriate solution to a problem or objective” (source: Wikipedia).

Engineering is an independent academic discipline and it represents an extremely broad engineering field that encompasses a series of a number of specialized engineering fields, among which each field has its special focus on certain technology areas and types and/or the application thereof.

ENTREPRENEURSHIP

Entrepreneurship is "the capacity and willingness to develop, organize and manage a business venture along with any of its risks in order to make profit" (The Business Dictionary, 2013.).

The most striking example of entrepreneurship is launching of new businesses, or start-up companies.

In economics, entrepreneurship combined with land, labour, capital and natural resources can produce profit. The entrepreneurial spirit is characterized by innovation and risk-taking, and it is an essential part of a nation's ability to succeed in an ever changing and increasingly competitive global marketplace.

Entrepreneurship is an independent academic discipline and it is seen as a recognizable, if not a unique component of an economic system. In that sense, it enables people to create wealth, improve productivity of a region, increase employment levels and in general it offers a number of significant dimensions for a society, through creation of theoretical basis for generation of new businesses, or through launching of the start-up enterprises.

In the case of satisfactory market options, there is a series of elements in an environment that support successful start-up of enterprises. Elements that are most important for successful realization of any entrepreneurial venture are as follows (according to Carmo, Muzaffar & Wade, 2005):

1. Auspicious financing environment;
2. Available competent workforce;
3. Accessibility of useful suppliers;
4. Governmental support, or at least absence of any obstacles;
5. Proximity of a University to assist in research;
6. Availability of land or facilities;
7. Access to transport routes;
8. Support from the local self-government;
9. Available service support (secretarial, telecommunications, etc.);
10. Low entry taxes;
11. Existence of entrepreneurial sub-culture¹¹;
12. Business incubators that are set up by the local Universities, Government or Centres for Development of the SME sector.

¹¹ *The success of the Silicone Valley in the USA has been strongly supported by the fact that the entrepreneurs support one another in a synergy and thus create their own dynamic environment.*

The above listed factors are, of course, not all of the same importance, and for a concrete business venture some of these can be of vital importance; all of them, however, play an important role in providing conditions for success of any new business venture.

TECHNOPRENEURSHIP

Technopreneurship is a concept that has been relatively recently introduced and it pertains to one special part of entrepreneurship, and as a term, it was made as a combination of two words, 'techno' + 'entrepreneurship'.

Thus, the technopreneurship is a specific branch of entrepreneurship in the field of high technology (high-tech¹²) in which a technopreneur operates (Wiktionary, 2013.).

It is a well-known fact that the high technologies and entrepreneurial skills are the contemporary generators of economic prosperity in a knowledge-based economy. A technopreneur is thus a person that integrates different ideas of different groups of people in different fields.

When it comes to the start-up enterprises in the field of high technologies, in which new inventions or new technologies play dominant role as the key environmental elements supporting the successful start-up of enterprises, (5), (11) and (12) can be noted. The contributions of these are reflected in research, problem solving and engineering support.

ENTREPRENEURSHIP IN ENGINEERING – WHY IS IT IMPORTANT?

There is a large number of talented engineers equipped with the necessary technical education and innovative ideas, but lacking in knowledge on how to commercialize their ideas and use them to start their own businesses.

Traditionally, engineers in various disciplines are trained to solve problems, such as the solution to n-equations with n unknowns, or problems with explicit form. In coming up with solutions for such problems, all the necessary pieces of information are known in advance, and coming to the solution to the problem implies application of a certain general procedure that will provide solution to all the problems of a certain type.

Unfortunately, the very nature of the economy of the 21st century has shown that the current types of problems that require solutions from engineers tend to be more of the implicit form. All the relevant pieces of information required to solve these problems are indeed available, but are only fragmentarily represented and dispersed; and thus collecting, separating and successful application of these pieces of information requires highly developed perception skills.

¹² The term "**High tech**" pertains to the technology that is currently the top technology, that is, the most advanced currently available technologies. The terms "high-tech" or "high-technology" are often used interchangeably, as synonyms.

With the growth and development of our technological capacities, engineers' task to come up with efficient and sustainable solutions to social needs of the market grows bigger as well. The aforementioned efficiency and sustainability originate primarily from the entrepreneurial aspects of engineers' solutions. If one engineering solution is not at the same time an entrepreneurial solution, then the relevant social need of the market is not being adequately fulfilled.

Engineers are predominantly engaged in development of solutions from the technical aspect. It is only rarely that an engineer should venture into dealing with the entrepreneurial aspects of the solution of his design. However, if the engineers build such aspects into the solutions of their designs, then the final engineering solution to the social needs of the market will become sustainable.

It can be concluded from the above said that one engineering solution shall be useful for a society only if it can be presented in an entrepreneurial manner. Otherwise, the engineering efforts shall be reduced to the engineering transaction in a scientific laboratory merely.

The following statement made by an entrepreneur is quite interesting: "If an engineer is not an entrepreneur, he is just a tool" (Fredholm et al., 2002).

There is a common misconception that engineers are only dealing with the technical aspects of their solutions. It is true that the engineers make precise measurements, develop and present the solutions that are efficient, effective and sustainable. Our experience so far however has shown that the practices of business, knowledge and institutional entrepreneurship have all a synergistic character. Thus, it is less likely that there will be anyone else to present an engineering solution more efficaciously and in an entrepreneurial manner than an engineer.

It is thus of importance to assess the entrepreneurial perspective in engineering in advance. The Perspective-Based Entrepreneurship Analysis (PEA) Method (Syamantak, 2011) can be used for the assessment of the entrepreneurial perspective in engineering. Based on this method, the assessment of entrepreneurship in engineering ultimately comes down to quantifying of the market and engineering perspectives. As an indicator of the entrepreneurial perspective in engineering, the coefficient of market proximity and engineering perspective is used:

$$V = (X - Y) * 100 / X$$

Where:

- V is the coefficient of proximity of market and engineering perspectives;
- X is the average value of market perspective. It is obtained by firstly identifying the relevant standard market perspectives, and then by assessing each of them individually and finally establishing the median value;
- Y is the average value of engineering perspective. It is obtained by firstly identifying the relevant standard engineering perspectives, and then by assessing each of them and finally establishing the median value.

In case that the calculated V coefficient value is less than 25%, it then reflects the relevant respective proximity of the values of X and Y, from which one can conclude that the engineering solution is an entrepreneurial solution, since it effectively addresses the market needs.

However, it is most often the case that the engineers do not present the entrepreneurial solutions of their innovations, since they most often do not possess the relevant entrepreneurial competencies. The reason for this lies in the fact that the majority of students of different branches of engineering do not acquire adequate entrepreneurial competencies.

A short analysis of the accredited study programs from the field of entrepreneurship based on (KAPK, 2013) has shown that presently there is a total of 14 accredited study programs in which entrepreneurship is studied in the Republic of Serbia, and specifically: 5 in basic or undergraduate vocational study programs; 4 in basic university study programs, and 5 in the Master academic study programs. Further analyses have showed that all the identified study programs are from the field of the social sciences and humanities. The fact that entrepreneurship has not been included in the curricula of technical or technological study programs is especially interesting.

Management functions are usually included in the study programmes in the engineering sciences, such as planning, organization and control. However, these study programmes have not recognized certain elements that pertain to two critically important characteristics of any entrepreneur, and specifically:

(1) The role of creation in entrepreneurship, where this notion includes a new concept, that of invention and innovations;

(2) Vision, the notion that goes along with the new concept.

Thus, the fundamental entrepreneurial competencies have not yet been included in the educational programs for engineers. Study programmes intended to provide educational programs for engineers, despite the managerial character of their vocation, are predominantly focused on creativity, innovativeness and leadership, with no mention of the business management component.

BUILDING OF RELEVANT COMPETENCIES

COMPETENCIES OF RELEVANCE FOR TECHNOPRENEURSHIP

There is a well-grounded requirement to identify the indispensable competencies that are necessary for the adoption the high tech ideas and their further transformation into the market products. The solution is offered in acquiring competencies through several levels of education, and more precisely, through education in two levels.

The main purpose of this paper is to design a curriculum for the study programmes for technopreneurship of the first and of the second level of studies,

which will serve to provide the students with adequate competencies that are necessary for their venturing into the establishing of their own business enterprises in the field of high technologies.

The profile of technopreneurship graduates will depend on the level of studies (the first or the second study level) and on the (low or high) level to which the competencies for relevant fields have been implemented (engineering, management and/or entrepreneurship).

Distribution of competencies (general education, engineering, management and entrepreneurial, and also the practical ones) per years of studies in technopreneurship can be represented in the manner shown in the Figure 1.

Study level	Study course year	Competencies					
		General educational competencies	Engineering competencies			Managerial competencies	Entrepreneurial competencies
First	I						
	II						
	III						
	IV						
Second	V						

Note: S – specialist, F – physics, M – mathematics

Figure 1: Distribution of competencies among the different years of a study program in technopreneurship

From the point of view of technopreneurship study program outcomes and for the purpose of visual presentation, the three dimensional diagram of competencies can be a useful tool. In Figure 2, the three dimensional diagram of competencies has been presented, in which each dimension serves to interpret a specific type of competencies, and specifically: the engineering, managerial and entrepreneurial competencies. Engineering competencies predominantly pertain to creativity and innovations; managerial competencies predominantly comprise of the general managerial skills, the know-how business skills and networking skills, while the entrepreneurial competencies predominantly comprise of the skills necessary to initiate one's own business venture. All the three dimensions take into account two extreme values of high and low. Mastering certain specific competencies leads to acquiring certain knowledge that can qualify the graduate for certain titles, which is presented in the Figure:

- The *promoter* is found within the low values of competency in all the dimensions (corresponding to the graduation from the 1st level of studies – the Bachelor degree),
- The *engineer/inventor* is found within the low values of competencies of the entrepreneurial dimensions and management and within the high values of engineering competencies (corresponding to the graduation from the 2nd study level – Graduate),

- The *manager/administrator* is found within the low values of competencies of the entrepreneurial and engineering dimensions and within the high values of the managerial competencies (corresponding to the graduation from the 2nd study level - Graduate),
- The *engineer entrepreneur* is found within the low values of competencies of entrepreneurship and within the high values of engineering and managerial competencies (corresponding to the graduation from the 2nd study level - Graduate),
- The *technopreneur* is found within the high values of competencies of all the dimensions (corresponding to the completion of the 2nd study level – Master degree).

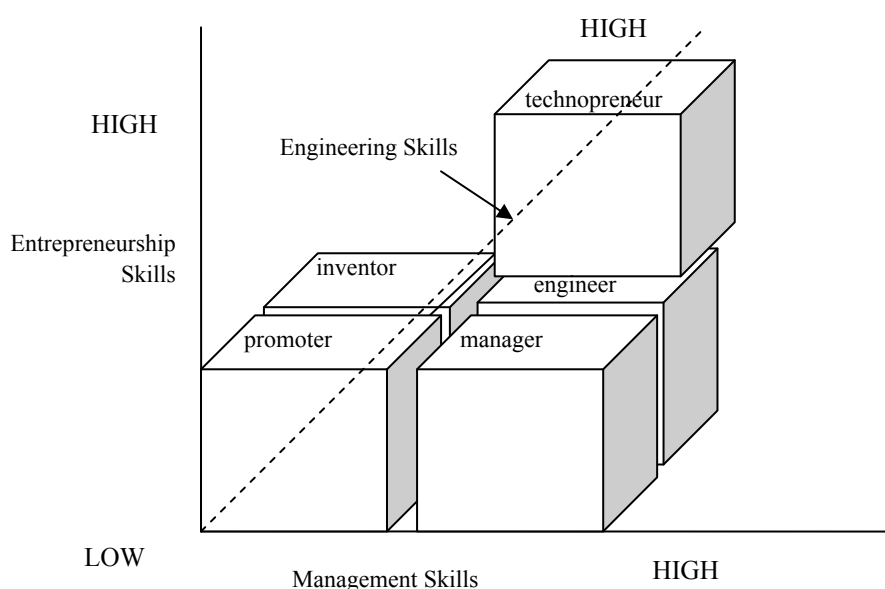


Figure 2: Three-dimensional diagram of competencies

Source: Autors

GENERAL EDUCATIONAL COMPETENCIES

General educational competencies, as presented in Figure 1, include competencies that are acquired through studies of general educational courses. These courses include the IT courses (basics in computer technologies, information systems, etc.), a foreign language/s course/s and so on.

ENGINEERING COMPETENCIES

Engineering competencies, as presented in Figure 1, comprise of three categories of competencies, and specifically: the competencies in mathematics, physics and in a specialized engineering field.

The competencies in mathematics make up the first category of engineering competencies. These competencies are invariant and constant regardless of the future choice of specialized study program in engineering (mechanical engineering, electrical engineering, computer engineering and so on). Distribution of the mathematical competencies within the study programs of the 1st and 2nd levels is, as a rule, the same, since these study programs equip students with the general knowledge in mathematics. These competencies can be acquired even through a number of study courses that are allocated within a number of years of a study program. In this specific case, it is advisable to provide students with competencies in mathematics during the first three years of basic studies, and to then shift the focus on the applied mathematics, i.e. on engineering mathematics.

Competencies in physics make up the second category of engineering competencies. These competencies are directly dependent on the future choice of specialized study program in engineering (mechanical engineering, electrical engineering, computer engineering and so on). This is to say that, in addition to the basic knowledge in physics, these competencies serve to determine the field of specialization in engineering. In case of a specialized study program in mechanical engineering, the competencies in physics will predominantly pertain to the mechanics, as a branch of physics. In case of a specialized study program in electrical engineering, the competencies in physics will predominantly pertain to electrical engineering. In case of a specialized study program in computer engineering, competencies in physics will predominantly pertain to the field of computer sciences.

Specialized competencies make up the third category of engineering competencies. These competencies serve to deepen the expert professional competencies from the vocational aspect and to closely profile the future perfect student – a graduate in engineering. Since within the selected specialized field of engineering (mechanical, electrical, computer engineering and so on), there are huge differences in specialization fields, and thus these competencies depend on the final choice of specialization field. Depending on the chosen field of specialization, whether it is a exclusive specialization in one or another field only or a combination of the two fields, these competencies can be combined through relevant optional or minor courses. For the specific needs of technopreneurship, the focus is on the study courses in high-tech fields.

MANAGERIAL COMPETENCIES

Managerial competencies, as presented in the Figure 1, pertain to some general managerial competencies, know-how business skills, as well as the networking skills, and these are represented in the final years of study programs (3rd and 4th year) of the 1st study level. These competencies are acquired by attending the following courses in management, and specifically: management, business economics, strategy, quantitative analysis, organizational behaviour. The courses in management are, as a rule, mandatory courses, and these can additionally provided in the form of the optional study courses, such as the following courses: management information system; finances and accounting; negotiations; organizational design; leadership; public presentation; quality management; environmental management; developmental management, and so on.

ENTREPRENEURIAL COMPETENCIES

Entrepreneurial competencies, as presented in Figure 1, which serve to determine the entrepreneurial approach within the study programs in the high tech fields, that is, in the technopreneurship, according to (Fredholm et al., 2002) should include the following courses: Entrepreneurship in System Engineering, Technical Marketing, Strategy of High-tech Products, Strategies of Technology Commercialization, Thesis – Business Plan. Since these are the courses that provide the students with the critical competencies for any technopreneur, we shall focus on them further on in this text.

Entrepreneurship in System Engineering. This study course equip the students with an all-inclusive overview of the system of engineering principles applied to the engineering entrepreneurship, within which the students ought to develop their own business plan through detailed work on its individual components. In addition to this, risks, rewards and challenges of entrepreneurship are to be examined in this study course, along with the strategies and tactics based on system engineering aimed at increasing the chances for success of a business idea. Teaching methodology for this study course should comprise of lectures, which are provided in the ex cathedra manner and supported with the video presentations and exercises in which case studies based on the principles of system engineering and entrepreneurial concept are examined. Lectures should be from time to time be followed by experience-based or guest lectures given by industry professionals (experts) from specialized fields or by successful entrepreneurs in a given field. This study course should be provided within the 4th year of the first study level.

Technical Marketing. This study course provides the engineers with the strong marketing orientation and enables them to mould their innovative high-tech ideas in an adequate manner and to transform them in a real product for an actual customer, with the aim to maximize their chances for success in the market. It is critically important for engineers to develop the paradigm of flexible market thinking, which pertains to the product as a whole, and not only to the engineering generic technologies or engineering generic product. Teaching methodology for

this study course should comprise of lectures, which are provided in the ex cathedra manner and supported by the video presentations and exercises in which the successfully realized case studies within this field are reviewed and examined. This study course should be provided within the 4th year of the first study level.

High Tech Product Strategy. This study program course is focused on strategy formulation for characteristic high technology products, in order to increase the probability of success of such products in the market. Teaching methodology for this study course should comprise of lectures, which are provided in the ex cathedra manner in the presence of all the students and supported by the video presentations and exercises in which knowledge and skills in application of individual strategies from the lectures are deepened. This study course should be provided within the 4th year of the first study level.

Technology Commercialization Strategies. This study program course has been designed in such a manner as to develop the students' capabilities to apply engineering and entrepreneurial process in technology commercialization. Thus, this study course is of innovative character, since it covers the relevant technical, marketing and business aspects of the technology commercialization process. In achieving this, each of the above mentioned aspects passes through 3 phases (concept, development and commercialization process) that are being reviewed through six different stages of realization (research, sustainability, development, introduction, growth and maturity). This study course should be provided within the 1st year of the second study level.

Thesis – Business Plan. This is the final paper within the study program of the 2nd level and it includes preparation of a Business Plan, its public presentation and defended before a commission or panel consisting of the course professor – mentor and two professors from the study program of the 2nd level. It would be mandatory for the students to produce a professional business plan for a particular high tech business idea and to publicly present it, if possible within a business incubator for high tech or technological development. Methodology used in realization of the final paper includes establishing of teams of two to three students that will be actively working in teams on the development of business plan for the market of a particular innovative, new product or on the commercialization of a corresponding technology during the final year of the 2nd level of studies and mentored by their course professor.

PRACTICAL COMPETENCIES

Practical competencies, as presented in Figure 1, pertain to the practical presentation of the actual practice of technopreneurship to the students. In that sense, and in compliance with the prescribed standards for accreditation of study programs [12], acquiring of these competencies should fit into the time frame of a minimum of 45 hours on the annual study level. Since it is about the study programs in technopreneurship, these practical instructions should be organized in the institutions in which the high-tech ideas are being realized in practice. This implies the high-tech business incubators or an Institute for advanced technologies.

DESIGN OF TECHNOPRENEURSHIP STUDY PROGRAMS

Based on the principles presented in [12], study programs for the basic and Master academic studies specifically intended for technopreneurship have been designed. It is important to note here that certain relevant parameters of these study programs (such as the concrete study courses, etc.) have remained open or unspecified, since they are dependent on the concrete specialization of the study programs in engineering. The basic general parameters of the designed study programs of the 1st and 2nd level of studies are presented in Table 1.

Table 1: The basic general parameters of designed study programs

Technopreneurship – 1 st study programme level	Technopreneurship – 2 nd study programme level
Technical and technological scientific fields	Technical and technological scientific fields
Basic academic study course	Master academic study course
180 ECTS	120 ECTS
Duration: 3 years	Duration: 2 years
Study programme structure	Study programme structure
<p>The study programme structure consists of study courses for which three basic ECTS dimensions have been adopted, so that each study course has been allocated 5, 6 or 7 ECTS points respectively. Study courses that, from the aspect of competencies, should be represented in a study programme with longer working hours were allocated 7 ECTS, while the other study courses were allocated 5 or 6 ECTS.</p> <p>According to the plan, thesis should be produced in the sixth semester, to bring 15 ECTS, mentorship included.</p> <p>By completing the study program in the basic academic studies, a student shall acquire the corresponding engineering title for which they shall qualify by mastering the methodological, basic engineering and other scientific disciplines, especially those from the field of engineering and technopreneurship, which will enable</p>	<p>The study program structure consist of study courses for which two basic ECTS dimensions were adopted, so that each study course has its value corresponding to 7 or 8 ECTS points. Study courses that, from the aspect of competencies, should be represented in the study program with a larger number of hours, will have 8 ECTS points, while the other study courses will have 7 ECTS points each.</p> <p>In the fourth semester, production of the final paper is planned to take place based on the principles of mentored students' work, equalling 15 ECTS points.</p> <p>By completing the study program at the Master academic studies, a student shall acquire the corresponding Master engineering title in the relevant specialized engineering field for which they shall qualify by mastering the methodological, quantitative and</p>

<p>the student to acquire the necessary competencies, knowledge and skills for successful launch, management and leading of a high tech enterprise.</p>	<p>qualitative knowledge from the field of scientific research methodology, which is complementing the knowledge acquired during the basic academic studies and which is the basics for development of critical thinking and knowledge application.</p>
<p>By completing the study courses within this study program, the students shall be qualified in all the fields necessary for them to become successful engineers and technopreneurs, or leaders in a high tech field.</p> <p>Students shall acquire knowledge and master skills that are necessary to perform highly specialized, managerial and analytical jobs from the broad area of engineering and entrepreneurial jobs.</p> <p>Depending on the more precise specification of the specialized engineering study program, a student completing this study program can perform various jobs, including management of a high tech enterprise.</p> <p>Standard methods of theoretical and practical teaching shall be applied in the basic academic studies. Lectures are, for the most part, organized in the ex cathedra manner, supported by the PowerPoint presentations, followed by, depending on the specialized engineering course in question, the work in laboratories as well and by the production of term papers.</p> <p>There is no precisely specified or exact number of study courses or the study courses' structure for this study program, due to the fact that these will depend on the specialized studies in engineering. For each study course, the following basic elements shall be specified: name of the study course; ECTS points; study course status; study course objective; outcomes -</p>	<p>By completing the study courses within this study program, the students shall be prepared to be capable to integrate knowledge, resolve complex problems and reasoning based on available information, which include contemplation on engineering and entrepreneurial responsibilities linked to the application of their knowledge and judgements, including the ability to transmit knowledge and methods of reaching conclusions to the expert and broader public in a clear and unambiguous manner.</p> <p>Depending on the more precise specification of the specialized engineering study program, a student completing this study program can perform different jobs, and he or she will especially be capable of leading a high tech enterprise of the highest level.</p> <p>Special methods of theoretical and practical teaching shall be applied in the Master academic studies. Lectures are, for the most part, organized in the ex cathedra manner, supported by the Power Point presentations, which, depending on the specialized engineering study program in question, followed by the specialized debates and round table discussions, case studies, guest lectures by successful entrepreneurs in the field of high tech, project papers, scientific studies, and essays produced to present the results of research work.</p> <p>No precise number of study courses or the structure of these courses</p>

<p>competencies; framework content; students' obligations that are to be realized through active instruction and individual students' work within their pre-exam activities and exams and valuation thereof; teaching methods; tests to determine the level of acquired knowledge, grading and exam taking method; basic and supplementary literature.</p>	<p>has been precisely specified for this study program, since these will depend on the specialization in a chosen engineering branch. For each study course, the following basic elements are specified: study course name; the number of ECTS points; study course status; study course objective; outcomes - competencies; framework content; students' obligations that are to be realized through active instruction and individual students' work within their pre-exam activities and exams and valuation thereof; teaching methods; tests to determine the level of acquired knowledge, grading and exam taking method; basic and supplementary literature.</p>
<p>Study Program Purpose</p>	<p>Study Program Purpose</p>
<p>The Study Program of the basic academic studies is structured in such a manner as to represent coherent units of teaching disciplines in specialized engineering fields and technopreneurship that are coordinated one with another according to the structure of the study courses' content with the academic and general educational, theoretical and methodological, scientific and expert and expert applicable knowledge and skills.</p> <p>The purpose of the Study Program of the basic academic studies is to educate students to acquire an academic title in specialized engineering studies, thus enabling the graduate students to acquire and present knowledge and understanding of theoretical and practical study subject matter.</p>	<p>The Study Program of the Master academic studies is structured in such a manner as to provide for the building on and continuation of the already acquired knowledge in the basic studies, through which innovation and creativity is deepened, along with analytical and research approach in the modern practical achievements in specialized engineering studies and technopreneurship.</p> <p>The purpose of the study program of the Master academic studies is to educate students to acquire the Master academic title in a specialized engineering field, thus enabling the graduate students to acquire and present knowledge and understanding of theoretical and practical study subject matter in a specialized engineering field and in practice of technopreneurship.</p>
<p>Study Program Objectives</p>	<p>Study Program Objectives</p>
<p>Primary objectives of the Study Program in the basic academic studies are as follows:</p>	<p>Primary objectives of the study program in the Master academic studies are as follows:</p>

<ul style="list-style-type: none"> - To acquaint the students with the theoretical knowledge and practical skills of engineering science and technopreneurship; - To train the students to successfully deal with the challenges of the field of their specialization and profession in the high tech field, information technologies and globalization, where the fields have the predominant role in the business world; - For the students to master the theoretical and practical knowledge and skills in the following areas: engineering, management, technopreneurship, electronic business and information technologies; - For the students to get acquainted with the inputs of practical instructions and professional practical training in the above listed fields. 	<ul style="list-style-type: none"> - To build on the acquired knowledge from the basic academic studies, which enables innovation and creativity, analytical and research approach to the modern practical achievements in engineering, technopreneurship and management; - To focus on permanent innovations in acquired knowledge in the fields of studies; - To develop the sense for creative thinking, business decision-making and management in the global business; - Students are capable of applying the acquired practical knowledge and skills in their respective fields of studies by incorporating the practical instructions and professional practical training, as well as some sophisticated knowledge; - Students are capable of engaging in scientific, research and innovative work, thus providing for the continuation of their studies in the specialist and doctoral study programs.
<p>Graduate Students' Competencies By mastering the study program, a student acquires the general engineering capabilities of:</p> <ul style="list-style-type: none"> - Production design, organization and control; - To independently perform experiments, process the results obtained and draw conclusions; - To present the results of their work in an adequate manner. <p>General managerial capabilities</p> <ul style="list-style-type: none"> - For analysis and synthesis in resolving of business problems and making adequate decisions; - For development of critical and self-critical reasoning and action in business; - For team work and cooperation; 	<p>Graduate Students' Competencies By mastering the study program of the Master academic studies, students shall acquire the following general engineering capabilities:</p> <ul style="list-style-type: none"> - Of production design, organization modelling and production control; - To independently perform experiments, to perform statistical processing of results obtained, to formulate and reach conclusions; - To adequately produce and present the results of their work. <p>General managerial capabilities</p> <ul style="list-style-type: none"> - To perform very complex tasks of technopreneurship business; - To master the methods

<ul style="list-style-type: none"> - For communicating with other employees; - For ethical behaviour. <p>By mastering the study program, a student shall acquire the following capabilities specific to the study course that he/she attended:</p> <ul style="list-style-type: none"> - For in-depth knowledge and understanding of relevant professional disciplines; - For providing solutions to concrete problems in business by using the scientific methods; - For understanding of interaction between the business phenomena; - For following, adopting and application of innovations in his/her profession; - For development of skills and abilities to resourcefully and adroitly use the acquired knowledge; - For managing of a high-tech based enterprise; - For application of engineering knowledge and skills as well as of other skills that influence efficacious performance of entrepreneurial business activities; - For managing human resources; - For the use of information and communication technologies in performing tasks and managerial functions. 	<p>and procedures of the research process;</p> <ul style="list-style-type: none"> - To develop critical and self-critical reasoning for realistic see through the given problems and to select the optimum method to solve it; - Complex problems are most often resolved through team work in a specific business context. <p>By mastering the study program, a student shall acquire the following capabilities specific to the study course that he/she attended:</p> <ul style="list-style-type: none"> - For in-depth knowledge of the specialized engineering field and technopreneurship, as well as for understanding of the broader context of concrete problems; - For in-depth knowledge of the disciplines he/she studied, as well as the capability to resolve concrete problems by using the methods learnt; - For linking the practical and the theoretical knowledge from the fields of study; - For application of one's own knowledge and skills in enterprises, regardless of their size or industry;. - For successful management of business ventures and team leading; - For production and presentation of results of one's own scientific and research work; - For continuation of education on the following study level.
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Source: Autors

CONCLUSION

Within the current economic paradigm that is based on intensive application of knowledge, knowledge has additionally become the factor of primary importance. In such an economy, high-tech competencies and entrepreneurial skills are becoming the generators of economic prosperity. The recent dilemma of engineering versus entrepreneurship is no longer considered as relevant. Contemporary engineers are increasingly required not only to get engaged in engineering in order to design optimum solution, but also to get equally engaged in the sphere of entrepreneurship.

In order for the engineers to be successful technopreneurs as well, it is necessary to complement their engineering competencies with certain entrepreneurial competencies. This can be achieved by supplementing the study programs for engineering education with adequate competencies. Research work on this topic has shown that it is necessary to complement the standard engineering competencies in the fields of mathematics, physics and advanced engineering with the technopreneurial competencies.

Thus, this paper contains projections of (hypothetical) study programmes of engineering orientation and technopreneurship in two levels of studies (academic and Master study courses).

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ENGAGING OPPORTUNITIES OF HIGHER EDUCATION AND SCIENTIFIC STAFF THROUGH THE DEVELOPMENT OF E-ENTREPRENEURSHIP IN THE REPUBLIC OF MACEDONIA

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Abstract: As a developing country, the Republic of Macedonia needs to accelerate its sustainable economic development and thus is facing an urgent need to produce and apply tertiary graduate's and researcher's knowledge as an efficient resource used in academic, public and business purposes. The data show that Republic of Macedonia has produced the highly educated people in increased volume in the past period. So one of the main goals of this paper is to answer the question: what is the potential of the Republic of Macedonia to join to the modern world trends and to open the possibility for using the knowledge gained? Unlike the developed countries where the knowledge is used as pragmatic and practical in the business sector as well as in public administration, in Republic of Macedonia using the knowledge primarily remains in the academic community and universities.

This paper briefly outlines the possibilities to engage the researchers and highly educated person in the business sector through the development of the e-entrepreneurship. This means their encouragement and support in the effort to create and launch online businesses, or entrepreneurial ventures with emphasized and innovative use of information and communication technologies (ICT). Recent research suggests that small online businesses are more likely to be founded and managed by entrepreneurs that are researchers or teachers at the Universities, through formal or informal programs for support of so called academic entrepreneurship. This paper provides an overview of possibilities for commercialization of research results, knowledge and expertise of scientific and academia community by starting business ventures in sectors that are based on significant technological innovations, especially in the industry of ICT and particularly Internet technologies.

Key words: E-entrepreneurship, Researchers, Academic Entrepreneurship, Innovations, E-enterprises

JEL classification: J20, J60, L26, M39, I23, O15

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INTRODUCTION

Knowledge is essential for individual progress and development of the national economy and its integration into global trends and is a key factor for achieving sustainable economic development in the long term. The effective use of knowledge depends on the extent to which a national economy can reach previously specified order, which emphasizes the inseparable link between the research and education institutions with the business sector.

Countries that have achieved outflow of human capital, suffered multiple significant adverse effects (slowing of economic development and the development of science, reduced productivity and competitiveness of the country and so on.). "Brain Drain" not only adversely affects the available stock of human capital in a given country, but creates other adverse effects on the broader socio-economic system.

When it comes to Macedonia in mind that we are still in the phase of "brain drain" from the country, the effects generated by this process is negative, leading to reduced production base of the country, slowing the development of science and research, slowing the technological development of the country, based on the reduction of the available human capital from one side, and less application of transfer of technology and knowledge from abroad from other side.

Macedonia is faced with the need to produce a quality of highly educated, or science- research staff, but as creators and disseminators of knowledge. This means that it is not enough only its production but it's effectively using in the function of sustainable economic development. Unlike developed countries where knowledge applied in the business sector, in the Republic of Macedonia it is usually associated with universities (academia) and public administration.

In science are analyzed a number of theoretical and empirical aspects of scientific migration, whereas particularly interesting ones of the periods before and after the fall of the Iron Curtain. Most theoretical approaches for analyzing scientific diaspora mainly based on general theories of migration, the prevailing view that is not entirely appropriate because failed to fully explain the phenomenon. In many of them exaggerated the economic aspect, and less attention is paid to the analysis of other factors that cause mobility. Other theoretical concepts the mobility of highly educated and scientific research personnel explain in the context of globalization, the emergence of multinational companies and intermediary agencies that facilitate the movement of human capital. In such concepts the globalization clue as mutual interconnection of the world, and the migration is interpreted as a form of creating networks. Here the driving force is economic and educational compatibility, which explains the Americanization of education systems in Europe, particularly in post-socialist countries of Central and Southeast Europe.

For many years development countries facing the same brain drain problem and much emphasis has focused on finding solutions how to reduce it. It is the case of Republic of Macedonia as well. For many years many highly-educated citizens are leaving the country and migrate into the western developed economies.

There are several reasons for these phenomena, mostly related to the quality of life, job security and educational opportunities for them and for their children. Especially for the people who intend to develop their scientific and academia career, the job opportunities in the country are very limited. They could apply for job only at the universities and public institutions for extremely limited number of positions. The business sector in Macedonia makes very low investments into the research and innovation, so there is no future for the people with masters and doctorate degree in private companies neither. One possibility how highly-educated people, especially the ones with research ambitions could be motivated to stay in the country is to encourage them to start their own businesses. They could be fully independent, or could be university spin-off start-ups.

TYPES OF MOBILITY OF THE HIGHLY EDUCATED AND SCIENTIFIC RESEARCH STAFF

Observed historical mobility of the highly educated and scientific research personnel, passes through several stages. Despite the general migration, the occurrence and trends are continuously monitored; interest in the scientific community for research mobility highly educated staff is relatively recent. The first findings of monitoring the occurrence of the general public and are presented in 1963, when he introduced the term "brain drain". Contemporary scientific debates have been caused by the alarming outflow of British highly educated and research staff in the U.S... Then commenced intensive debate continues to this day, resulting in the expansion and differentiation of the terminology used to explain the mobility of scientists. Thus, the "brain drain" is considered permanent migration of scientists from poorer to richer countries, whereas positive effects a country that takes such personnel, while the country that broadcast has negative effects.

As a clarification of the term "brain drain" in the early 90s of last century, the scientific debates introduces the term "brain exchange", which explains the spatial exchange (spatial displacement) knowledge that primarily occurs between developed countries. This term denotes balanced exchange highly educated and research staff. If the ultimate effect of such exchange is unidirectional negative for the country that broadcast staff, then it is a "brain drain", but if the effect is unidirectional positive for the country that receives them, then more precise definition of emergence uses the term "brain gain" (Kapur, D. & McHale, J., 2005).

Another mechanical term which is used to explain the scientific mobility is the term "overflow the brain." It occurs when a given country is excessively produced highly educated and research staff, the domestic labor market has the capacity to absorb. Consequently, highly educated and scientific research personnel are forced to leave the country. The late 70s and early 80s of last century, "overflow the brain" was a term that has been interpreted mass emergence of scientific diaspora of POS-socialist countries in Central and Southeast Europe. In fact, the former level of competitiveness of their economies, most former socialist countries had

oversized research sectors. By changing the economic system and the liberalization of the higher education and science sector in these countries occurred simultaneously transfer the staff to the private higher education and science institutions or business sector, or so-called "internal brain drain" and migration in developed countries, or "brain drain" (Breinbauer Andreas, 2007:2).

In the late 80s of last century, introduced the term "brain circulation" which is used to explain the trend of returning emigrated highly educated and academia staff, which appeared in North Korea and India (Leipziger, D.M. 2008). Also, the "brain circulation" became the preferred form of scientific mobility because the probability of dispersal and circulation of knowledge is greatest. Another term that clarifies the emergence of mobility of highly educated and research personnel, especially in post-socialist countries, is the so-called "horizontal outflow of brains." This form of mobility occurs when individuals occupied with scientific research, mostly due to low salaries and poor working conditions, they leaving scientific activity and moving into the business sector. Result of "horizontal drain brain" is the emergence of "brain waste", and accepts the jobs and tasks that do not require knowledge, skills and experience acquired in the process of education or previous employment. Depending on whether people leave the research activity will remain in the country or emigrate, "waste of brains" will be internally or externally. As a lighter form of "brain waste" is considered the emergence of "brain freeze" in which regardless of whether you leave scientific research or not, highly educated and scientific researchers do not use the maximum of their capabilities and qualifications or at least not to the extent to which they would like (Breinbauer Andreas, 2007:8).

The previous terms confirm complexity and uniqueness of physical displacement of scientific research personnel and the need of clarification. Namely, within the global scientific community, physical displacement and interaction between scientific researches is basic purpose of the production and transfer of knowledge, and in this respect, migration is only one kind of scientific mobility. Additionally, in the 21st century, study visits to foreign institutions have become an essential prerequisite for advancement in scientific research career.

FACTORS AFFECTING THE MOBILITY OF SCIENTIFIC RESEARCH STAFF

The mobility of highly educated personnel affects factors such as (Solimano A. 2008):

1. Differences in the amount of wages or earnings of Individuals between different national economies. This factor is closely correlated with the level of development of a given country, so that the difference between the levels of economic development of individual countries requires the size and mobility of highly educated staff. Differences in economic development

between the countries primarily relates to differences in rates of economic growth, which in turn leads to the existence of differences in 'income per capita and living standards. In this context, from the international point of view, the mobility of individuals takes place from poorer, less developed countries in richer, more developed economies or economic.

2. Factors immaterial. In addition to salary or earnings, a very important factor especially for scientific profile of staff present intangible factors that influence the decision to leave own countries and resettlement in other countries. These intangible factors primarily related to the opportunity to work in prestigious universities, research centers, and developed research infrastructure in countries that allocate large amounts of funding for science and research and so on.
3. Demand for factors of production. This factor is closely associated with the development of economic opportunities and living conditions in a given country. Because mutual correlation of factors of production, economic development opportunities are bigger (have higher growth rate) and at the same time becoming more attractive for foreign capital, influx of foreign labor and human capital. Moreover, these countries the human capital need can provide through number of ways:
 - The human capital to provide through permanent employment of highly educated staff available on the domestic labor market;
 - Outsourcing contracting, whereby it possible to use domestic and / or foreign human resources;
 - Re-allocation of capacities in countries where you can use human capital or knowledge at a lower price.
4. Level of technological development of countries. This mainly refers to ICT, which in the modern economy clearly facilitate the mobility of factors of production, including knowledge. The attraction of highly educated and scientific staff is causally related to the high level of technological development. Indeed, ICT has enabled the development of outsourcing, i.e. satisfying the needs of human capital and knowledge, without their physical migration.
5. Effect of agglomeration and concentration. The emergence of modern and developed centers-agglomerates, in which a concentration of renowned intellectuals from various fields, creating interest and motivation to be in the middle of the action. This is particularly evident in the migration of scientists and researchers because it allows them to cooperate, and it is important for them to share knowledge and experiences with reputable and quality personnel.
6. Socio-cultural and linguistic affinities. In the modern era language and socio-cultural differences between different countries are less constraining factors for mobility of individuals, particularly for highly educated staff. Long positive trend of foreign languages, coupled with the impact of pervasive globalization has led to a reduction of language barriers and

raising the overall socio-cultural awareness. In terms of scientific migration, this has led to the emergence of so-called international elite that has gained education on the prestigious education faculties in the world and is part of the alumni networks of other prestigious research, highly educated and professional institutions. This in turn allows greater mobility of knowledge.

7. Political regime and migration policies of countries. Macroeconomic stability, political environment, administrative efficiency and the level of investment in science, are important factors in migration flows. Understandably, there also should be especially emphasized the role of migration policies of the states as they have a direct impact on mobility, inflow and / or outflow of human capital. In modern times, the need for knowledge in all countries, increasingly intensifying their mutual competition and struggle in attracting highly educated staff. Thanks to the application of various concepts, developed countries increase their own attractiveness in the function of continuous knowledge transfer. On the other hand, the developing and poor economies introduced policies that endeavor to reduce the outflow of highly educated staff or possibly attract staff from other countries, in order to compensate the internal lack of highly educated staff or research staff.

SITUATION IN RESEARCH AND DEVELOPMENT ACTIVITIES IN SOUTHEAST EUROPE AND THE REPUBLIC OF MACEDONIA

Given that the narrower subject of elaboration of the paper is research and development activities in the country, this section illustrates the comparative analysis in terms of the trend of creating a high-educated staff, the structure of funding sources and sectors employing scientific and research staff in Southeast Europe for the Republic of Macedonia to compare with the countries of the wider region. Namely, as in all countries in the region, the reform process in higher education Macedonia started immediately after independence and in early 2000 resulted in the establishment of private higher education institutions. The emergence of private higher education institutions increased the possibility of studying for a large number of citizens, and thus from year to year there is permanent increasing in the number of graduates and master's degree students, as can be observed from Figure 1.

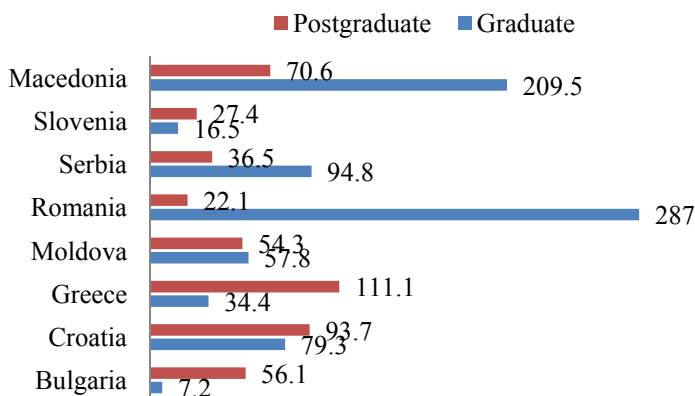


Figure 1: Growth in graduate and master's degree students in Southeast Europe, in the period 2002-2008, in %.

Source: Science report, UNESCO, 2010, p. 188

From the data presented in the Figure 1, it can be clearly seen that this trend is typical for other transitional economies.

Regarding the sources of the funds that come spent on research and development, it should be said that in the case of Republic of Macedonia there is a deviation both in the number, and the structure of the sources (Figure 2).

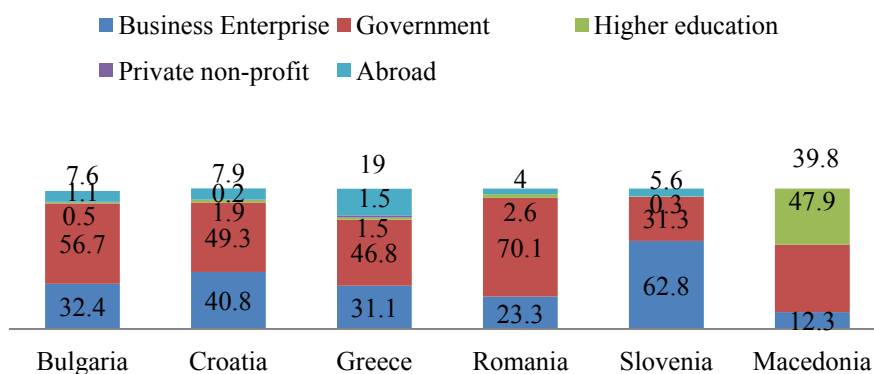


Figure 2: Structure of sources of Funds to fund research and development in Southeast Europe, in 2008, in %.

Source: Science report, UNESCO, 2010, p. 187

Namely, in the country, compared with other countries from the region, private nonprofit institutions and foreign resources, do not appear as a founding source. Regarding the structure, it can be said that there is no significant concessions in terms of expenditure made for research and development from the national budget, as opposed to expenditures made in this respect by the entities in higher education (39.8%) and business sector (12.3%).

From Figure 3, it is clear that the Macedonian scientific researchers are mostly engaged in higher education (51%) and public institutions (43.5%), and much less in the business sector (5.5%). A similar structure of employment is present in other countries in the region. Only exception is Slovenia, where the business sector is in the same time biggest funder of research and development (62.8%), and the sector in which most scientific research staff is engaged (43.5%).

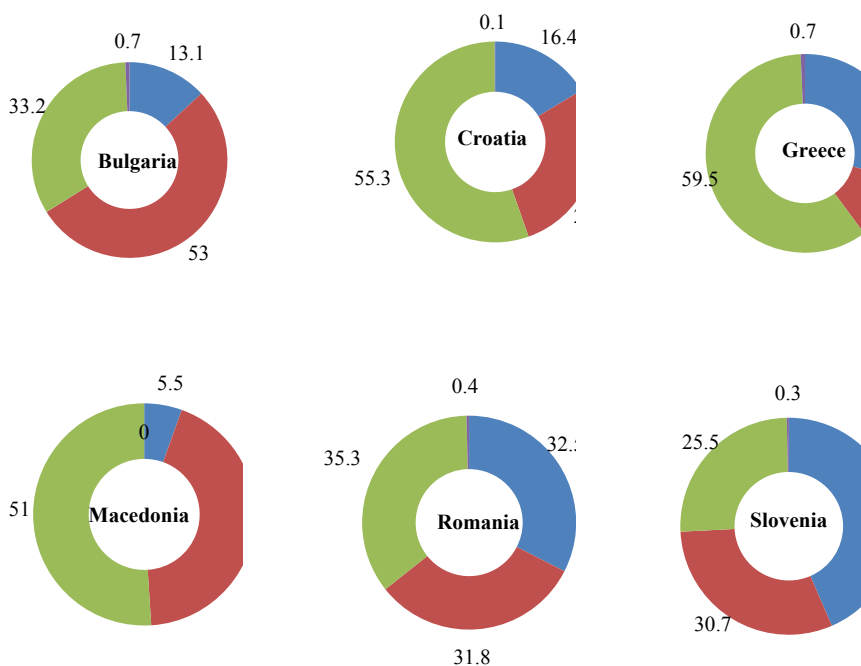


Figure 3 : Structure of sectors that employ scientific research staff in Southeast Europe, in 2008, in %.

Source: Science report, UNESCO, 2010, p. 189

For the Republic of Macedonia, it should be pointed out that there is low level of investment in this sector, as confirmed by the data presented in Table 1, where it is given a comparison with EU-27, which only supports the previously stated conclusion. An additional concern is the negative trend of the share of expenditure for research and development in GDP of Macedonia, despite the positive trend in the EU27 Member States.

Table 1: Participation costs for research and development of the total GDP in the Republic of Macedonia for the period 2001-2009, in %.

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Republic of Macedonia	0.20	0.19	0.20	0.17	0.16	0.17	0.16	0.14	0.11
EU 27	1.86	1.87	1.86	1.83	1.82	1.85	1.85	1.92	2.01

Source: State Statistical Office, Eurostat

Regarding the same parameter, the Republic of Macedonia is also lagging in comparison with other countries in Southeast Europe, as can be seen from Figure 4. For illustration, in 2007 in Macedonia, in the sector of research and development have been invested 16.1\$ per capita, which is nearly 29 times less than funds that for the same purpose designated in Slovenia.

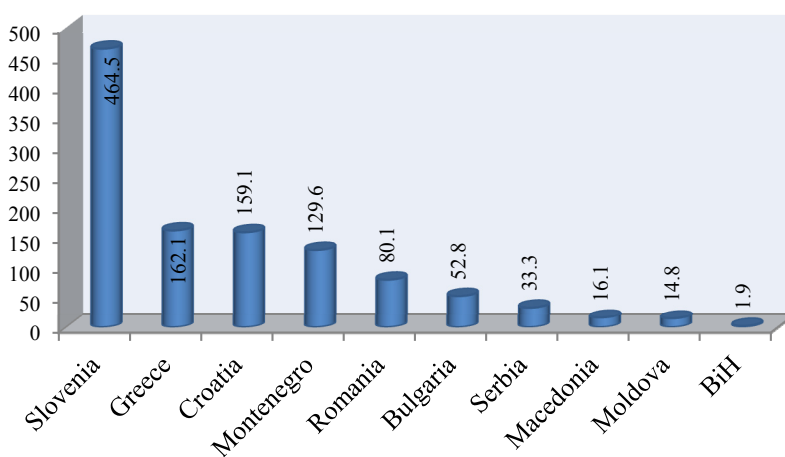


Figure 4: Gross expenditure on research and development in South East Euro, in 2007, in U.S. dollars

Source: Science report, UNESCO, 2010, p. 186

OPPORTUNITIES FOR E-ENTREPRENEURSHIP DEVELOPMENT AND ENGAGEMENT OF HIGHLY EDUCATED AND SCIENTIFIC RESEARCH STAFF IN REPUBLIC OF MACEDONIA

In the new era of globalization and knowledge society, the global economic forces, countries such as the US for example, and those who successfully cope with the challenges of globalization, drastically increase their investments in research and knowledge creation to generate economic growth, employment, and to achieve competitive advantage in global markets (Audretsch, 2007).

All countries increasingly feel the pressures of the knowledge based economy in which the value of information and knowledge is increasing thanks to the application of information and communication technologies (ICT). The process of absorption, adaptation and diffusion of knowledge and individual competences is becoming more integrated, focusing on realizing the broader scientific, social and business goals.

In terms of business entities in the knowledge-based economy, one of their main tasks is creation, provision, and distribution of resources based on information, which leads to increasing of their competitive advantage. Thereby, the role of ICT and their introduction in businesses is becoming more important, some say crucial (Trivellas, 2013). But if they intent to increase efficiency and effectiveness of their companies using ICT, they must begin to rely more on some intangible factors of production (knowledge, know-how). The new companies in the network economy (especially those which offer digital products and services), must apply specific knowledge of management, marketing, computer science and others, into their every-day's operations.

The companies in the network economy tend to be heterogeneous and complex and to differentiate themselves from existing companies in many aspects. To be different (to see what others can't) is one of the essential features of the entrepreneurship, and the knowledge could be a key factor that could differentiate entrepreneur the most. The knowledge enables entrepreneur to bring new ideas to identify and exploit business opportunities and to take specific actions. The knowledge is one of the drivers in the decisions making (Ivanova and Gibcus, 2003) and risk taking (Praag, 1999) which are in the focus of the entrepreneurial process.

New knowledge are gained primarily as a result of scientific research (basic and applied), and to be quickly and efficiently disseminated and get market confirmation through their commercialization, a link should exist between research institutions, academia and the business sector. Building a strong connection between science, education and the economy through "knowledge triangle" can be made on several possible ways; one of the newest lately is encouraging the so-called *academic entrepreneurship*.

Academic entrepreneurship redefines the process of knowledge transfer into a process of transfer of innovation. The key to this approach is to create an open system in which partners with various complementary expertises will create technological and other innovations that will further lead to creation of successful business ventures for commercialization and/or transfer of that innovation and knowledge. Each of the pillars of this system has a specific role:

- The science and research dealing with technological and other types of development, innovation and creation of new knowledge;
- The educational activity is responsible for the dissemination of produced and acquired knowledge, and
- Entrepreneurship is a part of the system which includes the application of knowledge and innovation and creating new value valorized at the market through the existing or newly established companies.

The system of academic entrepreneurship can cover all stakeholders at the universities: students, teaching and scientific staff. They all have the opportunity to engage in the commercialization of research results that they produce throughout the scientific and educational process. This can be done by patenting innovations and/or their licensing, and through business start-up by creating so-called spin-off companies.

In regard to this, academic staff and entrepreneurs have significant similarities in terms of certain features which they normally possess. The starting point of the entrepreneurs and scientists is a certain assumption (hypothesis); the next step for both is measuring, testing and empirically to determine whether their idea is the basis for further elaboration or not; the environment in which both work is full of uncertainty and people who question their ideas; they are both driven in their actions by similar motives (curiosity, looking recognition, acquisition status, lifestyle) (Pragmatic Startup 2011).

There are many researches that go in favor of these similarities. According to Shane (2009) the academic staff is extremely entrepreneurial oriented. In fact, about 16 percent of them manage companies which have been established by them, making them bigger entrepreneurs than the average American is.

Commercialization of scientific knowledge through academic entrepreneurship happens in almost all industries, but is particularly successful in sectors that are based on significant technological innovations, especially those in the field of ICT and Internet technologies. The Internet today offers new opportunities for individuals and companies to express their creativity and innovation through business ventures that have business models primarily based on use of ICT. Thus, business realized online through the Internet (also known as electronic business, or e-business), its dynamics, rapid growth and severe competitive advantage offers new avenues for wealth creation (Amit & Zott, 2001). That, in turn, presents a special challenge for the emergence of a new kind of business people who start these ventures, called *e-entrepreneurs* and the act of starting business ventures that are based on the Internet is called *e-entrepreneurship* (Kollmann, 2006).

Academic entrepreneurship is strongly involved especially in e-entrepreneurship. There are numerous examples of top online companies that started as part of a master or doctoral studies of their founders. These include Lycos, Yahoo, Facebook and many others.

In Republic of Macedonia there are 250 companies that have an online business or in most of their operations they introduced significant online component. The fact that according to the number of all active enterprises in the country in 2013 which is approximately 60, 000 shows that the participation of an e-enterprises in the Macedonian economy is about 0.4 percent, which is really too little. On the fact that there is a huge room for growth of the Internet industry in the country speaks the estimation that the share of e-businesses in GDP is less than 0.01 percent, while the value of the Internet economy in the countries of the G-20 in 2010 was 2.3 billion USD, or 4.1 percent of their GDP, and in some states climbs to more than 8 percent (in the United Kingdom for example, the Internet economy produces 8.3 percent of the national gross domestic product). According to the (Dean et al. 2012) this value in 2016 should reach \$ 4.2 billion, and in the UK Internet economy will participate in the GDP with 12.4 percent.

Only 3 percent of e-entrepreneurs in Macedonia possess PhD title (Figure 5). This leads to the conclusion that many more highly educated persons and scientists can be potential entrepreneurs if favorable conditions are created. One of these conditions could be encouraging universities and their scientific and educational staff, as well as master and doctoral candidates who are not currently engaged in higher education and scientific institutions in the state to establish academic entrepreneurial spin-off commercial companies that will be part of the structure of the university, but will preserve the full autonomy of the entrepreneur in respect of all decisions relevant to the business. This is recognized by the Government of the Republic of Macedonia (2012) and is implemented into the Innovation Strategy for Republic of Macedonia for 2012-2020 (Government of Republic of Macedonia 2012), where one of the measure is to provide support for the university spin-off companies creation, and to give opportunity for the academics which will decide to start entrepreneurial venture to take 2 years leave from the university or to continue working at the university with limited number of hours.

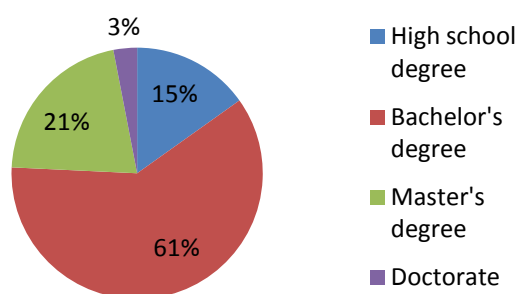


Figure 5: Educational structure of the e-entrepreneurs in Republic of Macedonia (2012)

Source: Authors' research

Nearly four out of five employees in the e-enterprises in Macedonia are with higher education (79%), while the remaining one-fifth (21%) have secondary education (Figure 6). This suggests that an enterprise does not employ people with Master or PhD degree.

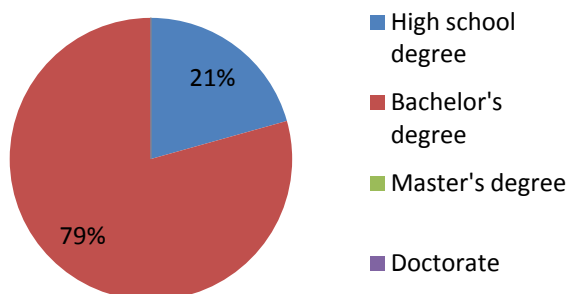


Figure 6: Educational structure of the employees in the e-enterprises in Republic of Macedonia (2012)

Source: Authors' research

However, research shows that certain researchable aspects of the work, analytics for example, as well as the need for greater expertise in some technical, and other specific business skills and knowledge (legal, financial, human resources, business models, cloud computing processing, etc.) e-enterprises substitute with outsourcing experts with masters and PhD degrees in certain areas. This is happening at a bit less than a half of the e-enterprises (44%), while the other (larger) part (56%) believe that for the development and operation of their business there is no need for outsource with Masters and PhD degrees (Figure 7).

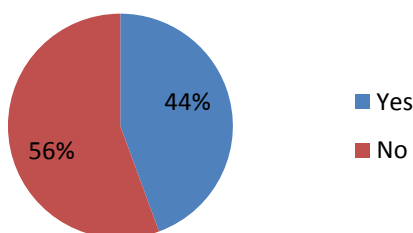


Figure 7: Outsource with Masters and PhD degree as outsource of the e-enterprise in the Republic of Macedonia (2012)

Source: Authors' research

Only 28 percent of the e-enterprises cooperate with the scientific institutions and universities, while majority of all e-enterprises, 72 percent try to find impetus for creativity, innovation and new knowledge with themselves or cooperate with other institutions (Figure 8).

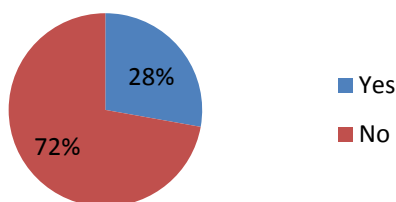


Figure 8: Cooperation of e-enterprises in Republic of Macedonia with scientific institutions and universities (2012)

Source: Authors' research

This indicates the need to link universities and scientific institutions with potential and existing entrepreneurs and encouraging all for more intensive mutual communication and cooperation.

CONCLUSIONS

From the analysis in the paper, it can be concluded that Macedonia is still in the phase of "brain drain" from the country, resulting in numerous adverse effects, leading to:

- Reducing the production base of the country;
- Slowing the development of science and research;
- Slowing the technological development of the country, on the basis of reduction of the available human capital, as well as insufficient application of transfer of technology and knowledge from abroad;
- Reducing the level of productivity of the economy, given that the lost human capital is with high capital productivity, and in the same time is the resource that can increase the productivity of labor and capital;
- Reduction of living standards;
- Reduction of the international competitiveness of the country;
- Reduction in tax revenues generated from tax revenues that are created on the basis of human capital and other.

Regarding the findings concerning the analysis of the factors for emigration of highly educated staff, and the trend of its production and use, with particular reference to the situation in the research and development activities in the country, situation is unfavorable. Namely, there is permanent positive trend in creation of highly educated staff that simply cannot be absorbed in the economy, including the development and research sector. As a result, much of the staff remains unemployed or gets engaged in activities where the knowledge gained in the educational process is not required, and thereby not used, or as a last resort, left the country.

Specifically for the Republic of Macedonia, it can also be concluded that research and development activities are mostly financed by the state budget, and that public sector is the biggest employer highly educated staff. Also, mostly as a result of its low profitability and inability to allocate more funds, the role of the Macedonian business sector is supporting the research and development in the country is insignificant.

One of the possibilities to increase participation of highly educated and scientific personnel from the Republic of Macedonia into the economy is to intensify with set of measures their employment into the business sector. The other possibility is to encourage them to apply their innovative skills and knowledge in their own enterprises in all sectors, especially in the sectors specific for the Internet economy through so-called e-entrepreneurship.

The emergence of new ways of doing business induced by the development and application of new technologies contribute to the successful positioning of the companies in the global market. Thus, in modern terms, the development of an entrepreneurship offers a range of opportunities for business development in the state through the creation and diffusion of knowledge and its implementation in new business models. In knowledge-based economy, e-enterprise creates value for its customers through electronic processes in e-value chain (electronic value chain). Usually, e-enterprise starts as a completely new firm established by an e-entrepreneur. The e-entrepreneurs very often are well-educated entrepreneurs who are well acquainted with the advantages offered by innovations in ICT and mostly are able to think creatively about the ways how potential customers will be able to get value from their product or service through Internet.

In the Republic of Macedonia only small percentage of highly-educated people with masters and doctorate degree are involved into e-entrepreneurship. This suggests that there is a big knowledge and scientific potential that can be engaged into various sectors in the economy, especially into the e-enterprises. For this purpose, it is necessary to create conditions through implementation of measures that will support and will encourage commercialization of their knowledge and innovations that are being produced at universities and scientific institutions in the country. It can be a way for their professional engagement, career development and in this respect, their more active and wider involvement in the national labor market.

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MANAGEMENT CONTROL AND IMPROVEMENT OF EDUCATIONAL PROCESS

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Abstract: The main objective of this paper is to improve the educational process by introducing management of a control, the modern concept of business process management, using online analytical processing (OLAP) business intelligence system in educational institutions. Business Intelligence as an additional instrument of management control, is extremely profound support to business process management. Given the scope and purpose of the research, the methods to be draining quickly in the research are: Inductive and deductive methods as the basic logic method, which allows the research to derive some conclusions on the research methodology and object-oriented development of business intelligence, which includes: defining requirements, analysis, design and implementation of business processes. The introduction of modern concepts of management control, using the OLAP system enables detailed analysis of the education and business processes in order to improve the operation of educational institutions. The paper used test scores as indicators of efficiency of educational processes, analyzing them by year of study, grades, subjects, exam dates ...The use of instruments of management control is always possible to act on the corrective and effective educational processes because the data thus obtained is always a function of anticipation and quick reaction to the perceived problem. The importance of the work it is reflected in monitoring, maintaining and improving the standards of teaching and learning, scientific research, contribution to educational quality management processes, improving awareness, information sharing and collaboration among service users and staff.

Key words: Management Control, Educational Processes, OLAP, Business Intelligence

JEL classification: M10, M15, M20, A20

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INTRODUCTION

Business systems today operate in a dynamic and unpredictable environment in which traditional management model provides a sense of control, but doesn't lead to the best results. Often, trying to control things they get out of control. Therefore, they need new ways of thinking, and limits should be set much wider so as not to be an obstacle but support in achieving the best results. You need to create a general framework of behavior based on values rather than the prescribed rules.

A modern approach of management control requires the introduction of changes in the way of management, business process management, and creating an organizational culture of achievement. Based on the success of which is estimated considering the given circumstances, competition, and whether there is a continuous progression.

Control should be based on relevant indicators and trends, on decisions taken on the spot in real time. This means that decisions are taken at the right time in the right place on the basis of the most updated information. In this regard, management control, to answer the purpose uses elements of modern information technologies of model-based business intelligence and data warehousing. Management control, in conjunction with business intelligence, is the basis of the modern understanding of business systems and a support for effective decision-making. Applying business intelligence facilitates the work of controllers, increases their work productivity and reduces dependence on IT professionals.

Applying the concept of management control and business intelligence, as a new management approach in Serbia, deals a small number of people in the business organizations as well as in educational institutions. The reason is probably the relatively recent emergence of this way of considering the management, as well as the lack of interest of a large number of owners and managers of business systems, for research and monitoring modern trends in this field.

Education is a specific type of service in today's knowledge economy, no one wants to be controlled, but wants support, wants to learn, wants to contribute and to be more successful. Taking for example the educational institutions, colleges are established, they accreditate their study programs, but care very little for the study programs to be in line with current market needs. The problem occurs when there are not enough interested students for their studies. The quality and success of the study are important questions that need to take care of educational institutions because they are a core of business and is a good precondition for the creation of a reliable and efficient system of higher education.

The introduction of modern concepts in management control, with the use of OLAP system, enables detailed analysis of the education and business processes in educational institutions. This paper discusses the optimal use of instruments of management control for the purpose of the corrective effect on the educational process, to ensure that informations that are obtained in this manner, are always operational forecasting and rapid response to perceived problems.

LITERATURE OVERVIEW

Management control with the use of business intelligence is the key to understanding the basis of the modern business management system and represents a management support.

Particularly great importance to the development of controlling in Germany, and therefore in Europe has Dr. Albrecht Dale, who in 1972. founded Controlling Academy, whose main task was the training of professionals in the field of controlling. What also contributes significantly to the development of controlling, harmonization of controlling concepts and terminology is the International Group of Controlling which was founded in Germany in 1995. year, which included over 6,000 active members from all over Europe (Perovic et al, 2012.)

For Ravi Kalakota and Robinson Marciai business intelligence is a set of new applications designed to organize and structure data about business transactions in a manner that enables the analysis useful to support decision-making and operational activities of the company (Kalakota, etc.. 2001)

DEFINITIONS

There are many definitions of management control but probably the most accurate definition of management control is: "Management control is effective, modern performance concept of companies business result, which includes coordination and a link between planning and information, then analyze and control of human, material, financial and informational resources to achieve goals in an efficient manner. It is a management tool which provides support to management in decision-making "(Avelini, 1998)

PROCESS MANAGEMENT CONTROL

Management is a continuous process by which an educational institution leading and directing towards set goals. Therefore, the management and control is a continuous process that must exist as long as the institution itself.

Data, which is available in the educational institutions are largely dysfunctional or roughly "accounting", which means lack transparency for managerial control and decision making. Often make the wrong decisions, because decisions are made based on information that is believed to be accurate. And they are not! The majority is not aware of how their information is of poor quality, and the other problem is that they are mostly natural. The introduction of management control of the business processes of educational institutions will certainly provide quality information, accurate and timely information about each business segment, which will decide safer and better.

Management controls consist of a series of activities in an educational institution implementing a range of these activities ranges from:

- Analysis of the objectives,
- Constant comparison of planned and actual,
- Coordination of the various organizational units in an educational institution, the evaluation of the situation,
- Decision-making,
- Transfer of information,
- Business Intelligence and so on.

Process control management includes the following steps:

Establishing standards and methods for measuring results;

Standard operating educational institutions is the expected or desired state of the institution in the future. Standards arising from the establishment of goals and standards, the institution directs its resources to achieve its objectives. Standards define what is expected and what is the standard deviation that can be tolerated. To expectations and any deviation could follow properly, you need to be measurable standards.

All decisions to direct educational organizations, include relevant indicators expressed in quantitative or qualitative form. This needs to be clearly and precisely defined landmarks pursued. At the same time, these figures represent the (standard) to monitor processes and outcomes for the valorization of actual performance and their comparison with the projected (planned) and taking (re) actions by which the actual performance brought into conformity with the (standard).

The Theory (Weihrich, Koontz,1994) recommends the use of different standards. However, in practice commonly used by the following indicators:

Physical indicators are non-monetary indicators. Their use is common at the executive level, where materials are used, which is represented by human labor, which, after repeated and where services are produced. They can be expressed quantitatively (eg, in the hours of work for teachers, according to the official fuel consumption vehicle, etc).. Physical indicators can be expressed qualitatively as well as the quality of teaching, the quality of the information provided on the website of educational institutions, the quality of space in the studies and the like.

Cost indicators are expressed in money, as well as physical indicators often used at the executive level. They connect the values expressed in money to specific aspects of the production of services.

There are a number of *financial indicators*, and all are performed using the financial indicators of the value of physical units. They are rather related to capital expenditure on educational institutions but the costs of services and are therefore rather than related to the balance of the profit and loss account.

Indicators of *income* obtained by connecting two or more elements of the business. They may include indicators such as income per passenger kilometer, average service provided by the user and others.

Program Indicators - The manager can be asked to bring in the calculation of the variable costs, formal monitoring program for the development of new services, or programs to improve the quality of service, ease of a subjective assessment can be applied for the assessment of the program and the timing and other elements can be used as objective indicators.

Intangible indicators - In business there are many intangible indicators eg. determine the ability vice dean for education and director of the institution? Are the teachers faithful to educational institution? Could a group be successful at marketing? For this purpose, the various tests, surveys and sampling methods developed by psychologists and sociologists who have allowed testing of human attitudes and actions.

Goals as indicators - Through research and reflection is possible to define goals that can be used as performance indicators, eg., If a program is worded so that it includes elements such as cost accounting teaching centers harmoniously with some special features of the plan, the plan itself makes up the indicators which become objective for our team, "physical".

Strategic plans as well as checkpoints for the implementation of the strategy - Strategic plans include the need to control the implementation of the strategy. In addition, the control strategy not only provides information about the degree of success of educational institutions, but also permanently changes environment.

The measurement results and the performance of educational institutions;

Measuring the results of an educational institution provides a mechanism to compare the results achieved with the standard. Measuring results are collected information that will perform the required analysis. Information gathering is done through various types and forms of documents, internal and external nature (in the case of transactional database).

The purpose of measurement is to determine the performance, which are important for achieving the goals, mission and vision of the educational institution. More specifically, the purpose of measurement is to determine only the actual performance of the process and the results that are compatible with the indicators contained in the standards and guidelines as defined in the previous step of the process control.

To be successful, the measurement must be properly organized, which means:

- Performance measurement process must be continuous because the process of engagement of inputs, transformation of inputs into output and the distribution of output, overall, continuous processes;
- Performance measurement results shall be in accordance with pre-defined program or plan, to which should be timely to meet the educational

subsystems, groups and individuals whose behavior and results are subject to measurement. This is very important because this way affects all factors (especially the staff) to punctually relevant preparation. Therefore, the measurement of the pre-defined limits (terms) is significant because in this way there are created the preconditions for objectifying comparability of data according to a "critical moment";

- The measurement must be performed in accordance with certain standards of measurement, and measurement using standard procedures. Standardization of measurements is very important (pre) condition for the measurement of success. With only using standard procedures we can get the best results, and what is also very important, the results are comparable: to each (of several time intervals) and in relation to the standards;

Successful measurement requirements and relevant expert knowledge. This is the reason that the measurement of processes and outcomes generally do not perform managers already trained for that purpose (authority and responsibility) of the organizational unit, or (sub) systems, among which a special place and role of organizational units operating in the field of accounting, finance and control the quality of products / services.

Beside these 'classical' holders measurements in well-organized modern educational institutions all have a significant role and Human Resource Services. This is because, on scientific grounds, valorization behavior and effects of individuals and groups is very important way to get knowledge about their performance and very important (pre) condition for the success of human resource management.

Comparisons with established standards

Comparison of the results with the standard means comparison, analysis and evaluation of information to monitor how to reach our standards. Based on these comparisons we come to conclusions about any corrective actions and the actions to be taken if the results achieved deviate from established standards and exceed pre-set limits of tolerance.

Results of comparison can be twofold:

- To come to the conclusion that the actual performance of the same planned, is in accordance with the set standards and
- To come to the conclusion that the actual performance deviate from the plan, or defined standards.

The most favorable option for the educational institution is a situation of equality between actual and defined performance standards. However, this situation is, practically speaking, very rare. This arises because the process of executing tasks (individual, group or institution as a whole) seem numerous factors that influence the occurrence of deviation - deviation of actual performance from projected. Because controllers have their attention directed to the determination of

the type and characteristics of the identified deviations. This is due to the type and characteristics of the deviation depends on their (re) actions.

Deviations may have different limits admissibility, and therefore deviations are divided into:

- *Microdeviations* - who do not register and do not give rise to decisions on their correction. They submitted to the stability of the system. They anticipated the concept of functioning;
- *Minor deviations* - which are registered but do not follow their development, and these are not decisions because their impact on meeting the demands of functioning negligible. They are corrected by selfscalability (self-organizing) of the system (Beer, 1966, p. 347). Selfscalability system provides for the concept of function;
- *Permissible deviation* - which are registered and tracked to the right time to decide upon the prevention of them exceeds the limit. They corrected the corresponding elasticity system provided the concept of regulation;
- *Unauthorized deviation* - to be entered and immediately gave rise to make decisions about their correction, because their effect hinders or prevents the operation of the system;
- *Devastating deviation* - whose symptoms emergence register to promptly decide on preventing their occurrence because they destroy the system (a definite break in the continuity of operation). Accordingly, it should be noted: any deviation, or any deviation is not a problem. The problem exists only when it is incurred unauthorized deviations or deviations devastating when they occur.

Taking corrective action measures in case of deviations from the set goals;

Taking corrective action is the fourth step of the controlling process (Robbins, Coulter, 2003). If it is determined the need for the implementation of corrective measures then implemented the same change of one or more activities in the operations of the institution. Under taking corrective action involves the activity of controllers and managers who, by nature, following the acquisition of knowledge about the nature of the results obtained in the previous step: comparing actual performance against relevant standards. It is an activity which is not only the purpose of determining the need to take corrective action, as argued by some experts, (Griffin, 1999) (which is obtained by analyzing the data obtained by comparing actual performance with standards), but also to take corrective action if they are needed.

The findings of the controllers come in determining the need to take corrective action defining to affect the type and direction of further activities of managers. In this context, perspective, managers are available to conduct the following options:

- *Do not take corrective action* - that, at the same time, does not mean that controller does not need to take any action that is "to do nothing." On the

contrary, it is a necessary or required, the controller of the "state of play" informs the parent managers and others interested.

- *Take corrective action* - the purpose of the adjustment of actual performance with standards. Corrective action (which some authors refer to as the current and basic, (Robbins, Coulter, 2003)² managers undertaken by first identifying the cause of the deviation (Hellriegel, et al.,2002),which is determined by the controller.
- *Take action with the purpose of correcting standards* - This activity is undertaken if the managers on the basis of diagnosing the causes of deviation and comprehensive analysis of the standards,acquire the knowledge that they should not change the actual performance but standards because they are unreal (Mankin, Cohen, 2004).

BUSINESS PROCESS ANALYSIS

Basically, management control is a business process analysis. Business process analysis is the most intensive research and has the deepest essence of economic phenomena and economic events of business educational institutions. Qualitative analysis of business processes and quality documentation are the basis for the economic analysis of the business. It is for internal control and audit, and to provide good documentation. Control means acts primarily to prevent abuse of goods and illegal behavior of staff. Analysis, on the other hand, we should, on the basis of symptoms, ie. of irregularities control, find and propose solutions to problems. So, good analysis precede Internal control and audit quality and internal control and audit are its prerequisites (Karavidic, Ivkovic, 2010).

Modern business depends on the measurement and analysis of performance. Standards for measuring arising from the strategy of educational institutions and provide valuable data and information on key processes, outputs and outcomes. Data and information that are needed to measure the performance and opportunities for improvement related to users, service performance, market, competitive analysis, personnel, costs and financial performance. Detailed analysis to determine trends, projections and causal - simulation. The complete results of these measurements can be used in the strategic planning process, improving company performance, and comparison of performance of institutions with the competition.

To make the process of measuring and analyzing successful, it is necessary to define the parameters of performance of educational institutions. These are primarily measurable characteristics of services and business processes themselves. In determining these parameters, it is necessary to single out those crucial influence on the results in the areas of measurement.

QUALITY OF THE EDUCATIONAL PROCESS

Key performance parameters of educational institutions are for measuring the quality of its educational processes. Education is a specific type of service, and there are many problems in defining the quality of its business processes. It is therefore necessary to develop common criteria and methodologies for quality assurance. Interested in the quality of educational processes are beneficiaries of educational institutions: students, employers and employees. Student as one of the most important participants in the educational process can be seen as a user of the institution of higher education or as a product of higher education. Expectations of students are educated to provide an advantage in the labor market. Employers want to provide a competitive advantage based on the knowledge and skills of graduates, in order to easily cope with the complexity of the business. Employees are essential to be satisfied with a job they want to do and for which they were formed.

The requirements and expectations are different, and in order to ensure the quality of educational processes the educational institutions must bring those diversities together and adjust their work to them to ensure quality.

BUSINESS INTELLIGENCE AS A FUNCTION OF MANAGEMENT CONTROL

In order to satisfy different user information needs controlling the implement business intelligence systems, as well as information technology that is able to adequately respond to the challenges of modern business decision making. The information system provides collection, storage, processing, and "delivery" of information and business intelligence Business Intelligence (BI) is a set of tools and applications:

- Access data from one or multiple sources
- Review of data
- Data analysis,
- Distribution of knowledge obtained by the analysis.

Management controls, in conjunction with business intelligence is the basis of the modern understanding of business systems and is supported management control (Figure 1). Different levels of management are made of different kinds of business decisions, and are therefore different in the nature of the required information.

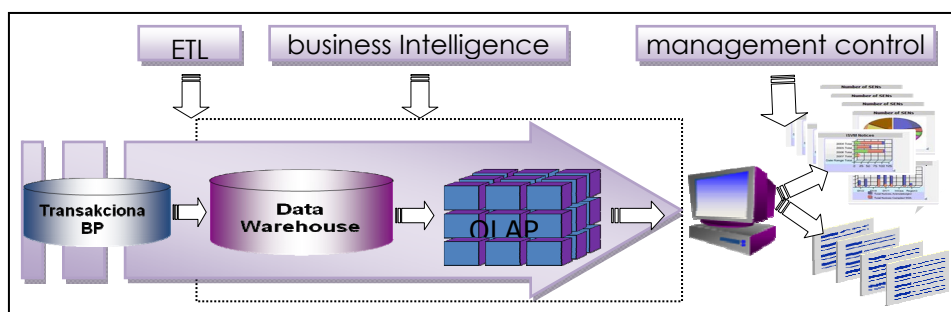


Figure 1: Elements of business intelligence and management controls

Source: The authors' assesment

The controller for the" strategic level management provides information on the highest level of generality educational institution and its environment, including summary reviews, often historical character, mainly qualitative in nature and often as a rough estimate.

Needs of the operational level management appropriate information specific narrow domains, mainly in the form of raw data, very current, largely quantitative nature and high precision and accuracy. Middle level of management requires internal information, sometimes of historical character, enabling business analysis, process modeling and prediction." (Balaban , Ristic, 2006).

Business Intelligence and Balanced Scorecard - the ideal image of an educational institution controllers have fast and efficient access to the scorecard cards, which show values of key performance indicators and triggers the alarm when they cross the limit. This concept allows the controller and easily getting into the detailed data provides consistent reports that integrate data from different sources.

"Corporate data warehouse" Bottom Up Approach - This approach involves creating a data warehouse database that integrates data from different data sources. This process involves the storage level and higher-level tools ETL (Extracting Transforming and Loading data) (Circic, 2006)).

EFFECTS OF BUSINESS INTELLIGENCE RESULTS ON MANAGEMENT CONTROL

Management controls connecting parts and the whole business system, past, present and future as well as the operational and strategic management. Task management control is to provide information to the operating system to encourage activity and they help managers to make informed management decisions.

How to get the quickest way to high-quality, accurate and timely information, and how to choose those that are most important to us, and which provide the most required

data? Management controls, to answer the purpose of its existence, uses elements of modern information technologies of model-based business intelligence and data warehousing technologies as well as basic business intelligence to decision-making process was as short as possible, a better and more rational decisions.

Applying business intelligence to facilitate the work of inspectors, increase their work productivity and reduces dependence on IT professionals. In this regard, business intelligence system allows controllers:

- Quickly analyze the causes of a problem,
- Insight into the business,
- Changing the form of a report,
- Easy identification of trends,
- Effective decision-making on the basis of objective information,
- Analytical flexibility (for simulation)
- Access to data in real time,

Information systems are stored in huge amount of data, but the significance of this information comes into play only when they connect to all databases. The key problem is the connection of data, since there are usually a number of different systems, especially various databases. It is in this area that OLAP techniques can make a major contribution, as they integrate all available data sources, regardless of the form of the database in which they are located.

Effects of application of OLAP business intelligence systems on the results of management controls are large and significant, and are reflected in:

- Converting the processed data into knowledge;
- Measurement of business performance in real time;
- Consistency of basic data;
- Better quality of planning and reporting on the level of educational institutions;
- Automatic consolidation of forecast and target data for parts, groups, etc..;
- Creating reports and conducting analysis to being subjected to the regulations other EU policies;
- Create a report by international accounting standards (International Accounting Standards (IAS)) and others.

Without the use of business intelligence tools, controllers, it would be virtually impossible to make quality reports. It would take weeks of hard work. With the use of business intelligence tools enable, without much effort, immediate access to all necessary information.

The modern concept of management control of supported business intelligence to management:

- Adoption of consistent business decisions based on data,
- Improving communication and coordination between sectors and the ability to quickly react to changes in the environment,
- Exchange of information with certain strategic business partners.
- Multidimensional analysis, online analytical processing, and mining the data-mining data providing quality information to provide the right answers to the right questions.
- Multiple ways of seeing the data, such as tables, charts, standardized and ad hoc report formats.

BI (Business Intelligence - BI) involves the collection of business data, aggregating them in one place and analyze. In this way the controllers provides insight into the achievements of educational institutions and the way in which they occurred, and points where there is the potential that has yet to be exploited. Business intelligence is not simply a convenient additional tool management control, but also very profound support to business process management. In some situations, business intelligence can be the main competitive advantage.

To control" Business Intelligence "is a kind of business radar. Warns of threat, indicating business opportunities, predicts that something will happen, adequate preparation for the inevitable, making more room for maneuver, in a word, increasing controllability of success to be achieved business.

Managament control and business intelligence, to enable business systems, and in particular the case of higher education institutions, discover the power of real information.

BUSINESS PROCESSES OF EDUCATIONAL INSTITUTIONS

Certainly one of the above observation perspective of quality and performance of educational institutions is the perspective of business processes, the impact they have on internal business processes that take place in higher education institutions, which in addition to the impact on the model itself affects the strategy of the institution.

In order for an educational institution could properly establish control and control activities it needs to define business processes and monitoring (Figure 2). It is obvious that the solution is in implementation of business intelligence that combines the methodology for measuring success.

In this paper, we analyzed the performance of studying in the first year of undergraduate study. Results obtained controllers used in order to analyze the success of study. Business processes that were used for the analysis are: planning and organization of exams, exam registration, examination and reporting.

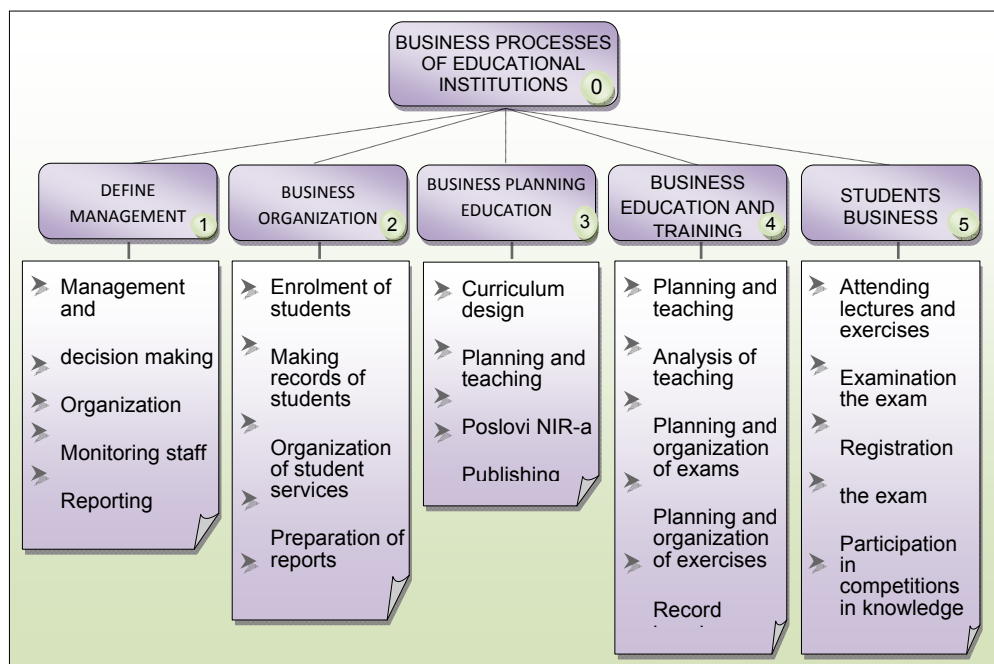


Figure 2: Tree of jobs in educational institutions

Source: The authors' assesment

In the center of the educational process of the student which can be regarded as a service institution of higher education or as a product of higher education. The requirements and expectations of students are different and to ensure the quality of education and the need for diversity and link them to coordinate their work to ensure quality. Each of these groups has different needs and therefore different views on the quality of higher education, it is therefore necessary for each group to define the criteria by which they judge the quality of higher education.

Students want to provide education relevant advantage in the labor market, ie to achieve a quality of excellence. Employers want to provide a high level of knowledge and skills of graduates, who can not cope with the complexity of the business, in order to gain advantage over the competition. Here we talk about achieving quality as answering the purpose. Employees want to be satisfied with the work they are doing and what they are educated for, and have the respect and recognition of the environment in which they work.

CONTROL OF MONITORING THE QUALITY OF TEACHING USING OLAP SYSTEM

In this document we used exam results as an indicator of the efficiency of educational institutions. There is great interest in the test results used for monitoring the effectiveness of an educational institution and that they are held accountable for student achievement (eg in England).

Arguments for using test results as a measure of educational effectiveness are:

- In most systems, this is the only common measures of student achievement that is an acceptable level of reliability;
- Can be easily collected from existing databases, and then analyze and display;
- These are important outcomes for most students and their parents.

The process of implementation of a system for measuring the success of higher education institutions by applying the elements of business intelligence and taking into account the project approach in building models to measure performance (*Balanced Scorecard*) can be expressed through the following stages:

- Development of a data warehouse
- Preparation of data analysis,
- Development of the user interface.

Creating a data warehouse involves creating a physical database model, generating the database and load the data.

After building a data warehouse, go to the preparation phase of data analysis. The great importance of data analysis is the conditioning of the development of techniques for data analysis. These techniques are used to show the results of various queries, analyzing data from different perspectives and discovering patterns and rules between existing data.

Multidimensional data analysis is one way of expanding the possibilities queries. This method of analysis is replaced by analysis of a large number of queries. Multidimensional analysis allows the user to perform the analysis on a large number of independent elements that constitute the system under analysis, and review data that are related to each other quite complex. Controllers are not always interested in the same level of detail of the data, so that the multidimensional data analysis enabled the level of detail changes dynamically.

The most convenient way to perform multidimensional analysis is the use of OLAP. OLAP is a way of organizing large databases. The data is organized in a way that is most suitable for analysis by the controller.

User interface (user interface) is a set of software assets that provide the interface to the system controller.

An effective user interface is a very important component of any type of decision support systems, including the business intelligence system. The easier to use interface of business intelligence, the greater the chance that the controller using the proposed solution. Many controllers have limited computer knowledge and are willing to learn the command languages used by experts and technically oriented people. That is why it is a

good design appropriate user interfaces most important determinant of successful implementation of business intelligence.

User interfaces OLAP should allow for the cube formed in conjunction with pivot tables, *Microsoft Excel* tools enable business to obtain graphical output on which to base management to make business decisions. Access to data in OLAP cubes, using tools other than *Microsoft Excel* can also be done by making a special application, using the so-called ADO mechanisms (Stanojevic, Veljovic, 2008).

This paper describes the advantages of OLAP technology, for example, an OLAP system for the analysis of the students in an educational institution.

OLAP and multidimensional analysis, an analytical data processing and is an integral part of any business process. Interface OLAP system should enable the controller comfortable working independently performing analytical operations and to obtain an overview and business graphics without programming knowledge and database structure. For the controllers OLAP provides the ability to independently ask questions, which significantly increases their ability to perform the analysis (Cupic, Suknovic, 2007).

Before the introduction of an OLAP system for obtaining such reports, it was necessary to create many complex queries against the database, which were inflexible, so that the smallest change requests caused the creation of new queries. An additional problem was that the data needed to create these queries physically stored in different places. It is therefore created a data warehouse that integrates these extracted data and automated flows for transmission and data integration in the warehouse (Vukicevic, 2008).

The following will be shown how to get the required reports with OLAP cubes. As a software tool to read the data from the cube used *Microsoft Excel*. *dream exams*

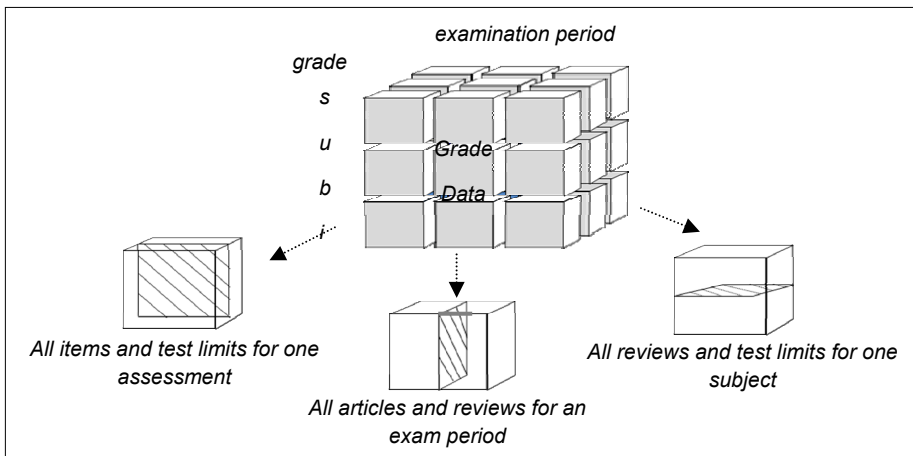


Figure 3: Three-dimensional OLAP cube for monitoring the students'

Source: The authors' assesment

The expressed purpose of using the system, reflected in the monitoring and the passing trend of the average score of students by year of study, exam schedule. These analyzes are conducted at the end of each test period, semester and year.

In the used example, there are three dimensions on which the data is analyzed. OLAP structure can be represented graphically as a three-dimensional cube (Figure 3). In the case of Figure 3, each cube represents the score of final exam from the defined test cases in a given period of time.

A more detailed analysis of the average grades in the subject Business Informatics to determine the reasons for the trend average, it is possible exam term use of pivot tables.

The analysis of the graph in Picture 4, comparing the average score on the final exam, during the analyzed four years of study, we can conclude that the best average achieved during the April exam period when students apply only individual exams to sit for.

Figure 4 shows a graphic representation of data from the pivot table.

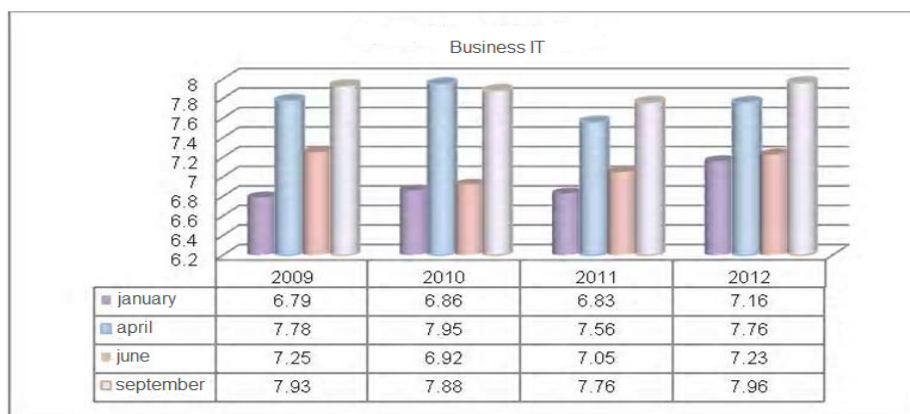


Figure 4: Graphic display of average score on the test cases selected terms

Source: The authors' assesment

Then followed the September examination periods when students take exams to qualify for admission to the next academic year. The lowest average is achieved in the January and June examination period, and the reason may be that the test is taken at the time immediately after the teaching of the subject.

If we analyze the passage of only those students who have enrolled for the first time a given year, it can achieve by dragging the dimensions of student field to filter the data. If we need a report for specific exam dates sizes deadline was pulled into the field to filter and choose the desired limits.

Figure 5 shows the parameters for passing objects of the second semester, which is related to first time freshmen enrolled in January, April, June and September examination period.

Row Label	Sum of exam	Sum of failed	Sum of passed	Sum of reported
1	114	58	56	184
2	447	183	264	619
Macroeconomic	76	13	63	86
Business IT	49	18	31	71
Business Econo	66	40	26	103
Managment	1	0	1	5
Mathematics fo	68	22	46	117
Monetary Econ	105	59	46	123
Sociology	1	0	1	1
Economic Statistics	237	81	31	50
Grand total	338	561	241	803

Figure 5: Report about the transience of the semester, subjects, for first year students in January, April, June and September examination

Source: The authors' assesment

The introduction of group size in the column of the report, we would get a report that shows the passage for each direction for each subject, and the choice of different parameters and dimensions of year deadline, I get different reports (for one or more years and dates).

In general, it is possible to create a large number of reports that differ in structure, and the values, without expert knowledge in the field of information technology

CONCLUSION

The modern education system produces and offers services in operation to meet the needs of students (users) for knowledge. At the same time he has to improve, modify and adapt the circumstances and thus improve individual competitiveness in a highly competitive market. Performance measurement of the success of higher education aims to achieve the highest possible quality of teaching as well as the efficiency of all key activities conducted (education, research and collaboration with industry).

The concept of management control includes: a detailed analysis of typical educational and business processes, measuring the adequacy of the implementation process, comparing methods of implementation process and their performance with

the best education systems in the region. In this regard, management control contributes to a clear definition of business strategies and set goals that will allow you to achieve that strategy.

The introduction of modern concepts management control, with the use of OLAP systems, institutions of higher education, you are getting quality feedback which is very important for the quality of the educational process. For this purpose, the test results were used as indicators and indicators of efficiency of educational institutions analyzed by year of study, grades, subjects, exam dates ...

Results of this work indicated that the multi-dimensional analysis of reasonable and necessary for OLAP systems place the information resources available to supervisors who may at any time, to obtain the desired interactive reports without IT support sector.

The application of the developed models, management control and business intelligence also enables:

- In the academic and administrative staff in higher education familiar with the concept of performance measurement of success;
- To model the performance measurement of success is the most important perspectives to assess the effectiveness of higher education institutions;
- To all those interested in the education system are familiar with the strategy of educational institutions.

Given the trend of progress of business intelligence and its application to the control of management, research should focus on the further development of models for performance measuring success of not only higher education institution but for the entire education system.

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INFORMATION TECHNOLOGY IN KNOWLEDGE MANAGEMENT

*Petar Subic*¹⁹

Abstract: The two primary function of IT in knowledge management are retrieval and communication. IT also extends the reach and range of knowledge use and enhances the speed of knowledge transfer. Knowledge management is more a methodology applied to business practices than a technology or a product. Nevertheless, IT is crucial to the success of every Knowledge Management Systems. IT enables knowledge management by providing the enterprise architecture on which it is built. KMS are developed using three sets of technologies: communication, collaboration and storage. Several technologies have contributed to significant advances in knowledge management: artificial intelligence, intelligent agents, knowledge discovery in databases, eXtensible Markup Language (XML) and Web 2.0.

Key words: Artificial Intelligence, Intelligent Agent, Knowledge Discovery

JEL classification: M15

UDC 005.94:004

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INTRODUCTION

In the scholar literature (Turban 2011; Tiwana 2003, Brown 2012) two main functions of knowledge management in the informational technology are highlighted; finding and communication. Informational technologies are enabling widening of the view and the degree of knowledge usage and they are increasing the speed of knowledge transfer, as well. Nets enable cooperation in the knowledge management.

Functioning of the knowledge management system conducts in a six steps cycle (Diagram1). Explanation of the cycle is that knowledge is constantly and dynamically purifying itself and it has to be up to date in order to keep this change on. These are the six steps in the cycle:

1. Knowledge creation. Knowledge is created through new ways we complete our work and through the development of their knowledge. Sometimes the outer knowledge is accepted. Some of these new ways may become very useful in practice.
2. Accepting of knowledge. New knowledge has to be identified as useful and it has to be presented in a comprehensive way.
3. Purified knowledge. Knowledge has to be given in a context of usage. Knowledge has to be accepted (for example implying the quality) together with the right facts.
4. Knowledge storage. Useful and practical knowledge has to be stored in a accepted form in the knowledge's base so as to be used by all the employers in one company.
5. Knowledge management. Similarly to libraries, knowledge storage has to be up to date. It has to be maintained in order to be relevant and true.
6. Widening & Knowledge have to be on a disposal in a form which is useful to every company which is in need of it no matter where it is situated and in every period of time.

As knowledge is widening itself individuals are developing and creating and identifying new knowledge or keeping the old knowledge up to date by adding it to the knowledge base. Knowledge is a resource which is not spending, but using although it can grow old (for example car driving in 1990 is different from car driving today, but many of the basic principles are still applied). Knowledge has to be up to date given that much knowledge obsolete with time.

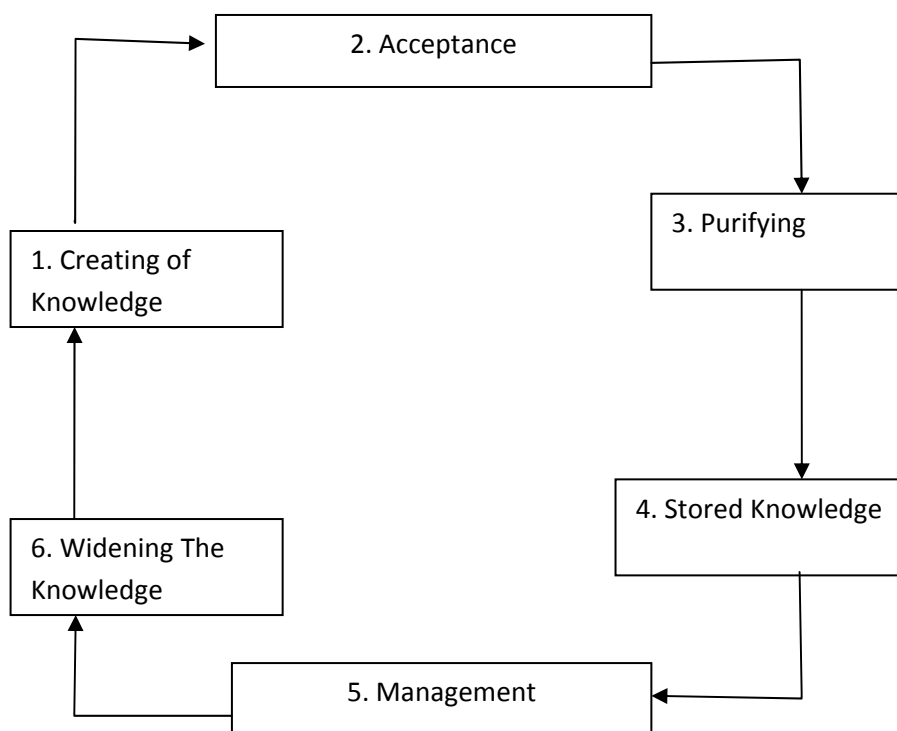


Figure 1: Knowledge guiding cycle (Turban 2011)

COMPONENTS IN KNOWLEDGE MANAGEMENT SYSTEM

Knowledge management is rather a methodology applied in a working practice than a technology or a product. However, the informational technology is of great importance for every kind of knowledge management system's success. Informational technology enables knowledge management to construct architecture on which it functions. Knowledge management system is developed by using these three sets of technologies: communication, cooperation and archiving with reparation.

Communicational technology enables a user to approach knowledge and to communicate with everyone – especially with experts. E-mail, intranet companies and other tools which are founded on the web provide possibility of communication. Both faxes and telephones are used for communication, especially those which have a suitable approach to knowledge management.

Cooperative technologies enable working in a group. Groups are able to work together on common documents simultaneously (for example synchronized) or at different times (asynchronously) at the same place or at several different places. Technology for cooperation is of special significance for the members of common working objects which are working on knowledge gathering. Other co-operational forms are possible by computers, such as electronic searching, improvement of group work, especially for knowledge creation. Additional forms of group work including experts' work in training individuals for their knowledge usage; all that requires cooperation at the very high level. Computer systems for cooperation enable one company to create virtual space which in turn allow for online work for individuals at every place in every time.

Archiving technology implies usage of the system concerning managing database for archiving and knowledge management. Collecting, archiving and knowledge management usually require diverse sets of tool. Systems for electronic document guiding and a special system concerning archiving which is a part of the system for computational cooperation contribute in creating the system for archiving and in the forming of knowledge storage.

TECHNOLOGIES WHICH SUPPORT KNOWLEDGE MANAGEMENT

Several technologies contribute to a significant tool improvement in knowledge management. Artificial intelligence, intelligent agent, finding knowledge in database, Extensible Markup Language and Web 2.0 are examples for technologies which enable improvement in knowledge management system's functionality and which form a base for the next innovations in the field of knowledge management. The following paragraph will give us a short description of the usage of these technologies as a support of the knowledge management system.

Artificial Intelligence. By the definition of knowledge management, artificial intelligence (AI) is rarely mentioned. However, practically speaking, AI methods and tools are built in numerous knowledge management systems by the sellers or by the system's designer. AI methods may help identifying expertise, automatic and semiautomatic knowledge detection, using natural language and browsing by intelligent agent. AI methods (the most significant are expert systems, neural network, fuzzy logics and intelligent agent) are used in knowledge management systems in order to perform following activities:

- Support more successful knowledge browsing (for example intelligent agent in searching the Web)
- Support the knowledge profile establishment of an individual or a group
- To support the establishment of the important connected knowledge when it is derived from the knowledge storage

- Searching e-mails, documents and databases in order to find knowledge, determine significant correlations, collect knowledge or determine the rules for expert knowledge
- Identifying pattern in the data (usually by neural network)
- Anticipating future results by using the existing knowledge
- Giving advice directly from the knowledge by using the neural network or expert system
- Using natural language or voice command for users relation to system for knowledge management

Intelligent agent

Intelligent agents are software systems which learn how the user is working and provide him help in his daily tasks. There are several kinds of intelligent agents. Intelligent agent can help the knowledge management system in many ways. Usually, they are used for finding and identifying knowledge. Look at the following examples:

- IBM (ibm.com) offers programs for data finding, including Intelligent Decision Server (IDS) concerning finding and analyzing large amounts of companies.
- Gentia (Planning Sciences International, gentia.com) uses intelligent agents in order to facilitate data searching with the Web approach and with the possibility of data storage.

Combining an intelligent agent with a company's knowledge portal is a strong technique which may give a suggestion to a decision-maker concerning what has to be done in order to fulfill his task. An intelligent agent notices what a user likes to see and how he is organized. Afterwards the intelligent agent endeavors to provide that information at the computers screen, almost as a good administrative assistant.

Detecting the knowledge in databases. Finding the knowledge in databases is a process which is used with the help of browsing and extracting the useful information from the huge number of documents and data. It includes activities such as knowledge extraction, archeology of data, browsing data, processing data patterns, data filtration and gathering of information. All those activities are preformed automatically and they are enabling fast knowledge detection even without programmer's engagement. Finding data and documents is valuable for finding knowledge from database, documents, e-mails etc. Useful data are often situated in numerous databases, data storages, text documents or knowledge storage or elsewhere where data, information and knowledge can be stored during several years.

Artificial intelligence techniques are useful tools for finding data which include automatic knowledge browsing from other sources. Intelligent data

browsing finds information in databases, data storages and knowledge storages. Browsing tools find data patterns from which they can drag the conclusions (automatically), as well. Patterns and rules can be used for directed decision making and to predict consequences of those decisions. Detecting knowledge in databases may also be used for identification of data meaning or text meaning by using the tools which browse documents and e-mails as they create expert profile of all employed in the company. Data searching can speed up the analysis with aiming to supply a required knowledge.

By widening the role of data browsing and the role of knowledge new techniques for wider collection of knowledge are discovered and according to that fact it is expected a more significant widening of frames for integrating and knowledge management in the company's environment to the next generation of systems for decision making support. The frame should include a trading center model and a storage model where the shopping mall model is analogue to data shopping mall, and a storage model is analogue to data storage. They function as a knowledge storage which is created by using the techniques for knowledge detection based on the examples of decisions which are archived in the data shopping mall and in the data storage. The shopping mall model and the storage model include operational and historical models of decision making, similarly to data shopping mall and data storages. This leads us to an example: the shopping mall model is able to archive decision making rules which are equivalent to problem solving knowledge by diverse decision makers in the special areas as bank loan making environment.

A frame which is integrated like this one adjusts different types of transformed knowledge. From the system built on these frames it is expected to increase the support quality for decision makers; to support knowledge management functions as coverage, creation, usage and accumulation; facilitating in finding the trend and the pattern in the accumulated knowledge; providing the ways for building company's experience.

Extensible Markup Language (XML). A programming language written by World Wide Web Consortium; in its essence it is simplified version of SGML which enables the authors of the web pages to create their own labels which will organize and give the content with a bigger flexibility and ease. Microsoft is a great supporter of XML and they often claim that it will replace HTML and become the next industrial standard.

This programming language enables standardized representation of data structure so that the data can be processed in the heterogeneous systems without any special programming. This method corresponds to e-business applications and systems for supply management which function in company's frames. XML is not just able to automate a way of work, it reduces paper use and it is also able to unite business partners and supply systems and it encourages them to a better collaboration and knowledge transfer. Messages based on XML are available for download from back-end storage and fed out storage through an interface portal and then they would be sent back. The portal which uses XML allows the company

a better communication with its buyers, it connects them in a virtual system of supply and it changes buyers' requirements and that has a momentarily consequences for the production field. Wider acquisition of XML is able to on a high degree solve the problems of integrating data from different sources.

Web 2.0. In the last years certain changes in use of www. are easily noticeable. The Web is developed from the tools for information widening and business leading to a platform for facilitation the new way of widening information in the digital era. The new vocabulary is formed, social networks, blogs and the like have become a characteristic genre of interactive collective application known as Web 2.0. It is expected from these technologies to give to knowledge management a strong support and to enable knowledge widening through the Web.

CONCLUSION

Knowledge management system is developed by using three technology sets: communication, cooperation and storage. Different technologies contribute to knowledge management, including internet, intranet, data storage, tools for support in decision making and for group work. Intranet has established a medium for connection and division of knowledge in one company. Knowledge management is not a new expense in the managing processes, it is a new paradigm which concerns our performance.

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ENGINEERING STUDENTS MOTIVES FOR STUDIES AND THEIR PLANS FOR FUTURE - A CASE STUDY

***Smiljana Mirkov²⁰
Tanja Sekulic²¹
Robert Molnar²²***

Abstract: This paper presents the results of an empirical study about young people motives to choose engineering studies and their plans for the future. Data for this study were collected through a standardized anonymous questionnaire method of testing. The obtained results were presented by descriptive statistics. This study was conducted during period January - March 2013 and the sample included 400 students from all years of study and study programs of the Technical College of Applied Sciences in Zrenjanin. The first findings of this study indicated very modest social background of students. Second, students on Technical College of Applied Sciences in Zrenjanin are positively motivated toward engineering profession, because through selection of studies they were guided by positive motives, such as: interest for the field of technique and technology, engineering profession provides an opportunity for creative expression, the engineering profession is a combination of theoretical and practical knowledge and ability to benefit society. However, students' expectations of the engineering profession are not compatible with the motives for the selection of study and this is reflected in the fact that half of the respondents expect from engineering profession the chance for employment and good earnings. We think that this difference is a result of reorientation of values that occurred during studying. Third, the hypothesis that students have modest expectations for personal future and the future of society was only partially confirmed. Though most of them do not believe in the prosperity of the society, when it comes to their personal vision of the future, they demonstrated a much higher level of optimism. We consider important and we emphasize that our respondents estimate that their future will not be easy, but they have strong beliefs in themselves and effectiveness of their work.

Key words: Motives, Plans for the future, Youth, Education

JEL classification: A20

UDC 159.947.5-057.875; 378-057.875:621.3(497.113)

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INTRODUCTION

As doctors heal and judges judge, so engineers convert the dreams of mankind into the reality. Stressing the importance of engineering and engineers in the development of modern society the American Association of Engineering Societies (AAES), Marta Sloan, a professor of Electrical Engineering at the University of Michigan and the first president of this great engineering associations says: "In an era when technology helps to achieve fantasies and fictions, engineers play a key role in the development of technologies that sustain our national, economic and environmental security. They have revolutionized medicine pacemakers and MRI scanners. They changed the world by the development television and transistors, computers and the Internet. They introduced the new concepts in the field of transportation, energy, satellite communications, earthquake-resistant buildings and resistant kinds of cereals, by implementation of scientific discoveries for human needs" (Kemper, Sanders, 2001). Indeed, for all the achievements of material culture, the world owes its gratitude to the engineers.

In order to develop the engineering as the most important profession of the modern society in the world, in the late 19th and especially in the 20th century in Serbia was built a wide network of higher education institutions for engineering education. One such institution with a tradition of more than a half of century is the Technical College of Applied Sciences in Zrenjanin (herein after: TCAS), which already 53 years educates both mechanical and technology engineers, and since three years ago, the engineers of management as well.

Starting from the findings of a significant decline of the interest of young people for engineering studies (Mirkov, 2013), the authors of the paper are oriented to test two important dimensions of the recruitment and socialization for the engineer's profession. These are the reasons for the selection of the engineer's profession as their future career as well as the plans for future of the future engineers.

Below in this paper, the methodological framework and the results of an empirical study of motives for the selection of engineering studies and students' plans for the future from TCAS are presented.

METHODOLOGICAL FRAMEWORK OF THE RESEARCH

The aim of this research was to examine the social classes that recruit future engineers, what motivates them to choose engineering as a career, what are their expectations of the engineer's profession, and where and how they see their future as the members of the relevant professional group.

Our assumptions are written below:

1. Students' population at TCAS is with the heterogeneous social background,
2. The reasons for the choice of studying techniques are uneven,

3. Engineering students are satisfactorily identified themselves with the future professional role but also they are inclined to postpone the moment of entering the world of work or taking over the professional roles,
4. TCAS students' population has modest expectations of the individual as well as of the society's future.

Data for this research were collected through a standardized method of testing an anonymous questionnaire that included the following groups of questions:

- • Socio-demographic characteristics of students of engineering,
- • Motives and the importance of external influences on the choice of future profession,
- • Expectations from the profession,
- • Plans for the future,
- • Self-perception of the characteristics needed to establish their own business as an optional career for the future, and
- • The perception of the future of the Serbian society and professional future.

The collected data are presented by using descriptive statistics and they are compared with the results of similar national and international research.

The tested sample in this research has been consisted of 424 TCAS students where 56% of them were boys and 44% were girls (Figure 1).

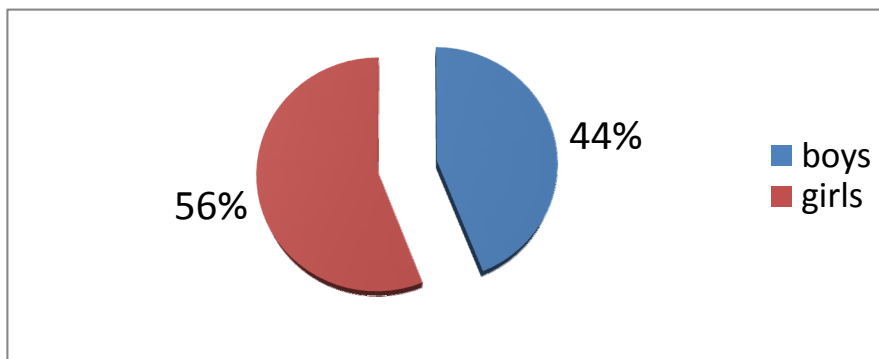


Figure 1: The gender structure of the sample

In view of the nature of the study program, the sample has been structured to fit the actual number of students in five vocational programs of studies realized by TCAS. In this sense, the largest group in the sample consisted of students of the study program Engineering Management (46%), followed by students of the study program Technology Engineering (35%), students of the study program for Mechanical production engineering and computers' technology have participated in the sample with 13%, while the smallest groups were consisted of students at Textile garments and design (4%) and Process and agricultural mechanical engineering (2%) (Figure 2).

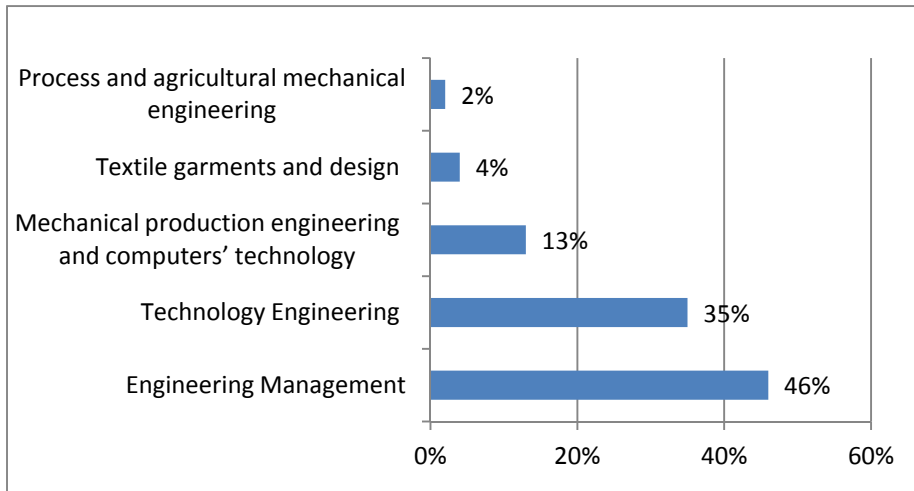


Figure 2: The structure of the sample by type of the study program

The research sample consisted of students from all years of studying: 42% of students at the first year and 29% of students in their second and third years of study (Figure 3).

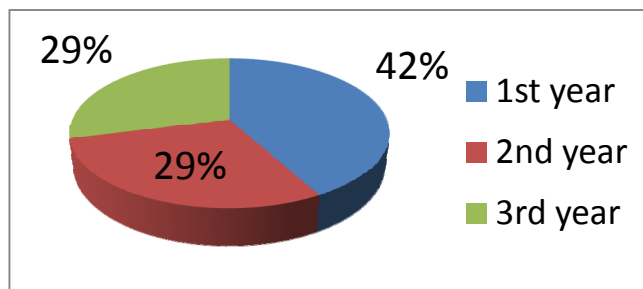


Figure 3: The structure of the sample by year of study

The majority of the tested students before the start of their studies completed a four-year high school education (65%), then are those with three-year vocational secondary school (25%), while the least of those who have previously completed gymnasium (10%). With regard to residential status, exactly half of the students have urban residential status, 42% live in rural areas, while 8% said that they come from the smaller towns (boroughs).

A social background of the respondents is heterogeneous, but dominates students of modest social background. Fathers of the majority of the respondents are blue collars (38%) or professionals working in jobs that require a high school education (25%), while 7% of respondents said that their fathers are farmers. Only 10% comes from the middle social class, and only 8% of respondents had fathers who are professionals with university degrees – white collars (Figure 4).

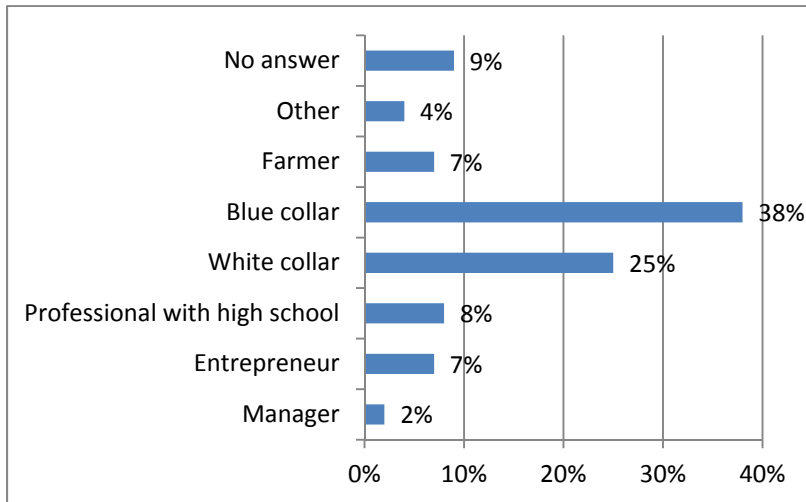


Figure 4: Fathers' educational level of the tested students of engineering

Modest social background of engineers and future engineers also has been found in other domestic surveys (Mirkov, 2013, Mirkov at all, 2011). Similar findings about the social background were obtained also in several studies prepared in the sixties of 20th century in some Western countries. According to one study, a significant percentage of unfinished engineers in the UK have a social origin in the middle and working class, 36% of students have fathers as white collars and 22% of students have them as blue collars (Gerstl, 1963). Several studies on engineering students in the United States indicate substantial recruitment of middle and working class: 44% of fathers of engineering students at North Western University are white collars (Krullee, 1963), while 50% of engineering students at the University of California come from the working class (Trow, 1959). On the other hand, in the Netherlands the opportunity to enter the engineering profession is more restricted comparing to the USA and UK. Average of 28% of the students' techniques, according to a survey (Kuiper, 1956), was recruited from the working and middle classes. These findings undoubtedly support the idea of the engineering profession as an important channel of social mobility.

RESULTS OF THE RESEARCH

MOTIVES FOR CHOICE OF THE STUDY

In most cases (86%), the decision on the selection of the engineering profession students made on their own and it coincides with the wishes of their parents: 71% of students' parents wished that their children study technique, 23% of parents questioned wished an employment for their child after finishing high school, while 4% of parents wanted that their children after finishing high school to continue the family business, and in 2% of cases to cultivate land on the family farm. On the question: "Do you want to study another college?" 39% of respondents said "yes". According to tested students, the reasons for giving up the desired college in 27% are of the material nature (desired college is located in a different city, or that a specified college fee is too high for the financial situation of their families), 10% of students didn't go to desired college because they had previously completed a three-year high school education, while 2% of respondents answered that the reason why they did not enter the desired college is low average grade in high school or the difficulty of the entrance exam at the college.

Inquired students of engineering study programs are mostly enrolled this kind of study because of the interest in the field of study (35%); by chance selected this study 11% of respondents; because the engineer's profession provides opportunities for creativity expression (10%); because it is a combination of theoretical and practical knowledge (9%); because the engineers are well paid professionals (8%); because of ability to benefit the society and having a possibility to go abroad with engineers knowledge is motivated by 5% of respondents (Figure 5).



Figure 5: Motives for choice of engineering study

More than a half of students (59%), as Figure 5 it shows, were motivated by internal values such as "Interested in relevant field of techniques by studying", "Engineer's profession offers opportunities to express creativity", "Engineers' work is a combination of theoretical and practical knowledge" and "Opportunity to benefit the society". External values such as money, prestige, security and leaving the country motivated only 14% of the students. However, it is symptomatic that even 16% of respondents did not answer this question, while 11% of them said that the choice of study has been made randomly.

Although, as it demonstrated by the majority of the students, positively value-oriented choice to study engineering, where the expectations of the profession concerned, the situation is slightly different: more than a half of respondents (58%) responded that expect employment and good earnings of their future profession, 10% of them expect that due to engineering knowledge will be able to start their own business, while 8% expect to go abroad. Taken together, the external motives are in expectation of two thirds. Altruism is stated in the option to contribute with knowledge to the development of the country and it is expressed in 8% of the respondents, the need for innovative and creative work in 7%, and in the minority are those who expect a management role in the company (3%). Although it isn't determined statistically significant difference in responses to this question in relation to the gender structure of the respondents, it is evident that the desire to support the development of the country by engineering knowledge was greater at girls (13%) than at boys (5%) (Figure 6). Also significant is the finding that among students of Textile garments and design, and students of the study program of Process and agricultural mechanical engineering weren't those who expect of the engineering profession some internal values, as inventive and creative work and opportunities to support the development of the country.

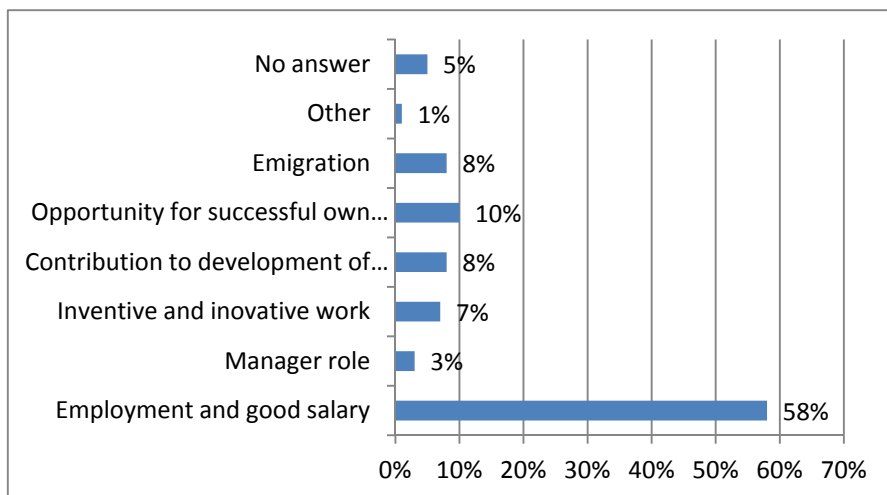


Figure 6: Expectations of the engineering profession

Foreign researches on this subject also have shown similar results. Thus, in a study of the motives of students to choose engineering profession at 11 U.S. universities, 38% of respondents highlighted that it is chosen because of "chance to make a lot of money", 52% of them noted "the opportunity to be creative and original", 28% of respondents opted for "the opportunity to be useful to the others" (Goldstein, 1960). Another study of American students (135 colleges and universities) who have chosen the profession of engineering showed that 25% of them mentioned "money" as a factor, 26% of them "opportunity to be original," and 7% cited "people" (Davis, 1965). In the UK, a similar study showed that 32% of students opted engineering because of "money and good opportunities", 19% said it was "an opportunity to be creative", 13% cited that engineering is a profession "combination of theory and practice" (Evans, 1968). On two London Polytechnic High School students by work responded as following: 36% of them expected from engineering profession "better paid job", 10% "more secure job", 16% "more interesting work", 9% work with higher social status (Cotgrove, 1958).

These characteristics of recruitment of engineers - the diversity of social backgrounds, motives and work values for work as a career choice posed serious problems for the profession. According to the findings of some researchers, the heterogeneity of social background is strongly related to the deterioration of the profession (Blau, 1965). In other words, the homogeneity of social background provides social solidarity that reduces the tendency of its members to leave their profession. The variety of motives that lead students to enter the field of engineering and expectations of the profession, however, creates difficulties for the engineering profession in two respects. First, the existence of different values that refer to this type of action reduces the sense of solidarity among future engineers. Second, placing values such as money, reputation, and the possibility of going abroad in the first place is a problem for this profession. External motives are in conflict with the internal values such as the ability to be creative and to connect theory and practice. Heterogeneous social recruiting of engineers with different motives for choosing the profession are more serious claim to professional socialization of both time and after, the formal education, oppositely in the case of a homogeneous social background and uniformity of motives and work values.

In this research, it was expected a finding that students of engineering are positively value-oriented when it is about education. Therefore, most of them believe that for the young man is extremely important to be educated (Table 1).

Table 1: The attitude to education

Statement	The average level of agreement
All decisions in a society should be left to the experts	1,88
I believe the most to educated and clever people	1,92
The most important thing for a young man is to be educated	2,60

PLANS FOR THE FUTURE

The process of socialization for the profession, in addition to educational activities, always includes those relating to the identification of students with their future profession. In this regard, it is important to determine how future engineers identify themselves with his future professional role, in terms of what are their future plans in terms of engineering careers.

Plans of students after graduation look like this: employment in homeland is in plans of 42% of them, further studies 35%, work abroad-emigration 18% (Figure 7).

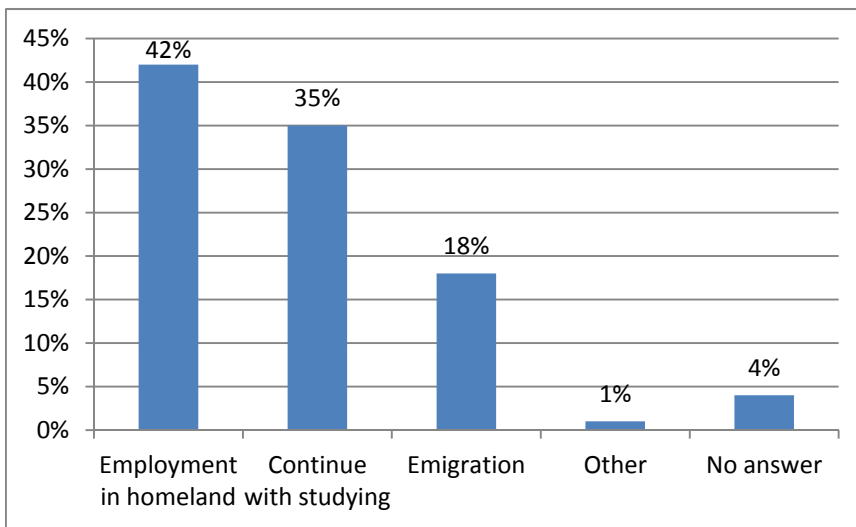


Figure 7: Plans for the future

As Figure 7 shows, slightly more than a third of respondents, after completing undergraduate study, aim to further training or studying graduate studies. Disposal of entering the world of work in the future plans of the students, we believe that stem from their perception of uncertain social and economic trends in Serbian society. We assume that such plans are based on their expectation that there will be positive changes in Serbian society and that those with higher levels of formal education have better job opportunities.

Regarding their future professional work tested students see themselves as employees of state-owned enterprises (62%), a quarter of respondents planning to establish their own businesses, and 12% of them see their professional future in private companies (Figure 8), which is particularly characteristic of boys (32%) and is much less present at girls (16%) (Figure 9).

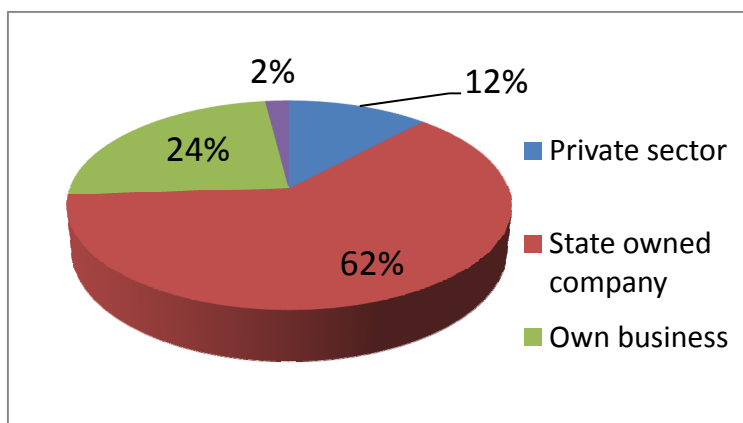


Figure 8: Preferred working sectors

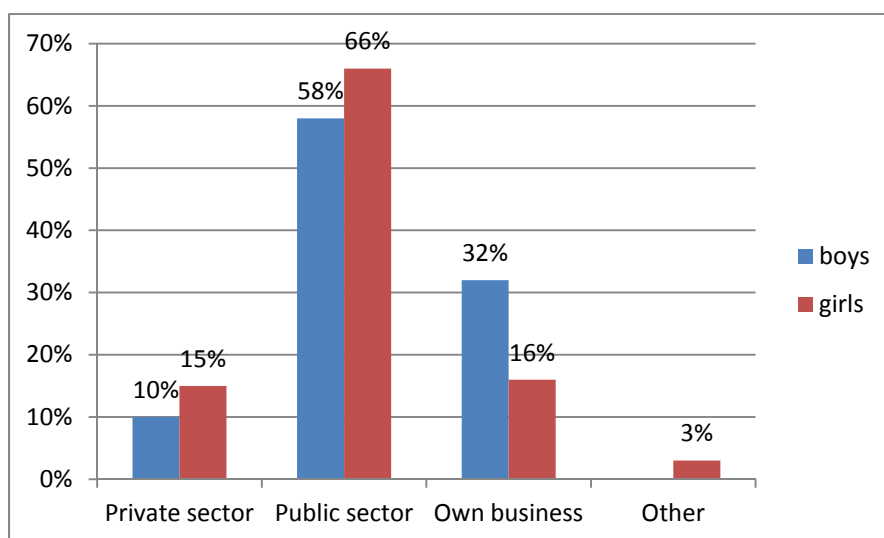


Figure 9: Preferred working sectors by gender

The interest of students of the engineering to start their own business as an optional career was found also in other studies of this issue in Serbia (Markov, Mirkov, 2006), (Mirkov, at all., 2011). These studies showed the existence of significant differences in plans for the future of students in relation to the type of degree program. Although at the majority of respondents dominate desire to be employed in state-owned enterprise or institution, even though 43% of students of study program Textile garments and design, over 30% students of mechanical engineering study programs and 28% of students of Engineering management plans entrepreneurial ventures in the future. The least pronounced this kind of tendency is among the girls in the study program of Technology engineering.

As their advantage to enter private business students tested mostly see in the "courage to start something of their own" (20%), on the second place are "responsibility and accuracy to meet the requirements" (18%) and "motivation to make something new" (18%), and on the third place was the answer related to professional knowledge (17%) (Figure 10). It is interesting that about 50% of the respondents opted for the "courage to start something of their own", "risk taking over tendency", "capability to handle money" and "motivation to make something new" that are typical entrepreneurial characteristics. It is also a significant number of those students (35%) who indicated that their advantage to enter private business is "professional knowledge" and "responsibility and accuracy to meet the requirements", which were expected because they are future professionals.

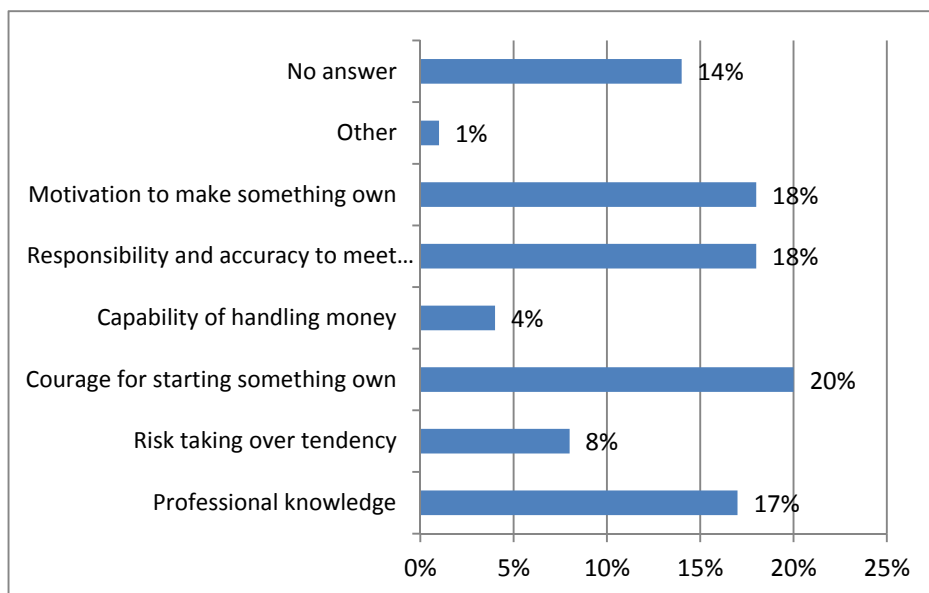


Figure 10: Self-perception of personal benefits of establishing and running own business

Since the Serbian society is affected by significant outflows of highly educated people who after graduation go to work abroad, respondents were asked to state the most important reason if they would be eventually left the country after graduation. Distribution of responses is like this: a better paid job abroad is expected by 55% of the respondents, the potential for professional forwarding is the reason for going abroad expressed in answers by 12% of students tested, 7% of them would leave the country with hope for a more peaceful life and more personal safety, and only 4% of respondents would continue their education abroad (Figure 11).

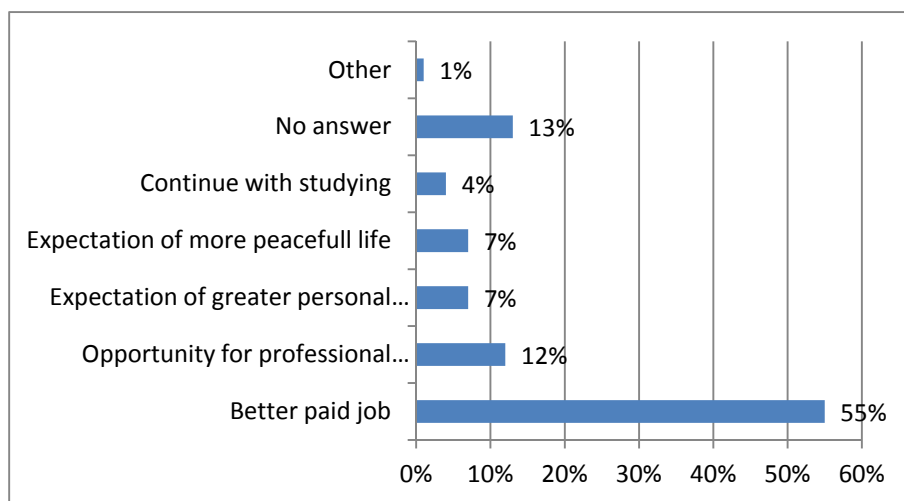


Figure 11: Reasons for going abroad

By analyzing the responses to the previous question, it is important to note that although 78% of respondents planning to leave the country, most of them (87%) answered the question. In these respect dominant response is related to preference for personal safety (total of 69%), which is reflected in the responses: "I expect a more peaceful life," "Expect a better paid job", "Expect greater personal security". In a much smaller percentage are represented responses that indicate the desire for professional and technical progress (total of 16%), indicating that the tested students directly perceive the social and economic context of Serbia as insufficiently stable and prosperous for the balanced and harmonious life. In this respect, they respond to the question in which they were asked to rate the future of our country. Perception of the future of society by the students of engineering is extremely pessimistic (35% of respondents believe that the future of our society will be much worse than the present). Moderate pessimism is expressed by 13%, and the opinion that the future will be the same as the present is 23%. Taken together, therefore, 71% of respondents have the opinion that in our country, nothing will change for the better. Only 11% of students believe that the future will be only slightly better than the present, and only 9% of them have expressed optimism about the future of the society (Figure 12).

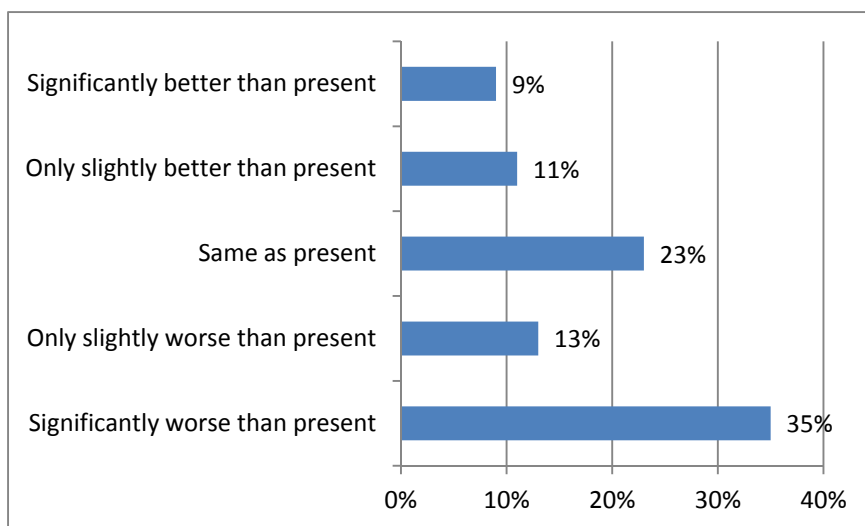


Figure 12: Perception of the Serbian society future

Pessimism of girls is 10% stronger than pessimism of boys (Figure 12), while relating to the study programs the most pessimistic are students of Textile garments and design, which even in the 85% do not believe in any kind of social betterment.

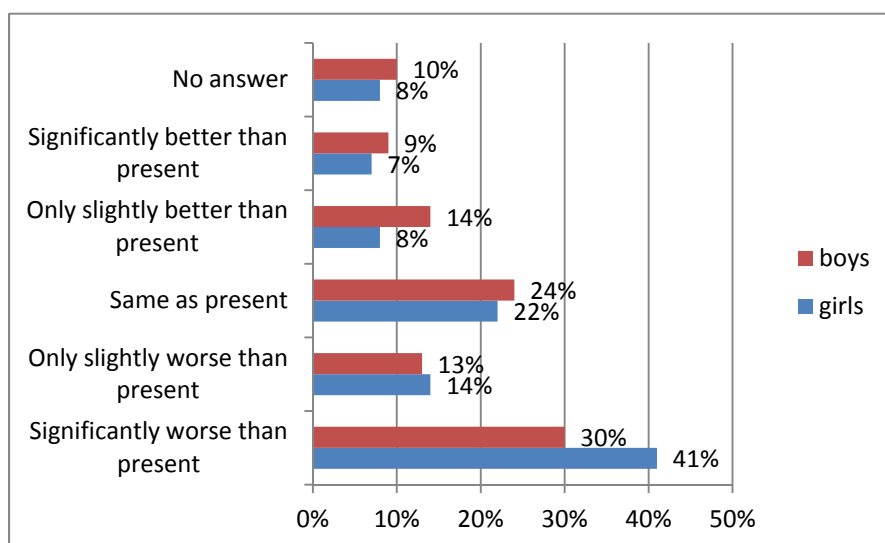


Figure 13: Perception of the society future by gender

The vision of the students' personal future, however, is somewhat more optimistic. Thus, 34% of them expect difficulties but they believe in themselves and their potentials, 20% of the respondents expect employment and a modest standard of living, 10% of them see their future abroad, and 19% of respondents expressed very high optimism by expecting career advancement and a good standard of living. Pessimism has shown at 8% of respondents who said that they expect to have difficulties in the future relating to employment and existence, while 3% of students have fear of the future (Figure 14).

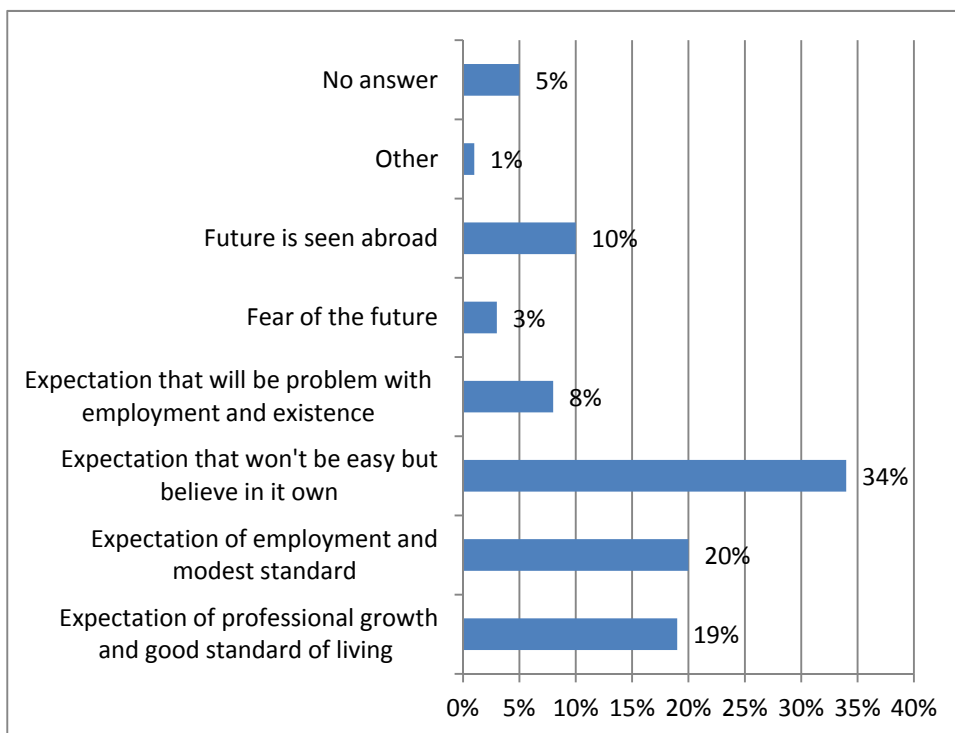


Figure 14: The vision of the personal future

A contradiction is marked between the two kinds of perception: the future of society and personal future. Why tested students expect much more of personal future than of the future of society, is a question to which the answer can be found in the fact that future engineers believe in the power of professional knowledge in terms that professional work provides a stable social position, and carries significant financial rewards than in the case of work which require less education.

CONCLUSIONS

The main findings of the motives for both, the selection of engineering studies and plans for the future of future engineers in the example of students of the TCAS in Zrenjanin are as follows:

1. The population of the TCAS' students is characterized by heterogeneous social origin with a significant number of students from blue collar families, and the engineer profession being demonstrating as an important channel of social mobility.
2. The variety of motives for the study of engineering poses to the process of socialization to the profession serious demands in the sense that among future engineers to develop a stronger sense of solidarity with a professional group and strengthens identification with the profession.
3. Plans for continuing education for more than a third of students surveyed indicated their desire to enter the world of work for a time delay, which is probably a result of the perception of uncertain social and economic trends. The previous conclusion is confirmed by the finding that most respondents preferred employment in state enterprises/ institutions which we consider as unrealistic. However, encouraging is the fact that one in four students of engineering plan to establish their own business and as their advantage to enter the field of entrepreneurship see the essential attributes of an entrepreneur.
4. The hypothesis that students have modest expectations from both, personal and the future of the society, is only partly confirmed. For while most of them do not believe in the prosperity of the society, when it comes to the personal vision of the future, significantly higher levels of optimism has been shown. We consider important and stress that our respondents estimate that their future will not be easy, but they believe in themselves and worth of their work.

Since the testing was done on a limited sample of the student population of a college, the findings have exclusively hypothetical character. Since they encourage more systematic and in-depth research on the topic, objective of this research will be met.

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INTERNATIONAL CONFERENCE

Employment, Education
and Entrepreneurship

PART TWO

***WORK, LABOUR MARKET,
ORGANIZATIONS & HUMAN RESOURCE
MANAGEMENT***



LABOUR IN CONCEPT OF COMPETITIVENESS OF WORLD ECONOMIC FORUM

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*Katarina Radosavljevic*²⁵

Abstract: This paperwork addresses place and importance of labour in concept of expressing and measuring competitiveness of national economies as World Economic Forum does. This concept is developed through Global competitiveness index (GCI) which is based on 12 pillars of competitiveness. Here we process those which are in the most direct way related with labor force, in order to emphasize the importance of the labor force for economic development, in the way it has been treated in this methodology for the countries with low and middle level of development. Comparative analysis of short and long-term influence of labor on competitiveness has been applied through the analysis of GCI and SCI (sustainable competitiveness index). For countries at the beginner level of development the most important thing is medical care and elementary education which enables maximum contribution of labor in economic development. Middle-developed countries such as Serbia, contribution of labor in competitiveness economy can be increased by improving higher education and training, as well as the efficiency of the labor market. As for competitiveness in the long term, the first group of factors is called human capital, in addition to its somewhat modified pillars of competitiveness which are related to the labor force in middle-developed countries we meet new pillar that is defined as the Social Cohesion. Contribution of this work is the proliferation of professional public awareness of the importance of our labor force for increasing of competitiveness of the Serbian economy, which is an essential prerequisite for development, both in the short as well as long-term which presents sustainable development.

Key words: Global Competitiveness Index, Index of Long-Term Competitiveness, Labor, Economic Development

JEL classification: B41, E24, J83

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INTRODUCTION

In economics competitiveness is a category of newer date. It has been defined in the modern form at the end of the twentieth century. It was the last decade of the last century with the strong momentum of science and the development of global markets and accentuated as never before issued problems of competitiveness (Hamel, 1994) to the micro level, as well as more recent phenomenon, and the competitiveness of the national economy.

Now the creators of national economic policies, especially foreign trade policy, must have on mind that if they want on sound basics in the longer term to develop economy they can not do it by protectionist measures, which usually cause countermeasure of their partners, but rather improving competitiveness. Thus deleted economic boundaries and allowed economic growth by attracting foreign investment in their country, enabling local companies to the world match. A special advantage of the improvement of the competitiveness of an economy is not limited to the growth of competitiveness from other economies. Each country can raise the level of competitiveness of their economies without any restrictions concerning those same processes in other countries.

For the successful integration of national economies into the world's, you need a high level of its competitiveness. In other words, the competitiveness of an economy is a measure of the success of its fitting, that is positioned within the global economy. With the collapse of socialism in the 90-ies of the last century, all countries have adopted essentially the latter concept and apply it according to their level of development and its specific conditions. So it's now superseded the old question of which is a better economic system, and replaced it with new, which is the national economy more competitive in ways how to improve the competitiveness and increase it.

Why is it necessary for each country to improve the competitiveness of their own economy? Because it is a basic requirement, specifically, a fitting measure of the national economy into the world's. In fact, any economy in general can not count on long-term sustainable growth unless there is a growing export in addition to this long-term, and has a lot of urgent importance for reducing the trade deficit and balance of payments as a whole and improving debt position of the country. In addition, increased competition is a basic precondition for the inflow of foreign direct investments, which carry not only the influx of fresh capital, but perhaps more importantly, technology and knowledge in the broadest sense, as well as effective access to foreign markets.

So, for every economy competitiveness growth today is a fundamental prerequisite for growth, which means survival and progress as a whole. What is the perspective of a country and people if dynamic economic growth and development are absent for a long period? Economic prosperity is a necessary condition of social survival and progress. Without him in the end there is no growth of personal and social standards, and the level of satisfaction of the human needs inevitably leads to degradation and lowers the individual, the nation and the state.

THEORETICAL BASIS

“Global Competitiveness Report” of World Economic Forum with its comprehensiveness, both in number of countries, as well as by the number of indicators provides a complete analysis of the competitiveness of an economy, both in absolute terms, by the values of indicators, as well as relative, enabling comparison with other countries, both by the Global Competitiveness Index, and the individual elements of the competitiveness, which enables detailed analysis and conclusions that should be the basis for taking remedial measures. In addition, the following values of these parameters from year to year, one can, in general, as well as by individual indicators, to monitor the developmental trend of competitiveness of a country in absolute and relative terms. In this way it can be concluded confidently about the state and prospects of the economy of a country and to identify the main shortcomings of the system, and development and economic policies that should be corrected.

Standardized questionnaires makes the basis for making the report which each year includes a growing number of representative companies in each national economy. Executives of companies assessed by most indicators of economic conditions score from 1 (worst) to 7 (best).

This approach is very important because the calculation of the Global Competitiveness Index (GCI) survey data accounted for approximately 60%. In this way we achieve a high degree of objectivity and prevents to a great extent influence of political factors that would certainly have an interest in the status display competitiveness of their "own" economy better than it actually is in practice. Also, this brings us back to the argument above that the competitiveness of an economy's exactly what it delivers to business entities that operate within it. The meaning of competitiveness growth of the economy is to create the conditions for the growth of microeconomic competitiveness of its entities in both domestic and foreign market because it is more indivisible, as the boundaries between them are fainter.

Given the competitiveness of the national economy is assessed as a whole, calculating the GCI in addition to these primary sources and secondary sources must be used, ie. official sources of information that can not be collected in the manner described in the survey of managers of the economy. There are also various statistics such as number of installed computers and internet connections, phone lines, data on education and health, monetary and fiscal data, GDP, demographics, etc.

Combining these data 12 pillars of competitiveness were constructed which can be grouped into three sections, and all together, however, constitute a synthetic GCI.

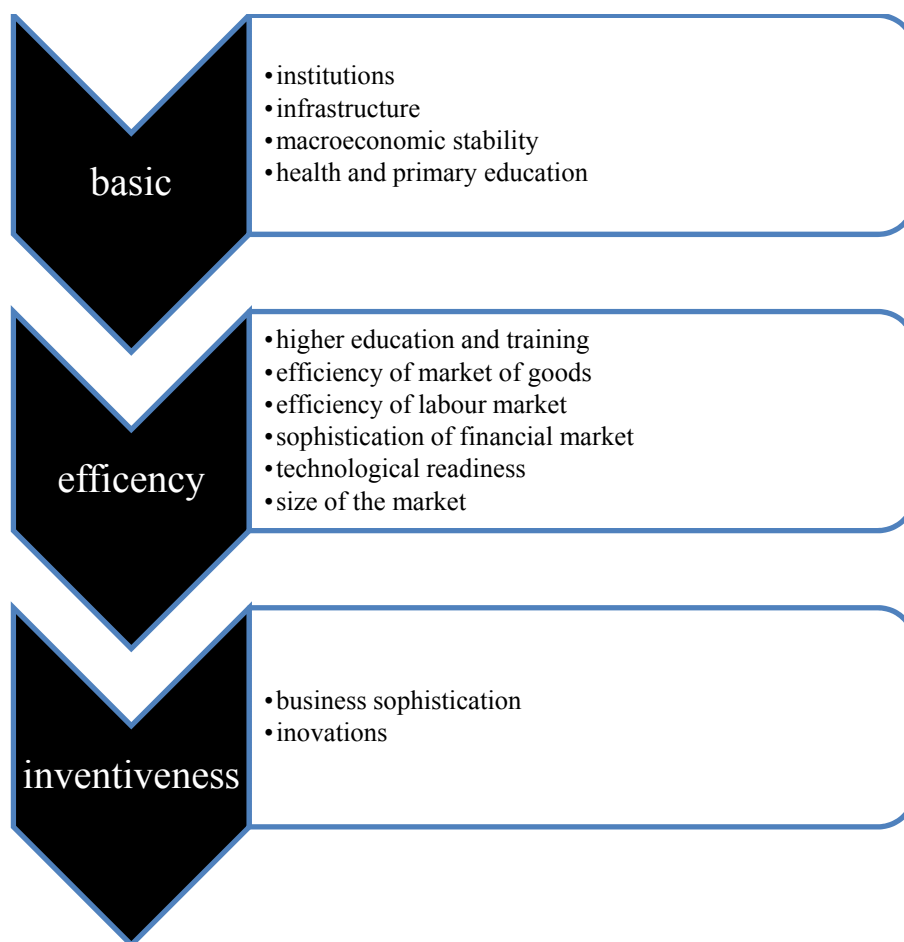


Figure 1: Factors and pillars of competitiveness

Source: Schwab, K. (Eds.). (2010). The global competitiveness report 2010-2011 Geneva: World economic forum, (str.9).

This methodology is based on a basic division of each phase of development of the economy at beginning, intermediate and advanced. According to this concept are those developing countries whose GDP per capita not exceed 2,000 \$, in medium developed this indicator has a value of between \$ 3,000 and \$ 8,999, while those developed economies that are achieved over 17,000 \$ of GDP on pc (Schwab, 2012) According to these baseline configuration, which certainly can be accepted because it was verified in most cases in the practice, developing countries have a chance to escape from poverty by exploitation of basic factors such as natural resources, labor and capital. For countries at this stage of development competitiveness of the economy depends mainly on improving the following pillars: institutions, infrastructure, macroeconomic stability and health and primary education.

In the second stage of development economic growth must be based on increasing efficiency. In regard to this situation economic growth can no longer be based on the increased quantum of engagement of basic factors of production, but in their effective use. Economic efficiency is central to this developmental stage and can be lifted by improving the following pillars of competitiveness:

- Higher education and specialized training;
- Goods market efficiency;
- The efficiency of the labor market;
- The sophistication of financial markets;
- Technological readiness;
- Size of the market.

It is worth to mention that the share of these pillars of competitiveness has been estimated at as much as 50% of the total in the creation of national competitiveness in the central stage of development (Schwab, 2010) and what is very important that share is equivalent for developed countries. To improve the competitiveness of each economy that left the circle of underdeveloped, far the most important are pillars of competitiveness mentioned above that determine the economic efficiency.

Competitiveness of developed countries is based largely on the sophistication and innovation of business processes according to this methodology.

Thus, professor Sala-i-Martin at the beginning of century constructed GCI (Global Competitiveness Index) which connects micro and macroeconomic factors of competitiveness, and was adopted and used by the World Economic Forum since 2005. already mentioned in the Reports on the global competitiveness (Global Competitiveness Report). In this report, national competitiveness is defined as "*... a set of institutions, policies and factors that determine the productivity of a country.*" (Schwab, 2010)

In addition, three decades ago the term sustainable development appeared in an economy. This theory was developed in 80-ies of the last century and is widely accepted by the world's most distinguished institutions involved in monitoring the global economy. Thus, in a report on Global competitiveness in the world 2011-2012 we find ways of processing these problems by the World Economic Forum. The GCI does not respect the long-term perspective of competitiveness, but only measure the current performance of each national economy.

Next step is designing the Sustainable Competitiveness Index (SCI). It includes factors that determine competitiveness in the long term, even if some of them are not represented in the GCI. This is a broader concept of competitiveness is preliminarily defined "*... as the set of institutions, policies and factors that determine the level of productivity of a country while ensuring the ability of future generations to meet their own needs.*" (Schwab, 2011, pp.54)

THE METHODOLOGY OF THE WORLD ECONOMIC FORUM

GLOBAL COMPETITIVENESS INDEX - GCI

As already noted, the GCI is assessed by considering the 12 pillars of competitiveness. We will deal with those which are in the most direct way of related to the workforce.

4. pillar: Health and primary education – This is an important, perhaps essential pillar for the country's competitiveness in its beginning stage of development. Both elements are concerning the most important factor of production - labor. Health is the basis of the productivity of employees, and if it is bad, there are frequent absences from work and efficiency is lowered. Both for the state and the company investing in health is economically justified, and of course it is one of their highest moral obligations.

In addition to health, the quality and quantity of basic education which covers the population of a country is the basis of each individual worker productivity, and global competitiveness of the economy as a whole. A worker with insufficient and poor quality of primary education has difficulties to be engaged in the modern business processes because he is, in principle, capable of performing only a simple manual jobs, which are increasingly less in demand on the labor market. In contrast, workers who have been widely covered by the basic education quality system are available to employers for further training and advancement in an increasingly complex manufacturing process.

This is a very important aspect of competitiveness which will have significant impact on the allocation of investment in the world, so that no country can reduce investing in basic health care and primary education, regardless of the widespread problem of the budget deficit. This is especially true of the poorest countries which the aspects of health and education should not consider as a consumer but as the most important economic investment.

Both health and primary education alike make this pillar of competitiveness. Further analytical breakdown of these factors for more precise measurements we see in Figure 2.

HEALTH CARE

- The impact of malaria on business (1-7)
- The frequency of malaria (per 100,000 population)
- Impact of tuberculosis on business (1-7)
- The frequency of tuberculosis (per 100,000 population)
- The impact of HIV/AIDS on business (1-7)
- The frequency of HIV (% patients, 15-49 years of age)
- Infant mortality (up to one year per 1,000 live births)
- Expected life duration(years)

PRIMARY EDUCATION

- Quality of primary education (1-7)
- The rate of primary education (%)

Figure 2: Fourth pillar of competitiveness

Source: Authors

The last pillar of competitiveness from the basic groups of factors which are most important for the competitiveness of developing countries deals with the most widespread infectious diseases which in large part may adversely affect the working potential of the local population. Also, the category of life expectancy is an essential component of competitiveness and important information for potential investors. Of course quality of basic education is very important and population coverage of it as a fundamental prerequisite for competitiveness in the initial stages of economic development. Participation of this pillar in the overall competitiveness of the group of countries where Serbia belongs by its development is 10%.

5th pillar: Higher education and training – the first pillar from the group that is particularly important for the competitiveness of the economy that have completed the initial phase of development. This pillar is crucial for the transition of the economy to a higher developmental phase characterized by complex business processes and increasing sophistication of creating products and services. The modern economy requires a workforce capable of adapting quickly to dynamic technical progress, and this is impossible without quality education and appropriate specialized training. Competitiveness in this regard is measured by rate of enrollment in secondary and high schools and the quality of the education system in terms of its compliance with the requirements of the economy.

In addition to this we must not neglect training employees for performing specific tasks that are implemented in the organization and competence of the company, which is also important for the efficiency of the economy. The importance of the role of the company is growing in terms of constant advanced specialist knowledge of all employees.

This fifth pillar of competitiveness affects the strengthening of efficiency of 17%, which means that the overall competitiveness of the countries which have overcome beginning phase accounts for 8.5%. This pillar is made up of three equal elements with equal importance, namely:

1. Quantity of education;
2. Quality of education;
3. Business training.

Quantity of education is measured by the methodology of the World Economic Forum in enrollment in secondary and high schools. These indicators are monitored through enrollment % of graduates of primary school students in high school graduates to colleges and universities. The percentage ratio for each year is calculated between the total number of elementary graduates (secondary) schools and total enrollment in secondary school (high school and college). Countries are ranked according to these criteria by those at the top who had given the highest %, and those at the bottom where the lowest.

As for the quality of education, it is followed in this methodology across a number of indicators including:

1. The quality of the education system;
2. Quality of math and science education;
3. Quality of school management;
4. Internet access in schools.

The quality of the education system in each country is graded on a scale from 1 to 7, depending on how the education system meets the needs of a market economy. It is similar to the quality of math and science education, which also represents the lowest grade 1 and 7 is the best. In the same way it assesses the quality of school management, as well as access to the internet in schools. Countries are ranked by being on top of those with the highest grades, close to 7, and one at the bottom of the lowest rated, with barely score greater than 1.

Business training is monitored and assessed through:

1. Local availability of specialized research and training (1-7) and
2. Extent of staff training (1-7).

7th pillar: Labor market efficiency – labor market by its efficiency and elasticity should ensure optimal allocation of labor and to encourage the workers to actively participate in finding their optimal work engagement, as well as to

efficiently use their work time. Appropriate labor market provides fluctuations of labor, but without unacceptable social consequences. A particular problem is the high youth unemployment, which can lead to serious social unrest, and this is the current challenge to the labor market in most countries of the world. It is particularly important in this area to ensure gender equality in the sphere of labor relations, as well as opportunities for the realization of extremely talented individuals all of which enhance the global competitiveness of any economy, it is especially important for the countries on secondary and higher levels of development, where the overall competitiveness participate with 8, 5%.

This pillar of competitiveness methodologicaly is considered through flexibility and talent development with equal contribution. Detailed analysis is presented in Figure 3.

ELASTICITY

- Cooperation between workers and employers (1-7)
- Wage flexibility (1-7)
- Rigidity of employment (0-100)
- The practice of hiring and firing (1-7)
- The costs of redundancy (severance pay in weekly wages)
- The extent and effect of taxation (1-7)

EFFICIENT USE OF TALENTS

- Wages and productivity (1-7)
- Reliance on professional management (1-7)
- Brain drain (1-7)
- The participation of women in the labor force (women's participation / involvement of men)

Figure 3: Seventh pillar of competitiveness

Source: Authors

The labor market is analyzed in detail here, which is justified, given that labor is the main factor in the economy. The elasticity of the market significantly affects the productivity of an economy and the importance of the cost of labor. Reducing tensions between workers and employers, wage flexibility and down, lower job

security, a simple procedure entry and exit of the work process, the minimum cost of redundancies and appropriate taxation of labor certainly can significantly raise the competitiveness of the economy, and vice versa.

Special attention is paid to the use of a country's talents as an inexhaustible reservoir to increase productivity. The basic characteristic of human potential lies in the inability to complete discovery and engagement. Since these potentials are virtually unlimited, it is this aspect of competition virtually impossible to accurately quantify. The emphasis is as seen in the firmer link between rewards and performance, highly professional management of work processes, reducing the brain drain and the greater involvement of women. It is these measures that represent the essence of growth competitiveness of the middle and higher level of development.

SUSTAINABLE COMPETITIVENESS INDEX - SCI

This beneficial long-term concept includes all the factors contained in GCI which have long-term impact on competitiveness, as well as some new ones, concerning the environment, demography and society. Here we have as many as 17 pillars of sustainable (or long) competitiveness that are by its nature divided into 5 groups, which can be graphically represented as in Figure 4.



Figure 4: Framework for SCI

Source: Authors

1.Group: Human capital - the first group of factors is particularly interesting and certainly the most important, and includes the following pillars of sustainable competitiveness:

1. Health and primary education;
2. High education and training;
3. Social cohesion.

We can see here that education plays a dominant role, and that innovation is only the third pillar - social cohesion. High-quality human capital is a key factor of competitiveness both on long and the short term. A globalized economy requires healthy and educated labor force adaptable to science and technology progress. Here, just as in the GCI, insists on productivity as the very essence of competition. Basic prerequisite for improving national competitiveness is the high level of health of the population which is evaluated by the following parameters:

1. The impact of malaria on business;
2. The frequency of malaria;
3. The impact of tuberculosis on business;
4. The frequency of tuberculosis;
5. The impact of HIV/AIDS on business,
6. The frequency of HIV;
7. Infant mortality;
8. Expected duration of life.

Primary education, after health is a basic quality of the labor force that determines the long-term competitiveness of the economy through and follows quality and rate to the population with it.

As we can see there is no difference in the assessment of long-term and short-term competitiveness on the aspects of health and primary education.

As for higher education and training, the education here is treated identically, except that the author analyzes its quantitative aspect. "In the pillar of higher education and training SCI introduces in the indicators of enrollment rates in secondary school with separate consideration for men and women. This division emphasizes the importance of equal education for both sexes, especially women's education is important because a lot of influence on the health and well-being of future generations. "(Schwab, 2011).

Social cohesion is also an important pillar of sustainable competitiveness and primarily involves intergenerational solidarity that is essential at all levels of development regardless of the age structure of the population. The younger generation needs to support those who have lost the ability to work due to old age, and the older generation should support the young people to acquire the knowledge and skills necessary to work. In the broader context social cohesion can be defined

as the capacity of society to provide social security for all members, reduce social gaps and prevent marginalization. This is important because large social inequalities have long-term harmful effect on economic development. Therefore, it is important for members of society to actively contribute to economic and social development, but to enjoy its results. This is the essence of social cohesion, which is an important element of human capital.

Social cohesion as a pillar of long-term competitiveness in human capital presents largest innovation in the GCI as compared to the previous two steps already mentioned in similar form in the analysis of global competition. This pillar includes the legalization of informal economy, care for the elderly, the sick, mothers and people who have lost their jobs. Given the special relevance that under this pillar of competitiveness gives equality in income distribution, the measurement of this element will be used as the GINI index as already worked out and common statistical indicator.

Another important factor of sustainable competitiveness of the economy in the period until the year 2030. by this concept is to reduce youth unemployment. This problem has negative impacts on competitiveness directly through idleness of valuable economic resources and indirectly through an increase in social tensions that could escalate into violence and various other phenomena of social pathology. In any case, the society with its young unemployment in progression threatens future population.

Quantification of this new pillar of competitiveness is performed using the following parameters:

1. Expected depending ratio;
2. GINI coefficient;
3. Youth unemployment;
4. The distribution of the gray economy.

From the aspect of the long-term competitiveness social cohesion is significant but we should not neglect the social aspect of the current competitiveness that mainly reflects the entrepreneurial climate in society (Ghanbari, 2012.).

2. Group: Market conditions – This group of long-term competitiveness takes second place to human capital, namely, they are able to measure the implementation and utilization of human resources for commercial purposes. These pillars of competitiveness are almost identical to those which are most affected by the concept of GCI and affects the economic efficiency and the goods market, labor market and financial market size.

The quantification of these pillars of competitiveness in addition to the methodology used to calculate them with GCI and the newly created measures of market distortions will be used.

For us the most important is labor market efficiency, which is decomposed into two factors:

1. The flexibility of the labor market and
2. Efficiency in the use of talents.

For more efficient analysis and measurement of these indicators they are further broken down. Thus, the elasticity of the labor market can be observed and evaluated by the following indicators:

1. Collaboration between employees and employers;
2. Flexibility in determining wages;
3. Rigidity of employment;
4. The practice of hiring and firing;
5. The costs of redundancy;
6. The size and effect of taxation.

As we can see, this is a very detailed analysis of the elasticity of the labor market in all economic parameters that affect the competitiveness of the economy. On the other hand, the efficiency of using talents that is particularly important for smaller countries is seen as follows:

1. Wages and productivity;
2. Reliance on professional management;
3. Brain drain;
4. The participation of women in the labor force.

It can be assessed that here are included all factors for using potential of employees that are essential for competitiveness.

In any case, this interesting concept of long-term competitiveness index is not yet operationally useful, but is still working on its development. If we assume that all elements of the long-term competitiveness are of the same importance, then the importance of labor in the long-term competitiveness (SCI) is the same as in the current (GCI) and is 27%.

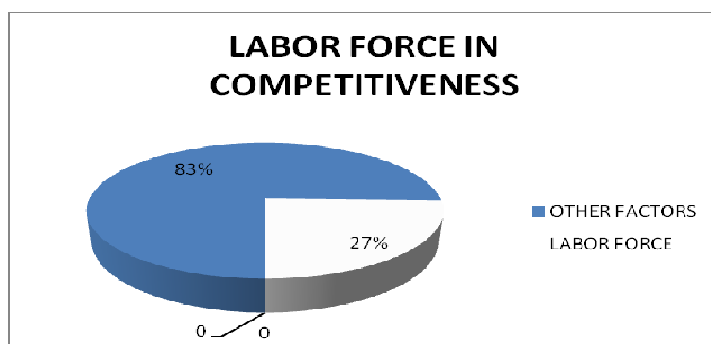


Figure 5: Labour force participation in the competitiveness

Source: Authors

COMPETITIVENESS OF TRANSITION ECONOMIES AND LABOR

Now we will turn to the competitiveness of some of the former socialist countries. The first task that must be addressed is the selection of the economy that will be analyzed. The problem is the size and heterogeneity of these countries and in different dynamics of transition that began in some countries more than two decades ago, and in some not yet over. In addition, during the transition there was a change of state borders of many former socialist countries which also makes a comparative analysis harder in many cases. On the other hand we have the greatest countries in the world Russia and China, which will be special treatment.

Although the competitiveness is followed by the World Economic Forum only since 2005. it would be advisable to analyze after the 2006. when we have definite borders of states of the former socialist countries. As for sample selection emphasis should be placed on the countries where the transition process is still up or has just ended. That is, as in many European countries, the transition has been completed in 2004 after joining the EU (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia), main attention should be paid to those in which the process was slower so we can monitor how the transition itself affects competitiveness, and this is, as a reminder, measured only since 2005.

When we have all this in mind, we will choose a group of countries that will be best to illustrate the relationship between the transition and competitiveness, which are:

1. Hungary;
2. Bulgaria;
3. Romania;
4. Croatia;
5. Serbia;
6. Bosnia and Herzegovina;
7. Macedonia;
8. Albania;
9. Montenegro.

Thus, we turn Hungary into the analysis as a pioneer of transition in Europe, Bulgaria and Romania which completed transition formally in 2007. after joining the EU, Croatia which should get that status in 2013, and the other Western Balkan countries in which the transition is still in progress.

In order to investigate the relationship between competitiveness and the transition of the former socialist European countries it is useful to analyze the competitiveness of Serbia and neighboring countries in the light of the latest report

of the World Economic Forum. We will take into account the latest reports, due to current events, and also because of methodological correctness given to Serbia and Montenegro as an independent states following from the Report 2007-2008.

Table 1: Global competitiveness ranking

	2007-8	2008-9	2009-10	2010-11	2011-12	2012-13
Hungary	47	62	58	52	48	60
Montenegro	82	65	62	49	60	72
Romania	74	68	64	67	77	78
Croatia	57	61	72	77	76	81
Bulgaria	79	76	76	71	74	62
Macedonia	94	89	84	79	79	80
Serbia	91	85	93	96	95	95
Albania	109	108	96	88	78	89
B i H	106	107	109	102	100	88

Source: WEF (2008, 2009, 2010, 2011 i 2012), The Global Competitiveness Report 2008 - 2009, 2009 - 2010, 2010 - 2011, 2011 - 2012 i 2012 - 2013.

This review is relevant for the assessment of the competitiveness of the economies in transition, for several reasons. First, in all the reports in which the ranking is made according to the Global Competitiveness Index (GCI), the number of analyzed countries is roughly the same: between 131 and 144. On the other hand, it is interesting that all these countries with the exception of Hungary and Croatia are in the middle according to the methodology developed by the World Economic Forum, while only these two are out of the group of advanced economies that are in transition to developed.

From the data given above it can be difficult to establish an unambiguous link between competitiveness and the transition observed in the medium term. In four countries competitiveness is in the poorer at the end of the period than at the beginning, but in five countries is better. It is particularly interesting to have deteriorated competitiveness of countries whose transition efforts by the EU Bulgaria has received the highest accolade: Hungary, Romania and Croatia. However, if we leave relationship with the EU behind, which has a marked political dimension, we should pay attention to the level of economic development of the economy and try to find a link to their competitiveness in the light of the latest data.

Table 2: Development of some transition economies

NUMBER	COUNTRY	GDP p.c. US \$
1.	CROATIA	14.457
2.	HUNGARIA	14.050
3.	ROMANIA	8.863
4.	MONTENEGRO	7.317
5.	BULGARIA	7.202
6.	SERBIA	6.081
7.	MACEDONIA	5.016
8.	BOSNIA AND HERZEGOVINA	4.618
9.	ALBANIA	3.992

Source: Schwab, K. (Eds.). (2012). The global competitiveness report 2012-2013 Geneva: World economic forum).

Thus, we can see at the top of the table the most advanced countries in transition, but we still do not know what is their global competitiveness in relation to the degree of development.

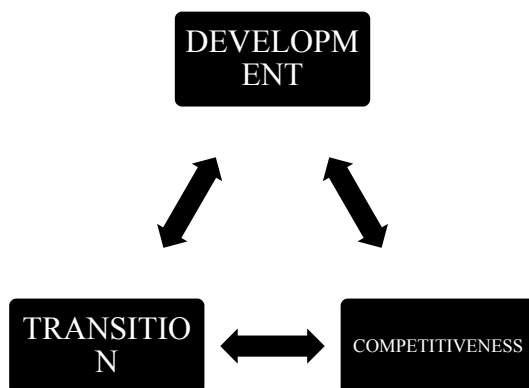


Figure 6: The relationship between key economic phenomena

Source: Authors

We have already noted that it is not a strong link between progress in transition and competitiveness, however it is difficult to quantify. Likewise, on the other hand an unambiguous positive relationship can be assessed between transition and economic development. Now it remains to show the quantitative relationship between competitiveness and development in transition economies in our sample. Again, we use the rank correlation using data from the Global Competitiveness Report 2012-13 of the World Economic Forum.

Table 3: Development and competitiveness in transition economies

RANK OF COUNTRIES BY GDP p.c.	RAK BY GCI	DIFFERENCE (1-2)
1	2	3
45. CROATIA	81.	-36
47. HUNGARY	60.	-13
65. ROMANIA	78.	-13
69. MONTENEGRO	72.	-3
70. BULGARIA	62.	8
75. SERBIA	95.	-20
84. MACEDONIA	80.	4
86. BOSNIA I HERZEGOVINA	88.	-2
88. ALBANIA	89.	-1

*Source: Schwab, K. (Eds.). (2012). The global competitiveness report 2012-2013
Geneva: World economic forum.*

Clear link between the development and competitiveness of selected countries in transition still can't be seen. We note that the largest gap in competitiveness is in the case of Croatia, which is the most developed and whose transition was very well evaluated by the EU. However, despite the extreme case of Croatia, the rank correlation between development and global competitiveness of transition economies in the sample is positive and significant, amounts to 0,544.

This result has multiple implications. This means that the transition countries in order to accelerate their development needs to continue improving its competitiveness. On the other hand, in all cases where there are significant negative deviations, primarily in Croatia and Serbia, there is still considerable room for improvement in the economic system and economic policy to promote the concept of neo-liberal economics. Regarding the influence of the labor force, we have found that it is expressed in the way the competitiveness of 27% for most of these countries, including Serbia.

Thus, we can conclude that Serbia, like other middle-developed countries, should promote all aspects of the labour force who are covered elsewhere in the conception of the current and long-term competitiveness of the World Economic Forum, it will thus increase its competitiveness and accelerate economic development.

CONCLUSION

In this short display we have presented the fundamental importance of improving the competitiveness of each economy in contemporary conditions. It also shows the currently most advanced methodologies and measurement of expression of this phenomenon with the help of the Global Competitiveness Index, and a reference was made to the initial steps of the World Economic Forum in designing Sustainable and Long-Term Competitiveness Index. It was observed that in both approaches, the importance of labor is greater than one-quarter, or more precisely, being 27% of the current and long-term competitiveness, which is not really small.

Given that Serbia has a transitional economy, as for its neighbors improving the competitiveness is significantly related to the development, which points to the importance of the complex problems of the labor force for the economy in the second decade of the twenty-first century.

Undeniably, it was concluded that to overcome the poor competitiveness of the Serbian economy improving those most important pillars of competitiveness is related to the efficiency of the economy, given that it is a middle income economy by the classification of the World Economic Forum, and the same goes for her neighbors. On the issue of workforce here refers Higher education and training and labor market efficiency.

It is particularly important to note that labor force participation conceived in this way in the competition is almost identical when it comes to the long-term aspect of this phenomenon, that of sustainable competitiveness. Thus, the competitiveness of Serbia and neighboring countries, now and in the future is very important to improve the quantity and quality of education and job training, and to increase labor market flexibility and efficiency of talent.

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THE IMPACT OF LABOUR MARKET INSTITUTIONS ON EMPLOYMENT IN EUROPEAN COUNTRIES

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Abstract: The subject of this paper is to assess the impact of labor market institutions and their mutual interactions on employment in European countries. The main problems of the European countries labour market are presented in the paper with review the results in achieving the Lisbon targets in full employment. The task of labour market standards and institutions is to balance the need for protection of worker`s rights and need to increase flexibility on labour market that will provide a more favourable environment for employment and growth of life standard. Besides the macroeconomic measures, the active labour market policies, strengthening entrepreneurship and promoting the mobility of labour force with more taking part of the flexible forms of labour are specially emphasized.

A long period, the labour market in Serbia has faced with the serious problems that are deepened by the global economic crisis. It is important to stress the fact that, unlike the general favorable developmental perspective, a general perspective on labour market remain quite negative, with a good prospect of unemployment and lack of employment of the population remain highest problems and at the moment Serbia joining the European Union.

Key words: Employment Policy, Regional Analysis, Serbian Labor Market, Economic Policy

JEL classification: E24

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INTRODUCTION

The economic performances of any given country observed at the aggregate level are measured by the gross domestic product (hereinafter: GDP). For an easier analysis, we can divide the GDP into two variables which are the key factors of its growth - work productivity and the employment rate (the number of employees in regards to the population). These output factors differ between developed and developing countries in regards to time, and they are defined primarily by the institutional environment which enables an economic activity in each country. The functioning of the labor market has a direct influence on the welfare of the employees and their families, and for that reason, in combination with the cultural, institutional, legal and political aspects, this area represents an important and obvious part of the general economic policy. The labor market institution is a system of law, norms and conventions which are a result of a collective choice and provide exemptions or limitations which affect the individual choices between the number of working hours and the profit. It is important to know that, from the point of view of certain economic driving forces, institutions always bring profit. If this were not so, it would be hard to understand why institutions were introduced in the first place and why their reforms are often so politically demanding. The task of work regulations and labor market institutions is to balance between the need to protect workers' rights and the need to increase flexibility on the labor market which in turn would provide an improvement of employment and social dialogue (Orley, 2010, p.8). The institutions which are the focus of this research are collective negotiations and wages.

The labor market institutions and regulations are very specific for each country, which may be the explanation of some of the differences in labor market results. It is not an easy task to connect the results with the institutions. There are three different approaches to researching how the institutions affect the results, though it should be stressed that there are no approaches without some flaws.

1. First, countries are compared through time. The problem of comparing countries when drawing conclusions about the effects of the institutions on the results is aggravated by the possibility that institutions which act in one manner in one country can function differently in another, due to a different institutional. Europe also has an unemployment problem, even though it has average rising wages and a compressed structure. The USA has full employment and stagnating real wages with high inequality in the distribution. High income inequality, stagnating real wages or a low rate of union density are not responsible for employment performances in the USA, but rather the interaction of all those factors (Freedman, 1998, p.5).
2. If these differences exist within one country, there can be a comparison made of workers in different institutions - for example, comparing unionized and non-unionized workers in those countries where there are employment contracts with or without the participation of unions. Comparing the results made with the participation of unions in collective

negotiations and the negotiations without their presence can give results, but the parts of the labor market which are or not under the influence of the unions can interact in different directions. For example, the results that are achieved by the unions could cross over onto the workers which are not union members.

3. Results can be measured before or after the modification of the institutions in one country. The hypothetical assumption is that without implemented reforms, the situation on the labor market would be unchanged.

Certain theoreticians emphasize the role of the labor market in solving the unemployment issue, though there is a concern that this institution restricts the activity of the participants by reducing uncertainty. The subject of this paper is an overview of the influence of labor market institutions and their interaction with employment in European countries, as well as the validity of their actions in the context of maximizing flexibility as an optimal balance between the flexibility of the labor market and social security and the protection of worker rights by labor market institutions.

THE TRAITS OF THE LABOR MARKETS OF EUROPEAN COUNTRIES

The growth of the natural unemployment rate in Europe from the beginning of the early 60ies has been caused by numerous unfavorable disruptions during the last 30 years, first of all by the increase of oil prices and the reducing of Total Factor Productivity, and also by the increase of the real interest rate and changes in labor demands. The average rate of unemployment has continuously been increasing in Europe, from 1.7% in the 60ies to 11% in the mid-90ies, followed by a large distortion all over Europe, from 4% in Switzerland to over 20% in Spain. As the unemployment rate remained large, the role of labor market institutions increased in regards to constant unemployment, as a consequence of the disruptions. Based on data of the institutions and the crisis in 20 OSCE countries from 1960 and on, it can be concluded that the interaction between the disruptions and the institutions is extremely important for the explanation of the occurrence and duration of unemployment (Blanchard, 1999, p.2). But, even though harmful influences may be the cause of the initial unemployment growth, there is the question why there are differences in labor market performances in the countries which were exposed to the same impacts. An OSCE employment strategy suggests that an institutional rigidity of the labor market is the foundation of the unemployment issue in Europe. They see the solution of the problem in reducing unemployment benefits, increasing work time flexibility, weakening trade unions and the decentralization of collective negotiations, which would move the European labor market model closer to a US-type deregulated labor market. Even the European employment strategy promotes labor market flexibility, retaining the European social model which assumes higher benefits given by the state, strong

trade unions and a relatively equal distribution of earnings. Neoliberal hypotheses predict that market rigidities such as a strict protection of employment, generous state donations, a minimum wage, high union density or any non-market institution would prevent the labor market from achieving optimum results. In a study of employment, the OSCE observed that protection of employment is a part of the total rigidity, and as such, can cause negative results on the labor market. Furthermore, neoliberals claim that employment protection is one of the causes of European unemployment, as it makes employment 'an irreversible decision', diminishing labor demand. Thus, the USA prefers a less strict protection of employment compared to Europe. This, however, raises the question why Europeans need employment protection, and Americans do not. An answer to this question can be sought in the exogenous and fundamental differences and in two dimensions: economic heterogeneity and the costs of migration between the countries. Europe, as a whole, is more diversified than the USA. The economic and cultural context of the USA provides a natural insurance of unemployment risk. Therefore, in countries where the system encourages work migration, workers are more inclined to support a work structure without employment protection. In the opposite case, workers prefer safe jobs and insider rents (Belot, 2001, p.4). Although opinions are divided, the arguments in favor of deregulation still prevail in OSCE politics, for solving low European employment which exists from the 70ies. Divergent with the neoliberal policy is the institutional comparative political economy. This model aims to have as a result a high level of employment which is caused by a wide range of social services that simultaneously increase the demand for labor. This in turn is reflected in employment in public services and the supply of labor, as well as ensuring services and transfers such as for example maternity leave. The 1997 European Employment Strategy (EES) defines that the European Commission monitors and compares employment policies in the EU member states. The most important elements of the EES are annual guidelines and recommendations, which are focused on the realization of three main goals: full employment, quality and productive jobs, and inclusive labor markets. Each member state prepares an annual national action employment plan which represents a national strategy for achieving goals and an implementation of the strategy connected to the guidelines. However, national action plans and European Commission employment reports are not mandatory and there is no formal coordination between employment policies.

Thus, globalization, the economic and politic domination of the USA, the loss of the existing position of the EU in comparison to the USA and Japan, and the emergence of China as the new world economic force, are the most important causes for a new approach to EU industrial policy, promoted at the Lisbon Summit of the Council of Europe in March 2000. The plan was the following, until the year 2010: 'For the European Union to become the most competitive economy in the world, based on knowledge, innovations and entrepreneurship'. In order to achieve the mentioned goal, the Lisbon Strategy was adopted, also known as the Lisbon Agenda, with a program which connects short-term political initiatives and medium and long-term economic reforms. The Lisbon Strategy is based on three segments:

- The economic part – which prepares a strategy according to a concurrent, dynamic and knowledge- based economy. There is a stress on the need for constant adapting to changes in information society and on the stimulating of research and the development.
- The social part – directed at the modernization of the European social model. It is achieved by investing in human resources and fighting against social exclusion. The member states are requested to invest in education and training and to implement an active employment policy, which in turn would set off the road to a knowledge-based economy.
- The environmental part – which was subsequently adopted at the meeting of the European Council in Gothenburg in 2001, and pointed to the fact that economic growth should be coordinated with a rational use of natural resources.

Of the total twelve Lisbon Strategy goals, seven are related to the strengthening of EU competitiveness and its potential for industrial growth, and they are the following:

1. A wider and more efficient usage of new information technologies (IT) and creating a European space for research and innovations;
2. Finalizing the building of a unique EU internal market;
3. Creating efficient and connected financial markets;
4. Strengthening entrepreneurship by improving and simplifying a regulatory environment (especially for MSP);
5. A better social cohesion based on employment promotion;
6. Improvement of skills and the social protection system;
7. Sustainable development that would ensure a long-term quality of living (Mičić, 2008).

The Lisbon Strategy recognized the importance of creating a supportive business environment. Thus, several specific tasks were set by Lisbon Strategy in the aim of inciting entrepreneurship:

1. A shortening of the necessary time and costs for founding companies;
2. A decision about an entrepreneurial, innovational and open EU in the ‘Multi annual programs for incitement and support to MSPP’;
3. Adoption of the ‘European Charter for Small Enterprises’;
4. Revision of the financial instruments of the European Investment Bank (EIB) and the European Investment Fund (EIF), so that resources would be redirected to the support of high-tech and micro enterprises (Mičić, 2008, p. 54).

An important element of the European Employment Strategy was the realization of Lisbon goals related to employment, economic reforms and social cohesion, based on the promotion of employment. The member states coordinate between themselves so that the total employment rate can reach 70% in all member countries by the year 2010, that the employment rate for woman is 60% by 2010 and that the employment rate for the 55-64 age group reaches 50% by 2010.

The report prepared in 2005 under the guidance of Wim Kok, the former Netherlands Prime Minister (the so-called Kok report), showed unsatisfactory progress in the implementation of the Strategy. The established failure of the Lisbon Strategy was a consequence of broadly defined goals, an overextended program, a lack of coordination and contradictory priorities. The division of the responsibility between the member states was not clearly defined, and there was no political will for reform implementation. Thus, the European Council in 2005 decided to put an emphasis on knowledge, innovations and an optimization of human capital and in that way increase the growth potential, productivity as well as strengthen social cohesion. With that goal in mind, a revised Lisbon Strategy was adopted in 2005 – the Lisbon Strategy for growth and employment which redirected the priorities of the European Union towards growth and employment. It required rapid action in all member states and in five priority areas:

1. an awareness of society,
2. a unique market,
3. improving the entrepreneurial climate,
4. building of a flexible labor market and strengthening of social cohesion and
5. an ecologically sustainable future.

The carrying out of the Lisbon Strategy in the EU by 2007 has shown the following results:

1. The employment rate had increased by 1.4% (about 2.75 million new work places), amounting to about 62.5%.
2. The GDP had an average growth rate of 2.3%.
3. The investments in IP amounted to 1.84% of the GDP.

The second three-year period of the ‘Reinstated Lisbon Strategy’ application started from 2008. The EU has confirmed the importance of the integrated guidelines and emphasized the following priorities in the ‘Lisbon Program of the Union 2008-2010’:

1. a stronger investment in knowledge and innovations,
2. a liberation and strengthening of business potential, especially the one in MSP,
3. a higher level of labor market adaptation, based on the concept of flexibility, and
4. energy and climate changes (Mičić, 2008)

The ‘Great Recession’ in the 2008-2009 period caused not only an increase of general unemployment rates, but also an increase of the number of unemployed for more than a year. However, the unemployment wave has affected European countries in diverse ways. Some countries, fronted by Germany, experienced only short-term unemployment rises from only half a percent, before the unemployment continued to fall, as happened prior to the recession. Furthermore, Germany is the only European country in the OSCE in which unemployment at the beginning of 2001 was under the crisis level, while the rise of unemployment less than a percentage point was recorded in Belgium, Luxemburg and Switzerland. The reason for a lower increase of unemployment than expected, in some of the mentioned countries is the attempt of the

employers to minimize lay-offs in the conditions of a decrease in product demand by the so-called 'work supplies' (OECD, 2011).

While capitalist countries mostly tend to adapt their institutions to variable environments, the former socialist countries have an additional task of coordinating newly introduced institutions with the economic and politic environment. A research of transitional countries deals with the division of these countries into three large groups: Central East Europe (the CEE, which includes the Czech Republic, Hungary, Estonia, Latvia, Poland and Slovakia), South-East Europe (SEE, which includes Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Serbia, Greece, Bulgaria, Turkey and Romania) and the countries from the Commonwealth of Independent States (CIS, which until recently included 12 of 15 constitutive republics of the former Soviet Union: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldavia, Russian Federation, Ukraine, Tajikistan, Turkmenistan and Uzbekistan, whereby Georgia officially left the Commonwealth in August 2009).

Unemployment was lower in most CIS countries, but numerous workers were engaged at lowly paid jobs, or they went back to farming. The labor market reforms in Russia, Ukraine and other CIS countries were less detailed in regards to other CIE and SEE countries with larger residual institutional rigidities, a weak implementation and high proportion of the informal economy.

In CEE and SEE countries, the key characteristic of unemployment is longevity and is spread among the young and the less educated. More than 50% of the unemployed in the CEE countries were jobless for longer than one year, while the percentage is even higher for the SEE countries. The main challenge is a reactivation of long-term unemployment through stimulation such as reimbursements and via targeting of active programs for those groups for which the largest net effect was determined.

The countries of South-East Europe (SEE) can be roughly divided into two groups, the first group being the former Yugoslav republics, with rigid labor market institutions, while the other group are the former centrally planned economies, with more flexible institutions. This group of countries is extremely diverse, but at least nine states (except for Greece and Turkey) have the same transitional experience, together with the tendency to enter the EU (Arandarenko, 2004). Moreover, all post-communist countries started with similar basic conditions regarding labor market functioning. Still, capitalist countries tended to adjust their institutions to the variable environment, and the former communist countries have the task to adjust the newly introduced institutions to their economic and political surroundings (Arandarenko, 2011).

The South-Eastern Europe countries are characterized by a lack of manpower, high levels of standardization and no unemployment insurance. In the countries of this region, chances for employment are low. As a result, employment has declined significantly in almost all the SEE countries, while some of them showed a high level of unemployment. Due to structural changes and relocations, numerous workers which lost their jobs failed to locate new ones, while a significant number

was unemployed or employed at lowly paid jobs. Thus, the unemployment rate achieved its maximum at over 30% in FYROM (31.6% in year 2012). It cannot be claimed that labor market rigidity had an adverse effect on the growth and employment in the SEE region only based on the fact that comparatively more rigid countries as Slovenia and Croatia had better performances during the last two decades than the comparatively more 'flexible' countries such as Bulgaria and Romania. The countries in this region need to understand what is suitable for them, considering the external limitations in the form of the demands of international factors, but also, what's even more important, they need to recognize the specificity of their labor markets (Arandarenko, 2004).

Serbia today is in a stage which most of the South-Eastern Europe countries have gone through. Labor statistics have a long tradition in Serbia but until 1994 they were founded only on the data related to the formal labor market. During the period from the Second World War until 1990, the employment growth in the public sector was positive, especially until 1965. A large growth of unemployment occurred in the 60ies with the first large migration wave to the countries of Western Europe. The 80ies brought economic stagnation and double-digit unemployment rates. In 1989, there were 2,662,000 unemployed people in Serbia, of which only 53,000 were employed in the private sector. The Labor Force Survey (LFS) in the form in which it was established in Serbia in 1994 was not completely adjusted to the standard requirements of the International Labor Organization. The LFS until 2008 was conducted once per year, and from 2008 it has been conducted once every six months on a sample of about 6,500-7,000 persons (Arandarenko, 2011).

The positive effects in the area of economic growth which are achieved from the beginning of the world crisis in 2008 did not result in opening an adequate number of new work places. Until the last quarter of 2008, Serbia was affected by the world economic crisis, which resulted in the weaknesses of the domestic economy coming to the fore. In 2009, by tender and auction privatization, some 74 enterprises were sold, generating an income of 75.6 million Euros while 43.0 million Euros were provided for investments. In the period 2002-2009 (until January 25) by tender and auction privatizations, some 1,784 enterprises were sold, generating an income of 2.2 billion Euros while 1.4 billion Euros were provided for investments and 276.7 million Euros were earmarked for the social program. From the total number of the offered enterprises (2,652) 67% were sold (109 by tender and 1,675 enterprises by auction privatization). The non-compliance with the contracted obligations (non-payment of installments, social program failure, non-compliance business continuity and labor relations) resulted in a cancellation of the contract for 478 enterprises (23 tenders, 455 auctions) (Savić, 2012).

A faulty perception of privatization and the economic crisis have largely resulted in a decline of employment. The number of employees declined for about 15 percent between 2008 and 2010. At the same time, the number of unemployed increased for about 60,000 persons, which led to an increase of the unemployment rate from 14.7 to 20 percent. This in turn led to the fall of the employment rate from 53.3 percent in 2008 to 47.1 percent in 2010. In the period 2008-2010, the

cumulative loss of working positions was 12.5 percent, while in the same period the GDP fell by 4.7 percent. This means that by reducing the GDP by one percent, employment fell by 2.6 percent. The elasticity of the employment growth was mostly in the range 0-1 in most South-East Europe countries, which indicates that the relative drop of employment in these countries was less effective than the drop in production (Arandarenko, 2011).

A significant reduction of the number of employees in that period in state (and public) companies was not absorbed by an appropriate increase of employment in the private sector. The number of employees in the private sector was less than a million workers (850,311 workers, Labor Force Survey, 2011) which is a small amount considering the working-age population (ages 15-64), which counts less than five million (4,775,996, Labor Force Survey, 2011).

According to LFS data from October 2012, there was an improvement of all labor market indicators: the employment rate for working-age people (15-64) rose by 2.2 percent, while the rate of inactivity for the same population was reduced by 0.7 percent. A combination of a modest increase in activity rates and a strong increase of employment enabled a significant fall of the unemployment rate by an entire 3 percent. This, however, is not a consequence of improving conditions on the labor market, but most probably a reflection of the more exact measurement of certain segments of employment (Žarković-Rakić, 2012).

COLLECTIVE NEGOTIATIONS AND THE MINIMUM WAGE

The setting of the model requires an answer to the following two questions: what do companies and trade unions negotiate about? And, what are the negotiating sides trying to achieve? The preferences of the unions are the sum of the individual preferences of the workers. So, it is easiest to assume that all individuals have the same preferences and that unions take full advantage of the benefits regardless who they represent. Unlike the unions, the companies and the representatives of the employers are in a process of collective negotiations. Thereby, what do unions and companies negotiate about? Most frequently they confer about all the aspects of work contracts: the salaries, working times, overtime, lack of monetary compensations, employment protection, and also about work safety and health. They mostly advocate an egalitarian wage policy or a reduction of the difference in salaries which result from differences in education and qualifications. It can be assumed that unions attempt to achieve a level of 'fair benefits', maximizing the difference between the agreed and minimal or legal wage. The negotiating power of the unions is connected to the level of coordination which unions can achieve and with the coverage of collective contracts. On the national level, unions occasionally negotiate with the government and employer's organizations regarding the minimum wage and labor legislation including a legislative protection of employment, working times, rules of retirement and unemployment benefits (Arandarenko, 2011).

COLLECTIVE NEGOTIATING IN OLD EUROPE

From the 70ies until the mid-80ies, analyses of labor market institutions have shown that countries with centralized negotiating regarding wages between the unions and employers organizations are superior compared to the countries in which market forces are in force, or in which there are negotiations about wages and working conditions within decentralized collective negotiations. In the research regarding the reasons for the economic success of countries such as Sweden, Norway, Finland and Austria, a couple of decades ago it was concluded that such success, as well as superior results on the labor market, are a result of centralized collective negotiating. During the 80ies of the last century, this hypothesis was partially revised. It never, empirically, fitted into the equally good performances of the labor markets of Japan, Switzerland and the USA, which traditionally have a much decentralized structure of collective negotiating and a high flexibility of real wages (Arandarenko, 2011). During the 60ies and 70ies, unemployment was at a lower rate in the countries with highly centralized systems of collective negotiations than in those with decentralized systems. During the 80ies, unemployment was lower in both these groups, compared to the countries where collective negotiation institutions are between the two extremes. A market determining of wages ensured a low level of unemployment via competitive pressure on the enterprises and the workers until the centralized negotiating achieved a low unemployment rate, forcing negotiators to consider the impact of wages on national unemployment. There have been negative outcomes on an industrial or indirect level of the collective negotiations which allowed the unions and the enterprises to ignore the effects of their decisions on the aggregate economy, which is why wages were set so high, thereby causing unemployment. The most common measure of the prevalence of unions is the rate of unionization or union density, and it is related to the proportion of manpower members of a certain trade union in the total number of employees. In continental Europe, trade union density is below 50% and tends to decrease further. Great Britain has a tradition of highly unionized manpower, together with Norway and Ireland. In those countries, there is a large gap between union density and coverage, but it could be exceeded by way of laws regarding the enlargement of collective contracts validity. France has the lowest union density in the OSCE, about 10%, but one of the largest coverages, about 95%. On the other hand, union membership is high in most Scandinavian countries. Sweden has the biggest union density in Europe, followed by Finland and Denmark.

Table 1 shows movement rates of union density from the 60ies.

Table 1: Union density (number of union members is shown as the percent of the number of employees)

	1960-64	1965-72	1973-79	1980-87	1988-95	1996-98
Austria	59	57	52	51	45	39
Belgium	40	42	52	52	52	-
Denmark	60	61	71	79	76	76
Finland	35	47	66	69	76	80
France	20	21	21	16	10	10
Germany	34	32	35	34	31	27
Ireland	47	51	56	56	51	43
Italy	-	32	48	45	40	37
Netherlands	41	38	37	30	24	24
Norway	52	51	52	55	56	55
Portugal	61	61	61	57	34	21
Spain	9	9	9	11	16	18
Sweden	64	66	76	83	84	87
Switzerland	35	32	32	29	-	23

Source: (Layard, Jackman, Nickell, 2005)

COLLECTIVE NEGOTIATIONS IN TRANSITION COUNTRIES

In market economies, a high rate of unemployment reduces wages, thereby reducing the negotiating power of the workers. In communism, there was practically no unemployment (except in the former Yugoslavia) and the wages were not determined by company profit. Because of the passive role of the unions in the period of central planning, wages were centralized and were in accordance with the determining of prices. Due to the fact that in communism almost all employees were union members, they had no influence on earnings, as they were integrated into the management structures and were only the instrument for implementing government decisions. During the period of transition, in almost all South-East European countries, the coverage and number of unions were significantly reduced. During the 90ies, in most transitional countries there was a negative proportion between unemployment and wages (Bulgaria, Hungary and Poland), which indicates that the salaries were sensitive to the local labor market conditions. In the countries which made less progress in market reforms, no such relations were recorded (Romania). Most of the transitional countries retained the wages system in the public sector based on coefficients, whereupon the earnings determination in the public sector had a strong influence on wages determination in the private sector. The key characteristic of the coefficient system in most transitional countries is the compression of the wages scale. While the earnings in the public sector in OSCE countries were at the top of the scale and 6-9 times more than in the countries on the end of the scale, the coefficients of the scales in transitional countries were smaller (for example, 2.3 in Romania, 2.8 in Moldavia, 3,6 in Hungary, etc.).

In the SEE countries, the wage determination was not decentralized, but it also was led by the government like in the countries of Central and East Europe. The role of the state in wage determination in the private sector remained dominant,

either by direct intervention (Bosnia and Herzegovina, Serbia and Montenegro), or less directly through wage retention in state enterprises. General collective contracts were widespread in SEE countries. Slovenia was characterized by a 100% coverage of collective contracts while in Bulgaria 40% of the manpower was covered. Considering the fact that the public sector had a great impact on the retention of earnings growth in other sectors as well, the desired level of the decentralization in collective negotiations has still not been achieved (Rutkowski, 2005). The SEE countries had significantly smaller rates of unionization and coverage and despite a decreasing union membership, their negotiating power in certain sectors stayed relatively strong. These sectors were often the ones which remained in the public domain, such as transportation, mining and heavy industry. And yet, growth sectors such as trade and personal services, which involve big business enterprises, had smaller unions. Also, the presence of the unions in newly created small or medium companies was at a low level.

In the Former Yugoslav republics, the unions were quite influential, partially due to the self-management heritage. Serbia, Montenegro and FRC Macedonia are examples of economies with fragmented unions, as even general and sector collective contracts had important roles in all these countries.

Social dialogue and industrial relations in Serbia are regulated by a comprehensive labor legislation whose foundation is the 2005 Labor Law and the 2004 Social-Economic Law Council. In order to keep in line with the relevant demands and EU law regulations and International Labor Organization standards, there has been an almost complete labor legislation change in 2001. The Labor Law gives a detailed description of collective negotiations and trade union and employer association activities (Arandarenko, 2004). A weakening of trade unions, especially in the standardized union domain, such as the unionization rate and contract coverage rate, is the expected consequence of the transitional period (Arandarenko, 2011). During the previous decade, there has been a constant trend of union density decrease, together with overall union power and density, especially in the private sector. The density of unionization within the private sector has been estimated at over 60%, while the one in the public sector is somewhat below 20%, and the overall rate of unionization is about 35%. The global economic crisis from 2008 has been the cause of a massive decline in membership with all unions due to the massive lay-offs in that period. In order to increase the competitive power of the Serbian national economy, it is recommended that patterns of collective negotiations extend from the public into the private sector. The unions within the public sectors are stronger than those in the private sector, which has resulted in the fact that the earnings within the public sector grow much faster than the productivity rate. The restructuring of the collective negotiations system toward sector-based negotiating within the industry would beneficially enhance the competition, as it would provide the growth of salaries in the country, in accordance with the growth of productivity.

THE MINIMUM WAGE IN OLD EUROPE

In most countries, the minimum wage is the generally accepted method of politically regulating the labor market. The goal of determining the minimum wage is to prevent an exploitation of the workers on behalf of the employers, promoting a fair structure of wages, securing the lower limit of the acceptable living standard, and a mitigation of poverty (Rutkowski, 2003). Nowadays, more than 15% of all employees within the EU 15, which is more than 20 million working men and women, hold lowly paid jobs. There are two methods of establishing a minimum wage, whether it by collective contracts or through legislation. The first country to provide legislation on the minimum wage has been Great Britain in 1908. Seven of the EU member states do not regulate the minimum wage: the Scandinavian countries – Denmark, Sweden and Finland, together with Germany, Austria, Italy and Cyprus. These countries rely on collective contracts when it comes to establishing the minimum wage. Nevertheless, there are sectors in which collective contracts do not exist, so that the state can impose legal measures on the minimum wage, determining the wage in society overall, even providing a set minimum wage for the employees outside of the collective contract-based minimum wage. Trade unions are nevertheless in favor of a collective negotiating of the minimum wage, as in that way they have a direct impact on the forming and protection of the minimum wage.

Germany is the only country which does not have its functional equivalent, which is the key subject of debates. For each sector individually, the unions and employers negotiate the wages. The German model is often mentioned as an example of how the European countries can reduce unemployment and become more competitive, that is because of the fact that the rigidity of wages has caused the lowest unemployment rate during the last 20 years. Critics claim that reforms and the labor market has expanded and stabilized the sector of low-paid jobs and by doing so has stimulated equality in earnings. Market labor statistics show that the this sector has grown three times faster than the other types of employment in the period 2005-2010.

In most of European countries, the institutional process of consulting regarding the minimum wage has been established, in which employer associations and unions are included in providing periodical recommendations to governments about increasing wages. In Belgium, Greece and Ireland a low minimum wage has been negotiated through tripartite social frames, whereas in Ireland, in the case of the failure of the agreement between the three, the government takes over and decides about the increase. In the Benelux countries, together with France, there has been an indexing, so that growth is directly linked with the increase of prices or salaries. This method of establishing a minimum wage provides the highest degree of social security, as the growth of the minimum wage follows the overall economic development. In Great Britain, Luxemburg, Holland, Spain and Portugal, the minimum wage negotiations take place at the national level, between trade unions and representatives of employers, which afterwards leads to state implementation through the law.

THE MINIMUM WAGE IN TRANSITIONAL COUNTRIES

In most transitional countries, the legislated minimum wage was implemented during the period of transition and transformation at the beginning of the 90ies. These regulations have played a particularly important role in the growth of overall salaries, which relates to a rudimental collective negotiating system.

In Table 2, we can see the mechanism of determining and adjusting minimum wage legislation.

Table 2: Determining and adjusting minimum wage legislation mechanisms.

	Automatic adaptation to the growth of prices or wages	Dual or tripartite negotiation	State regulation after consultations with unions or employers	Unilateral state decisions
Bulgaria	x		x	
Estonia		x		
Latvia			x	
Lithuania			x	
Romania		x		
Slovakia		x		
Slovenia		x		
Czech Republic			x	
Hungary		x		x

Source: (Funk, Lesch, 2005)

We can see that dual or tripartite negotiating frames have been accepted in Estonia, Rumania, Hungary, Slovakia and Slovenia, whilst Bulgaria, Latvia and Lithuania, Poland and the Czech Republic determine the minimum wage by way of state organs after consulting with employers and unions.

The minimum wage in transitional countries exemplify a clear division between the countries of Central, Eastern and South-East Europe, where the minimum wage can go up to 40% of the average wage (in 2002), and at the other end, in Central and Eastern Europe, where the minimum wage goes up to only 20% of the average wage. The ratio between the minimum and average wage is in Bosnia and Herzegovina is about 55%, 45% in FYROM, in Slovenia somewhere close to 40%, while in Romania and Bulgaria it is around 30%. Most countries have no 'positive discrimination', but rather follow general trends of salaries, though tax reductions exist in certain countries. The examples show that the exceeding of a minimum wage above the overall wage can be significant: in Bulgaria 52% of the sector collective contracts provide a minimum wage which is more than 10-80% of the national minimum (Rutkowski, 2005, p.207).

Due to the fact that wages of lowly paid workers is close to the minimum wage, these are the first to be affected by an increase. Research shows that a high national minimum wage has a negative impact on the chances for lowly qualified workers to gain employment, including workers with little work experience (for example, young people) and with inadequate qualifications. It has been established that there is a negative correlation between the minimum and average wage and the level of lowly paid employment, which suggests that the minimum wage contributes to an exclusion of marginal workers from the workforce. Taking into consideration that transitional countries do not offer a set minimum wage for the young, it is expected that an increase in the minimum wage will be the cause of a high unemployment rate (Rutkowski, 2005).

Minimum wage determination in Serbia is at best centralized by the socio-economic council, and a minimal wage is, according to Labor Law provisions, mandatory in the entire economy, including the self-employed and those employed outside the corporative sector. The socio-economic council is in charge of negotiating and implementing a general collective contract, and every 6 months determining the minimum wage according to work hours. In accordance with the Labor Law, the council determines the degree of the minimum wage, which obliges them to take into a consideration the following parameters: the cost of living, average salary oscillations in the Republic of Serbia, the unemployment rate, the dynamics of employment on the labor market and the overall level of economic development in the Republic of Serbia (Arandarenko, 2012). Economic analyses suggest that the effects of the minimum wage on employment actually depend of its initial level. Thus, if it is positioned relatively low from the very beginning, a further increase does not necessarily have a negative impact on employment. If the minimum wage is positioned very highly at the beginning, it is certain that a further increase will lead to a negative impact on employment. These results have to a certain degree been verified by empirical studies.

INSTEAD OF A CONCLUSION

The theoretical justification for a regulation of the labor market is based on understanding how labor market institutions can generate long-term economic gains by protecting the interests and competitive positions of productive enterprises, and at the same time preventing them to base their competitive advantage on lower expense costs which are generated by poor work conditions. The OSCE Employment Strategy demands a consensus between policy makers in order for the labor market functional principles to be in line with the new challenges such as an aging population, rapid technological changes and fluctuation within international labor division. A strategy called “Europe 2020” has been developed during the global economic crisis and global challenges, to which it has to respond. Europe 2020 defines how the EU can in ten years increase its employment rate for the population between ages 20 to 64 by at least 75%.

Nevertheless, the unemployment rate in the EU in 2011 has stayed at the level of 68.6% and has not increased in comparison to the previous year, and for the subsequent years, only a marginal increase is expected. Considering the goal of the complete integration of SEE, the EU has played an active role by influencing legislation and the administrative organization of developing regional countries. As the highest priority of the SEE countries is the economic and social development, it has been stressed that creating new jobs is necessary. Improving the labor market institution demands an intervention within several areas such as wage determination, job protection and creating social safety networks for the unemployed. In many of the countries in this region, the consequence of institutional rigidity is creating a segmented labor market where regular employment is protected, while informal is not. There is evidence that job protection is harsh but implementation is weak and a huge part of labor market flexibility comes from the failure of implementing laws. Fundamental reforms are needed also in the area of job protection, where legislation regarding fixed-term contracts has remained particularly harsh (Arandarenko, 2012). The negative trend derived from the 90ies in the Republic of Serbia has continued during the largest part of this decade, even in the years of the greatest economic growth. During the period 2005-2010, there has been a decline in employment and an increase in unemployment. Economic growth benefits have affected the population by the growth of salaries and not the growth of employment. The number of employed people between ages 50-64 reached its minimum in 2010, which is about 2,279,000 people, which represents a decline of 11% in regards to 2005 (the Government of the Republic of Serbia, 2011). A drastic fall of the employment rate according to age structure is seen as a main indicator of the labor market conditions, and is one of the crucial obstacles to EU integration of Serbia. The National Employment Strategy 2011-2020 and post-crisis model of economic growth and development of the Republic of Serbia determines development priorities that should increase the employment rate by 20%. Nevertheless, there is an entire range of goal parameters that must be confronted during the process of converging the market labor of Serbia with the European Union. The general characteristic of successful countries is an implementing of overall institutional reforms, as the alignment between labor market institutions should be used to fix the performances of the labor market.

Thus, certain countries can achieve better performances due to their implementation of specific types of institutions or they have implemented reforms of the institution toward desirable goals. Institutional and legislative reforms provide an adaptable market labor, in which basic worker rights are effectively protected, though at the same time employers are not unjustly restricted in size, structure and qualification adjustment toward changes in the demand for products. The research seeking an answer for the consequences of the institutions facing the labor market performance based on analysis and data comparison between countries are limited due to two reasons. Firstly, institutions do not all change quickly, and there are variations which appear in different countries which are not sufficient to encompass the true effect of institutional activity. Furthermore, there are numerous events specific for each country individually that can influence the

labor market and which are not encompassed by studies. The specific mix of policies which each country has to implement depends on the economic situation and labor market conditions. After deep recessions such as the most recent one, European labor market policies should not rely on dealing with unemployment through social programs in order to alleviate job loss by generous but passive awards, rather they must combine labor market policies which are oriented toward skills development and an effective process of connecting the unemployed with the available work places. Only in such a way can a new wave of mass and long term unemployment be avoided.

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CHANGES OF THE NUMBER OF EMPLOYEES IN SOME SECTORS OF THE ECONOMY AS A RESULT OF CLIMATE CHANGE

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Abstract: The world of work is sensitive to changes in the environment. As climate change sweeps across the globe, governments, workers and employers are facing its incremental effects as well as searching for solutions to offset them. Climate change is already shaking up the nature of work and the distribution of employment within and between countries, regions and communities, dislocating people and industries and communities. As a consequence there will be major transitions in the labour market. The most of these shifts will be within rather than between economic sectors. Climate change is affecting workplaces around the world and also looks at the new employment opportunities created by the global, national and grassroots initiatives promoting sustainable development and green jobs. There will be major transitions in the labour market, the most of these shifts will be within rather than between economic sectors. The paper presents the changes in the number of employees in certain sectors, particularly those that are closely related to climate and climate change. It also provides comparative data for some countries of Europe and the world. We used data on the number of employees available in statistical databases that are processed and then compared. The results can be guidelines that may indicate which sectors of the economy that are more or less vulnerable to climate change.

Key words: Climate Changes, Employees, Labor Market

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INTRODUCTION

Climate change will have significant impacts on the structure of economies, settlement patterns, livelihoods and employment. These impacts will come from three sources:

- Changes in the climate, which have already started to cause significant suffering;
- Adaptation to these changes in an effort to “limit the suffering”; and
- Mitigation, i.e. measures to reduce emissions in order to “avoid the unmanageable“.

As the IPCC points out, little is known about the employment and livelihood impacts of climate change. The sectors most likely affected are the ones most directly dependent on the weather, agriculture and tourism. While the share of agriculture in world employment has been falling for decades and more people now work in services than in agriculture for the first time in human history, agriculture continues to be the single largest employer in the world. Extreme weather can cause severe and lasting damage. A storm which struck the mega-city of Karachi in Pakistan in killed over 200 people, mostly in poor, densely populated areas with precarious housing. Damage to infrastructure like roads and powerlines disrupts economic activity and reduces incomes. Persistent drought has reduced the availability of hydropower from dams in developing countries such as Ghana and Uganda, provoking frequent load shedding and disrupting life and economic development.

According to some prognoses, extreme weather could lead to the displacement of some 50 million people over the next few years. The lack of access to social security systems is one of the reasons why people have little choice but to migrate when faced with natural disasters (ILO, 2007).

Tourism has been one of the fastest growing employers in recent decades, including developing countries. The consequences of Hurricane Katrina illustrate what extreme weather events can do to the tourism industry: New Orleans lost some 40,000 jobs and half of its population. Over two years after the event, many of the hotels are still in ruins.

Women stand to be disproportionately affected, not only because of their presence in agriculture, in agro-processing and in sectors like tourism, but also because of their family roles. Water is likely to become scarcer and fetching it may add to womens workload. Infectious diseases like malaria will increase, affecting the available labour force and the productivity of workers. There will be more care work for family members, a task that tends to fall on women (ILO, 2007).

Among regions, Africa stands to be most affected, with large numbers of vulnerable people and a low capacity to adapt even though the continent has historically contributed little to climate change and will not become a major source of emissions for the foreseeable future. Coffee is still Ugandas most important

export and one of its biggest employers. With a 2°C rise in temperature there would be no suitable areas left in the country. This could happen by the middle of the century, implying a massive restructuring in the economy. An important fact stressed in the IPCC report is hardly reflected yet in the media: at least in the short to medium term, the social impacts of climate change depend more on the development path of economies and societies than directly on the changes in natural systems. Most of these impacts can be cushioned or averted altogether if policies and measures to adapt to climate change integrate the repercussions for employment and income.

People, businesses, communities and countries have always adapted to changing conditions and so they will to alterations in the climate. Spontaneous as well as planned adaptation is already happening. Most of the planned adaptation concentrates on infrastructure like coastal defences and flood protection.

Water harvesting and management will also be increasingly important. In these areas labour-based methods in public works programmes could create large numbers of jobs. In the tourism industry, adaptation will involve changes in the seasons. Cruise ships will avoid the Caribbean during the now extended hurricane season. The Mediterranean basin may become too hot during the summer months and tourists may prefer the cooler spring and fall. Labour peaks in hotels, restaurant, transport and so on will shift also. In the case of ski resorts, the change will be more radical. Low-lying resorts will no longer have enough snow and have to find alternative activities. Farmers are changing their agricultural practices, sometimes switching to entirely new crops. So far most adaptations in farming systems have related to agronomic practices like seed selection and irrigation and to the economic viability of alternative crops.

There can also be significant shifts in employment and income opportunities. A recent FAO study in semi-arid Bangladesh found that mango is a good alternative to rice from an agronomic and an economic point of view. But the prospects for employment are less encouraging: mango requires much less work than rice and labour demand is highly concentrated in two short periods per year. That is bad news for the onethird of households in the region who depend on work as daily labourers in agriculture. This example shows that effective adaptation policies and programmes require a much better grasp of the problem and of options for tackling it. The “hotspots” need to be identified more clearly, i.e. the areas, sectors and population groups which will be most affected. The nature and dynamics of these effects need to be understood. This sort of mapping has been neglected in the past but has now started.

Even in Europe, a recent study found a general lack of preparedness and failed to put any numbers on the labour market consequences of adaptation. Much more work will be needed to chart these shifts to enable employers, workers and governments to anticipate and smooth these transitions (ILO, 2007).

Impacts in the short to medium term will not be the consequences of temperature increases as the latter will be moderate and might even have positive impacts, by increasing agricultural yields in some regions for instance (under an

optimistic scenario in which there is less than 2°C increase in global average temperatures). The negative impacts on employment will be the result of extreme weather events such as droughts, cyclones and/or floods. They will also arise from slower processes such as sea level rise. The greater incidence of extreme weather events will affect urban employment because damage to transport, industrial infrastructures and settlements affects the ability of workers to commute and/or to find alternatives when workplaces have to close.

Rural employment will also be affected by climate change. Due to a greater incidence of heavy precipitation and the damage to crops this entails, it is anticipated that employment in the agricultural sector will be adversely affected, especially seasonal jobs that depend on harvesting and crop-processing.

It is hard to draw a simple cause-and-effect relationship between migration and climate change. People migrate for numerous reasons. However, a recent study has revealed that climate change is one of the key reasons behind male migration from Chiapas towards the northern states of Mexico and the United States (Verheecke, 2010). In the 2010 floods in Pakistan, in addition to the heavy death toll, almost 17 million acres of farmland have been flooded and billions of dollars worth of crops and livestock destroyed. This destruction is particularly significant in a country where two-thirds of the 180 million inhabitants are in agriculture-related work (Karamat, 2010, <http://www.brookings.edu>).

Climate change is also expected to reduce workers productivity by increasing mortality and morbidity because of the resurgence and proliferation of certain diseases and to worsen the working conditions of workers who carry out their activity outdoors, such as construction workers, for example, because of rising temperatures. Increases in respiratory and/or water and food-related diseases and the risk of malnutrition will also negatively affect employment. The latter will also condition the future incorporation of young workers into the workforce due to irreparable childhood health damage (Samet, 2010). Increased migration and mortality will further aggravate problems such as worker turnover and the loss of qualified workers.

In order to shed some light on the link between climate change effects and employment, some regional cases are worth examining. In Europe, agriculture, tourism, insurance, forestry, fisheries, infrastructure and energy were identified as highly vulnerable to the direct effects of climate change due to their dependence on regular climate conditions (ETUC, 2008). *Table 1* includes some of the potential direct effects of climate change in Europe.

Table 1. Some of the potential direct effects of climate change in Europe.

Geographical location	Main climatic drivers	Expected effects on economic activity and employment	Level of confidence
Mid - and high latitude regions	Rising temperature, high atmospheric CO ₂	Positive impact on agricultural productivity. Positive impact on employment overall.	Medium/ High
Southern Europe	Rising temperature	Negative impact on livestock productivity and employment.	Low
Mediterranean regions	Higher fire risk due to rising temperature and droughts	Negative impact on forestry productivity and employment	Medium
General	Increase in frequency and intensity of extreme weather events	Negative impact on agricultural and forestry productivity, and employment.	Medium/ Low
Fisheries communities*	Changes in sea surface temperature, wind regime, water runoff, ice melt, or marine currents	Mix of negative and positive impacts on fisheries productivity and employment depending on the region. Shifts in maritime industries, e.g. in the Arctic.	Low

* *Iceland, Baltic Sea, Spanish and Portuguese coast .*

In Africa, climate change will affect agricultural production through increased water stress, reduced farming areas and decreased yield potential. Jobs in the rural areas will be affected, not only through the direct reduction in agricultural production but also through indirect effects in rural economies such as the knock-on effect on the processing sector, private transport services to the cities and non-agriculture-related commerce which depends on the revenues of agriculture (i.e. small shops in rural communities). For example, an increase of only 2°C would make some areas of Uganda unsuitable for coffee production. In Uganda, the coffee sector is the most important exporter and one of the biggest employers (ILO, 2007).

In Asia, up to 60 percent of the income of rural households depends on agriculture, with the rest coming from wage jobs in the same sector. Thus, rises in the frequency of floods or decreases in freshwater availability are likely to affect the two main sources of income of these households. The development of the Asian region will be subject to an increased water stress. Predictions reveal that by 2050 up to 1 billion people will be affected (UNEP, 2010, www.unep.org).

In Latin America, the increase in extreme weather events in cyclone-prone zones might bring about changes in tourism patterns in the Caribbean region. For example, the Guatemalan travel and tourism economy accounted for 7.2 percent of the country's GDP and provided 257,000 jobs in 2007. (6.3 percent of total employment) (UNEP, 2008). In the medium term, these jobs could be at risk.

Adaptation strategies, by improving societies and economies capacity to react and adapt to climate change, should not in essence have a negative impact on employment. Generally speaking, there are two kinds of adaptation policies in terms of their positive effects on employment: policies that avoid job losses by changing the element in production affected by climate change (i.e. changing crops); and policies that create jobs by preparing the country for climate change, engaging in labour-intensive projects (i.e. large infrastructure projects).

For example, in the agriculture and forestry sectors, in which climate change is expected to reduce yields and damage crops, erode soils and increase livestock deaths, adaptation policies need to focus on expanding non-farming activities and farming crops that are able to face greater variability in weather conditions. In the tourism sector, the vulnerability of workers can be reduced through policies that focus on the development of different tourist activities or the promotion of economic diversification. These policies will reduce the negative impacts of climate change on this economic activity and the employment opportunities it generates. Having said that, it is fair to note that policies aimed at adaptation to climate change in different productive sectors need to take into account the labour-intensity of the output product that is being substituted, in order to avoid conflicts between workers short-term income needs and mid-to long-term policies (ILO, 2007). If the implementation of policies substitutes a product by another because it is more economically and environmentally viable, as well as less labour-intensive, then policy makers should acknowledge the potential job losses and its impacts on the local economy.

This was made clear in an example on rice substitution in Bangladesh (ILO, 2007). In this case, policy-makers should take into account the employment consequences of substituting rice or fisheries by another agricultural product that is more economically and environmentally viable but requires less labour for its production. Vulnerability to climate change is a direct consequence of poverty. Poor people have few resources to plan and implement adaptation strategies to deal with the changes that will occur in their workplaces (notably in the informal economy), in their homes (often in slums or extremely precarious housing) or within their families (for instance with regard to the health effects of climate change). Adaptation policies can start a virtuous circle driving local jobs creation

which, with decent wages, can increase workers wealth, and by doing so, reduce their vulnerability. This virtuous circle is starting to be explored by United Nations agencies, such as the ILO and FAO but it has been rarely mentioned in the UNFCCC negotiations, where the major decisions on adaptation planning practices are made (ILO, 2007).

New jobs will also be created in the construction sector as a consequence of infrastructure investments, such as the building of coastal defences, flood protection, drainage containment, road adaptation, etc. Buildings, infrastructure and homes will have to be better adapted to climate change, and political decisions that promote these strategies will lead to new job opportunities.

Pollin and Wicks-Lim show how an ambitious mitigation framework would generate employment across a certain number of sectors (Pollin and Wicks-Lim, 2008). Equally, studies concentrating on certain sectors shed light on the potential positive consequences of mitigation policies. The French Agency for the Environment and Energy Management (ADEME) estimates the number of direct jobs in the energy efficiency, renewable energy and public transport infrastructure at 260,000 FTE, a level equivalent to the chemical industry and with a growth rate of 27 percent compared with 2006. and 13 percent compared with 2007 (Rosenberg, 2008, pp.138).

In Brazil, current accounting of employment in environmentally friendly sectors also shows the positive effects of green policies. In 2008., the number of employees in companies listed as performing green economic activities reached 1,405,001. This amount represents 3.6 percent of the total formal employment generated by the Brazilian economy in that year. Between 2006. and 2008., employment in green economic activities grew at an annual rate of 7.9 percent. At the same time, employment in economic activities producing oils based on renewable resources grew at a annual rate of 15.7 percent (Caruso, 2010).

When these trends are studied from a sectoral perspective, opportunities are also found. Regarding energy efficiency, while numbers at the global and economywide levels are not available, there is a general consensus around the idea that measures promoting energy efficiency create jobs in auditing and other energy services. The auditing and evaluation of energy consumption, the analysis of reduction opportunities for industrial and commercial facilities as well as households, are initial activities from which important sources of employment could emerge in the future. Energy efficiency measures also create opportunities in the building sector. Nevertheless, this sector (a particularly labour-intensive one) faces the challenge of improving job quality, which remains very low. Several studies estimate that every US\$1 million invested in building efficiency retrofits creates 10-14 direct jobs and 3-4 indirect jobs (Hendricks and Campbell, 2009). If the positive impacts on employment of retrofitting building were better known, these policies could be promoted as part of a job creation agenda with emission reductions and household's reduced energy consumption as environmental co-benefits.

For instance, one of the aspects of the Brazilian programme “My house, my life” has facilitated poor household’s access to solar panels. According to estimations between 2009. and 2010., as a consequence of this programme. In addition to the examples mentioned below, other national case studies are available. For Australia, Australian Conservation Foundation (ACF) and Australian Council of Trade Unions (ACTU): *Creating jobs - Cutting pollution, the roadmap for a cleaner* around 800 project managers and 7,000 installers of solar panels will be employed (Caruso, 2010).

The expansion of *renewable energies* such as solar, wind, geothermal and agroenergy will have a positive impact on employment. The manufacture, installation and maintenance of solar panels should create in the entire world 6.3 million jobs by 2030., while wind power should create more than 2 million jobs (UNEP, ILO, IOE and ITUC, 2008). The IEA estimates that for every billion dollars invested in clean energy technology, 30,000 new jobs will be created. Employment factor by energy source can be seen in *Table 2*.

Table 2. Employment factors by energy source.

Fuel	Fuel Construction, Manufacturing and installation Person years/MW	Operation and maintenance Jobs/MW	Fuel Jobs/GWh
Coal	7,7	0,1	Regional factor
Gas	1,3	0,05	0,12
NUclear	16,0	0,3	0,001
Biomass	4,3	3,1	0,2
Hydro	11,3	0,2	
Wind	15,0	0,4	
PV	38,4	0,4	
Geothermal	6,4	0,7	
Solar Thermal	10,0	0,3	
Ocean	10,0	0,3	
Multiplier for CHP		1.3	

The most ambitious target has been set by the European Union. In 1997, a White Paper on Renewable Sources of Energy set the goal of doubling the share of renewable energy in the EU from 6% to 12% by 2010. This was followed by the 2001 Renewable Electricity Directive, which detailed the aim (within the White Paper goal) of increasing the amount of renewable electricity from 14% in 1997. to 21% by 2010. Each European Union member state was allocated its own individual target. Although these targets are indicative (not binding), they have served as an important incentive for political initiatives throughout Europe to increase renewable energy’s share of electricity supply. Wind power is expected to contribute a substantial part of this increase.

The European Photovoltaic Industry Association (in conjunction with Greenpeace International) undertook modelling of the worldwide solar power industry with three scenarios, depending on the degree of political commitment to, and investment in, the solar technology. Under its advanced scenario, the study estimated that by 2030, there was potential for 6.33 million jobs worldwide in the photovoltaics industry (Wolfsegger and Stierstorfer, 2007). Similarly, a 2006 report into the worldwide wind industry modelled different scenarios for wind power development and investment. Under its most advanced scenario, the report indicated the potential for between 2.1 million jobs worldwide by 2030., and 2.8 million by 2050 (GWEC, 2006).

However, labour shortages for this key area have already been identified. They would probably disappear if ambitious training and education programmes were put in place. The CEDEFOP states that: Understanding the environmental impact of an occupation needs to be mainstreamed into education and training systems. Integrating sustainable development and environmental issues into existing qualifications is much more effective than creating new training standards. Every new apprenticeship ought to have a low-carbon element (CEDEFOP, 2010, pp.3). If these deficiencies are addressed, there is a huge employment potential in the renewables sector. The latest data available for Spain, for example, show that the wind sector alone has created 95,000 new jobs (24,000 direct jobs and 71,000 indirect jobs) driven by the domestic component associated with the design, production and assembling processes (Sanchez and Belén, 2006).

In the transport sector, mitigation measures could lead to the creation of an important number of jobs. The changes in employment in public passenger road transport, are in a positive direction with an annual increase of +1.54% over the period 2000/2010. Thus, employment in public passenger road transport would be higher by more than 12% in 2010., by more than 24% in 2020. and by more than 33% in 2030 (*Figure 1 and 2*).

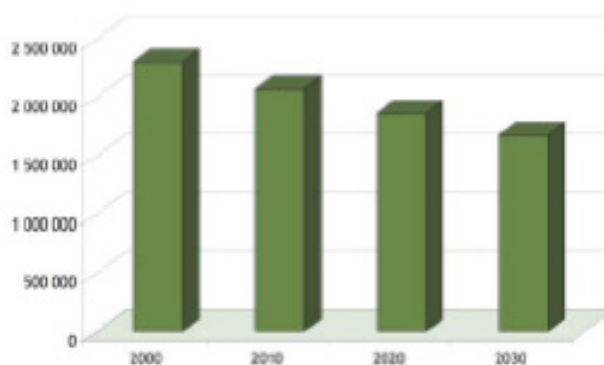


Figure 1: Direct employment in road freight transport - reduction by 10% by decade of road transport activity

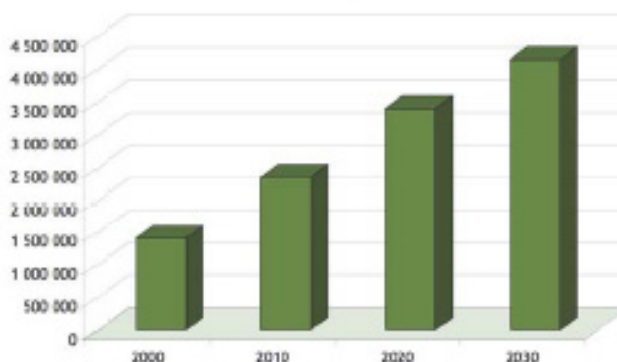


Figure 2: Direct employment in passenger road transport - assumption of reduction of private transport activity

Rail transportation, for both freight and passengers, should be a source of well-trained and safe jobs. In the United States, a billion dollars spent on public transport generates (averaging between operations and capital projects) around 36,000 jobs, which is 9% and 17% higher than the job creation potential from road maintenance and new roadway projects respectively (Litman, 2009).

DATA ANALYSIS

For a discussion of the impact of climate change on employment in certain industries statistical data base of the UNECE (United Nations Economic Commission for Europe) have used. Selected countries with different GDP per capita (gross domestic product), a group of transition countries of the former socialist countries (Croatia, Estonia, Romania, Serbia), whose GDP varies between U.S. \$ 11433 (Serbia) to U.S.\$ 21909 (Estonia) a group of countries with a GDP value in the range U.S.\$ 26136 (Greece) to U.S.\$ 32917 (Italy) and the country with the highest values of GDP (Austria, Switzerland, the U.S. and Norway), with a GDP over \$ 40000 U.S. (Austria with U.S.\$ 42132 , America with U.S.\$ 48314, 51224 U.S.\$ to Switzerland and Norway with \$ 62540 USD). GDP per capita in selected countries is shown graphically in *Figure 3*.

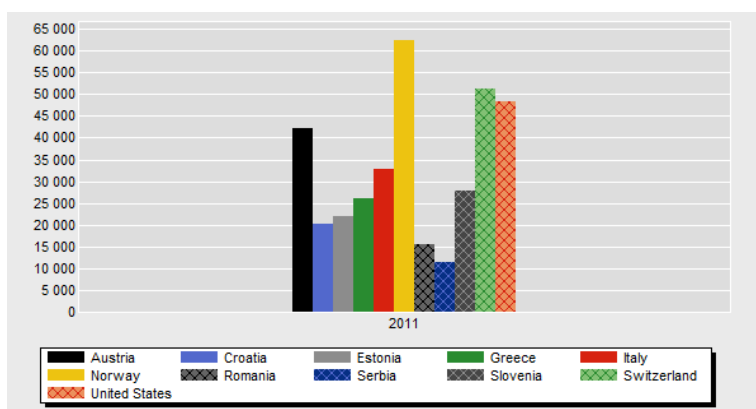


Figure 3. GDP per capita for selected countries in \$US.

Data on employment relate to the six activities or groups of activities, namely:

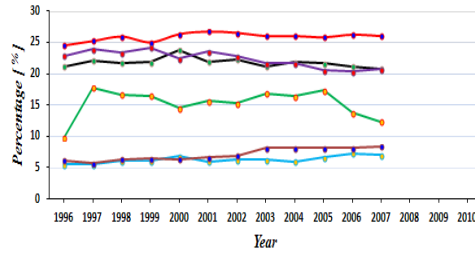
- Agriculture, hunting, forestry and fishing
- Industry and energy
- Construction
- Trade, hotels, restaurants, transport and communication
- Finance, real estate, finance and business services
- Other services activities

The service sector is the biggest employer in the EU and is also the main source of new jobs in European economies, although with considerable differences between EU Member States and between the different service branches. The total employment share in services ranges from 55% (Poland) to 80% (Luxembourg). Retail and wholesale trade is the biggest sector in terms of employment, but the rise of service employment is to a large extent being driven by growth in real estate, renting and business services.

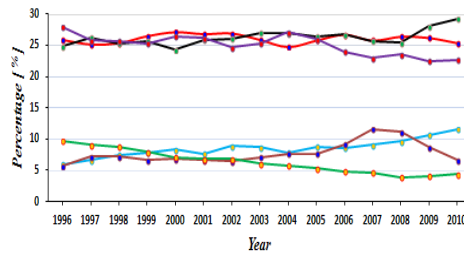
Employment in the service sector, and in particular in private services, will continue to grow as a share of total employment. The analysis indicates that all the key drivers of structural change in favour of services (including the aging of the population, increased participation of women in the labour market, technological developments, outsourcing and the internationalisation of services) will remain in place in the coming years, and some may intensify. Extrapolations for the EU15, conducted as part of the study, suggest that by 2020, employment in services could reach 80% of the total; and real estate and business activities could overtake trade as the biggest employer.

Some of the main features of services employment are the large share of small and medium enterprises; increasing employment by foreign affiliates; diversity of the workforce in services, often with a high turnover. Private sector services, which are the main area of employment growth, employ relatively large numbers of women, migrant workers and young people. The service sector is, however, very heterogeneous with both characteristics and trends differing between subsectors.

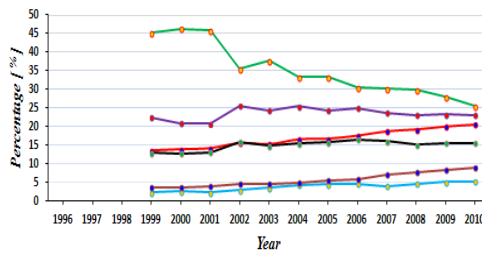
Trends in the number of employees in the period 1996-2010 for a selected group of countries is presented in *Figure 4*. Corresponding change in percent (increase, decrease) in the number of employees for the reporting period are shown in *Figure 5*. Among the countries of the former socialist system, Croatia, Estonia and Romania in the reporting period show an increase in the number of employees in the sectors of Construction, Finance, real estate and business services (except Croatia), drop in employment in industries Agriculture, hunting, forestry and fishing (except Croatia) and in Industry and energy (except Estonia).



a)



b)



c)

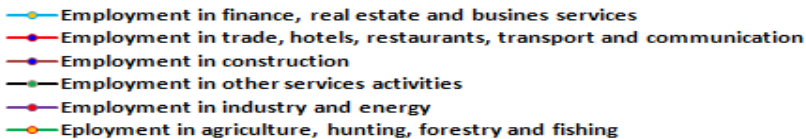
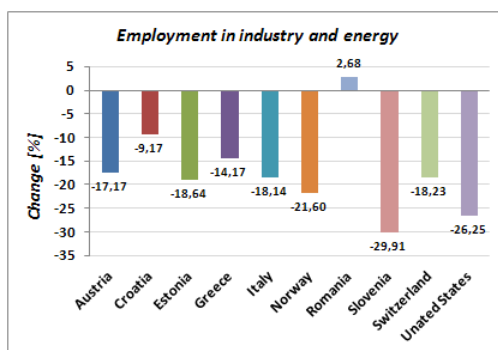
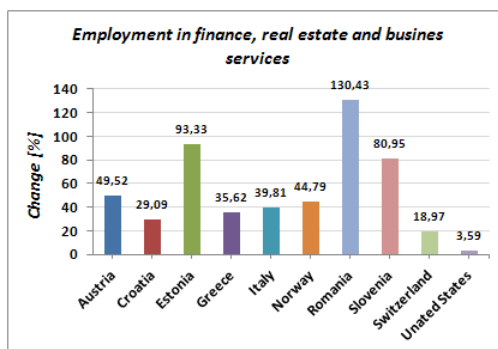
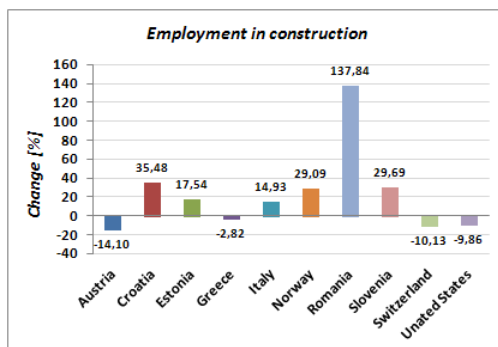
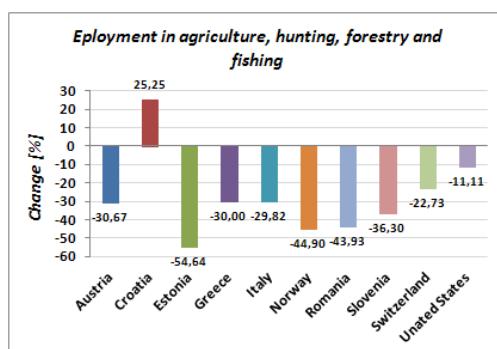
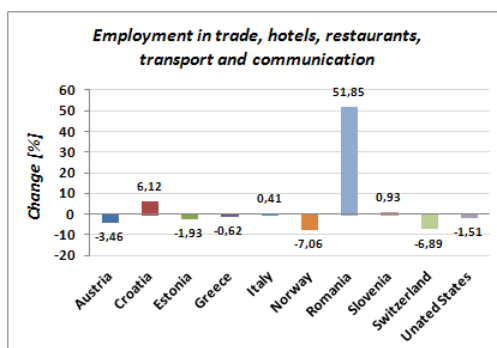
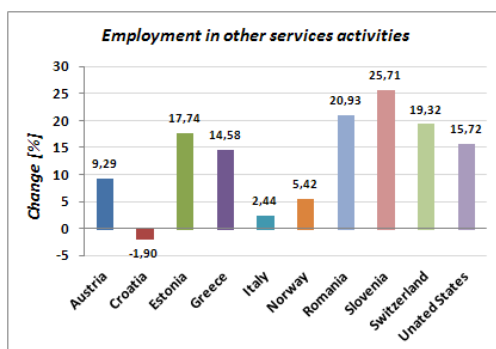


Figure 4. Employment in different activities in countries with low GDP: a) Croatia; b) Estonia; c) Romania

The most dramatic change occurred in the number of employees in Romania in Agriculture, hunting, forestry and fishing. Number of employees was reduced by as much as 43.93%, which is a significant number considering that in these industries employed 45.3% of the total employed population in Romania.



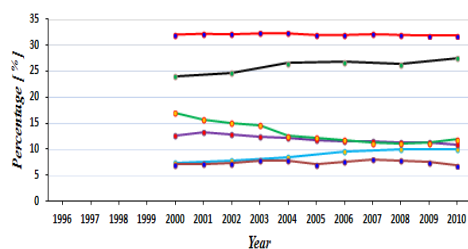


- Employment in finance, real estate and business services
- Employment in trade, hotels, restaurants, transport and communication
- Employment in construction
- Employment in other services activities
- Employment in industry and energy
- Employment in agriculture, hunting, forestry and fishing

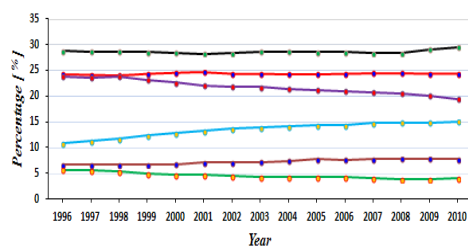
Figure 5. Change (%) in the number of employees for period 1996-2010 year

The largest increase in the number of employees can be seen in Estonia in the field of finance, real estate and business services, 93.3%, while in Romania the most significant increase in the areas of trade, hotels, restaurants, transport and communication 51.85%. The number of employees decreased in the industry and energy sectors and in Croatia by 9.17% and 18.64% for Estonia (except Romania where the number of employees has increased by 2.68%). With the exception of Croatia the number of employees has increased in Other services activities.

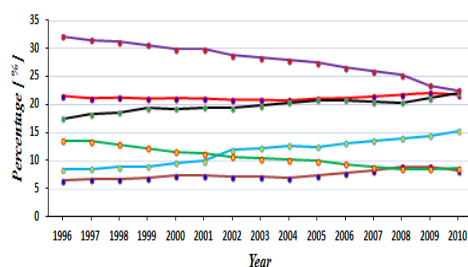
In countries with a mean value of GDP (Greece, Estonia, Romania), (*Figure 6*) in the activities of trade, hotels, restaurants, transport and communication is no significant change in the number of employees.



a)



b)



c)

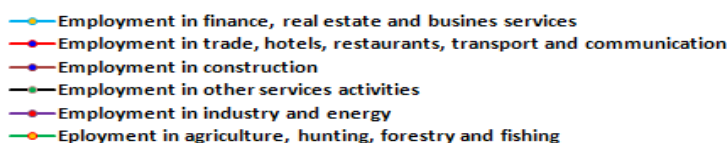
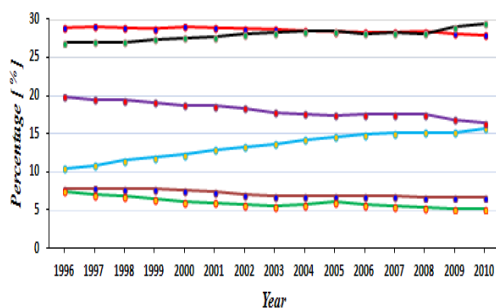


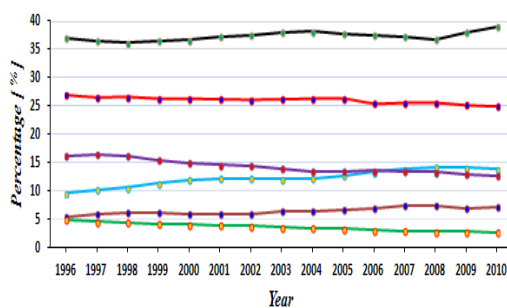
Figure 6. Employment in different activities in countries with middle GDP:
 a) Greece; b) Italy, c) Slovenia.

The number of employees grows in the finance, real estate and business services. In Slovenia, the number in these industries has increased to 80.95%. Also, the number of employees in Other services activities has increased. The smallest increase was in Italy (2.44%), the highest in Slovenia (26.69%). In Construction activities observed an increase in the number of employees in Italy (15%) and Slovenia (30%), while in Greece reduced by 2.82%. Activities that recorded downsizing was Agriculture, hunting, forestry and fishing and Industry and Energy.

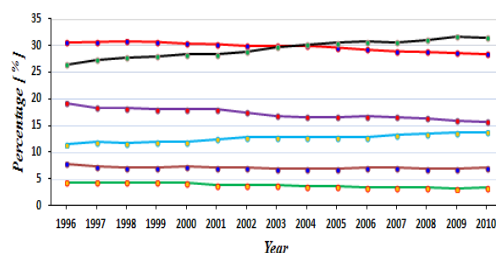
In countries with the highest values of GDP (Figure 7) growth in the number of employees recorded in the finance industry, real estate and business services and in Other services activities, with the most pronounced changes in Norway (44.79%) and Austria (49.52%). In these industries and in these countries 1/3 of the total number of employees are employed, where leads Norway with 38.9% employed in 2010. year. A slight decrease is observed in the activities of trade, hotels, restaurants, transport and communication of about 2-7%.



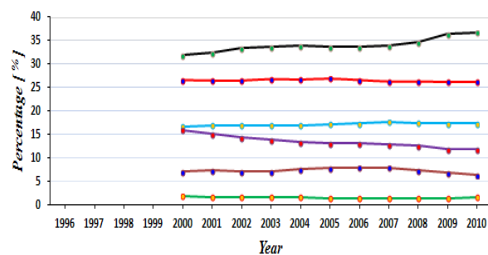
a)



b)



c)



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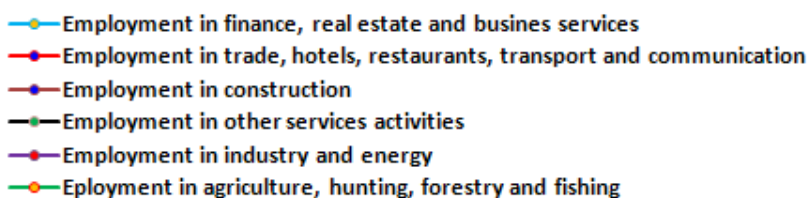


Figure 7. Employment in different activities in countries with the highest GDP: a) Austriae; b) Norway, c) Switzerland; d) United States.

Except Norway, where the increased number of employees (29.09%) in the field of the Construction in other countries number of employees reduced for about 10-15%. The two groups of activities reduced the number of employees, Agriculture, hunting, forestry and fishing and Industry and Energy. In Norway, the number of employees in the Agriculture, hunting, forestry and fishing decreased by 44.9%.

CONCLUSION

Analysis of data on the number of employees in certain groups of activities revealed the following:

- significant downsizing occurs in Agriculture, hunting, forestry and fishing and Industry and Energy,
- slight changes in employment occurred in the areas of Trade, hotels, restaurants, transport and communication,
- the significant increase in the number of employees going into Finance, real estate and business services and other services activities,
- in certain a number of countries in the construction sector number of the employees was increased and in a few countries, the number of employees decreased (Austria, Switzerland and United States)

If we take into account that the activity that the most sensitive to climate change are Agriculture, hunting, forestry and fishing and Industry and Energy, we can say that the changes and shifts in employment between different sectors caused by climate changes. The upward trend in the number of employees talking about the demand for safer workplaces in sectors such as Finance, real estate and business services and other services activities.

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PROTECTION OF LABOR AND EMPLOYMENT RIGHTS IN CIVIL PROCEDURE

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Abstract: The subject of this paper is a new legal framework for the protection of labor rights in civil proceedings in the law of the Republic of Serbia. We analyzed the provisions of the new Code of Civil Procedure, case law, and the attitudes of the legal theory of labor disputes.

The aim of the research is to assess the new procedural legal issues that are inherent in a separate civil proceedings in cases arising from labor relations, and the institutions and rules whose application must, as are common in the general litigation and for specific litigation, such as working slow.

The study results point to the new legal institutions, which had not existed in our procedural law, especially when it comes to types of judgments and liabilities of attorney representation at all stages of the proceedings.

Provisions regulating regular civil procedure shall respectively apply to labor-related litigations, with the highest degree of derogation, by adjusting general norms to specific rules, nature and objective of this specific procedure. Novelty is that the court is allowed to render a decision on the basis of previously established facts, if defendant fails to appear at the main hearing, i.e. a possibility to “adjudicate on the basis of previously established facts.”

The new Civil Procedure Code excludes application of rules concerning small value claims to labor-related litigations, regardless of the type of complaint.

Key words: Litigation, Protection of Rights, Proceedings, Labor Relations, Judicial Review, Attorney; Lawyer

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INTRODUCTION

Judicial protection in litigations concerning labor relations falls under jurisdiction of courts of general jurisdiction and is exercised through regular civil procedures for protection of violated subjective civil rights (Kozar, 2011). In some cases, labor and employment rights, primarily the ones related to monetary compensations, are also exercised through claims filing in insolvency proceedings, as well as in litigations on disputed claims to which specific rules apply (Kozar, 2009), principally the ones referring to jurisdiction by attraction of commercial courts, referral for litigation and other special procedural presumptions for procedure-admissibility of civil actions taken against insolvent debtor (Kozar, 2009) or admissibility of motion for continuance of civil procedure interrupted due to legal consequences of bankruptcy. Special procedure for litigations concerning labor relations is regulated by provisions of Articles 436-441 of Chapter XXIX of the new Civil Procedure Code (Official Gazette of the Republic of Serbia, no. 72/2011).

PROVISIONS REGULATING REGULAR CIVIL PROCEDURES APPLIED RESPECTIVELY TO LABOR-RELATED LITIGATIONS

Application of provisions on regular procedures is defined in the new Code in Article 436 which stipulates that, if not otherwise defined by the provisions of the respective Chapter, other provisions of this Code shall apply respectively to labor-related litigations, which is significant difference in comparison to the previous Code, that also provided for application of other provisions of the Code, but did not specify that the application should be respective (Kozar, 2011).

Therefore, it is now explicitly defined that respective application of other provisions of this Code to litigations concerning labor relations, that is provisions of the Code governing regular procedures, though with the highest degree of derogation, meaning adjustment of general norms to the specific rules, nature and objective of this specific procedure. Accordingly, norms of regular procedures are not applied literally to labor-related litigations, in matters not regulated by provisions of the respective Chapter, but with certain derogations and adjustments. Courts will have to take into account, in each particular case, that general rules applied are not prejudicial to the main objective of the particular labor-related litigation procedure.

That means that many legal concepts of regular procedures shall also apply to labor-related litigations, such as factual withdrawal of complaint as defined in Article 311 paragraph 2 of the Civil Procedure Code, as one of the most significant in terms of legal consequences it generates and frequency of its application in the case law. Such interpretation of the previous Code, which contained similar rules, was also applied in the case law when defining whether the rule of withdrawal of complaint may be applied in litigations concerning labor relations before commercial courts, when

defendant is bankrupt, if both parties fail to appear at the hearing, although duly summoned: “In labor-related litigation conducted before commercial court on the basis of jurisdiction by attraction due to the fact that defendant is bankrupt, the complaint may be deemed withdrawn if conditions stipulated in Articles 289 and 296 paragraph 2 of the Civil Procedure Code are fulfilled. This is due to the fact that, in accordance with Article 434 of the Civil Procedure Code, all provisions of the Code apply to litigations concerning labor relations, unless otherwise specified in the respective Chapter. Having in mind that the Chapter of the Code containing rules concerning particularly labor-related litigations procedure does not contain specific provisions that would exclude application of provisions of Articles 289 and 296 paragraph 2 of the Civil Procedure Code, it could be concluded that the complaint may be deemed withdrawn in labor-related litigations as well if duly summoned plaintiff fails to appear at the preparatory or main hearing.” (Kozar, 2011).

COMPOSITION OF THE COURT OF FIRST INSTANCE

The novelty is provision of Article 437 stipulating that the court of first instance shall sit as a judge sitting alone in litigations concerning labor relations, which is in line with legislator opting in favor of the trial before one judge.

THE PRINCIPLE OF URGENCY

In labor-related litigations procedure, and in particular before setting time limits and scheduling hearings, the court shall always pay special attention to the need for urgent solving of labor and employment disputes (Article 438).

IMPOSITION OF TEMPORARY INJUNCTIONS BY VIRTUE OF THE OFFICE (EX OFFICIO)

The fact that the court by virtue of the office, in litigations concerning labor relations, may order temporary injunctions represents reasonable exemption to the principle of protection at the motion of a party, typical for the civil law (Article 439, paragraph 1).

Article 439, paragraph 2 defines the time limit for imposition of temporary injunction at the motion of a party by stipulating that the court shall decide upon imposition of temporary injunction at the motion of a party within eight days from the day of submittal of the motion.

Against decision of the court to impose temporary injunction in labor-related litigations no special appeal is allowed (paragraph 3).

VOLUNTARY OBLIGATION FULFILLMENT DEADLINE AND EXTENSION OF TIME LIMIT FOR MAKING APPEALS

Voluntary obligation fulfillment deadline is eight days, but the new Code does not provide for shorter time limits for making appeals in labor-related litigations (Article 440, paragraph 3), which was set to eight days by Article 438 of the previous Code. That means that general 15-day time limit for making appeals, as set forth in Article 367, paragraph 2 of the new Code stipulating that the party may file an appeal against judgment of the court of first instance within fifteen days from the day of submittal of transcript of judgment, unless otherwise stipulated under this Code, applies also to labor-related litigations.

It is not clear why legislator opted for extension of the time limit for making appeals in labor-related litigations. Moreover, separate shorter voluntary obligation fulfillment deadline is not in compliance with longer – general 15-day time limit for making appeals that now applies to labor-related litigations as well.

DECIDING ON THE BASIS OF PREVIOUSLY ESTABLISHED FACTS IF DEFENDANT FAILS TO APPEAR AT THE MAIN HEARING

The novelty is provision of Article 440, paragraph 2, stipulating that if defendant, being duly summoned, fails to appear at the main hearing, the court shall proceed with the hearing and decide on the basis of previously established facts. This rule has not been elaborated to a sufficient extent by the law, but it is clear that in case of failure of defendant to appear at the main hearing, the court must hold the hearing and render a decision - judgment on the merits, which significantly accelerates the procedure.

Therefore, this is the case of contumacy, a similar judgment rendered in case of failure to appear at the court in small value disputes, the difference being that in this case the court has to determine the facts, meaning it has to present evidence and apply substantive law to such established facts. Due to the significance of such disputes, large number of cases and the need for their urgent solving, the legal concept of “adjudicating on the basis of previously established facts” (Lutovac Z, 2011, p.115) is assumed and introduced from contemporary comparative law.

That means that even though defendant fails to appear at the main hearing in litigation concerning labor relations, the factual and legal acknowledgment of the facts on which the lawsuit is based will not automatically occur. The consequence is that ruling will not necessarily be in favor of the plaintiff, that is that failure of defendant to appear at the court does not necessarily mean that the complaint is accepted, since the court may also reject it if the plaintiff failed to submit relevant

evidence for determination of disputed facts, as the court will then apply the general rule of burden of proof as stipulated in Article 231.

In interpreting requirements for rendering judgment “on the basis of previously established facts“, introduction of principle of affirmative contestation of suit (*litis contestatio*) into the new Code should be taken into account. According to Article 230, paragraph 1, undisputed facts are not to be proved.

On the other hand, if all other requirements stipulated in Article 351 are fulfilled, along with a failure of defendant to appear at the main hearing in labor-related litigation, the court may render judgment due to failure to appear at the hearing in litigation concerning labor relations, as per the rules governing regular procedures.

The court shall warn, in the summons for hearing, of legal consequences of failure to appear at the hearing (Article 440, paragraph 3).

JUDICIAL REVIEW IN LITIGATIONS CONCERNING LABOR RELATIONS

JUDICIAL REVIEW IN STATUTORY LABOR-RELATED LITIGATIONS

As to litigations in relation to legal employment status (beginning, existence and termination of employment), judicial review is always allowed regardless of the value of the matter in dispute indicated in the complaint (Article 441).

This is the reason why complaint in which the value in dispute is not defined, and the complaint refers to beginning, existence or termination of employment, cannot be rejected by applying provisions of Article 192, paragraph 3 and in relation to Article 101, as the right to request judicial review depends on the value of the matter in dispute. This certainly does not apply to wage payment or other employment related monetary income litigations, including compensation for damages.

The notion that it is not possible to reject complaint in litigations in relation to beginning, existence and termination of employment, if the value in dispute is not indicated, is part of the case law originated during the period when previous Code, which regulated this matter in the same way in Article 187, paragraph 3 and Article 439, was in force. According to the case law, lack of definition of the value in dispute in litigations concerning beginning, existence and termination of employment is not a reason to reject complaint as irregular, since in such litigations judicial review is always allowed and thus the right to request review does not depend on the value in dispute. It is stated in the explanation that it is reasonably indicated in the complaint that disputed decision significantly violates provisions of litigation proceedings as the court of first instance incorrectly applied provision of Article 187, paragraph 3 of the Civil Procedure Code when rejecting complaint as irregular because the plaintiff had not indicated the value of the matter in dispute. In fact, the plaintiff in this litigation requests that the defendant’s decision on termination of employment for the plaintiff is annulled and that the defendant is

obliged to re-employ the plaintiff in the same position of employment, meaning that the litigation in question concerns labor relations. Provisions of Article 439 of the Civil Procedure Code stipulate that the judicial review is allowed in litigations concerning beginning, existence and termination of employment. Accordingly, the complaint could not have been rejected because the plaintiff had not defined the value of the matter in dispute, since Article 187, paragraph 3 of the Civil Procedure Code stipulates that the complaint may be rejected only when jurisdiction, composition of the court or right to review depend on the value in dispute, and when the subject of the complaint is not a monetary sum (Decision of the High Commercial Court, Pz. 12908/05 of 8 February 2006).

SPECIAL JUDICIAL REVIEW

The new Code provides for exemption to rejection of illicit request for review (request for review filed against a judgment against which, under the law, cannot be submitted – that is, if it does not refer to the final and enforceable judgment of the court of second instance or if the requirement concerning minimum limit value of the matter in dispute is not fulfilled) by excluding special judicial review from Article 404. The request for special judicial review may be filed only against judgments of the court of second instance, when requirement regarding minimum limit value of the matter in dispute is not fulfilled, provided that other requirements stipulated in the said Article are met.

That means that, in the opinion of the Court of Appeal or the Supreme Court of Cassation, the „special judicial review“ is also allowed in labor-related litigations, not statutory in nature, e.g. wage payment litigation, even though the requirement for minimum limit value has not been met, i.e. even when the value of the matter in dispute as regards the disputed part of the effective judgment does not exceed 100,000 Euros in Serbian dinar equivalent at the middle exchange rate of the National Bank of Serbia on the day of filing the complaint, provided that other legal requirements stipulated in Article 404 are fulfilled – if it is necessary, in the opinion of the Court of Appeal or the Supreme Court of Cassation, to consider legal matter of public interest or legal matter relevant to the equality of citizens, in order to unify case law or if new interpretation of the rights is needed (the special judicial review).

REJECTION OF ILLICIT REQUEST FOR JUDICIAL REVIEW AND MANDATORY REPRESENTATION BY ATTORNEY OR LAWYER IN PROCEEDINGS ON EXTRAORDINARY LEGAL REMEDIES

The new Code changed the reason for considering a request for review illicit, with regard to qualified attorney, by prescribing in Article 410, paragraph 2, point 2 that the request for review is deemed illicit if „not submitted by an attorney“. The previous Code provided for mandatory representation by a lawyer for all parties in review procedures, regardless of whether the party is legal or natural entity, and in

accordance with this provision, Article 401, paragraph 2, point 2 defines that the review is illicit „if a request for review is filed by any person other than a lawyer“.

However, the new Code introduces obligation that attorney to a party can be only qualified attorney, but parties may also in person perform all actions in the procedure. The new Code stipulates that the parties may perform all actions in the procedure in person or through an attorney who must be a lawyer (Article 85, paragraph 1). The exemption is attorney to a legal person who can be law graduate who passed bar examination and is regularly employed in that legal entity.

However, the new Code prescribes a special rule for procedure in relation to extraordinary legal remedies, under which falls the review procedure – a party has to be represented by a lawyer in procedure in relation to extraordinary legal remedies, unless the party itself is a lawyer (Article 85, paragraph 3), hence the representation through a lawyer is mandatory. This rule applies to legal persons as well meaning that the exemption referred to in paragraph 2 does not apply to the procedure on extraordinary legal remedies. Therefore, in the procedures on extraordinary legal remedies representation through a qualified attorney - lawyer is mandatory, reflecting the need of justice system and legal practitioners in the field for more efficient and professional practice, meaning that the parties to litigation cannot perform actions in procedures on extraordinary legal remedies in person.

This is why the change made in the new Code in terms of reasons for a request for review to be deemed illicit is unclear. Article 410, paragraph 2, point 2 stipulates that a request for review is deemed illicit if „*not submitted by an attorney*“, which collides with the provision of Article 85, paragraph 3 – the party must be represented by a lawyer in procedures in relation to extraordinary legal remedies, unless the party itself is a lawyer. If the request for review is filed on behalf of a legal person by a qualified attorney – a law graduate who passed bar examination and is regularly employed in that legal entity as per Article 85, paragraph 1, then the request for review could not be rejected as illicit by virtue of Article 410, paragraph 2, point 2, as the request for review is „filed by an attorney“, notwithstanding that it was not submitted by a lawyer, that is regardless of the provision of Article 85, paragraph 3, under which the party must be represented by a lawyer in procedures on extraordinary legal remedies, unless the party itself is a lawyer.

The term „attorney“ is broader legal concept than the term „lawyer“, and any lawyer is also an attorney (unless being the party itself), but any attorney is not necessarily a lawyer. This conclusion also arises from systematization of the law which regulates this matter in Chapter V titled „ATTORNEYS“.

The considered legal solution is most likely writer's omission since the bill was amended, when debated before parliament. The original bill stipulated that only practicing lawyers can act as attorneys in all phases of procedure, whether or not the party has litigation capacity. Those changes were not consistently incorporated in all provisions of the newly adopted law.

EXCLUSION OF APPLICATION OF RULES REGULATING PROCEDURE ON SMALL CLAIM DISPUTES TO LABOR-RELATED LITIGATIONS

Small claim disputes are those in which the statement of claims refers to pecuniary claim that does not exceed the amount of 3,000 Euros in Serbian dinar equivalent at the middle exchange rate of the National Bank of Serbia on the day of filing the complaint (Article 468, paragraph 1). Small claim disputes in commercial litigations are the ones not exceeding the amount of 30,000 Euros – Article 487, paragraph 1.

The new Code kept the same value limits as prescribed by the amendments of the previous Code, that is by the Act on Amendments to the Civil Procedure Code („*Official Gazette of the Republic of Serbia*“, no. 111/2009), but it explicitly defines that change in exchange rates after the complaint has been filed shall not affect the application of the rules of procedure (Article 468, paragraph 2), meaning that fluctuations in foreign currency exchange rates shall not have any effect, so if the procedure was commenced as a small claim litigation, the subsequent increase of Euro exchange rate shall not lead to application of provisions governing regular procedures. And vice versa, litigations commenced as regular procedures cannot be considered small claim disputes if Euro weakens against the Serbian dinar.

The solution from the previous Code was assumed in terms of set limit value for small claim disputes as the amount of alternative obligation for the defendant (*facultas alternativa solutionis*), by defining in Article 468, paragraph 3 that even if the statement of claims does not disclose any monetary value, but the plaintiff states in his/her complaint that he/she will accept a monetary sum that does not exceed 3,000 Euros in Serbian dinar equivalent *in lieu of* the obligation disclosed in the complaint, that claim shall be deemed small value claim (Article 33, paragraph 1).

However, the important novelty is introduced by the provision of Article 468 paragraph 4 which stipulates that small claim disputes shall also include those disputes in which the statement of claim is not pecuniary in nature and the value of the matter in dispute indicated in the complaint does not exceed the amount of 3,000 Euros in Serbian dinar equivalent (Article 33, paragraph 2). The previous Code considered small value claims only non-monetary claims such as transfer of movable asset whose value, as stated in the complaint by the plaintiff, did not exceed the established limit value, while the new Code does not limit non-monetary claims to transfer of movable assets. Now small value claim can be any non-monetary claim, if its value does not exceed the established limit value, except for the claims exempted by the special provision of Article 469 which defines the following as small claim disputes: disputes related to real estate, labor relations and trespassing, regardless of the value stated in the complaint. This is how, under the new Code, any request for fulfilling obligations from service contract, construction contract, copyright contract, etc., can be considered small value claim, if the value of the matter in dispute stated in the complaint does not exceed the prescribed limit amount of 3,000 Euros or 30,000 Euros for small value commercial disputes.

ATTORNEYS

The concept of attorneys is regulated by provisions on regular procedure, but it has tremendous significance for litigations concerning labor relations as well, having in mind capacity of the parties and significant statutory novelties. Therefore, it is necessary to consider these provisions in the subject paper.

QUALIFIED ATTORNEYS

In Chapter V - Attorneys, a particular novelty refers to attorneys to the parties in litigations. Under the previous Code, in proceedings before the court of first instance and appeal procedures, attorney could have been any natural person having requisite legal competence. The new Code stipulates that parties may take actions in procedures in person or through an attorney, who must be a lawyer (Article 85, paragraph 1). In this way a consistent enforcement of the constitutional provision, under which legal aid can be rendered only by practicing lawyers, is ensured. The equal legal status of a lawyer and any other person not necessarily in possession of any legal knowledge, provided by the previous Code, is primarily unacceptable from the point of view of legal practitioners whose expertise implies multiple legal qualifications: a bachelor degree, relevant practice, bar examination, as well as fulfillment of special requirements for admission to practice law, and it is not in accordance with the Constitution either. The adopted new solution guarantees dignity of the procedure and the court itself, as well as fair, lawful and efficient protection of the rights of parties, and finally cost-effectiveness of the procedure.

By defining that an attorney to a natural person has to be a lawyer, the new Civil Procedure Code does not differentiate natural person not engaged in any business activity and entrepreneur who is defined in Article 83 paragraph 1 of the Law on Business Companies („Official Gazette of the Republic of Serbia“, no. 36/2011) as a natural person with business capacity who conducts an activity in order to earn revenues and which has been registered as such pursuant to the law on registration. That means that attorneys to all natural persons, regardless of their capacity, must be lawyers, both in the procedures before the courts of first instance and appeal procedures as well as in procedures in relation to extraordinary legal remedies.

LAW GRADUATES WHO PASSED BAR EXAMINATION AND „OTHER ATTORNEYS“ TO LEGAL ENTITY

The exemption refers to attorneys to legal entity who can be a law graduates who passed bar examination and are permanently employed in that legal entity (Article 85, paragraph 2). Accordingly, the legal entity in proceedings before the court of first instance and appeal procedure may be represented by a law graduate who passed bar examination and is permanently employed in the respective legal entity. The said solution represents a step forward with regard to the previous Code. As, by allowing lay persons to act as representatives of legal entities, the

previous Civil Procedure Code (*Official Gazette of the Republic of Serbia, no.125/04*) has not only degraded the level of protection of rights of parties to litigation (which is a matter of choice of the parties themselves) but has inevitably degraded the overall level of professionalism in terms of debating before the court, which subsequently degraded the entire process, i.e. proceedings before the court, as the court was compelled to communicate and debate with lay and unqualified persons during the course of the proceedings.

Legal entities whose attorneys do not possess adequate qualifications may appoint them as legal representatives pursuant to Article 77 of the Civil Procedure Code which defines that attorney to a legal person in litigation shall be a person registered in a relevant registry, and appointed by special regulation, by-laws of the legal entity or decision of the court. It is necessary that two cumulative requirements are met in order for a person to be considered attorney to legal entity in litigation: 1. that the person is registered in the relevant registry, and 2. that the person is appointed by special regulation, by-laws of the legal entity or decision of the court. In other words, such attorneys, together with legal representatives of the legal entity who typically have unlimited authority (director, chairperson of the board of directors or executive board), may be registered in the Business Registers Agency as agents with limited authority, i.e. with the authority to represent a company or any other legal entity only in judicial procedures. The second cumulative requirement, i.e. defining employment position of such agents and their granted authorization in Articles of Association, statute or other by-laws, and then by separate act – decision on appointment of a particular person to the position of company's attorney in legal procedures, needs to be fulfilled as well.

These persons may certainly be registered, together with director, chairperson of the board of directors or executive board, in the Business Registers Agency, as agents with limited authority, if so foreseen in the by-laws of the legal entity. Such representatives under „Other representatives“ are defined in Article 32 of the Law on Business Companies stating that “in addition to legal representatives, a company's representatives, as referred to herein shall also be persons who are authorized, by means of a by-law or a company's competent body's resolution, to represent the company and who are registered as such in keeping with the law on registration”. Moreover, the Law on Business Companies provides for more than one legal (statutory) representative by stipulating in Article 31, paragraph 3 that „a company must have at least one legal representative who is a natural person.“

In case of related legal entities, employees of one legal entity often act as attorneys to other related legal entities, even though they are not permanently employed in that other legal entity. Such issue may be resolved in the above described way, meaning that licensed attorneys (who passed bar examination) permanently employed in one related legal entity are appointed as agents in other related legal entity and registered in the Business Registers Agency, i.e. other relevant registry of legal entities, pursuant to Article 77 of the Civil Procedure Code and Article 32, under “Other representatives”, of the Law on Business Companies.

In addition, one law graduate who passed bar examination may be employed as attorney in several legal entities by applying the concept of „part-time employment“ as set forth in Articles 39 to 41 of the Labor Law („Official Gazette of the Republic of Serbia“, no. 24/2005, 61/2005, 54/2009), and keeping in mind that the employment has to be on an indefinite basis (Article 39). An employee working part-time shall enjoy all labor-related rights proportionally to the time spent at work, unless some rights are not otherwise defined by law, by-laws and employment contract (Article 40). An employee working part-time for one employer may, for the remaining hours to full-time work, enter into employment with another employer to reach the full-time quota (Article 41 of the Labor Law). The Civil Procedure Code requires that law graduate who passed bar examination and is permanently employed in the legal entity he/she represents (Article 85, paragraph 2) which is consistent with the concept of “employment on an indefinite basis” as set forth in Article 39 of the Labor Law, but it does not define whether it refers to full-time or part-time employment.

On the other hand, there are opinions that said concepts cannot be considered synonyms and that the Civil Procedure Code uses nonexistent legal concept in terms of legal employment status of the representative of the legal entity.

Legal entities that employ attorneys who have not passed bar examination may ensure continuity and legitimacy in proceedings before the court of first instance, until such employees pass bar examination, by changing legal employment status of their attorneys who will then enter into employment as legal trainees in relevant law firm or with relevant attorneys at law to which the legal entity will give power of attorney for representation with explicit authorization that a lawyer may be replaced by the legal trainee employed in their office or firm, pursuant to Article 88 paragraph 3 of the Civil Procedure Code. The exemption refers to procedures on legal remedies for which the new Code does not allow the said replacement.

LEGAL INCAPACITY AND REPRESENTATION IN PROCEDURES ON EXTRAORDINARY LEGAL REMEDIES

The new Code stipulates that a party to litigation must be represented by a lawyer in procedures on extraordinary legal remedies, unless the party itself is a lawyer (Article 85, paragraph 3), meaning that in case of review procedures or requests for judicial settlement, the parties do not have legal competence. This rule applies to legal entities as well, as in procedures on extraordinary legal remedies the exemption referred to in Article 85, paragraph 2, that attorney to the legal person may also be a law graduate who passed bar examination and is permanently employed in that legal person, does not apply.

Therefore, it is mandatory that, in procedures on extraordinary legal remedies, the representative is qualified attorney – lawyer, reflecting the need of justice system and legal practitioners in the field for more efficient and professional practice, meaning that the parties cannot in person take actions in procedures in

relation to extraordinary legal remedies (having legal incapacity), but not even through attorneys – law graduates with passed bar examinations permanently employed in that legal entity.

The new Code, with the said provisions, raises the level of expertise in procedures before the courts of first instance and appeal procedures both for natural and legal persons, while keeping solutions from the previous Code referring to representation in procedures on extraordinary legal remedies.

Legal competence is a capacity of a party to take all actions in procedures on its own, in person and directly, i.e. without an attorney (Stankovic,1996). In other words, a party with litigation capacity has legal competence as well if he/she is able to, on its own and with its own resources, i.e. without help or mediation of third parties, perform all actions in procedures (Poznic,1987). However, the new Code, through the said provisions, defines legal incapacity in procedures on extraordinary legal remedies (request for review and motion for reopening the procedure) because even a party that has full litigation capacity cannot file legal remedies without a lawyer. Mandatory representation by a lawyer is defined. In legal theory it is indicated that the concept of legal incapacity enables uninterrupted and efficient work of courts and eliminates the possibility that lay and unprofessional individuals debate before the court, and it is sometimes prescribed to protect the party itself and sometimes to protect the practice (Stankovic, 1996).

CONCLUSION

Provisions regulating regular civil procedure shall respectively apply to labor-related litigations, with the highest degree of derogation, by adjusting general norms to specific rules, nature and objective of this specific procedure.

The court of first instance shall sit as a judge sitting alone in litigations concerning labor relations, which is in line with legislator opting in favor of the trial before one judge.

The fact that the court by virtue of the office, in litigations concerning labor relations, may order temporary injunctions represents reasonable exemption to the principle of protection at the motion of a party, typical for the civil law.

Voluntary obligation fulfillment deadline is eight days, while general statutory 15-day time limit applies to making appeals, meaning that the new Code did not harmonize these time limits.

Novelty is that the court is allowed to render a decision on the basis of previously established facts, if defendant fails to appear at the main hearing, i.e. a possibility to “adjudicate on the basis of previously established facts.” This rule has not been elaborated to a sufficient extent by the law, but it is clear that in case of failure of defendant to appear at the main hearing, the court must hold the hearing and render a decision - judgment on the merits, which significantly accelerates the procedure.

In case of litigations concerning legal employment status (beginning, existence and termination of employment), judicial review is always allowed regardless of the value in dispute stated in the complaint. This is the reason why complaint in which the value in dispute is not defined, and the complaint refers to beginning, existence or termination of employment, cannot be rejected by applying provisions of Article 192, paragraph 3 and in relation to Article 101, as the right to request judicial review depends on the value of the matter in dispute.

In the opinion of the Court of Appeal or the Supreme Court of Cassation, the „special judicial review“ is also allowed in litigations concerning labor relations, not statutory in nature, e.g. wage payment litigation, even if the requirement for minimum limit value has not been met, if it is necessary, in the opinion of the Court of Appeal or the Supreme Court of Cassation, to consider legal matters of public interest or legal matters relevant to the equality of citizens, in order to unify case law or if the new interpretation of the rights is needed.

The new Civil Procedure Code excludes application of rules concerning small value claims to labor-related litigations, regardless of the type of complaint (Vrhovsek, Kozar, 2012).

Judicial protection in litigations concerning labor relations falls under jurisdiction of courts of general jurisdiction and is exercised through regular civil procedures for protection of violated subjective civil rights.

Parties to litigation may act in person or through an attorney, who must be a lawyer. The exemption is the attorney to a legal entity who may be a law graduate who passed bar examination and is permanently employed in that legal entity. In this way, the Code introduced *qualified attorneys* in our legal system.

In procedures in relation to extraordinary legal remedies representation by the qualified attorney is mandatory. The new Code stipulates that a party to litigation must be represented by a lawyer in procedures on extraordinary legal remedies, unless the party itself is a lawyer, meaning that in case of review procedures or requests for judicial settlement, the parties to litigation do not have legal competence. This rule applies to legal entities as well, as in procedures on extraordinary legal remedies the exemption that attorney to the legal person may also be a law graduate who passed bar examination and is permanently employed in that legal person, does not apply.

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RECENT TRENDS AND DEVELOPMENT OF THE LABOUR FORCE IN SERBIA³²

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Abstract: Serbia has experienced a permanent fall in the labour force as a result of several factors, out of which negative demographic tendencies and migrations of the population are the most important ones. The long-term structural changes, driven by transitional processes and shifts in the global economy, caused structural breaks in the employment trend. Successive rates of positive economic growth that occurred in the mid-2000s pointed out to some favourable developments in the labour market. These favourable economic conditions were additionally contributed to by the intensified privatisation and the stimulating business climate, but these improvements were only temporary. The economic crisis occurred, turning positive developments into the negative ones. This paper will examine recent trends and development of the labour force and its components in the labour market of Serbia. The Labour force survey data and the data from other statistical sources will be used for the purpose of the analysis presented in this paper.³⁵

Key words: Labour Force, Serbia, Structural Changes

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INTRODUCTION

One of the major problems in the Republic of Serbia is related to the negative demographic tendencies: a declining number of inhabitants and aging of population. These long-term tendencies are also translated into the labour market. Due to that, the number of labour force in Serbia has decreased over years, while its age structure has deteriorated.

This work aims to analyse recent trends and development of the labour force and its components in the labour market of Serbia. In the first part of this work we will examine the extent of the fall in the number of inhabitants and how the age structure has changed over the previous two decades. We will also point to the fact that migrations also shape changes in population and labour force, but will not be able to discuss it in more detail, due to the lack of data. The second part of this work deals with main characteristics of the labour force and main tendencies in the labour market, related to economically active population, employed and unemployed persons of the working age. We will also examine some characteristics of two vulnerable groups in the labour market: young persons and women. Afterwards, an analysis of the factors that most likely increase or constrain the probability of the participation in the labour force in Serbia has been presented, based on data from the Living Standard Measurement Survey. Finally, in the last part of this work we draw the main conclusions.

DEMOGRAPHIC TRENDS AND MOVEMENTS OF POPULATION

The labour force supply in the Serbian market is shaped by two main factors: demographic trends and migrations. In this chapter we will analyse the latest data from the 2011 Census (Statistical Office of Serbia 2012b, 2013b, 2013c), which refer to the Republic of Serbia without Kosovo and Metohija.

The main demographic tendency in Serbia is a decrease in the total number of inhabitants. According to data of the 2011 Census, the total number of inhabitants in Serbia stood at 7.2 million, which is a decrease of more than 300 thousand in relation to the previous Census, which took place in 2002.

The main factor that contributes to this trend is the fact that over the last couple of decades a number of deaths has been higher than a number of births. Which is even worse, this trend keeps deteriorating, since the negative rate of natural increase of population has been growing. Namely, the negative rate of the natural increase of population, measured per 1000 inhabitants, increased over the last decade from -3.3 in 2002 to -5.2 in 2011 (Statistical Office of Serbia, 2012a, pp. 28).

Migrations are another major driver of changes in the number of inhabitants over time. The 2011 Census data published so far do not provide us with a

comprehensive insight into this factor, because data on emigrant population are lacking. What is available, however, shows that the influx of migrants from abroad has been relatively modest, and could not make up for the decreasing number of births in Serbia. Namely, the total number of immigrants since 2001 onwards stood at only around 85 thousand.

The negative tendencies related to the total number of inhabitants are translated into the negative structure of population according to age. As shown in Fig. 1, over the last 20 years the share of the working age population (15-64) has remained the same. At the same time, the share of persons older than 65 has increased, on behalf of the decreasing share of children below 15 years of age.

Figure 1: Structure of population of Serbia according to age groups, in %

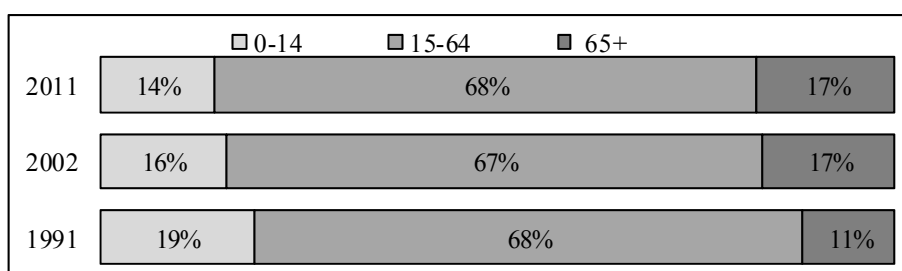


Figure 1: Structure of population of Serbia according to age groups, in %

Source of data: Statistical Office of the Republic of Serbia. 2012. Book 2: Population - Age and Sex. 2011 Census of Population, Households and Dwellings in the Republic of Serbia. Belgrade. Retrieved from www.popis2011.stat.rs.

Note: the shares for 1991 and 2002 do not add up to 100% because persons whose age was unknown have been excluded.

Inevitable consequence of such demographic tendencies will certainly be that until the next census the share of the working age population will decrease, while the share of persons older than 65 years will continue to increase.

As far as migrations are concerned, data on emigrant population are lacking, but data on internal migrants and immigrants are available. These data point to the conclusion that over the last decade, i.e. from 2001 onwards, nearly 550 thousand persons within Serbia moved to a new place of residence. Out of that number vast majority, nearly 85%, refers to internal migrations, that is persons who moved from one municipality to another, or even from one settlement to another within the same municipality. The inflow of immigrant population over the same period included nearly 85 thousand persons. Out of that number two thirds refer to persons from the republics of former Yugoslavia, mostly from Bosnia and Herzegovina (33%) and Montenegro (17%).

LABOUR FORCE CHARACTERISTICS

In this part, main characteristics of the labour force in Serbia are examined. For that purpose, we use data from the Labour Force Survey (Statistical Office of Serbia 2013a), which is executed and published by the Statistical Office of Serbia.

In 2012 economically active population in Serbia accounted to 2.8 million, constituting 60% of the total number of persons who were 15-64 years of age. Out of that number 2.1 million were employed, which means that the employment rate (measured as ratio of employed persons in relation to the total number of persons who are 15-64 years of age) stood at 45%. On the other hand, the number of the unemployed reached nearly 700 thousand, constituting a very high unemployment rate of 25%. Even at the first glance, presented data reveal several major issues, which will be discussed in more detail.

First of all, one can argue that the number of economically active population is low. In Fig. 2 one can observe that, since the first Labour Force Survey was conducted in 2004, the activity rate has declined by 6 percentage points, standing at 60% in 2012. Given that an unemployment rate is this high, low and declining or stagnating activity rate may not seem as a huge problem. However, since the number of economically active persons depicts the supply of labour, once the Serbian economy steps out of the recession, its growing prospects may be somewhat limited due to the low activity rate.

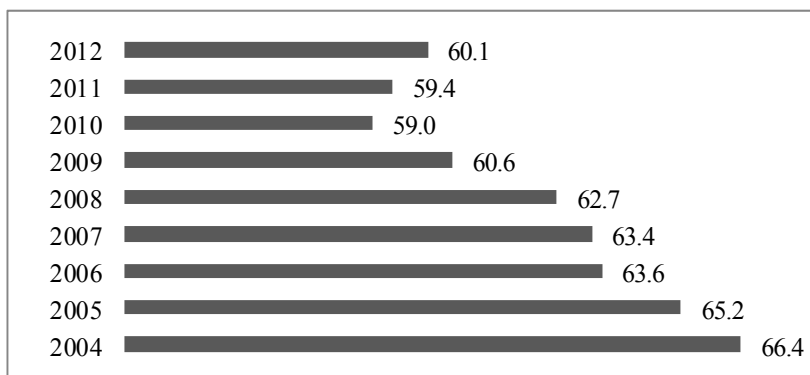


Figure 2: Activity rate for population aged 15-64, in %

Source of data: Statistical Office of Serbia. 2013. Labour Force Survey 2012. Bulletin No. 564. Retrieved from <http://www.stat.gov.rs>.

Ognjenović and Branković (2012a, pp. 395) show that these trends are in line with the developments in other parts of the Western Balkan region. However, the situation in Serbia seems to be particularly aggravated, since a decrease in the activity rate has been more prominent than elsewhere. They also argue that tendencies in the Western Balkan countries regarding the activity rate have been opposite to the ones in the European Union. Namely, throughout the 2001-2011 period the activity rate in EU-27 has been on an increase, and it has been substantially higher than in Serbia, standing at around 70%.

The most important problem related to the Serbian labour market is a very high unemployment rate. This rate, measured as ratio between the number of unemployed persons of working age (15-64) and the number of economically active persons of the same age, was as high as 24.6% in 2012. As of mid-2000s it started to decrease, but as the global financial crisis occurred, it swiftly started to increase again (Fig. 3). Thus, unemployment rate has increased by as much as 10 percentage points in just four years (from 2008 until 2012).

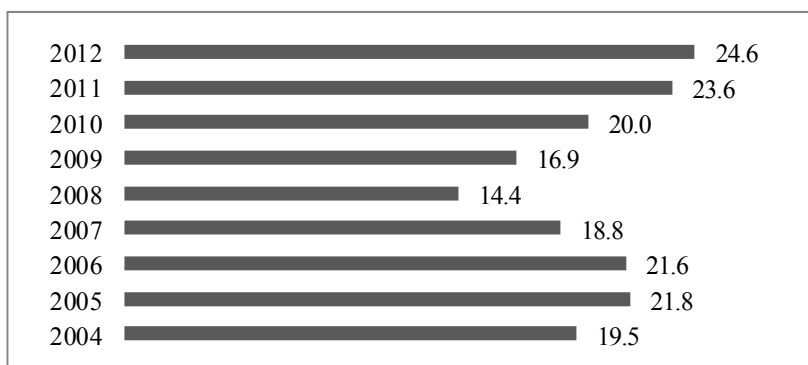


Figure 3: Unemployment rate for population aged 15-64, in %

Source of data: Statistical Office of Serbia. 2013. Labour Force Survey 2012. Bulletin No. 564. Retrieved from <http://www.stat.gov.rs>.

As far as the total employment among the 15-64 age group is concerned, we have already mentioned that the employment rate in 2012 stood at 45.3%, which is the lowest recorded rate since 2004. As in the case of an unemployment rate, as of mid-2000s indicators on employment began to improve, but since the outbreak of the global financial crisis in 2008, they have started to deteriorate again (Fig. 4).

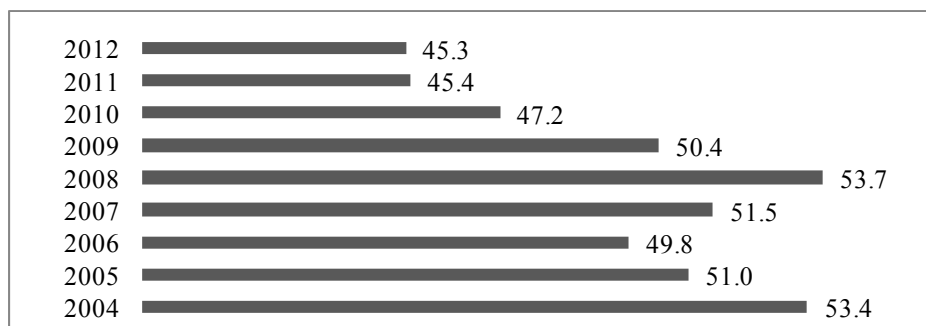


Figure 4: Employment rate for population aged 15-64, in %

Source of data: Statistical Office of Serbia. 2013. Labour Force Survey 2012. Bulletin No. 564. Retrieved from <http://www.stat.gov.rs>.

Data on employment by economic activities show that major employers in the Serbian labour market originate from the sectors of agriculture and manufacturing. Share of each of these activities in the total number of employed persons of working age (15-64) stood at 18% in 2012. Another major employer is the sector of trade, so that these three sectors combined employed precisely a half of the employed persons aged 15-64. These data are presented in Fig. 5.

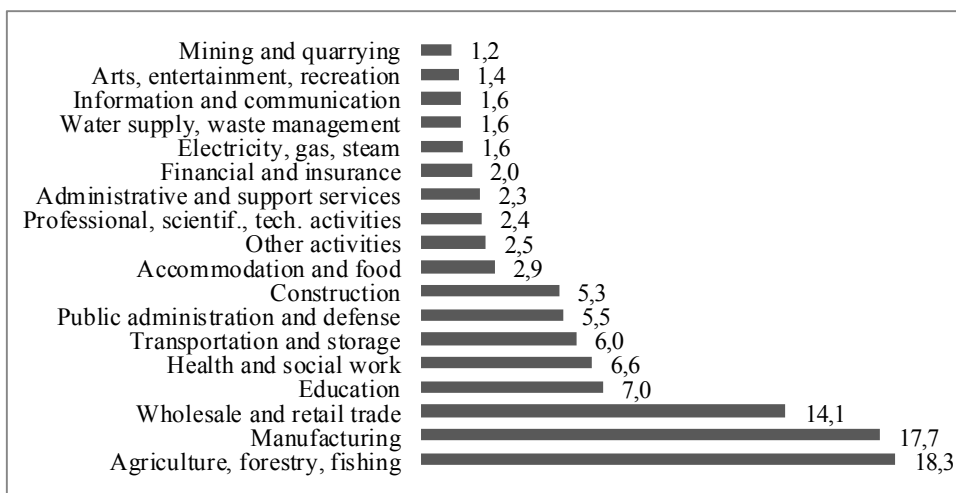


Figure 5: Structure of employment by economic activities for population aged 15-64, 2012, in %

Source of data: Statistical Office of Serbia. 2013. Labour Force Survey 2012. Bulletin No. 564. Retrieved from <http://www.stat.gov.rs>.

Such a structure of employment is not atypical for the region of the Western Balkans. Analysis of Ognjenović and Branković (2013a, pp. 589) shows that in 2010 the shares of agriculture and industry were comparable to each other not only in the case of Serbia, but also in cases of Bosnia and Herzegovina and FYR Macedonia.

Particularly vulnerable group in the labour market are young persons, whose prospects of finding work when an unemployment rate is this high are not particularly good. Using available data from the Labour Force Survey, we have calculated that in 2012 the number of unemployed persons below 30 years of age was 230 thousand, while the corresponding unemployment rate was as high as 42.3%. If we separate them into age groups, we can observe that within the age group 15-19 nearly two thirds of economically active persons is unemployed, while in the case of age groups 20-24 and 25-29 these shares stand at around one half and one third, respectively. These shares can be observed in Fig. 6.

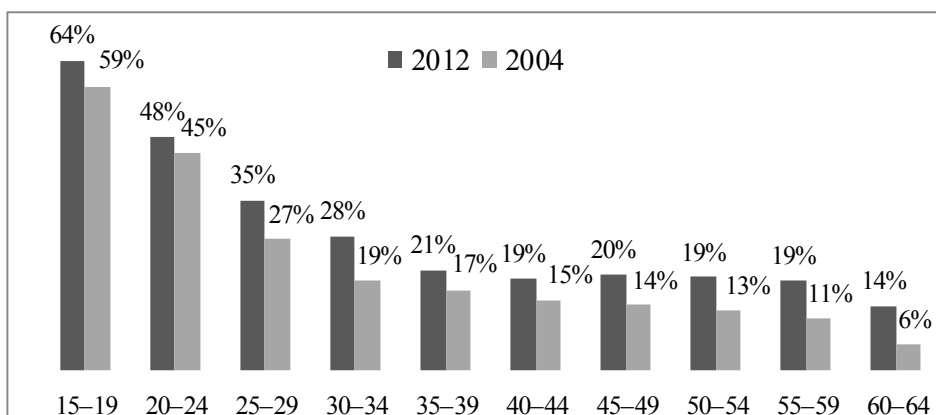


Figure 6: Unemployment rates by age groups, in %

Sources of data: Statistical Office of Serbia. 2013. Labour Force Survey 2012. Bulletin No. 564 and Statistical Office of Serbia 2006. Labour Force Survey 2004. Bulletin No. 451. Retrieved from <http://www.stat.gov.rs>.

We can also note that within all age groups unemployment rates have worsened in 2012 in relation to 2004. Although we have shown that unemployment rates for persons younger than 30 have been extremely high, deterioration of these rates has been, in relative terms, more prominent in the case of some other age groups. This is particularly true for older persons (age groups 55-59 and 60-64), and persons aged 30-34. In the case of the latter group unemployment rate recorded the highest increase of 9 percentage points in 2012 in relation to 2004. The fact that the highest increase in the unemployment rate was recorded for persons in their early 30s is particularly troublesome, because a substantial portion of these persons have a family and little children to support.

The structure of unemployed persons according to age reveals that they are evenly distributed among certain age groups. Namely, in 2012 a third of the total number of unemployed persons of working age (15-64) belonged to the age group 15-29, another third referred to the age group 30-44, while the remaining third of the unemployed included persons over 45 years of age. The structure of unemployed persons according to age groups is presented in Fig. 7. We can also note that, if we observe 5-year age groups, the highest share within the total number of unemployed relates to persons aged 25-29 years, but also to those who fall within 20-24 and 30-34 age groups.

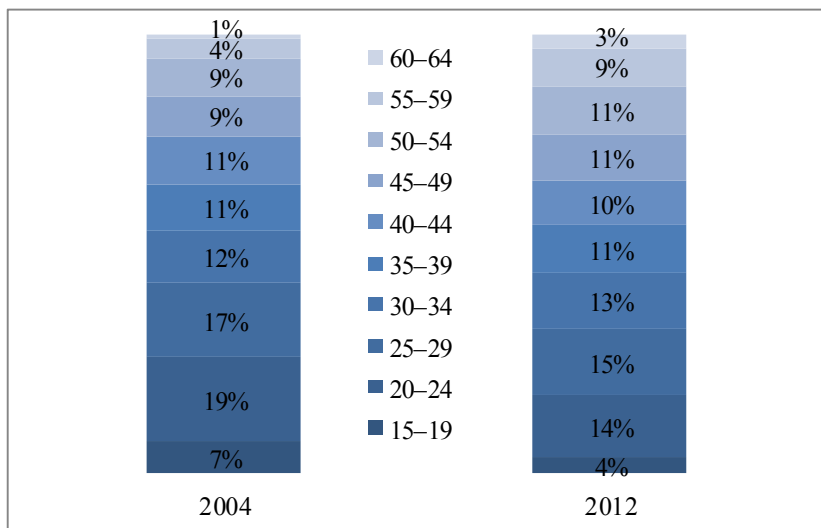


Figure 7: Structure of unemployed persons by age groups, in %

Sources of data: Statistical Office of Serbia. 2013. *Labour Force Survey 2012. Bulletin No. 564* and Statistical Office of Serbia. 2006. *Labour Force Survey 2004. Bulletin No. 451*. Retrieved from <http://www.stat.gov.rs>.

Fig. 7 also reveals that one of the notable changes in 2012 in relation to 2004 is that the share of persons under 30 years of age has decreased by 10 percentage points, while the share of those aged 30-44 years in the total number of unemployed persons of the working age has remained unchanged. This means that, although unemployment rates have been highest among young persons, the relative position of some other age groups has worsened more. This is true for age groups above 45, which have all witnessed an increasing share in the structure of unemployed persons of working age in 2012 in relation to 2004; but this is also true for those persons who fall within the 30-34 age range, because their share has also increased in relation to 2004.

Another group considered to be vulnerable in the labour market are women. As evident from Table 1, all the labour market indicators are worse for women than

for men, indicating that the female participation in the labour market is substantially lagging behind the male one. Presented data show that in 2012 only a half of women of working age was economically active.

Table 1: Selected labour market indicators for men and women aged 15-64, in %

		Activity rate	Employment rate	Unemployment rate
2012	Male	68.8	52.4	23.9
	Female	51.2	38.1	25.6
2004	Male	75.1	63.1	15.9
	Female	57.9	44.0	24.1

Sources of data: Statistical Office of Serbia. 2013. Labour Force Survey 2012. Bulletin No. 564 and Statistical Office of Serbia. 2006. Labour Force Survey 2004. Bulletin No. 451. Retrieved from <http://www.stat.gov.rs>.

Labour Force Survey does not reveal reasons for such a small percentage of women who are economically active, but some answers may be obtained by analysing data from the 2011 Census (Statistical Office of Serbia, 2013b). Analysis of the structure of inactive women of working age (15-64), presented in Fig. 8, shows that the majority them (36%) are those who are staying at home and performing activities for their families. Out of these female home-makers of the working age, 16% are women below 30 years of age, while 44% refers to persons aged 30-49 years. We can expect that within these two age groups a certain number of women may be willing to become economically active and engage in the labour market, provided that in the future the overall economic situation and prospects of finding work improve.

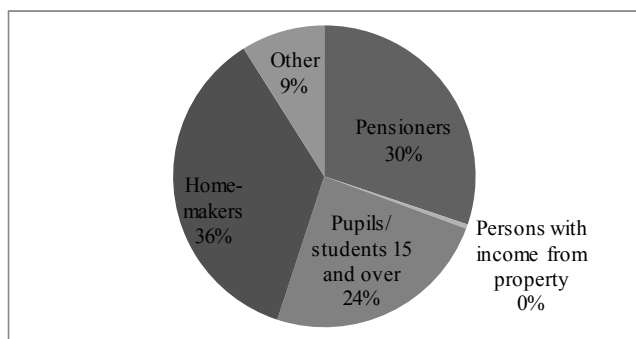


Figure 8: Structure of female inactive population aged 15-64, in %

Source of data: Statistical Office of Serbia. 2013b. Book 7: Population – Economic Activity. 2011 Census of Population, Households and Dwellings in the Republic of Serbia. Retrieved from www.popis2011.stat.rs.

Data from Table 1 show that 38% of the total number of women aged 15-64 years has been employed in 2012. This is substantially lower than in the case of men, where the corresponding indicator was also low, but stood at 52%. However, as far as the unemployment rate is concerned, differences have been much less prominent, so that in 2012 the unemployment rate for women aged 15-64 was 25.6%, which is just slightly above the unemployment rate for men (23.9%).

The Table 1 also contains data that refer to 2004, so that certain tendencies in the labour market can be observed. These tendencies are partly associated with the transformation of the economy, but are probably dominantly driven by the effects of the global financial crisis. Both male and female participants in the labour market have been negatively affected by the crisis, but, given that the gender gap related to some of the indicators has decreased, we can argue that, in relative terms, men have been more severely hit by the crisis than women. Namely, the gap in employment rates of men and women of working age has decreased in 2012 in relation to 2004 by 5 percentage points, while in the case of unemployment rates it has narrowed by 6.5 percentage points. This is due to the fact that the rate of female unemployment increased only from 24.1% to 25.6%, while in the case of men this change has been much more striking, since the unemployment rate deteriorated by 8 percentage points, reaching 23.9% in 2012.

FACTORS DETERMINING LABOUR FORCE PARTICIPATION

METHODS AND DATA

The binary choice probit model is employed in the analysis of the participation in the labour force. Following the approach presented in Greene (2000), the probit model has the form:

$$P(y_i = 1 | x_i) = \Phi(x_i' \beta), i=1, \dots, N. \quad (1)$$

In equation (1) y represents an indicator variable that takes two values, one and zero, depending on one's decision to participate in the labour force, x and β are k -dimensional vectors of the independent variables, i.e. predictors (the first element of x is unity) and unknown parameters, respectively, while $\Phi(\cdot)$ denotes the standard normal distribution. N is the number of the sample units. The maximum likelihood (ML) estimator of the probit model strongly relies on the distributional assumptions about the error term. In the parametric approach, it is assumed that the errors are normally distributed around zero mean and that their variance is a constant set at unity. The usual assumption implies that the errors are independent on a set of explanatory variables x . If those assumptions are violated, the ML estimator does not yield consistent estimates of the unknown parameters β in the probit model. Then, in order to obtain the consistent estimates of the unknown parameters β , one of the possibilities is to employ the semiparametric approach (Martins, 2001; Ognjenović, 2013).

The data used in the analysis of the participation in the labour force in Serbia are taken from the Living Standard Measurement Survey. The survey was carried out by the Strategic Marketing and Media Research Institute from Belgrade in 2002. The data set is provided by the Statistical Office of Serbia. We decided to use this data set instead of the Labour Force Survey data due to the availability of a broader set of the household based variables, as for instance sources of the total household income. According to the labour supply theory, this variable is an important explanatory factor, especially for women's decisions to participate in the labour force (Heckman, 1974).

Table 2: Descriptive statistics of the sample

Variable	Total sample		Female		Male	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
LF participation	0.69	0.46	0.58	0.49	0.81	0.40
Child_06	0.30	0.60	0.31	0.61	0.28	0.59
Child_14	0.36	0.66	0.38	0.67	0.34	0.64
D_married	0.72	0.45	0.76	0.43	0.68	0.47
Ln_hincome	8.93	0.97	8.95	0.96	8.92	0.98
Age	3.96	1.16	4.00	1.16	3.92	1.16
Agesq	17.03	9.29	17.32	9.41	16.73	9.15
D_urban	0.59	0.49	0.61	0.49	0.57	0.49
<i>Region</i>						
Belgrade	0.19	0.39	0.20	0.40	0.19	0.39
Vojvodina	0.27	0.44	0.26	0.44	0.27	0.44
Šumadija West	0.29	0.45	0.29	0.45	0.29	0.45
South East	0.25	0.43	0.25	0.43	0.26	0.44
<i>Education</i>						
Primary	0.26	0.44	0.31	0.46	0.21	0.40
Vocational_3	0.22	0.42	0.17	0.37	0.28	0.45
Vocational_4	0.33	0.47	0.33	0.47	0.33	0.47
Gymnasium	0.03	0.17	0.04	0.19	0.02	0.14
University	0.16	0.36	0.16	0.36	0.15	0.36

Notes: Standard deviation (S.D.).

Source: Authors' calculations.

The sample contains data on 7,938 individuals of the working age (15-64 years of age), out of which 4,085 and 3,853 are females and males, respectively. In terms of the distribution by gender, the total sample includes 51.5% females and 48.5% males. In the total sample, 68.8% are participants in the labour force, while divided by gender, 57.6% and 80.6% of the total number of women and men in the sample are those who participate in the labour force, respectively (Table 2). Individuals who are engaged in any kind of self-employment or in-household activities, as well as farmers, are excluded from the sample. Hence, the total sample includes those individuals who belong to the interval of the working age population, but who are not enrolled in pursuing further education, and who are capable of work.

Table 2 illustrates descriptive statistics of the total sample used, as well as a breakdown of the sample by gender. Means and standard deviations are provided for continues variables, while proportions and standard deviations illustrate distributions of the categorical variables. The figures provided in Table 2 illustrate the main differences between the subsamples used in the analysis. *LF_participation* is a binary choice dependent variable that takes value one if an individual actively participate in the labour force and zero otherwise. The set of independent variables (predictors) includes continues variables, such as the number of children in the family under six and fourteen years of age (*Child_06* and *Child_14*), age and age squared (*Age* and *Agesq*), and natural logarithm of the total household's income excluding wages of the employed members (*Ln_hincome*). The set of independent categorical variables includes the following ones: marital status that associate value one to those who has a spouse and zero otherwise (*D_married*), the variable that indicates who are residents of the urban areas (*D_urban*), four regional dummies excluding the Kosovo and Metohija region (the province of Vojvodina is the reference category), and five educational dummies (primary education and less is the reference category).

RESULTS

The results of the ML estimation of the probit model for the participation in the labour force in Serbia are presented in Table 3 below. We have estimated three independent models, based on the total sample, as well as on the subsamples of female and male participants in the labour force, respectively. The selection of the independent variables for the probit models is based, in general, on the data available in the sample used, but also on the theoretical background about the female labour supply following the approaches given by Mincer (1962) and Heckman (1974).

Table 3: Probit estimates of the labour force participation equations

Independent Variable	Total sample		Female		Male	
	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.
Intercept	-3.67*	0.25	-3.90*	0.36	-3.01*	0.37
Child_06	-0.05***	0.03	-0.15*	0.04	-0.01	0.05
Child_14	-0.02	0.03	-0.04	0.03	-0.02	0.04
D_married	-0.06	0.04	-0.34*	0.06	0.53*	0.07
Ln_hincome	-0.08*	0.02	-0.06*	0.02	-0.07**	0.03
Age	2.15*	0.10	2.18*	0.15	1.87*	0.16
Agesq	-0.25*	0.01	-0.26*	0.02	-0.21*	0.02
D_urban	0.04	0.04	0.21*	0.05	-0.10***	0.06
<i>Region</i>						
Vojvodina	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>
Belgrade	0.10	0.11	0.25***	0.14	0.05	0.19
Šumadija West	0.12	0.08	0.14	0.11	0.11	0.13
South East	0.15**	0.08	0.07	0.10	0.26***	0.13
<i>Education</i>						
Primary	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>	<i>Ref.</i>
Vocational_3	0.74*	0.09	0.61*	0.13	0.43*	0.13
Vocational_4	0.90*	0.08	0.99*	0.10	0.57*	0.13
Gymnasium	1.15*	0.23	1.08*	0.28	1.13*	0.40
University	1.40*	0.12	1.46*	0.15	1.20*	0.24
<i>Joint significance of interacted terms (education and region)</i>						
χ^2 (12)	23.44**	0.02	13.84	0.31	19.15***	0.08
<i>No. of observations</i>	7938		4085		3853	
<i>Log L</i>	-4187.06		-2246.99		-1536.30	
<i>Pseudo-R²</i>	0.15		0.19		0.19	
<i>% correctly predicted</i>	82.44		62.15		90.97	
<i>LM test for normality</i>						
χ^2 (2)	4.08	0.13	3.73	0.15	3.89	0.14

Notes: The standard errors (S.E.) of the coefficient estimates are corrected for the heteroscedasticity of unknown form. (*, **, ***) indicate statistical significance at the 1%, 5%, and 10% level, respectively. Reference categories (Ref.) for the categorical variables Region and Education are dummies created for the province of Vojvodina and for primary education, respectively. The Pseudo-R² is defined as $1 - (\text{Log L constrained} / \text{Log L unconstrained})$.

Source: Authors' calculations.

As already mentioned above, the three probit models are specified in order to estimate outputs of the participation in the labour force for a given set of predictors. We initially focus our analysis on the diagnostics reported for the estimated models. As the results of the Lagrange Multiplier (LM) tests show, all the three estimated models satisfy the strong assumption about the normality of the residuals, confirming the relevance of the use of the ML method. In addition, the standard errors of the coefficient estimates are corrected for the presence of the heteroscedasticity of unknown form, following the procedure based on the adjustment of the appropriate matrix of variances and covariances (Greene, 2000). The Pseudo-R² indicates that all the estimated models perform well in terms of the selected predictors. Percent of correctly predicted probabilities seems reliable for all the three estimated models as well. Based on these findings, we can rate our models as satisfactory for the analysis of the participation in the labour force in Serbia.

The estimated probit model for the participation in the labour force, based on the total sample, indicates that the presence of children of the preschool age in the household significantly decreases the probability of the participation in the labour force, while the presence of children under fourteen years of age is not an important factor for one's decision to participate in the labour force. The unearned income also significantly constrains an individual's decision to participate in the labour force, while the marital status and residence in the urban area are not important factors of the participation for the total sample of working age individuals. Living in a particular region does not necessarily affect one's decision to take an active role in the labour market, while only citizens of the Southern and Eastern Serbia region, in comparison to those who live in the province of Vojvodina, are more likely to participate in the labour force. This is probably related to a reduced number of other opportunities for the engagement of an individual outside of the labour market. All the levels of education, relative to primary education and less, significantly increase the probability of the participation in the labour force. We can notice that the effect rises with the level of attained education, which is related to the expected returns to education. All the estimated coefficients are significant at the 1% level. The interacted terms of education and region indicate the joint significance at the 5% level.

In accordance with the theory of the female labour supply, the presence of small children under six and marital status significantly reduce the probability of the female participation in the labour force. Both coefficient estimates are significant at the 1% level. Other sources of the household income, also, significantly reduce the probability of the participation in the labour force, but the effect of this factor is smaller in comparison to the one in the male participation equation. The age of women follows a concave path and indicates a stronger positive effect than in the male participation equation. Also, women who live in urban areas are more likely to participate in the labour force than those who live in other areas. All the coefficient estimates are significant at the 1% level. Women who live in Belgrade are more likely to actively participate in the labour force than those who live in the province of Vojvodina, while no significant effects are found

for women living in other regions in Serbia. The level of education strongly determines the probability of the female participation in the labour force. The estimated coefficients for educational dummies are significant at the 1% level. An interesting finding shows that the effects of education are higher across almost all levels, except for general secondary education, i.e. for those women who completed gymnasium, than in the male participation equation. This finding is related to the rising level of women's education in Serbia, in particular of those women who completed university education, but, in general, educational attainment of men is better in comparison to the one of women of the same age. It was interesting to find out if there are any differences in the interacted influence of education and region on the probability of the female participation in the labour force. These variables are used to approximate the differences in the level of education of the labour force participants and their willingness to be economically active across the regions. However, the test statistic for the joint significance of the estimated coefficients does not indicate a significant influence of the interacted variables in the female labour force participation equation.

Opposite to the findings for women's participation in the labour force, the presence of small children of the preschool age, as well as of children under fourteen years of age, does not significantly constrain men's decision to participate in the labour force. However, those men who are married are more likely to participate in the labour force, which is expected and contrary to the findings obtained for married women's participation in the labour force. The estimated coefficient is significant at the 1% level. The unearned income, also, reduces the men's probability of the participation in the labour force, but the effect of this factor is greater than in the female participation equation; the estimated coefficient is significant at the 5% level. This finding indicates that men of the working age population, probably, put more value on other sources of the household income, in particular the one originating from capital and other assets of the household. The age of men, also, follows the concave path in the participation in the labour force, but the estimated coefficients show smaller influence than in the female participation equation. Men who live in urban areas are less likely to participate in the labour force in comparison to those who live in other areas, while living in some particular region does not significantly determine men's decisions to participate in the labour force, with the exception of those men who live in the Southern and Eastern Serbia region. All the levels of education significantly increase the probability of men's participation in the labour force. As the test of the joint significance of the interacted influence of education and region indicates, there are certain differences in the level of male education across the regions that affect the probability of the participation in the labour force.

DISCUSSION

On the demand side for labour, one can notice that the conditions for new jobs creation in Serbia have been unfavourable for years, as assessed from the perspective of companies (Ognjenović and Branković, 2013b). Furthermore, this indicates slow dynamics of the rates of job creation and job destruction, inducing the presence of certain constraints that suppress faster dynamic of the net employment growth in Serbia (Ognjenović and Branković, 2012b). However, certain changes are present in the supply of labour, as it was shown in previous sections. First of all, the rates of the economically active population for both women and men were characterized by decreasing trends.

As the analysis in this section shows, all the levels of education, in comparison to primary education and less, are the factors that significantly increase the probability of the participation in the labour force, for both women and men. Comparison with the similar research for other transitional economies indicates that the labour market participation was decreasing during the transition, but the return to education, in particular, of those individuals with completed higher and university education was significantly improved relative to the pre-transition period (Orazem and Vodopivec, 1997). In the countries of the European Union, an educational attainment, also, significantly increases the probability of the participation in the labour force and this is particularly emphasized for the female subpopulation (Martins, 2001). As we can notice from the analysis given above, women may expect more gains from higher and better education than men in Serbia. However, interacted effects of education and region play an important role for the male participation in the labour force, while it is not confirmed by the analysis in the case of the female participation. Educated people may have more benefits from the fact that they are economically active, as for instance the higher chances to be enrolled in the programs of active labour market policies and better employment opportunities (Ognjenović, 2007).

CONCLUSIONS

In this work we have estimated three probit models in order to analyse the factors that most likely increase or constrain the probability of the participation in the labour force in Serbia. As the results indicate, there are certain differences between factors that determine participation of both men and women. The presence of small children in the household, marital status and the unearned income are the main constraining factors of the participation of women in the labour force. In contrast, marital status significantly increases the probability of the participation of men in the labour market, while the unearned income is an important constraining factor. Education is an important factor of economic activity for both women and men and the effects rise with the level of attained education almost linearly. The results that we obtained for Serbia are in line with the similar research for the transition economies, as well as with the expectations of the labour supply theory.

This work also contains analysis of the latest tendencies related to the labour force in the Republic of Serbia. The analysis is based on data from the Labour Force Survey and a 2011 Census. Based on it, we can draw several conclusions.

We can observe that the continuous decline in the number of inhabitants in Serbia has been translated into a decreasing number of working age population, and worsening of the age structure of labour force. Namely, while the share of the working age population (15-64 years of age) did not change in 2011 in relation to 2002, the share of those older than 65 has increased on behalf of the declining share of children below 15 years of age. This means that the share of the working age population will decrease until the next Census.

Also, one can note that labour force indicators, such as activity, employment and unemployment rates, have deteriorated since the outbreak of the global financial crisis. Due to that, unemployment rate in Serbia in 2012 within the working age population has been as high as 24.6%.

We have also analysed positions of two vulnerable groups in the labour market: young persons and women. We have concluded that indicators for young persons (below 30 years of age) have been worse than in the case of other age groups, and the same conclusion is drawn related to relative position of women against men. However, it seems that, in relative terms, the global crisis has more severely affected persons older than 30 than youngsters, and also men in relation to women. To illustrate this, we have calculated that the share of persons below 30 years of age in the structure of unemployed persons aged 15-64 has declined in 2012 in relation to 2004. Also, during the same period, the increase in the unemployment rate for women has been relatively negligible (1.5 percentage points) in relation to the one for men (8 percentage points).

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PROHIBITION OF DISCRIMINATION IN SERBIA AND VULNERABLE SOCIAL GROUPS

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Abstract: Vulnerable social groups in Serbia are faced with problems that are present in all areas, in almost every aspect of public and social life, from inability to meet basic needs, such as adequate health care, primary education and welfare, to the barriers in accessing the labor market. The reasons that led to this are numerous: living conditions, different social and economic policies, but also many social factors such as ignorance, carelessness, neglect, fear and prejudice. Therefore, various documents containing provisions prohibiting discrimination in all areas of public and social life were adopted on international and national level. In this paper we have tried to point out the position of certain vulnerable groups in Serbia, with a special focus on the Roma, people with disabilities, women, refugees and internally displaced persons. Regarding the protection of especially vulnerable groups from discrimination existing legal framework in Serbia provides solutions that are relatively harmonized with European legislation. However, the main problem is the lack of application of these solutions in practice, which requires a greater commitment of public authorities, in order to ensure that the law is fully implemented, and a higher level of democratic culture, which should ensure that cases of discrimination can be recognized, all in order to create the conditions where all citizens have equal opportunities to live in dignity.

Key words: Discrimination, Society, Serbia, Legislation

JEL classification: J14, J16, J70

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INTRODUCTION

Discrimination originates from the word *discriminare* which means *to separate, to distinguish*. In the broadest sense, it could be said that this notion represents any distinction. However, discrimination also means different treatment of certain individuals or groups on the basis of the fact which determines them as "different". In this sense, "discriminated" means "excluded".

Simply put, discrimination is unequal treatment of a person or a group on the basis of their personal characteristics, which results in inequality in opportunities to realize constitutional and legal rights. That is unequal treatment, exclusion, or bringing in a subordinate position of individuals or groups of people who are in the same, similar or comparable situation.³⁹

Anti-Discrimination Act⁴⁰, which was adopted in Serbia in 2009, in Article 2 defines the concept of discrimination as follows: "the term "discrimination" and "discriminatory treatment" means any unjustifiable discrimination or unequal treatment, or omission (exclusion, restriction or preference), in relation to individuals or groups as well as their family members or persons close to them, in an open or covert manner, that is based on race, skin colour, descent, nationality, national or ethnic origin, language, religious or political beliefs, gender, gender identity, sexual orientation, property, birth, genetic characteristics, health status, disability, marital or family status, convictions, age, appearance, membership in political organizations, trade union and other organizations, and other real or supposed personal characteristics (Zare,2013).

The Act specifies the following forms of discrimination: direct and indirect discrimination, violation of the principle of equal rights and obligations, accountability mechanisms, conspiracy to commit discrimination, hate speech and harassment and degrading treatment. Finally, article 13 of the Act also specifies more difficult forms of discrimination: inciting inequality, hatred and intolerance on the basis of nationality, race, religion, language, political opinion, gender, gender identity, sexual orientation and disability; advocating or exercising discrimination by public authorities and in proceedings before public authorities; propagation of discrimination through the media; slavery, human trafficking, apartheid, genocide, ethnic cleansing and their propagation; discrimination against individuals on the basis of two or more personal characteristics (multiple or intersecting discrimination); discrimination that took place more than once (repeated discrimination) or which takes place for a longer period of time (extended discrimination) against the same person or group of persons; discrimination that leads to serious consequences for the discriminated, other persons or property, especially if it is a punishable act in which the predominant or exclusive motive for the execution was hatred or intolerance towards the victim, which is based on his personal attribute.

³⁹ <http://www.ravnopravnost.gov.rs/rs/дискриминација/шта-је-дискриминација>, access on 10th May 2013

⁴⁰ Official Gazette of the Republic of Serbia, no. 22/09

Consequences of discrimination are always difficult. They are sometimes obvious and sometimes not visible, and therefore more dangerous. Discrimination against individuals and groups can undermine relationships in a society for a longer time. Therefore, every society has a moral obligation to suppress and eliminate discrimination by various policies and measures and to help social groups who were or still are the victims of long-term discrimination. Unfortunately, although the discrimination is prohibited in Serbia, the equality and human rights are guaranteed, in practice certain social groups still have difficulties in realizing their rights. Roma are marginalized, disabled people are included in society in a very small extent, homophobia is deeply rooted in the society and the gender equality is often principle. In addition to employment problems, access to health care or social welfare, minorities also face hate speech and violence, and public opinion is fraught with stereotypes and prejudices⁴¹ (McMillian,2012).

Accordingly, in this paper we have highlighted the problem of discrimination against Roma, women and persons with disabilities. We have chosen these groups because we had in mind the European Commission's report on Serbia's progress towards accession to the European Union, in which it is stated that these groups have been exposed to discrimination most. Also, these statements are confirmed by the data given by the Commissioner for Protection of Equality, according to which the number of complaints of discrimination was about 40 higher in 2012 than it was in 2011, and the basis for discrimination was most often disability, national or ethnic origin, and gender⁴² (Elyas et al.,2012).

CITIZENS' VIEWS ON DISCRIMINATION IN SERBIA

Considering that the cause of discrimination is often the lack of information, ignorance, indifference, prejudice and stereotypes, it is interesting to look back at the attitude of citizens towards discrimination in Serbia. According to the latest results of the public opinion research from November 2012⁴³, discrimination is widespread in Serbia. More than 60% of respondents believe that discrimination is present a lot or quite a lot. Also, more than a third of the citizens (36%) believe that there is more discrimination now than three years ago.

The Roma are the most vulnerable group in the first place, which was spontaneously indicated by 38% of respondents. However, it is less (7% and 12%) than in the researches from 2010 and 2009 (45% and 50%). They are followed by poor people (28%), persons with disabilities (22%), seniors (18%), women (17%)

⁴¹ <http://www.euractiv.rs/ljudska-prava/4514-diskriminacija-problem-srpskog-drutva-.html>, access on 04th May2013

⁴² See the report of the Commissioner for Protection of Equality

⁴³ The research was conducted by CeSiD in November 2012. The research was implemented on a representative sample of 1196 citizens of Serbia, excluding Kosovo and Metohia, older than 15, and it was published in "Citizens' Attitudes on Discrimination in Serbia, CeSiD, Belgrade, 2012

and sexual minorities (14%). It is striking that most people do not believe that ethnic groups other than Roma face discrimination in our community. Among all ethnic groups, the participants (most of whom are the Serbs) found that the Serbs are the most discriminated in their home country.

When it comes to the perception of the area in which discrimination is most present, as many as 37% of people stated that there is the greatest discrimination in employment. Except the employment, people recognize discrimination also in the provision of health services and in education.

Citizens notice the difference between the institutions when it comes to discrimination. In the body of those who are most discriminated, there are political parties, the government, the parliament and the judiciary (as political and government institutions), but unfortunately the media and citizens, who are the actors coming from the domain of civil society. In addition, nearly two-thirds of the population (63%) thinks that the responsible institutions do not inform citizens about discrimination issues enough. An interesting fact is that there are many of those who do not know that discrimination is prohibited in our country (even fifth) and 55% of respondents are aware that there is the legislation, but they doubt that it is properly implemented, and believes that laws are applied selectively (a slight increase compared to the earlier period-two years ago, from 52% to 55%). At the same time, the citizens do not talk to their friends about discrimination a lot, they are passive and it seems that their goal is to solve these problems "without their involvement." This indicates a certain type of passivity at the majority of the population, which certainly has a negative effect on the successful fight against discrimination in our country⁴⁴.

DISCRIMINATION AND VULNERABLE SOCIAL GROUPS

There are vulnerable categories everywhere (Totic, 2011). In addition to the above mentioned entities which will be discussed in this paper, vulnerable groups in our country are children, the elderly, members of the LGBT population, internally displaced persons, HIV- positive people, etc. but they are not the subject of this analysis.

In comparison to other social groups, members of vulnerable groups cannot participate in the sphere of social events on an equal basis. This results in social marginalization and exclusion related to limited access to material resources, labour market, development potential, etc. On the other hand, poverty and related social phenomena - poor housing conditions, inadequate education, and poor health - increase the vulnerability of these social groups and reduce their ability to mitigate their vulnerability by concerted effort. In this way, members of disadvantaged social groups enter into a vicious circle of vulnerability which they can leave only with the wider social support and assistance (Stefanovic, Stosic, 2011).

⁴⁴ *Ibidem*, p.10

The Commissioner for Protection of Equality received 465 complaints of discrimination, which represents a substantial increase compared to 2011 and 2010, when 349 and 124 complaints were submitted⁴⁵. Most of the complaints, a total of 76, related to discrimination on the basis of disability, and on the basis of national or ethnic origin (68), of which 31% was based on belonging to the Roma minority. Eight complaints based on sexual orientation were filed, and discrimination was found in one case. Such a small number of complaints of discrimination based on sexual orientation indicate the fact that such discrimination is still not reported sufficiently.

Most complaints were related to the sphere of labour relations and employment (35.1%) and the procedures before public authorities (18.1%), then education and training (8.2%) and the provision of public services and use of facilities and areas (7.1%). Analysis of the complaints shows that in the area of labour and employment there are many problems that citizens face, and that women, particularly pregnant women and new mothers are often subjected to discrimination, as well as people with disabilities and the elderly.

Unfortunately, these data indicate that the problem of discrimination remains strong in our country, despite the fact that anti-discrimination law was adopted in 2009 and other laws that should prevent discriminatory behaviour. This leads us to the conclusion that the regulations are only one step in the fight against discrimination, and that it is essential that the legal provisions should be applied consistently in practice, discrimination cases should be punished more severely, and most importantly, it is necessary to take significant measures of prevention plan in order to prevent discrimination. One of the prerequisites for this is respect for the "universal" values, and one of the fundamental values of a democratic society is also the prohibition of discrimination.

ROMA

When it comes to vulnerable groups, it seems that members of the Roma community are their best representatives. The Roma population is in the unenviable position in Serbian society as particularly vulnerable and marginalized minority, facing a number of obstacles which continue to hinder its development. The problems faced that Roma face are present in all areas, in almost every aspect of public and private life, from the impossibility of fulfilling the basic needs such as adequate health care, primary education and social assistance, to the barriers they face in accessing the labour market.

First, the majority of Roma live undocumented. This is particularly worrying if we consider that the possibility of exercising rights in the areas of education, health and social protection, labour and employment, pension insurance and the like largely

⁴⁵ *The report of the Commissioner for Protection of Equality*

depend on personal documents (Kosanović, Gajin, Milenkovic, 2010). The fact that there are officially about 118,000 Roma, and unofficially over half a million, speaks in favour of that there are about 400,000 people without documents, who do not vote, who do not have social security, who do not go to medical centres and who in most cases do not go to school. This further leads to practical problems related to health care of Roma, which are reflected in the lack of primary health care, especially for children and women of the Roma nationality, which results in the form of acute and chronic diseases of this population group (Zare,2012).

On the other hand, one of the biggest problems of this population is the housing problem and the fact that today between 60% and 80% of Roma live in unhygienic isolated settlements, where the living conditions in these areas further aggravate health of this population group. Poor living conditions, low standards and lack of health care have led to Roma live 10 to 15 years shorter than the majority population.

Difficult position of Roma, especially Roma children, is noticed when it comes to the educational process. Roma children are still significantly distinguished from other children when enrolling regular schools or they are placed in so-called special schools or special classes. Only about 2% of Roma children attend compulsory primary education, while, according to estimates, between 35% and 60% of Roma is not even enrolled in school, and more than 60% does not complete primary school. It is alarming that the illiteracy rate is more than 10% in all age groups, including children older than ten, as well as younger middle-aged population (Raduški, 2009). One of the reasons for this situation is the fact that the educational system does not provide sufficient support in creating a multicultural environment for Roma children, including teaching in the Romani language. In addition, other reasons may be found in social and economic situation, Roma stereotypes, tradition, etc.

Lack of Roma education directly affects the employment of these groups. According to the Labour Force Survey from 2009, the percentage of unemployed members of the Roma community is twice higher than in the rest of population. Unemployment rate of Roma is 40.7% (compared to 16.4% in the total population). Women and youth members of this population (age 15-24) are in particularly disadvantaged position (unemployment rate 68.2%). Those who are employed, generally fall into the category of low-skilled labour. Therefore, most Roma can be found in those professions that require no expertise, such as maintenance workers and cleaners, carriers, warehouse workers, construction workers, etc. Huge Roma presence in the informal economy (83.5%) in relation to the total population (34.9%) also speaks about the high vulnerable employment of Roma in the labour market, considering the quality of jobs in the informal economy.

A particular problem of unemployment among Roma is its long-term character. A large number of employed Roma, once they become unemployed, remain in that status for a very long time, which may lead to their permanent exclusion from the labour market and the high risk of poverty (Krstic, Arandarenko, Nojkovic, Vladisavljevic, 2010). Finally, high unemployment rate and low participation and employment rate are the main reasons of great poverty

among Roma. Poverty of the majority of Roma is a handicap both in formal - institutional and informal network of economy. It is paradoxical but true: they are unemployed because they are poor and unskilled and they are poor because they are unemployed or do the lowest-paid jobs (Jaksic, 2009).

The Government of the Republic of Serbia, with the support of the United Nations and in connection with the Decade of Roma, adopted *the Strategy for Improvement of the status of Roma in the Republic of Serbia*, with the main goal to help this population with finding a job easier and creating opportunities for escape from poverty. The basic principles of the values underlying the Strategy include: respect, protection and fulfillment of legal rights of Roma; full and effective inclusion of Roma in all areas of social life; respect, recognition and promotion of the diversity of equal opportunities based on equal rights; preventing and combating all forms of discrimination, etc.

However, improving the living conditions of this ethnic minority does not take place uniformly. There are some improvements in the field of education and health (e.g. facilitation of procedures for enrolment of Roma children in primary schools, persons living in informal settlements and the homeless are given an opportunity to obtain identification cards and then establish a number of social welfare), but in the area of housing and employment there are almost no sizable changes (Belgrade Centre for Human Rights, 2012).

In connection with the above, it should be noted that cooperative efforts of the whole society are needed to improve the status of Roma, and thus prevent their discrimination. In order to live in one democratic and humane country, we need to accept the idea of multi-ethnicity and multiculturalism, which includes the possibility of successful adaptation and equal integration of Roma into society (Raduški, 2009).

PERSONS WITH DISABILITIES

The exact number of persons with disabilities is not known and is difficult to determine, because in many countries there are no precise data on this. However, it is estimated that 7 - 10% of the entire population has some kind of disability, or about 600 million of people. When it comes to our country, a comprehensive statistical data on persons with disabilities still lacks, and the questionnaire on the census from 2011 contained a number of questions related to disability for the first time. It is estimated that in Serbia there are more than half a million of persons with disabilities, and according to the data of the National Employment in 2007, there were only 23,202 persons with disabilities registered.

Discrimination against persons with disabilities, direct and indirect, exists in all spheres of public and private life. However, it is most evident in the areas of employment, education, access to facilities and services and housing. The status of persons with disabilities can best be seen if we take into account the high level of

unemployment, low education, poverty, political under-representation, violence, and limited access to public buildings, areas and services, which is why this category of citizens is still in worse position in relation to other citizens (Tanjevic, Miric, 2012) This is a consequence of the long period during which these individuals were exposed to unequal treatment, prejudice and marginalization in all spheres of social life. Related to this, a large number of international and national documents regulate the issue of protection of persons with disabilities and prohibition of discrimination against them.

The corpus of legislation protecting the rights of persons with disabilities in Serbia is on the rise in recent years, and several documents relating to the protection and promotion of their rights have been adopted⁴⁶. Employment and vocational rehabilitation of persons with disabilities have been regulated and important international documents in this field have been ratified. In addition, strategic documents which contain guidelines that are used for planning the employment of persons with disabilities have been adopted, and certainly the most important is the Strategy for Improving the Position of Persons with Disabilities for the period from 2007 to 2015, whose primary goal is improving the status of persons with disabilities to the position of equal citizens with all rights and responsibilities.

However, despite the above mentioned, the main problem is the lack of enforcement of the law in practice, so there is still a large discrepancy between the proclaimed and the reality. This can best be seen if we observe the field of employment and labour relations. The overall unemployment rate of persons with disabilities is three times higher than in the general population, and according to the data of the World Bank⁴⁷: only about 13% of persons with disabilities are employed in Serbia; additional concern is the fact that 10% of them is employed in the NGO sector (mostly in the organizations of persons with disabilities), and only 1% in economy and public sector. This low percentage of employees with disabilities in public sector certainly affects their social inclusion, because those workplaces that create public policy are not available for persons with disabilities, and therefore, they are not able to significantly affect it and take part in making important state decisions that concern them, too.

There are a lot of reasons for this situation, and the most important are: lack of access to jobs, lack of interest by employers to increasingly use capacities of this group of people, prejudice, lack of psychosocial support programs in the community, and especially, the low educational level of persons with disabilities. However, nearly half of the persons with disabilities registered with the National Employment Service have primary education, 349 have a college diploma and 259 persons have a university diploma. According to the author, there are a lot of

⁴⁶ *The most notable among them are: the Law on Prevention of Discrimination against People with Disabilities, the Law on Professional Rehabilitation and Employment of People with Disabilities*

⁴⁷ *See the Draft Report on the Implementation of the Convention on the Rights of Persons with Disabilities in Serbia, <http://www.ljudskaprava.gov.rs/vesti/nacrt-o-primeni-konvencije-o-pravima-osoba-sa-invaliditetom>, access 2nd May 2013*

reasons for this educational status of persons with disabilities, but the most important are: families do not sufficiently encourage persons with disabilities to be educated and so gain a better professional competence, their own lack of interest in education, lack of access to education facilities as well as poor implementation of inclusive education (Tanjević, Mirić, 2012).

Another problem that complicates the realization of many of the rights of persons with disabilities, particularly those related to the field of work is the lack of access to public facilities and areas that would allow and ensure the smooth movement and access for people with disabilities. Even in cases where there is a positive (single) example of an adapted workplace, there is a problem of transportation from home to the workplace or there are often prejudices of the environment that are difficult to fight with (Stanimirov, Jablan, 2009). Unfortunately, such examples are often perceived as seeking special privilege of a few, although it's actually an investment for everyone, because persons with disabilities significantly contribute to the national economy, costs of disability benefits are significantly reduced by their employment, and most importantly, employment is an opportunity for their active participation in society.

An interesting picture of the position of persons with disabilities in Serbia is provided through the information from the regular annual report on the work of the Commissioner for Equality for the year 2012. According to these data, most complaints in 2012 related to discrimination on grounds of disability - 76 (19.2%). From these complaints, it is possible to conclude that discrimination against persons with disabilities is still present in almost all areas of social life, where 20 complaints were filed because of discrimination on the basis of disability while providing public services or when using facilities, 15 complaints were related to proceedings before public government, while 14 complaints were related to discrimination on the basis of disability in the areas of labour and employment⁴⁸.

There is no doubt that, in the sphere of the exercise of the right to work, many physical barriers limit the abilities of persons with disabilities. Therefore, modification and adaptation at a workplace are needed, so the enjoyment and exercise of the right to work could be guaranteed to these people. However, physical barriers, which are the most frequently mentioned obstacle to the lives of persons with disabilities, can be overcome most easily, while the most difficult obstacles are the ones that come from people.

⁴⁸ Regular annual report of the Commissioner for Protection of Equality for the year 2012, available at the address <http://www.ravnopravnost.gov.rs/lat/izvestaji.php?idKat=16>, access on 12th April 2013

WOMEN

Women's human rights are indivisible part of universal human rights and they must be guaranteed, respected and protected in accordance with all international documents. Therefore, it is very important to identify and prevent discrimination against women, particularly in cases of direct or indirect discrimination.

Current political and economic trends exacerbate women's poverty and exposure to a variety of social and economic problems. It also follows from the data of the UN documented in numerous reports which include, inter alia, the following conclusions about the existence of systematic discrimination against women: women are the last to be hired and the first to be fired; they have a secondary role in the decision-making process; no one helps women with the housework; they are assigned a stereotype of a second-class social role; their intelligence and abilities are underestimated; women are considered to be the weaker sex; women earn lower wages than men; they are limited by inadequate capacity of child and the elderly care services; it is "natural" for them to stay at home; their contribution to economic production is not recognized; women are victims of sexual blackmail and exploitation in the workplace; they are economically marginalized; women are professionally discriminated and stripped of leadership positions, etc. (Mrsevic, 2005). Moreover, according to the UN data, women do two-thirds of the world's work, earn one-tenth of the world's income and own less than 1% of global assets.

Unfortunately, it was believed for a long time, and some even believe today, that the differences in social status and roles that men and women have are given to them because of their gender and that they are natural. Thus, for example, some believe that the division into men's work and women's work is natural because a woman bears children, so it is natural that she takes care of them, and a man is physically stronger, so it is natural for him to be the head of the family, to earn more money and to make decisions. It is clear, however, that there is nothing natural in this kind of division of work, and that it is not the result of biology, but social circumstances (Petrusic, Beker, 2012).

Causes of economic inequality of women are deeply rooted in the division based on gender in a work process, both in public and private sphere, and the absence of changes in these roles in the family along with their changes in the market and economic trends. Women are constantly on low positions, poorly paid jobs, with little opportunity for advancement, and over-represented in the informal economy (Tanjevic, Cilerdzic, Miric, 2012). Such economic inequality affects gender differences in personal income and earnings, which directly increases the vulnerability of women, especially single mothers. Finally, social marginalization and lack of resources increase the risk of poverty among multiply discriminated and marginalized women groups (Roma women, persons with disabilities, refugees, internally displaced persons, single mothers, etc.), and these women also have additional difficulties in the labour market.

Industry sectors where mostly women work are the lowest paid and least valued, since women are employed primarily in the areas of education, health and social care, trade, financial activities and manufacturing. Even in those sectors management personnel is mostly male.

The burden of women's work in private sphere and prevailing attitude of society that politics is not for women affects de facto limited access to management and decision making. Therefore they do not have enough opportunities to influence decisions which would improve their position. Even when they are on tops of pyramids, economic or political, women are often "in a shadow without a real opportunity to reach the very top, and in order to get to the top, women are forced to become" one of them "(Blagojevic, 2010). In fact, women in transition often lack basic funds and informal networks that are engaged to achieve social promotion and to win leading managerial positions. That is why there is an argument that women can advance to a certain level, can occupy positions of closest associates of managers, but positions of directors, top managers, ministers and the like are mostly reserved for men. Of course, there are exceptions, but they are not so much expressed to be able to refute this assertion.

Bearing in mind a great contribution of women to the welfare of the family and the development of society and in order to eliminate discrimination against women in the acquisition and exercise of rights and freedoms in the political, economic, cultural, civil and social field, the United Nations adopted Convention on the Elimination of All Forms of Discrimination against Women in 1979. Also, in comparative law, special laws on prohibiting discrimination on the basis of sex are often adopted in order to prevent discrimination against women, e.g. in the UK, Denmark, Japan, etc.

In our country, this is done by adopting the Law on Gender Equality⁴⁹, which defines the prohibition of discrimination on the grounds of gender and rights for both sexes in the fields of employment, social security and health care, family relations, political and public life, education, culture, sports and judicial protection. The law prohibits all forms of direct and indirect discrimination, guarantees gender equality, provides special measures to achieve gender equality and regulates judicial protection against discrimination based on sex. Also, in 2009, National Strategy for Women's Empowerment and Promotion of Gender Equality was adopted. This document establishes a comprehensive and consistent national policy with the goal of eliminating discrimination against women, improving their status and integrating the principles of gender equality in all areas of system activity, as one of the elements of modernization and democratization.

However, despite the fact that Serbia has laws that support gender equality, statistic data and conducted research show that there is still an unequal position of women compared to men in political and economic life, particularly in the labour market, and that a lot of space remains where women are going to face a hard and

⁴⁹ *Official Gazette of the Republic of Serbia, no. 104/2009*

long way to fight for equal status with men. In this regard, it is important to understand that the issue of women's equality exists as a problem and a task of the society, that applies to both public and private life, and that it should never be an overlooked or superfluous issue in the society. It should be known that the empowerment of women and promotion of gender equality contributes to the development of the whole society.

PROHIBITION OF DISCRIMINATION ON A NATIONAL LEVEL

The Constitution of the Republic of Serbia⁵⁰ stipulates the equality of all citizens, and prohibits any discrimination, establishes that everyone is equal before the Constitution and the law, and that everyone has the right to equal legal protection without discrimination. Accordingly, the Constitution prohibits any direct or indirect discrimination, particularly on the basis of labor, national or social origin, culture, language, age or mental or physical integrity. Also, the Constitution stipulates that human dignity is inviolable and that everyone is obliged to respect it, that physical and psychological integrity is undivided and that no one can be subjected to torture or to inhuman or degrading treatment (Article 23, paragraph 1 and Article 25 of the Constitution).

These and numerous other provisions of the Constitution were the basis for the adoption of Anti-discrimination law. In addition, the obligation of passing this law also stems from the respect for the obligations that our country has taken over the ratification of international agreements relating to the guarantee of human rights and freedoms adopted by the United Nations, the Council of Europe, the ILO and other organizations.

As Serbia became a member of the Council of Europe in 2003, it is also a signatory to the European Convention for the Protection of Human Rights and Fundamental Freedoms, which came into force on 3rd March 2004. Prohibition of discrimination is provided by Article 14 of this Convention and by Protocol 12 which goes with the Convention. Considering the above, Serbia is committed to realize every right that its laws guarantee without discrimination of any kind.

A number of other laws contain anti-discrimination regulations. The Law on Vocational Rehabilitation and Employment of Persons with Disabilities (2009) is one of the most important legal documents which aims to promote employment and encourage creation of conditions for equal participation of persons with disabilities into the labour market through vocational rehabilitation and other measures such as the obligation to employ persons with disabilities, establishing and conducting business of enterprises for professional rehabilitation and employment of persons with disabilities and other special forms of employment and work opportunities of persons with disabilities. The law stipulates that all enterprises with 20 to 49

⁵⁰ *Official Gazette of the Republic of Serbia, no. 98/2006*

employees are required to hire a person with a disability, and companies with 50-99 employees at least two persons with disabilities, while, for every additional 50 employees, companies are required to employ one more person with disabilities. In addition to these measures of employment, the Law also provides measures of active policy of employing people with disabilities which are focused on increasing motivation, employment and self-employment of persons with disabilities such as: wage reimbursement to employers for a period of 12 months who employ a disabled person with no work experience, or a disabled person who begins to work for the first time, and / or reimbursement of appropriate costs of adapting the workplace and work conditions to employers who employ a person with disabilities under special conditions. The law also provides specific forms of employment and work opportunities for disabled persons in the form of organizations such as enterprises for vocational rehabilitation and employment of persons with disabilities, employment centres and social enterprises and organizations. However, the problem arises when the existing legislation need to be applied. Due to the lack of professional qualification of persons with disabilities caused by their low educational status and still existing prejudices among employers about work performance and capabilities of persons with disabilities, employers usually decide to settle their obligation provided by this Law in other ways (by paying penalties or signing contracts on business cooperation with the companies that employ persons with disabilities). Some employers believe that the state has unwillingly entered the implementation of the Law on Vocational Rehabilitation and Employment of Persons with Disabilities⁵¹, which of course cannot and must not be an excuse for shortcomings in its implementation, which resulted in a small number of employed persons with disabilities.

The Law on Health Protection (2005) prohibits discrimination in the provision of health services by any personal characteristic. The Law on the Foundations of the Education System (2009) provides that all educational institutions in Serbia prohibit discrimination based on racial, national, ethnic, linguistic, religious or gender identity, physical and psychological characteristics, disability, health status, age, social and cultural background, economic status, political orientation and other grounds established by law. The Act on Churches and Religious Communities (2006) guarantees the right to freedom of thought, conscience and religion and prohibits religious discrimination, providing that no one can be harassed, discriminated or privileged because of their religious beliefs, belonging or not belonging to a religious community, participation or non-participation in worship and religious practices and the use or non-use of guaranteed religious freedom and rights. The Labour Law (2005, amended in 2009), prohibits discrimination against employees and job seekers based on any personal capacity, and that is in terms of employment conditions and selection of candidates for a particular job, working conditions and all rights from employment, education, training and development,

⁵¹ See the article available at the address <http://www.politika.rs/rubrike/Beograd/Grlom-u-paragrafe.lt.html>, access on 24th August 2012

promotion, and termination of employment. The law expressly provides that the provisions of the contract of employment establishing discrimination based on any personal capacity are invalid.

One of the most important and most effective ways to prevent discrimination is certainly a criminal- law protection. In this regard, discrimination is a criminal offense under the Criminal Code of the Republic of Serbia (Art. 128, 317 and 387). A prison sentence of up to three years is provided for the persons who deny or restrict the rights of citizens by the Constitution, laws or other regulations or by-laws or give privileges or benefits on the basis of national or ethnic origin, race or religion, or lack of such membership or because of differences in political or other opinion, sex, language, education, social status, social origin, property or other personal capacity. Article 387 of this law prohibits and criminalizes racial and other discrimination and provides penalties for the promotion and incitement to hatred, violence and discrimination (paragraph 4) and public threats to commit offenses against the person or group of persons on the basis of their personal characteristics (paragraph 5). The same article criminalizes the dissemination of ideas of superiority of one race over another, propagation of racial hatred or incitement to racial discrimination, as well as persecution of organizations or individuals for their commitment to the equality of people (paragraphs 3 and 2).

Finally, a separate and independent body that will have a significant role in the fight against discrimination has been set up – the Commissioner for Protection of Equality. The Commissioner's powers are many and very broad, which should ensure a successful fight against discrimination and prevention of discrimination to this new independent body. The law also provides a special judicial proceeding to protect citizens from discrimination. Also, there are sanctions for discriminatory behaviour.

CONCLUSION

In terms of the protection of especially vulnerable groups from discrimination, existing legal framework in Serbia provides solutions that are relatively in line with European regulations. However, the main problem is the lack of implementation of these solutions in practice. This is also confirmed by the fact that discrimination against certain vulnerable social groups is still very expressed. Different cases of discriminatory treatment in Serbia are happening almost daily, and the presence of strong prejudices and stereotypes hinders the realization of the rights of particularly vulnerable groups-members of ethnic minorities, women, children, the elderly, LGBT population, persons with disabilities, internally displaced persons and refugees, and the like.

The non-participation of vulnerable groups in decision-making and in economic, civil, social and cultural life represents weakness of the community, suspension of the process of their integration and denial of human rights. On the other hand, as mentioned categories are most affected by the unemployment problem which has become a big issue in the last few decades and the reason why many of them live under the poverty line, we need active policies and measures on the labor market, which should contribute to better social inclusion and reduce social marginalization of vulnerable groups in Serbia.

The above requires a greater commitment of public authorities, in order to ensure a full implementation of the law, as well as a high level of democratic culture which should ensure identification of discrimination cases, and all of that with the aim to create the conditions for all citizens to have equal opportunities for a dignified life (Kosanović, Gajin, Milenkovic, 2010). This further implies a broad mobilization in order to develop tolerance and be accepted as a common value in society. Finally, the prevalence of discrimination in any area and not responding to discrimination is a measure of the inability of the community to have civilization consciousness that a man should be treated like a man (Vodinić, 2008).

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PERSONAL INSOLVENCY- AN ENTREPRENEUR'S PERSPECTIVE IN SERBIAN LAW

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Abstract: Personal insolvency, in terms of a possibility of initiating insolvency proceedings against natural persons, represents a new concept in Serbian law, for both the legislation itself and the public. Having in mind official statistical data that report an increasing trend in credit indebtedness not only for businesses but for natural persons as well, followed by an increasing trend in late payments, the Serbian legislation will inevitably have to face the challenge of implementing this concept.

This article outlines the principal characteristics of this concept aiming to introduce to broader professional community advantages of its implementation, not only for business entities by ensuring legal security but for the society as a whole, by applying a social method. Furthermore, using a comparative law method, the authors sought to provide some basic guidelines for future legislative challenges in terms of regulating entrepreneur insolvency, which the Serbian legislators will inevitably face, taking into consideration experiences of the considered reference countries, particularly the respective regulations in countries in the region.

Key words: Personal Insolvency, Bankruptcy, Entrepreneur, Fresh Start Policy, Debt Relief

JEL classification: K35

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INTRODUCTION

Personal insolvency, in terms of a possibility of initiating insolvency proceedings against natural persons, represents a new concept in Serbian law, for both the legislation itself and the public. Having in mind official statistical data that report an increasing trend in credit indebtedness not only for businesses but for natural persons as well, followed by an increasing trend in late payments, the Serbian legislation will inevitably have to face the challenge of implementing this concept.

There is an increasing interest in understanding how entrepreneurship can create value in a society. Much of this interest focuses on the role of risk taking by entrepreneurs and managers in creating economic value and, in particular, how market entry barriers for entrepreneurs can be lowered (Busenitz, Gomez, & Spencer, 2000; Djankov, La Porta, Lopez-De-Silanes, & Shleifer, 2002). However, relatively little work has been done on lowering exit barriers, such as bankruptcy laws.

Corporate bankruptcy is very common. Indeed, hundreds of thousands of firms around the world declare bankruptcy every year.

Despite the rate of corporate bankruptcies, the legal procedures in relation to bankruptcy vary significantly across countries. Some countries define only a few types of bankruptcy and provide limited protection for entrepreneurs and managers of bankrupt firms. Other countries have many more bankruptcy options, which vary in the extent to which they limit personal liability of entrepreneurs and managers of bankrupt firms.

In this paper we define entrepreneurs as individuals who combine resources in new and risky ways and who have the potential to add value to society through these endeavours. Our key question is "Is entrepreneur-friendly bankruptcy law needed in the Serbian law?"

PERSONAL INSOLVENCY

Each business arrangement which includes establishment of a certain creditor-debtor relation carries some realistic risk that the debtor may not be able to fulfil their liability. In order to achieve the fundamental principle of civil and international right "*pacta sunt servanda*" and preserve legal safety at the same time, the law introduced the concept of bankruptcy as a form of settlement with creditors in a situation where debtor becomes insolvent i.e. unable to pay.

When initiating bankruptcy proceeding, it is not relevant whether the debtor is a natural or legal person, because that is a universal procedure which applies to all subjects unable to fulfil undertaken obligations.

The past Law on Bankruptcy Proceedings (Bankruptcy Law, Official Gazette of the Republic of Serbia, No. 84/ 04) stipulated the possibility of initiating

bankruptcy proceedings against entrepreneurs. Thereby the Law opened up the possibility of initiating bankruptcy proceedings against natural persons as well. *Ratio legis* of such solution can be found in the very definition of the private entrepreneur. According to relevant regulations, an entrepreneur conducts activities in order to make profit and achieves either positive or negative results in his/hers business activities. With regard to that, the entrepreneur is either able or unable to fulfil his/her business liabilities, i.e. to reconcile his/her debts with creditors.

Equality before the law requires equal treatment of all parties engaged in commercial relations regardless of them having legal or natural person status.

This is a new legal solution with regard to the previous Law on compulsory settlement, bankruptcy and liquidation. However, bankruptcy of a natural person is not a novelty in our bankruptcy law. Bankruptcy proceeding against natural persons was known concept in the bankruptcy law of the Kingdom of Yugoslavia in 1929. In line with paragraph 67 of that law, bankruptcy shall be initiated over the property of debtor unable to settle payments. Apart from that, paragraph 68 allowed the possibility to initiate bankruptcy proceeding over an over-indebted succession. That way, bankruptcy ability was equalised with legal capacity and the possibility was allowed for bankruptcy proceeding to be commenced against natural persons (Slijepčević, 2006). However, our Law on Bankruptcy Proceedings does not allow entrepreneurs to declare bankruptcy as natural persons, nor in relation to other natural persons. Previous bankruptcy procedure provided for commencement of bankruptcy proceedings only against entrepreneurs as natural persons, and thus the category of bankrupt debtor is needlessly limited as other natural persons were exempted, while business practice speaks in favour of expanding the concept of bankrupt debtor to all natural persons regardless of whether they are entrepreneurs or not. Unfortunately, existing legal solution does not allow initiation of bankruptcy proceedings against individuals, but only against legal persons (Bankruptcy Law, Official Gazette of the Republic of Serbia, No. 104/09).

By introducing the category of individual bankruptcy, non-commercial entities, which enter carefully into business arrangements, would become salient and consequently important actors in economic activities. In addition, the risk of debtor becoming insolvent is in bankruptcy proportionally distributed among all creditors thus preventing that claims of some creditors are entirely satisfied while others do not receive any settlement whatsoever, which is a realistic danger in regular enforcement proceedings. Bankruptcy of natural persons foresees somewhat different procedure than bankruptcy of legal persons, and introduces some new concepts such as: exemption from liability to settle outstanding contractual obligations, right to exemption of certain matters and rights from execution in bankruptcy proceeding, etc.

Also, the expansion of consumer loans implies introduction of this type of bankruptcy, as when consumer loans become more widely available, and so under very favourable conditions, it is logical to have an increased risk of inability to settle due payments, i.e. in this case to repay the loan, which is the most frequent case in this type of bankruptcy precisely in those countries that have extremely developed credit economy, especially in the United States of America.

BASIC PRINCIPLES OF PERSONAL INSOLVENCY

In case of personal bankruptcy it is possible to differentiate two objectives: the first, related to substantive law, concerning only debtor and being precisely *diferntia specifica* with regard to the regular bankruptcy, a fresh start for the debtor and the second one, related to procedural law, concerning only the rights of creditors, i.e. collective, equitable, fair and compulsory satisfaction of unsecured creditors.

In personal bankruptcy, in terms of the rights of creditors and debtors in bankruptcy, a tendency to limit the rights of the creditor for the benefit of the debtor is noted, which is in line with the guiding idea of this procedure, rehabilitation of the debtor, while that is not the case in corporate bankruptcy, where the rights of creditors prevail.

The fresh start principle for bankrupt debtor means a new beginning, and economic re-birth. Considering the nature of this principle it is hard to imagine it being applied in corporate bankruptcy, since it would be quite absurd as the main consequence of legal entity declaring bankruptcy is that it ceases to exist as such and loses capacity of a legal entity.

In corporate restructuring (Slijepčević & Spasić, 2006), as an alternative to bankruptcy, we note certain similarities with this principle, however even though the goal of restructuring is improvement of an insolvent company, through preparation and application of the restructuring plan, that is not an actual bankruptcy because it is used when the restructuring plan fails or creditors achieve quorum and bankruptcy is declared. Economic improvement of a natural person subject to bankruptcy proceeding is precisely the main objective and we may say consequence of personal bankruptcy, and it represents the measure applied due to bankruptcy of natural person.

Achievement of this principle would not be possible without the following most important concepts: debt relief, exemption from execution and limitations of the bankrupt debtor.

When personal bankruptcy specifics are taken into consideration, reflected in enabling economic recovery to insolvent debtor, the question is how to determine who will be able to benefit from this concept in order to avoid significant misuses. At a first look, there are several possibilities to bend the law, so if no clear criteria are established in terms of determining who may apply for personal bankruptcy, individuals will enter into financial arrangements carelessly, with no rational criteria in mind, since they could at any time declare bankruptcy, seek debt relief and thus, after short period of time, re-enter the market and repeat their irrational behaviour which would then reflect to the entire economy of the respective country. That is why the laws of certain countries, where personal bankruptcy is a possibility, introduce terms such as "fair but unfortunate debtor" and similar. In addition, quite liberal personal bankruptcy systems face with uncontrolled credit indebtedness of individuals, and the risk of uncollected debts is borne by the creditors. The consequence is quick return of debtors to the credit market, new indebtedness and a closed circle of irrational spending which would soon result in

crash of national economy. Extreme of this concept may only exist at a theoretical level, that is why solutions are created and, depending to a great extent on the economy of a country, certain limitations are applied such as: determining deadline for repayment of debts. Upon the expiry of the deadline, other debts are forgiven, and by applying the already mentioned category of "fair but unfortunate debtor" the number of individuals who may use this beneficial procedure is narrowed, etc.

However, if this concept is too rigidly applied and many limitations are introduced, it in itself becomes contradictory and is no longer beneficial for the debtor, but approaches corporate bankruptcy, protecting mainly the creditors' interests, which results in negation of the basic principle of personal bankruptcy, as it is absurd to discuss the principle of fresh start for the bankrupt debtor.

By applying this principle both economic and moral goals are achieved.

Economic goals which should be mentioned are:

- stimulating the individual to remain economically productive;
- reduction of the use of social rights;
- efficient monitoring of uncontrolled need of consumers to take loans offered by creditors;
- maximising the value of bankruptcy estate;
- reduction of credit expenses and increase of availability of loans;
- preserving the integrity of contracts;
- encouraging entrepreneurship (City Bar Justice Centre, 2007)

Different countries shall, depending on who bears the risk, debtor or creditors, apply different systems of relief. Thus, theory experts who opt for the concept according to which the debtor should bear all the risk, believing that debtors have higher control over their financial activities than any creditor, will actually lead to negation of the concept of relief. On the other hand, we often cite the example of the USA, and view which considers creditors as a dominant party in the debtor-creditor relation, and thus the main carriers of the insolvency risk. There are justifications, most of all due to the fact that large creditors are indeed better equipped, before approving the credit lines, to check the potential client's credit ability, and numerous conditions which must be fulfilled prior to approval of the loan. That is precisely why large banks formed Risk departments (RISK) as one of the pillars of their lending activities with the goal to estimate the investment risk. Crisis introduced some new initiatives in the financial market, so now the focus is on establishment of strong legal departments (LEGAL RISK) having as the main goal a detailed risk assessment for biggest investments, from the legal point of view, with a tendency of its subsequent application to all loans. Taking these initiatives into consideration, investments of further funds for the purpose of restructuring, then establishment of units consisting of the best legal experts, who will also earn the most, which additionally stresses the their responsibility level, it does seem that in competition between creditors and debtors, we choose creditors as the dominant risk bearers, without further contemplation.

It should be mentioned, as illustration, that, by passing the Law on Insolvency of Business Organizations, the Republic of Montenegro adopted precisely this type of liberal relief system, whereby creditors bear all the insolvency risks of the debtor. However, as already mentioned, the extremes are only attainable in theory so there is a great number of interim, compromise solutions, which imply distribution of risk between debtors and creditors, and such models are various: obliging debtors to repay their debts to creditors during certain number of years, prescribing requirements for opening bankruptcy proceeding, authorizing courts to grant debt relief to debtors, etc.

Bankruptcy law also has a moral dimension, through its basic principle of the fresh start which makes it clear that there is a tendency for affirmation of Richard Flint's notion that human dignity is bigger and more important category than economic benefits or expenses.

If we consider debtor-creditors relations not only in terms of trust but also in terms of "good faith", their commitment to fulfil their contractual obligations and to pay their debts, the relation of moral obligation or duty is established as well. Bankruptcy must be a relief instrument for those in actual need of assistance and it must not be the means for misuse and frivolous avoidance of moral and contractual obligations. Moral standards are not the only constant, unchangeable category. On the contrary, they are in constant interaction with the society and so they monitor development of the economy on certain territory. Morality, as a fluid category generates different views on personal bankruptcy depending on the historic period, and thus it now represents the basic instrument for protection of human dignity in the bankruptcy proceedings against natural persons, that were once considered disgraceful and morally unacceptable category.

This ethical dimension consists of two related obligations:

- obligation that society has to the consumer and
- obligation that consumer has to the society.

As to the obligation of the society to the consumer, preservation of human dignity is especially emphasized and the role of concept debt relief is precisely achieving that protection. Also, through exemption from execution, debtor is guaranteed existential minimum, and the law prohibits execution which would jeopardize debtor's ability to satisfy their basic human needs and those of their family.

Correlative obligation of consumers to the society has corrective function, since ideal society is a form of utopia, and that there will always be individuals who will try to misuse the law. This obligation is focused on the obligation of consumer to act responsibly towards other members of society, predicting responsibility (sanction) due to breach of some behavioural norm. The aim is to establish and preserve acceptable behavioural standards in economic business activities, such as: principle of conscientiousness and honesty, prohibition of misuse of the law, duty to fulfil obligations, prohibition of causing damage.

In order to discuss introduction of personal bankruptcy system in the first place, certain requirements must be met, from economic as the prevailing ones to social to cultural.

It is equally wrong to leave this matter unregulated, which is precisely what our legislator is doing, or to regulate it in a wrong way not taking into consideration the actual economic, social and time factors in a given society.

Theory has recognised and separated several conditions for successful implementation of personal insolvency, and they are:

- positive attitude towards entrepreneurship;
- increase of consumption in society;
- increase of individualism;
- awareness of the necessity of organising and consumer protection;
- development of legal and entrepreneurial culture, and thus development of socially responsible market;
- deregulation of financial and credit business relations;
- development of social legislation;
- development of theory of personal bankruptcy (Ivanjko, 2008).

Principle of collective, equitable, fair and compulsory satisfaction of unsecured creditors represents the undisputed principle of bankruptcy law and there is no need for it to be applied in the field of bankruptcy over property of natural persons.

When debtor is unable to effect payments of his/her obligations, the creditor may initiate enforcement procedure in order to collect their claims (this applies to entrepreneur in our system). However, considering the maxim in force in enforcement procedure *prior tempore potior iure*, meaning "faster in time, stronger in right", it is possible that the first creditor to apply for settlement of their claims is completely satisfied from the debtor's estate which may result in lack of funds to be distributed to other creditors who filed their application later. If debtor's estate lacks funds for all creditors to be satisfied, the law defined different form of debt collection, the bankruptcy proceeding. In such situations commencement of bankruptcy proceedings is better solution than enforcement procedure since it applies the principal of equality of creditors, which is somewhat relativized by existence of bankruptcy settlement order, but on the other hand, within the same order, equality is guaranteed (In the same bankruptcy settlement order the creditors are paid proportionally). The need for bankruptcy proceeding to be opened so that bankruptcy rules can be applied to all creditors is evident, since conversely those creditors not included in the bankruptcy procedure would, for example, collect all their debts through enforcement procedure and there will be no funds left for satisfaction of other creditors participating in the bankruptcy proceedings against the debtor. Therefore, all principles applied to the personal bankruptcy proceedings are also applied to corporate bankruptcy, such as the principle of collective settlement of unsecured creditors, principle of process economy, principle of universality, etc.

ENTREPRENEUR AS ACTOR IN PERSONAL INSOLVENCY PROCEDURE

Term entrepreneur comes from the French language and it is related to the business activity. The term was first used by the French theorist Kantinijon in 1755 in his discussion of the nature of trade, where lessees of land, merchants, craftsmen, painters, builders, doctors, lawyers, etc. in order to highlight their business risks.

According to our Law an entrepreneur is an individual who is registered to carry out economic activities, and for all liabilities incurred in the course of business fits their assets. Therefore, it is necessary to underline that our legislators do not distinguish between entrepreneur's personal property and property intended for a registered business.

When an entrepreneur becomes insolvent, he/she may be subject to enforcement proceedings but not bankruptcy. Bankruptcy procedure is reserved only for legal entities. When registering his/her business, the entrepreneur is not required to pay the initial capital, or even to provide confirmation that he/she owns any property. This is essential for understanding the main problem that arises when entrepreneur becomes insolvent. So, on one hand the legislator defined that entrepreneur is liable with all his/her assets in case of insolvency, and on the other hand, he/she is not bound to actually possess any asset when registering his/her business. This is the reason why it typically occurs that when entrepreneur becomes insolvent, there are no assets from which his/her creditors may collect claims.

When it is impossible to settle with creditors due to lack of assets, it seems that business entities cautiously enter into business and financial arrangements with entrepreneurs.

This further complicates the position of entrepreneurs as more and more credits and loans become unreachable. Because of the increased risk of failure to repay the loan, banks and other financial institutions approve fewer loans to this category of business entities. The risk that even a partial payment of creditors will be impossible creates the overall legal uncertainty that has an effect on the economy in general. All this goes in favor of implementing personal insolvency procedure (entrepreneur) which would improve legal safety and provide even partial satisfaction of creditors.

A personal bankruptcy law that allows “fresh start” after bankruptcy has reduced the individual risk involved in entrepreneurial activity. On the other hand, as risk shifts to creditors who recover less of their loan after debtor has declared bankruptcy, lenders may charge higher interest rates or ration credit supply, which can hamper entrepreneurship. Both aspects of a more forgiving personal bankruptcy law are less relevant for wealthy entrepreneurs who still risk losing their wealth, but tend not to face higher interest rates because they provide collateral security. As income from entrepreneurial activity is considerably more unpredictable than income from wage employment, entrepreneurship implies a

greater risk of bankruptcy. For entrepreneurs owning unincorporated businesses, business debts are personal liabilities as we have previously said. Personal bankruptcy law can, therefore, be expected to play an important role in the decisions of an individual to become and to remain an entrepreneur. Stimulating entrepreneurship is now a major policy objective in many countries with the intent to promote innovation, competitiveness, and job creation. How may one expect to stimulate entrepreneurship when there is no legislative regulating personal bankruptcy? From an economic perspective, the main policy leeway in personal bankruptcy law is between more creditor-friendly and more debtor-friendly procedures. The former ensures that creditors recover as much of the funds extended as possible in case of a debtor's bankruptcy ("absolute priority rule" of creditors over equity holders); while the latter provides discharge of debt when certain requirements are fulfilled, thus giving the bankrupt the chance for a fresh start. Such "fresh start" policies are widely considered to promote small business entrepreneurship, because relief from debt burden allows entrepreneurs to start new business after experiencing failure. This is the main argument laid out by Germany's Merkel led government, which intends to shorten the time period after which debt relief may be granted, after filing for personal bankruptcy, from six down to three years.

More liberal bankruptcy law could generate two opposing effects on entrepreneurial activity. On one hand, it may make entrepreneurship more attractive, as entrepreneurs do not risk losing as much wealth and future income in case of bankruptcy. On the other hand, however, risk is shifted to lenders, who recover less in case of debtor declaring bankruptcy, and they may react by charging higher interest rates or rationing credit supply. This may hamper entrepreneurship, which depends on capital (Fossen, 2011).

Historically, entrepreneur-friendliness and bankruptcy laws are like an "oxymoron," because bankruptcy laws are usually harsh and even cruel. The very term "bankruptcy" is derived from a harsh practice: In medieval Italy, if bankrupt entrepreneurs failed to pay their debts, creditors would destroy their trading benches. The Italian word for broken bench, "banca rotta," has evolved to become the English word "bankruptcy." The pound of flesh demanded by the creditor in Shakespeare's *The Merchant of Venice* is only a slight exaggeration. The world's first bankruptcy law, passed in England in 1542, considered a bankrupt individual a criminal and punishments ranged from incarceration to death sentence (bankruptcydata.com, 2008).

Around the world, being entrepreneur-friendly is a relatively new concept in bankruptcy lawmaking, which is in radical contrast with traditional bankruptcy laws and practices that generally favored the creditor and were harsh toward the bankrupt (Halliday & Carruthers, 2007). Recently, many governments around the world have increasingly realized that entrepreneur-friendly bankruptcy laws cannot only lower exit barriers, but also lower entry barriers for entrepreneurs.

We can distinguish six dimensions of entrepreneur-friendliness:

1. the availability of a restructuring bankruptcy option,
2. the time spent on bankruptcy procedures,
3. the cost of bankruptcy procedures,
4. the opportunity to have fresh start in liquidation bankruptcy,
5. the opportunity to have automatic stay of assets during restructuring bankruptcy, and
6. the opportunity for entrepreneurs and managers to remain on the job after filing for bankruptcy (Peng, Yamakawa & Lee, 2009).

PERSONAL INSOLVENCY IN SERBIAN LAW

The current Law on Bankruptcy of the Republic of Serbia (Law on Bankruptcy, Official Gazette of the Republic of Serbia, No. 104/09) defines that bankruptcy proceedings may be initiated only against legal entities (“This law governs the manner and conditions of initiating and governing bankruptcy proceedings against legal entities.”, Law on Bankruptcy, Official Gazette of the Republic of Serbia, No. 104/09). Hence, our legislator, with 2009 bankruptcy law reform, erases entrepreneur as a potential actor in bankruptcy proceedings. The possibility of opening bankruptcy procedure against entrepreneurs was introduced in the Serbian law by the Law on Bankruptcy Procedure (Law on Bankruptcy Procedure, Official Gazette of the Republic of Serbia, No. 84/ 04) adopted in 2004 (1861 Law on Bankruptcy Procedure and 1930 Law on Bankruptcy regulate consumer bankruptcy. From 1953, when Decree on Cessation of Business and Activities was passed until today our legal system does not regulate bankruptcy of a natural person not conducting business activities). That Law also introduced the possibility of singular management of the entrepreneur in bankruptcy. This solution was at that moment interpreted by the law theory that advocates the implementation of the personal bankruptcy system as small but valuable step toward contemporary bankruptcy laws. The fact that natural persons eligible for bankruptcy procedure are only entrepreneurs and the lack of the concept of debt relief were criticized, and the need for future reform of singular management of the entrepreneur was stressed. The 2009 reform has not continued to further implement and improve the mentioned concepts but, on the contrary, the possibility of opening bankruptcy against natural persons was erased from the Serbian bankruptcy law.

On the other hand, academic community shows increasing interest in the possibility of opening bankruptcy procedures against natural persons. The data collected by the Credit Bureau of the Association of Serbian Banks (UBS, 2012) show an increasing trend in consumer debts, which is a consequence of many individuals taking bank loans in order to be able to meet their basic needs. Consumer credit indebtedness increased in July of last year (2012) by 1.3 percent in relation to the previous month, amounting to the debt total of 609,84 billions of dinars. Credit indebtedness of entrepreneurs increased in July by 7.7 percent which resulted in the total debt of 98,57 billions of dinars. If we compare the data of the Credit Bureau of the Association of Serbian Banks from July

2011 with July 2012 data we will note that credit indebtedness of both economy and citizens significantly increased, as well as increase in late payments (In July of 2012, late payments were registered at 4.3 percent of citizens.).

Consumer loans enable immediate consumption of goods and services that will be paid for by future income. As long as income is constant and sufficient, there are no problems. The question is how to solve numerous problems of insolvent citizens who are no longer able to repay their debts due to job loss or illness. In case of mortgage loans, the loan is secured by real property through the use of mortgage note, so the bank is protected and may settle the debt by selling the property. However, the situation on the housing market forces commercial banks not to sell the property (low selling rates, low market value) but to seek alternative methods such as various consumer debt restructuring plans. In case of cash and consumer credits such collaterals do not exist and in case of debtor's inability to continue to repay their debts, both banks as creditors and debtors are facing big problems. The way out may temporarily be found through various forms of credit restructuring which actually in a very perfidious way drags debtors into a vicious circle of perpetual indebtedness. Insolvency most commonly occurs as a result of irresponsible and reckless behaviour of individuals, to an extent due to lack of understanding of how credit economy works, but insolvency may also occur as a result of sudden job loss, illness or illness of one's next of kin, natural disasters that destroy one's property, etc. It is necessary to find solution for those individuals who are not objectively guilty for being in such position, which would in such extraordinary cases help preserve their dignity and prevent their social stigmatization. It is in the interest of legal security to provide for a proceeding in which the creditors would collect at least part of their claims, in cases in which enforcement procedures prove inefficient. In case of enforced collection of claims, all parties lose: creditors lose because they most commonly cannot entirely collect their claims, debtor loses because in such situation it is quite clear that he/she will hardly get back on his/her feet, and state loses by gaining one more user of the social assistance system. Consumer insolvency may actually have far-reaching consequences. A person who is not able to meet his/her financial obligations will be under great stress most of the time, which may cause physical illness and psychological disorders and it is quite evident that persons in such position may opt for illegal ways of solving their problems (criminal activities). Insolvency reflects quite seriously on the state's entire economy since such individuals will burden it with their need for social assistance and, on the other hand, will no longer be subject to taxation, thus having double impact on the state's budget (Garašić, 2011).

Economic reality warns us that the time has come for the state to start behaving responsibly, since it is obliged by the Constitution to guarantee dignity of every individual citizen (Article 19 of the Constitution of the Republic of Serbia, Official Gazette of the Republic of Serbia, No.83/06). It is necessary to start financial literacy action, gather unions' representatives, consumer associations and representatives of the competent ministry in order to find an adequate model of the fresh start concept implementation. Taking into consideration that other countries in the region regulated this matter to a lesser or greater extent, it is recommendable to consider their experience and difficulties they face in implementation phase and accordingly draft a model that corresponds to our specific economic and social circumstances.

CONCLUSION

From the age of imposing entrepreneur-hostile bankruptcy laws, countries and governments around the world have come a long way to reform their bankruptcy laws to make them more entrepreneur-friendly. Strengthening market-supporting institutions to stimulate more entrepreneurship development is at the heart of the institution-based view of entrepreneurship.

Our Insolvency Law does not recognize entrepreneurs as potential parties to this procedure, as it is defined that actors in insolvency procedure can only be legal entities. There are two possible solutions to change the norm in order to extend the base of potential actors, as it was the case with Insolvency Law in force from 2004 to 2009, under which it was possible to start insolvency procedure against entrepreneur or to adopt a special law considering personal insolvency matter, that would regulate entrepreneurs bankruptcy as well as bankruptcy of any other natural person.

In region, the situation is completely different. Montenegro, Slovenia, Croatia and FYROM have implemented provisions on personal insolvency, some only for entrepreneurs as natural persons (Montenegro, Croatia, FYROM) and others like Slovenia, being the most modern legislative model, recognizes all natural persons as potential actors in this privileged procedure.

Economic trends on the global market, recession, disruptions of the credit sector due to over-indebtedness of entities and their inability to repay their loans, all imply changes in determining users of the procedure making its expansion to all natural persons necessary. Europe offers great number of models, it is only necessary to make a collage from all the offered solutions which would in itself contain all the good sides of some of them and be in accordance with the economic, social and political circumstances of our country, since that is the only way their full implementation may be ensured.

Human dignity, in our eternally unhappy and turbulent economic surroundings, has become an endangered category that must be affirmed and protected through individual bankruptcy system.

Instruments providing second chance to individuals who, due to difficult existential circumstances and fight for survival, reached for too many loans that overburdened them and led them to a brink of disaster, must be ensured.

It is up to the legislator to establish a new system which shall function for the benefit of the society as a whole, but legal theory is responsible for understanding this matter well, both in its own country and in the comparative law as well, and for criticising the legislator in order for the best solution possible to be developed. There is not enough time for passing provisional laws, in line with the expiry date principle "from one Government session to another", but it is necessary to address this issue seriously and involve the most prominent experts in the field of bankruptcy law and diligently work on preparation of a draft of the new bankruptcy law.

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UNCITRAL AND INTERNATIONAL COMMERCIAL ARBITRATION

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Abstract: This paper, starting from the general positions, stated in the above introduction on the content of international business, the topic of paper and its purpose, shall offer, above all, a legal view of the operation, acts and texts of the Commission on International Trade Law; provide a brief explanation of the concept, subject and contents of the international trade law, and mostly present the place and role of UNCITRAL in the building of system of international trade law, with a detailed analysis of the most important acts, prepared by this Commission or those in which it has participated in their preparing with the appropriate international organizations and bodies.

Also, it shall provide a detailed presentation of issues of the international trade arbitration, as the one of priorities of the UN Commission on International Trade Law, a significant part of the international trade law and a very important factor of the efficient and legally guaranteed development of the international trade relations.

Key words: International Trade Law, International Conventions on Arbitration, International Trade Arbitration, Sources of Arbitration, Arbitration Proceedings

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INTRODUCTION

CONCEPT AND CONTENTS OF BRANCHES OF LAW DEALING WITH COMMERCIAL-LEGAL RELATIONS

There are different opinions on the concepts, which are determining commercial or business relations with a foreign element, or of global i.e. regional character (Vukadinović, R, 2005; Đurović, R, 1979; Besarović, I, 2010; Carić, S, Vilus, J, Đurđev, D, Divljak D, 2007.)

In the somewhat older professional literature, there was an opinion that International Commercial Law is the branch of law, which is regulating the international business relations. Some authors felt that the concept of “commercial law” is inadequate, wide and hardly comprehensible (Gams,1952)(Goldštajn, 1964). So, according to the German legal theory, the international commercial law is at the crossroads of international public law and international private law. It is different from the international public law because it excludes the political relations from its domain, even when such relations are commercial-political, and it is different from the international private law because its sources are of international character while the sources of the international private law are always national.

Besides, the commercial law encompasses, as its subject, also the group of narrower legal fields: company law, trade law and international trade law.

Đurović feels that the international commercial law, which he accepts as the relevant concept, consists of the general and special parts. The general part of the international commercial law studies “legal framework, assumptions and general sources of this branch of law as well as the general conditions for the establishment of commercial jobs with foreign element“. The special part of the international commercial law, which is called international business law with justification, according to the author, studies the concrete legal transactions and legal relations, originated from them: international purchase and sale, international brokerage and agency, commission jobs with a foreign element etc. The term international business law „includes in everything what represents the special part of the international commercial law“ and there is no reason not to be accepted. Đurović feels that the system of international business law consists of the trade law in the narrow sense (international purchase and sale of goods, investments, brokerage and agency, jobs of international insurance and storing etc.), international transport law (freight forwarding, international transport of goods and services, and international maritime, land and air traffic) and international financial law (payment for goods and services and money transfer).

As it can be stated, for all such legal disciplines and theoretical opinions, regardless of their names, it is characteristic that they encompass commercial legal relations and not the conflict of laws rules, which are regulating the conflict of laws i.e. regulations, which might occur in these fields. So, in this sense there is no difference between them. However, the differences originate in the subject which is

encompassed with these rules. Namely, the international business law includes all the international business relations, i.e. not just the trade –international sale, brokerage and agency etc., which are encompassed with the term of international trade law, but also the relations, which originate in relation with the international transport and international payments. However, from the other side, we should distinguish the concept of law of international trade from the international trade law in the sense that it also includes internal rules of domestic law, which are regulating the international commercial relations. The international economic law is mostly defined as a branch of international public law, which is dealing with property and utilization of natural sources, production and distribution of goods, payment and financing means, appropriate services as well as the position of those subjects, which are acting in these fields.

The sources of international business law are the international conventions and contracts, national imperative rules and indefinite standards, autonomous national and international sources – codified uniform rules, general rules of business, master agreements, usances, transactions and business customs, production and service customs, arbitration practice etc.

The international business law includes the status part, which is dealing with the subjects of the international commercial law: commercial organizations, legal position of foreigners and their protection in commercial transactions, international organizations of general and regional character, state as the subject of international business law etc.; then international commercial judiciary and international commercial arbitration. This is what we can call the general part of international business law. Some authors at the same time call this part of the international business law with other concepts or names like international economic law, international commercial law etc.

Also, the international business law is studying international business contracts – purchase and sale and service providing, international trade brokerage, international trade agency, storage of goods, insurance and quality control, freight forwarding and other forms of international transport, works performance in foreign countries etc., international payments and international financial operations – loan jobs, documentary letters of credit, clearing, securities etc. This part of international business law includes also rules on industrial property and copy rights, trade arbitrations, international insurance jobs etc. According to the presented contents, this part of international business law belongs to the international trade law, starting, above all, from the definition expressed in the UN General Assembly Resolution No. 2102 of 1966, according to which the international trade law is set of rules, which is regulating trade relations of private law nature in which various states as the holders of sovereignty are included.

Therefore, international trade law is a set of regulations and other legal rules, which are regulating trade commercial-legal relations, which originate from international goods and payment transactions. Within the international trade law there are elements of commercial law, international public and international private law. The elements of commercial law are actually making the major part of the

substantial legal contents of the international trade law. These rules mostly serve for regulation of legal status of traders i.e. commercial organizations, which participate in the international transactions as well as for regulation of contents of commercial legal jobs in transactions with foreign countries. The rules of international private law are expressed above all in the conflict of law rules, which should regulate the conflict of laws, which originates due to the existence of various laws of particular states. Nowadays, many rules of international trade law are unified by major number of bilateral and multilateral conventions, international trade customs, uniform rules of sample (representative) clauses etc. So it seems that major number of rules of the international trade law originates from the international private law, with specific characteristics, required by the special nature of trade transactions. Also, certain part of rules of the international trade law, by its nature, represent the result of the general sources of international public law – international agreements, where these sources regulate a separate field of commercial legal relations in the international transactions.

So, broadly viewed, the international trade law is included in the concept of the international business law as the separate branch of law. In spite of and independently from theoretical disputes on contents and nature of the international business law, this branch of law has developed and has been established in the practice. Parallely and following the development of the international economic relations, its substantial legal contents has been determined much more and in more clearly. Every day we have an increasing number of uniform regulations, the general trend that national regulations are harmonized with the established international rules, the international standards which are directly influencing the national legislature are being created etc.

THE SIGNIFICANCE OF THE UNITED NATIONS COMMISSION ON INTERNATIONAL TRADE LAW (UNCITRAL) AND OTHER SUBJECTS FOR REGULATION OF INTERNATIONAL COMMERCIAL LEGAL RELATIONS

Several measures have been undertaken within the OUN system for the purpose of further development of international trade law. Therefore, in 1966, the UN Commission on International Trade Law – UNCITRAL was established with task to work on building of system of international trade law, mostly by preparing and making of conventions, which shall be acceptable for all countries members, respecting at the same time the legal systems and national legislatures in the field of trade law, as well as the autonomy of will of subjects in the international commercial and above all in trade relations.

Beside UNCITRAL, the following international institutions and organizations are dealing with issues of international trade law in particular way and to the particular extent: International Bank for Reconstruction and Development (IBRD),

International Institute for the Unification of Private Law (UNIDROIT), International Chamber of Commerce (ICC), International Civil Aviation Organization (ICAO), Inter-Governmental Maritime Consultative Organization (IMCO) etc. (*Politička enciklopedija*, 1975)(*Pravna enciklopedija*, 1989).

This paper, starting from the general positions, stated in the above introduction on the content of international business, the topic of paper and its purpose, shall offer, above all, a legal view of the operation, acts and texts of the Commission on International Trade Law; provide a brief explanation of the concept, subject and contents of the international trade law, and mostly present the place and role of UNCITRAL in the building of system of international trade law, with a detailed analysis of the most important acts, prepared by this Commission or those in which it has participated in their preparing with the appropriate international organizations and bodies.

INTERNATIONAL TRADE ARBITRATION

The special attention in the work of international organizations, which have influence on legal formulation of rules of international trade law, and especially UNCITRAL, was dedicated to the international trade arbitration, which was put on the priority list already at the first session of Commission on Trade Law. The following UNCITRAL acts are of particular significance: Model Law on International Commercial Arbitration of 1985 and UNCITRAL Arbitration Rules of 1976, and particularly the Convention on the Recognition and Enforcement of Foreign Arbitral Awards. All such acts as well as the appropriate arbitral practice are enabling the important and required legal protection to the international trade transactions and its subjects, which is securing the certainty, nondiscrimination and performance of undertaken obligations in this significant segment of international commercial business.

GENERAL CONCEPT, CONTENTS AND PURPOSE OF INTERNATIONAL ARBITRATION

The international arbitration is a procedure of peaceful resolution of international disputes by one or more chosen judges (arbitrators), on the basis of agreement of the parties – states and other subjects of the international law.

A rule was established in the international public law that no state can be obliged against its will to solve its disputes with other states in the procedure of mediation, arbitration or other way of peaceful resolution (consulting opinion of the Permanent Court of International Justice in the case of Eastern Carelia).

The General Assembly of UN did not accept the proposal of Commission for International Law at the sessions in 1955 and 1958 to regulate codification of arbitral procedure by convention, of which the Commission has adopted the Draft Convention but it has adopted the above-mentioned text as the Model Law on

Arbitration. It was necessary because during the discussions two opposite and irreconcilable positions have been identified:

first, that agreement of parties is the basic condition for arbitration, not only during taking the obligation to undergo arbitration but also in each phase of arbitral procedure, and

second, which does not allow deviation from once accepted arbitration, which is after the acceptance, compulsory and strictly led under the rules of court procedure (concept of court arbitration).

Anyway, parties undergo arbitration:

1. by agreement (compromise) which is determining the subject of the dispute, way of selection of arbitrators, special rules provided to the court, place of session, official language and other things agreed by the parties, and
2. arbitration clause, which is content of particular international agreements, and
3. there is a practice of conclusion of special agreements on arbitration (institutional arbitration).

The arbitration award is the final resolution of the dispute and the parties carry out arbitral award in the good will. In case of dispute in relation with the execution of the award, the request is submitted to the same arbitration tribunal. The award is obliging only the parties to a dispute, and each of them will cover its expenses of the procedure and the tribunal expenses are divided in equal shares.

The international arbitration appears in the international private law as foreign trade arbitration. This is an institution, which, although it is not a state one, resolves the disputes from foreign trade transactions, if and when its competence is stipulated. This arbitration is established by chambers of commerce, foreign trade organizations or other legal and physical persons.

Yugoslavia has ratified the following conventions on execution of arbitral awards, adopted abroad, as follows:

1. Geneva Convention on the execution of foreign arbitral awards of 26 September 1927; (Official Gazette of FPRY,-international agreements⁶⁶, 1952).
2. Geneva Protocol on arbitration clauses of 24 September 1923; (Official Gazette of FPRY,-international agreements, 1959).
3. New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards of 10 June 1958. (Official Gazette of SFRY-international agreements 1981).
4. European Convention on International Commercial Arbitration of 21 April 1961. (Official Gazette of SFRY-international agreements, 1963).

The UN General Assembly at its XXXI regular session in 1976 has adopted the UNCITRAL Arbitration Rules, UN Commission on International Trade Law, and suggested its use in resolving of disputes, which originate in the international trade law. The work on these Rules has started in 1973, on the basis of

consultations with the regional economic commissions of UN and centers of international trade arbitration, Arbitration rules of UN Economic Commission for Europe and ECAFE for international commercial arbitration. The Law on foreign trade arbitration of Republic of Serbia has foreseen possibility for parties to foresee implementation of UNCITRAL Arbitration Rules .

SOURCES OF REGULATION OF INTERNATIONAL TRADE ARBITRATION

The legal sources, which regulate the international trade arbitration are varied: some are international and some are internal; some are compulsory and some are optional; some of them have been created by state or some other organization, while there are those, which are created by the parties themselves.

As the sources of the international trade arbitration, we can quote:

1. International agreements (multilateral and bilateral) and conventions;
2. National laws;
3. Permanent arbitration rules of procedure;
4. Autonomous law of international trade;
5. Arbitration agreement;
6. Arbitration practice and
7. Doctrine of arbitration law (*More on sources of arbitration law in Jovičić, K: Međunarodna trgovinska arbitraža, Strani pravni život 3/2008*)

In the area of trade relations, the autonomy of will of the contracting parties is the ruling principle, which is almost universally accepted, due to which the imperative rules in this field are brought to the minimum. The parties freely determine not only if they are going to establish a contractual relation, but also the substantial law which shall be applied to such relation, the authority before which they are going to discuss the possible dispute, as well as the rules of procedure, which shall be applied by the authority in the procedure of dispute resolution. The parties' choice has one limitation only and this is the public order of the country and its law according to which this issue is set and the dispute resolved.

In accordance with the domination of autonomy of will of contractual parties in the trade operations, the autonomy of will is the ruling principle also in the case of international trade arbitrations and therefore the schedule of sources of the arbitration law is regulated in accordance with this principle. So the primary source of the arbitration is the agreement of the parties by which the dispute resolution is entrusted to the arbitration (arbitration agreement) and only then there are rules of permanent trade arbitrations and the autonomous law of international trade, then the international agreements and conventions and national regulations and at the end the court practice, arbitral practice and the doctrine of arbitral law. (A. Goldštajn: *International trade arbitration*, third part, 1964).

The arbitration agreement is the agreement by which the contractual parties have agreed that resolution of disputes from their particular contractual relation is entrusted to the arbitration. It can be concluded in the form of an arbitration clause,

if it foresees in the basic contractual act the resolution of possible future disputes from the contractual relation by the arbitration. The arbitration clause, by rule, is a consisting part of basic agreement from which the possible disputes shall originate and which shall be resolved before the arbitration. However, the contract may be concluded also when the dispute has originated from the particular contractual relation. Also, the arbitration agreement may be concluded in a special written form, as an annex to the basic contract, even after the conclusion of the basic agreement but before the occurrence of dispute.

By arbitration agreement, the resolution of disputes from international trade law and trade relations is transferred from the court competence into the competence of contractual arbitration. This agreement is independent in relation to the job from which the dispute has originated.

In the international trade transactions, where the major number of disputes is solved before the permanent international trade arbitrations, such agreements are mostly concluded by acceptance of model agreements, created by these arbitrations i.e. competent organs of the institution, which has established them. Such are, for example, master arbitration clauses of the International Trade Chamber in Paris; American Association for Arbitration, London Court of International Arbitration, Foreign Trade Arbitration in Belgrade etc.

The autonomous sources of arbitration law are rules of procedure of the permanent international trade arbitrations and the autonomous law of international trade. It is characteristic for these sources of law that they have been created without influence of state and they obtain its compulsory force from the will of parties, which have foreseen its implementation and not from the law. The implementation of such sources of law have priority in comparison with international conventions and national laws, which is a rule expressly confirmed in particular international conventions. The mentioned priority is expressly foreseen by the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards of 1958, which in the Article V/1d foresees that it shall reject the recognition and enforcement of arbitral award when the establishment of the arbitration tribunal or "arbitration proceedings was not in accordance with the agreement of parties, or if there is no agreement, it wasn't in accordance with the law of the country in which the arbitration was performed". Besides, the European Convention on International Commercial Arbitration in the Article IV/1 states that "Parties in an agreement on arbitration may at their disposal foresee: a) to undergo their disputes to a permanent arbitration institution; in such case the arbitration proceedings shall be conducted in accordance with the statute of such institution;"

The rules of procedure which are adopted by the permanent international trade arbitrations, by rule regulate in details all the issues of significance for an arbitration proceedings, starting from the organization and competence of the arbitration, following with the establishment of the arbitration tribunal and procedure rules, to the arbitral award and costs of the arbitration. Such rules of procedure are acceptable for the parties in most cases because the rules, contained in them, are based on customs and generally accepted principles of arbitration law, legal standards, conditions of

business and other well-established and rational acts of businessmen in the international trade transactions.

Beside the rules of procedure, the international trade arbitrations in their work apply at great measure the *autonomous law of international trade* – law, which has been created through the centuries through the practice of participants in the commercial transactions and which has gained the form of master agreements and general business conditions, adopted by the associations of businessmen and their other associations. At the beginning, the mentioned unions and associations have offered the mentioned forms only to their members but later they became available to other interested persons and therefore in mass use. Having realized its significance, the various international bodies and forums started to work on their codification and in that way some codifications, which are in a broad use for decades have been made. In that way the UN Economic Commission for Europe has adopted many master agreements, among which are the most well-known the Geneva master agreements for sale of various goods. Also, at the international level, the significant role was played by the International Trade Chamber in Paris, which has adopted INCOTERMS rules for regulation of basic obligations of buyer and seller in the various types of agreement on international sales of goods.

The international agreements and conventions had almost decisive role in the establishment and development of arbitration law. The first more significant multilateral international conventions in this field is the Protocol on arbitration clauses of 24 September 1923 and the Convention on the execution of foreign arbitral awards of 26 September 1927, which were adopted after the First World War at the initiative of League of Nations in Geneva. The biggest quality of the Geneva Convention on the execution of foreign arbitral awards of 1927 is that it has regulated for the first time the unique requirements for execution of foreign arbitral awards in the countries signatories. Namely, this conventions set forth the conditions for recognition and execution of foreign arbitral awards (article 1.); foresees limitations for recognition and execution of foreign arbitral awards (article 2.); allows rejection or postponement of recognition or execution of foreign award (article 3.), and it regulates the procedure in which the foreign arbitral awards are recognized and executed. The Protocol on arbitration clauses is significant not only as the first international convention in this field, but particularly because by this act for the first time the arbitration clause, beside the arbitration compromise, has been recognized as the legal basis for the establishment of arbitration. The mentioned protocol, however, did not regulate the issue of execution of the foreign arbitration awards because the conditions for this have not matured yet. Only four years later, when the practice has pointed out the necessity of international regulation of this issue as well, the new Convention was adopted with the subject of precisely regulating the issue of execution of foreign arbitral awards, known also as Geneva Convention on the execution of foreign arbitral awards. Before the adoption of Geneva Protocol on arbitration clauses of 1923, many countries have allowed the parties to conclude only the arbitral compromise, as the agreement on entrusting the already appeared dispute for resolution before the arbitration, but not the arbitration clause.

As the international trade arbitration developed in time, the solutions foreseen by mentioned conventions became obsolete and insufficient, which was particularly expressed in the matter of recognition and execution of foreign arbitral awards. The Geneva Convention on the execution of foreign arbitral awards did not provide a safe and fast execution of foreign arbitral awards, which was the main reason for adoption of a new convention - New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards of 1958. This convention has made another significant step in the development of international arbitration law, above all because it has introduced for the first time the rule that party which is disputing the execution of a foreign arbitral award, must prove the existence of certain deficiencies in relation with the award for which the recognition and execution is requested i.e. to prove that there are violation of substantial or procedural law in relation with it. That was the final foundation of the rule that award of a foreign arbitration is executed in another country, signatory of the convention. The New York Convention on the recognition and execution of foreign arbitral awards has been ratified in 106 countries of the world.

There are international conventions on arbitration, which were concluded at regional level, as well as the bilateral international agreements regulating the arbitration. One of the more significant regional conventions is the European Convention on International Commercial Arbitration of 1961, which has been ratified by 25 European countries (among them our country as well) and several countries out of Europe. This convention regulates various issues and it is significant, among other reasons, because it has foreseen for the first time that legal persons of public legal character may conclude arbitration agreements. Beside European, there are other international conventions, concluded at the level of region and they relate to the arbitral resolution of disputes, like the *Inter-American Convention on International Commercial Arbitration of 30 January 1975, which was joined by 15 states of South America and the U.S.A., and the Arab Convention on Commercial Arbitration of 14 April 1987, which is implemented in eight Arabic countries*. However, in the case of bilateral international agreements in the field of arbitration law, it is characteristic that such agreements are rare. In case of this European convention it is important to point out that it foresees the obligation of party, which is submitting the request for recognition and execution of the foreign arbitral awards, to prove the fulfillment of requirements for its recognition and execution (*article 4(2) and (3)*). Article II. Of the European Convention on international trade arbitration of 21 April 1961.

The international agreements which are regulating only the arbitration are rare, in most cases the provisions on arbitration are within trade international agreements or agreements, which are regulating mutual legal cooperation between two states. Among the sources of arbitration law, which belong to the group of international sources, the unavoidable sources are UNCITRAL Model Law of 1985 and UNCITRAL Arbitration Rules of 1976. The UNCITRAL Model Law on arbitration was adopted by the UN Commission for international trade law on the 21 June 1985. The basic goals promoted by the Model Law are: strengthening of the autonomy of will of parties, minimal number of imperative provisions and

improvement of possibilities for execution of arbitral awards abroad. (UNCITRAL Arbitration rules were adopted by the UN Commission for international trade law on the 15 December 1976. (http://www.uncitral.org/uncitral/en/uncitral_texts/arbitration/1976Arbitration_rules.html).

These are, namely, rather specific sources of law, adopted under patronage of United Nations and which do not have the form of international agreement, but they are legal sources because they are implemented in the practice. They were adopted by the UN Commission for international trade law and they regulate the most significant issues of procedure before the international trade arbitrations.

The arbitration rules completely regulate the procedure before the ad hoc arbitrations. It's an optional source of law, which is implemented only when the parties expressly refer to it. From the other side, Model Law on Arbitration is a document, which resembles an international convention, but in essence it's an act, which should serve as an sample, example or model for preparing of national laws on arbitration. It regulates the issues from the field fo international trade arbitration but the practice accepts a broader interpretation according to which its provisions may be applied also in the domestic trade arbitration. This legal act is not implemented directly as a source of law but their solutions are accepted and provisions introduced in the major number of national laws on arbitration, so we can talk about its implementation even when such national regulation is implemented. The practical significance of the Model Law on arbitration reflects in its undisputable influence on modernization and unification of the national arbitration legislatures, so it has surpassed the existing international conventions in this field by its broadness and flexibility. The following countries have based their legal regulations on the UNCITRAL Model Law: Australia, Bahrein, Belarus, Bermuda Islands, Bulgaria, Egypt, Greece, Guatemala, Croatia, India, Iran, Ireland, Japan, Kenya, Cyprus, Republic of Korea, Lithuania, Hungary, Madagascar, Macao, Malta, Mexico, Germany, New Zealand, Nigeria, Oman, Peru, Russian Federation, Singapore, Serbia, Sri Lanka, Tunisia, Ukraine, Zimbabwe, within U.S.A.: California, Connecticut, Oregon and Texas, and within Great Britain: Scotland (Jovičić, 2008.)

The Geneva Protocol on arbitration clauses of 1923 regulates the arrangement of arbitration clauses. The corresponding Geneva Convention on the execution of foreign arbitral awards of 1927 relates to the execution of foreign arbitral awards. By adoption of the New York Convention of 1958, and the European of 1961, the previous two almost lost their significance. The Geneva Protocol and Geneva Convention were ratified by the decree of Federal Executive Council (Federal Government) in 1958. The rules of Geneva Protocol i.e. Geneva Convention make Serbia obliged towards the countries, which are not signatories of the New York i.e. European convention: (1) in case of arbitral awards adopted before New York i.e. European conventions came into force and (2) in case of arbitral awards adoped in the matters on which those conventions do not relate or do not oblige us because of the stated reservation.

The Convention on the Recognition and Enforcement of Foreign Arbitral Awards was adopted in 1958 in New York at the OUN conference. Any country may join it and therefore it is considered to be in the rank of universal international agreements. The rules of this convention relate to the issues of procedure of recognition and execution of foreign arbitral awards. This procedure is conducted before the state court of justice and it belongs to noncontentious proceedings. The New York convention's rules regulate: (1) recognition and execution of arbitral awards adopted in regard to disputes between physical and legal persons in the territory of some state, other than the one where the recognition and execution of the award is demanded, and (2) recognition and execution of those arbitral awards, which are not considered to be domestic awards in the state in which their recognition or execution is demanded (for both situations there is an assumption that the state of recognition and execution is a signatory of the New York convention).

Our country has accepted this convention by the Law on ratification of the Convention on the recognition and execution of foreign arbitral awards of 1981. (Official Gazette of SFRY – International agreements, 1981). The Law on ratification of the New York Convention has stated the following reservations:

1. The Convention is applied in relation to Serbia only for the arbitral awards, which were adopted after the Convention ratification;
2. The rules of the Convention are applied on the basis of reciprocity only in relation to the arbitration awards, which were adopted on the territory of other Convention member;
3. The rules of the Convention are applied only to the arbitral awards on disputes, which originate from the legal relations, considered to be trade relations according to our legislature.

By the New York Convention ratification, the rules from this convention have become the applicable law and were introduced into the system of rules of our procedure on recognition and execution of the foreign arbitral awards. The consent or summoning of parties is not requested for the validity of the Convention rules. The parties cannot regulate the procedure by themselves in the procedure of recognition or execution of the foreign arbitral awards because such procedure is not a proceeding before an arbitral tribunal and it remains the public law standard as a whole.

The European Convention on International Commercial Arbitration was prepared and adopted in the organization of UN Economic Commission for Europe in Geneva in 1961. It relates to Europe but, although in the legal-structural sense it makes entirety with the New York Convention, it can be joined by the states, which are not signatories of the New York Convention and states, which are not from Europe (for instance, Cuba). From this aspect it can be said that the European Convention is universal. Our country has ratified the European Convention in 1963 and in that way its rules have become a part of our applicable law. They are valid: (1) if the parties have stipulated the arbitration and (2) if the assumptions that arbitration tribunal acts in accordance with the rules of this convention are fulfilled (requirements). The European Convention regulates 5 sectors of arbitration law, which relate to: arbitration agreement; arbitrator

and establishment of the arbitration tribunal; some issues of proceedings before the arbitration tribunal; arbitral awards and annulment of arbitral awards. The rules from conventions become applicable law of the state by ratification. The agreement of parties may change rules of convention, which would have status of optional rules in the applicable law of the state but rules, which would have coercive nature cannot be changed as well as those which would deal with the public order.

The conventions, as the legal source of international trade arbitration, although in a very limited scope, regulate some issues of the arbitration proceedings law, particularly in the field of recognition and execution of the foreign arbitral awards. For instance, the Rules of New York and European conventions set forth that by their acceptance, the provisions of bilateral and multilateral agreements of states signatories remain in force, which relate to the arbitral resolution of disputes. It is also valid for the rules on competence of state court of justice in the performance of arbitral proceedings.

Our country has also ratified a number of bilateral agreements, which directly relate to the particular court affairs..

The national laws on arbitration during last several decades, are significantly and rapidly developing due to the increasingly broader international trade transactions and increase of disputes in this area. For the previous period, in which the arbitrations were not so broadly used as nowadays, it was characteristic that provisions on arbitration proceedings are found as separate parts of already existing laws, most frequently the laws, which regulate the civil proceedings.

In view of structure of national laws as the legal source of the international trade arbitration, it can be noticed that they, in essence, set forth the organization and proceedings for the ad hoc arbitrations, since the institutional arbitrations are organized according to their own rules. Only when such rules in the particular case prove to be insufficient, the disputed issue shall be resolved by implementation of some national proceedings law, most frequently the one selected by the arbitrators.

Court practice: in regard to this source of arbitration law, the competent practice for arbitration is the practice of courts of the country for whose law the arbitration is linked, but also of the courts of those countries where the recognition and execution of arbitral award of a foreign international trade arbitration is requested. Besides, the court practice is a significant source of law also for the fulfillment of awards, which appear during the arbitration proceedings itself. More details in (A. Goldštajn, *op. cit.*) *The arbitration practice and doctrine of arbitration law* are not the direct legal sources but they have a remarkable significance, not only as the sources of arbitration law, but also for its development. The fact that major number of permanent international trade arbitrations are publishing the volumes of selected awards (with previous approval of the parties) tells enough on the significance of arbitration practice and the need to put it at the disposal of professional but also of broader public. From the other hand, the science of arbitration law is not only participating in the formation and development of this branch of law, but it particularly contributes to the establishment and affirmation of legal principles, applied by the arbitration in the adoption of their awards.

THE SORTS OF INTERNATIONAL TRADE ARBITRATIONS

The basic criterion for determination of sort of international trade arbitration is the way of arbitration organization. According to this criterion, there are institutional (permanent) arbitrations and *ad hoc* arbitrations (arbitrations on case by case basis, i.e. for particular arbitration dispute). Historically, *ad hoc* arbitrations were first to appear.

Occasional- ad hoc arbitration assumes that parties to a dispute freely choose the arbitrators – chosen judges on case by case basis, and the subject itself, competence and the procedure of dispute resolution is set forth by the agreement of parties to a dispute. Also, *ad hoc* arbitration requests cooperation of parties in determining the procedure for establishment of the arbitration tribunal. This form of arbitration has certain advantages in comparison with the institutional one, because it provides bigger freedom in the choice of arbitrators, determination of proceedings and it costs less. However, in the modern arbitration practice, *ad hoc* arbitrations are rather rare.

The permanent, institutional tribunal is organized at the chambers of commerce, stock exchange, associations of businessmen and similar associations. Such tribunals resolve the disputes between the parties, which address them. The composition of a permanent arbitration is determined by the list of arbitrators from which the parties select the arbitrators, the tribunal is operating according to the proceedings set forth by its rules and the tribunal is also formulating the model of arbitration clause (agreement on arbitration).

The quality of work of institutional arbitrations reflects in the fact that by their work the rules of business practice are standardized and uniform and for a longer period, certain system of arbitration is created. The feasibility of award of permanent arbitration originates from the fact that they have legal force, recognized by the national legislatures and from the authority of arbitration institution itself.

The most renowned institutional arbitrations are the International Arbitration at the International Chamber of Commerce in Paris, the London Court of International Arbitration (LCIA), American Arbitration Association (AAA), *Zürich Arbitration etc.* The Foreign Trade Arbitration at the Serbian Chamber of Commerce has the character of international trade arbitration and is competent for resolution of disputes between our commercial subjects and foreign persons as well as the disputes between foreign persons.

The international trade arbitrations can be classified to *general and specialized*, depending on if they are resolving all the disputes in the international business relations or particular disputes, which has occurred in the trade in special sorts of goods or transport. The specialized arbitrations are implementing special proceedings, with broader use of rules of profession and with moderate participation of lawyers. However, it should be pointed out that the awards of the specialized arbitrations do not have to be compulsory, unlike the awards of institutional arbitration tribunals.

At the same time, arbitrations may be classified depending on if the awards are adopted according to the *merit law or according to the principle of equity* (ex aequo et bono). According to the principle of equity, the arbitration shall make decisions only if the merit law is not set forth, when the parties to a dispute expressly demand it and give their consent for this to the arbitrators.

ARBITRATION PROCEEDINGS

The existence of arbitration agreement is the presumption of arbitral resolution of disputes in international business relations. The regular course of arbitration is as follows:

First of all, there is establishment of arbitration, which consist of selection of arbitrators, where it can be an individual arbitrator or board of arbitrators, which mostly consists of three arbitrators. In the international trade law the arbitration is mostly performed i.e. the dispute is resolved by an arbitration board.

The arbitrators are usually selected from the ranks of professors of law, judges, barristers and eminent experts in particular areas, who, at the same time, are highly professional and enjoy trust of the contracting parties. They are, above all, led by the principles of independence and impartiality in their work.

The arbitration proceedings at the permanent arbitration is conducted according to the rules established by this institution. The key feature of the arbitration proceedings is simplicity and efficiency in decision making. However, if the parties to a dispute have decided for an *ad hoc* arbitration, they will establish the procedure of the dispute resolution by themselves.

The arbitration proceedings is initiated by petition, which contains identification of both parties to the dispute, both general one and business one; the evidence on existence of arbitration agreement; presentation of subject of the dispute, facts or matters of facts, the petition claims and enclosure of all documents which relate to and are of significance for the subject of dispute, as well as appointment of the arbitrators. The Arbitration Secretariat delivers petition for reply to the other side in the dispute (respondent) while respondent may submit the counter-claim before the conclusion of the main hearing.

According to the Arbitration Rules and Model Law of UNCITRAL, the proceedings are initiated by notice on arbitration sent by the petitioner to the respondent.

The notice on arbitration, petition or request may be delivered personally to the respondent, to the address of his registered seat or mail address, or if the delivery cannot be performed to the above-mentioned addresses, to his last known address.

The arbitration proceedings in principle consist of two phases, which are attached and represent a functional unity:

- preparatory phase, which consists of preliminary and earlier proceedings, and
- phase of investigation, discussion and decision making.

The contents of the preparatory phase consists of investigation of compatibility of legal protection in the arbitration and providing conditions for an undisturbed development of process activities of all participants of arbitration and in the phase of investigation, discussion and decision making, the state of affairs is established and arbitral award is adopted by which the decision on merits of the arbitral matter is made.

The UNCITRAL arbitration rules foresee that each party may dispute the appointment of particular arbitrator if there is a doubt in his impartiality or neutrality, while the UNCITRAL Model law and our Law enable a higher degree of control by enabling to dispute the arbitrator, who hasn't required qualifications, required by the agreement of the parties.

After the implemented arbitration proceedings, the arbitrators make the arbitral award. By this the dispute is solved on merits and finally. The award must have a factual and legal justification and is made by majority of votes and in a written form. The absolute arbitral award is at the same time the executive one and has the legal force of decision of a regular court of justice. This means that the party is obliged to execute it otherwise the other party may request enforced judicial executin of the arbitral award. The foreign arbitral awards are executed in the country of the party to which it is ordered to execute something, under conditions set forth by the national regulations, in accordance with the international conventions, with application of principle of reciprocity with the country from which the other party in the dispute is from.

CONCLUSIONS

The one of the most important institutional consequences of the development of international trade and its function of international commercial law is arbitration as the instrument of resolution of disputes. The sanctions, delivered by the international trade arbitrations have only *prima facie* less imperative character thone those delivered by the domestic courts because banishing from the international trade mostl frequently means the termination of the international commercial subject, which did not fulfill its international commercial obligations.

The special attention in the work of international organizations, which have influence on the legal formulation of rules of the international trade law, and particularly the UNCITRAL, was dedicated to the international trade arbitration, which was put on the priority list already at the first session of the Commission on Trade Law. The following UNCITRAL acts have special significance: Model Law on International Commercial Arbitration of 1985 and UNCITRAL Arbitration Rules of 1976, and particularly the Convention on the Recognition and Enforcement of Foreign Arbitral Awards.

All general acts of UNCITRAL, as well as the international arbitration practice which stems from such acts, provide for the substantial and procedural legal basis for solving disputes which arise during the realization of international trade transaction, which also provides international trade subjects (those to whom acts of UNCITRAL apply, which is the overwhelming majority of world countries) with legal certainty, nondiscrimination and performance of undertaken obligations by the other side of the agreement.

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ETHICAL MANAGEMENT OF HUMAN RESOURCES AS A WAY OF RAISING AWARENESS FOR SOCIAL RESPONSIBILITY OF THE EMPLOYEES

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Abstract: The aim of the research was to gain new insights from the socially responsible behavior of companies in all segments of its action. The research confirms the connection between socially responsible behavior of the management team and employees to their motivation for joining the socially responsible activities of the company.

This is a case study conducted in an organization that is considered to be socially responsible organization especially in terms of ethical management of human resources. The research was conducted within the research activities of the University of Tourism and Management in Skopje, Macedonia. As the technique is used survey. The anonymously surveyed 365 employees are proportionally chosen in the organizational hierarchy.

The survey showed connection to business ethics of managers who possess a minimum required leadership competencies in motivating employees to perform independently and taking socially responsible activities. These superiors (managers) behave professionally, in accordance with the rules and procedures of the organization and with due respect to their subordinates. Fairness in decision making is also shown as a reason to increase the motivation of employees. Also this research has shown that the developed socially responsible organizational culture is in favor of employees' motivation for socially responsible actions.

The research is significant because it reveals new data about social responsibility. Also the research shows that ethical management affects positively in terms of getting the staff to greater involvement in socially responsible activities during work as well as in socially responsible actions taken by the organization.

The results from this research are useful not only for the organization where the research was conducted, but for all the organizations that support the principles of organizational social responsibility. Also the results can be used by other researchers working in this area.

Key words: Social Responsibility, Business Ethics, Leadership, Organizational Culture, Rules and Norms of Behavior

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INTRODUCTION

Contemporary organizations are increasingly aware of the role and meaning of corporate social responsibility of the organization as well as for the organizational behavior and its effects on the organizational development and success. By all means, the organization conducts all the activities through the most important resource – the human. Therefore is the need to affect this resource on a manner that will contribute to build the company's image as a corporate social responsible subject on the market.

The overall coordination of all the activities that the company will undertake must be synchronized according to the corporate social responsible goals set up by the organization and to nurture socially responsible climate that will enable its implementation.

Carefully selected and established managers in the spirit of "the right people at the right place" allow the management team of the company to be composed of individuals that possess the leadership competencies. Establishing leadership process: gaining followers who will move along with their leader toward a common goal, these leaders provide acceptance and socially responsible behavior by employees. Also managers that possess the minimum required leadership competencies behave professionally, ethically, with respect to their subordinates and through personal example show how everyone else should behave.

This paper is written exactly in the direction of confirming the connection of ethical behavior towards employees and socially responsible activities of employees as part of an organization that is known in the environment as a socially responsible company with a built socially responsible organizational culture.

SOCIAL RESPONSIBILITY OF ORGANIZATIONS

The development of information technology is contributing to the greater availability of information to all interested parties. Nowadays it is impossible to hide any information or event, especially for the facts and events that affect large groups of people or communities.

Because of that organizations must perform their activities within the frames of generally accepted moral and ethical standards of work, for the main goal - the profit, not to be threatened by the actions that are ethically unacceptable in society where they work.

The social responsibility of organizations is a term recently embedded in the policies of companies worldwide. Basically the concept of social responsibility is the performance of the organization in accordance with the moral and ethical norms, especially with respect to business ethics.

The term Corporate Social Responsibility can be defined as a term that indicates whether and how organizations in addition to growing and maintaining a business, take care of the people, community and society as a whole.

Social responsibility is questioned during the last decades of the twentieth century, by the internationalization and globalization of organizations. Large corporations, expanding their operation in several countries and continents, fighting competition, began to introduce new to the work, such as care environment protection, care for employees and their health, care for customers, community and so on. This is done by providing finances to invest in improving working conditions (example: installing cooling systems, providing gyms, paid holidays, etc.), community investment (construction of parks, investment in social, environmental and other projects, etc.), then protection of the environment (installing filters, waste treatment, etc..) and many others.

The growing interest of organizations for social responsibility is based primarily on globalization, where multinational companies abroad are imposing their values from their home country in their countries of operation. Also consumers want to buy products and use services of a socially responsible organization. Third party stakeholders exert strong pressure on the introduction of responsible and ethical operation of companies.

In reality, there are a lot of initiatives to motivate SME to adopt the concept of CSR. It showed that these efforts met a number of obstacles, among them SMEs perceiving CSR as a concept of expensive additional activities, while they themselves are often short on resources(Krauss, Rütelionè, Pilgrimienè,2010)

It is necessary to raise awareness of the role of socially responsible behavior of companies. In fact it is closely related to sustainable development of the same. By applying socially responsible activities, organizations reduce the risk of failure; enhance brand and reputation, which contributes to achieving greater profits and survival in the long term.

Investing in socially responsible projects through allocation of profits, organizations show that they are socially responsible, adding new value to their business. The main goal of this kind of behavior of organizations is to increase its competitiveness and to maintain development of their own business. But, despite the benefits for themselves, they also create benefits for customers and for the society as a whole. Of course, all interested parties should be properly informed about the social, environmental and other effects resulting from the economic performance of the company. "Therefore, several major companies have introduces an integrated reporting system, which coherently summarizes the information available, thus making stakeholders participants in the business management"(Frias-Aceituno, Rodriguez-Ariza,Garcia-Sanchez,2013).

BUILDING SOCIALLY RESPONSIBLE ORGANIZATIONAL CULTURE

Any organization that has established a systematic approach to relationships with people and it has published about that, it is considered socially responsible towards this segment. This means that any organization that respects human rights needs to take and adopt a code of conduct that includes international principles of human rights, but also to adopt measures for monitoring and evaluating their implementation. Beside this code, organizations need to establish policies and procedures in order to know with what kind of vendors they work with, how to select them, what goods or services should they purchase etc., as well as indicators to monitor and control processes in the value chain. Politics and procedures should be transparent, clear and available to any interested party.

Many companies are aware that before you introduce social responsibility as a principle of work you have to prepare the ground for it i.e. to establish a suitable organizational culture where all the proposed changes for the management team (or leader) will be accepted. This indicates the need for hard work with staff in the company. Also when multinational companies enter a new area they should have in mind that the concept of social responsibility in their countries does not necessarily correspond with the concept of the state they work in. It is therefore necessary and internal and external adaptation.

Many theoretical papers suggest the link between social responsibility and organizational culture, but very few research papers prove it. Those who undertook to explore this connection indicate that the built organizational culture contributes to socially responsible activities in companies and in times of economic crisis.

Leaders in organizations are the ones that first they saw the need to introduce the principles of socially responsible business organizations, especially the staff. To increase profits, they need to increase production, it is necessary to increase employee productivity. In order for employees to be more productive they should be satisfied with the job, salary and the attitude towards them.

ETHICAL LEADERSHIP

Leaders in organizations are the ones that first felt the need to introduce the principles of socially responsible business organizations, especially towards the staff. To increase profits, they need to increase production, and for that to happen it is necessary to increase employee's productivity. In order for employees to be more productive they should be satisfied with the job, salary and the attitude towards them.

Beside the other factors that affect the development of social responsibility especially the influence towards the first man (the leader) in the organizations is

emphasized (Huang,2013). It is well known that many stakeholders of the big companies are mainly interested in increasing the profit (Grossman). However that is the reason why the company should be lead in a socially responsible manner.

It is of great importance for the leader – if he possesses competencies of a leader – to act ethically in order to maintain the socially responsible behavior towards the most important part of the company- the human. It is scientifically proven that the leader's ethical decision making contributes to the straightening the organizational values (Marsh,2013). However, if the leader, the one that has finished the process of leadership, is a person that promotes social responsibility and though personal example influences his followers, the followers should think and act in accordance with the socially responsible principles.

Human resources as the most important part of the resources in each company need special treatment in order to fulfill the goals set by the top management in the organization. Some researches (Florea, Ha Cheung, Herndon,2013) show the strong connection between the ethical behavior of the human resources and the sustainable development of the company, which is one of the goals of the social responsibility. It is the altruism, empathy, positive norms of the reciprocity as well as the support and protection of the human resources in the organization that are the real variables that contribute to the raise the awareness and wish to achieve mutual organizational goals and to respect the organizational politics. All of that provides sustainable organizational development.

RESEARCH

RESEARCH METHODOLOGY

The research presented in this paper is conducted at the University of Tourism and Management in Skopje. The research was conducted in an organization that is being awarded many times for being socially responsible.

As research techniques in the survey two questionnaires were used including: the organization's managers and employees. The survey was anonymous and it covers a total of 760 employees out of which 365 respondents on 12 management positions.

The criterion of selection was determined by the specific nature of their jobs, the job position in the organizational hierarchy and distribution, with aspiration to include all structures of employees, starting from the qualification representation, work experience, age of the employee and ambit of all steps in the management hierarchy.

Statistical data processing was performed with the statistical software SPSS 16.0.

As a general hypothesis set is as follows: If the company has set up social responsibility as a part of the organizational policy, in continuity and in different circumstances acts ethically and socially responsible to its employees, it will

contribute to increase the motivation of employees to join the socially responsible activities of the company.

From the general hypothesis emerged four specific hypotheses as follows:

- **If** the organization establish a functioning and perfect care for their employees and if it causes a feeling of pride of belonging, **then** it increases the support in their social responsibility activities by its employees.
- **If** a company fosters socially responsible organizational culture, **then** it will contribute to the motivation of the employees for better work performance and acceptance of socially responsible activities.
- **If** the leading positions in the company are lead by personalities with leadership competencies that demonstrate socially responsible behavior towards employees, **then** the employees accepting the leadership will join the socially responsible behavior of the company.
- **If** the organization sets rules and regulations that support mutual communication, confidence, motivation, sense of belonging and pride that are members of that organization, it helps employees to support the company in its activities related to social responsibility policies.

After the survey the following results are expected:

- How much does the company through ethical behavior towards its employees win their support for socially responsible activities undertaken by the company?
- How much does the care for the employees motivate them to fulfill organizational goals?
- Is there a connection between organizational culture and socially responsible behavior of employees?
- How many employees follow the personal example of their superiors, if they possess the leadership competencies?
- How many of the rules and regulations of the organization that support mutual communication, confidence, motivation, sense of belonging and pride in being part of the company contribute to the realization of socially responsible activities?

KEY FINDINGS

The following tables present some of the results which are considered to be proof of the hypotheses. The claim: “The equitable reward system contributes to my positive change in the workplace”, gave the results shown on figure 1.



Figure 1: The influence of equitable reward system

Visually it can be noticed that 1, 36 % of the respondents have neutral opinion about the equitable reward system. The other 98, 64% fully agree that the equitable reward system contributes to the positive change in the employees' workplace.

The results from the following claim are shown on figure 2: “Consistency and compliance with the rules and regulations by my supervisor motivates me to work better.”

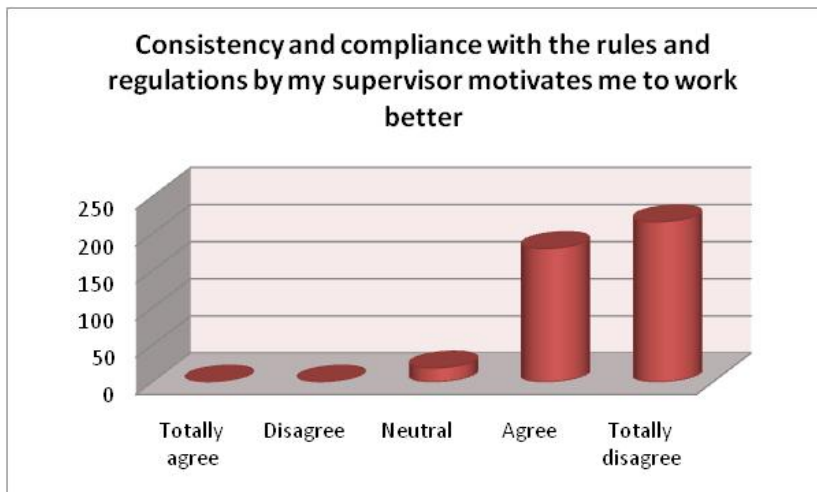


Figure 2: The influence of the supervisors' behavior on the employee's work

From the results it can be concluded that employees actively monitor the behavior of their superiors in terms of their compliance with the rules and regulations set out in the company. The picture that leaves superior in the eyes of employees significantly affects their motivation to work. Even 59.17% totally agree with that view, and 35, 61% disagree. The remaining 5.22% occupied a neutral position.

In the same direction are the answers on the claim: “The personal example of superior contributes the most to my acceptance of socially responsible activities within the company”. The results are shown in the figure 3. It can be concluded that high 82.18% of respondents are motivated by personal example of socially responsible behavior by their supervisor, so they take or include in their implementation. Only 17, 82% reported neutral and no respondent answered with a negative response.

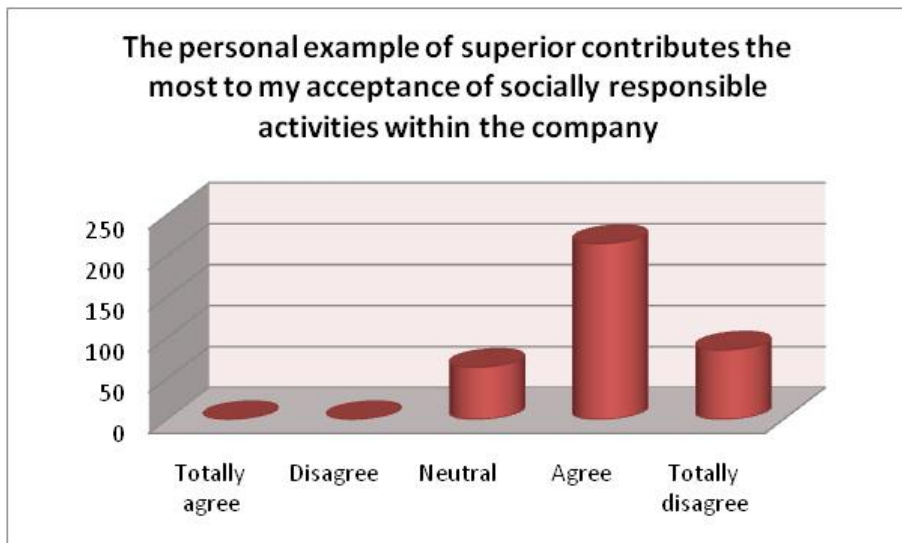


Figure 3: The personal example of the superior and the CSR activities of the employees

Employees in the researched organization feel proud to work there. This is confirmed by the results of contention: “The behavior of the company contributes towards me to feel proud to be part of it”. The results are presented in figure 4. Only positive answers are received, 100% agree or completely agree. No respondent answered negatively or neutrally.

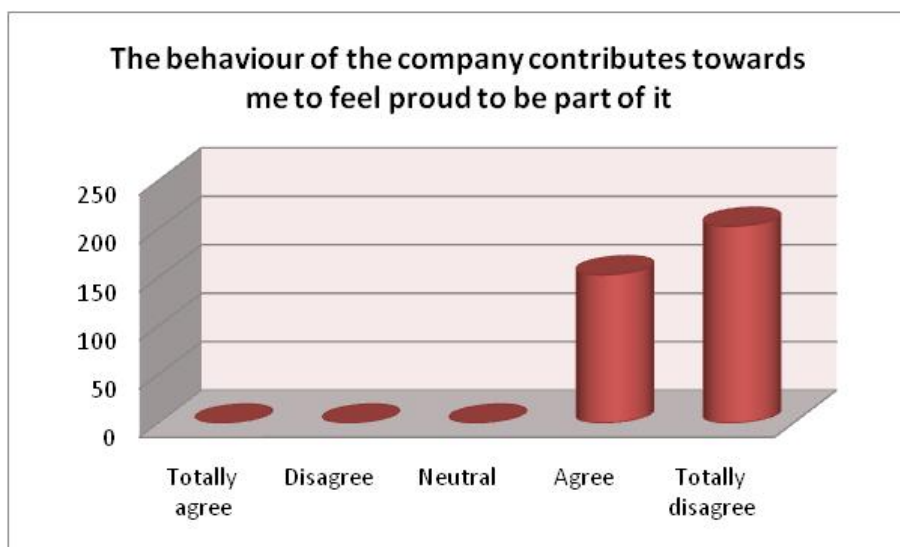


Figure 4: Pride to be part of the company

The existence of socially responsible organizational culture in the company which is taken as a sample for the research is proven by the results of the claim: “In the company a socially responsible corporate culture exists”. Besides the insignificant 0.82% of the respondents, all other 99.18% agree or completely agree that in the company socially responsible corporate culture is built. No respondent pleaded negative. The results are shown in the figure 5.

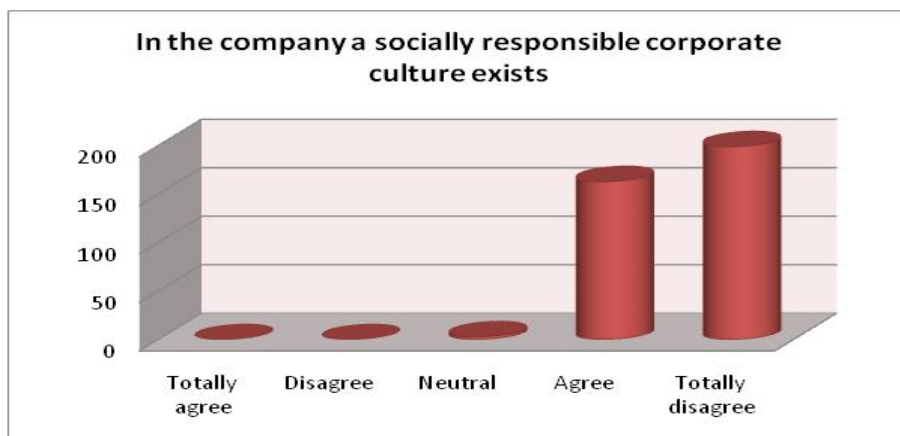


Figure 5: Socially responsible organizational culture in the company

CONCLUSION

The research produced several conclusions. Hypotheses are confirmed.

Organizational culture, business ethics and social responsibility are mutually connected segments of operation of every company that has determined to act socially responsible. Considering the fact that in the center of attention while performing the three important elements are the human resources we cannot ignore the fact that the most important part of the company- are simply the people.

Therefore through successful human resource management we managed to reach the goals we want to achieve and in case of this research the company's social responsibility.

Organizational culture, business ethics and social responsibility are closely related and have the same goal: making the right decisions and appropriate action by individuals and organizations that will not harm others and the planet Earth. In this regard, the responsibility of managers is even greater.

Ethical management of human resources is the basis for building an organizational culture in which changes are made daily, but also and the base for socially responsible operation of any organization. Without it there is no socially responsible organization.

The main thing that every organization needs to create and nurture within their specifics is to create and maintain a positive organizational culture in which employees feel proud of belonging to it.

Personal example of superiors is crucial in terms of respecting the rules and regulations of the organization, and also a major stimulus for undertaking socially responsible activities by employees especially if they possess leadership competencies, as well as if they are socially responsible.

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GENDER DIVERSITY AND SECURITIES FRAUD

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Oliver Meng Rui⁶³

Abstract: This study examines the impact of gender difference on corporate fraud in China. Although females are still under-represented in business enterprises, the increasing number of females occupying the post of entrepreneurs and senior executives provides a motivation of the study. By comparing fraud firms and no-fraud firms, there are significant differences in the proportion of female board directors and number of female chairpersons between the two groups. We show that gender diversity is a significant factor to explain the likelihood of fraud, suggesting that females are more ethically sensitive and less likely to take risk to commit fraud. Further, we show that the market response to fraud from a gender diverse board is significantly less pronounced.

Key words: Corporate Governance, Ethical Sensitivity, Fraud, Gender Diversity, Risk Aversion

JEL classification: G30, J16, K22

UDC 343.53:305-055.1/.2; 174:305-055.2(510)

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INTRODUCTION

Fraud is a global problem (e.g., Karpoff et al., 2008, 2010). According to “2010 Report to the Nations on Occupational Fraud & Abuse”,⁶⁴ it is estimated that the typical organization loses about 5% of its annual revenue to fraud, which can be translated to a potential total fraud loss of more than US\$2.9 trillion (p. 4). Fraudulent acts cause more damage when they are committed by high-level perpetrators, with owner/executive fraud being more than three times as costly as manager fraud and nine times as costly as employee fraud. In addition, it takes longer time for owner/executive fraud than manager/employee fraud to be detected. More interestingly, the Report shows that there is a higher percentage (two-thirds) of fraud committed by males in all regions (the US, Canada, Oceania, Africa, Central and South America, Europe and Asia), with Asia having the highest ratio of male perpetrators (87.7% males vs 13.3% females). Among the owner/executive fraud cases, 87.3% and 12.7% are committed by males and females, respectively. These statistics suggest that fraud is a widespread problem with significant financial impact. In addition, there is a difference between males and females in the likelihood of fraud commitment.

In the past two decades, there have been a growing number of females taking up the executive positions (e.g., chairperson, general managers and board directors) in the US firms (Farrell and Hersch, 2005; Rosener, 2003). The presence of female directors on board can be seen as a favorable signal to the market that the firms are socially responsible by paying attention to the minority groups in the society. A number of studies also show that firms with a higher proportion of female board directors have better corporate reputation (Bernardi et al., 2006; Brammer et al., 2009). Carter et al. (2003) find that there is a positive relation between firm value and percentage of female board directors. Bernardi et al. (2009), in an examination of the association between the number of female directors on board and appearance on Ethisphere Magazine’s World Most Ethical Companies’ list; report that the proportion of female board directors of a Fortune’s 500 company is positively related to the likelihood that the firm is being listed on Ethisphere Magazine’s World’s Most Ethical Companies’ list.

Besides in the US, some European countries also require the firms to have a minimum number of females on board. Hoel (2008) mentions that Norway is the first European Union member state to set the minimum quota of at least 40% of board directors are females by 2008 for all listed firms. Cabo et al. (2011, p. 1) report minimum quotas for female representation on boards of 40% in large Spanish listed firms by 2015, 40% in large French listed firms by 2017, 30% in Italian listed and state-owned firms by 2015, and 30% in large Dutch firms by January 2016. These incidences of increasing number and influence of females in

⁶⁴ The Report is published by the Association of Certified Fraud Examiners (ACFE) based on data compiled from a study of 1,843 cases of fraud that occurred worldwide (106 countries) between 2008 and 2009.

business provide a motivation for this study to examine if there is gender diversity in the standard of corporate governance in China. In this study, we use the data of enforcement actions on violation of securities regulation or fraud as a measure of corporate governance.

In China, the China Securities Regulatory Commission (CSRC) is responsible to enforce the laws relating to securities regulation which have to be complied with by the listed firms, stock exchanges and securities firms. Besides, the CSRC is also charged with investigating the accusations of corporate fraud and imposing the enforcement actions on the firms which have violated the securities regulations. When listed firms have violated the regulations of CSRC, Shanghai and Shenzhen stock exchanges, and other regulatory authorities (e.g., Finance Department), the information about the violating firms and violation events would be disclosed by the relevant authorities and published on the media (e.g., Securities Times and Shanghai Securities Daily) designated by the CSRC. There are many types of violation events, the major ones include illegal share buybacks, inflated profits, assets fabrication, unauthorized change in fund use, violation in capital contribution, shareholder embezzlement, price manipulation, illegal guarantee and speculation. The violations may involve the firm, management and shareholders. After investigations, the violations may be followed by penalty such as fine, public criticism, administrative punishment, warning and delisting.

In this study, we examine the impacts of gender diversity on the likelihood of fraud, after controlling for other board and firm characteristics in China. Studies in the psychology, ethics and finance literature have shown that females are more ethically sensitive and risk-averse (Bruns and Merchant, 1990; Cohen et al., 1998; Sundén and Surette, 1998). These morality concern and risk trait differences between females and males should be reflected in the compliance of regulation. Hence, we hypothesize that firms with more female board directors should be less likely to violate rules and commit fraud.

The investigation of gender diversity on fraud and the case of China are of interest for several reasons. First, it is important to study the ethical attitudes and standard of entrepreneurs and businesspeople. Bucar et al. (2003) argue that societies with low business ethics standards may have higher costs of regulation and policing. Although there have been a number of studies on fraud (e.g., Beasley, 1996; Beasley et al., 2000; Uzun et al., 2004), few have been conducted to examine the relation between gender diversity and fraud (Tennyson, 2002)⁶⁵, in particular financial fraud. Second, China is one of the fastest-growing emerging markets in the past two decades since its economic transformation started in 1970s. Third, despite its rapid economic growth, China is still immature in terms of the improvement of legal system and investor protection mechanism as compared to other developed markets. In addition, the Chinese firms are characterized by the

⁶⁵ Tennyson (2002) examines if there is gender difference in the consumer attitude towards insurance fraud.

high concentration of shares held by the central and local governments. Therefore, it is also important to get the picture of the development and practice of corporate governance of this growing market. Finally, China is a male-dominated society. Traditionally, most senior positions in the Chinese firms are occupied by males rather than females. Since the 1949 revolution in China, although there is a government policy for equality of sexes in employment and the employment of female is relatively high, most females work in the production line and low-tech industries (Stacey, 1984; Yi-hong, 1992). Only a few (8.9%) managers are females (Hildebrandt and Liu, 1988). Korabik (1992) finds that the higher the post in a firm, the fewer the females and Cheng et al. (2010) show that only 4% of chairpersons are females. Therefore, it is of interest to see the extent to which females have become the higher echelons and their impacts in influencing the development of corporate governance in the Chinese firms.

Our findings provide support to prior research studies on gender differences in ethics sensitivity and risk-taking activities. We show that firms with a high proportion of female directors on board and led by female chairpersons commit less fraud. This result is consistent with the literature that females are more ethically sensitive and risk averse. These traits make the females tougher monitors of the management and hence help to minimize violation of regulation and reduce fraudulent activities. Although there is a global call for gender diversity on board, females are still under-represented. According to the reports of Ethical Investment Research Service (Maier, 2005) and European Professional Women's Network (2006), only three developed markets have 2-digit percentages of female board directors, they are the US (12.7%), Sweden (20%) and Norway (25%). On average, there are only about 7% of board directors are females in the leading firms of major developed markets. Vanhala (1999) reports that 25% of managerial and 2-3% of chief executive positions are held by females and Lilius (2003) finds that 11% of board directors are females in Finnish firms. Kang et al. (2007) show that 33% of Australian firms have no female director and Cheng et al. (2010) report that only 4% of Chinese firms are chaired by females. This study contributes to the literature of ethics by providing further evidence that gender diversity in ethical sensitivity helps reduce fraud in business enterprises. We present support that females can help improve the corporate governance of a firm, hence providing implication for the regulators and policy-makers to consider the call for a more gender-diverse board.

It is important for the owners and managers to consider anti-fraud control mechanisms to protect their resources from fraud. Our results provide some significant ethical implications for the entrepreneurs and business enterprises. Since more gender-diverse board can help minimize the likelihood and severity of corporate fraud, the inclusion of more female board directors can be an effective anti-fraud control mechanism to set an ethical tone in the workplace.

BACKGROUND AND HYPOTHESIS

Fraud has been well documented in the finance and accounting literature with the focus on corporate and financial fraud. These prior studies, mostly using the US data, show that a number of factors are related to the incidence of fraud. In the examination of the accounting and auditing enforcement actions by SEC, Beasley (1996) show that the incidence of financial statement fraud is negatively related to proportion, tenure and share ownership of outside directors. Uzun et al. (2004) find similar result for proportion of independent outside directors using the corporate fraud cases collected from Wall Street Journal. While Beasley (1996) find that the presence of audit committee has no effect on financial statement fraud, Dechow et al. (1996) and Beasley et al. (2000) report that audit committee helps minimize fraud. However, a later study by Agrawal and Chadha (2005) suggests that only if at least one outside director on board and in audit committee has accounting or finance background, then the likelihood of earnings misstatement can be lower.

A few studies have been conducted examining enforcement actions on fraud in China. Chen et al. (2005) show that there is a negative stock price reaction for the announcement of enforcement actions. Chen et al. (2006) examine the impact of ownership structure and boardroom characteristics on corporate financial fraud in Chinese listed firms. They find that only boardroom characteristics such as proportion of outside directors, number of board meetings and tenure of chairman, but not type of owner (state owner, legal entity etc), are significant factors in explaining the incidence of fraud. However, limited attention has been paid on the relation between gender and fraud.

Since 1990s, in response to the increasing pressure for board and gender diversity, the number of females occupying senior positions such as chairperson, general managers and directors, has risen drastically in the US firms (Farrell and Hersch, 2005; Rosener, 2003). A number of research studies have also been conducted to examine the impact of gender on firm performance and governance (e.g., Carter et al., 2003; Adams and Ferreira, 2009). Besides, increasing representation in the business world, there is also a growing number of female political leaders (Dollar et al., 2001; Chattopadhyay and Duflo, 2004).⁶⁶

In the literature of psychology, ethics and business, females are portrayed as being more ethically sensitive than males, particularly in dilemma situation. One explanation for gender difference in ethical sensitivity is provided by the gender socialization theory. According to the gender socialization theory (Dawson, 1997), males and females learn their different sex roles, related values and concerns which form their masculine and feminine personalities in their childhood. Consequently, the two sexes have psychological and cognitive differences in moral principles. Carlson (1972)

⁶⁶ *Chattopadhyay and Duflo (2004, p. 1409) show that females represent 13.8% of all parliaments in the world. Dollar et al. (2001) examine if females are more effective in promoting honest government and find that the greater the representation of females, the lower the corruption level.*

suggests that males are guided by agentic goals which focus more on the pursuit of personal achievement and females are guided by communal goals which put more emphasis on the development of interpersonal relations.⁶⁷ Since females have socialized more communal values than males, females are more likely to react ethically in dilemma situations (Mason and Mudrack, 1996). However, empirically, the evidence whether females are more or less ethical is mixed.

A number of studies have shown that there is no significant difference between the genders for ethical preferences (Jaffee and Hyde, 2000; Radtke, 2000). Weait (2001) even suggests that females can be more liberal than males in ethical views. Owroso (2002) examines whether the presence of positive ethical information mitigates the previously observed superior female ethical sensitivity in evaluating the likelihood of fraud risk when performing audit. The result shows that given positive ethical signals, female auditors lose their superior ethical sensitivity to ethical dilemmas in fraud risk assessment, providing evidence that gender has no impact in ethical sensitivity. Further, Velthouse and Kandogan (2007) find male managers value personal and codified ethical concerns significantly higher than female managers.⁶⁸

On the contrary, there are also some studies showing that gender can explain differences in ethical decision-making behavior in the business ethics literature. Females are found to have stronger feelings about ethical issues concerning disclosure than males (Roxas and Stoneback, 2004). In an eight-country ethical dilemma study of accounting students (Australia, Canada, China, Germany, Philippines, Thailand, Ukraine and the US), Roxas and Stoneback (2004, p. 161) provide evidence that females are more ethical than males. The agency theory suggests that in order to perform good monitoring function, there should be an appropriate mix of experience and capabilities on the board (Hillman and Dalziel, 2003). In the accounting literature, Bruns and Merchant (1990) and Cohen et al. (1998) show that females are more aware of the ethical issues in making dilemma decisions. Carter et al. (2003) argue that a more diverse board enhances board independence and performs a better monitoring function on the management. Adams and Ferreira (2009) find a positive relation between gender and governance and conclude that a gender diverse board is a tougher monitor.

Although gender difference may affect individual ethical decisions with female executives being more sensitive to ethical issues than male executives, it is still unclear whether gender difference can affect the ethical decisions made by the firms as a whole. Fondas and Salsalos (2000) and Hillman and Dalziel (2003) further argue that gender diversity facilitates the board to monitor the management and to protect shareholders' interest more effectively by broadening the board's expertise, experience and qualities. Ibrahim et al. (2009, p. 348) survey 286

⁶⁷ For instance, females are more nurturing, less aggressive and less likely to be harmful to others (Radtke, 2000).

⁶⁸ In their study, Velthouse and Kandogan (2007, p. 159) report that female managers score particularly low in "not compromising own standards" and "providing accurate information" in personal ethics and in "adhering to regulations" in codified concern.

managers about their perceptions of codes of ethics, showing that gender has a significant impact on the attitudes of managers towards business ethics, with the female managers being more positive with respect to the impact of ethics code and more confident that the code would raise the business ethical standard.

In addition, in the psychology and finance literature, females are less overconfident, more risk-averse and conservative than males (e.g., Barber and Odean, 2001; Byrnes et al., 1999; Sundén and Surette, 1998).⁶⁹ Overconfident investors tend to hold more risky portfolios (Odean, 1998). Powell and Ansic (1997, p. 622) report that “females are less risk propensive, they tend to focus on strategies which avoid the worst situation to gain security”. Female entrepreneurs are more concerned about the risk associated with fast-paced growth and more likely to adopt a steady expansion rate (Cliff, 1998). Using different risk measures (return volatility, beta, size), Barber and Odean (2001) show that males invested in riskier portfolios than females. Olsen and Cox (2001) find that professionally trained female investors place greater weight in security considerations and loss potential when making investment decisions. Agnew et al. (2003) and Agnew et al. (2008) show that when facing financial decision for retirement investment plan, females are more likely to choose less risky assets and annuity. One reason proposed to the underperformance of female-owned firms to male-owned firms is the propensity to take risks (Sexton and Bowman-Upton, 1990). Watson and Robinson (2003) find that female-controlled SMEs have significantly lower risk compared to male-controlled SMEs.

If females are more ethical and risk-averse than their counterparts, female senior executives should realize that it is unethical, illegal and risky to violate securities regulations or commit fraud. To protect the best interest of the shareholders, the firms, and themselves, they would choose not to violate rules. Based on gender differences in ethical sensitivity and risk aversion, we conjecture that increasing gender diversity can minimize the likelihood and severity of fraud.

⁶⁹ Byrnes et al. (1999) show that females are less likely to engage in such risky activities as changing job, speeding, and drug abuse etc. Jianakoplos and Bernasek (1998) and Sundén and Surette (1998) find that females are more likely to invest in financial assets with low risk or return volatility.

RESEARCH METHOD

DATA AND SAMPLE SELECTION

Our sample period covers ten years between 2001 and 2010. The data of regulation violation or fraud is from the enforcement action announcements made by the CSRC. We collect the data of enforcement action announcements, board and firm characteristics as well as financial statements from Wind database. Over the 10-year period, there are 742 enforcement action announcements. We report the types of violations (Panel A), yearly (Panel B) and industry (Panel C) distributions of firms in Table 1. The violations include illegal share buybacks, inflated profits, assets fabrication, unauthorized change of fund use, disclosure postponement, false statement, violation in capital contribution, failure to disclose information, shareholder embezzlement, price manipulation, illegal guarantee and illegal speculation.

In Panel A, the number of violations is greater than 742 is because there are cases of multiple violations. It is common for firms to have multiple violations. Among the 12 types of violation, three of them are false statement, disclosure postponement and major failure to disclose information. In case if the firm violates the rules of inflated profits, unauthorized change of fund use, embezzlement, it is very likely that the firm also violates the rule of false statement, disclosure postponement and failure. In Panel B, the statistics show that the number of violation cases is higher during the period of 2001-2004. In Panel C, we observe that there is a higher incidence of enforcement actions in the conglomerates sector (as a percentage to total firms in the industry sector). However, among the 742 firms in the sample, most of them are from the industrial and manufacturing sector.

We employ a control firm approach to select firms for our analyses. Following Agrawal and Chadha (2005) and Chen et al. (2006), we create a group of control firms (no-fraud firms) which are not subject to enforcement actions. We use three criteria, stock exchange location, industry type and firm size, to select the no-fraud firms into our control firm group. For each fraud firm, we find a no-fraud firm which is listed in the same stock exchange (Shanghai Stock Exchange or Shenzhen Stock Exchange), same industry sector (utilities, property and construction, conglomerates, industrial and manufacturing or commercial) and similar in firm size. To select firms with similar size, we divide all firms by total assets into five categories. Firms are considered to be similar in size when they are in the same firm size category (from 1 to 5). Using these three criteria, we are able to choose 742 no-fraud firms in the control firm group for the analyses with the 742 fraud firms in the sample firm group.

REGRESSION MODELS

In this study, we explore if gender diversity makes a difference in the likelihood of violation of securities rules and fraud. Based on our hypothesis that firms with lower percentage of female directors are more likely to commit fraud, we examine the relation between the likelihood of fraud and gender diversity, controlling for governance factors and firm characteristics with the following model.

$$\begin{aligned} \text{Fraud} = & \alpha_0 + \beta_1 \text{Female Director Ratio} + \beta_2 \text{CHFemale} + \beta_3 \text{GMFemale} \\ & + \beta_4 \text{Multiple Director Ratio} + \beta_5 \text{Average Age} + \beta_6 \text{Average Education} \\ & + \beta_7 \text{Independent Director Ratio} + \beta_8 \text{CEO Duality} + \beta_9 \text{Board Size} + \beta_{10} \text{Board} \\ & \text{Meeting} + \beta_{11} \text{Supervisor Meeting} + \beta_{12} \text{Firm Size} + \beta_{13} \text{Leverage} + \beta_{14} \text{ROA} + \beta_{15} \\ & \text{Central SOE} + \beta_{16} \text{Local SOE} + \beta_i \sum_t \text{Year}_t + \beta_j \sum_j \text{Industry}_j \end{aligned}$$

Fraud is a dummy coded 1 if the firm is subject to an enforcement action on violation of regulation or fraud and 0 otherwise. We use *Female Director Ratio* (proportion of female directors on board) as our measure of gender diversity on board. As an additional test to examine if gender is a factor affecting the likelihood of fraud in a male-dominated society like China, we include *CHFemale* and *GMFemale* in the models. *CH* represents chairperson and *GM* represents general manager. *CHFemale* is a dummy coded 1 if the firm is led by a female chairperson and 0 otherwise. *GMFemale* is a dummy coded 1 if the firm is led by a female general manager and 0 otherwise. If females are more ethical and risk-averse than males, female senior executives (female board directors, female chairperson and female general manager) should commit less fraud. Therefore, *Fraud* should be negatively related to *Female Director Ratio*, *CHFemale* and *GMFemale*.

Aguilera et al. (2008) and Carter et al. (2010) suggest that the impact of gender diversity on firm performance and governance depends on other factors such as board and firm characteristics. Therefore, we include seven board and five firm characteristics as control variables in the logit model. *Multiple Director Ratio* is the proportion of directors with multiple board directorships. Multiple directorships can be a measure of expertise or busyness as additional board seats allow the directors to have more experience but also make the directors to be too busy for effective monitoring (Fich and Shivadasani, 2006). Beasley (1996) shows that financial statement fraud in the US is lower when the outside directors hold fewer directorships in other firms. *Average Age* is the mean age of directors on board. *Average Education* is the mean year of schooling of directors on board. Top managers who are younger in age and less educated are more conservative and risk averse than their counterpart (Hambrick and Mason, 1984; Wally and Baum, 1994).

Effective governance is positively related to board independence (Xie et al., 2003). Beasley et al. (2000) and Dunn (2004) find that there is a negative relation between board independence and fraudulent financial reporting. Therefore, we expect that firms with larger proportion of independent directors should commit less fraud as independent directors are assigned with the monitoring function on the management and hence should help to prevent the occurrence of fraud (Agrawal and Chadha, 2005). *Independent Director Ratio* is the proportion of independent directors on board. *CEO Duality* is a dummy coded 1 if the chairperson and general manager are the same person and 0

otherwise. While Beasley (1996) and Uzun et al. (2004) show no relation between fraud and chairperson/CEO duality, Dechow et al (1996) find that fraud is more likely in firm when there is chairperson/CEO duality.

Prior studies provide mixed evidence for the relation between board size and likelihood of fraud. Jensen (1993) and Yermack (1996) suggest that it is easier for CEOs to control large board hence large board is less effective in monitoring the management. However, Uzum et al. (2004) find no relation between board size and fraud. *Board Size* is the number of directors on board. Board activity should be positively related to the level of monitoring. Schminke et al. (2002) find that it is more likely for active leadership to get conformity in ethical decision. As more meetings should imply more monitoring and less fraud, there should be negative relations between the likelihood of fraud and number of meetings. We use the number of board meetings (*Board Meeting*) and supervisor meetings (*Supervisor Meeting*) to proxy for board activity.

We use *Firm Size* (log of total assets) to control for firm size in the model. *Leverage* and *ROA* are our two indicators of financial health. *Leverage* is a measure of leverage, which is estimated by debt to assets ratio. *ROA* is the profitability measure, which is proxied by return on assets. Beasley (1996) argues that firms in financial distress (e.g., high debt and loss) are more likely to commit financial statement fraud such as inflated earnings and false statement. We expect *Fraud* to be positively and negatively associated with *Leverage* and *ROA*, respectively.

Central SOE and *Local SOE* are the ownership variables to examine if the ownership structure has an impact on the likelihood to commit fraud. *Central SOE* is a dummy coded 1 if the firm is a state-owned enterprise controlled by central government and 0 otherwise. *Local SOE* is a dummy coded 1 if the firm is a state-owned enterprise controlled by province, city or country government and 0 otherwise. During the process of enterprise reforms started in the late 1970s, a number of state-owned enterprises (SOEs) are carved out. Although these SOEs become publicly listed, the central and local governments still retain a significant percentage of shareholding in the SOEs, which allows the governments to have a controlling stake in the SOEs.⁷⁰ If the firms are SOEs, it means that the central and local governments have power over the firm management. There are studies showing that high state ownership is beneficial for firm performance (Bortolotti and Faccio, 2009; Gupta, 2005).⁷¹ Chen et al. (2006) argue that the state shareholders are less likely to influence the firms to commit fraud. Since SOEs can seek financial protection from the central and local governments, the SOEs are less motivated to commit in financial fraud such as inflated profits and false financial statement. Therefore, we expect *Central SOE* and *Local SOE* to be negatively related to *Fraud*.

⁷⁰ Chen et al. (2006) show that about 30% of the shares in the SOEs are held by the central (and its ministries), local and regional governments. Another 30% of the shares are in the hands of legal entities (e.g., a SOE), which are also owned by the central government.

⁷¹ Bortolotti and Faccio (2009) find that privatized SOEs with high state ownership have better financial performance as measured by market to book ratio. Gupta (2005) reports similar results that privatized SOEs have higher sales, profits and labor productivity.

RESULTS AND DISCUSSION

We have in total 1,484 observations, with 742 sample and 742 control firms. The descriptive statistics of the variables are reported in Table 2. The mean percentage of female board directors is 14%. There are 84 and 105 female chairpersons and general managers, respectively. On average, there are 9.51 directors on board. The proportion of directors having multiple directorships is 14%. The mean age and the mean year of schooling are 47.49 and 3.32, respectively. About one-third of directors are independent directors. Only 254 firms have CEO duality. The directors and supervisors meet about 8.19 times and 4.09 times in a year, respectively. In total, there are 818 SOEs, with 219 central SOEs and 599 local SOEs.

Before we test the relation between gender and likelihood of fraud in a multivariate logit regression model, we employ a univariate test to compare the characteristics between sample firms and control firms to see if there exist significant differences. We report the results in Table 3.⁷² The sample firm group has a lower proportion of female directors (10.59%) than the control firm group (16.58%) and the difference is significant at 0.01 level. Of the 742 firms with enforcement actions on fraud, only 20 firms and 44 firms have female chairpersons and general managers, respectively. For the 742 control firms, there are 64 female chairpersons and 61 general managers. The Pearson Chi-square test shows that there is a significant difference between the sample firm and control firm groups in terms of the number of female chairpersons ($p < 0.01$), but not female general managers ($p > 0.05$). These results provide some preliminary evidence for our hypothesis that gender makes a difference in the likelihood of the incidence of fraud.

Among the control variables, there are no significant differences in the proportion of directors with multiple board directorships, proportion of independent directors, CEO duality, board size, number of supervisor meetings, total assets, number of central SOEs between fraud and no-fraud firm subsamples. However, there are significant differences in the mean age of directors, mean number of schooling of directors, number of board meetings, leverage and return on assets ($p < 0.01$). The mean age of directors in the fraud firms is smaller, suggesting that younger board commits more fraud. The mean number of schooling for directors in non-fraud firms is significantly higher than that in fraud firms. The greater number of board meetings in the sample firm group indicates that firms with more board meetings are more likely to violate securities regulations and commit fraud.

In Table 4, we show the results of the logit regression to examine if the proportion of female directors on board affects the likelihood of fraud. In addition,

⁷² Besides using the parametric *t*-test for equality of means, we also conduct a non-parametric Mann-Whitney test for significant difference in median values. The results are similar to those of the parametric test for mean values.

we also divide the fraud sample into two categories: disclosure related fraud and non-disclosure related fraud. The disclosure related fraud includes inflated profits, disclosure postponement, false statement and failure to disclose information. We classify illegal share buybacks, assets fabrication, unauthorized change of fund use, violation in capital contribution, shareholder embezzlement, price manipulation, illegal guarantee and illegal speculation in the non-disclosure related category. Of the 742 observations of fraud, 433 are disclosure-related fraud and 309 are non-disclosure related fraud.

Similar to the results in Table 3, we find *Female Director Ratio* and *CHFfemale*, but not *GMFfemale*, are negatively and significantly related to *Fraud* in Table 4. In the full sample, the coefficient on *Female Director Ratio* is -7.1362 ($p < 0.01$), implying that if the female board director ratio increases by one percent, the likelihood of fraud decreases by about seven percent. *CHFfemale* has a coefficient of -0.5919, which is also statistically significant ($p < 0.05$). The results suggest that firms with a large proportion of female directors and female chairpersons commit less fraud, hence implying that gender diversity is an important factor explaining the incidence of fraud and providing support to our hypothesis. When we divide the sample into disclosure-related and non-disclosure-related categories, *Female Director Ratio* is significant in the two categories but *CHFfemale* is significant in the non-disclosure related category. In addition, the coefficient on *Female Director Ratio* in the non-disclosure related category (-7.9400) is lower than that in the disclosure related category (-6.7616), suggesting that females have greater influence in reducing the likelihood of non-disclosure related type of fraud.

We find that the coefficient on *Average Age* ($p < 0.01$) is negatively and significantly related to *Fraud*, suggesting that younger board is more likely to commit fraud. Beasley et al. (2000) and Dunn (2004) show that firms with larger proportion of independent directors commit less fraud. However, *Independent Director Ratio* is not significant in the model. Jensen (1993) and Yermack (1996) find that large board is less effective in monitoring the management. The positive coefficient on *Board Size* (which is significant at 0.05 level) suggests that more board directors imply more fraud. Since the violations of securities regulations (e.g., false financial statement, embezzlement, unauthorized use of fund) are to be committed by people, the greater the number of board directors, the higher the probability for fraud to happen. We expect more board meetings should lead to more effective monitoring (i.e., a negative relation between *Fraud* and *Board Meeting*). However, in the disclosure-related category, the coefficient on *Board Meeting* is 0.0671, which is significantly related to *Fraud* ($p < 0.05$), indicating that more board meetings, more fraud, a result which is consistent with Chen et al. (2006). Chen et al. (2006, p. 444) explain that the directors need more discussions for the questionable activities that the firms has engaged in or about to engage in and hence there may be a positive relation between *Fraud* and *Board Meeting*.

It is expected that fraud firms have poorer performance, in terms of leverage and profitability, than no-fraud firms. We find *Leverage* and *ROA* to be positively

and negatively related to *Fraud*, respectively. *Leverage* is significant in the full sample and disclosure related sample ($p < 0.05$). The coefficients on *ROA* are -7.9075 in the full sample, -7.1948 in the disclosure related sample and -9.9064 in the non-disclosure related sample, which are all significant ($p < 0.01$). The results of significantly positive relation between *Leverage* and *Fraud* and negative relation between *ROA* and *Fraud* are consistent with our expectation. The result shows that the two ownership variables, *Central SOE* and *Local SOE*, have expected signs (negative) and are significant. The negative relation suggests that ownership structure has an impact on the propensity of fraud, with SOEs being less likely to commit fraud.

CONCLUSION

This paper examines if there is gender diversity in the likelihood of fraud or violation of securities regulations. Fraud is not uncommon in the business world. On average, an organization loses about 5% of revenue to fraud annually (2010 Report to the Nations on Occupational Fraud & Abuse). In the past few decades, there have been a growing number of females occupying high-level positions in the business world. Research shows that there is a gender difference in ethical sensitivity and degree of risk aversion, with females being more ethical and risk averse than males. Recently, there is an increasing focus on board diversity, particularly gender diversity, as a way to improve corporate governance. Hence, there is a global call for gender diversity on the board. In this study, we hypothesize that firms with more female board directors are less likely to commit fraud.

We find that firms with a higher proportion of female directors (relative to board size) and led by female chairpersons are less likely to violate securities regulation or to commit fraud, after controlling for other corporate governance and firm characteristics. As well, violations are less severe as indicated by the less pronounced impact on share prices when there is a greater presence of females on the board. Our study contributes to an improved understanding of gender differences in ethical sensitivity, particularly in the top management level (chairperson, CEO and board directors). We add to the ethics literature by providing international evidence about gender diversity in China, which is a male-dominated society. In addition, our finding has implications for policy-makers or regulators of board composition to consider the issue of a more gender diverse board.

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Table 1: Summary Statistics of Enforcement Action 2001-2010

Panel A: Breakdown by Type of Violation

	<u>Frequency</u>	<u>Percentage</u>
Illegal share buybacks	122	8.58%
Inflated profits	108	7.59%
Assets fabrication	29	2.04%
Unauthorized change of fund use	44	3.09%
Disclosure postponement	413	29.04%
False statement	210	14.77%
Violation in capital contribution	1	0.07%
Major failure to disclose information	303	21.31%
Major shareholder embezzlement	114	8.02%
Price manipulation	14	0.98%
Illegal guarantee	58	4.08%
Illegal speculation	6	0.42%
Total	1422	100%

Panel B: Breakdown by Year

	<u>Frequency</u>	<u>Percentage</u>
2001	93	12.53%
2002	83	11.19%
2003	87	11.73%
2004	94	12.67%
2005	55	7.41%
2006	51	6.87%
2007	57	7.68%
2008	58	7.82%
2009	102	13.75%
2010	62	8.36%
Total	742	100%

Panel C: Breakdown by Industry

	<u>Frequency</u> (%)	<u>% of Total</u> <u>Number of</u> <u>Firms in</u> <u>Industry</u>
Utilities	71 (9.57%)	25.91%
Property and construction	28 (3.77%)	29.47%
Conglomerates	86 (11.59%)	56.95%
Industrial and manufacturing	522 (70.35%)	34.62%
Commercial	35 (4.72%)	27.56%
Total	742 (100%)	34.43%

Table 2: Descriptive Statistics

	<u>Mean</u>	<u>Median</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Standard Deviation</u>
<i>Fraud</i>	0.5000	0.5000	1.0000	0.0000	0.5002
<i>Female Director Ratio</i>	0.1359	0.1250	0.5000	0.0000	0.0996
<i>CHFfemale</i>	0.0566	0.0000	1.0000	0.0000	0.2312
<i>GMfemale</i>	0.0708	0.0000	1.0000	0.0000	0.2565
<i>Multiple Director Ratio</i>	0.1437	0.1111	0.7778	0.0000	0.1334
<i>Average Age</i>	47.4949	47.4444	60.1111	35.1111	3.9967
<i>Average Education</i>	3.3292	3.5000	7.1111	0.0000	1.6978
<i>Independent Director Ratio</i>	0.2981	0.3333	0.6000	0.0000	0.1190
<i>CEO Duality</i>	0.1712	0.0000	1.0000	0.0000	0.3768
<i>Board Size</i>	9.5108	9.0000	19.0000	4.0000	2.1142
<i>Board Meeting</i>	8.1860	8.0000	26.0000	2.0000	3.3095
<i>Supervisor Meeting</i>	4.0930	4.0000	16.0000	1.0000	1.7888
<i>Firm Size</i>	20.9792	20.8880	25.9615	15.3764	0.9462
<i>Leverage</i>	0.4844	0.4993	0.9069	0.0091	0.1853
<i>ROA</i>	0.0148	0.0256	0.4573	-0.5280	0.0850
<i>Central SOE</i>	0.1476	0.0000	1.0000	0.0000	0.3548
<i>Local SOE</i>	0.4036	0.0000	1.0000	0.0000	0.4908

Notes: Female Director Ratio, Multiple Director Ratio, and Independent Director Ratio are in proportion to total directors on board. CH represents chairperson.

GM represents general manager. Average Age and Average Education are in number of years. Leverage and ROA are in percentages of total assets. Firm Size is in natural logarithmic form.

Table 3: Sample Comparison

	<u>Sample Firm Group</u>	<u>Control Firm Group</u>	<u>Mean Difference</u>	<u>Sample t-test p-value</u>	<u>Pearson Chi-square Test p-value</u>
<i>Female Director Ratio</i>	0.1059	0.1658	-0.0599	0.00**	
<i>CHFemale</i>	20	64	-44		0.00**
<i>GMFemale</i>	44	61	-17		0.09
<i>Multiple Director Ratio</i>	0.1387	0.1486	-0.0099	0.15	
<i>Average Age</i>	47.1672	47.8225	-0.6553	0.00**	
<i>Average Education</i>	3.1735	3.4849	-0.3114	0.00**	
<i>Independent Director Ratio</i>	0.2986	0.2977	0.0009	0.88	
<i>CEO Duality</i>	117	137	-20		0.17
<i>Board Size</i>	9.5984	9.4232	0.1752	0.11	
<i>Board Meeting</i>	8.4596	7.9124	0.5472	0.00**	
<i>Supervisor Meeting</i>	4.1577	4.0283	0.1294	0.16	
<i>Firm Size</i>	20.9583	21.0001	-0.0418	0.40	
<i>Leverage</i>	0.5139	0.4549	0.0590	0.00**	
<i>ROA</i>	-0.0076	0.0371	-0.0447	0.00**	
<i>Central SOE</i>	109	110	-1		0.94
<i>Local SOE</i>	270	329	-59		0.00**

Notes: Sample Firm Group includes the firms with enforcement actions on violation of regulation or fraud. Control Firm Group includes the firms without enforcement actions. Female Director Ratio, Multiple Director Ratio, and Independent Director Ratio are in proportion to total directors on board. CH represents chairperson. GM represents general manager. Average Age and Average Education are in number of years. Leverage and ROA are in percentages of total assets. Firm Size is in natural logarithmic form.

** and ** denote significance at 0.05 and 0.01 levels, respectively.*

Table 4:Regression Analysis: Main Results for Determinants of Fraud

	Full Sample		Disclose-related		Non-Disclose-related	
	Coefficient	P-value	Coefficient	P-value	Coefficient	P-value
Intercept	2.7737	0.08	0.6170	0.77	6.7708	0.01
<i>Female Director Ratio</i>	-7.1362	0.00**	-6.7616	0.00**	-7.9400	0.00**
<i>CHFemale</i>	-0.5919	0.04*	-0.1343	0.69	-1.7795	0.01**
<i>GMFemale</i>	0.2778	0.26	0.3583	0.24	0.4108	0.36
<i>Multiple Director Ratio</i>	-0.8412	0.08	-1.6890	0.02*	0.7166	0.31
<i>Average Age</i>	-0.0567	0.00**	-0.0198	0.37	-0.1065	0.00**
<i>Average Education</i>	-0.1202	0.00**	-0.1525	0.01**	-0.1206	0.07
<i>Independent Director Ratio</i>	1.8421	0.06	1.5070	0.27	2.1541	0.16
<i>CEO Duality</i>	0.0152	0.92	-0.1307	0.53	0.2509	0.32
<i>Board Size</i>	0.0692	0.02*	0.0714	0.06	0.0540	0.26
<i>Board Meeting</i>	0.0295	0.15	0.0671	0.02*	-0.0029	0.93
<i>Supervisor Meeting</i>	0.0167	0.66	0.0007	0.99	0.0255	0.70
<i>Firm Size</i>	0.0055	0.94	0.0064	0.95	-0.0349	0.79
<i>Leverage</i>	0.8526	0.03*	1.2194	0.02*	0.2723	0.65
<i>ROA</i>	-7.9075	0.00**	-7.1948	0.00**	-9.9064	0.00**
<i>Central SOE</i>	-0.1236	0.50	0.1315	0.59	-0.6464	0.03*
<i>Local SOE</i>	-0.5508	0.00**	-0.7220	0.00**	-0.3093	0.18
Year Dummies Included						
Industry Dummies Included						
McFadden R-square	0.1608		0.1688		0.1960	
Log Likelihood	-983.19		-498.92		-344.40	
LR statistic	330.88		202.69		167.93	
p-value	0.00		0.00		0.00	
N	1484		866		618	

Notes: The dependent variable is *Fraud*. *Female Director Ratio*, *Multiple Director Ratio*, and *Independent Director Ratio* are in proportion to total directors on board. *CH* represents chairperson. *GM* represents general manager. *Average Age* and *Average Education* are in number of years. *Leverage* and *ROA* are in percentages of total assets. *Firm Size* is in natural logarithmic form.

* and ** denote significance at 0.05 and 0.01 levels, respectively.

WHAT DOES IT MEAN TO BLOW-THE-WHISTLE: ETHICAL APPROACH

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Abstract: The problem of whistleblowing is recognized as a standard problem of business ethics. Considering the individual level, it is concerned with deontological value of moral integrity. Strict business ethics analysis would center this problem in the complexity of employee- employer relationships. The aim of this paper is to show the real place of two conflicting values, the value of loyalty and the value of moral integrity. We intend to reach this goal by using the whistleblowing problem as an example where these values come into conflict. To make this puzzling case clear, we will try to make a difference of loyalty and integrity on the level of duty. Thus, we introduce Kantian approach into consideration. The duty of loyalty is not absolute, and we will try to prove that employees may have a higher order obligation to be disloyal to their employer and blow the whistle. That means that the value of moral integrity may override the loyalty duty on the grounds of moral justification. It is very important to show how it is possible and justified, because of the significance of the obligation to loyalty. The results of our effort should benefit business, both the human potential and the economic interest side of it.

Key words: Whistleblowing, Business, Moral Integrity, Loyalty, Duty

JEL classification: M14, M21

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INTRODUCTION

Whistleblowing is a problem that can be analyzed from different perspectives. Our primal goal is to consider it from the business ethics point of view. In this context, the whistleblowing is the problem for individual's will, whether at the level of decision making, or at the more modest level. Also, the whistleblowing is associated with the problem of conflict of interest, as a special form of the broader theme of conflicting interests. At first glance, an ethicist catches the tension at the level of values (between intrinsic and instrumental) and at the level of duty (whether it is a conflict, or rather cross of duties and rights or conflict of perfect and imperfect duties, responsibilities or duties to oneself and to others). After some analysis, we could locate the whistleblowing problem in the field outlined by mentioned ethical tensions, because it can be described by these dichotomies. It seems that the analytical effort on these topics led ethicists to key issues that define the framework of business ethics, as one field of applied ethics. This is what makes the consideration of ethical aspects of whistleblowing very interesting and important, especially for someone who is interested in success in business, but also for an ethicist, who is generally dedicated to get to know the good, proper, virtue and something that should be the case.

In this paper we will try to specify the notion of whistleblowing, and the most important issues that it raises. To the extent that we are dealing with considerations of values and duties, the theoretical background of our research is, at least vocabulary, defined by Kantian ethics. It would be hard to imagine an ethical analysis generally, that didn't take over key words from Kantian tradition, even if it doesn't support Kant's views. In other words, ethics is defined by Kantian terms. In addition to these modest ambitions, our goal is to try to place the whistleblowing in the framework of a plausible ethical justification. That means we need to try to depict the problem in details, relevant for ethical analysis. After that we would be able to see the appropriate mode of justification that fits the problem the best. This is a very complex task for different aspects and levels of ethical justification that should be taken into account. Now, let us meet this challenge (Elyas et al., 2013).

THE NOTION OF WHISTLEBLOWING

We will start with the elementary definition of whistleblowing, the one alike those you can find in a dictionary. According to Wikipedia „the term *whistle-blower* comes from the whistle a referee uses to indicate an illegal or foul play. US civic activist Ralph Nader coined the phrase in the early 1970s to avoid the negative connotations found in other words such as "informers" and "snitches". Most whistleblowers are *internal whistleblowers*, who report misconduct on a fellow employee or superior within their company. One of the most interesting questions with respect to internal whistleblowers is why and under what

circumstances people will either act on the spot to stop illegal and otherwise unacceptable behavior or report it. There is some reason to believe that people are more likely to take action with respect to unacceptable behavior, within an organization, if there are complaint systems that offer not just options dictated by the planning and control organization, but a *choice* of options for absolute confidentiality. *External whistleblowers*, however, report misconduct to outside persons or entities. In these cases, depending on the information's severity and nature, whistleblowers may report the misconduct to lawyers, the media, law enforcement or watchdog agencies, or other local, state, or federal agencies. In some cases, external whistleblowing is encouraged by offering monetary reward." (<http://en.wikipedia.org/wiki/whistleblower>)

Based on these indications we get to know several elements important for the determination of the term whistleblowing. First, 1) whistleblowing represents a response to behavior deemed to be illegal, immoral or harmful. It is important that 2) an intention to prevent or end such behavior exist, and that the one who blows the whistle does that in order to prevent improper practices. Further, 3) the whistleblower may be motivated to blow the whistle in different ways. And finally, 4) he can alarm the close, internal environment (in that case we do not have whistleblowing, because a man didn't alarm the public and there is still a possibility to react if somebody is willing to) or he can really blow the whistle, alarming the whole public, beating from the rooftops.

We'll get into considering of each of these elements in details.

Ad 1. Whistleblowing is a reaction to the illegal, immoral or harmful behavior. First, the fact that someone thinks that the response is necessary, shows that there is no generally accepted attitude about the way we should respond to such behavior. On the contrary, most of the actors who are in some way involved in or are familiar with a given suspect behavior, does not consider that it is necessary to respond. The reasons for this may be manifold. Ignorance factor plays a certain role. It may happen that those who are at leading or managerial positions are far better aware of the relevant facts and circumstances that are accessible to them, and very often they are the ones who directly create decisions which invoke irregular behavior. Those who choose to blow the whistle must have true reasons to believe that their action will prevent illegal, immoral or harmful. How will he be able to substantiate this assessment if relevant facts of the case are not available to him, because of the position he takes inside the company? He could try to consult with someone, but the situation is very problematic. The environment can be corrupted, and in these circumstances it is very dangerous to consult. On the other hand, such information, which is basic for a decision of taking involved risks, must be checked. This request is uncompromising. Thus, a whistleblower is in the position of a man who carries on his shoulders a classic, but a heavy burden. This is a burden of cognitive limitations which, in the context of predictability of consequences, becomes an ethical limit. This means that our decision making process is additionally complicated because of the factor of ignorance. And the only question is how influential the factor in these circumstances is and what is its significance. On the

other hand, employers and managers have much more direct access to information and higher responsibility that business moves they take do not harm the interests of the company. This may mean that they have to worry about whether their actions will fail to maximize profit or will they harm the interests of stakeholders. Here there is an obvious tension: a whistleblower can't be a person that directly and significantly affects the decisions that are vital to the business practices. A whistleblower is the one who has no other way of reacting to immorality or illegality of the act, than to alarm the public opinion, hoping that that would lead to the change of corporate decisions. The people who make those decisions will not blow the whistle. They can make their decisions better prepared and they can examine every relevant fact more carefully. On the other hand, they have access to information on which they can accurately determine the nature of practice they are to make decision. That is why they are easy to silence whistleblowers if they show the slightest uncertainty. And a position of a whistleblower becomes even more difficult, because it is unlikely that he will be able to have so much power in arguments that are in his hands. Whistleblowing is a riot that occurs due to the asymmetry of power and the presence of the sense of justice, which is inversely proportional to the power. The main strength of a whistleblower is his willingness to make the justice come to life in practice, so he is the one who follows the call of justice. In the act of whistleblowing, one tries to change the asymmetry of power in favor of justice, by using the power of the public. The risk is imminent to this rebellion. In most cases the whistleblower gets fired, anathematized and his promotion is prevented, at current job and with other employers. Whistleblowers must be aware of the risk of losing their jobs and reputation and risk of jeopardizing their own families. They must know that the risk is the price of his right to blow the whistle.

Ad 2 The aim of whistleblowers is to prevent improper practices. This means that the whistleblower was estimated that the aim is available and that he should realize it. In other words, it is important to emphasize that whistleblowing is a practical matter, and that it shouldn't be simplified. It is justified only if it is effective (Di George, 2003, pp.258). Anyone who wishes to engage in such a process must be sure that he manages to weigh out the importance of different facts, and that he can be confident that his assessment is not self-destructive. If we accept that the practice is a purposeful activity, the practical side of whistleblowing will be provided by efficacy of its procedure. This means that there is a reasonably well-founded estimate that the risk of personal harm is minor and negligible compared to the probability and magnitude of harm to others. The disproportion is so great that we almost can't consider the damage on the personal level to be called damage, we are also able to ignore it. It wouldn't be right if rational foundation of neglecting of personal harm occurred thanks to the strong sense of injustice, which can make us completely separated from the evaluation of self-interest. Acting on the basis of strong feelings can mean that we can come totally blind, when it comes to the reason underlying. Good intention, if we are talking about legitimate cases of whistleblowing, is based on a certain competence and the willingness to take the risk. This will is supposed to get after taking into account valid and compelling

reasons. Also, the intention of which we speak here is intention to prevent or stop improper practices. That intention is *prima facie* intention, not the intention to alarm the public, no matter what. Intention to reach your goal is rational and not emotionally caused. Such intention is a precondition of moral assessment procedure in Kant's ethical position, and it defines the field of possible moral assessment.

Ad 3 The motivation for whistleblowing can be manifold. The question of motivation has at least two sources of its significance for us and the consideration of the whistleblowing. On the one hand, we talk about motivation as the motivation of the person who decides to blow the whistle. That motivation may come from some kind of non-moral interest or it can be pure moral motivation. On the other hand we are talking about the motivation of the whistle-blowing process, and in that sense, it is a matter of its evaluation, i.e. evaluation of the procedure. Is the whistleblowing procedure that should be encouraged and promoted or discouraged? This question is especially difficult if we want the answer for all cases of whistleblowing, for the class of actions with the same name. At this point, the most challenging for the problem of whistleblowing as we have conceived it, is pure moral motivation. Expressing by vocabulary of Kantian ethics, it is motivation that comes from the duty to act. If the motivation comes from envy, malice, intrigue and revenge as a motive, then we are dealing with whistleblowing as a means of satisfying an interest that is not simply an interest to prevent immoral, illegal or harmful procedure. In these circumstances, the risk as an integral part of blowing the whistle is differently calculated within the global calculus of decision-making and that risk has a specific weight than when it comes to risk in a purely moral motivation. We did not determine the whistleblowing act as a kind of personal account. Also, we can't say in advance whether whistleblowing should be discouraged or encouraged. The issue of that, let us call it, meta-motivation remains unresolved, it is still the problem because of the essential nature of the whistleblowing practice. The essential feature of whistleblowing is a complex conflict of obligations, rights and duties in a specific set of circumstances that is not typical, nor is it possible to define them in advance.

Ad 4 the main concern here is about cases in which an individual announces a plan or procedure that have been made and that are invalid or unlawful to authorities. He doesn't alarm the public on this occasion. Should these cases be taken into account as deeds of practice called whistleblowing? Suppose that an individual is morally motivated, that he doesn't defame colleagues or employer because of envy and that he follows the call of justice. If he ventures to use the instances within the company to try to point out the irregularities, he must judge the situation as to be a serious potential harm. But is he required first to use all the mechanisms that are available within the company, rather than to reach for a literal emergency alarm to the public?

It is important to emphasize that a wide range of actions for which we use the term whistleblowing do not have the same moral status. Thus, we recommend that cases where the misconduct is revealed to someone from the company should be

called the internal whistleblowing (Di George, 2003, pp. 249). The key assumption for this class of action is usually honor system. In fact, like the lying practice assumes that telling the truth is common practice, the practice of abusing trust presupposes respect for trust as common. If you disclose cheating on exams, you just embrace the assumption of a common practice that doesn't include cheating. In fact, this is the essence of the request for logical universalization that we found in kantian ethics, when it comes to perfect duties. But the essence of morality is actually the practical application of universalization, where there is freedom to choose the procedure that can be both correct and incorrect. Then to the forefront comes moral quality, and not in a situation where it is logically impossible to proceed in a different way. A student who discloses his colleague who cheat and an employee who blows the whistle to his colleague for falsifying accounts for business travel, both revolt against the misuses. And they can define misuses because their background consists of generally accepted norms that are undeniable. These norms define the framework of their practice. In this class we can also extract cases of personal whistleblowing, like reporting sexual harassment. These are cases where global severe harm doesn't have to be involved although these are typical cases of faulty behavior and violation. Here we recognize a twisted dilemma about whether such things could or should be disclose. Analyses of such cases also highlight the tensions between rights and duties. A special feature that defines the moral analysis of personal whistleblowing is the share of personal factors in decision making.

If a wrong practice threatens the population because there is no immediate response, only outside whistleblowing can be effective. If it is well-founded, the basic foundation for decision on such public alert is a doubtless assumption that there is a serious global harm. Here, the internal mechanisms are used mainly as a warning, because the urgency of response requires rapid shift to alert the media. The request to respond in a tight timeframe further complicates the decision-making process and increases the level of pressure. We must notice that the notion of serious harm is elusive and problematic. First, in this context we can think of cases in which the business is about launching of dangerous, unsafe products on the market or about hiding environmental incidents whose harmful effects are of such a size that defines these events as an ecological disaster. If the moral motivation is an assumption of whistleblowing, then serious harm means loss of something that is considered irreversible and irreplaceable. So, we also assume that there are things whose value is incommensurable. What are these things and what is the threat that could endanger them? Reaching the general answer to this question would mean to deprive the puzzle from the moral and turn moral philosophy into the scientific theory of morals. Still, at least we'll try to illustrate what it is about. The harm that is serious enough to justify the decision to blow the whistle, even though others can think of us as a traitor and even though we have to take a huge risk is endangering other people's lives. There are situations, such as the famous case of the Ford Pinto (De George, 1981), which suggests an utilitarian calculus for comparison of costs and benefits. Of course, here the probability parameter is extensively used, and the items like the fear and collection litigation of bereaved families are taken into account. The one who blows the whistle in

this case is following the call of duty, and for him that calculus does not make sense. The decision in favor of whistleblowing here is a matter of moral reasons that are incommensurable with probabilities of various costs. Whistleblowing is the product of a coherent voice of integrity in the individual and is a *conditio sine qua non* of taking the risk in this case. Anyone who decides not to take into account the reason, overlooking it, will be able to approve launching of Challenger or selling Ford Pinto, but others will not be able to. In such situations, the entire class of such whistleblowing practices should definitely be encouraged. But, it is possible that, if we fail to recognize a case of abuse and lack of moral motives, we will replace one loss with another, perhaps even greater and more serious damage.

IMPORTANT ASPECTS OF WHISTLEBLOWING: WHISTLEBLOWING AS AN ETHICAL PROBLEM

We have embraced the task of highlighting the moments that have been depicted in the context of proposed ethical analysis as essential to the problem of whistleblowing. Note that we will use the phrase problem of whistleblowing assuming that in the certain circumstances and about a specific, proposed or already established, business practice an ethical conflict occurs. We should now try to define that conflict more precisely.

Let us start using some instructive help from relevant researches in the field of business ethics. Ronald Duska claims that "discussions of whistleblowing generally revolve around three topics: (1) attempts to define more precisely whistleblowing, (2) debates about whether you and when whistleblowing is permissible, and (3) debates about whether you and when one has an obligation to blow the whistle" (Duska, 1997, pp. 335). Each of these aspects is burdened with an ethical dimension, and also relevant for our analysis. In the previous chapter we pointed to the constitutive elements that stand out when trying to define the whistleblowing. On that occasion, we have highlighted the topics that seemed interesting for ethical analysis point of view, related to ethical problems that are well known. In a way we have mentioned:

1. The problem of cognitive constraints: ignorance regarding the relevant facts limits our decision-making and moving to action. It also affects the moral evaluation. Here we remind of a problem, usually formulated as factors of ignorance as connected with accountability and the problem of responsibility for the action in general, which is further complicated due to the high risk of harm that the launch of unverified information or defamation can cause.
2. The problem of risk: we will call attention just to a moral dilemma. To what extent, in what circumstances, and whether is a man obliged to risk the interests of its family and its own interests, in the sake of interests of the company or the general interests of the population, in a situation where that risk is not defined as the business's responsibility, and is not the duty that defines his job position? In other words, what is the acceptable risk?

3. Good intentions, as an assumption of whistleblowing are very important feature that participate in ethical analysis. Here, good intentions must be based on a certain competence, not the desire of getting a higher power or desire to impose their own sense of correctness or expertise (Babic, 2002, pp. 51). Also, we take for granted that the prerequisite of whistleblowing that tends to be justified is an intention to protect the general and long-term interests and to succeed in preventing improper practices. What does it mean to have good intentions and what are the main ethical objections to a valuation of actions based on the concept of intention, namely, deontological conception?
4. The decision making problem is present when we consider whistleblowing practices due emphasized need of establishing priorities. Decision-making takes place at multiple levels and does not end up by simple choice of one of the ready-made alternatives. It is necessary to determine the hierarchy of interests, rights and duties, which will be able to be defining, precise and reliable for our behavior.
5. Motivation: Motivation is present as a motivation for an action, where we try to deal with cases which have pure moral motivation and cases with some kind of external, non-moral and interest-guided motivation. The second type of motivation is related to the issue of valuation, meaning the general attitude towards whistleblowing practices.
6. We should discuss different types of whistle blowing, as an internal, personal or external, and define additional restrictions coming along with specificity of a particular form.
7. Finally, the problem of harm, otherwise very common in ethical theory. It is generally considered that the harm is the basis for liberty limiting principles (Feinberg, 1984). It seems that is enough to note this problem, so we could create a picture of the complexity of the issues that could be analyzed.

Although we have named these ethical problems claiming that they are derived from the desire to accurately determine the concept of whistleblowing, which is the first theme indicated by Ronald Duska, the fact is that we are thus already entered the area of crucial moral dilemmas of whistleblowing. Let us summarize main features of whistleblowing as an ethical problem. It is a special case of conflict of interest in which it comes to light something that is known to be incorrect. Thus, conflict of responsibilities, duties and rights as well as a problem of priorities when determining values are immanent to whistleblowing. Therefore, the ethical analysis of whistleblowing can be organized around two main issues: first, the loyalty, and other moral integrity. In the following we will address these issues.

LOYALTY AND WHISTLEBLOWING

One of the main, if not the sole reason to conceive whistleblowing as a generally unjustifiable practice is unwarranted disrespect of loyalty. What is the loyalty, how do we conceive the notion of loyalty, what is its place and what is the nature of demands for respect of loyalty? With these issues, we have introduced the discussion on the conflict of duties and rights.

THE ORIGIN OF LOYALTY

First, what is loyalty? In the collective, the individual becomes a member of the working group. This group is determined by the specific dynamics, social climate and cohesion. In this group there are rules of varying degrees of formality; their background is unequal strength of the participants and their appropriate share decision-making process or influence on decision-makers. People who work together are people with feelings and they have a common goal. The basis of loyalty is created among people in a group due to request of a *positive attitude* towards colleagues and the work. "Apathetic or alienated worker certainly is not a team player, and usually works just enough not to be fired. If he gets the chance, that worker will gladly leave the firm for a job at another company. Such workers lack loyalty to their employers"(Di George, 2003, pp. 254). If we accept that a positive attitude founds what we call loyalty, the question of the interpretation of a positive attitude still remains. A positive attitude may come from a feeling of *gratitude* to the employer on the grounds that he has given us the opportunity to work (and in the situation of massive unemployment this becomes more important), or because an employee thinks that behavior of the employer is correct, so he deserves loyalty. Correct behavior usually refers to the domain of actions which the law does not regulate, or actions that lack legal sanction even though there is legislation, and in which the employer could behave in different ways. On the basis of employers' decisions in this area, employees make judgments about his character and whether that deserves our affection and devotion. Also, even if the employees do not have this source of positive attitude, and if they are aware that they are completely faceless, interchangeable individuals, they still need to feel that company they work for is their own company. This identification facilitates participation in a practice in which the others share the same goal. If that is the case the loyalty comes from an individual's need for meaningful work. Further, our need for security is getting the face of *concern* for our company and this concern can also represent loyalty to the firm.

STATUS OF LOYALTY REQUEST

What does loyalty require of an employee? What kind of change in the nature of relationship between employee and employer comes from loyalty request?

Suppose that we have decided to stick to the ethical minimum norm not to cause intentional harm to others. If we want to extend this request on the basis of the intuition of common sense morality, we can require the commitment to the obligation of preventing harm to others. We assume that the price of preventing harm is small and insignificant compared to the damage that we prevent. Let us call this a Samaritan realist position: he helps if it is reasonably well founded, and if it does not lead him to victim status. In this setting the treatment of the loyalty obligation turns out to be problematic. If you need my help and the price is not great for me, when should I help? Assume first that it isn't about serious harm. Should we help the employer and be silent about injustice, because the price of silence is not great? But I *can* keep my mouth shut if I am aware of some injustice, as well as I *am* quiet when I don't know anything about it at all. These two cases are different. The former one would be my decision which requires justification, and the latter would be simply a necessity that has no relation to justification. Another question rise: should I help someone who is hardly affected by such injustice and reach for the emergency alarm, because for me it does not have to be too high price? If it is a serious harm, this dilemma seems quite different.

The hierarchy of interests is background for determination of the place of loyalty obligation. Each interest is generally legitimate, but their priority depends on the circumstances. Self-interest, the interest of the company (if we accept the stakeholder theory in terms of the objectives and tasks of the company, this interest can be further analyzed), the public, general social interests are in the game. None of these interests is the most important in all circumstances nor has *a priori* priority. Customary and moral standards, internal company codes as well as legal norms should assist in determining the behavior when a conflict of interest exists. But it often can be very complicated and difficult to measure. Relationship of employer and employee is defined by the fact that employee works for the employer in compensation for money, but that way he owes obedience and respect. Obedience and respect are the foundation for positive feelings which constitute loyalty. What are the limits of obedience? Does the employer rightfully expect that under the pretext of job descriptions employee does something illegal or immoral? Is the employer somebody who "owns" the employee full time, or only for the duration of job time? In other words, we are interested in how far duty of loyalty goes?

Whatever the motive for loyalty is, it is natural that there is a duty of loyalty to the supervisor of the employee (employer, manager, owner of the company). Specifically, there is a loyalty to the company. And the company is represented by certain people. Employees need to address their senses that move loyalty, and they often address these senses to people. If so, then our loyalty to the company may mean that we should protect the company from harmful decisions, which are actually made by people who represent it. However, the definition of loyalty

addressee may appear as a problem (Babic, 2002, pp. 50). Who are we loyal to: the firm, the owner, CEO, principle of collegiality, hidden power center? Disobedience can sometimes be an act of loyalty. Are we obliged to defend the interest of the company from malicious individuals and their decisions, in order to show the loyalty? Or does this request belong to the loyalty to something else or to some other wider interest, or the law? Sometimes it can happen that there is a loyalty to the moral rightness and we will speak of that in details in the next chapter, considering the moral integrity problem in the whistleblowing cases.

Loyalty means that we should not slander the company and the individual, which is, after all, punishable by law. This automatically means that loyalty involves restriction of the right to freedom of speech. But this right is not an absolute right. One extreme position would be the claim that right to free speech is always superior, because it would, beyond desirable measure, encourage whistleblowing. So we would get a paranoid company where the whistleblowing would be usual and so pointless. And it wouldn't be the whistleblowing in the proper sense. This company looks like a small police state. The right to freedom of speech is limited at the moment we need to verify the information, by the appropriateness in a given case, and the moment of the legal limitation (the law prohibits making a statement that harms someone's honor).

Loyalty also means proper behavior of employees in order to protect the reputation of the company, which is particularly the request for people whose roles are prominent. Misconduct may involve different actions, depending on the role and nature of the activity which the employee is engaged. This behavior causes damage to the company directly. It affects the reputation and image, and thus the success of the company.

For now, we can claim that there is a duty of loyalty that is often cited as a reason for opposing public alert. In general, it is assumed that the practice of whistleblowing is the exception, and that respect for the duty of loyalty is common practice. Thus, distress and breach of a duty of loyalty requires justification. But from these claims we can't draw the conclusion that whistleblowing is generally morally unjustifiable, or that the duty of loyalty is absolute. This only means that there are circumstances in which the duty of loyalty may reasonably be overridden. The cases that make it necessary to revise the obligation of loyalty are cases in which there may be justifiable and purely morally motivated whistleblowing. We can't agree that in the name of loyalty somebody asks an employee to do something unethical or to withhold about the immoral or illegal practice that he knows about. In whistleblowing employees oppose such a demand, ignoring the risk much easier as harm that threatens is more significant.

*WHISTLEBLOWING AS ALLOWED, OBLIGED OR PROHIBITED, IN
RELATION TO LOYALTY*

We can ascribe a different status to a duty of loyalty in the case of whistleblowing, in terms of moral justification. Depending on that, the whistleblowing practices also can have different status:

1. The obligation of loyalty can be seen as an absolute, which would mean that the whistleblowing is prohibited. Then the whistleblowers are considered a traitor, not only because they are deaf to the loyalty and damages the company, but because they do not respect the principle of loyal colleagues. A whistleblower does something that every honest man should do, and in deciding to do so he actually resembles of justice those who remain silent. This setting corresponds to a commonly accepted negative attitude towards whistleblowers, making that the burden of moral justification always lie on the side of the person who starts alerting. This is a somewhat extreme position. In the case of the complex situation, inherent to a conflict of interest, we are not in a position to judge the correctness of certain practices, in principle. However, this argument has brought us a clear insight that "disobedience can be morally justified, but if they do, the burden falls on the disobedient or its agents to successfully prove a thing" (Di George, 2003, pp. 256).
2. The obligation of loyalty can be conceived as unjust, which would mean that whistleblowing is morally obligatory. This means that we are not in a position to decide whether or not to access whistleblowing, but it is our moral obligation. Failure to fulfill the obligation would deserve moral condemnation, and fulfill the obligation would mean that we have answered the call of duty. What is the additional requirement for whistleblowing as morally obligatory in relation to whistleblowing as allowed is something that makes it safer practices when it comes to moral arguments. This means that the whistleblower must have evidence that will be obvious to anyone who doubts the validity of his action. The evidence used to discredit any motive (jealousy, malice, revenge, coming to power or some other benefit, impact on decision making), except for the moral motive. When the whistleblowing is mandatory, beside the proof it is important that a whistleblower has good reason to believe that his turning to the public will bring the necessary changes. He has to take all relevant factors into account and to assess the chances of success.
3. Finally, the duty of loyalty may be experienced as a well-established obligation, but that obligation is not absolute. This means that the whistleblowing is practice that is considered to be morally permissible and that it can be justified. The arguments used here are actually arguments for justification of overcoming the obligation of loyalty with something of greater importance and weight in the moral argument. First, in case of serious harm that may be caused by the use of a product the reaction can be justified. The concept of serious harm is not easy to define. We certainly

speaking of harm that is associated with the recoverable moment, what is the harm in loss of life or in the event of environmental disasters with devastating consequences. It's not the harm that is caused by the mere discomfort when using the product. As damage becomes more serious, the less important becomes the risk to the whistleblower's own interest and the interest of his family that a whistleblower may compromise if left without a job or reputation. Also, employees must try to exhaust all the mechanisms that are available to him within the company. If his behavior is really morally motivated, he will be moved by an intention to prevent damage, and not with the intention to perform some kind of personal promotion in public. It would be the best for the whistleblower that people in the firm accept his kindness and try to correct what could be corrected. Then the total risk is reduced, and that is the ultimate goal. However, if the employee is often put down by the abuse of power and the behavior that is harmful to the company or the public, he will not have another mechanism available except to alarm.

In the field of ethical analysis of the whistleblowing problem, the position of the moral admissibility of this practice seems to be the only acceptable. From the standpoint of moral admissibility of whistleblowing complexity is evident at the first sight. This position also manages to keep us on the course of moral motivation and that is very important. In principle it is not possible to determine the whistleblowing as a prohibited practice or the obliged one. The tension between moral permissibility and obligation is more clearly evident if we consider it in terms of the conflict between rights and duties. Thus formulated, we are interested in whether the whistleblowing domain belongs to our rights or duties? If we think of it as of the right, while there is no duty to blow the whistle, then we have to deal with the decision making that seeks for very demanding effort, different from case to case. This is exactly the case of conceiving whistleblowing as permitted and the relationship of rights and duties is designated as the standard case of supererogation (Babić, 2002, pp. 52). This means that employee feels uncertain about whether he had to blow the whistle or just could, but did not have to do so. Anxiety of decision making is related to these very uncertainty and the risks involved. If he had to, it means that it was his duty and that his personal decision is less spouted. If it was the right, it means that the actor has full responsibility for the decision. Right only prohibits somebody to prevent us to do something that that right defines, but leaves freedom for decision making, and thus the responsibility. The supererogation means that the action can't be expected though is morally right. This action is not based on duty: if you take it, you deserve praise, if not our decision is not to be judged. Here right is not based not on duty, and all the risks that decision making situation carries borne by the decision-makers. So, the risks are the price of our right.

THE ETHICAL DEBATE ON THE LOYALTY REQUEST

We have accepted whistleblowing as a morally acceptable practice, which means that we understand the loyalty as it is not an absolute obligation. As for the moral argument, this setting is a major challenge. Using a brief discussion of the ethical debate concerning the relationship of loyalty and whistleblowing, we will illustrate what kind of challenge it is.

Ronald Duska started the debate in question. The author has found inspiration in the conflicting views on the valuation of the whistleblowing practice. According to these positions authors of numerous works on the theme of whistleblowing are classified to those who "praise whistleblowers as civic heroes and those who condemn them as 'finks'" (Duska, 1997, pp. 335). The first one claim that whistleblowers deserve gratitude and protection, while others think they are bold and start a practice that is corrosive and impermissible. Duska believes that a key debate concerns by whether whistleblowing is permissible, and that the key issue of the debate is the attitude towards loyalty. He states his position as follows: "If whistleblowing is a disloyal act, it deserves disapproval, and ultimately any action of whistleblowing needs justification. This disturbs me. It is as if the act of a good Samaritan is being condemned as an act of interference, as if the prevention of suicide and needs to be justified" (Duska, 1997, pp. 335).

Duska refers primarily to the arguments of Sissela Bok and Norman Bowie, claiming to share their conclusion and the conclusion is going in the direction of defending whistleblowing in certain contexts. Bowie claims that duty of loyalty is only a *prima facie* duty, which means that it can be overridden by a higher duty to the public good (Bowie, 1999, pp. 140-143). Sissela Bok explains that whistleblowing is defined as violation of loyalty, but "loyalty to colleagues and clients that comes to be pitted against loyalty to the public interest, to those who may be injured unless the revelation is made" (Bok, 1997, pp. 330).

For now, the debate stands for the standard position. The novelty entries with Duska's insistence that there is no duty of loyalty. Particularly interesting is the reason that he invites to support that. Duska reminds us of a very important issue of business ethics, and that is the responsibility of corporations. As it is difficult to determine who carries liability, so when we talk about the company it is also difficult to determine carrier of loyalty. Duska's opinion on the matter is as follows: "I want to argue that one does not have an obligation of loyalty to a company, even a *prima facie* one, because companies are not the kind of things that are properly objects of loyalty. To make them objects of loyalty gives them a moral status they do not deserve and in raising their status, they lower the status of the individuals who work for the companies" (Duska, 1997, pp. 336). If the addressee of loyalty is the company, we do not manage to draw the relevant distinction between the individual and the company, in a moral sense. As he believes that the loyalty is wholehearted devotion, Duska claims that devotion that can have concrete person or person as a proper object of it. In a business environment, the relationship loyalty that is created is like a relationship between a lord and his

vassal. However, companies are operating across the social groups that have been established so the principle of the role division is the basis of functioning. The role dictates the power and prestige of a person, and thus its impact on decision-making.

What is the status of the company as a social group? Does this group simply represent a collection of individuals or a group has its own particular being that is more than the sum of individuals? Family is an example of a group that has its own particular being, as it was formed on the basis of specific relations. We are loyal to the family in the way of loyalty to a group because of such connections. Duska argues that "what binds people in business is not sufficient to require loyalty" (Duska, 1997, pp. 337). As a reason he says that the main objective of business is profit and without profit we are out of business. Because of this loyalty has no place in business because it has nothing to do with profit, because you can't buy loyalty. I'm in a specific company, not because that company is my parent, but because they pay me to do my job. Money is a universal connective tissue within the company. There are no specific relationships that make the company a big happy family. It seems that Duska speaks contemptuously of the workers as their motive allegations stemming from considerations of loyalty: "There is nothing as pathetic as the story of the loyal employee who, having given above and beyond the call of duty, is let go in the restructuring of the company. He feels betrayed because he mistakenly viewed the company as an object of loyalty. Getting rid of such a foolish romanticism and coming to grips with this hard but accurate assessment should ultimately benefit everyone" (Duska, 1997, pp. 338). Here it might be instructive to refer to misplaced loyalty. Speaking from the psychological standpoint, it is not difficult to explain the fact that an individual has a need to devote to some contexts. The problem of mistaken or misplaced loyalty occurs when an individual stick to a deal in an institution, even though things have changed, and the rules or laws that constitute that institution do not exist anymore.

It is important to be competitive at the market if we want success. Whistleblowing has nothing to do with success in business nor its justification depends on compliance with the duty of loyalty. Although Duska's view is extreme in denying the merits of the duty of loyalty due to the characteristics of the company as a social group, his conclusion is quite realistic. Whistleblowing is a practice that is not only permitted, but is expected in situations where the company is threatening to harm society. Duska explained basis of this expectations by the fact that an individual has an obligation to society, but fails to explain the nature of such obligation.

THE PROBLEM OF WHISTLEBLOWING AND MORAL INTEGRITY OF THE INDIVIDUAL

In the previous consideration we represented the view that whistleblowing is morally permissible practice and that in concrete circumstances it can be justified. The first precondition to have a serious candidate for justification is the existence of the moral motivation. Justify whistleblowing procedure in practical terms would mean that we were able to achieve the intended reaction, and we were able to prevent serious damage that threatened. In theory, this would mean that the duty of loyalty was overridden by a higher order duty. We are interested in the role of the moral integrity of individuals with regard to the latter type of justification.

THE CONCEPT OF INTEGRITY

Integrity is the quality that keeps the priority of moral values in the individual. Basic moral values are values that do not allow any assessment of the market, but they are the starting point for evaluation. Utilitarianism is an ethical theory within which it is hard to find the place for this value. On the other hand, the analysis of ethical business practices could be easily incorporated into utilitarianism. Is it possible to reconcile the tension between categorical moral demands, which holds integrity, and rigor demands for profits and efficiency?

I suggest the following definition of integrity: integrity is an unconditional commitment to own moral values and duties. In this sense, integrity means the ability to maintain dignity. The concept of dignity is the basis of the concept of human rights. Dignity is inherent to every man and is usually defined as the inner and at the same time demand for social validation and respect that belong to every human being.

Kant's ethical conception of dignity stores the topic in the context of reviewing duties. The duty to oneself consists in the fact that a person maintain to protect dignity in his own person (Kant, 1981, pp. 82, PP. 89). Speaking about the notion of dignity Kant raises difference of values and dignity, because in the kingdom of ends dignity is an absolute end. There is no equivalent for dignity, so it can't participate at the market. It is impossible to estimate the value of dignity.

Based on the foregoing, we can conclude that the moral integrity means that the moral reason is given priority over other non-moral interests. As it is impossible to compare them, we follow the duty to preserve our dignity, and we are willing to allow other people do the same.

THE IMPORTANCE OF INTEGRITY IN JUSTIFICATION OF WHISTLEBLOWING

Recall that, talking about whistleblowing, we have insisted on the application of purely moral motive (to the ethics of Kant appointed as acting from duty) and we have claimed that overriding the obligation of loyalty can be justified. We will now connect these claims with settings that are presented on moral integrity. If the individual sacrifices other non-moral interests, putting itself at risk, and if the assumption that the company is threatening serious harm is reasonable, then we will be able to justify whistleblowing. This means that actions in the name of preserving integrity, if your rational assessment of the situation is right, are cases of justified whistleblowing. Only the absolute incommensurability of moral values, which lies in the grounds of moral integrity, may explain why a man would react in that situation, if not expected improvement in business, power, or financial compensation.

CONCLUSION

There are many situations within the business whose moral status is suspicious. The obligation of labor discipline is a feature of human work as a resource. This discipline is the request for obligation of discretion and decorum. To help business practices taking place as efficiently as possible, we often articulate the rules strictly and punish their transgressions. The goal is to protect and keep values that are in the long run the most significant for business, namely the values of trust, honesty and reliability.

Participating in the implementation of business practices individual invests his knowledge, ability and effort in order to effectively carry out the role that belongs to him and whose implementation is a matter of arrangements. The employer determines appropriate compensation for this work within the role. It is natural that an employer expects a positive attitude from his employee that is not, strictly speaking, matter of financial compensation. There is a risk that an unsatisfied worker will unreasonably speak against the company, and so harm the company. The worker may accidentally hear about irregularities or immoral practices in the firm, and thus be placed in a position to decide whether to act and what is its responsibility in this case.

An employee is entitled to blow the whistle if morally motivated and in case of serious damage threatening. The practice of whistleblowing falls within the allowed actions, because the duty of loyalty, breach of which the whistleblowing implies, is not an absolute duty. Integrity is easily visible motive of risk-taking in this situation, especially if the workers are required to do something unethical or immoral conductor if covering up these secret is under the pretext of protecting the interests of the company. Compliance with the requirements to protect the moral integrity managed to override the obligation of loyalty, which is otherwise morally well founded. The reason is the degree of moral evilness of actions that the company is planning.

Important limitation is that one can't leave his sense of proper procedure to be the sole judge as to whether to resort to public alert. Employee who has a real dilemma, which arises from the fact that a conflict exists, can't just let his personal feelings interfere with moral work. Employee must be sure of a well-founded view that there is a large and significant moral failure, because, in the end, the decisive argument is the one that produces a moral duty to act.

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PROBLEM OF CORRUPTION IN THE BUSINESS SPHERE

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Abstract: Corruption appears as an inevitable notion in transitional processes and it represents a specific characteristic of economic crime. The appearance of corruption and its various forms jeopardize almost all economic branches of a country. In Serbia the corruption is one of the biggest social problems which leads to widening of economic inequality, slows and disables the economic growth and development, destroys the legitimacy of institutions and undermines the basic values on which the society is founded. This paper shows the basic characteristics and causes of corruption in Serbia. Special attention is dedicated to the problem of corruption in the business sphere, having in mind the fact that bribery and corruption have become an integral part of doing business, and the members of influential business circles, by abusing their authority and function they do, through cheating and hiding, they do many offences hiding behind the masks of successful and powerful entrepreneurs, businessmen etc. That is why we pointed out in this paper to the phenomenon of white collar workers' crime, which represents the synonym for crimes of businessmen. The greatest danger that comes from this type of corruptions is the fact that politics and economy are connected and interrelated in the period of economic transition, which enables the individuals, who are at distinguished positions in the government or who have exceptional economic power in society, to conduct many crimes without getting punished. The significance of economic development, complexity of relations within an organization, management and business in economy in the conditions of transition oblige us to dedicate special attention to this problem, and by writing this paper that is exactly what we wanted to achieve.

Key words: Corruption, Economy, Politics, White Collar Crime, Transition, Serbia

JEL classification: D73, K40, K42

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INTRODUCTION

Corruption has been going hand in hand with mankind from its beginnings. There is no doubt that it is a great mischief. Economic, social, political and other consequences of corruption, first of all, depend on the nature of political system, and then on the social system of a country. History of corruption is related to the development of the state and the law, with the creation of the state offences of corruption it becomes pronounced and substantially reflects the social, economic and political affairs of a state. Today the corruption has become a global phenomenon, so there is no state whose representatives could claim that they do not face this socially negative notion. Still, it is clear that this "Illness" affects mostly developing countries, and it tries to take advantage of all the weaknesses of these countries' systems, in order to find a fertile ground for its development and widening.

Corruption in Serbia is of a systemic character. It has "infected" all public services, and citizens have accepted corruptive behavior as a form of socially acceptable behavior. In addition, the biggest problem is the fact that discovering and punishing the perpetrators of "petty" corruption, creates the illusion that this is the most prevalent form of corruption in the society, while, on the other hand corruption offenses, particularly those committed by the members of the political and "social elite", are under-detected or not prosecuted, although they cause the greatest damage to the society and are one of the worst obstacles our country is facing on its way to European integrations.

That is why, we wanted to determine the basic causes and forms of corruption in Serbia, in this paper, and we dedicated special attention to the problem of corruption in business sphere. Considering that the main participants of this type of corruption are first and foremost members of influential business circles, i.e. professional criminals who belong to certain well-known social group and who abuse their functions and are led by motives of unscrupulous greed, we pointed out the phenomenon of white collar crime, which is a synonym for the crime done by business men.

NOTION AND CHARACTERISTICS OF CORRUPTION

When we speak of corruption, in practice we often think of bribing the state officials, extortion of money from citizens, nepotism, embezzlement of public means etc. (Milosavljević, 2011). The term of corruption is defined in different ways depending on the point of view (such as psychological, sociological, economic, criminal, legal phenomenon). Corruption is, in its broadest sense, defined as the abuse of public service for private gain. A large number of authors who study and research this phenomenon tend to consider public service as its center, and hence the corruption is defined as "behavior that deviates from regular

performance of public service for personal or other benefit; it is a violation of norms in order to achieve personal interest"⁷⁸. However, this does not mean that corruption is not possible while exercising the authorizations that are not public. Therefore, it could be said that corruption is criminal behavior in which granted authorization is misused in order to obtain personal benefits (Ignjatović, 2008, p.153). Public opinion and political parlance define the term of corruption as two completely different social phenomena: organized crime, poor governance and its consequences, human levity and arrogance of authorities.

It seems that the most appropriate definition of corruption for our topic is given by Vodinelić, who defines corruption as a huge octopus which engulfs civil, social, economic and legal sphere of the society, where profiteers (white collar crime) without a shred of scruples shamelessly exploit their positions (Vodinelić, 1992, pg.164). This means that the holders of corruption, first of all are persons in positions of prestige or the professional criminals who belong to a respectable social group and who abuse their functions guided by motives of unscrupulous greed.

Corruption, in any case, represents illegal and amoral acting whose factors are pillars of state, political, financial, economic or other public function as well as the actors that appear as the pillars of specific functions in private sector, actors that misuse their functions, social influence and institutions of the system with the goal of illegal enhancement of their richness, accomplishing personal goals, financial and other power.

However, it should be noted that the element of bribery can be recognized in some other morally unacceptable behaviors which are not defined as criminal offenses, economic offenses or misdemeanors. Such behaviors are especially common in the area of economic activities, and use of monopoly or dominant market position and actions in a situation of conflict of interest is typical for them. These include cases of financing political parties from the revenue of large commercial companies, various forms of fraud to tax evasion, group of business people informally connected in order to gain or maintain a monopoly position in the market (so called „old boys“-networks) etc. This leads to the conclusion that corruption with only one of its (smaller) parts is manifested in a way that can be successfully regulated by norms of criminal law. On the other hand, on the higher levels it is hidden by the forms of morally problematic or even socially acceptable behavior.

⁷⁸Monitoring the EU Accession Process-Corruption and Anti corruption Policy, Open Society Institute, Budapest, 2002, pg. 24.

CAUSES OF CORRUPTION IN SERBIA

Corruption is socially pathological phenomenon which is hard to catch and measure because the dark threesome is emphasized, so neither the definition of corruption nor the causes or methods of fighting against it can be determined in a unique and permanent way. Still the experts agree that this problem affects first and foremost the countries that are in the process of transition. The regional research in southeast Europe shows that the problems of these countries are similar, and one of the leading ones is corruption. The appearance and spreading of corruption in these countries is the consequence of piled economic issues, low incomes, fall of the life standard of majority of citizens etc. Beside these factors there are also the ones that contribute to the growth of corruption in the countries in transition and those are: weak state administration, non-existence of legal state, political institutions and poverty.

When we talk about Serbia, there are some specific causes. Namely, the wars in former Yugoslavia, the political and economic sanctions imposed by the United Nations Security Council in 1992, NATO bombing, etc. contributed to the rapid decay of the Serbian economy, increased smuggling, and various types of financial frauds, including the emergence of organized crime. In such circumstances, bribery and corruption became mass phenomenon and widespread business scenario (Šoskić, 2004, pg.47). The sanctions caused shortages of many goods causing the emergence of "gray"(underground) economy, and consequently corruption. People involved in those activities, had to bribe various civil servants, customs officials, inspectors, police, etc. in order to enable purchasing goods or effective sale. The positive regulations of that time did not contain norms which could adequately eliminate the causes and conditions that contributed to the development of black market and other illegal practices in business operations. Such regulations existed but were not applied. Their use has been hampered by the fact that, they were offering too much discretion to those who were applying them, and narrowed the space for the efficient operation of state bodies in charge of control, which, along with other negative factors of social nature, affected the increasing incidence of corruption (Banović, Đokić, 2007, pg.79). At the same time a considerable number of workforce and employees lost their jobs and switched to working at the illicit market, being engaged in smuggling, which was even more suitable for the spread of corruption. Therefore, the sanctions on one hand led to the impoverishment of one part of the society; while on the other hand, some people grew rich quickly and in an easy way. Those who, at that time, got rich illegally, tried to accomplish everything else in the same illegal way, and thus used to bribe people in high positions, entering the top of government and corrupting its servants. Political mediation placed such individuals into very privileged positions leading to fusion of crime, politics and economics. The most dangerous consequence of social anomie thus created is total collapse of the system of values: the difference between acceptable and unacceptable behavior is eliminated from the consciousness of citizens-what is beneficial for the individual becomes the measure of "normal" behavior even if it is formally illegal.

In somewhat different political and social conditions, corruption continues to spread even after the democratic changes in 2000. There is a wide range of factors which influenced that process. The experience of most developing countries shows that periods of rapid change in economic structures is at the same time, period of great instability and increase in all types of crime. Endemic disorder of countries in transition, unfortunately, has not been eradicated because the economic enrichment of individuals under the leadership of political parties has been continued at a rapid pace. The money invested in political changes is paid back through the leading positions in public companies, abnormally beneficial conditions for privatization, pre-acquired tender operations and the green light for all kinds of dirty money investments in the most profitable sectors (public works, construction, procurement, etc.). As support to this contention, there are many examples of unpunished conflict of interest between the holders of political positions, followed by some local public affairs and commenced, but uncompleted administrative and judicial proceedings. Redistribution of public functions by political, rather than professional criteria was more than evident (Tanjević, 2010, pg.98). This situation restrains serious foreign financial investments, both in the form of capital investment, primarily in internal infrastructure, and those of local character. Foreign investors, some of them personally affected by the global financial crisis, still hesitate to inject fresh capital into the Serbian market, waiting for better conditions, reflected in the harmonization of laws with EU standards, transparent operation of public services, easier and uniform administration procedures and most importantly, a stable political situation.

High discretionary authorizations of the state apparatus in the sphere of economy are always one of the factors that influence the high level of corruption in society. If making a decision of great importance for an economic issue directly depends upon the will of state officials it is real to expect that they will try to abuse their position and to gain material benefits (e.g. with procurements, limitations of import and export, various exchange rates etc.)

Regarding this, we have to emphasize another significant cause of corruption in Serbia, and that is the process of privatization. Transition has given great possibility for corruption through privatization of state properties, and the notion of privatization itself reminds many of the corruption. The vulnerability of the process of privatization because of corruption and other abuses is determined by the selected method and modalities of privatization, by general political and economic environment in the country, the quality of law and institutions, level of transparency, control etc.

In our country privatization was done partly without the right regulations, for a long period of time, in some sort of legal vacuum. Until 2002 6% of our economy was privatized. It was claimed that the privatization is delayed in order for the conditions of "righteous conduct" to be fulfilled. While we were waiting for the conditions for righteous conduct of privatization, the privileged political elite actually was conducting a mass "hidden privatization". Today, when the process of privatization in Serbia is coming to an end, we have to state that there have been many irregularities spotted, in processes of privatization done until now, in companies that were owned by the state or by the society. The circumstances and the way the privatizations took place, instigate suspicion that corruption and other forms of abuse were present. We can also notice that the privatization in our country was done very slowly, not enough transparently and with many legal insecurities, i.e. with the frequent change of the legal frames.

Corruption and acting because of the conflict of interests represent the most often used way to achieve forbidden goals in this sphere (favoring the individual bidder or tender fix). Some have companies interested in purchase of state companies that by bribing the officials come to the favorable position in bidding. On the other hand, in certain companies the management alone or in agreement with certain politicians, decreases the value of companies, or even gets them into bankruptcy and then buys them at very low prices. This model of disloyal actions towards the state/social assets is applied even out of the frames of institutionalized privatization. One of the most famous cases is motivating the managers of social companies by the co-owners of private companies to buy the share of the company at significantly higher price than the book price. Considering that companies – buyers were not able to financially settle their overtaken obligations, nor their real expectations of the income of funds with which they could settle the obligations, the private company as a creditor started the procedures in the court of law where they reached court settlement. By these actions a private company would become an owner of the company that bought its share unreal, and the difference between the book price and selling cost was shown as the capital gain. Co-owners of the company, based upon this, filed the requests to business banks to approve them the loans through which they got multimillion amounts of money that had neither real, legal grounds nor real financial funds (typical example is the famous affair „Agroživ“).

Besides this, the potential buyer can bribe his way to some important information about a company that he is interested in buying. On the other hand a corrupt officials can show to the public false data about the company, and to “sell” the true information to the interested buyer (Jovanović, 2001). It is not rare to sell a company, without the publication of the price, i.e. without bidding, to those who have the strongest political connections.

Unfortunately, in this area, as well as in all the others, when we talk about revealing the corruption, financial affair and abuse, it usually ends with everything being “clean” and all hands being “washed”. What is very worrying is the lack of criminal prosecution of the involved in privatization affairs, despite the numerous public appeals to make the privatization transparent, which implies the continuous harming acting of the responsible people (public officials) who handle the state assets. So, if, for example, trustees would sell the assets of the debtors at extremely low prices and got away with it unpunished, together with their partners (political lobbyists that approved such transactions) they would remain at their positions, and continue to through non transparent and harmful agreements damage the state assets.⁷⁹ This connection between criminal participants from the “gray sphere” and high politics can be seen in the largest transactions of Serbian privatization, i.e. in the questionable handling of state assets by the public officials.⁸⁰

⁷⁹ *Despite the numerous appeals of the public, where some of them have been institutionalized through Information Commissioner, the biggest privatization business were never public, and the people who approved such business are still at the high political positions. The most striking examples are the privatization of „Sartid“, „DuvanskaindustrijaNiš“, etc.*

⁸⁰ *There is almost none significant business connected to the biggest transactions of Serbian privatization or managing the state assets without the doubt that political officials or directors of public companies have not gained assets for themselves, but allegedly they were acting according to the public interest.*

CHARACTERISTICS OF CORRUPTION IN THE BUSINESS SPHERE

As we already mentioned, underdeveloped economic system, both in economic and legal aspect is one of the causes of many forms of corruption. In changed socio-economic conditions where the market economy is still unstable we can see many forms of socially harmful behaviors that are „somewhere in-between“ – in „grey“ zone, between legally allowed and forbidden.

Mid-level corruption, in most cases, includes what is meant by the word "bribe" and what is sanctioned as a criminal law offense of bribery and criminal misconduct. The main protagonists in this case are mid-level state officials in the area of independent discretion decision making. Economic flows and activities of economic agents are bounded in the contemporary state by many regulations and administrative measures, and in order to avoid them, the entrepreneurs, in their business strategy, practice public administration bribery. In this way, they act in favor of their own companies at the expense of others, gaining monopoly powers and violating the principle of equality and equity in the market. In addition, in countries with extensive state regulation of foreign trade, mid-level corruption occurs in the process of issuing import and export licenses, and determining the allocation of quota, etc. In this respect, it approaches and even touches the corruption at the highest level, because it appears as the "greed corruption" (Korać, 2001).

The mechanism of this corruption acts in the frame of informal structure of exchange of resources and it is created in the area of cooperation of the state and private sector of economy. Economic flows and activities of economic subjects are limited, in the modern state, by many administrative regulations and measures, so with the intention of avoiding them, the entrepreneurs while doing business apply the strategy of bribing the state administration. In this way they favor their own companies, and they gain the position of monopoly, they deny the rule of equality at the market. Besides this, the mechanism of corruption at the middle level can appear in the points of interrelation of economic entities and the public sector. So, in the countries where the large state regulation is ruling in the area of foreign trade, mid-level corruption appears in the procedure of issuing the export import permits, determining and allocating the contingent etc.

The willingness to offer the bribe is equal to the power of the potential corruptor which has two key consequences:

- It destroys the middle and small entrepreneurs
- The market is closed and the going into a business relation is harder for the interested entrepreneurs (Vesić, 2008).

The influence of the corruption on the business environment and the real degree of its presence in the area of interrelation of the state and the private sector is impossible to put into precise, numbers. Most of the analysis of the influences of corruption on the economic life rests on the indirect indicators such as observations and experiences of

private entrepreneurs in relation to the state administration. At this point it is very interesting to look back on the opinions of entrepreneurs, about what they see as the biggest obstacle in business development in Serbia. The research's results⁸¹ undoubtedly point that the entrepreneurs see the level of taxes and contributions as the basic obstacle, in the key foundations of economic policy and omnipresent corruption. Furthermore, the widely spread form of corruption, according to the experience of private entrepreneurs happens during obtaining the location for construction, permits for import and export and agreements with the government (procurements).

Just like in everything, according to the statements of private entrepreneurs, the basic mark of corruption in Serbia is accomplishing rights of economic entities and the fact that, just like the citizens, economic entities are additionally "taxed" from the public officials (Antonić, et.al, 2001). The level of that tax depends upon the will of a public official, relation between an entrepreneur and ruling political party and creativity. This additional "tax", i.e. bribe, has become an inevitable way of doing business. That is why the following fact is not surprising; in the recent years (2007-2012.) more than 17,000 entrepreneurs in Serbia gave up the participation in tenders because of the numerous bad experience and corruptive actions.⁸²

On the other hand, in these circumstances of inefficient state administration, the economic entities often think in the following way: since the state officials do not do the job they have been paid for from the budget (which is filled on the account of taxes of those economic entities), it is better to burden ourselves with another „tax“ (increased by the transactional expenses of corruption) and still get the service from the state, i.e. public sector, than to have a loss by paying taxes and getting nothing.(Jovašević, Gajić-Glamočlija, 2008).

When we speak about the main participants in corruption in business sphere we could conclude that those are officials of middle level of state hierarchy with the ability to directly make decisions alone. They are familiar with the laws and regulations that refer the area of economic business so they direct their criminal activity all the way to the margins of the allowed conduct, using certain gaps, understatements and often changes and additions to the law regulations (Bošković, 2005). At the same time these are the people who represent the "social elite", people who are highly respected, and who have such a social status that their deeds are rarely discovered and described as illegal, i.e. if it happens, they are rarely held responsible for such deeds. Fatić, for these offenders uses the term "corporally rich" (Fatić, 2005). Those people are the elite made of representatives of companies with big financial potential, and along with that with greater political influence. Generally known fact is that big corporations finance political parties, participate in privatization of the companies, represent themselves as the "successful managers", and by doing so they gain some kind of influence through their expertise in the area of economy. Good example for how the corporally rich

⁸¹Research on corruption among private entrepreneurs conducted in February 2001 at the sample of 327 private stores and companies on the territory of Serbia without Kosovo, in 40 municipalities.

⁸²<http://www.poslodavci.org.rs/vesti/ucestvuj-suzbij-korupciju?id=172>

integrate their potentials are various associations of entrepreneurs and industrials and from that group we usually have people who tend to get the political functions in the country, which rely the most on their financial power.

The scientific and expert literature, for this kind of behavior, uses the term "white collar" crime, which represents the synonym for businessmen criminality. This term was firstly used by Sutherland in its speech to American sociological society. In 1949 the same author in his work titled „White collar crime“ (Sutherland, 1957) defined this crime, which comprises the crime which usually appears in the area of economic business, and whose manifestations are usually seen while purchasing and selling various stocks, fake advertising of the goods, fake financial reports and business of certain corporations, or bribing the business partners, direct or indirect bribery of state officials, with a goal of obtaining favorable business arrangements, embezzlement, misuse of funds, tax evasion etc. Later the same author the term of "white collar crime" defines as the crime that is done by the people who have high social status within their vocation (Sutherland, 1973). We are speaking of the crime where the members of influential business circles, using their authority and function they have, harm the citizens and the entire society. These crimes are usually done behind closed doors, by doing larger business transactions and manipulation by fraud. The areas where this type of crime is present are: business sphere, insurance, banking and stock market, and the main trait of these deeds is that they are done behind closed doors by fraud.

In 1933 the Federal Court, during reaching the verdict to the members of the company „H.O. Stone and Company“ from Chicago for false transactions in real-estate, said to the prosecuted: "You are businessmen, experienced, refined and well-mannered people of great reputation and position in society and business world." (Sutherland, 1973). This characterization of „white collar“ criminals can be applied to all the people in corporations that break the law. Even when they are breaking the law, they are not labeled as criminals. So these offenders rarely are under criminal liability and the main reason for that lies in their significant political and economic influence, skillful law avoiding, using bribery and corruption etc. (Tanjević, 2010). That is why the „white collar“ crime is hard to discover, because not one of the participants will not allow to be caught and to leave the evidence of his scams.

The applicability of the concept of white collar crime is present in the modern circumstances as well, we cannot deny its presence in our country as well. The largest part and the most dangerous forms of crime in Serbia in the period of transition are done by the members of social elite, either from business world or from the world of politics.

Our public has witnessed affairs without a clear start and without a definite end, in which the participants were "white collar" workers. Public was denied many information about the processes against participants in criminal affairs.⁸³ To what

⁸³Let us recollect certain affairs like „Sartid“, „Nacionalnastedionica“, „Sugar affair“, „VIP“, „Knjaz Milos“ and many others, that filled the cover pages of numerous newspapers, only to be completely forgotten after that.

extent the mentioned process is complex and incorporated in all the spheres of domestic economic and political system, testify the examples from all areas of public finance, legal system and other parts of administration, health, education, sport, industry etc. Sudden “catching” of high officials with a large sums of money of unclear origin, inexplicably fast, i.e. slow trials against certain people and groups, many suspiciously made and broken privatization tenders, affairs of corruption in high educational institutions, examples of opposing public functions with the managing positions in companies, trade with mandates because of the allocation of public functions, lobbying against the Law on sport etc., these are clear indicators that the high social and business circles are involved in criminal sphere. This is also the explanation to the question why most part of these activities remains unknown or unpunished and how it is possible that our crime statistics simply does not pay attention to such activities. So, it is clear that we are talking about socially powerful people, of whose responsibility we can talk only when they are deprived, by political will, of that same power, and then the prosecution and verdicts for their criminal acts are always hard to realize, and sanctions are uncertain. This is why, in the network of social control, “small fish” remain, that is, cashiers, accountants etc., while the “powerful directors” remain outside the responsibility frame.

CONSEQUENCES OF CORRUPTION IN THE BUSINESS SPHERE

The consequences of corruption are many, they are very negative, and there is almost no area of social life where the consequences are unfelt. Corruption weakens the country and makes the citizens poor, no matter whether we are talking about giving small bribe or giving the money compensation for medium and large favors, all the way to the most dangerous form corruption, which comprises the high state level corruption. Still the most significant consequences are felt in economic efficiency, i.e. the social wellbeing and economic growth. Social relations, especially in economy, which are developed with the presence of corruption decrease motivation of foreign partners for investing in the national economy, i.e. they stop the significant foreign investments, decrease the possibility of international help, they make harder the realization of the developmental projects, in short, they make the country become poor.

Socially dangerous manifestations in economy appear but only in connection to the organization and financing the economic activities, but literally in all areas of production, internal and external trade, and all the way to direct consumption of finished products. The consequences that arise from these criminal behaviors are not only economic and those of financial damage for the state and companies, but other protective agents are jeopardized such as life and health of people and the environment. In the background of most of the economic criminal activities is corruption, or it is directly connected to them. That is why the elimination of this evil is the assumption for confronting all other problems in transitional Serbia,

including economic crime. Otherwise the line between economic companies that conduct criminal business and the criminal organizations which do criminal activities in an organized way, like a kind of criminal company, is getting blurred.

Furthermore, corruption inevitably undermines the reign of law, democratic institution and undermines the basic values on which the society is founded, which jeopardizes the protection of basic human rights and freedoms.

FIGHT AGAINST CORRUPTION

The awareness of the danger and harmful character of corruption, in recent years, led to intensive activities nationally and internationally, which are directed towards successful fight against it. However, we should bear in mind that the corruption gets new forms all the time, which makes the fight against it harder. This is why the theory often states that corruption in its forms' development is always one step ahead of the efforts of society to discover and fight it.

Getting acquainted with the conditions that lead to and instigate corruption, represents a great part of the answer to the question of how and by what means we can fight it. It is certain that the mentioned fight requires professional and legal actions of all authorities which have to be not only independent in their work, but also efficient enough, technically equipped, to comprise professional and educated people etc. The state, of course, has the most important role, which has to contribute to fighting the corruption by its many economic, social, political and other measures. The first condition for eliminating the corruption from the economic point of view is the presence of economic freedom, which means the wider, free activities of individuals at the market, i.e. absence of any coercion and compulsion in economic activities, along with an obligatory obeying of the law (Vesić, 2008, p.485).

Good management and rising the level of transparency in the work of authorities, especially while managing the public money and resources, influence the decrease of corruption. We think that we should point out here that while discovering and proving the corruption, the significant role is also given to "whistleblowers"⁸⁴. By its nature, blowing the whistle is similar to any disagreement with the attitudes of the majority or the authorities, but by its domain it is narrower, because the social disagreement can relate to any decision or an official attitude, while blowing the whistle means disagreement with the particular abuse (Fatić, 2005). In another words, it is necessary for someone to "blow the whistle" and warn the public by doing so, that something illegal is happening, something that should be reacted to and because of what the matter should be investigated, sanctioned, published. It is obvious that these people have double

⁸⁴The term whistleblower is used in English language, and it refers to the policemen who blowing the whistle signalize that something forbidden is happening.

criminal and preventive function. Firstly, they warn the police, prosecution and other authorities to take the necessary measures (to investigate, obtain an expert's report, control etc.), and secondly, they influence the managers in a company, institution, organization, not to think that they are untouchable, protected, too powerful etc. (Ćirić, et.al, 2010).

However, the potential "whistleblower" faces numerous problems in his/her decision to react in the showed way. One of them is a moral conflict which, on one hand, is followed by the need to be loyal to the employer, and, on the other, the need to be loyal to wider community and its ethical principles. That is why, in the situations when in the service there is abuse that can jeopardize the public interest, the employee is in internal conflict, between the need to, according to the professional loyalty, protect the employer and the need to protect the public by publishing the abuse outside the organization by "blowing the whistle". (Fatić, 2005). Of course, there is the danger here that the organization where he/she is publishing the abuse "whistle blowing" will take that as an act of treason, breaking the loyalty, and there is always the possibility of revenge against an individual who decided to react.

This is emphasized by the fact that in our country legal provisions do not guarantee an appropriate protection to the sources of this information.⁸⁵ We think that, this form of protection, in which the legal provisions "scattered in many laws" or in which this problem is tried to be solved by bylaw, does not provide systemic protection, but point to the need to make a special law which would regulate the protection of the mentioned people, in the way that they can report the discovered illegality, without the fear of getting fired or that they will be punished in another way. It is also necessary for the Law to regulate the whistle blowing in the public and private sector. For example, USA brought the first Law on protection of whistleblowers in 1977 and some of the biggest cases of corruption were discovered because of them. The law guarantees them the protection if they work either in private or public sector, and criminal sanctions are also regulated for those who molest the whistleblowers at work. Law even foresees money rewards for reporting the corruption. Similar laws exist in other countries (Canada, Romania, Great Britain, France etc.)

However, if we have in mind that in our society the institutions generally function weakly, that the level of the officers' integration is low and that the crisis of morals, values and norms is obvious, we can pose a question, is there any sense in blowing the whistle? Because it seems that blowing the whistle only makes sense in an organized system, in organizations which are well structured and which are characterized by a high level of integrity, where the noticed irregularity is uncharacteristic for the general social atmosphere, which is well organized and marked with integrity of officials and institutions.

⁸⁵ *In public, the case of Borko Josifovski is well known, he first stayed without the function of director of Bureau of Emergency in Belgrade, and soon he was left without a job when in 2006 he alarms the authorities about certain doctors "are trading" with private undertakers and that because of that they have not given the help to patients at the right time.*

There is also a significant role of media in revealing the corruption. It implies a very important fact that the point of the media is to bring into light, direct and reveal, prevent and not to judge. However, in our country, many examples show that the press is more prone to follow accusations and personal “bickering” of politicians connected to certain affairs, rather than doing the researches themselves and point to the problems. We can say that the media competed in who will publish more affairs and who will have a more sensational cover, and that the research and analytic texts were very few, which makes it clear that this kind of situation does not help in revealing and stopping the corruption.

In the broader sense, this fight includes the state of mind, change of vision of ethical standards, rising awareness and general culture level, rising of economic power of society up to the level which enables full meeting the real financial and other spiritual needs of a man. We should especially have in mind that efficient work according to the ethical standards contributes to a higher integrity and strengthening the cooperation of public and private sector, but also to the decrease of possibilities for abuses, and corruption. All of this should contribute to overall socio-economic progress of our country.

Finally, of special significance is criminal legislation, at the first place the Criminal Code which states the corruptive activities: giving and receiving bribe, abuse of authority, abuse in procurement, subsidy fraud and deception in business operations. It is also important to make the Law on legal entities’ responsibility for criminal acts, introducing the criminal responsibility of legal entities for the activities of corruption. Then reason for this is that the question of criminal responsibility of legal entities becomes very present in the modern conditions, in respect to the huge economic power and great social influence of legal entities (corporations, multinational companies, enterprises) which often do criminal activities that are more serious than those that can be done by the individuals. On the other hand, there is no doubt that certain forms of crime characteristic for the development of modern society (corruption, money laundering, organized crime), demand a wider application of various measures for the legal entities, as well as determining of their criminal responsibility.

At the end, the finalizing of the fight against corruption will be represented by adopting the National strategy for fight against corruption for the period from 2013 to 2018. The general goal of the strategy is to remove the corruption in Serbia to a highest possible degree, since it is an obstacle of economic, social and democratic development of Serbia. In order to realize that, the existence of political will is necessary in order to activate the corruption, for it to be processed and punished, that is to apply the laws in practice consistently and without the selection.

CONCLUSION

When we talk about the legal legislation which refers to preventing and fighting the corruption we cannot say that Serbia has not adopted the legal solutions that should provide the efficient fight against this notion, but how does it look like in practice, is another question. Here it is very interesting to emphasize the opinion of Čedomir Čupić, who at the following question: "How do you explain that the same people, who established the law, now do not want to apply it", replied: "It is a despotic behavior – the law does not apply to me but to those under me. Besides, here we are talking about a heavy manipulation – you adopt the law in order to show the European democratic norms, and then you do not want to apply it."⁸⁶ And here, we really come to a paradox, that in our country we have enough legal legislations that regulate this area and enough various agencies, bodies and commissions that should deal with the application of the law in practice, but the examples of corruption and economic crime become more often and obvious, and the cases of punishment, revealing and prosecuting the participants of these actions is rare. And that is why it is not unreal to pose a question, what is the point of all the laws, agencies, commissions, bodies, if the reports against people who have political and economic power, and who mostly do crime in the area of economic crime, are not processed?

This situation prevents serious foreign financial investments, in the form of capital investments, in the domestic infrastructure first of all, and the local character ones. Foreign investors, some of which are hit by the world economic crisis, for input of the fresh capital at the Serbian market, wait for the more appropriate climate, which will come when we adjust our laws with the standards of the European Union, when the work of the public services becomes transparent, when the administrative procedures become easier, when the government acts in a uniformed way and the most important thing, when the political environment becomes stable. As the most important step towards joining the EU is efficient fight against corruption, we hope that we will achieve significant results in that area.

That is why we will finish this paper with the words of a theoretician who says the following about the corruption: Corruption is not a myth. It is a reality that we create or which we adapt to. It is not the illusion it is the reflection of the problems that we rarely deal with.

⁸⁶See: www.politika.rs/rubrike/politika/funkcioneri-se-ponasaju-despotski.sr.html.

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POST-BUREAUCRATIC ORGANISATIONS AND ENTREPRENEURIAL CULTURE: UNDERSTANDING POWER AND CONTROL IN KNOWLEDGE-INTENSIVE FIRMS

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Abstract: This paper discusses the notions of ‘entrepreneurialism’ and enterprising culture. In particular, it examines the significance of such discourses on the contemporary workplace and consequent impact on the individual worker’s identity and behaviour. Robertson and Swan’s (2004) study on Knowledge-Intensive Firms, a type of organisation that is not entirely synonymous with postbureaucratic organisation but mainly overlapping it, they revealed that majority of firms relied on ‘cultural or professional forms of control’. These forms of control are regarded to have dependence on an ideology of entrepreneurialism and enterprising culture (Du Gay, 1996; McCarthy, 2008; Rose, 1990). Thus the issues of power relations and discourses in Knowledge-Intensive firms are primarily investigated in this study to expose and understand how the drive by organisations for the ‘enterprising’ individual produces a worker who is self-regulating and self-disciplined. The paper will include an assessment of discourses from various organisational actors to shed light on the role of ‘enterprise’ as a principle of control or government in creating autonomous and productive subjects in the workplace and wider society.

Key words: Entrepreneurship, Organization, Entrepreneurial Culture

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INTRODUCTION

Modern organisations in the Western societies have over the years have acted as vital part of the organisational actors' lives as they play a significant role in shaping their identities through various organisational discourses and practices. The purpose of this paper, is therefore, to show that although the wider societal practices and perceptions may affect an individual's societal attitudes, particularly in the workplace, there is also a significant role that contemporary organisations play in the production of certain organisational identities – these roles are linked to the discourses and entrepreneurial behaviour practices and the notion of the enterprising culture emerging in Western societies.

The paper is divided into three main sections. First, we discuss some of the theoretical and conceptual parts of the most important themes of this study: construction of the contemporary organisations in modern societies. In the second part, an overview of the entrepreneurial culture and post-bureaucratic organisations that have emerged in the United Kingdom and other Western countries will be discussed. The discussions are centred around the emergence of the 'anti-bureaucratic' thinking that mainly involves an understanding that bureaucratic organizations are viewed as not being capable of accommodating probing, creative, and entrepreneurial individuals. The evaluation seeks to expose and highlight the facts on how contemporary organisations have moved from rigidly devised system of rules, standard operating procedures, and clearly distinguished domains of expertise and authority (Styhre, 2008), to newer forms of control. The third section will address the issues of power relations and how the move from the bureaucratic to a post-bureaucratic workplace has rendered the individual into an 'enterprising-self' - that is, a calculating self, who is calculative about itself and works upon itself in order to better itself (Rose, 1990). Finally, we provide some discussion regarding the usefulness of the main themes of this study. Above all, we address the relevance of understanding the nuances involved in discourses pertaining an 'enterprise-culture' and the power that they have in moulding and shaping the lives of organisational actors, particularly in knowledge-intensive firms. More importantly, this paper draws on Michel Foucault's work on power relations - interactions between power relations and discourses (expert and lay knowledge) to understand why/how certain organisational discourses and practices become dominant over time; that is, why/how the entrepreneurialism has become a key concept in the workplace.

THE CONSTRUCTION OF 'CONTEMPORARY' ORGANISATIONS IN WESTERN SOCIETIES

According to Watson (2003), work organisations are important to the way in which modern industrialised civilisations are ordered. Thus at the heart of the history of contemporary societies have emerged organisational activities which are often undertaken inside “bureaucratised corporations and formally structured enterprises that employ people to work under the instructions of organisational managers” (Watson, 2003, p.75).

Strati (2000), in explaining the relevance of organisations to modern societies refers to them as the centre of gravity of contemporary societies. Based on the aims of this paper, emphasis will be particularly placed on multinational companies (MNC)⁸⁹ to address the overall aims of this study. For example, studies by Warner and Peccei (1977) show that such organisations’ subsidiaries based in the United Kingdom allow local autonomy and blend in more to the local style in terms of practices. Such features, have therefore, made it relevant to focus the attention of this particular research and even carry out studies (fieldwork) with similar firms as they currently depict the contemporary British way of conducting business.

There are a large number of MNCs operating in the United Kingdom, some of which are overseas-owned or United Kingdom-owned firms. However, members of society have always had a ‘love-hate’ relationship with these MNCs and often criticise such organisations for being bureaucratic, inefficient and intrusive in its member’s private lives (Thompson and McHugh, 2002). In contrast, it is argued that the ‘downsides’ of their activities are highlighted over the ‘upsides’ like their contribution to society as a provider of employment, public services and private services. In addition to this role these organisations provide to the society, they are also involved in the system of government and the “birth, education, leisure and welfare of people throughout their lives” (Watson, 2003, p.75). It is, therefore, important to acknowledge the role that contemporary organisations play in the lives of individuals in terms of structuring and moulding it, within and outside the workplace.

As Morgan (1986) suggests, complex political, economic and social organisations of a web of individual and social relationships offers its members an opportunity to partake in the wider society at local, national and even global levels. Valero-Silva (2007) makes a reference to the central role and contribution that institutions like the prison, clinic and school have made to human existence.

“However, they also make constant demands on individuals for the latter to adjust to and comply with their internal procedures in the names, for instance, of efficiency and improved service. Only in the very remote and under-developed regions of the world do such institutions still remain exclusive and somehow

⁸⁹ Interviews for this study were carried out with individuals from MNCs based in the East Midlands, United Kingdom.

detached from the daily lives of ordinary individuals and communities, or else their interaction is discontinued and/or sporadic” (Valero-Silva, 2007, p. 1)

Littler (1980) explains that organisational theory and practice should be viewed historically and contextually as it can only be understood as something in process, or else the search for general propositions and instant prescriptions will become detached from reality, which is often the case for ‘ahistorical’ approaches. Furthermore it is necessary to recognise an understanding of organisations should be multi-dimensional rather than multi-layered especially when dealing with the complexities and levels of human behaviour in organisations. Thus many researchers have been critical of the approach to the human behaviour in organisations and have rejected the psychological component of mainstream theory that has often treated or regarded the people in organisations as “‘psychologically determined’ entities with abstractly and individually defined needs, for example the need to belong or for self-actualisation” (Thompson and McHugh, 2002, p. 17)

In discussing and understanding how organisations have evolved in modern societies, particularly Britain, and the role that it may have on the constitution of organisational actors, it is important to consider that organisations often act as ‘people processors’ through either their informal cultural and social practices or formal managerial measures to gain or mobilise approval. It is relevant to note that in studies involving organisations and their role and effect in wider social processes, there needs to be a critical consideration of existing realities and power relations. Thompson and McHugh (2002) make mention of the perceived role of the organisation in ‘empowering’ or ‘enabling’ its employees to, for instance double their workload or go beyond the job description. They suggest that it only serves as a means of transforming the employees’ workplace relations and that such a term does not imply any form of politics or intervention. It is argued that such terms like ‘empowerment’ in organisational jargon moves away from its usual managerial usage and act merely as a term whose rhetoric is not matched by reality.

POSTBUREAUCRATIC ORGANISATIONS AND ENTREPRENEURIAL CULTURE

With a rapidly changing workplace, a phenomenon seen all over the world, due in part to new technologies, new market conditions, and new conceptions of employer-employee relations the issue of workplace control has become a concern (Deetz, 1998). That is, concern could be attributed to the ‘dominant’ groups with how to obtain and exercise this control, and a concern from the ‘non-dominant’ groups about new forms of domination, representational failure, and less satisfactory company performance (Deetz, 1998, p. 151). It is evident from the previous section that older forms of domination do exist; however, with the rise of new large-scale organisations, in tandem with participation and empowerment strategies and shifting work forces, new and more subtle forms of domination and control are now surfacing.

The notion of the postbureaucratic organisation has been utilised by numerous researchers (Garsten and Grey, 1997; Hodgson, 2004; Maravelias, 2003) to define a range of ‘contemporary’ organisational forms that move away from the ‘traditional’ bureaucratic organisation. It is explained in the case of new breed of postbureaucratic organisations, “rather than being structured in accordance with hierarchical principles, clearly bounded assignments and roles, and fixed career paths, the postbureaucratic organisation is characterised by fluidity, permeable and porous boundaries, and informal and organic structures” (Styhre, 2008, p. 639). Hence in such organisations, strategic planning processes may assume a more original and open-form, while control within organisations would have to be understated or softened (Mintzberg, 1993; Marx, 1991).

Iedema (2003) explains that postbureaucratic organisations rely on new forms of subjectivity and forms of identification constructed in the workplace. That is:

“For ordinary workers, the post-bureaucratic ethos asks no less than a “frameshift” with respect to work, other, meaning, and self...Put in discourse terms, post-bureaucratic workers are asked to conceive of work and self as socially constructed, performatively maintained, and organisationally anchored. (p. 131)

Iedema (2003) clarifies this definition by contrasting the postbureaucratic organisation with the traditional bureaucratic ‘Fordist’ organisation as follows:

“Whereas in Fordist and neo-Fordist organisations, employees fitted into clearly marked institutional hierarchies and were in charge of clearly circumscribed (proceduralised) and specialised tasks...post-bureaucratic organisations tend to demand that they be multi-skilled, broad-banded, and linguistically articulate and assertive. Rather than management determining the sequence and manner in which tasks are to be carried out, employees are now encouraged to participate in the conceptualisation of tasks and of the work process as a whole. They negotiate their jobs as members of ‘quality circles’ and consultative committees, as occurs in hospital settings where clinicians get together to protocolise and benchmark their practices” (Iedema, 2003, p. 200)

Hence, it can be implied that the postbureaucratic organisation structure enforces different and new forms of subjectivity and expectations for identification with the firm, and also the creation of new expertise. Thompson and Alvesson (2005) point out that advocates of the postbureaucratic notion believe that there has been a radical change from the traditional and outdated bureaucratic form to the current contemporary postbureaucratic organisational form.

According to Deetz (1998), these new forms of control are existent in so-called ‘knowledge-intensive’ industries and also in the knowledge intensive parts of other firms. Thus by addressing and understanding such organisations and the units that make up majority of their rising segment of the workforce, especially in economically advanced societies, such forms of control in these firms can be exposed (Drucker, 1993). Clegg and Courpasson (2004) argue that the process of rationalisation innate in past bureaucracies resulted in a diminution of liberty as officials were expected to develop into submissive subjects, enclosed in an ‘iron cage’. Josserand (2004) portrays an image of postbureaucratic organisations as

decentralised with cohesion gained through cross-cutting networks of numerous types, and in which the role of management changes to being a catalyst. However, Joserrand et al (2006) argue that as interesting as this new ideal-type may seem, it still depicts an abstract version of post-bureaucracy. It is added that the post-bureaucratic organisation is not devoid of the Weberian ideal-type but rather merges the old rationalisation techniques with new principles of networks and democracy. Hence:

“Post-bureaucracy does not mean the end of domination (Herrschaft) but it does mean that organizations and their management are caught in intrinsically ambiguous democratic mechanisms. Where legitimacy is premised on a political principle of democracy, it sits oddly within the frame of an older legitimacy of the power of office as (a legitimate) authority. In the former, domination is abhorred; in the latter it is inescapable, which changes dramatically the functioning of the line of command” (Joserrand et al, 2006, pp. 55-56)

A central notion present in the literature is that management control has shifted from what is called technocratic control into diverse forms of normative control (Alvesson, 2004); Foucauldian ideology emphasises how normative control, as a discourse, constitutes particular forms of subjectivity. Technocratic control denotes the form of control present in bureaucratic organisations to either have power over the process of the work such as work routines and scripts or the output of the work.

As mentioned earlier on in the discussion, Robertson and Swan (2004)’s study on knowledge-intensive firms, a type of organisation that is not entirely synonymous with postbureaucratic organisation but mainly overlapping it, revealed that many firms depend on ‘cultural or professional forms of control’. These forms of control are regarded to have dependence on an ideology of entrepreneurialism and enterprising culture (Du Gay, 1996; McCarthy, 2008; Rose, 1990) [bold added].

Although some researchers like Knights et al (1993) criticise the liberal use of the term knowledge-intensive firms and how it is used to denote a particular group of firms, it is clear that they do portray some ‘postbureaucratic’ tendencies. Baron et al (2001) argue that there is little doubt that several firms particularly those operating in the high-tech sector utilise highly skilled experts and these firms organise in distinctive ways. Furthermore, Robertson and Swan (2004) state that these firms represent a good example of contemporary forms of ‘people-dependent’ organisations that holds close the ideology of ‘entrepreneurialism’ as the pervasive structure of governance.

In the next section, we will demonstrate how the notion of entrepreneurialism have evolved in present-day organisations and has consequently been used as a tool or technique for controlling and rendering the employees as subjects.

POSTBUREAUCRACY AND ENTERPRISE

Although most contemporary organisations, particularly knowledge-intensive ones, may be governed through entrepreneurialism, they have been very few studies on how this organisational phenomenon may have evolved over time (Robertson and Swan, 2004; Alvesson, 2000). As Du Gay (2004) explained, political discourses in many advanced liberal democracies, like the United Kingdom, have been inundated with mentions of ‘enterprise’ for many years; mainly due to the dominance of ‘market’ institutions in the constitution and reproduction of such societies. Peters (2001) states that the idea of the ‘enterprise culture’ emerged in the United Kingdom as a central theme in political thought under the Margaret Thatcher's administration. It is added that this notion signified a deep move away from the Keynesian welfare state to a deliberate attempt at cultural restructuring and engineering based upon the neo-liberal model of the entrepreneurial self; a move symbolized by a move away from a ‘culture of dependency’ to one of ‘self-reliance’.

In distinguishing between the usual established usage and the organisational usage of the term enterprise, Du Gay explains that:

“...contemporary usage is distinctive in traversing established definitions of ‘enterprise’ and ‘entrepreneur’ to signify a novel and vastly expanded meaning for the term. No longer does ‘enterprise’ refer simply to the creation of a independent business venture or to the characteristic habit of model entrepreneurs or (successful) persons in business for themselves, rather it refers to the ways in which economic, political, social and personal vitality is considered best achieved by the generalisation of a particular conception of the enterprise form to all forms of conduct - to the conduct of organisations previously seen as non-commercial..., to the conduct of government and its agencies and to the conduct of individuals.” (Du Gay, 2004, pp. 38-39)

In this regard, the concept of enterprise therefore refers to both to the preferred enterprise form of organisation, and to a collection of features such as self-reliance, initiative and the capability to admit responsibility and accountability for one’s self and one’s actions (Du Gay, 1996). Thus the term “enterprise as a rationality of neo-liberal government involves defining the conduct of organisational activity so as to produce autonomous, productive, self-regulating, entrepreneurial behaviour at both a collective and an individual level” (Doolin, 2002, p. 372). Dijksterhuis et al (1999) add that most large organisations, particularly knowledge-intensive firms, now exercise what is termed as ‘Post-industrial management logic’. This involves a practice whereby individuals are encouraged to reflect on their own behaviour and adjust their actions consequently with clear emphasis laid on self-control and self-organisation rather than organisational control. Thus Starbuck (1992) adds that that most knowledge-intensive firms would clearly derive their shared managerial schema from Post-industrial management logic.

Hence from the above discussion it is evident that concerning governance, the emphasis is largely placed on self-control and self-management in such firms. That is, a trait that is reminiscent of the entrepreneurial form; besides the work in these knowledge firms does demand autonomy and critical reflection (Kelley, 1990). However Doolin (2002) argues that enterprise discourse is not the only form of discourse that is at play in contemporary societies and organisations. Moreover Fournier and Grey (1999) suggest that in practice a number of discourses tend to be juxtaposed and do function together; additionally, there is not automatically a single source for a discourse or a total agreement over questions within it.

As Gordon (1991) has revealed, enterprise as a principle of control or government is closely tied up with 'ethics', a term Foucault defines as the "kind of relationship you ought to have with yourself, rapport also...which determines how the individual is supposed to constitute himself as a moral subject of his own actions" (Du Gay, 1994, p. 352). This refers to the means by which individuals come to "understand and act upon themselves in relation to the true and the false, the permitted and the forbidden, the desirable and the undesirable" (Du Gay, 1994, pp. 659-660). Also Gordon (1987) points out that enterprise as a rationality of government encourages a conception of the individual person as an 'entrepreneur of the self'. That is:

"the idea of an individual human life as an enterprise of the self suggests that there is a sense in which no matter what hand circumstance may have dealt a person, he or she remains always continuously engaged (even if technically 'unemployed') in that one enterprise, and that it is 'part of the continuous business of living to make adequate provision for the preservation, reproduction and reconstruction of one's own human capital'" (Du Gay, 1994, p. 660)

Thus Rose (1990) defines the 'enterprising self' as a calculating self, one that is calculative about itself and works upon itself in order to better itself. Du Gay (1994) adds that modern organisational existence and eventual success is based on an engagement by the organisation of the 'self-fulfilling impulses' of all of its members, regardless of their formal positions. They achieve this by allocating particular enterprising dispositions and capacities to employees by means of a number of mutually enhancing technologies and practices.

FOUCAULDIAN DISCOURSE ANALYSIS

Since this study aimed to use a Poststructuralist approach to address the main aims of the paper, a discourse analysis or discourse research was employed. However, it is important to note that discourse analysis is not in itself a "Poststructuralist method", or even a unitary approach (Wetherall et al, 2001). For this paper, the analysis of discourses surrounding entrepreneurialism and 'enterprise-culture' was done to enable us to understand the conditions behind the notion(s) It should also be noted that discourse analysis, with respect to a Poststructuralist analysis, has already received some attention in the field of policy analysis and management studies.

This body of discursive work can be usefully differentiated into that which concerns itself for the most part with the relatively formal communications of institutional discourse and that which is proximally concerned with the informal, “everyday” communication of “ordinary” discourse (Martin and Stenner, 2004). Therefore there are studies within Foucault’s Poststructuralist analysis, which this paper has utilised, that trace the development of knowledges about enterprise discourse and their resulting power relations, and those that critically “deconstruct” prevailing discourses. This then allows us to say something about how power/knowledge operates in relation to enterprise culture in contemporary societies (for example, Holguin, 2005; Campbell, 2000).

CONVERSATIONS WITH ORGANISATIONAL ACTORS

This section therefore draws on selection of interviews conducted with individuals working in Multi-National Corporations (three) in the United Kingdom. These organisations are business service firms and this industry represents a major growth area in the United Kingdom and therefore relevant to consider when addressing any issues concerning the contemporary British workplace.

The choice of the three workplaces ensures that the situation is thoroughly examined from various perspectives and Kraemer and Thiemann (1987) explain that exploratory studies are not intended for generalisation to a large population but rather designed to increase knowledge in the field of study. According to Abramovsky et al (2004), business services have accounted for over fifty percent of job growth in the United Kingdom over the past two decades and this makes sampling from this sector critical to understanding the issue of entrepreneurialism and enterprise culture. That is, although this paper does not aim to be statistically representative, it is still necessary that the discourses gathered on a local level still give a typical reflection of the discourses on the national level.

Purposive sampling strategy was adopted because it enables the selection of information-rich cases over statistically representative ones that would result from probability sampling (Patton, 2002). Because the aim of our research was to gather discourses among employees, which may be overlooked in most mainstream/managerialist workplace-based studies. Hence it was necessary for us to adopt purposive sampling instead of going for the usual cases, a cross-section or a balanced choice, we as researchers would be able to focus on cases which exhibit broad range and possibly even focus on extreme cases to illuminate the topic at hand (Dane, 1990).

The reason we conducted semi-structured interviews was to provide qualitative information which would facilitate a deeper understanding of the individuals’ representations and experiences regarding ‘enterprising’ roles and the notion of entrepreneurialism in their respective workplaces. It is important to restate that the opinions that these organisational actors provided were not sought to support or oppose a particular line of thoughts on entrepreneurialism, but rather to show the richness of the research topic and its originality through the provision of a platform for these diverging

views to be aired and debated. That is, the aim was to gather discourses among people in the workplace, which may be overlooked or neglected in most mainstream workplace-based studies, and to contrast them with political and managerial 'official' accounts.

THE DISCUSSION - THE ENTERPRISING SELF

Du Gay (1996) mentions that the restructuring of organisations in contemporary societies at the level of commercial entities working in a competitive environment necessitates the production of enterprising behaviour by organisations and organisational actors. In the case of the latter, Foucault's conception of 'disciplinary power' and 'social technologies of control' have been very vital in revealing and understanding new forms of domination on individuals that occur in a number of different organisations. Knights and Murray (1994) state that discourses such as that of enterprise act upon the subjectivity of individuals, constituting the sense of what it is to be enterprising, and restricting certain ways of thinking and acting, while revealing others.

Doolin (2002) explains that most discourses employed in certain organisations have the ability to constitute organisational participants as subjects who gained their organisational identities, reality, and sense of meanings through partaking in such discourses and related practices. Moreover, Peters in his discussion on how promotion of an enterprise culture has become a style of government characteristic of both neoliberalism⁹⁰ and Third Way politics states that:

"A genealogy of the entrepreneurial self reveals that it is the relationship, promoted by neoliberalism that one establishes to oneself through forms of personal investment...insurance that becomes the central ethical component of a new individualised and privatised consumer welfare economy. In this novel form of governance, responsabilised individuals are called upon to apply certain management, economic, and actuarial techniques to themselves as subjects of a newly privatised welfare regime." (Peters, 2001, p. 60)

As Doolin (2002) notes, discourses and particularly those relating to enterprise, offer means by which individuals come to understand themselves as subjects and makes reference to Foucault's notion of 'governmentality'; he suggests that employee/worker autonomy can be understood in terms of governmentality. Governmentality, which refers to Foucault's work on macrophysical practices of government, was based on the foundations of his previous studies on microphysics of power and discipline. He adds that:

⁹⁰ Foucault views neoliberalism as a novel mode of the art of governing; that is, a new mode of social power. Therefore a Foucauldian approach understands neoliberalism in terms of its replacement of the natural and spontaneous order characteristic of Hayekian liberalism with "artificially arranged or contrived forms of the free, entrepreneurial, and competitive conduct of economic-rational individuals" (Burchell 1996, p 23). See Burchell G. (1996) *Liberal Government and Techniques of the Self*. In A. Barry, T. Osborne and N. Rose (eds) *Foucault and Political Reason*. London: UCL Press.

“It has at its objective the normalisation of the self-regulating subject, and encompassed governmental programmes of not only the state, but also private- and public- sector institutions and individual conduct. In this sense, government is not the overt extension of control from some centre of power, but rather the conduct of conduct – influencing the action of others by working on their autonomous subjectivity... Governmentality operates through various heterogeneous sociotechnologies of controlling, organising and ordering related to the construction of incalculable spaces and the shaping of the self” (Doolin, 2002, p. 375)

Thus such technologies of government express and symbolise that which is ‘right’ and ‘suitable’ conduct for individuals and collectives. As Doolin (2002) explains, their actions grant individuals a particular subjectivity that shapes and guides them in their daily regimes and decisions. Consequently individuals end up entwined in pursuing social, political and economic objectives which are stimulated by individuals who, as subjects, come to identify with and normalise their actions in terms of standards inherent in governmental institutions and programmes.

Fleming and Spicer (2003) cite the usefulness of applying Foucault’s ideology to labour process theory and suggest that by rejecting essentialist views of human nature, subjectivity is seen as a result of disciplinary mechanisms, techniques of surveillance and power/knowledge approaches. Furthermore, by understanding the relationship between subjectivity and power, most researchers have aimed to understand the way that workers inscribe themselves in power relations and become “the principle of their own subjection”(Foucault, 1977b, p. 203). Most studies of contemporary organisations based on power and subjectivity have looked critically at the corporate culture, and recently entrepreneurial culture, and the effects on the selves of its workers. Mutch (2008) also mentions that the concept of culture has been mostly developed at the level of organisations and suggests a need to evaluate how these concepts overlap with the conceptions of power.

Hence, numerous amounts of critical research studies have been aimed at identifying how culture building and related technologies are basically systems of management control that intend to capture the identities of employees; that is, understanding how the individual is transformed into a productive and less recalcitrant employee, just the way the organisation expects (Fleming and Spicer, 2003). Peters (2001) refers to the work of anthropologist Mary Douglas who commences her discussion of the person in enterprise culture by arguing that enterprise culture is “justified by the claim that it frees persons [driven by self-interested motives] from constraints” enforced by bureaucratic regulation which “inhibit the pursuit of freely-chosen objectives, and so infringes the essential liberties of the person” (Douglas, 1992, p. 41).

For Douglas, the self and the concept of person is locked into ideology, and the ‘recognising the ideological structure of the self is the right starting-point for an investigation’. She indicates the way in which the self and the person have become separated in Western discourse over the last three hundred years, where the private self is bracketed from inquiry so as to protect the freedom of persons from ideological coercion and the category of the person ‘has been filled by the need to meet the forensic requirement of a law-abiding society and an effective, rational judicial system’ (Peters, 2001. pp. 66-67)

Rose (1998) analyses types of political reason that try to produce an enterprise culture by assigning a certain political value to the self, as an 'enterprising self', and also makes reference to Foucault's work. That is, Foucault's work is "productive for 'linking practices bearing on the self to forms of power' where power is not considered repressive, dominating and negating the capacity of individuals, but 'as the creation, shaping, and utilisation of human beings as subjects' ...such that power works through subjectivity" (Peters, 2001, pp. 67).

Furthermore Rose (1998) suggests that to understand the relationship or the link between the self and power through a Foucauldian perspective, one has to document and evaluate the means by which human beings have been created as subjects through different law-making strategies and forms of regulation. Utilising a Foucauldian view on the issue of governance and control thus is not focused on liberalism as a political philosophy or ideology but rather "reconfigures it as a form of governmentality with an emphasis on the question of how power is exercised"; consequently... "it makes central the notion of the self-limiting state which, in contrast to the administrative (or 'police') state, brings together in productive ways questions of ethics and technique, through the responsabilisation of moral agents and the active reconstruction of the relation between government and self-government" (Peters, 2001, p. 67).

From the discussion in this section, it is evident that the identification and acceptance that individuals do indeed bring their own meanings and personal work orientations to the workplace may now be seen as challenging the traditionally-held assumption that organisational members are rigid entities with given 'personalities' which changes little over a lifetime (Watson 2008). Such a shift towards a more relational view of organisational members and their identities was explained by Watson as being initiated by researchers in the poststructuralist realm questioning the prior assumption that each person has an unchanging 'sovereign' or 'essential' self. Employee subjectivity is consequently viewed as a result of disciplinary mechanisms, techniques of surveillance and power-knowledge strategies' (Foucault, 1977b; Knights and Willmott, 1989). Watson explains that although researchers like Alvesson and Willmott (2002):

"...concentrate on the efforts made by employing organisations to accomplish organisational control 'through the self-positioning of employees within managerially inspired discourses', they acknowledge that this can never be fully accomplished because such attempts are balanced by individuals with other elements of life history forged by a capacity to accomplish life projects out of various sources of influence and inspiration" (Watson, 2008, p. 125).

Furthermore, it is possible to suggest that workers in knowledge-intensive firms were individuals one would expect to have taken in to some degree the discourses of identity that are dominant currently with their industry and, particularly, the notion of the 'enterprising self' (Storey et al, 2005). However, Storey et al. summarised that workers diversely 'incorporate, modify, or reject notions of enterprise in their reflexively organised narrative of self' and argued against perceived dominance of the notion of the enterprising self (Du Gay, 1996). In addition, Bolton and Houlihan (2005) imply, in their study of customer service in call-centres, that the power of the discourses of enterprise has been over-estimated.

IMPLICATIONS OF THE ENTERPRISE CULTURE ON THE EMPLOYEE

Based on the above discussion, the complexities and ambiguities that are inherent in the debate, particularly concerning the organisational intricacies concerning the enterprise culture and the actual practices in the workplace, become apparent. Furthermore, following the interviews, it also became apparent that the organisations being studied have utilised numerous policies under the guise of entrepreneurialism as part of their disciplinary technologies through which they assert authority over the relation between knowledge, the work and the worker. For instance, by promoting the enterprise culture and making the employees feel that they are autonomous, self-regulating individuals, the employees, at times, convince themselves that management is implementing such policies for benefit of the workforce and the organisation as a whole.

From the interviews, it was clear at times that some of the employees believed or accepted management's decision to promote this enterprising spirit based on the reasons that were stated by the management. Hence these workers become governable due to their agreement of knowledge that is offered by management pertaining to entrepreneurialism. In the case of the office-based work environment and knowledge-intensive firms the reason that management gave for introducing an enterprise culture or ideology was to facilitate a shift from a 'culture of dependency' to one of 'self-reliance'.

Thus when employees have accepted the truth claims made by the organisation about enterprise culture, and the precise collections of knowledge making them possible, they act in a way as to maintain these 'truths' even in instances where the underlying concepts of these notions may not explicitly permeate. Consequently the employees partake in the production of power that affects them and through their practices and exploits substantiate and reinforce it; its perceived authority and its rationality (Winiecki and Wigman, 2007).

However, it is necessary to point out that management or supervisors are not always principals in this process. As we identified in the interviews, the organisation's techniques on enforcing an enterprising workforce have a tendency to produce workers whose actions are consistent with its demands for conformity and increased organisational efficiency. Nonetheless, it is not just that the organisation controls the workers until they all accept or comply with what management requires of them. The workforce can utilise mechanisms and techniques produced by management different ways, "ranging from compliance through proper means to compliance through unofficial or proscribed means, to subversion or outright resistance" (Winiecki and Wigman, 2007, p. 126).

CONCLUSION

This paper has shown the importance of the large-scale organisations, particularly knowledge-intensive firms, in contemporary societies and their role in producing and affecting the identities of individuals that work in them. The changing nature of the wider societal culture has also been attributed to particular shifts in the way organisations now perform their activities. Furthermore, the recent rise of the ‘enterprise-culture’ has been deemed significant in the way organisations and their relevant actors behave and carry out all aspects of the roles in society. At the forefront of this discussion has also been the role of the individual in all this shifting and constant debate about how individual working lives are shaped by their respective work organisations; this force or control is seen to be imposed by the latter to ensure that the organisational actors “adjust to and comply with their internal procedures in the names, for instance, of efficiency and improved service” (Valero-Silva, 2007, p. 1).

In addition as discussed in methodology section of this paper, by adopting a Foucauldian approach, many aspects of an individual’s existence including issues of self-empowerment and self-reliance can be ‘problematised’ in contemporary society and examined while acknowledging the importance of work institutions and the roles they play in the wider society. Furthermore it is already clear in this paper that there are emerging issues regarding power that have contributed to shaping the view of society towards the ‘entrepreneurial’ culture; for instance, how views and opinions of certain ‘experts’ and institutions have remained dominant over time in the debate about how the individual is viewed and dealt with in society and particularly in the workplace.

In sum, the discussions above suggests that there is a need for a thorough and rigorous debate about what is meant by “entrepreneurialism” and “enterprise culture”. Any attempt to redefine the terms, should note that the notions of entrepreneurialism and enterprise culture is a dynamic endeavour that is influenced by numerous institutions, actors, disciplines and interests and therefore, deserves better explanations as it cannot be studied without addressing the wider social processes that exist as a result of the ‘problematisation’ of these key notions.

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PROFESSIONAL SATISFACTION AS AN ASPECT OF ENTREPRENEURIAL ORGANIZATIONS

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Abstract: This paper focuses on the general theoretical and empirical knowledge of quality and values of entrepreneurial organizations by defining the factors of professional satisfaction as the primary resource for development in every organization. Assumption that it is possible to identify the factors of employees' satisfaction as one of the important dimensions of organization's quality has been confirmed in this paper; however, the existence of any meaningful link between the identified factors and personal and andragogical characteristics of the interviewees, i.e., the predictive value of the above mentioned characteristics has not been confirmed.

Key words: Entrepreneurship, Organizational Changes, Professional Satisfaction

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INTRODUCTION

Successful entrepreneurial organizations internationally consider their employees to be the most important asset of their organizations and their primary developmental resource, and active management and integration of their employees' potentials are in the focus of such organizations.

Success levels of any modern organization are not measured exclusively by the profit they make, but also by their success in realization of interests of various internal and external groups and by success in the integration of such groups.

Employees' satisfaction is key to success of any present-day entrepreneurial organization. Thus, the process of continuous performance measuring by monitoring the employees' professional satisfaction levels is a very important precondition for improvements of efficiency of any entrepreneurial organization, quality of its work, growth and development.

But, at the same time, there is almost no organization having the measurement system comprising of a formalized method for employees' satisfaction measuring. This is primarily due to the fact that it is a very complex phenomenon, one that depends on a series of heterogeneous factors with various intensities, which has been additionally confirmed by numerous research works and studies, both internationally and in our country. On the other hand, due to the differing conditions in business environments in which they operate and due to their different strategic objectives, each organization creates its own system to measure the professional satisfaction of its employees.

The theoretic approach to the problem and to the subject matter of the research work and its scientific (theoretical) and practical importance have all defined the elements of the objective and tasks for this empirical research (Stojanovic et a., 2013).

The focus of this research is on establishing links and correlations among all the factors that influence professional satisfaction in entrepreneurial organizations –interdisciplinary approach (sociological, andragogical, psychological and methodological), inter-relations among individual factors and personal characteristics of the employees.

In realization of research works, *variables* have been conditionally categorized in the following manner:

- a) *Independent (predictor)* variables are as follows: (1) employees' personal characteristics (sex, years of age, years of service, managerial positions) and (2) andragogical characteristics (education, success achieved in school).
- b) *Dependent (criterion)* variables and indicators of dependent variables are as follows:

1. Characteristics of a position/function: type of work (content of tasks); independence in performing one's work; authority level in decision making process, involvement in decision making process, stability and security of employment;
2. Professional development: possibilities for application of acquired knowledge and for fulfilment of one's abilities and skills; potential for professional training and development; potentials for professional training and development externally or outside of the enterprise.
3. Material and non-material incentives: salary level; salary levels' distribution within the organization; rewards for accomplished results at work; recognitions for results accomplished at work.
4. Working conditions – prevailing working conditions in the workplace.
5. Interpersonal relations – interpersonal relations within the organization as a whole.
6. Position and available future options and perspectives within an organization: position in the organization; potential for vertical promotion within the organization (along the chain of authority); available options for lateral promotion within the organization (based on one's expertise); potential to get assigned to more complex or better paid jobs; personal perspective within the organization; potential to earn a certain status within the organization, (Elyas et al., 2012; Krouse, 2012; Milos, 2013)
7. Management: relationship with the immediate superior; direct management model; organization of work by line manager.
8. Dissemination of information and communication: dissemination of information on organization (plans, business policies, program of activities); information provided to the superior; communication in between the work process.
9. Business policy of the organization: business operations and business policy; perspective; reputation and stability of the organization.

In this research paper, due to the techniques used in research, a Questionnaire is being used (UZP.1 - Schedule 1)), comprising of the following two parts:

- *Part One of the Questionnaire* was used to collect information about some characteristics of the employees – the personal ones (sex, years of age, years of service, managerial duties) and the andragogical ones (educational degree, success achieved in school that the interviewee last attended, position at work).
- *Part Two of the Questionnaire* was used to collect information about professional satisfaction (modified Job Satisfaction Scale by Cooper, which contains 20 items). Answers to each item are presented in the form of a scale with marks ranging from 1 to 5, where the interviewees were asked to mark the intensity or the rate of his/her personal satisfaction with the aspect of job in question.

Reliability of the scale of attitudes has been determined by using the traditional *summation methods*, and it ranges from 0.7157 to 0.8926 (Spearmen-Brown-Cronbah coefficient amounting to 0.826⁹⁴; Guttman Split-half coefficient⁹⁵ of 0.7157).

In processing of collected data, in addition to the descriptive statistics, the following mathematical and statistical methods and procedures were used: factor analysis⁹⁶ and regression analysis⁹⁷.

Guttman coefficient lambda is used to specify the lowest limit of reliability.

The research was carried out in 2013, on a quota sample that consisted of 500 employees from 16 entrepreneurial organizations from the production and service sectors; the quota sample included 213 female and 287 male interviewees.

ENTREPRENEURIAL ORGANIZATION - QUALITIES AND STRENGTHS

The main task of any entrepreneur is to assiduously search for different areas of operation; to generate ideas; to improve their methods of assessment, selection and choice of ideas; to shorten the path from the initial idea to its realization; as well as to develop methods and techniques for practical problem solving that are characterized by high efficiency and profitability levels, which, under the present-day conditions, imply speed, optimum costs and innovation.

“By applying the philosophy of economics, a stronger link between the economic actors and results of work is achieved, and that is an indispensable mechanism for achieving auspicious market and economy environment and healthy entrepreneurship“ (Karavidići et al., 2010, p. 27)

In the contemporary economic trends, knowledge, innovations, creativity, new ideas and information are the key wealth and resource that can significantly contribute to the social and economic growth and development.

In addition to the efficiency in achieving desired quality and production levels, the key influence on growth and development, but also on the value of any

⁹⁴Spearmen-Brown-Cronbah coefficient is most often used for the instruments that are designed as the Likert's scale/type instrument (with no dichotomous items). It precisely specifies the lower reliability limit. It is based on the inter-item method of correlation.

⁹⁵Guttman Split-half coefficient is used to show the internal consistency of instruments.

⁹⁶Factor analysis enabled grouping of numerous components used to express job satisfaction into several basic groups, based on their similarity, or based on the correlation of marks used by the interviewees to evaluate their importance.

⁹⁷Regression analysis has served to establish relationships between the personal and the andragogical characteristics of employees in medical care system with the basic factors of job satisfaction, that is, for establishing potential for prediction of the basic factors in job satisfaction based on the employee's personal characteristics – sex, years of age and years of service and also based on the andragogical characteristics – educational degree and profession. Consequently, each basic factor that was identified by means of the factor analysis, presented a criterion (dependent) variable, while the personal and andragogical characteristics of the employees in entrepreneurial organizations had the meaning of the predictive (independent) variables.

entrepreneurial organization, is exerted by the efficiency of the organization and its management, organizational culture and performance measuring within the entrepreneurial organization, which is the most important asset of any existing organization.

The most important potential asset of an entrepreneurial organization is made up of its staff and of its established organizational culture – building up of a team that is complementary in their respective competencies and of creative climate of mutual trust.

And here is the explanation for the above statement: the majority of problems does not have anything to do with the money – if there is a market, you will be able to generate money; problems do not have anything to do with the market, either - providing that you have a competitive product and technology, you will always be able to find a market for it; and they do not have anything to do with the technology – if you have the money, you will be able to find the technology – the root of the problems lies in the people, that is, the employees. Thus, the employees' opinions on their own best interest and job satisfaction become a structural issue and a presumption for strengthening and development of entrepreneurial potentials and entrepreneurial energy. “Success comes from within“. (Adizes, 2012, p. 152)

Lasting improvements in the value of any entrepreneurial organization and its performance lie in its internal environment – in the awareness of one's own strengths and vulnerability, in faith that solutions can be found in integration and complementary nature of the team, in their mutual trust and as the culmination of all the afore said, in the employees' professional satisfaction. “Where there is mutual trust and respect, energy flows“. (Adizes, 2012, p. 144)

With frequent changes, different opinions will emerge along with different communication styles, signs of one's own interests, conflict situations, and parallel to these, the stress intensifies as well. Adizes points out the following in relation to the above statement: “Life is made up of changes and conflicts; we cannot run away from them.” (Adizes, 2012, p. 195) Conflict is not an abstraction. It lies in the very centre of the problem and it has many different aspects and facets that are manifested through: different points of view about the problems and processes that are manifested through emotions and stress.

Entrepreneurs have to accept that the differences in opinions, even within ourselves, are normal and acceptable and also that the destructive energy of any conflict should be redirected into a functional activity or in development, which implies, before all, monitoring of employees' satisfaction.

THE NOTION OF PROFESSIONAL SATISFATION

Employees' attitudes about their jobs are called professional satisfaction and it can be analysed through cognitive, affective and evaluative reactions on one's job. Professional satisfaction is thus a complex attitude that includes certain presumptions and beliefs related to the job (the cognitive component), job-related feelings (the affective component) and assessment of one's job (the evaluative component).

There is a similar opinion (Guzina, 1980, p. 136), according to which professional satisfaction is a general attitude towards job that is again made up of three components: the cognitive one, the emotional and the conative one. The cognitive component pertains to the worker's opinion about the value, importance, difficulty levels of the job for himself/herself and in general. The affective component comprises of the love for the job, emotional attachment to the job, agreeableness or disagreeableness caused by the task or substance of the job one is required to perform and by the work conditions in general. The conative component pertains to one's willingness to strive hard, readiness to change job, willingness to choose the same or a completely different job.

Professional satisfaction can additionally be looked at as a general attitude towards work, or as satisfaction with one's salary, satisfaction with work in general, potentials for promotion. In addition to these factors, the following approaches can also be mentioned here, which are potentially characteristic of employees' professional satisfaction: satisfaction with performance of certain tasks; satisfaction with the fact that one belongs to a certain working group; satisfaction with the fact that one belongs to an organization (Šušnjar, Zimani, 2005, p. 135 to 136).

Numerous factors of professional satisfaction can be categorized in two main groups: those that are related to the organization and those that are related to the personal workers' characteristics (Greenberg, 1998, p.162-164).

Professional satisfaction factors related to the organization are as follows:

- Work in it self – People tend to be satisfied if they perform a job that is more challenging and/or diverse, than if they perform a simple or routine job.
- Reward system – The higher the salary, the higher professional satisfaction among the employees is in general; however, a just system of rewards and incentives is still found to be more important than the salary amount in itself.
- Working conditions – These can create better opportunities for quality performance of work and achievement of expected results and outcomes.
- Social atmosphere – Good interpersonal relations and relations with the immediate superiors are a very important factor in employees' professional satisfaction, to the measure that the majority of interviewees find them more important than the salary amount.

Personal factors in professional satisfaction:

- Harmony between the personal interests and job – Congruence between one's abilities and requirements of a job will lead to better results of work, and also to greater professional satisfaction.
- Position and status – Employee's position on a hierarchy level with the organization, job security, status symbol, greater power and social influence all lead to greater professional satisfaction.
- Satisfaction with personal life – This is reflected on professional satisfaction and vice versa, and it is manifested through employees' productivity levels, but it additionally influences some other phenomena in the organization, such as the frequency of leaves, absenteeism and employees' turnover.

Different conditions and environment for business operations, different business strategies, different goals and objectives make it necessary for each individual organization to create its own system to measure employees' professional satisfaction.

PROFESSIONAL SATISFACTION IN ENTREPRENEURIAL ORGANIZATION - RESEARCH RESULTS

Table 1: Structure of the first factor – Interpersonal Relations

<i>No.</i>	<i>VARIABLE</i>	<i>Variable -factor correlation coefficient</i>	<i>Representation coefficient</i>
1.	Relations with other employees.	0.655	0.678
2.	Communication and method used to disseminate information within the organization.	0.530	0.651
3.	Fellow workers' willingness to cooperate.	0.614	0.604
4.	Available opportunities for career development.	0.571	0.474
5.	Salary amount compared against years of service.	0.552	0.391

Table 2: Structure of the second factor – Job Security

<i>No.</i>	<i>VARIABLE</i>	<i>Variable factor correlation coefficient</i>	<i>Representation coefficient</i>
1.	Current job security (safety).	0,691	0,667
2.	Method used to introduce changes and innovations.	0,605	0,681
3.	Satisfaction with the current job.	0,591	0,637

Table 3: Structure of the third factor – Organizational Management Style

<i>No.</i>	<i>VARIABLE</i>	<i>Variable factor correlation coefficient</i>	<i>Representation coefficient</i>
1.	Management style in your organization.	0.761	0.765
2.	Your workload (regardless of its volume).	0.619	0.646
3.	Conflict resolution method used in your organization.	0.501	0.564

Table 4: Structure of the fourth factor – Freedom and Creativity in Performing One's Work

<i>No.</i>	<i>VARIABLE</i>	<i>Variable factor correlation coefficient</i>	<i>Representation coefficient</i>
1.	Degree of freedom and flexibility in performing your job.	0.743	0.718
2.	Type of work or tasks that you are engaged to perform.	0.599	0.682
3.	Psychological climate and atmosphere in your organization.	0.650	0.615

Table 5: Structure of the fifth factor – Potential to Influence Own Professional Development and Career Advancement

<i>No.</i>	<i>VARIABLE</i>	<i>Variable - factor correlation coefficient</i>	<i>Representation coefficient</i>
1.	Possibilities to realize own aspirations and ambitions.	0.788	0.840
2.	Possibilities for involvement in decision making process for the important decisions.	0.674	0.702
3.	Available options for professional development and career advancement.	0.351	0.279

Table 6: Structure of the sixth factor – Work Control Method

<i>No.</i>	<i>VARIABLE</i>	<i>Variable - factor correlation coefficient</i>	<i>Representation coefficient</i>
1.	Control method used by your superior officers to monitor your work.	0.695	0.742
2.	Available options for professional development and career advancement.	-0.561	-0.560

Table 7: Professional Satisfaction Factors

<i>No.</i>	<i>VARIABLE</i>	<i>Variable-factor correlation coefficient</i>	<i>Representation coefficient</i>
1.	Interpersonal relations	17.50	17.50
2.	Job security	10.437	27.943
3.	Organizational management style	6.428	34.370
4.	Freedom and creativity in performing of one's work	5.886	40.256
5.	Potential to influence own professional development and career advancement	5.560	45.816
6.	Control method	5.291	51.107

Table 8: Inter-correlation between factors of optimum selection of staff from the aspect of unit mobilization

<i>FACTOR</i>	1	2	3	4	5	6
1	1.000					
2	0.251	1.000				
3	0.351	-0.003	1.000	1.000		
4	-0.036	-0.174	0.096	-0.178	1.000	
5	0.218	0.341	-0.021	-0.096	-0.020	1.000
6	0.028	0.218	-0.021			

Table 10: Summary of Results – Regression Analysis of Prediction Variables and Criterion Variable

Criterion Variable	Multiple Correlation Coefficient (R)	Multiple Correlation Coefficient Square (R Square)	Adjusted Multiple Correlation Coefficient (Adjusted R Square)
Interpersonal relations	0.126	0.016	0.002
Job security	0.095	0.009	-0.005
Organizational management style	0.077	0.006	-0.008
Freedom and creativity in performing of one's job	0.120	0.014	0.001
<i>Potential to influence one's own professional development and career advancement</i>	0.150	0.022	0.009

PROFESSIONAL SATISFACTION RESEARCH IN ENTREPRENEURIAL ORGANIZATION - ANALYSIS OF RESEARCH RESULTS

In order to identify factors that objectively present employees' professional satisfaction, factor analysis was applied. Sample adequacy index is 0.754, which is considered to be a very good indicator, and the result of the Bartlett's Test of Sphericity is also high and statistically significant, on the level of 0.001, making it a reliable basis for the application of factor analysis.

Factors' structure and configuration matrices are presented in Table 9 for the influence of optimal selection of staff from the aspect of unit mobilization.

Table 9: Factors' structure and configuration matrix in professional satisfaction

VARIABLES	STRUCTURE FACTORS						CONFIGURATION FACTORS					
	I	II	III	IV	V	VI	I	II	III	IV	V	VI
1.	0.530	-0.235	0.255	-0.065	-0.188	-0.026	0.651	0.400	0.242	0.033	0.188	0.206
2.	0.655	0.171	0.16	0.078	0.174	-0.145	0.678	0.047	-0.091	0.109	0.023	-0.165
3.	0.579	0.400	0.242	0.033	0.188	0.206	0.487	0.259	0.064	0.107	0.016	0.148
4.	0.614	0.434	0.059	-0.163	0.185	0.283	0.604	0.238	-0.141	-0.073	-0.039	0.203
5.	0.571	0.576	0.095	-0.123	0.301	0.149	0.474	0.429	-0.066	-0.012	0.048	0.04
6.	0.428	0.691	0.242	-0.162	0.175	0.127	0.224	0.667	0.171	-0.076	-0.112	-0.03
7.	0.220	0.591	0.271	-0.063	0.096	0.119	-0.011	0.637	0.275	-0.015	-0.112	-0.016
8.	0.153	0.051	0.040	-0.078	0.143	0.695	0.138	-0.214	0.011	-0.048	0.200	0.742
9.	0.080	0.605	-0.015	-0.109	0.176	-0.056	-0.079	0.681	0.011	-0.022	-0.046	-0.205
10.	-0.086	0.065	-0.273	0.599	0.089	-0.053	0.084	0.117	-0.365	0.682	0.144	-0.02
11.	0.379	0.019	0.238	-0.062	0.351	-0.561	0.293	-0.04	0.136	-0.076	0.279	-0.56
12.	0.112	0.274	0.501	0.026	0.097	0.259	-0.17	0.253	0.564	0.045	0.073	0.227
13.	0.136	0.171	0.054	-0.057	0.788	-0.076	-0.052	-0.083	0.083	0.064	0.840	-0.031
14.	0.124	0.157	0.032	-0.291	0.674	0.134	-0.032	-0.142	0.079	-0.183	0.702	0.163
15.	0.124	0.157	0.032	-0.743	0.674	0.134	-0.032	-0.142	0.079	-0.718	0.080	0.163
16.	0.015	-0.246	0.256	0.65	-0.231	0.142	0.019	-0.177	0.194	0.615	-0.056	0.243
17.	0.552	0.072	0.562	0.148	0.187	-0.058	0.391	-0.043	0.413	0.138	0.149	-0.034
18.	0.333	0.091	0.761	-0.079	0.017	-0.017	0.051	0.072	0.756	-0.146	-0.029	-0.033
19.	0.182	0.112	0.619	0.117	0.122	-0.134	-0.1	0.143	0.646	0.084	0.121	-0.138
20.	0.042	-0.365	0.283	0.522	-0.363	-0.179	0.094	-0.215	0.202	0.418	-0.234	-0.094

By analysing the data presented in Table 9, six relevant factors were identified that represent all the 20 manifest elements of professional satisfaction.

The most important manifest variables are as follows: (1) Relations with other employees (2/0, 655/0, 678)⁹⁸; (2) Communication and methods used to disseminate information within the organization (1/0, 530/0, 651); and (3) Fellow employees' willingness to cooperate (4/0, 614/0, 604); (4) Available options for career advancement (5/0, 571/0, 474); and (5) Salary amount compared against years of service (17/0, 552/0, 391).

Since the first factor is determined by the manifest variables that are significant for individual aspects of communication and interpersonal relations

⁹⁸The first number in brackets is the ordinal number of the manifest variable in the Questionnaire; the second number serves to identify the correlation between the variable and the factor; and the third number indicates the factor saturation.

among the employees, it can be called the Interpersonal Relations (Table 1). The most significant variables that constitute this factor highlighted the significance of the interpersonal relations. This is an important precondition for successful functioning of each organization, and in addition to this, it is also an important precondition providing that it is a case of organization in which each employee performs tasks for which they are qualified, since without that the interpersonal relations cannot reach the desired levels. Consequently, employees' professional advancement and career advancement are conditioned, and thus the monetary compensation for their work.

The second factor is defined by the following manifest variables: (1) Job security (safety) for the job you perform (6/0,691/0,667); (2) Method used in introducing changes and innovations (9/0,605/0,681); and (3) Satisfaction with the job that you perform (7/0,591/0,637).

As it can be concluded based on the results of this research, the second identified factor is determined by manifest variables that pertain to the job that the employee performs, and before all to job security, and thus it can be called the Job Security factor (Table 2).

No job, of course, can be safe (secure) if no innovations are accepted and if general dissatisfaction among employees is present. In such a situation, it is always the case that the employees turn to exploring other available professional options. It is thus quite understandable that this factor has such a prominent place.

The third factor has been the most significantly defined by the following manifest variables: (1) Management method used in Your organization (18/0,761/0,756); (2) Your workload (19/0,619/0,646); and (3) Conflict resolution method used in Your organization (12/0,501/0,564).

Bearing in mind the meaning of the manifest variables that determine this factor, it can be called Organizational Management Style (Table 3). Namely, the identification of this factor was quite understandable, because the organizational management style exerts significant influence on workload and resolution of potential conflicts.

The fourth factor is primarily determined by the following manifest variables: (1) Degree of freedom and flexibility that an employee has in performing his or her work (15/0, 743/0, 718); (2) Type of work or tasks that an employee is engaged to perform (10/0, 599/0, 682); and (3) Predominant psychological climate and atmosphere in the organization (16/0, 650/0, 615). Thus, this identified factor can be justifiably interpreted as Freedom and Creativity in Performing of One's Job (Table 4). Of course, without freedom and flexibility to perform one's job - regardless of its type - there shall be no creativity that is an important precondition for progress in job performance, but also in advancement of careers of the people performing the job. This is additionally one of the necessary preconditions for creation of positive psychological climate within the organization.

The fifth factor is defined by the following manifest variables: (1) Possibilities for realization of personal aspirations and ambitions (13/0, 788/0, 840); (2)

Possibilities for participation in decision making process for important decisions (14/0, 674/0, 702); and (3) Available options for professional development or for career advancement (11/0, 351/0, 279).

As it can be seen, the fifth identified factor has been determined by the manifest variables that establish direct correlations between involvement in decision making process and personal aspirations and ambitions in professional development and career advancement, and it can thus be called the Potential to Influence own Professional Development and Career Advancement (Table 5).

The sixth factor is being represented with only two manifest variables: (1) Method used by your superior officers to control your work (8/0, 695/0, 742) and (2) Potential for professional development and career advancement (11/-0, 561/-0, 560).

Since there are only two manifest variables within the sixth factor, this factor, according to many statisticians, lacks sufficient elements for proper identification. However, due to the importance of the manifest variables that determine this factor, it could be defined as the Work Control Method (Table 6). However, the potential for professional development or career advancement is found to form negative correlation with this factor, which means that the interviewees believed that the control implemented by their superior officers failed to contribute to their professional training or career advancement, despite the fact that it ought to be used for adequate assessment and identification of employees that should be offered such options.

It is necessary to note here that not all the identified factors in optimal selection of staff are of the same significance (Table7).

All the six factors of professional satisfaction participate in explanation of the total variance with 51.107%. The greatest share in explanation of variance is distributed among the first three factors: *the first one* – Interpersonal Relations (17.50%), *the second one* – Job Security (10.437%) and *the third one* – Organizational Management Style (6.428%).

By establishing the inter-correlations among the identified factors, the degree of their mutual causality was established (Table 8).

Based on data presented in the above mentioned Table, it can be concluded that there is a statistically significant interdependence between the Interpersonal Relations and Job Security (0.251). This is understandable, because without good interpersonal relations, there shall be no job security. In addition to that, there is also a statistically significant interdependence between the Interpersonal Relations and Organizational Management Style (0.351), which is understandable, because the social climate in any organization depends on the management style and relations that the managers nurture with the employees. The Interpersonal Relations are to a significant degree linked to the Control Methods used to control the employees' work, as well (0,218). This is, of course, quite understandable, because only the objective, well-intentioned and useful control methods can exert positive influence on the interpersonal relations.

The factor of Job Security is, from the aspect of statistics, linked to a significant degree with two separate factors, and specifically, to: the Control Method used to monitor employees' work (0.218) and to the Potential to Influence Own Professional Development and Career Advancement (0.314). It can be said that this finding, too, has its foundations in theory, since it is well known that due to the method in which control is exerted and due to the lack of available options for further career advancement and opportunities for professional development, employees turn to exploring other employment options that offer a greater variety of options and potentials for realization of their professional ambitions.

The second part of the research was focused on interrelations among the identified factors and the personal and andragogical characteristics of the interviewees.

The results of the regression analysis have indicated that the identified factors cannot be used to predict a single one among the presumed personal and andragogical characteristics. This was additionally supported by data presented in Table 10, which clearly indicated that the causality between the predictor variables and the criterion variable was unacceptable, due to the fact that the multiple correlation coefficient was very low.

Since the sixth factor – the Work Control Method – was determined by only two manifest variables and since that it had the smallest share in the explanation of the total variance if compared with the other factors, further considerations of its potentials in prediction of personal and andragogical characteristics of the interviewees were abandoned, since these were not no produce any valid indicators.

CONCLUSION

Many people find it difficult to understand that human resources are assets in any entrepreneurial organization, and not liabilities or expenditures.

Employees know their organization very well – its problems, issues and untapped possibilities – energy flows. We do not teach any leader in any entrepreneurial business about integration, we teach them that they are static in their offices, that they are to analyse data, produce reports, and we fail to teach them that they are to work with one another, or in other words that they are to focus on employees' satisfaction in their organizations. Modern day entrepreneurial business and entrepreneurial leadership within the context of employees' satisfaction are based on building and nurturing of culture of mutual trust and respect – or organizational culture in which the employees are satisfied with their jobs, in order to survive the economic crisis.

The secret of a healthy organization lies in integration, primarily of the satisfied people who are able to turn any crisis into a business chance and who are

able to succeed in doing their business in the future through creation and modification of values and assets.

The capitalistic system is based on the presumption that capital produces value ("Invest the money and the money will work for you!").

Based on the analysis of results obtained in this part of the research, it can be concluded that six factors of employees' professional satisfaction in entrepreneurial businesses have been identified by using the factor analysis. These are: (1) Interpersonal Relations; (2) Job Security; (3) Organizational Management Style; (4) Freedom and Creativity in Performing of One's Job; (5) Potential to Influence Professional Development and Career Advancement; and (6) Work Control Method. These factors serve to explain the total variance of 51.107%, but with differences in respective participation in individual factors. The first two factors are the basic factors, since their cumulative share in explanation of the total variance amounts to 27.943%. The third and the fourth factors contribute to variance with 13.31%, while the participation of the sixth factor is the lowest, with only 5.29%. Despite the importance of the first two factors, and even of the third factor to a certain degree, in providing an explanation for employees' professional satisfaction levels in any entrepreneurial organizations, the remaining factors cannot be disregarded at all (but with a significantly lower respective share levels at that).

Results obtained from factor analysis confirmed that there is a latent (factor) structure of employees' satisfaction as an important dimension of organizational quality and organizational changes. This piece of information is significant from the aspect of rationalization of the quality management process, since only some of the identified factors need to be assessed and not a large number of job satisfaction indicators.

Results of regression analysis have not confirmed the predictive value of presumed personal and andragogical characteristics. Thus, based on these characteristics, the values of individual factors of optimal staff selection from the aspect of unit mobilization cannot be predicted.

Based on the above said, it can be concluded that the initial hypothesis has been confirmed, and that it is possible to identify the factors of professional satisfaction in the entrepreneurial organizations in which the research was carried out; however, it has not been confirmed that there is any significant correlation between the identified factors and personal and andragogical characteristics of the interviewees, or in other words, the predictive value of the said characteristics has not been confirmed.

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Schedule1

QUESTIONNAIRE UZP-1

I

You are kindly asked to fill in this Questionnaire without providing your name. The results obtained will be used exclusively for the purpose of conducting a research on establishing the *job satisfaction factor among the employees in your organization*.

Before you read the instructions and start filling in the Questionnaire, you are kindly asked to provide some general personal information by circling the relevant answers among the provided ones for each question, so that we can perform a more detailed analysis of Questionnaire results.

THANK YOU FOR YOUR TIME AND COOPERATION!

- a) Sex:
1. Male
 2. Female
- b) Years of service:
1. Up to 10 years
 2. 11-25 years
 3. 26-40 years
- c) Years of age:
1. Up to 35 years
 2. 36-50 years
 3. More than 50 years
- d) Managerial duties:
1. I am currently employed as a manager.
 2. I used to work as a manager.
 3. I have never worked on a managerial position.
- e) Education:
1. Elementary school diploma
 2. Secondary of vocational school diploma
 3. University degree
 4. Post graduate degree
- f) Sector You are employed in:
1. Production
 2. Services
 3. Finances
 4. Sales
 5. Planning and development
 6. Management

II

In this part of the Questionnaire, questions in the first column pertain to professional satisfaction of the staff of medical care institutions. You are kindly asked to circle only one number provided on the scale of 1 to 5 in the second column, to express the level of Your personal satisfaction pertaining to the relevant question. The meaning implied for each respective number from the scale offered is presented in the following Table:

1	2	3	4	5
Not satisfied at all	Somewhat satisfied	Undecided	Quite satisfied	Completely satisfied

Kindly, read carefully each question to which You need to provide the graded answer.

No.	SATISFACTION LEVEL:	Level to which You agree with the statement proposed				
1.	Communication and method used to disseminate information in Your organization.	1	2	3	4	5
2.	Relations that You have with other employees.	1	2	3	4	5
3.	Method used to assess Your work and commitment.	1	2	3	4	5
4.	Willingness of Your fellow workers to cooperate.	1	2	3	4	5
5.	Potentials for career advancement.	1	2	3	4	5
6.	Current job security (safety).	1	2	3	4	5
7.	Job that You currently perform.	1	2	3	4	5
8.	Method of control implemented by Your superior officers.	1	2	3	4	5
9.	Methods used in introducing changes and innovations.	1	2	3	4	5
10.	Type of job or tasks on which You are engaged.	1	2	3	4	5
11.	Potentials for professional development and career advancement opportunities.	1	2	3	4	5
12.	Conflict resolution methods used in organization that you work with.	1	2	3	4	5
13.	Opportunities that Your job offers for realization of personal aspirations and ambitions.	1	2	3	4	5
14.	Chances for involvement in decision making process in case of important decisions.	1	2	3	4	5
15.	Degree of freedom and flexibility that You have in performing Your job.	1	2	3	4	5
16.	Psychological climate and atmosphere in Your organization.	1	2	3	4	5
17.	Salary amount compared against the number of years of service.	1	2	3	4	5
18.	Management style in Your organization.	1	2	3	4	5
19.	Your workload (regardless of its volume).	1	2	3	4	5
20.	Measure to which Your job can "enrich" You.	1	2	3	4	5

STRESS AT WORK

Vlajko Petkovic⁹⁹
Zorana Petkovic¹⁰⁰

Abstract: Stress in general, and especially stress at work, is very common in life and work of every individual. There is no employed person who does not have stress.

There are different perceptions of stress in medicine, biology, psychology... What is in common to all concepts of stress is that it includes different changes in human body (stress), which arise due to the effects of certain environmental factors (stressors).

This paper discusses the concept and nature of stress at work, its causes and consequences, characteristics of people and their resistance to stress, as well as possible strategies, ways and means of stress management.

There are two types of stress: eustress (which is pleasant and contributes to good health) and distress (which is unpleasant and threatening to health).

There are various misconceptions and prejudices related to stress. For instance, there is a widespread belief that every kind of stress is negative. This is only partially true.

In practice, there are different measures and techniques that can act preventively to avoid stress and can be used to eliminate or at least mitigate its harmful effects.

Key words: Stress, Stressors, Eustress, Distress, Conflict Behavior, Stress Causes, Stress Consequences, Stress Situation, Stress Management

JEL classification: Z13

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THE CONCEPT AND NATURE OF STRESS

Stress is a word that is frequently encountered in everyday life. Results of numerous studies indicate that a large number of employees face high levels of stress at their workplace, which affects their working capacity, performance and health. Given that, one can understand why the theory and practice of organizational behavior pay more and more attention to this phenomenon.

The word *stress* was first made in the English language. The Serbian translation means: pressure, tension, strain, load. Laymen people use that word when they want to express a variety of unpleasant and difficult events in life.

In medicine and biology, Hans Selye, an endocrinologist from Montreal, gave the first basic assumptions about stress, as a part of his research about general system of adaptation. In his view, there appears a state of non-specific stress as a reaction to external influences in a living organism. It appears in the morphological and functional changes in various organs, especially in the endocrine glands, which are controlled by pituitary gland. Selye realized that these changes have protective nature and are directed at mobilizing all the resources of the organism in terms of overcoming adverse effects.

Over time, the meaning of the word stress evolved and took on different meanings in medicine, biology, psychology. However, there is something in common to all these concepts. Everybody see stress as an external force that affects a certain system, and the changes that this force causes to the system. Therefore, when studying stress, there is a need to separately consider the external force acting on a system, especially the changes in the system that have arisen under its influence.

External force (agent, stimulant, stimulation, teasers, etc..), which essentially means any change in the energy that excites the receptors, is called stressor, and the changes that occurred under its influence in the system are called stress. While some authors believe that these changes are non-specific, protective and adaptive response to the effects of various stressors that threaten disruption of maintaining consistency relations in biological processes, other authors consider that stress involves many, if not all systems of the body to avoid or correct harmful agents (stressors). These authors, in fact, believe that there is no separate existence of specific and non-specific response of the body because they are all interrelated. In addition, specific reactions do not assume standard reactions and specificity of stress and characteristics of an organism can change dynamics, intensity and form of manifestation of stress. Also, the concept of abnormal stressors in pathology has, in a sense, a provisional character. Thus, harmful effects of stress do not depend only on the strength of its action, but also the continuance and repeatability of its impact and its special meaning for individuals.

Many characteristics of stressors condition intensity of stress response and its outcome. Something that has not been experienced before and it was not expected has extremely negative effect. In both cases, emotional and stress response is of high intensity.

The stressors of high intensity and long duration have negative effects because they cause strong stress reaction and easily lead to a breakdown of adaptive power. Particular stressful are situations whose evolution and duration are impossible to predict, because they demoralize a person. The intensity of the stress response and its outcome often depend on whether it is possible to neutralize the effects of stressors or at least mitigate them. Some stressful situations can be avoided. However, it is not always good to avoid stressful situations. Successful confrontation with them makes individual capable for new similar situations that are an integral part of life. Thus, we gain some survival skills and self-confidence, which is very important for selection of appropriate reaction. Avoiding stressful situations and overprotection of them do not provide the opportunity to gain useful experience. In addition, avoiding a stressful situation can lead into another, with even more severe consequences.

Sometimes stressors act individually and sometimes jointly. Simultaneous action of couple of stressors, which is often the case, quickly exhaust the adaptive potential of the organism. The repeated action of certain stressors can have both a negative and a positive impact on a person's ability to successfully confront them. The accumulation of stressful events may, for example, lead to an increase in tolerance and mitigate the effects of new stressful situations.

Conditionally, *stressors can be divided into physical, biological, psychological and social*. The physical stressors are changes in the physical environment, especially if they are big, sudden and unexpected (cold, heat, earthquakes, noise ...). Biological stressors can be external (body injuries, a variety of infections - bacteria, viruses, fungi, and various toxic agents; malnutrition, especially hunger, etc.) and internal (surplus or deficiency of hormones, enzymes, etc.). The psychological stressors are different deprivation, frustration, intra-psychological conflicts creating unpleasant emotions, etc.). The social stressors include all the social changes that threaten individuals (interpersonal conflicts, social disasters, revolutions, wars, strikes, etc.). Psychological and social stress, because of their similarity, are often called by a single term psychosocial.

Depending on the type of stressor, there are various types of stress: physical, physiological, psychological, psychomotor, professional, emotional, social, life, environmental, imaginary, real, potential, central, peripheral, combat, catastrophic ...

Dealing with stress is a direct response of people to a stressful situation in order to change either environment or themselves, in order to achieve an objective harmony. Changing the environment is mastering the environment, and changing oneself is adaption.

There are various misconceptions and prejudices related to stress. It is necessary to remove these misconceptions and prejudices so that people can be able to manage stress. For instance, there is a widespread belief that stress is a negative phenomenon, that it leaves harmful effects and should be avoided at all costs. This is only partially true. Many activities can cause stress, which does not

necessarily have negative consequences (various hazardous and sports games, car or horse racing, meet with your loved one, a pleasant news, etc.).

Seyle distinguished two types of stress: *eustress* (that is pleasant and contributes to health) and *distress* (which is unpleasant and threatens health). He believed that short and mild stress, which can be controlled, was perceived as pleasant. In addition, they can promote emotional and intellectual growth and development. He also believed that difficult situations that lead to breakdown of adaptive capabilities of the organism are harmful because they lead to serious health problems. Also, it is believed that stress occurs in people who work too hard. And that's only partly true, as the practice shows that more often people who are out of work or are only partially engaged are under greater stress.

Therefore, stress should not be avoided at all costs. Even if we wanted to, we couldn't. Some stress cannot be avoided. It is an inevitable part of life. Complete liberation from stress is death. Thus, despite popular belief, stress is not to be avoided at all costs, but we should master it by changing our philosophy of life, ways of thinking and behaving. This means that each stress does not necessarily have to be negative. It does not have to be damaging, but may have immunizing character. Stress can therefore be a normal, adaptive response that prepares the body for defense. Finally, although not all stress can be avoided, since it is an integral part of human life, it is a mistake that we cannot avoid, or at least mitigate, its consequences. In practice, there are different methods and techniques that can act preventively to avoid stress, or can be used to eliminate or at least mitigate its harmful effects.

When one encounters stressors, his reaction is realized through three phases: alarm, resistance and exhaustion (Radenovic, Radosavljevic, 2001).

In the first phase, when faced with a threat, there is a strong agitation, which leads to a high level of excitement. Then there comes defensive reaction, which prepares a person for greater exertion. In the second phase, which is the phase of resistance, the level of excitement gradually decreases, so that a person may endure it over a longer period of time. At this stage a person is trying to deal and to cope with the stressor. If he fails, there is a third phase, which is called the phase of exhaustion. At this stage, the excitement decreases as well as the ability of resistance, which can cause serious disorders and biological damage. It can cause disease, and even death.

CAUSES OF STRESS

For easier understanding, the main causes of stress can be divided into two main groups:

- The causes of stress directly related to job
- The causes of stress associated with other aspects of life of an individual. (Greenberg, Baron, 1998).

The main causes of stress associated with job may be classified as follows:

- Some jobs are more prone to stress than others,
- In some cases there is a conflict between the demands of work and demands outside working hours (the stress is caused by contrary demands)
- Uncertainty caused by contradictions (ambiguity) of roles,
- Overload or underload (too much or too little work)
- A lot of responsibility to others,
- Lack of social support and
- Sexual harassment.

Stressful situations are inevitable companion of the work environment, especially in today's conditions of work and business. However, all professions and all jobs are not equally exposed to a high risk of stress. Some jobs and organizations expose workers to significantly greater risk of stress. The fact is that some jobs are more stressful than others. According to some research the most stressful jobs are those of doctors (especially in the emergency room), police officers, firefighters, pilots, workers in the telecommunications and so on. Experiences and results of research show that the higher the risk of stress comes from jobs that:

- Require decision making,
- Mean permanent control of resources and materials,
- Mean a constant exchange of information with others,
- are carried out in poor physical conditions and
- Require unstructured rather than structured operations.

The greater presence of these elements at a workplace, the more intense and more frequent the stress.

The stress related to work can be due to overload, ie. too much work, but it can also occur due to underload or too little work. Overload ("full" style syndrome) means that employees are required to do more than it is possible in a certain period of time. Here, we should make a difference between quantitative and qualitative overload. Quantitative overload occurs when an employee is required to perform more work than is prescribed, while qualitative overload occurs when an employee is required to perform a specific job though he does not have the necessary knowledge and skills to do so. Both types of overload can cause high levels of stress. On the other hand, the lack of work ("empty table" syndrome) can also cause a stress reaction. Underload causes boredom and monotony. It also has a quantitative and a qualitative dimension. Quantitative underload causes boredom because the employees are in a position to be underutilized. Qualitative underload usually occurs in routine and monotonous tasks that can not engage the majority of potential of employees.

Individuals whose jobs are to be responsible for other people or that they have to communicate with others, are more at risk from stress. One often hears that the most stressful situations are created at work that involves dealing with with people. People in these positions often must communicate many pleasant and unpleasant information to others. In addition, they are expected to mediate in many disputes, resolve conflicts,

listen to complaints and appeals, etc. These are all extremely stressful situations and they often show symptoms of stress. Speed and dynamism of work lead to the so-called. managers' disease (angina pectoris). It usually occurs in older people who deal with this kind of work (people between 50 - 60) and is considered to be the result of a long and stressful work, which affects the life after retirement.

This is understandable, given that older people are more tired, nervous, less tolerant, with reduced immune system, and more susceptible to stress and stress to them often turns into distress.

The case is similar with the "new" businessmen. They are also more susceptible to stress than others, given the frequent meetings, conflicts, excitement, heavy business lunches and the like.

In cases where there is a lack of social support for individuals in the organization it is much more difficult for them to deal with stressful situations. The symptoms of stress are much less common among employees who feel that they enjoy the support and friendship at the workplace. There are several ways in which social support contributes to the fight against stress. First, the fact that an individual can turn to friends when in trouble creates in him a sense of security and greater control over stressful situations. At the same time, they can receive helpful advice for dealing with these situations. In extreme cases, with the stress symptoms already taking place, friendly support helps reducing negative consequences. Practically, social support means that if we have to deal with stressful situations, it is better to share it with others.

Sexual harassment is a common source of stress in organizations. This means unwanted sexual contact or communication of sexual nature. Consequences of sexual harassment are a direct attack on the dignity of a person and a direct impact on their working ability. In connection with this phenomenon, there occur many doubts. The basic question is how to establish guilt. It is necessary that the company has a stand how to deal with this problem. Although it is difficult to completely eliminate and prevent this phenomenon, there are several measures that, in practice, gave good results. These are mainly the following measures (Petkovic,Djokic, 2012.):

- Clearly indicate that the company will not tolerate such behavior,
- Educate and train employees to recognize such cases,
- Establish clear procedures regarding the response in such cases,
- Determine the company policy towards offenders and
- Consistently implement the adopted policy.

Sexual harassment at work is less and of lower intensity than in other areas of life. But that does not mean it is not there. On the contrary, there is a lot more of it than one might think. For example, in the UK it is estimated, based on surveys, that seven out of ten women experienced long-termed sexual harassment during their working life.

It is also considered that only 10 percent of victims of sexual harassment reports it, while others are silent about it for various reasons. The expression of sexual harassment is different: overt or covert, direct or indirect. Sometimes it is demonstrated in "more refined" form of announcement or promise of certain benefits at work, awards, promotions, travelling, higher wages, and sometimes it is very rough and primitive, like threats that the person will be assigned to worse job post, lose job etc.

The causes of stress may not be associated only with work, but may be related to other aspects of life of an individual. A large number of events that occur after working hours causes stress, which then adversely affects the workplace. These events can be divided into two groups - highly stressful events in life and everyday problems.

Throughout their lives people face with a variety of serious events that leave different effects depending on individual ability to withstand stressful situations. These events could include: the death of a spouse or close family member, divorce, illness, etc. If the number of stressful events is greater, the greater is the chance that an individual's health will be affected. In addition to these relatively rare events, the life of every individual is filled with everyday problems and troubles. The lower intensity of the negative impact of these problems is compensated with their frequency (eg, financial problems, excessive obligations, lack of free time, etc.).

Stress related to work and the stress associated with private life generally cannot be strictly separated. They are usually inseparable whole that burden an individual's life in the form of stress caused by the overall life activities.

How it works in real life can be best seen from the following review (Greenberg, Baron, 1998):

Stressful events in an individual's life

Event	Relative level of stress
Death of a spouse	100
Divorce	73
Separation	65
Jail time	63
Death of a close family member	63
Injury or illness	53
Getting married	50
Being made redundant	47
Retirement	45
Pregnancy	40
Death of a close friend	37
A child leaving family nest	29
Problems with in-laws	28
Problems with a boss	23
Change of residence	20
Holiday	13
Christmas	12
Minor legal violations	11

This problem was first dealt with Holmes and Rahe. These points were obtained from a large group of people who were asked to evaluate different events in life from 1 to 100 points, based on the degree of difficulty they had to adapt to. If the number of points is higher, it means that the events caused higher stress.

CONSEQUENCES OF STRESS

It has already been noted that causes of stress can be different. With that in mind, the logical question is how the consequences of stress show and how big they can be. In addition to the direct health impact stress can have a big impact on working performance.

The effects of stress on health are very serious in a negative way. Some believe that the stress related forms of physical ailments comprise about 50-70 percent of all diseases (Greenberg, Baron, 1998).

Virtually any disease that we can think of is associated with a stressful situation. Stress plays a big role in degenerative diseases (high blood pressure, heart disease, diabetes, ulcers), but there is evidence that it increases the tendency towards infectious diseases caused by the action of bacteria or viruses. Exposure to high levels of stress reduces the body's resistance to disease.

It is difficult to accurately estimate the impact that stress has on working performance. The traditional view assumes that the relationship between stress and performance can be represented by a curve. The essence of this understanding is reflected in the opinion that lower and moderate levels of stress can act stimulating and even cause better performance. A decline in performance comes from a higher level of stress. This relation is indeed possible in certain situations. However, there is much evidence in favor of the fact that performance may be reduced even from a low level of stress and that stress causes mainly negative effects. Even very low levels of stress can lead to disbalance which can result in performance decrease. We should not ignore exceptions to this rule. There are individuals who experience stressful situations more as a challenge than as a threat. They show maximum results in such crises. For such people stress acts as stimulation and improves their performance. In considering the relationship between stress and working performance, we must take into account the complexity of the tasks performed, the personal characteristics of individuals, their experiences so far and so on. Bearing in mind the facts above, it can be concluded that the impact of stress on working performance should not be generalized (Greenberg, Baron, 1998).

CHARACTERS OF PEOPLE AND THEIR RESISTANCE TO STRESS

According to experts, primarily medical, *there is a strong link between stress and characteristics of people*. Some people experience serious consequences after a few moderate stressful events, while others remain healthy even after prolonged exposure to high levels of stress. These people are called stress-resistant or strong people.

There are stressors that provoke very complex stress in certain individuals, much less in others, and some almost do not feel stress at all. There are also stressors that cause stress in almost all individuals. It largely depends on the sensitivity of individuals, their attachment to certain stressors, their life situation, aspirations, their value systems, motivations, etc.

The results of clinical experience and research shows that resilience to stress, stress reaction and its consequences largely depend on person's characteristics, as well as the age of a person. In general it can be said that *children and young people are more sensitive to almost all stressors*. Stress reactions in young people are stronger and with worse consequences.

There are some differences in response of men and response of women to certain stressors. They are partly conditioned by biological factors and partly by differences in the status, role and expectations of them in different socio - cultural environments. Recently, with the growing activities of the various feminist movements in the West, there came affirmation of women and their role in a society. This has led to partial equalization of response of the sexes to stressors. In some countries, things have come to the other extreme. Women gained more rights, but with taking over men's roles, they have also taken over men's diseases, such as coronary diseases.

Intelligence also affects the resistance to stress. Smarter people better and more objectively assess stressful situation and their potential when confronting with it. Of course, this rule has many exceptions. The *type of personality or temperament* also affects response to stress. Calm person reacts differently than temperamental person.

Also, good *social adaptation and good family and economic situation* protect certain people in stressful situations. And vice versa.

The results of research show that the relationship between personality traits and their resistance to stress is very much affected by *genetic characteristics of individuals*. Some people were born with a strong immune system and relatively easily deal with stressful situations, while others were born with very sensitive immune systems and it is relatively difficult for them to handle stress.

Another factor is philosophy of life of individuals and social groups. Philosophy of life is their views of life, their system of values, their aspirations, and above all, their *optimism or pessimism*. Of course, optimists have a positive view of the world, believe in success, expect positive results. They never give up. They see the glass as half full. Contrary to them, pessimists have a negative view of the world. They doubt their success. They generally expect unfavourable results. They see the glass as half empty.

This situation is explained by different tactics used in the management of stress. Optimists focus on problem solving - making plans, seeking help from friends and society, all other obligations become less important. Pessimists use other strategies - giving up the goal if stress is on its way, as well as denial of very stressful events. And of course, given the different tactics applied in the first and in the second case, their effects are different.

STRESS MANAGEMENT

It is obvious that stressful situations cannot be avoided and eliminated completely from life and work. But if the stress cannot be avoided, it is important to try to reduce the intensity and negative consequences of stress. In this sense, there is a difference between individual stress management strategies and organized stress management strategies. (Petkovic,Djokic, 2012.) Individual approaches to fight stress are more focused on reducing its negative impact while organized strategies are much more concerned with preventing the occurrence of stress in general.

When it comes to individual stress management strategies, four approaches can be identified:

- lifestyle management,
- physiological techniques,
- cognitive approach
- behavior change.

Lifestyle management involves the change of lifestyle of individuals exposed to stress. It is recommended to pay more attention to food and physical fitness. It has been shown that eating a healthy diet (more fruit and vegetables, less salt and fat) significantly increases the body's ability to fight stress. It is the same with maintenance of physical fitness through regular physical activity and exercise. Introduction of new habits and lifestyle change requires a lot of will and effort but there is a generally accepted opinion that the effects are very favorable. A large number of companies in industrialized countries provide sports facilities and implement different so called. "health programs" for their employees. (Greenberg, Baron, 1998).

Physiological techniques, including meditation and relaxation, are aimed at helping people to resist stress by inducing state of relaxation. In this way, they establish concentration and increase their functionality.

Cognitive techniques make people think differently about stressful situations. The bottom line is a positive way of thinking and understanding that one should not worry too much about many side issues that cannot be changed or controlled. The basic principle of cognitive techniques emphasizes that we cannot change the world around us, but we can alter our reaction to it.

Behaviour related techniques teach us to react differently when facing stressful situations. In these moments, it is proposed that people help themselves by applying certain actions (eg, taking a break before an important decision or having a hobby). The goal of this behavior is to reestablish balance and regain a sense of control over the situation.

Like individuals, organizations may also remove many sources of stress in the workplace. Strategies that organizations can use as an effective preventive measure

against stress are changes in organizational structure, changes in the nature of work and the implementation of programs for managing stress.

Organizations can make changes in the internal structure and procedures to prevent the occurrence of stress. They may take decentralization measures in order to reduce feeling of powerlessness and alienation from the organization. Regular performance assessment and fair remuneration that will help reduce the uncertainty and dissatisfaction that encourages stress are also very important.

Stress can be avoided if special attention is given to nature of certain tasks. Proper formulation of certain tasks can introduce diversity in activities that are usually monotonous and boring.

Modern organizations often employ the so called programs for stress management. These programs involve direct training of employees to reduce the harmful effects of stress. Programs typically include a combination of the previously described techniques. Many organizations do not spend resources on creating their own programs, but use outside consultants or widespread audio-visual programs on DVDs. Also, many organizations, rather than using programs for stress management, use their programs for helping workers to solve various problems.

A serious approach and the use of different techniques to combat stress indicate how much such programs can be useful for successful running of business organizations and taking care of workers's health.

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IMPACT OF QUALITY HUMAN RESOURCES MANAGEMENT ON COMPANY SUCCESS

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Abstract: The increasing demands of the market, which are caused by constant qualitative and quantitative changes lead to the fact that every serious business organization must follow trends improved its human resources through systems upgrades, training and constant evaluation of the performance of each individual in the system operations. Human resource management has largely remained as manager's job, regardless of whether it is the general manager or specialist in this field. However, to improve work and professional performance of employees, all levels of management are responsible, not just strictly Human Resources Management (HRM), because if we assume that most of the tasks are in teamwork, every manager of a certain sector is responsible for the formation of the team, setting standards of performance, defining the means of implementation, as well as identification and elimination of potential problems during the work process. In this way, employees represent the complete picture of human resources within an organization, and their results are reflected on the company rating, as well as managers who took part in their selection of the project implementation. Content of this work is to show the influence of the human resources management in the selection of employees, their integration into the system of work, evaluation and improvement of performance in relation to the requirements of the company.

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INTRODUCTION

Human resources are the most important factor of quality of organizational functioning in the business segments of society today. It has long been clear that the human resource makes a profit, and not vice versa as in the beginning of the creation of modern corporations thought. The requirements of the modern business world are a way for each individual in the system should work, meaning that sets standards of behavior, dress, work output, attachment, integration into the community, etc. Many parameters have been placed in front of the business unit or individual, asking from them the maximum degree of efficiency of their work, which will primarily affect the profit of the company itself, but also to improve the rating of the entire company, which in today's world is a very important factor when it comes to corporate - business performance. If we assume that the organizational structure of today is composed of at least three levels: top, middle and executive level, we have to ask concrete questions related to the functioning of the system. Three main questions to be asked before each setting organizational schemes are: What? Who? How? We believe that the answer to these three questions, companies can get from the start to 45 % success in selecting and defining accurate organizational charts and resources, in order to avoid the situation in the short term need to perform reorganization jobs because of poor pre-analysis operational needs and potential.

Question - What? - The answer: What is the goal of the company? What are the priorities of the business? What are the long term and short term plans for what?

Question - Who? - Answer: What are the jobs need to organization scheme? What are the criteria in selecting staff? Who will be positioned where any of the company? What are the parameters of success?

Question - How? - Answer: How to get the best performance among employees? How to motivate them? How to become a leader in your business? How to build a reputation and respect?

These are some of the key issues that must be set before the company in order to minimize contingencies entered the corporate fight , but to the business audience seemed successful, the key to quality business is located in the internal roads of quality management which leads to a high degree of success of corporate operations .

The term "human resources" tells us about the people in the organization, their potential , and to all the capabilities that can be provided by the organization to achieve its needs. Previously it was thought that this term is too harsh to marked people as living beings , because the starting point was the fact that the very word resource something that would mean the equipment prior to the organization, but not the human potential. However, it turns out that the notion of " resource" people just get a very important place, because by putting an equal footing with other resources, perhaps even better, because of their quality management required certain skills and knowledge.

The importance of human resource management is based on the fact that people are the main factor that is common to every organization, and on the basis that they are the creators of organizational strategy. On this basis, each manager will be involved in activities related to human resources and will seek to facilitate cooperation among the people, in order to successfully achieve strategies and plans of organizations having implemented. Human resources contribute in various ways to the success of the organization, but must comply with the company's strategy.

This work should be a clue of how to reach the highest possible limits of internal organization and management, and at the same time to show that the challenges facing the company's management to each individual put into the service of the collective, and collective the service profit and rating, as Company, and the individual, as if the two things are not coherent, there is a good chance that, productivity will not be at the desired level.

THE STANDARDS OF SUCCESS AND QUALITY

Management of the company, sector or work unit is a complex act that summarizes the different knowledge, behaviors and solving daily tasks and potential problems that can occur in the system operation. Challenges in the business world every day are growing, due to the unstable economic, political and demographic changes that are specific to particular countries in transition that have not yet reached the levels of security and defined business strategy and how to ensure the quality of the business environment in the whole country. In line with that, companies must adapt to the circumstances and to their target and strategic goals aligned with the real. Because what will largely determine the quality and efficiency of operations, is a high dose of reality and a willingness to adapt for situations in business, to the long-term basis to be competitive in the market. However, it can be noticed that many companies in their strategic plans were not ready to change their long-term idea, although the situation in the market is opposite of doing business. Many managers did not realize (or did not want), to transform or adapt to business conditions, defending his decision to the aspects of the existence of long-term plans, which were adopted at the level of 20, or 25 years. But as the market demands increasing qualitatively and technological terms, companies must be prepared to manage the micro and macro cycles. Continuous observation of the market and the external analysis can greatly help in perceiving the real picture of how the company should orient its staff in order to improve the overall business. And that, to reduce the fluctuations of human resources within the company, analyzes made in selecting personnel must itself contain all the elements that make up a quality assessment of each individual.

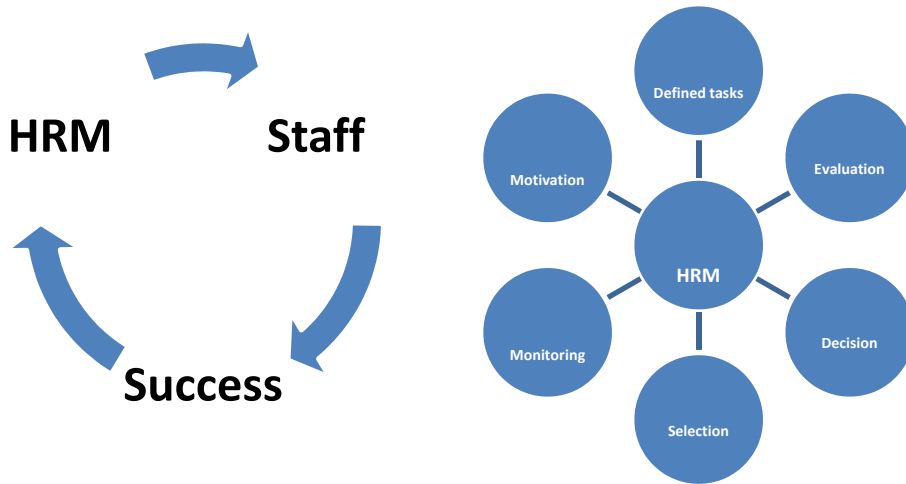
The company has a need for people and people in need of company and only through joint efforts achieve goals. Human resources are the basis on which to build a strategy of the company and all its resources like machines, raw materials and capital goals as productivity and customer satisfaction - come from people on the basis of their action (Bohlander, Snell,2010).

The strategy does not mean anything special if it is not transformed into a strategic plan that is then implemented in practice. Manager shall ensure the optimal use of

resources and the selection method and resources to do it. His role is particularly important concern about the achievements of his department, the role of the individual and to his satisfaction. Documenting the value of work, productivity and effectiveness of each person, department, he actually controls the objectives and if necessary take corrective action to the plans, and in the tactics and strategy of the company. Any business company wants perfect results, with the best human resources and top managers. However, the business perfection does not exist, but need to get to the highest point that is closest to it. And that is the dose of reality that is needed in business, because while you chase perfection, you do not pay attention to more important things that are vital to the success of the company. So that the individual could be handled by a particular sector or part of the organization, it primarily has to examine himself, to know exactly what he wants from each individual, and then the whole group. One of the major errors in management is that a number of tasks that a manager sets the individual or group, are beyond his knowledge or even understanding of the task, which then leads to confusion and misunderstanding worker in a qualitative way to accept that idea and objective of the job and how to solve this task. This practically leads to managers must be sure of their assignments, be clear and precise it primarily in order to properly could further expand on the operational level. Just because all these elements, it is very important how the Human Resources Department will choose someone to manage a business, and how to set up staff at the executive level. In today's business world, the sector of human resources (HRM) represents one of the most important links in the success of company operations, because of the good or bad decision of new employees may depend in which direction will move and position the company. Large corporations already have their system operations include heavily in HRM, which through various types of tests and interviews they want to come up with the best candidates who have applied for prospective employment. However, the big question is what actually gets through the system, or whether they in a qualitative way they can really tell us who is the ideal candidate for appropriate position. It also plays a role and strategy of the company, which must decide whether it wants to give a chance to young employees, only the graduates studied the Faculty, which in the long process of education and integration should be holders of preference or an experienced staff that can immediately be put into full working function without too much time spent on initial training. However, the general opinion is that these two types of personnel should be mixed in order to obtain best achieved possible combinations. Young employees should be in the business clerk, assistant, as people with previous work experience, you should go to managerial positions, all in the long-term planning of human resources, since then the company comes in an enviable position to be the time of their lines to promote younger staff in managers in future, who already know the business system, and thus motivate the entire team which clearly stipulates that anyone who exhibit a sufficient level of competence can be promoted within the company.

The control system of the company, the sector HRM must function as an independent body, which has no effect on the side, and least of all from the part of top management. In this way we practically get a kind of separate units within the company, which aims to be a selection of the best and most necessary human

resources for the company's performance. The only function that top management should have in regards to the HRM is that the directive about the type of work that is required in the company, but no impact on the personnel who enter the inner circle and the end, of course, should be among the best to choose candidate, all based on a comprehensive proposal analyze and HRM.



What connects each function of HRM is actually its activities to education, prevention, monitoring, and other functions that this sector, in order to improve the performance of the work results groups and individuals, which are the essence of a company's profitability. Just because of this, the sector that deals with human resources, must be staffed with a people who have different conceptual knowledge, and in line with the company needs (lawyer, economist, psychologist, sociologist, etc.), in order to come to more comprehensive results when testing candidates for a certain position. However, as the human resources sector reached its full form, it must work actively and after selecting staff, which means that their job does not end with the employment of new staff, but continues its activities on the entire group of employees.

As the main active components of human resource management (HRM) are:

- 1 education
- 2 monitoring
- 3 motivation
- 4 advisory function
- 5 evaluation

Each of these components aims are to improve performance, correct any problems, and understanding the needs of their workers.

When it comes to defining and selecting part of management to guide a particular sector, primarily to look for answers to three main questions:

- 1 Do you have conceptual knowledge ?
- 2 Do you have technical knowledge ?
- 3 Does wearing a human knowledge ?

THE IMPACT OF STRATEGIC MANAGEMENT

As mentioned above, the strategic focus of the company and how they will manage crucial and very selection of human resources. What is certain is that every management wants to increase profits, and reduce the number of mistakes and wrong decisions in their work. This effect can be achieved through two levels, namely: quality selection of personnel and quality management. However, when a company chooses a manager or head of a particular sector, it does not necessarily mean that the quality of his right to come to the surface, because he has to adapt his team, but in clearly defined standards. A number of companies and organizations is apt to their managers to a great extent " free hand " in the management, without much internal control and audit, both by him can create a great sense of freedom and superiority to his team, and it can create the opposite effect on the work or even individual and the group. And that is one of the main issues of quality management, training of managers for leadership positions in all three necessary knowledge as outlined in the previous section (conceptual, technological and humanistic).

If the company's strategy could be implemented in the right way, that is, that human potential could control all instances , the requirements and elements that make up the quality work, as the main component of this behavior appears to education .

Educated staff represents a combination of theory and practice, the best and the real, the possible and necessary. And it is one of the main parts of this work , how managers should be trained to get from the employees the highest degree of respect, credibility, loyalty and motivation. In the early stages of the phenomenon of corporate society, it was thought that the manager should be an " iron fist " of companies, which can be no compromise and deviation from the standards and quality that are set before them. However, at the present time, this phenomenon must be eradicated, because companies need to recognize the dearth of quality manpower which is on the market, especially the need to focus on staff who are in their own ranks and recognize them as future potential manager or person that their knowledge and dedication can help increase company profits.

The management style is also very important for the motivation of employees as it directly affects their freedom to work, the ability of decision-making , and thus actually highlighting their ability and self-indulgence. So with all the autocratic leadership style focuses on the power manager and thay managed with the help of reward and punishment, in a democratic emphasizes the role of employees in the company and have access to participation in decision-making , while the assertiveness style gives employees great autonomy (Northouse,2010).

A comparative analysis of the characteristics of managers clearly leads to the result that assertiveness is a form of management that workers accept the best and then come given the highest labor productivity and motivation. However , there are a variety of circumstances and factors that greatly affect the way the sector is managed and how it will be organized and the people who will be delegated to a particular job . At the present time , when the recession practically destroys human potential managers within the

company play a major role in the recognition of, these problems and must find a way to highlight the personnel policy as a capital for quality business.

Modern managers are increasingly aware of the importance of skills working with people and have become essential to their following capabilities :

- 1 to select , train and empower employees
- 2 to shape and lead group meetings of all kinds,
- 3 the management of all conflicts between powerful individuals and groups,
- 4 to influence and negotiate on an equal basis and to
- 5 effort to integrate people with different professional specialties.

This is why human resource management is meeting the needs of the relevant employees' structure (numbers and skills) and their effective exploitation. Better planning of human resources is a key to success in management, because their prediction is the ability to head in the future, prevent all the phenomena involved in the business, whether negative or positive (Northouse,2010).

Strategic management is an integrated process, which in its model of operation includes some degree of integration :

- 1 planning and selection of staff
- 2 development of human resources
- 3 motivation
- 4 leadership
- 5 control

Each of these processes is connected and has to be seen as a synergy of all elements of a strategic human resource handling performance. These five elements are main and the essence of quality human resources.

The entrepreneurial society cares for the staff and their motivation , specialization and promotion becomes part of the establishment and development of an integrated company performance. The most productive companies were created to achieve a premise that employees are actively involved in its life because they work in the company inflicts joy.

Business enterprises have two types of strategies that need to be closely linked and mutually congruent:

- 1 External - a way of competing in the market (competition), and
- 2 Internal - the way of development, hiring, directing, motivating and controlling internal resources .

Especially rewarding strategy should be integrated with business strategy and formulated in a way to facilitate the achievement of long-term goals of business policy and human resources, as it carries a lot of potential risks.

In order to achieve the specific goals of the organization, human resource management has to meet certain requirements , which will improve the work of the employees, and thus their greater productivity in the organization. If the management of human resources is not able to manage the human resources that may affect the business and profit in the worst case, as the survival of the organization.

The main objective of human resource management is to achieve the following objectives:

- 1 Functional purpose - HRM function is to contribute to the organization as long as it takes to realize their goals and realize organizational strategy . This would mean that resources should be the most rational and effective to use in the pursuit of organizational goals .
- 2 Organizational goal - to organize the most important factor is the human resource, therefore we need to improve efficiency and motivate employees in a better way and thus will meet the organization's goals .
- 3 Social goal - in everyday human relations social norms and values are very important in achieving good communication. Be ethical and socially responsible to the needs and challenges of society and minimize the negative impacts of these.
4. Personal goal - the satisfaction of employees is the most important for any organization ,but it is not enough to satisfy the employees come up with a business , it is necessary to assist them in realizing his their personal goals. Only in this way can gain their trust, and employees will be happy and motivate for progress and personal contribution to the organization.

Each of these points significantly influences the management of human resources, improving the performance of the organization. Human resources as a common factor in all the organization 's complete source contributions through their personal abilities and skills. Activities that managers at all levels should undertake in human resource management should ensure the success of the organization, but must abide the companies strategy. Recruitment of skilled personnel is also one of the most important activities. Assessment of the quality and selection of candidates depends on the further development and success of the company. Sometimes misjudgment can do great harm.

Activities of human resources can affect directly and indirectly on the productivity of the organization. Directly, so you will find better and more efficient ways of achieving the objectives and indirectly by influencing the improvement of working conditions.

SELECTION, RECRUITMENT AND HUMAN RESOURCE DEVELOPMENT

Significantly, in terms of modern and efficient management of human resources, the operation of each individual worker to be given meaning, and that every employee feels responsible for the joint project and the institutions which it contribute (McCourt,2003). This means that all team members need to feel like participants in the project whose head , knowing that the person elected decision-makers within functioning team. In order to achieve this, the most important is compiled job descriptions.

They make it possible to precisely define the duties of each employee and his place within the institution, in function of the needs that are identified in relation to the project to be realized. Answers to the questions : Who is doing what ? In what circumstances ? By what means ? Who is responsible? Under whose authority ? and so on, ensure good functioning of the sector or business unit and especially every worker have opportunity to work under a clear and transparent conditioning. Every employee knows exactly his role in the institution where she or he works.

In addition, the definition of competence, knowledge and capacity required for each position, allow employees to fully comply with their workplace, and they are also offering a job consistent with their abilities and skills, and the ability to develop their competence continuous professional development and to seize the opportunity for career development (Sims,2002). The needs of human resources are dependent on the type of organization and the sector in which they are engaged, and only on the basis of the results of the needs we come to the final terms of employment.

Fundamental processes that make up the subsystem hiring of human resources are:

- 1 Analysis jobs
- 2 planning of human resources
- 3 people gaining employment
- 4 selection (selection of) the people
- 5 introduction to business and employment.

Workplace analysis is the use of one of a number of structured techniques in the study of the functioning of an organization. The unit of study analyzes work, actually positions that make up the organization. Analysis jobs organizes information on jobs, such as tasks, knowledge, skills, abilities, and other attributes. The information collected during the analysis of jobs are the basis for the necessary operations department of human resources such as selecting people for jobs, their training, performance development, determining appropriate compensation and promotion, etc.

Based to these most important tasks of planning human resource development are:

1. analysis of the development of human resources and their training
2. Growth of human resources in the company
3. projections of growth and training of human resources ,
4. production system in the adoption and implementation of integrated human resource plans .

While a concrete plan for the selection of human resources includes:

1. how to structure and staff need, when and where ,
2. how to get employees
3. the way in which trained employees ,
4. which costs arise and how to influence them (have timely prediction of potential movement).

The process of winning candidates is based on the plan of human resources policies and winning candidates. This is followed by the selection of employees and its introduction into the business. The process of selection, the implementation of various tests, such as interviews and psychological tests must be extremely well organized and designed to bring about the end, the best quality and selection of best candidates. It is very important that the Department of Human Resources monitors and checks the quality of each individual and its integration into the group and the company.

Any good strategy firm operations inside must include development, training and career management of employees. In this way, we give you the knowledge to all employees within a company can progress to their hard work makes sense, and the constant improvement of the company has to offer.

The function of professional development includes several sub features: career development, job-training, career counseling, career advancement. Key point in the development of human resources are the best choice for the position, induction, participation, studies with work and progress. Part of actors and professional development are part of the motivation. If you are the main factors of professional development are present in the enterprise, there is motivation, satisfaction, productivity and equitable development. Career development is very important for humans since the job that makes the quality of life, social equality, self-respect, self-control, and finally manages his own career, and it is therefore necessary to provide counseling and support. Today, continuing education is becoming one of the most important forms of management and human resources development. Different methods are regularly linked to specific objectives and programs of training and education. Instructions, job rotations, internships, mentoring and lectures, audio-visual techniques, conferences, randomly some of the many methods that can be used in training.

Professional orientation takes place in the sub-recording of employees, information, selection and placement of employees, induction, promotion at work, technological change and monitoring human potential and predictions are that there will be significant enhancements to the professional orientation in all its aspects, especially in field of education. Man is not employed to remain always in the same place and the same workplace level, but seeks advancement, personal achievement, change for the better. Professional selection of candidates for promotion must be equivalent to the selection and deployment of new people and includes the nomination of candidates, evaluating their properties, decision-making and monitoring career development.

Termination of employment, as a result of personal desire, transfer, suspend mode, termination or retirement, is a reality where the important role have the Human Resources Department to alleviate tensions, interviewing employees and doing analysis of how the decision of termination of relationships established, and that it was not rushed, as a result of the current discontent. Professional development is an ongoing process that starts at the beginning of schooling in each individual breakeven point it is important to make the decisions that include

individual characteristics, job requirements and trends of supply and demand in the labor market.

Planning and career development shows organizations interest for employees potentials and have a motivational effect. In that way organization better use the potential of individuals and directly affects the reduction of personnel turnover. From an organizational point of view, a career planning and goal- oriented plan designed follower at all hierarchical levels of the company. It is a function of human resource management, which is to align individual needs and career plans with the needs of the organization and it does include the following:

- evaluation of the ability and potential of employees at all levels of the organization,
- Definition of possible lines of activity in the business, both horizontally and vertically,
- efforts to put individual interests related to career in a direction that is compatible with the future of the growing need for human resources , because it is one of the essential conditions of success .

Careers should be equal to the attention of the individual and the organization he works for. The function of its own development and achieving the goals by planning a career development organization leads to self-development goals in organizational function. That career has both a subjective and objective dimension . Subjective refers to the attitudes, interests and motivations of individuals and the organizational objective conditions, the structure of employment, promotion criteria, and so on .

An important role in career planning and development is the immediate superior. The head has a special responsibility for career management of people that he managed. It should identify the organization's needs and aspirations of employees to act supportive and advisory, to evaluate the results and direct career path. In order to implement these complex processes, the manager should have a primarily intensive communication with employees, regardless of ability then counseling, guidance and motivation of its employees. He must also know a good concept and development plans and the requirements of organization that will continue to place employees in connection with the execution of these plans. It is very important to assist the employee in the head to gain insight into the reality of the expectations that are placed before them.

Desler pointed to a number of assumptions for the impact of managers on career development :

- Avoiding the " reality shock " , especially in the first period of employment, when an individual is faced with the reality that is different from the imagined and acquire self-confidence when providing " challenging " task
- change of job due to the development and testing of new capabilities
- Linking Performance Appraisals to careers in order to provide objective information about the results and possible directions of career

- To encourage individual career plans and provide assistance and support
- Set high standards and expectations especially in the initial stages of their careers , which enhances self-esteem and a positive effect of setting career goals

At various times in his life a man has a certain perception of his career. During the career development of people is constantly changing, especially in terms of value and life attitudes , goals , ambitions, abilities and needs. Most authors opt for the four key stages of career development. Although often associated with certain life periods and the choice based on certain time duration, their beginning and their duration depend on the nature and complexity of the profession, the duration of the educational process and prepare for the exercise of their professions and their interest.

1. Start of his career - starting entry of individuals into the organization and the first choice of work , which is referred to as the stage of entering into a career . Usually refers to the period between 18 and 25 years. It is the initial phase of work, getting used to a new work environment and organization, acquiring the necessary knowledge and skills, knowledge of its capabilities and features , learning of their colleagues and managers and more. This is the stage of reviewing and weighing their options and goals, socialization and orientation , learning and adapting to the new working environment . Research shows that more than half of newly hired did not start work what they wanted and that is why fluctuation is the highest in this stage of career.
2. Stage of career - starting between 30 and 35 and lasts until the 40th or 45 year of life. An employee in her career stabilized, opted for a particular job, showed some potential and opportunities, socialized with the organization and its culture, has acquired the necessary safety and fully qualified to work independently and in that way it is ready for any situation. In this phase, special attention is paid to the evaluation of the contribution of work and system improvement. At the end of the second phase, it may appear that the crisis is related to the " mid-career " in which the current generated intense questioning , or professional unfulfilled desires and ambitions.
3. Maintenance phase of his career - starts between the 40th and 45 and lasts until the 50th or 55 years. It has a stable staff, acknowledged and recognized position within the organization , proven skills, proven ability and undeniable contribution. Although it is commonly referred to as the maintenance phase, it is often played a major change in career: can not continue its further growth, maintain the existing position or start a period of decline. This is the stage where the reduced professional invoices and review what has been done and what is omitted to be done on a professional level. In it, particularly at the start, for the above reasons can lead to a review of the lifestyle and values of life, especially in the case of a miscarriage of professional and life goals and plans. Individuals at this time opting for a new challenge and satisfaction, job change , etc.

4. Late phase of his career - starting between 50 and 55 years of age and lasts until retirement. Many authors indicate the phase of withdrawal and slump. Careful analysis concluded that it consists of two sub-phases:

- sub-phases maintain career
- sub-phases of withdrawal and preparation for retirement

Though it is the latest stage in career development, is characterized by a sense of fulfillment and work of past labor. It is the knowledge transfer to younger colleagues and used to develop the organization, particularly in sub-phase maintenance career. The second phase is characterized by mental and professional preparation for retirement. There comes a reduction in work-related activities, the transfer of responsibilities, authority, knowledge and experience to the younger to deal with this retirement is the last act of career management. Lately, more and more points to opportunities at work part-time instead of retiring as a way to continue his career for most employees to be eligible.

Education and development, and career management process are the most comprehensive in the management of human resources, since the quality of the planning phase, we can primarily to reduce the workforce past bottlenecks, strengthen their leadership potential , and thus motivate employees for future work, which can be crucial for their relationship to work, or thinking about a possible job change (Hiam,2003) .

MOTIVATION OF EMPLOYEES IN THE PROCESS OF MANAGEMENT

Motivation and job satisfaction are the foundation of the modern profession of human resource management because only the construction quality of the motivational system can help an organization to increase its competitiveness and value, and thus to develop human resources in relation to the employees - the company .

Motivation is a complex and personal character that has no single answer, but it is possible to identify the basic motivational techniques. Besides the classification of motivational compensation to financial and non-financial direct or indirect motivation for the work may be divided on the outside, such as the system of salaries, working conditions, and inside as education and advancement.

The results show that first need to be addressed in order to achieve existential motives, and include other factors, to achieve greater impact and success motivation.

Money has always been the oldest and "most obvious " , and also the most universal way of motivating the work . Yet undoubtedly one of the most significant problems attracting increasing attention because of the huge impact it has on work and relationships at work, especially in a situation of global crisis (Hiam,2003).

If the money gets direct function of increasing labor productivity, it may leads to the fact that any increase in wages doesn't meant the better productivity of employees and therefore must be cautious .

Because of the possible negative effects on the group or work unit we should ask the following material factors and action systems, so that the effectiveness of individual work , was equal to the required group performance :

1. material rewards to be associated with those indicators of work performance in which an individual can influence and operating standards must be achievable ,
2. there must be a clear link between performance and reward,
3. reward system should be based more on the positive rather than the negative consequences of work behavior ,
4. increase in material compensation must be large enough to justify the extra effort made,
5. salary increase has direct and immediate follow increase performance and improve job performance,
6. material compensation must be adequate to the work performed and fair compared to others, and
7. differences in wages between good and bad workers must be substantial enough to stimulate good work.

Motivation as put on place, should look as this:

1. Try to identify the needs of their subordinates. Quality of life in the workplace considered a key factor of motivation
2. Make sure you know not only their needs but also desires, no matter whether you are able to meet them, it will help you in your approach to motivating people .
3. Be aware that the prize big motivation, but also people can be strongly motivated by awards, honors, promotions, gaining more responsibilities or providing opportunities to achieve something significant. Some even believe that money does not motivate, but its absence motivate !
4. Expectations of employees are strongly motivated. Give clear that after the objective of the following job, they will get awards. And vice versa - what they do not get if you do it wrong. Let them know that it depends on them whether they will achieve something and get it or not.
5. Enable people to participate in setting their goals - let them experience as their own, not imposed !
6. The nature and content of work and closer people adjust so that these jobs are more interesting, diverse, dynamic, responsible, challenging, etc. Avoid using the word "problem" , replace it with other words with the same meaning as "challenging " or " a situation that needs to be addressed " .
- 7 Let them, when possible, they choose the way that will do the job. The famous General Patton said, " Never tell people how to do the job. Tell them what to do and they will surprise you with their ingenuity ."

- 8 Be a true leader. Be a good example to their subordinates, because people like to have the people who managed them predominate !
- 9 Think " big" - High expectations are the key to all success ! Constant action - there is no success without the pro-activeness !
- 10th Positive communication - Enthusiasm and optimism ! The prices time and note

Motivation of employees in the company has become one of the main tasks of managers, with motivated staff achieve better results and increase the efficiency of our company. Each manager has a wide range of resources to motivate , it remains to decisions that will be used, of course it depends primarily on the nature of the work performed by the company, as well as the possibilities of the company.

Of course, all these methods should not be used around all situations, sometimes it's enough to be awarded a small prize for the workers who demonstrate above-average results have encouraged the others to follow in the footsteps of these workers. Although the addition of material to meet the needs must be lead accounts and certain intangible compensation to be involved in the reward system , such as providing new challenges to employees, more power, etc.

CONTROL AND EVALUATION – FEEDBACK

Assessment of performance appraisal is a process that measures the contribution of employees in achieving the goals at one time . If such an assessment is not done properly, it can damage relationships, and conversely, the precise evaluation may encourage employees to better realization of the goals and tasks set in front of them .

The methods of performance assessment include: reviews of managers, ranking within the group , forced distribution methods, problem solving methods, and evaluation categories. There should be a mutual relationship between performance assessment and incentive prizing or performance assessment should be a function of incentive remuneration .

Today, in addition to higher-level managers and associates and colleagues all over the performance appraisal process, including self-assessment , which should contribute to a single dose of the reality of the employee (McCourt,2003).

When technological development assessment system, people need to keep in mind their mental and organizational skills, temperament, ethical principles and achievements of success : planning, decision making and control, organization and coordination, performance of work, economy, productivity and profitability. Any system of performance management has its advantages and disadvantages, but certainly the most important to choose one that will keep the goals of the company and the individual.

Control helps any organization that reaches the goals. It is necessary because it provides cheaper and faster operations, quality production, avoiding costs due to defects and waste.

Control mustn't insult anyone. Dispute, everyone should be content, for that, because it provides better results. Also responsible managers should not leave out the alleged control of the trust they have in their co-workers, and thus to make a big mistake.

Trust should develop into naivety or even abuse, but there needs to be both, and the control should not be exaggerated, as there would be no resistance to the employees.

Excessive control may cause adverse effects (McCourt,2003). To control and evaluation of performance of the individual was successful, the true primarily establish standards and measures for determining what is right and what goes beyond the framework provided activates. Of course, the standards are different, and the productivity of the workers on the production line can not be measured and productivity Deputy Managing Director of the company. It should also be understood that the process control can achieve various objectives of the company, not only controlling the people, technology and finance. For example, the control can improve the quality of the product and " open " the doors of other markets. Also, control protecting capital and formed organizational behavior directed at the protection of people, technology and the environment. What is important to emphasize the process control should gather as much information and timely use them . In other words, the information would gradually lose its quality and value if we not react on time, because in the next second information may no longer be relevant to the control.

Since every business organization has its own specifics that implicate the character or activity which is performed, its size, structure, organization, location, etc.in a number of specific and control system which it establishes. In fact, successful control is based on the principle. Without the creation and due to the lack of principles, control would be reduced to a formality.

CONCLUSION

The people, their needs , motivation and satisfaction has become the center of attention of human resource management, because it was realized that human capital is the main tool of competitiveness and advantages in the global market.

Companies which realized that the human resources are one of the key success factors are on higher level than companies witch has not yet realized the importance of human resources and motivation techniques. Education and training of employees, create a pleasant environment in the enterprise and fair payment system tasks that are successfully implemented to create a favorable motivational basis for each employee.

Great attention is paid to the timely informing the staff , and the effort of their involvement in decision-making.

The needs of individuals and the fact that it is considered that motivate them, are the object of intensive research and analysis, from which emerged many motivational theories.

The planning, development and career management have numerous positive implications, not only for the individual but also for the organization for the enhancement of overall organizational development potential, flexibility, and employee identification with organizational goals.

Of the unspeakable importance of good interpersonal relations policies, including workers in the decision-making process, giving greater responsibility and entirely accurate judgment of their merits as they gained full confidence in the company.

The man is a fundamental factor in the success of any company and therefore HRM should be given great attention. In this purpose managers coordinate the different needs of individuals and organizations by collecting, selecting, hiring, and promoting employees, and parallel improve the current conditions in organization. At today's strong competition and big changes organizations must treat people as the most important resource that will contribute to the interests of organizations and their individual goals and the wider community.

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THE ROLE OF COMMUNICATION IN INTELLECTUAL CAPITAL MANAGEMENT IN ACCORDANCE WITH THE EU MODEL

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Abstract: To be able to manage the collective knowledge within the business entity, and to transform it into "intelligent organization," the management must possess adequate knowledge and skills. Only management that directs the company towards the creation of organizational culture which supports learning accessible to all employees, can expect creativity and innovation from employees. Internal communication that respects every individual and which has partnership for its ultimate goal, can improve the motivation and the creation of flexible teams in setting the business strategies utilizing the knowledge which underpins the concept of "intelligent organizations" The interaction of knowledge, intellectual capital and management teams who understand the importance of these resources, represent the efficient way for a company to ensure the new, competitive advantage in the market. Modern economies are increasingly turning towards the domination of intellectual capital over the natural resources. This paper aspires to identify whether the management in Serbia has accepted to recognize communication as essential skill for implementation and improvement of the intellectual capital.

Key words: Management, Knowledge, Intelligent Organizations, Business Strategy, Communication

JEL classification: D83, L21, M11

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INTRODUCTION

Long-term economic crisis, indebtedness, high unemployment rate, brain drain and drastic decline in the standard of living, as well as a host of other related indicators, identify the condition in which Serbia is. All state level strategies, so far, failed to launch the Serbian economy, which leads us to the conclusion that 'diagnosis' has not adequately and in full scope addressed the problem. If we are looking for a way out of this situation we would need also to address the key factors such as orientation to the knowledge and management economy that is sufficiently informed and has the capacity to accept the challenges of modern business and to adapt. The business, which has been increasingly turning towards globalization, implies that management must have the knowledge and skills necessary to achieve such an organizational system that enables cohesive actions of all employees. Especially important skill is the ability to establish an adequate organizational communication. Communication and organizational culture together play an essential role in the organization and are important for achieving the projected goals of the organization and adjustment to change of the organizational culture because they encourage more adequate participation of workers. Good communication is to ensure that employees fully understand the importance of the goals. Communication stimulates ideas and creative response from workers in cases when management is educated and applies communication skills that are necessary for establishing the two-way communication. In our environment, in organizations where there are rarely clearly defined rules of conduct, there is under-developed mutual respect and an unsatisfactory level of business communication.

Motivation as a 'consequence' of employee satisfaction becomes the main focus of the modern management, because it is a prerequisite for an organization to increase its competitiveness and value. An unhealthy working environment, which causes dissatisfaction among the workers, can culminate with mental and physical health disorders in employees, leading to alienation of workers and the collective, and thus creates unmotivated, dissatisfied employee with greatly reduced labor contribution. Law on Prohibition of Harassment at Work, which was adopted in 2010, and from whom much was expected, unfortunately, had no significant effect on the improvement of the situation in the labor collectives in Serbia, nor was able to influence the work environment. In the working environments, we are still having the continued poor organizational climate and lack of optimal communication. Communication creates an opportunity for members of organization to create and maintain productive working relationships with other members of the organization, where they have to be aware that a successful business requires successful communication between employees at the equal hierarchical level, as well as at the level of vertical communication in both directions.¹⁰⁶

¹⁰⁶ *Vertical direction from top to bottom-manager towards the implementator and the vertical direction from the bottom up- implementator towards manager.*

Along with the process of globalization, the foundations of a new economy were set, which is in Western literature known as 'knowledge based economy' or 'knowledge economy'. Knowledge economy can be viewed as a part of a system that is associated with the process of creation, dissemination and use of knowledge, as well as certain characteristics of the state of the economy, where knowledge is emerging as a key factor in its growth and development, or as a knowledge-based economy. Knowledge, information, skills, innovation and revolutionary new ideas are pushing the boundaries of social and economic growth and development and are becoming a major production resource. Knowledge management is the strategic use of the collective knowledge of the company and know-hows in profit making and increase of market share. All this is achievable only if the organization has good communication channels for transfer of knowledge and experiences in which they participate both in a collective as a whole, as well as individually. Therefore, communication is essential factor for successful business strategy in Serbia.

THE IMPORTANCE OF MOTIVATION IN EMPLOYEES

Management is a necessary precondition for the realization of the main objectives of any system: survival, functioning and development. The very term management represents a continuous effect of management actions that affect the parameters of the system, and the system translates from one state to another (Jovanovic, 2001). The style of management directly affects the motivation of employees.

Work motivation is a complex term which has been the focus of interest as long as there has been organizing and directing of human effort. Scientific research of motivation begins with the development of industry in early thirties of the last century and experienced its peak in the last decades. Today, in the business world, the central questions are the organization of the human interest and work motivation, because without good results in this area chances of business success and competitive advantage are reduced. The work motivation for contributes to the improvement of efficiency, effectiveness, creativity and quality of work, and improves the quality of the working environment. Human resources are the driving force and factor in gaining competitive advantage. A thorough analysis of employees by qualification and age structure and their contribution to the further development of the organization, should include the culture of the organization, changes in the environment and potential impacts from power centers. Human resource planning should be adapted to the strategic goals of the organization and in harmony with the other plans, introduce new techniques and motivational strategies. The main strategic goal of economic entities must be aimed at achieving highly motivated workforce, which is reached by the optimal combination of material and non-material incentives.

Numerous studies show that the democratic way of managing and enabling group members to participate in decision-making, is contributing to the increase of the group attractiveness and its cohesion (which further reinforces the adoption of common goals). The impact of the management system is implemented to a large extent due to personal values and attitudes of the group members. (Roth, 2006: 143).

An employee who is unmotivated to work more will be noticeably more absent from work, and far less loyal to the firm, than an employee who feels that belongs to a group. Such organizational environment is a precondition for a high level of motivation. Employees will be, in such circumstances, constantly motivating themselves to achieve better and better results in the workplace. When, the primary conditions are complemented by special measures for employee motivation, an improvement in business processes and business results is likely to follow. The employees who identify the elements of the personal in the relation of their organization towards them reciprocate it with the trust and acceptance. Such a collective is ready to embark on the construction of the 'intelligent organization', which means that it is qualified to apply intellectual capital available to the organization, and to think in an innovative way.

The most important motivational incentives for employees is a genuine involvement in the business process, the sense that personal contribution has a significant impact on the results of the organization's business success, and that the organization shows interest for the personal problems of employees. To achieve these goals it is necessary to maintain a constant and open communication between employees and managers. Sincere interest of the management for employees can improve business. The flexibility to the special needs of employees regarding working hours, or other conditions at work, will allow each employee to fully realize their potential and to give the maximal contribution to the business. Active role of the employees in the business process, taking responsibility for the business improvement, giving more power to the employees without excessive bureaucratic procedures in important decision making processes, are highly effective motivational factors with sustainable effect on the employees and creating a positive impact on the organization. Hosking and Morley argue that the best management is the skill-based one. A skilled leader is one "who is able to create and maintain social order based not only on power but also on acceptable values" (Hosking, Morley, 1991).

INTELLECTUAL CAPITAL

The real wealth of the organization is in people, their knowledge and skills. Intellectual capital is the intangible organizational resource. Competitive advantage is also based on the intellectual capital as a result of the organizational values underpinned by the intellectual capital. Intellectual capital is the product of

interaction: human resources, organizational resources and good communication. Human resources are all employees with their tacit knowledge,¹⁰⁷ skills and experiential attitudes, while organizational capital is focused on tangible material investments. Communication is seen as a relational resource. Communication is the essence of the relationship with the capital 'makers', relationships with customers, suppliers and other external stakeholders.

The value of an organization is determined by the extent to which the organization is able to maintain confidence in its reputation. Preparing for the transition and competitiveness, in fact, represents a dynamic knowledge-based economy. Redirection of the Serbian economy can have a good starting base in the Lisbon Agenda,¹⁰⁸ which gives an indication of the type of intellectual capital that drives the EU towards the goals that must be reached to ensure a position that is identified as a competitive, dynamic and flexible, with respect to market changes. Compared to the EU platform, the activity in Serbia should be defined by objectives whose ultimate outcome should provide competitiveness of the Serbian economy.

The first objective is to ensure that organizations and citizens have access to the world's communications infrastructure (structural capital) and to have the skills to use it (human capital).

Another objective is to increase investment in knowledge (structural capital) and implicit knowledge (human capital).

Creating favorable conditions for starting up and developing innovative businesses, especially small and medium-sized enterprises involves the removal of red tape, reduction of operating costs and creation of the structural capital. The economic reforms of the operational internal market entails the lifting of acquired monopoly positions and other barriers to trade.

In pursuing economic breakthroughs, human resources are the most important category. This includes the orientation of our society towards lifelong learning. European social model, with its developed systems of social protection, given the transformations that lead to the knowledge economy. This is possible if the system is sustainable in the longer term, if it promotes social inclusion and gender equality, and provides quality health services. Moreover, the internal communication that respects every individual is also important, the communication which ultimate goal is a partnership, improvement of motivation and creation of flexible teams in setting business strategies that are using the knowledge that underpins the concept of 'intelligent organization'. Here we come to the question of whether our social system is able to cope with these challenges and is it able to adapt to EU standards that are defined for this field.

¹⁰⁷ *Tacit or hidden knowledge: experience, skills, available to employees and not transferred to others.*

¹⁰⁸ *Conclusions of the Council and of the Representatives of the Governments of the Member States, meeting within the Council, on the role of the development of skills and competences in taking forward the Lisbon goals, 24.11.2005, Official Journal of the European Union C 292/3*

Advanced technologies, which are present in most EU countries, are enabling research of corporate awareness of new products based on knowledge. Knowledge management covers three main activities of knowledge: generating, codification and transfer. Generating knowledge includes all activities that provide new knowledge for individuals, groups or organizations, such as the creation, acquisition, synthesis, fusion and adaptation. Codification of knowledge is a kind of knowledge that allows individuals and organizations to re-use it. Knowledge transfer involves the transfer of knowledge from one place to another and its absorption. Knowledge is the power that enables organizations to improve productivity of all activities and to assure their value for groups and individuals (Baltezarevic, 2009b).

Management is, in meeting the challenges of the new economy, faced with a lot of uncertainty, and requirements to be able to react quickly to any changes identified in competition, technology, regulation, as well as at the organizational level itself, through enhanced process flexibility and product innovation and capabilities.

In capacity building, managers need to manage knowledge as the most important organizational resource. Knowledge is created and stored in the human, organizational and production processes and relationships. Accumulation, delivery and management of knowledge (innovation as a result) have long since become imperative for economic growth and development. Interest in knowledge management is on the rise, as it has long been clear that this influence is essential for creation of the competitive advantage, economic growth and development.

Strategies to generate higher values of the organization are focused on the integration of knowledge into products, services, people and processes. Dimensions of knowledge should be used as a strategic lever for either adding value to products and services, or improving organizational performance. The key objective should be the establishing of a knowledge-base, oriented towards the needs of the organization, knowledge transfer to employees, and opportunities for continuous transformation of the organization into the 'intellectual' organization. In any case, people will determine the success of an organization. Knowledge must be viewed as a system process. Knowledge is the understanding of customer and business environment needs as well as the skills and experience of employees. Employment policy has a central role in this, because the technology itself is not the answer to the sharing of knowledge – it can be done only with people. Each organization is unique: with its own success stories, failures, existing culture, reputation, products and people, but all of them need to develop close relationships with colleagues and with people who are included in their base of existing and potential clients. The imperative in this process is communication. The situation in Serbia, unfortunately, does not show a tendency towards the development of organization in this direction.

THE ROLE OF COMMUNICATION

Communication is an ongoing process of exchanging messages, always containing more than one message, which is dependent on the code, context and the manner in which it is communicated. Contemporary theories define communication as "a symbolic process in which the human world creates, maintains, improves and transforms" (Tomic, 2000, p.33). Communication is a way of exchanging ideas, attitudes, values, opinions and facts, a process that requires the sender which initiates the process and the recipient, which completes the communication link.

In order for communication to be implemented, it must first be understood. Communication is the production, promotion and causing of effects via symbols and signals that people are using to send and receive messages (Hargie 1992, p.10).

The communication flow problems may arise due to the inability to successfully achieve communicator communication contact. The ability to communicate is a skill that is difficult to achieve and which needs be perfected. Increasingly there is a need to analyze and forecast, or prescribing modes of communication in work processes. Occurrence of pathological forms of communication, such as mobbing directly destroy productivity and through creating a hostile work environment are destroying every desire and willingness for contribution to the development and progress of the collective (Baltezarevic, 2007).

We spend a good part of our lives as members of various organizations. The organization does not consider only business organizations, but also schools, churches, military facilities, and all other forms of organizational connecting of people.¹⁰⁹ Organizational communication allows organizational members, as individuals, to create and maintain direct business relations with other people who share the business environment, but also giving them the opportunity to improve their business relationships, through establishing family and personal cooperation outside of the business context. Organizational communication implies that people are communicators, and it is human communication that is taking place within the organization. This type of communication displays overlap with other contexts of communication (communication between two people, within a small group, public and mass communication). Any of these types of communications, and all together, can be associated with organizations.

Organizational communication is the process of creating and exchanging messages within the network of organizationally related people, in order to find the best way to communicate within an organizational context. The organizations can basically have quality human resources in relation to their general and professional knowledge, without

¹⁰⁹ *In this paper, we focus on the business organization*

having an appropriate level of success in achieving strategic business goals. One of the reasons may be the insufficient communication potential of employees.

Communication involves the inclusion of people in the communication process.¹¹⁰ Emotional intelligence is the ability to convince others of something or motivate them to do something, the ability to build a relationship of friendship, to rein in their own and others' emotions, to receive the feedback frankly, to build coalitions, to observe and analyze their own and others' behavior and to know the business policy. There are many words and even more demands placed on the communicator, and this is the reason why the participants of communication are divided into the good and bad communicators. People who do not have communication skills, often find themselves experiencing barriers in communication caused by different factors (Dickson, 1999). Only a manager who can provide two-way communication channel with employees, may be effective in improving the communication in the domain of an adequate level of human rights. Effective communication incorporates implementation of existing knowledge and creative potential of employees into the working process. The movements of the hand, fingers, head, body, and facial expressions are complementing the spoken word, while the word and the movement combined interpret the thoughts and feelings of the speaker. People, as individuals differ in terms of manifestation of gestures, whereas different gestures, within one and the same verbal communication, provide a different perception of the audience.

Organizational communication must be adaptable, to have the ability to flexibly respond to the dynamic changes in the environment and the ability to make a positive response to the demands posed by the environment. This means that, the ones most responsible for the promotion of business communication, managers, should be able to provide quick and efficient use of all available data and information, as well as their distribution in the external and internal environment, that is to say, management must be able to manage business information and establish a role of an active participant in communication with employees.

Skills of a good communicator comprises the ability to hear the speaker and adjust the sending of information to the communication style of the speaker. Active listening means to fully follow the whole communication flow. We are carefully listening to what we are being told, how something is said and what is the accompanying body language. In this way, we get a complete picture which gives us the ability to achieve satisfactory quality of communication. The attractiveness of the organization or the appeal of belonging to a particular group depends on the

¹¹⁰ *Adoption of the Universal Declaration of Human Rights, the international community recognized the inherent dignity of all members of the human family by providing everyone with equal and inalienable rights. Communication rights are tied to the human condition and based on a new, more powerful understanding of human rights and the role of communication. Without communication rights, human beings can not live in freedom, justice, peace and dignity. The recognition of this universal human need has inspired us to set out a statement of human rights based on the principles of freedom, inclusion, diversity and participation*

individual satisfaction of each member of the group with the work he/she is performing. Data from the American literature show that that productivity is lower when those who perform the activities in question are not involved in their planning (Bass, 1972).

The greatest impact on creating an organizational climate is in the hands of the manager, but we must not neglect the impact of all employees. The Republic of Serbia, unfortunately, is characterized by the lack of organizations in which the communication is unencumbered by stress and conflict (Baltezarevic, 2009, p.6.).

ORGANIZATIONAL CULTURE

The organization is defined as "a set or system of individuals who are working together through a hierarchy of positions and division of labor, striving to achieve a predetermined goal" (Rogers and Rogers,1975). The organizational culture includes the knowledge and experience that an individual uses in developing the organizational behavior, which manifests itself in the micro-environment of an organization and a rounded working collective. Powerful and unique organizational culture accelerates the process of coordination between employees, acting as an effective mechanism to control and eliminate conflicts. Common experiences and attitudes of employees and management in the organization acquired through problem solving position in the external environment and establishing of internal relationships within the organization, are gradually leading to the creation of the defined behavioral norms. The positive effect of solved problems determines the future behavior in the incidence of the of similar problems.

Organizational culture is an important part both on the individual level and at the level of human groups, as a system of shared attitudes and values that guides the way in which all or most of the employees in the organization think about this organization. Development of the organizational culture of individuals and groups, and the identification of employees with the organization, significantly affect the good organizational behavior. The importance of organizational culture in implementation of the strategy is linked to the fact that it determines the behavior of employees and motivates the realization of the set goals. Organizational culture is an aspect of the organization, which is a common subject of research, but not of the application of the results obtained from the research.

A significant feature of organizational culture is that it is the base for differentiation of one organization from others. The content of organizational culture is organization's members common understanding of the importance of things, events and phenomena. A common approach to understanding of the phenomena and determine a common understanding and interpretation of these phenomena. Most of the members of an organization characterized by a common belief, identical value judgments, same assumptions and accepting the same

standards of conduct and behavior according to the established pattern. It is defined as a set of relatively uniform and enduring values, beliefs, customs, traditions and practices that are common to the members of the organization. It is being modified and transferred from one generation of employees to the next. Organizational culture is a category that exists in the organization on the social system aspect, it is related to the collective, not the individual. Thanks to the acceptance of the organizational culture, all members of the organization have approximately the same understanding and interpretation of the phenomena, thus creating a set of rules that is guiding the daily activities.

Management that is oriented towards the leadership skills to receive and disseminate information, to understand the broader and the corporate environment, that has the knowledge and skills supporting the negotiating process and reaching of the best solution, can expect the social order which is based on the true values (Pennington, 1997). Degree of acceptance of common values can be reached by members of an organization through communication and acquired shared experience, solving of everyday problems, since the organizational culture is related to the longer period of time and transferred to the new members of the organization as specific and unique behavior. It is a significant factor in strategic decision-making, because the quality of strategic decision-making is influenced by the impact of organizational culture and the ability to accept change. Successful organizations build such an organizational culture where the priority is constantly adapting to changes and employee satisfaction. Job satisfaction is a complex concept that involves the entire scale of the individual employee satisfaction. Satisfaction is conditioned the type of tasks, success, recognition for achievement, and the degree of self-affirmation. Dissatisfaction is the result of working conditions and dissatisfaction with pay, work environment, management and human relations (Herzberg, et al., 1959).

CONCLUSION

At the beginning of this study we opened a dilemma: whether the management in Serbia has accepted the notion that communication is an indispensable skill for the implementation and promotion of intellectual capital? The study of parameters which should assist us in interpreting the situation (communication, organizational culture, intellectual capital, the European model ...), unfortunately, lead us to a negative conclusion.

Starting from the fact that the main task of the manager is to ensure the survival and development of the organization, to make profit and justify the mission, every organization should strive to own management teams who will want and be able to manage business systems on economic and rational basis. New trends of integration of the world economy, globalization, global processes, various

forms of cooperation, adapting business models from the EU, require professional managers, which will eliminate business risks. This is the first step which Serbia has been failing to make for years. Management teams, as a rule, are created by the political parties, not by professionals.

Organizational environment which is a precondition for a high level of motivation is the environment in which good communication is achieved, which means that employees know exactly what is expected of them and that the managers have an open and constructive communication. Employees will, in such circumstances, constantly motivate themselves to achieve better and better results in the workplace. When the primary conditions are supplemented by the special measures for motivating employees, improvement of business processes and business results can be expected. Employees who identify the elements of personal relationship from company in relation to them, are reciprocating the form by giving back confidence and acceptance. This is the next obstacle for the elimination of which no actions and strategies have been initiated. One of the imperative conditions for performing the tasks of the managerial position is possessing the knowledge and the ability to use communication on both internal and external level. Communication is a learned skill and the training is necessary for managers and employees.

The model for the development of management in Serbia should be a European social model, which is based on a high degree of social protection and education as well as on safe and secure social dialogue. The effort to improve the quality of the work can be achieved only if it is directed in line with the properly set strategy. Such a strategy does not exist in Serbia. Given the fact that next year the start of negotiations for accession to the EU is expected, will have to start preparations for the development of strategies that encompass mentioned areas.

The fact is that our country is still in the transition process, and that we have been facing a long-term crisis, resulted in having a significant number of companies without the desire and ability to identify business imperatives that lead to the creation of modern and competitive organization. The importance of intellectual capital and the value of know-hows for making profits and increasing market share are the core organizational values that guarantee success. Accumulation, delivery and management of knowledge and innovation which are their 'effect', is an important and indispensable condition for economic development. However, a small number of companies in Serbia have its strategy based on knowledge management and with goals primarily oriented towards the creation of their own know-hows. Such behavior is unacceptable because intellectual capital leads to a significant competitive advantage, and guaranteed economic growth and development especially over other economic actors that do not recognize this strategic resource. Even bigger problem is impoverished society which does not have the funds that could be directed towards development of intellectual capital and providing incentives to enterprises that are oriented toward intelligent organizations.

However, the problem is not just a lack of funds. A much larger problem is not recognizing the imperative demanded by the modern environment: professionalism, communication skills and the recognition of the role and importance of new technologies. The open dilemma remains: what is the percentage of managers in Serbia who know and apply the four golden rules of communications: flexibility, communication skills, respect for the self, co-speaker, and the situation and finally, the teamwork. Only those people who always have in mind the rules necessary for contact with others, can provide creative and open dialogue with employees. All employees are burdened with the risk of potential physical and psychological survival and only communication that inspires confidence, which is accepting of differences between people and their individualities, can prevent alienation. Communication is a constant of human nature as man is a social being, and the contact with others is realized through communication.

In such environments, formation of a collective identity as a result of the necessary adjustment process is a prerequisite for participation in social life. The group that accepts diversity allows development of creativity and progress of the group as a whole. Such groups do not have a problem with aggressive authority because they are groups in which freedom and team decision-making, as well as active involvement in the work process, are not under the question. Individual identities, which are included in the group, are further complemented not only by the individual attitudes of other people, but also by the collective attitudes of the group.

Therefore, fostering communication and communication skills represent the model of the primary prevention of occurrence of psychological harassment at work, the issue that separates us from the European model of creating and functioning within the organizational activity. For any organization communication represents: blood circulation and energy that moves. These metaphors suggest the essence of communication: it is a process that allows transmission of messages to a variety of subjects and their connection. Communication is rightly considered to be the central component of effective business processes. Promoting a work culture that gives priority to the respect of human dignity, discouraging any form of psychological violence, which is introduced as an imperative EU model, is narrowing the space for communication deviant behavior.

Communication is the constant companion of human activity, and is involved in the entire human behavior. Codes of ethics can contribute in setting the stage for positive organizational behavior with clearly defined form of communication, but the code without a complete restructuring of all levels of society (education, labor market, the selection of senior executives redefinition of the Labor Law and other related elements), are only 'Cosmetic means' without concrete effects.

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DISEASE MANAGEMENT LEADERSHIP: MULTIDISCIPLINARY APPROACH CASE STUDY: DIABETES MANAGEMENT PROGRAM

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Abstract: Nowadays politics and economy directly and/or indirectly communicate with health systems through science and business-oriented sustained development. Prevention and health promotion are the basic functions of global, regional and local disease management programs. An original multidisciplinary scientific and business approach to one health problem has been taken for a Diabetes Management Program model at the level of organization, funding, health care, education as well as the application of most contemporary preventive activities, diagnostics, therapy, rehabilitation and care. The program encompassed the population of 1,400,000 people in RS (B&H entity) through the cooperation of the relevant ministry, fund, institute of public health, clinical centers, hospitals and health centers. A scientific and professional leadership has been established through a vertical reform of diabetes protection headed by the national coordinator for diabetes and the director of the national development program as well as with six regional and thirty local coordinators. At the level of organization, the National referral center for diabetes has been founded together with six regional and 30 local centers. The project resulted in a complete switch to the most contemporary pen-insulin therapy, a permanent control of possible complications due to diabetes, digitalization of diabetes protection (Computer-based Register of patients) and the education of 188 physicians of primary and 20 physicians of secondary health protection (The National Guide for Diabetes Mellitus published). Three years of the program implementation thus gave 14 new subspecialists in endocrinology (compared to just two in the beginning), 188 physicians of family medicine were trained for treating patients with diabetes (compared to 10-15 of them in dispensaries for diabetes in six bigger towns in the beginning) and a complete diabetes control monitoring was established with prompt IT support. The main results of the Program are the financial savings of over 30% for treating patients with diabetes, the reduction of diabetes-induced complications for 10-15% as well as the increase of the level of diabetes protection in one of the first European Region with a 100% pen-insulin therapy. Apart from medical experts, the Program involved experts from finance, accounting, medical engineering, pharmacy, statistics, information technology and health politics. Together with the Project Director, they were all in the Management Team responsible for the realization of previously agreed scientific and business objectives. The conclusion is that only a multidisciplinary leadership approach to science and business leads towards sustainable development of scientific and professional programs and projects as well as systems they are implemented in.

Key words: Leadership, Disease Management, Multidisciplinary Approach, Health Education and Policy Strategy

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INTRODUCTION

Global strategy for diet, physical activity and health (WHA 55.23) prepared by WHO/FAO expert group for diet, nutrition and prevention of chronic diseases (WHO, 2002) and Global strategy for prevention of non-communicable diseases (WHA 53.17) established by the Global forum of WHO for integration of prevention and control of non-communicable diseases (WHO, 2003) are the basic health policy strategies for the WHO resolutions regarding Diabetes Prevention and Diabetes Disease Management. We are composed in our study Development Strategy of Diabetic Health Care involving in National Diabetes Program and Project based on the integrated health care system which is implemented in both entities of the Bosnia and Herzegovina (B&H) in the period from 1998 to 2002 (Muehlbacher, A, et al., 2000). Our National Diabetes Project started in 2002 as a partnership contract between National Health Insurance Fund and Novo Nordisk Company (Copenhagen, Denmark) which is named as a Key Strategic Partner in the field of insulin therapy focused on the development of the diabetic health care in our B&H entity with specific donation administrated by the Health and Diabetes Foundation and National Diabetes Committee. Other contract partners were Roche Diagnostics (Basel, Switzerland) for glucometers and glucose blood level permanent control, Bayer Diagnostics (London, UK) for permanent control of the blood level of HbA1C and Medtronic (USA) for the implementation of the insulin pumps in the diabetic therapy (Pavic, Dragojevic, 2004).

A multidisciplinary approach to Diabetes Mellitus demanded that we particularly include in our study, in addition to conventional medical and pharmaceutical partnerships, the cost-effective analyses, current trends in public health, epidemiology parameters of the entire population and IT application of software for the management and control of certain diseases (Gulledge, Beard, 1999). The current public health trends include: the integration of health policy, the construction of the necessary human resources, the focus on primary health care, the evidence-based medicine, the use and development of national guidelines for the management of one particular disease, the development and monitoring of new technologies through health technology assessment, the inclusion of the consumers of health services in the decision-making process in health care and partnership, as a vital aspect of national and / or international health cooperation. Focus on primary health care stemmed from its accessibility to all clients of health services, since it is cheaper than the professional services and the intervention occurs at the early stage of the disease, which facilitates the treatment and increases financial savings in the budget of the state. The inclusion of the consumers / patients means: better patient education, better self-protection as a consequence of the understanding of the essence of a health problem and its complications, a higher level of health care as a result of the introduction of the system of self-control and a higher responsibility of the health care system itself since the patients pay for the services that systematically require a higher level of health care (Greene, Merendino, Jibrin, 2009).

And why has a partnership in health care become so necessary in the context of new economy? Health problems are too big to be solved by an individual, and when it comes to specialized health services expensive procedures are being mainly used, and as a result nobody has neither the human nor the material resources to solve such a specific problem, like Diabetes Mellitus, on their own, separated from the system and the health-budget of the country, which is why one multidisciplinary approach to the disease is necessary. Evidence-Based Medicine is the foundation for a measurable medical care of patients with Diabetes Mellitus and a rigorous implementation of these principles is the main strategic goal of modern national programs (Pavic,2007).

CASE STUDY: DIABETES MANAGEMENT PROGRAM

Nowadays politics and economy directly and/or indirectly communicate with health systems through science and business-oriented sustained development. Prevention and health promotion are the basic functions of global, regional and local disease management programs. An original multidisciplinary scientific and business approach to one health problem has been taken for a Diabetes Management Program Model at the level of organization, funding, health care, education as well as the application of most contemporary preventive activities, diagnostics, therapy, rehabilitation and care (Guthrie,Guthrie, 2008, Levene, Donnelly,2008). The program encompassed the population of 1,400,000 people in our B&H entity through the cooperation of the relevant ministry, fund, institute of public health, clinical centers, hospitals and health centers. A scientific and professional leadership has been established through a vertical reform of diabetes protection headed by the national coordinator for diabetes and the director of the national development program as well as with six regional and thirty local coordinators. At the level of organization, the National Referral Center for Diabetes has been founded together with six regional and 30 local centers. Financially, the program has been covered with a three-year donation of the NovoNordisk Company (Denmark) which for this purpose set up the first Health and Diabetes Foundation in Southeastern Europe, its director being the director of the overall program. The donation was received at a public request of tender of the Fund of Health Insurance which had made a unique business move by publishing the first public tender for the realization of the Diabetes Management Program at five levels: diagnostic (for permanent monitoring of glycosylated HbA1C, the DCA 2000 Bayer system, London, UK); therapeutic (pen-insulin therapy, NovoNordisk, Copenhagen, Denmark and insulin pumps Medtronic, USA); control (glucometers for permanent monitoring of a glucose level on an empty stomach, Roche Diagnostics, Switzerland); information (Microsoft, USA) and educational one (World Health Organisation and International Diabetes Federation).

The project resulted in a complete switch to the most contemporary pen-insulin therapy, a permanent control of possible complications due to diabetes, digitalization of diabetes protection (computer-based register of patients) and the education of 188 physicians of primary and 20 physicians of secondary health protection (The National Guide for Diabetes Mellitus published). Three years of the program implementation thus gave 14 new subspecialists in endocrinology (compared to just two in the beginning), 188 physicians of family medicine were trained for treating patients with diabetes (compared to 10-15 of them in dispensaries for diabetes in six bigger towns in the beginning) and a complete diabetes control monitoring was established with prompt IT support.

The main results of the Program are:

1. The financial savings of over 30% for treating patients with diabetes in the region of Republic of Srpska (our B&H entity).
2. The reduction of diabetes-induced complications for 10-15%.
3. The increase of the level of diabetes protection in the first region with a 100% pen-insulin therapy (2002) in South East Europe.
4. The first National Project for one particular disease in Europe (2002-2012), besides Spain.
5. Reduction of over 58% in hospital lying, which resulted in significant health and economic benefit.
6. Apart from medical experts, the Program involved experts from finance, accounting, medical engineering, pharmacy, statistics, information technology and health politics.

Together with the Project director, they were all in the Management Team responsible for the realization of previously agreed scientific and business objectives. The Program has shown that the combination of intensive diabetic treatment, supported by permanent education of both medical staff, through regional and general seminars, and patients, through contacts with the specialized doctor, specialized nurse, dietitian, pharmacist and psychologist led to a significant reduction of hospital lying, which resulted in, not only health, but also in very clear economic benefit. Among the key factors for successful management of the diseases such as Diabetes Mellitus are the awareness and training of health workers, the education of diabetic patients as well as clients with a high genetic risk of developing diabetes, coordinated provision of health services by health workers through the National Program for Diabetes Mellitus and contemporary disease management through computerization of data within health information system with a special software program for Diabetes Mellitus (Canadian Diabetes Association, 2009, American Association of Diabetes Educators, 2008, Tripathy, BB, et al., 2012).

The main values of the modern Diabetes Management Program have turned out to be the following: the development of optimal and quality human resources, the use of current methodological approaches and procedures, the use of standards and norms adopted by the World Health Organization (WHO) and International Diabetes Federation (IDF), re-engineering and restructuring of the health sector, diabetic information system and a multidisciplinary approach to the medical and economic sciences.

The mission of keeping diabetes both as the problem of the healthcare system and economy system in one country proved to be fully justified with the following characteristics:

1. Professionalization of health care.
2. High level of motivation as a consequence of precisely formulated and applied common goals.
3. The improvement of communication.
4. Excellent response to education.
5. Visible effects of the reform actions in the health care sector.

Transparency, analytical approach, precision, accuracy, currency, teamwork and availability have turned out to be the main strategic factors that have enabled the positive effects of a comprehensive national program for one particular disease. Higher quality of service, cost rationalization in the treatment of patients with Diabetes Mellitus, the National Register and the National Guide to Diabetes Mellitus, systematic monitoring of the results of the implementation of Diabetes Management Program and constant education through the work of the diabetic workshops on local, regional and national level, present the main effects of the conducted study. Our experience shows that a multi-disciplinary approach to science and business represents the only sure path to sustainable development of scientific and professional programs and projects, as well as the systems in which they are implemented.

The study used three types of management (Albrecht, GL, Peters, KE, 1995, Ewers, M, Schaeffer, D, 2000, Greulich, A, et al., 2000, Hardt, R, 1998):

1. Case Management,
2. Utilization Management,
3. Disease Management.

The first type covered the achievement of optimal quality of service in Diabetes Mellitus, the continuity of modern diabetic care and control of the use of human and material resources. The second type encompassed optimal utilization of available strategic, human technical and economic resources, as well as the effects of the application of modern diagnostic and therapeutic diabetic principles. Target groups were physicians, medical institutions, the population and the type of diagnosis. The third type, that consisted of prevention, diagnosis, therapy, rehabilitation and care in

Diabetes Mellitus, dealt with the identification of high-risk patient groups, the medical condition of the identified person, therapy plan and approach to the disease, and the adoption of the treatment plan and the type of financing by the patient .

From the perspective of public health, Diabetes Mellitus in our study proved to be, both socio-medically and health-politically, the most important disease of modern times. Vertical reform of diabetic care based on scientific evidence and systematic record of epidemiological and clinical parameters with a defined plan of implementation, monitoring and evaluation of the National Program for Diabetes Mellitus represents the only effective way to completely control such a multidimensional disease both on medical and on health-political and economy plan. Since Diabetes Mellitus is a systematic disease controlled by the state apparatus through Health Insurance Fund and the responsible Ministry in the Government of the country concerned, the Diabetes Management Program represents a perfect example of a positive relationship between medical science and business.

CASE STUDY CONCLUSIONS

The main results of our Diabetes Management Program are the financial savings of over 30% for treating patients with diabetes in the region of RS (B&H entity), the reduction of diabetes-induced complications for 10-15% as well as the increase of the level of diabetes protection in the first region with a 100% pen-insulin therapy (2002) in South East Europe and with the first National Project for one particular disease (2002-2012), besides Spain. Conclusions of our study include the achieved objectives of Diabetes Management Program, as well as the objectives within the health sector reform:

A. Accomplished Diabetes Management Program Goals

1. National Register for Diabetes Mellitus
2. National Guide for Diabetes Mellitus
3. Protocols for Diabetes Mellitus
4. Guide for Diabetics
5. Referral Center for Diabetes Mellitus
6. Regional Centers for Diabetes Mellitus
7. IT Center for Diabetes Mellitus
8. Epidemiological Studies
9. Clinical Studies
10. Cost Effectiveness, Cost Benefit and Cost Utility Analysis

B. Diabetes Management Program and Health Care Reform Goals

1. Developmental National Program for one disease
2. Scientific leadership and vertical health care reform
3. Human resources development
4. Common education of physicians and pharmacists
5. Common education of primary and secondary health care
6. Education of diabetic patients and high-risk-population
7. State, regional and local coordination
8. Health care reform and sustainability of the Program

***DISEASE MANAGEMENT LEADERSHIP:
MULTIDISCIPLINARY APPROACH IN HEALTH
MANAGEMENT EDUCATION SYSTEM***

Development strategy of the health management education contains two interactive functions: Health Management Education System (HMES) and Health Policy Development Program (HPDP). We suggest the following undergraduate, graduate and doctoral degree proposal in the field of the health management education:

1. Undergraduate studies in Health Management**• The Basic Principles of Health Management**

Lectures:

1. Health Management Definition
2. Functions of the Health Management
3. Communication Systems
4. Monitoring, Control and Evaluation
5. Decision Making And Problem Solving
6. Conflict management
7. Interpersonal Coordination in the Health System
8. Management and Motivation
9. Definition of the Successful Manager
10. Strategic Planning and Management
11. Management of the Science in the Health System

Workshops:

1. Health Care Reform
2. Leadership
3. Policy Making Analyses
4. Opportunity and Obstacles in the Health Development
5. Public Private Partnership

• **Management of the Health System**

Lectures:

1. Goals and Strategy of the Health Policy
2. Organization of the Health System
3. Health Financing
4. Integrated Health Care
5. Management of the Integrated Delivery Services
6. Control Knobs of the Health System
7. Health Promotion, Prevention and Social Marketing
8. Management of the Profit and Non-profit Organization in the Health Sector
9. Criteria of the Health System Management
10. Public Health Research and Development
11. International Coordination, Globalization and Health

Workshops:

1. Strategy Drafting
2. Development Programs and Projects
3. Models of the Integrated Health Care
4. Information Technology in the Health Sector
5. Disease Management

2. Professional, Master and PhD Studies in Health Management

Professional (7 topics):

- Primary Health Care Management
- Hospital Management
- Public Health Management
- Nursery Management

- Pharmaceutical Management
- High Technology Assessment
- Human Resources Management

Master(3 topics):

- Health Policy
- Health Care Payment Systems
- Quality Improvement Models In Health Care

PhD(2 topics):

- Health Policy
- Health Economy

Health policy development strategy is very closed connected with the development of the HMES in each countries of the European region (Busse, 2000, Busse,Wismar,2002, Kckbusch,2002)). The management of our development strategy is guided by objectives, health care reform and leadership in our health care system. Development objectives of the HMES include activities that are necessary for a new and modern role of the health system which have to be accomplished by our governmental and non-governmental sector.

Objectives are the following:

1. Objectives in the area of education
2. Objectives in the area of medical science and technology
3. Objectives in the area of improvement of organization and status of medical profession
4. Objectives in the area of organization and functioning of public health
5. Objectives in the area of enhancement and fostering of the ethical and bioethical principles of profession.

Strategic framework of the HMES implies the organization of the education system generally consisted of the following functionally and conceptually interconnected segments: structure, system, process, culture and human resources.

HMES structure implies the next development parameters:

1. Efficiency and functionality
2. Decentralization
3. Network of health and education authorities
4. Geographical distribution
5. Public-private-partnership

HMES is a specific education subsystem within public health sector which serves to accomplish the collaboration between health professionals and community, as well as doctors and patients. Advancement of professional collaboration, formation of teams, managerial network and research activities represent the basic components of systemic approach to work of the Department for Health Management. The reform of public health system allows for transparency and interconnecting of all intended activities in organizations, institutions and societies. Optimal results of planned activities in the process of work of the HMES are accomplished by formal and informal connections between health and education system. Key points are feasibility of the health management study and knowledge applicability in practice.

Cultural approach of the HMES depends on tradition, demographic changes and socio-economic environment (Klein, 1989). In Serbia, Serbian Medical Society try to take over the leading position in transformation of cultural milieu, with a special aspect not only to health but also to political, sociological and educational culture. Special phenomena of health culture development are the culture of strict values in public health, culture of selection of top-quality personnel, culture of knowledge, culture of innovation, culture of approach to health care and culture of rapport with patients.

Personalization of the health management profession in health care system and leadership of the health managers in the decision making processes are basic goals of the HPDP (Ritsatakis, A, et al., 2000, Van de Water, HPA, Van Herten, LM, 1998). That assume the establishment of institutional and personnel authorities and values in the public health care at all levels. Hierarchy of values, demands and responsibilities is closely associated with the position of health authorities in relation to health care system, where knowledge and talent represent irreplaceable values of HPDP and development strategy of the health management.

The implementation of this strategy implies the control and evaluation of success of accomplished goals and development guidelines. Basic factors of action plan monitoring are the time, human resources, material resources and expenses required for realization of HMES and HPDP. The problems that may arise regarding the implementation of the strategy are the consequence of disproportion between HMES requirements and future prospects of the health system reform development. To overcome the problems the following actions are needed:

- to design more effective and transparent health systems,
- to adjust the new standards and norms,
- to implement new technologies,
- to build a health management expert network for support of strategy,
- to improve the effectiveness of communication,
- to institute the rational access to resources,
- to define the better system of stimulation.

Fundamental mission of the Health Management Experts in preserving the dignity of medical profession may be completed only through management of the long-term visions of the European health care system development with clear political and financial support, legality of procedure and socio-cultural consensus in the European region(Wismar,Busse,2002).

DISEASE MANAGEMENT LEADERSHIP: INTEGRATION AND COLLABORATION IN HEALTH SYSTEM

Management and leadership are important for the delivery of good health services. Although the two are similar in some respects, they may involve different types of outlook, skills, and behaviours. Good managers should strive to be good leaders and good leaders, need management skills to be effective. Leaders will have a vision of what can be achieved and then communicate this to others and evolve strategies for realizing the vision. They motivate people and are able to negotiate for resources and other support to achieve their goals (Jago,1982, Kotter,1990, Kirkpatrick,Locke,1991, Lenway, Rehbein,1991).

Managers ensure that the available resources are well organized and applied to produce the best results. In the resource constrained and difficult environments of many low – to middle-income countries, a manager must also be a leader to achieve optimum results. Leaders often, but not necessarily always (Bass, BM, 1990):

- have a sense of mission,
- are charismatic,
- are able to influence people to work together for a common cause,
- are decisive,
- use creative problem solving to promote better care and a positive working environment.

In most health systems, health facilities are linked to the national health system through the district and therefore are accountable to district management teams. All operational health system activities are implemented via the district including drugs and commodities procurement, human resources, infrastructure, and technical support. Local facility managers and district managers must have clear lines of communication, and ensure optimal off-site support and supervision, and that reporting to districts is accurate. Facility managers must communicate all challenges to the district level to make sure there is continued service delivery at facility level. District managers should communicate new policies and management tools to local managers to ensure compliance. A strong relationship between the two levels is key to sustained service delivery at the facility level (Abdelhak, et all, 2001).

Health facilities exist for the sole purpose of providing health services to patients in communities. Therefore managers need to ensure that client satisfaction is of utmost importance. This is why all staff must be trained to understand patients' rights. Staff should not be judgmental and must provide information to patients so they can make informed decisions regarding treatment options, as well as lifestyle and behaviour modifications that may be required to improve their health status. Staff must also be able to assist patients to understand their responsibilities, including:

1. to live a healthy lifestyle,
2. not to participate in risky behavior,
3. to participate in their care by attending appointments, asking questions, and
4. playing a part in their own health improvement,
5. to be open and honest about the problems they face,
6. to have the best health outcome by adhering to treatment regimes.

The attitude of staff towards patients influences patients' willingness to obtain access to and continue care, to treatments, and to accept and follow health promotion messages. Negative staff attitudes reduce patients' self esteem and motivation, reducing their will to seek services.

Appropriate tools should be used by the health centre and district supervisors to assess patient satisfaction, or to assess how patients perceive the health establishment in general (Grant, 1989, Kongstvedt, 1996, Preuss, KL et al, 2002).

These include:

1. Client satisfaction surveys,
2. Suggestion boxes,
3. Community consultation committees.

The concrete measures ensure patients' voices are heard. Anonymous mechanisms for eliciting suggestions should be encouraged, such as a "suggestion box" placed in the waiting area (with paper and pen), in which patients can put anonymous messages.

Successful managers/leaders use calendars and to-do lists to structure time demands and to ensure that no important tasks are forgotten. Important tasks and events are best kept on a yearly wall calendar, on which each line represents one month, with each day having one field. As a manager and/or leader, you should include the following information on this planner (De Cenzo, D., Robbins, S.P., 2010, Dessler, G., 2011):

- Important dates on which action on contractual issues is needed, absences of team members (participation in training, vacation), a time slot for a yearly

patient satisfaction survey, time for supervisory visits and community health committee meetings.

- Managing information: time slots for preparation of routine patient monitoring reports, due dates for progress reports, dates of important meetings with partners.
- Managing finances: budget preparation and reporting deadlines, financial monitoring visits.
- Managing hardware: hardware inspection dates, maintenance dates, ordering deadlines for supplies and hardware.
- Managing care: review and revision of current care and prevention routine, time slots for checks on adherence to patient and staff safety policies

Integration and collaboration in public health sector is a part of the modern approach to the health management development from health care institutions to different actors in public health systems, from formal organisations to informal and virtual organisations like alliances, networks and partnerships and from organisational structures to processes of organising within and between different organisations.

Collaboration generally can be:

1. Interdisciplinary: between different fields of activities and specialties.
2. Interprofessional: between different occupational groups and professions.
3. Interorganisational: between different authorities and organisations.
4. Intersectoral: between different sectors of the society with different orientation and different ownership.

Health sector as a very sensitive area of the human services has 4 different fields of collaboration:

- between different clinical specialties (care pathways),
- between primary care and secondary/tertiary care,
- in rehabilitation and
- in care of the elderly, psychiatric care and other forms of community care.

Communication skills, good understanding of the health system management, problem solving and decision making experience and leadership capability are the basis of all integration and collaboration processes. Using collaboration advantages during health system reform we can improve implementation outputs, outcomes, the access, quality and continuity of different services, and, finally, we can counteract the fragmentation of the system due to increasing specialisation and professionalisation and use existing resources in a more efficient way.

Collaboration is difficult and problematic, especially in the countries with political system and economy in transition. Critical points are great investments in

time and energy , both to establish and to maintain collaboration, and collaboration costs before it pays off .

There are many structural, cultural and individual barriers to collaboration:

- Different rules and regulations, responsibilities and budgets,
- Different professional and organisational cultures, languages etc.,
- Different attitudes, values and commitment to collaboration,
- Territoriality: defending and fighting for non-physical territories.

We can talk about different models of collaboration like meetings for coordinated planning and exchange of information, agreements on clinical guidelines, treatment programmes, care pathways, cooperations between case managers, liaison functions, coordination groups, multidisciplinary teams and different working/expert groups and consensus meetings regarding co-location, financial coordination, common information systems etc. So, we have continuum of collaboration from autonomy till fusion of all the activities (Broeskamp-Stone, U, 2002, Schwartz, FW, 2003).

For the improvement of the collaboration in public health is very important to think about the next facts:

- Health is created and maintained mainly outside the health sector.
- There are many other sectors of the society that are important for health.
- In order to improve public health, it is necessary to increase intersectoral collaboration.

There are many evaluations, more or less scientific, of different forms of collaboration. Most of these have evaluated the process rather than the results of collaboration. The process evaluations show positive effects on the commitment and competence of the professionals involved. Some evaluations show positive results for the patients/clients, while others show no improvements, at least in the short run.

Integration in public health is a part of the ongoing integrated processes in the health care systems in European region. The goals of integration in health sector are quality improvement, patient safety, better cooperation between different health care levels, rationality in the health economy, reduction of the positions in health system and establishing of the effective link between medical and nonmedical flow in the health sector. Regarding some kind of hierarchy, health market and network we can speak about vertical and horizontal integrated processes. Vertical integration is integration through control and coordination and horizontal through voluntary collaboration. Among them we know 4 functions:

- Cooperation,
- Collaboration,
- Coordination,
- Contracting.

In conclusion is important to emphases again the very active role of the integration and collaboration in the modern health care system development. For the future the following will be crucial:

1. The importance of a more holistic view of the patients or clients.
2. The importance of knowing the tasks and the competence of other professions and organizations involved.
3. The importance of being able to compromise and even give up parts of the professional or organizational territory for a better total result.

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HUMAN RESOURCE MANAGEMENT FROM THE PERSPECTIVE OF MODERN LEADERS IN SPORT

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Abstract: Modern leaders are persons that have the ability to influence a certain, circle of people, smaller or bigger, depending on the field of action, the situation they may be in, in which they find themselves, which goals they aim for, etc. Their vision and ideas on how to achieve success leaders in sport convey to their closest associates, senior level executives, board members, coaches, athletes and quite often, to sports public. Kastratović mentions that the style of leadership to be selected, depends on the characteristics of leaders' subordinates, preference of managers towards the realization of the task or social factor, and the particular situation in which the organization is, Edita Kastratović (2008). Constant development of sport imposes the need for scientific research of all phenomena related to the sport, in order to elevate this area to a higher level. The importance of leaders in sport is inevitable, as the driving energy they have is one of the most significant potentials of any sports team.

Key words: Leaders, Sport, Styles, Modern

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INTRODUCTION

Leadership is a complex process whereby an individual influences a group of people, so they accept his vision and accomplish it together. Leadership implies influence as a key factor in achieving the objective (vision). Given the fact that the influence of a leader refers to a group of people (bigger or smaller), leaders must make use of human resources management principles in order to achieve previously set goals. Modern leaders in sport must recognize the importance of a systematic approach to the implementation of the tasks set for human resources sector:

- Planning future human resources to meet the needs of the organization and economy trends;
- Recruitment of a group of candidates with specific qualifications to achieve higher productivity;
- Selection of a number of candidates with particular education and eligibility to suit obligations and responsibilities of the job for which they apply;
- Orientation and socialization of new employees in the organization in terms of providing information about the organization, its objectives, policies, rules, working conditions, as well as the expected operating results of the newly employed;
- Training and development aimed to improve performance and develop the skills required for the job;
- Review of the results and determining the compensation for the achieved results, such as bonuses, health care and other advantages;
- Promotions, deployments, degradations and dismissals, i.e. providing incentives to achieve successful results, greater experience of employees, or punishing employees for violation of rules or failure of performance, respectively, (Kastratović 2008).

Leaders of sports organizations must assess the needs of the specific sports organization related to its human resources (the necessary number of athletes, managerial staff, and technical staff). Given the trend in the application of new tactical and technical demands of modern sport, leaders must make assessment and corresponding plans for procurement of required staff. Recruitment of appropriate (planned) sports staff includes involvement of a certain number of specific athletes for which the sport organization has a need (for example, in football - attacker or defender, goalkeeper, midfielder). It is necessary to acquaint the recruited persons with all aspects of the sport organisation to which they came. They must get to know all the personnel and the other staff in the organization, with whom they will have direct communication in within their daily activities. Leaders need to provide their proper socialization and the establishment of good relations among all staff.

Training of staff is an important process in competitive environment of sports organizations, wherefore the support of the leaders in this segment is required.

For a better understanding of human resource management in sport, it is necessary to define the leader in sports appropriately in terms of their characteristics and leadership styles they apply. Research related to the phenomenon of leaders and leadership styles differed according to the assumptions (hypotheses) that served as basis, but also to the conclusions that have been reached on the basis of data obtained from the research. Researchers have come up with different findings, which clearly confirms the fact that the leadership styles are complex phenomena in an even more complex area, that of management. On the basis of all these studies, leadership styles theories were created that differ, more or less. Researches on leadership styles in our country are rare.

Taking into account the constant development of sport, scientific research of all phenomena related to the sport are necessary, so that the area could be elevated to a higher level. While leadership in sport has been largely present, it is only the awareness about the presence of leaders that has improved. As in other areas, leaders in sports are visionaries, persons with vision of sports success, capable of conveying their vision to the people that surround them. Leaders in sport convey their vision and ideas on how to achieve success to their closest associates, senior level executives, board members, coaches, athletes and quite often, to sports public. Leaders' influence is magnetically attractive and it often happens that people with hardly any leadership potential "fight" for the leaders' position in order to be able to pursue their interests.

Problems in the sport arise exactly in the situations when quasi leaders lead sports organizations astray or enforce their leadership role on basis of superficial aspirations and personal interests. Modern leaders in sports must be aware of their importance and constantly improve to make their leadership qualities maximally utilized. They must possess a wide range of features and capabilities needed in the process of keeping to the set goal. Circumstances in which modern leaders are significantly differ compared to the circumstances of the past, so the ability to adapt to new trends, technical developments, global changes in sport are of crucial importance for the success of organization they belong to. Tomić states that sport managers in the 21st century will experience an expansion in terms of professional engagement, but also in sense of specific features they must possess, in accordance with the needs of modern sports, (Tomić 2001).

Modern leaders must recognize the importance of using modern technological innovations as a way of gaining dominance in terms of quality and competitiveness. New information technologies provide better access to human resources management:

- Use of electronic mail and the internet (establishing IT relationships within an organization) for communication and information;
- Rise of the internet as a new way for recruiting;

- Development of internet access to training and learning;
- Use of computer database for storing information about employees and report writing;
- Application of computer technology to usual tasks, such as human resources planning and administration, (Torrington, Hall and Taylor 2004).

THEORETICAL CONSIDERATIONS

Leaders are persons with the ability to influence people around them in terms of winning others over, with determination to follow the leader on his/her path to achieving goals, (Jovanović 2007). They are persons with the ability to influence a certain group of people that may be smaller or larger, depending on the area of activity, situation they may be in, the goal they may aim at and similar. Leaders are always looking to the future and present the driving force of the group they belong to. They are never satisfied with immediate effect and always strive for the better. In the pursuit of accomplishing their vision, they require support of people who sincerely believe in the goal present by the leader. Support of the people, commonly referred to as followers (those who follow someone's idea), they win over by their ability have an impact on people. The greater their impact and the stronger their power of persuasion, the more their followers are committed to working together towards the achievement of the previously presented and defined goal.

Leaders have charisma that attracts followers like a magnet, and together with them they achieve their goals. Only persons who are mentally strong enough can be leaders. Leader must equally bear criticism and praise, stay calm and collected in every situation. Lee states that a leader must be ready to leave the conventional thinking and actions, prepared to say NO and firmly defend his/her position that they strongly believe. Unlike managers who operate under and comply with the rules, leaders run the risk of destroying the existing and setting their new rules, (Lee 2003).

One of the modern leaders in sport is Dejan Petković, nicknamed "Rambo". He is a Serbian football player of incredible physical and technical characteristics, who, in the period when talented players massively went from Brazil to Europe, was consistent with his beliefs and defying the then tradition, went from Europe to Brazil. Completely dedicated to football, Petković became one of the best players of Brazil and the idol of the new generation. With his leadership abilities on and off the field, Petković the teams he played in to the league titles. "Rambo" experienced something that no other player in the world did, to have both the fans of his club and those of the opposing team cheer him and applaud at the same time!

Adizes does not believe in the theory which says that people are born predisposed to be leaders. He formulates such views as "managerial racism." In his opinion, people have the potential necessary for a good manager. Whether any of them will take advantage of this potential and develop it to the level of practical applicability depends on both internal and external factors. He believes that the environment in which people work may enhance or destroy the potential abilities of an individual, (Adizes 2004). Leaders always look forward. Their look is aimed for tomorrow, while they listen to today and project future events. Imagining the path they will take, they speculate on the danger zone on their way and define alternatives as detour possibilities overcoming the potential "bottlenecks". They put their ideas to the most difficult challenges in order to fully examine it and prepare it for a presentation for the followers. Leaders are measured by whether they recognize the problem in time, before it becomes harmful, (Maxwell 2005). In sport, like in other areas, leaders stand out with their abilities and position themselves in sports organizations (clubs). Tomić states the specific incidence for the sport, in terms of having several leaders in one organization, (Tomić 2001). He underlines that the leaders can appear at the highest top level, but also at the operational level as coaches. This specific feature of having several leaders at different levels within the same organization enables the synergic effect, which results in a better final performance. It is much easier for athletes to identify and become attached to a leader who is part of them, at their level - team captain, then to a sports director or owner of the club who are at the top of the sports organisation. Having more leaders at the same level is also specific for sport. In modern sport, you can have more leaders in a sports team without their responsibilities ever overlapping:

- Players (technical) leaders - individuals who stand out with their sports skills and capability to organise tactical ideas of their coach
- Social leaders - individuals who stand out in terms of extensive social intelligence and the ability to animate the team off the field or court (during their traveling, moments of socializing in the hotel where they are accommodated, in organization of social games as a way of relaxation and unwinding before an important match, etc.).

Lazarević states that there are opinions that certain formations in the team have their own leader (tie line and the offensive line, defensive line) (Lazarević 2001).

CHARACTERISTICS OF LEADERS

Adaptability is one of the hallmarks of good leaders. Considering historically known and recognized leaders, one notes that most of the credit for their success was due to their ability to adapt to the situation. Roberts describes Attila the Hun and his ability to adapt. Attila chose his clothes carefully to adapt to the situation in which he was. In each situation of battle and fight, when he was supposed to intimidate opponents and show the cruelty and barbarism, he knew to put on, together with his followers, the most barbarous furs, coats and other clothing. When they held their festivities, Attila gave the example to his followers, wearing the most solemn gowns made from the finest leather. In hunting, it was necessary primarily to be agile and precise, which in itself required adaptation of hunters in terms of adequate clothing and wearing a bow and arrow especially made for game hunting, (Roberts 2003). In modern sport as well, adaptability is evidently one of the traits in leaders. Modern leaders in sport possess ability to adapt to the situation. An example of this is the football coach Jose Mourinho (Jose Mario dos Santos Felix Mourinho). As a coach, Mourinho managed with his players to win the Champions League twice, the largest and most important football competition in Europe. He was nominated the best coach of the world by the International Federation of Football History and Statistics (MFFIS) for the seasons 2004/05 and 2005/06.

He showed his adaptability in the semifinals of the Champions League in the 2009/2010 season against Barcelona. Aware of the quality conscious of the FC Barcelona and the way their players lead the game, he changed the style FC Inter played specifically for that semifinals double match. Mourinho was aware of the fact that Barcelona should not be allowed to create a game of their choice, knowing that no opponent beat them in that way. By studying the game of the opponent in detail, their qualities and weaknesses, Mourinho devised the tactics for his players that were carried out. He requested his players to play defense most aggressively, forcing the error of the opponents. Mourinho recognized and used the "weapon" that was typical for the opponent team (aggressive defense all over the field until the opponent makes a mistake). By using this "weapon", he surprised and defeated the opponent. This approach precisely demonstrates the importance of detailed analysis and preparations, but also the willingness to adapt to a given situation.

Maslow stresses the need to use a different style of leadership in crisis situations and in those that are not. In crisis situations, when you need to reach a proper decision, leaders make authoritarian decisions without discussing it with others. Leaders must act quickly and give orders to their followers who would perform those tasks as soon as possible and thus influence the crisis solution. In situations where time is not a limiting factor when making strategic decisions, leaders apply participative leadership style and make important decisions in accordance with the followers, (Maslow 2004). In crisis situations leaders take on the responsibility, as it has been proved by Lionel Messi (football player of FC

Barcelona and National Team player of Argentina) in the return leg of the Champions League quarter-finals against the PSG Team (Paris Saint-Germain). In spite of the fact that he had not recovered fully from his injury, he entered the game in the second half and organized the attack in which he made the tying goal (goal that enabled them pass to the semifinals of the competition).

Commitment is a trait that considerably characterizes a leader. Only leaders fully committed to achieving their goal can instill confidence to their followers. An excellent example of a leader committed to his goal who managed to gain confidence of his teammates, based on his commitment and perseverance, was Cristiano Ronaldo (professional football player of Real Madrid and National Soccer Team Player of Portugal). He was completely devoted to football and he proved it by staying each time after training to practice his shooting. Practicing for hours on end, Ronaldo got his shot on goal to perfection, and thus elevated his talent to a higher level. Thanks to his commitment, Ronaldo attained admirable precision and with such quality game earned the trust of his teammates, fans, and all football supporters.

Integrity represents harmony of words and deeds. Leaders have to corroborate their vision and their words with works. If followers are convinced in concrete results as realization of previously presented ideas by leaders, they will gain full confidence in their leader and, with sincere faith and loyalty, stand behind him. One of the best tennis players of today, Novak Đoković earned the trust of his teammates, audiences and all tennis fans, thanks to his leadership skills. His game always portrays his words and his rational understanding of the situation at all times. Đoković proved his integrity gained over the years when, after he announced that he would give his maximum and enable the Serbian National Team to qualify for the Finals of the Hopman Cup, he fulfilled his promise by winning over the Belgian Ruben Bemelmans. In that way he showed his leadership skills and with his charisma and fighting spirit he led his teammates into the finals.

LEADERSHIP STYLES

Kastratović states that the leadership style to be selected depends on the characteristics of subordinates, managers' determination to the realization of a task, or social factors, namely, the particular situation in which the organization may be, (Kastratović 2008). According to Lewin and his associates (Lewin, Lippitt and White), there are three basic leadership styles: autocratic, democratic and free (*laissez-faire*), (Rot 1980).

Modern leaders in sport have to identify the situation and according to prevailing factors, evaluate and apply the appropriate leadership style. In crisis situations, when you need to make a quick decision, the leader should take responsibility and implement the autocratic style. Autocratic style in chaotic and

anarchic situations provides the best results with regard to the fact that it enables the leader to make a decision in a short period of time. In situations where the circumstances are much better, leaders can implement democratic or free style, while achieving favorable results.

In the literature, leadership styles are divided into a people-oriented and task-oriented style. This division is based on the functions of leaders aimed to maintain interpersonal relationships and to solve tasks. Modern leaders in sports must be task-oriented, due to the fact that modern sport significantly differs from the period when sport was mostly a game. Modern sport has widely assumed the form of business, the principles of which do not deviate from their origin - capital. The success as an imperative imposes a need for leadership orientation in that direction. Modern leaders must find a balance between task-oriented and people-oriented style. Their exclusive orientation towards people has no prerequisites for survival in the unforgiving conditions of modern sport, while being solely oriented to tasks is successful only in the short term. The characteristics of exclusive orientation towards tasks gradually leads to an accumulation of discontent, and ultimately to a drop out of high quality staff.

Recently, the authors are increasingly oriented towards the definition of leadership styles through roles the leaders play in their organizations. Adizes addressed the issues of leadership styles by observing the roles they perform in their daily activities. Adizes defines styles of good and bad leadership by looking at them through the four basic roles: performance (P), paperwork/administration (A), entrepreneurship role (E) and the integrative role (I). Adizes assumes that there are no perfect leaders and that the success of leaders depends on a combination of roles in terms of their qualitative value. Studying the leaders within his research, he discovered that they play some or all roles and that they have developed them to varying degrees. In the opinion of Adizes, depending on the combination of roles and the level of their development, the leaders may have good or bad leadership styles. Poor leadership styles are characterized by the existence of only one developed role, while the remaining three are undeveloped (in any combination). Good leadership styles are characterized by the requirement of having all roles, even on a minimal level of development. Every leader has a certain leadership code, which represents a combination of the four roles. Roles within the code are presented in Roman letters representing the first letters of the role's name. Very developed roles in leadership code, Adizes marked with capital letters (PAEI), poorly developed roles were indicated by small letters (paei), while for a lack of roles he put dashes (----).

In modern leadership there are the following styles: transformative-transactional leadership, charismatic leadership, team leadership, moral leadership, online leadership, cross-cultural leadership.

Transactional leadership refers to directing and motivating the followers to the goals set, to explaining the duties and job requirements. In sports, the transactional

leaders can be recognized in the form of a coach who, through their strategy try to explain the duties of each athlete individually in order to achieve the ultimate goal - winning. Transformative Leadership implies influence of leaders based on the inspiration of followers to point their own interests in the direction of the organization's benefit.

Charismatic leadership refers to the impact of an individual to the group, which is realized on the basis of self-confidence of the individual (leader), where the effects of the impact are reflected in the behavior of followers¹¹⁶. An appropriate example of a modern sport charismatic leader is the volleyball player Vladimir Grbić (Serbian National Team player and professional volleyball player in many clubs of Europe and the world). As a Team Captain, Vladimir used his charisma to motivate his teammates. The energy he showed on and off the field connected all his teammates on their way to the same goal - the medal. His temperament and self-confidence were the springboard for the whole Team and the lighthouse on their way to the goal they set.

Team Leadership entails influence of an individual to a group of followers using the appropriate knowledge and skills. Team leaders need to find a balance in terms of their influence on their team's work. They need to recognize the necessity imposed by the situation and to decide accordingly whether to influence the team's work or to withdraw and hold back. Team leaders exercise their influence on the followers through a number of roles: the role of coaches, agents, conflict managers and the role of connection with the outside world¹¹⁷. Sports coaches are typical examples of team leaders in sport. They account for all of the mentioned roles within their influence on their followers (athletes).

LEADERS IN SPORT

Leaders in sports can appear in different roles. A wide variety of roles and the emergence of leaders in many fields describe the sport as a complex area in which both current and future researches are necessary in order to establish some theoretical platform, as well as any practical implementation of new knowledge. As in other areas, groups form in sports in which individuals stand out based on the success they achieve. Unlike in other areas, dominant prerequisite in sport for obtaining a role of the leader are sports skills. This means that a person as a leader contributes to sporting achievements of the group with their sports skills.

In the development process of the sports group certain relations are established, manifested in taking certain positions and roles by each member of the

¹¹⁶ *Ibidem*, str. 433

¹¹⁷ *Ibidem*, str. 435

group. At the very beginning of the process, a person stands out that contributes to the success of the group by their behavior (Lazarevic, 2001). These are individuals who are distinguished by their technical skills (sport skills - good technicians, athletes who achieve the highest score).

In a situation where the person is an active athlete, contributing with his/her skills to the achievements of a sports team, leadership is expressed through the role of a captain. If a person has been an active player, and if their sports skills proved that they can successfully perform the leadership role as a team captain, the most common case of transfer of leadership from that on the field to leadership off the field is reflected in the appointment of that person for a coach or for some of the management functions of the club. In such situation, the player-leader must transform and adapt to a new role of leader-coach or leader-manager (official of the club). If such a transformation is not done in the best possible way, or if it is not performed in a certain (usually very short) time frame, there is a possibility that the organization may get into problems due to inadequate leadership.

We are witnessing many examples where successful athletes (leaders in the field - captains) completely failed as a leader-coach or leader-president of the club. Many clubs tried to resolve the situation by instituting the function of a sports director and thus specifying the decision-making process solely to the sports domain (scouting, selection of players, selection of coaches, etc.). Given the fact that modern sport completely came close to economy to become one of the most profitable areas, the balance between sporting and economic success of a club depends primarily on communication and cooperation between managers of sports and economic sectors.

Often the question is whether it is better to have a professional sports club manager manage a club or a professional athlete with years of sport experience who achieved the maximum in sports terms? The most appropriate answer to that question would be reduced to a compromise, in terms of sports knowledge and experience on one and management skills on the other hand. In other words, an ideal leader of a club would be a successful and experienced athlete with managerial education and leadership skills. This can be achieved through a suitable education of athletes in the field of sports management.

Leaders in sports occur among athletes who are the main actors of all sporting events. Each team with a real leader among players is mentally more stable than the team in which influences of different individuals constantly intertwine. The leader of a team is a beacon illuminating the way of the team towards their goal. It is a great relief for coaches to have a leader in their teams in both tactical and psychological sense. That is the reason why coaches observe their players as through the lens during their sports and psychological development, recognizing individuals who have a predisposition to, and the desire and motivation to become leaders and lead their teams to victory. An example of a real modern leader in sport is that of Dirk Nowitzki, a professional basketball player of Dallas Mavericks in

the NBA League, a player of amazing physical abilities, with extreme precision and calmness even in the most important (crucial) moments of games. He is the leader of the Dallas basketball team, but also in the German National Team he plays for. Nowitzki equally well achieves points and assists his teammates, making him stand out in comparison to other successful basketball players. Crowning glory of his hard training and sacrifices was the Championship Ring in the NBA League (2011) with his Team Dallas Mavericks with the team (www.basketball-reference.com).

Coaches can also be leaders. They can have a vision of sports result and present it to other coaches, top-level managers, club management and athletes winning them over with their authority and creative idea. In that way, they win the followers of their vision and everyone contributes to its achievement, (Tomic, 2001). The coach that represents a real leader of modern sports is Dušan Ivković. Ivković is one of the most successful basketball coaches in Europe with the greatest number of trophies won. All the expertise and the experience he acquired by many years of hard work, he selflessly passes on to young players and coaches and thus contributes to the development of European basketball. Numerous medals from international competitions (3 gold and 1 silver medals from the European Championship, a Gold from the World Championship, Silver from the Olympic Games and the silver from the Universiade) (<http://sr.wikipedia.org/sr>) affirm his leadership qualities and his ability to form and lead basketball teams to the greatest successes.

In addition to athletes and coaches, leaders appear within the ranks of top-level managers, who see the vision of sports success as a segment of the entire mosaic of a sports organization success. Their horizons stretch beyond the borders of sports and are often result of intertwined actions of sports, politics, culture and economy.

CONCLUSION

Researches in the domain of leadership styles in our country are rare, which presents a serious obstacle for theoretical and practical development of the area. The constant development of sport imposes the need for scientific research of all phenomena related to the sport, so that the area is elevated to a higher level. Numerous researches and abundant scientific practice of researchers from the developed countries of Europe, America and Asia are the only support to professional coaches just in terms of implementation of sports knowledge. The Government should play a more important role in the development of both sports and the science. Scientific research and conclusions will enable the development of sports in Serbia in terms of training and therefore the performance.

Basis of sports is formed by the results and their measurability. Sports emerged from the game, and distanced itself from it thanks to the measurement of results and the competitive goal. Sociological principles in sport increasingly emphasize the importance of interpersonal relationships in sport organizations and their influence on the results obtained. Managers gradually accept the importance of collectivism without any tendency to marginalize individualism. The individual quality in its full glory comes into play precisely on sound pillars of collective quality. Leaders are people who recognize the importance of collectivism and support it fully. They are aware of the fact that only a strong team can elevate the quality of a leader to the level sufficient for achieving significant results.

The importance of leaders in sport is inevitable because the driving energy they have is one of the most important potentials of any sports team. It is necessary to do everything possible in order to create a favorable environment in which leaders will stand out, but also enable transparent expression of the importance leaders have. Transparency allows all participants in sport to understand and accept the importance of leaders in sport and support them to the maximum.

Leadership is not imposed, it is welcome. It is necessary to systematically approach quality planning and organizing of the way sports organizations function. Thorough approach must be based on the development strategy of sports organizations, which includes qualitative and quantitative basis in working with the youngest age categories in sport. Leaders in sports organizations must recognize the importance of human resources in the overall approach to the implementation of the strategy. Only organizations that properly plan their need for qualified personnel in the management of human resources can expect long-term positive effects and success in the field to which they belong. Leaders, who are at the top of the sports organizations in a hierarchical sense, need to put maximum energy towards recruitment and hiring of quality staff at all levels (managers, coaches, athletes). Modern leaders in sport must be guided by the idea to recognize and engage the leaders of each of the mentioned levels. Sports organizations that strive

for top-class achievements need leaders in all forms (leaders-athletes, leaders-coaches and leaders-managers).

The impact of leaders on a group is a complex multi-disciplinary phenomenon. Modern leaders in sport must recognize the importance of a comprehensive insight into the problems that arise within the human resources management. They must take into account a wide range of influences of various factors (psychological, sociological, cultural, political, social - economic) that are present in managing all aspects of human resources. It is the quality of modern leaders in sport (leaders at the top of the sports organizations), made up of multidisciplinary competence that is a prerequisite for a proper management of human resources in a sports organization. Only leaders with such approach towards improving their knowledge and skills in multidimensional scientific sense, are capable of making the proper influence on the group they lead. Studying leadership in terms of features and styles that distinguish leaders is a prerequisite of proper understanding various approaches of these leaders to the basic elements of human resources management (planning, organization, development, management, control). The study of leadership as a phenomenon of modern sports environment is a challenge for scientific research centers, and the sports organization.

Modern leaders in sport must be willing to adapt their leadership style to modern needs and circumstances. Adaptability must be the basis of their correct perception of global sports market, as well as political, social, cultural and others influence of the environment. Interdisciplinarity is imposed as a condition of appropriate economic and political context of modern sport, given the obvious impact of the global economic crisis on most sports organizations.

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INFLUENCE OF THE LEADER ON INFORMAL EDUCATION

Zoran Punosevac¹¹⁸

Abstract: The paper aims to show the way and how leader influences the informal education from the point of impact of first man of local government, public and public utility companies and owners of small and medium companies. The question is how much and how can environmental factors, like politics, economic power and infrastructure, affect the need for education, and how much influence has behavioral and how much cognitive approach, while it is well known that they do not separate from each other. How much are we prepared to not treat education as an expense and accept the fact that it doesn't bring us harm? Numerous literature, theoretical concepts and experiences of other countries teach us that we get the most by investing in knowledge. Without exaggeration and underestimation, on the base of interviews with employers and employees in many organizations, the real picture is completely different. From that reason, in further text those findings will be presented with recommendations for improvement of informal education.

Key words: Education, Knowledge Management, Leader, Improvement

JEL classification: I25, O15

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INTRODUCTION

Among the factors affecting the competitiveness of the organization, most important one is the knowledge that is constantly improving, which is not only to be gained through formal learning, i.e. through formal education. Therefore, non-formal education has an important role in the improvement of personal competence, as well as in organizational performance.

A lot of time had passed since it was found that the continuous learning is a necessity. French philosopher Denis Diderot (1713-1784) said: "Education should be completed when an individual leaves school, it should cover all ages of life.... to give people the opportunity to maintain their skills or to learn new skills at each and every moment of life".

When it comes to formal education, there is no intention to point out what is wrong in the domain of non-formal education, for example, that it is an expense, that we had already learned all that during our formal education, that it was a waste of time, that good workers were well educated and trained and that the bad ones have other jobs where knowledge is not necessary etc. However, the emphasis will be put onto the fine examples of others in this area, as well as onto examples from our surroundings.

Here are some of the examples that can be used, for the ones in a dilemma whether to invest in education or not. If we consider the factors that contribute most to the successful business in Japan, the crucial factor is certainly employees - educated, creative, innovative and motivated employees.

SANYO company that manufactures air conditioners, among other things, used to send new employees to training. The first course was not in the domain of the implementation process of the cooling system for air conditioning, but how to make simple flutes from clay. This is an example of how to encourage creativity in new recruits.

According to the American Society for Training and Development, companies throughout the United States spend about \$ 45 billion a year, but not a very large number of the companies is included with these figures.

An epitome is the Motorola University, that organizes training activities for their employees, suppliers and customers.

With IBM, employees spend 15% of their total working hours on training. In the United States, depending on the activity and the company, the training lasts for 4-28 weeks a year.

Many European countries have increased investments in education and training, but a lot of them do not know exactly how much the trainings themselves cost. The obvious example are Sweden, Denmark and England, while France

invests about 2% of the total working hours in training. Other countries are positioned below this level.

As for the time spent on training, only 10% stated that the training takes longer than 10 days, while in Spain for 30% of organizations training lasts longer than 10 days.

An important fact is that in all countries, training for managers lasted longer than for employees.

Education and training is an important process that affects business, so there should not be a dilemma whether formal education is necessary or not. The words of William Wiggernhorn, president of Motorola University will surely break the dilemma: "When you buy equipment, disconnect the aside 1% for maintenance. Wouldn't it supposed to do the same for humans? "

LEADER AND MANAGER

Success of an organization depends on many factors, but one among many is employees themselves. Human resources are the creators and makers of innovation, technical solutions, improvements, etc.

The question is who will define the appropriate tasks, how they will be assigned to the employees, who will control them, how can the necessary resources be provided, who will be rewarded and lead to the target? This dilemma does not exist, management is to fulfill its role professionally. It is not without reason that people say that the three sacred rules for the organization's success are: management, development and marketing .

Human resource development is the most important function of management. Dynamic changes imposed by the need to shape the future, the management of ideas as well - which can be achieved with capable leaders.

It is not possible that everyone be a leader, because many people lack knowledge in certain fields of science (sociology, adult education, management, organizational behavior, ethics). Also, they lack certain characteristics that are essential to leaders as such. The problem is that we do not want to admit that we have not learned all the skills, needed to lead an organization successfully. Therefore, we have to learn a new management philosophy.

Leaders are a necessity in organizations, local municipalities, as well as in regions at the level of the state itself.

The leaders are the ones that most affect the performance of the organization, the vision, mission and strategy of the organization, defining the organization's goals, and how to fulfill these goals.

Although the difference between managers and leaders has been made, it should be repeated once again, in order to define the role and importance of leaders in the organization compared to managers of the organization.

Throughout the literature, we can find two dominant directions: the first one is based on the distinction between management and leadership, and second one takes terms of management and leadership as synonyms. Kotler said that the two concepts differ from the viewpoint of distinguishing leaders' from managers' tasks.

The leader is the creator of the mission and vision of the organization. The task of managers is to make this vision happen, practically. One example of determining whether a person is a leader or manager can be found in the paper of Trompanaars (Trompanaars 2003) - which says that they should ask a simple question: "Why can't you sleep? Because you do not know how to get the selected target or because you do not know which of the potential targets to select?" If the reason for your insomnia is the first answer, you are a manager, otherwise you are a leader.

Contrary to this opinion, there are also those according to which - terms leader and manager are considered synonyms and used for people who are at a position where they need to express their leadership skills.

Henry Mintzberg considers the separation of leadership and management a huge mistake. He believes that it became a matter of fashion since 1977, when leadership takes on characteristics of a higher level.

To make a successful leader of a leader - you need to have the knowledge and ability to motivate, communicate, etc. (Stefanovic, 2000, pp. 259)

The principles of visionary leadership are:

- Causing the process: being a pioneer - encouraging innovation and support to people with ideas
- Enthusiasm - inspiring others to participate in your vision through personal enthusiasm
- Helping others to act: being the idol of the team and support the efforts and talents of others
- Giving examples: providing a consistent role model to others
- Celebrating success: introducing emotions into work (working with the heart and the head altogether)

Significantly, in addition to having a clear vision and giving tasks to others, the leader should also have the power to influence others to follow in his footsteps, which is a capability of the highest level.

Power sources can be divided into two groups: based on the position of manager in the organization and based on the manager as a person (figure 1).

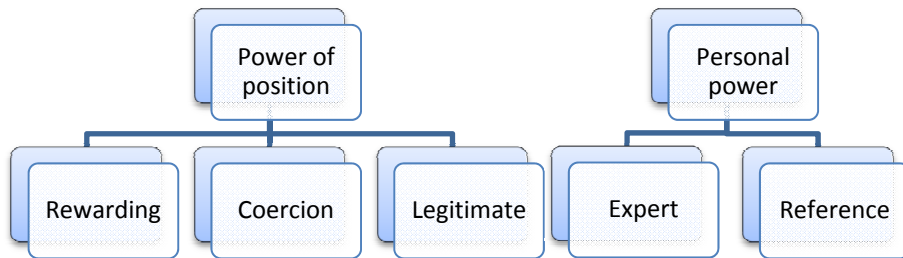


Figure 1: Power sources: positions and personal characteristics

The biggest source of power is the position of a leader in the organization where he has the power to reward, coercive power and legitimate power.

All of this can be summed as: "I am the boss and you should do what I tell you to do". Using the power of rewarding, this would mean: "Do as I say and I will give you a reward". Using the coercive power, this would mean: "If you do not do as I tell you, you will be punished." Finally, legitimate power is a right to point out the behavior through the use of authority, which is proportional to the importance of organizational positions (Stefanovic, 2000, pp. 260). However, for the effective operation of the organization, personal power of a leader is more important and more essential, which can also be viewed from two aspects. On one hand, the leader of external power influences the behavior of employees using the knowledge and skills. On the other, reference power of the other party encourages a positive identification with the sources of power.

MODELS OF LEADERSHIP

There are many definitions of leadership models. Fiedler believes that leadership depends on the relationship between leadership style and the demands of the situation.

Hershey - Blanchard recommended that a leader should adapt their style according to the readiness of employees to accomplish the tasks in a given situation. In these circumstances, leader decides when to assign duties and authorities, i.e. he uses a high degree of interaction with employees, explains his decisions and gives specific commands.

He usually does it when the employees want to follow their leader - when they are willing to perform tasks.

Involvement (participation) style is used in cases of low and average willingness of employees to follow the leader, while persuasive style is used when employees are averagely or highly willing to fulfill their obligations. Style of

communication is the best for the conditions of low and poor readiness of employees to perform the tasks. (Stefanovic, 2000, pp. 261-262)

Robert House stresses that the successful leader is the one who is able to be a pioneer for his employees on their way to success. He identifies four leadership styles:

- Leadership is based on the support of members
- Leadership is based on commands - what should be done, on planning - the work itself and how it should be done.
- Leadership is based on the performance of tasks
- Leadership is based on the involvement of employees in decision-making

Vroom-Jago approach suggests that a leader should choose decision-making process in accordance with the problems. (Stefanovic, 2000, pp. 320)

- Authoritative
- Consultative
- Group

Group and participatory decision-making process is to be used if the employees need assistance in order to define the problem itself, as well as when they do not have enough information to solve the problem themselves, while authoritative model should be used if the leader has sufficient knowledge to solve problems and is secure in his own ability of problem solving .

Goleman (1998) classified the competencies into three groups:

- technical
- cognitive
- emotional

He believes that the emotional characteristics are two times more important than the others, and lists five components of emotional intelligence:

- self-awareness - comprehension of their own strengths, weaknesses, needs, values and goals, self-aware leaders are aware of their own limits
- self-control - control of emotions, canalizing emotions in a controlled manner, the ability to accept uncertainty without panic
- motivation - the desire to achieve results beyond expectations, strength and willingness are raised more by internal than by external factors, a constant struggle for progress
- empathy - thinking about the feelings of employees when making decisions
- sociability - openness to the objectives, building friendly relationships, ability to find a common position

As for the role of leaders in practice, some believe that it is somewhat different at present compared to the past. In fact, the leaders are not expected to have a solution for every problem.

The leaders are also expected to have a willingness to be helpful to others, to be able to seek answers and to know which are the right questions.

In Table 1 , we have a comparison of the leadership positions in the late eighties to the ones during the period 1995-1997, the difference in terms of leadership skills being the obvious one.

Table 1: Comparison of leadership skills

Five most important skills in terms of priority	
1995-1997	<ul style="list-style-type: none"> • The ability to boost confidence and motivation • Envisioning • Ability and willingness to listen and to self-discipline • Strategic thinking • Ability to communicate with others
end of the eighties	<ul style="list-style-type: none"> • Strategic thinking • Entrepreneurial skills • Originality • Talent • Ability to solve problems

Source: Human resource mangement, D. Torrington, L. Hall, S. Taylor, pp.342

However, a successful leader needs to have a sense of control and good communication, to support staff development, encouraging others to solve problems, he must share his enthusiasm, pride and loyalty, rewards and controls, clearly, morally, decisively and independently.

NON-FORMAL EDUCATION

Previous views giving certain necessary characteristics and styles of leadership provide only guidelines for defining leaders.

Having these characteristics or not, it is a matter of his followers' assessment, and not only of the assessment itself, but also a matter of the acceptance and implementation of the assigned tasks and activities.

It is always a question how a leader in a local government or a politician see the reality of non-formal education, how capable they are and how much they want to influence the promotion of non-formal education and mobilizing their colleagues to go through the management of non-formal education.

Results of the project called "Improving corporate culture" in two municipalities in Serbia - show the ability of leaders to recognize the need for non-formal education, the method of implementation of the project and the ability of leaders to mobilize the executives and implement education lasting for a period of five months, transferring this knowledge to their colleagues or doing the same in their companies afterwards.

Non-formal education of employees has benefits compared to formal education, especially because for a brief period of time, they can investigate the specific skills, examples from practice, learn to use new tools and new methods. Non-formal learning skills can be applied immediately in the organization afterwards.

The most commonly requested trainings in non-formal education are the ones from the domain of improving the personal skills and they are usually related to the conduct of business, time management, team and team work, business communication, employee motivation, performance management, measurement of employee satisfaction, conflict management etc.

Model of experiential learning, on which non-formal education is usually based, consists of four phases:

- Experience - using different teaching methods (practical work, simulations, case studies, lectures)
- Reflection - a brief overview of the lecture by asking open questions. This stage of learning gives participants the opportunity to be reminded of what they have learned in the previous phase. The most important is to discuss the division of different opinions, emotions, and reactions of participants.
- Generalizations - at this stage, the participants are expected to make conclusions regarding acquired new knowledge, changes in attitudes that participants have gained in transitional phases. The role of teachers is a way to help the participants to reflect critically on what they have learned in the previous two phases.
- Application - in this phase, the participants perceive opportunities to use their newly acquired knowledge with the aim of a more effective work.

One of the significant advantages of informal over formal education is that the skills and knowledge acquired (eg, business communication, teamwork, employee motivation) can be transferred, so that these can be used if there is a change of workplace.

There is a special interest in non-formal education, especially in language courses, bookkeeping, cooking etc.

The biggest problem of non-formal education is financing, employers are not prepared to invest, because awareness is low when it comes to employees, and employees in turn are not able to provide funds for education.

The situation in some European countries is different, so the EU has 9% of the population between 25 to 65 years enrolled and attending courses and trainings, Europe 8%, UK 19.5%, Switzerland 30%, Sweden 25%, while in Serbia 3%. Why is this so?

Probably because people in Serbia do not understand the importance of non-formal education, do not understand the needs of the future which requires knowledge. Also, in our country a very small percentage (approximately 10%) acquire certifications that mean ticket to employment, while in Europe it is even 50 %).

Long-term and comprehensive plans are necessary and their implementation should be reviewed with accurately projected timeframe.

How important formal education is - proves the fact that the Government of the Republic of Serbia adopted the Law on Adult Education, and the obligation to apply the same starting with 01 January 2014, which defined the informal adult education organized according to adult learning processes based on the specific programs, the acquisition of knowledge, values, attitudes, abilities and skills aimed at personal development of adults, labor, employment and social activities (Article 2, paragraph 5), where adult education provides:

- improvement of educational structure and improvement of the employability
- creating the basis for sustainable socio-economic development of the Republic of Serbia
- increasing professional mobility and flexibility of the working population
- reducing poverty, achieving social inclusion and equality of intergenerational solidarity
- improving the quality of life - personal, family, natural and social environments
- development of democracy, tolerance and intercultural development
- integration into European economic and social area respecting the European framework of education (Article 4)

Speaking about the importance of non-formal education, there are several aspects presented by the Directorate for Youth and Sports of the Council of Europe:10

- According to the modern concept of education (lifelong learning), informal education is a significant addition to the formal education
- Following the values of equal opportunities, non-formal education has an important role in providing additional skills for disadvantaged minorities who are unable to attend formal education. Non-formal education is now viewed as a kind of "second chance to acquire education" (second chance school)

- Non-formal education modifies and supplements the knowledge acquired through formal education system, taking into account both the multicultural composition of society, the specificity of the transition countries, market demand, and the need to acquire practical life skills to make sense of the broader social context.

IMPLEMENTATION OF THE TRAINING

In order to implement the training process, it is necessary to pass through several stages:

- Identification of needs
- Training planning
- Conducting training
- Evaluation of training



Figure 2: Phases of training

DETERMINING TRAINING NEEDS

Determining training needs can be quite an easy job, but a lot of people depend on whether they had done the job properly. What does it mean to do it right?

Topics related to training of employees can be defined as "very easy", Head of Personnel came up with a similar definition of certain topics, or is a consultant and suggests that the topic be placed among employees. It is a wrongful act.

Training needs to be defined along with the employee taking effect. That is most important to them, department, service department or human resources - to function and consolidate requirements and implement them.

What are the elements that affect the training needs of analysis?

- First of all, the organizations sets the goals and strategies of the organization and staff development plan that result from the analysis thus far and where they want to be in the future.

- Analysis of the technological level of knowledge for a certain position, need of competence, or whether employees meets or does not meet the required level of knowledge.
- The knowledge about employees' interests is of great importance when it comes to the need to acquire knowledge. The most common way to get to the knowledge is an oral one or sometimes a formal questionnaire.

In order to perform a qualitative analysis of the required education, it is necessary first of all to have a database of employees who have the skills (computer skills, language skills, which have undergone vocational training, courses, seminars, etc.).

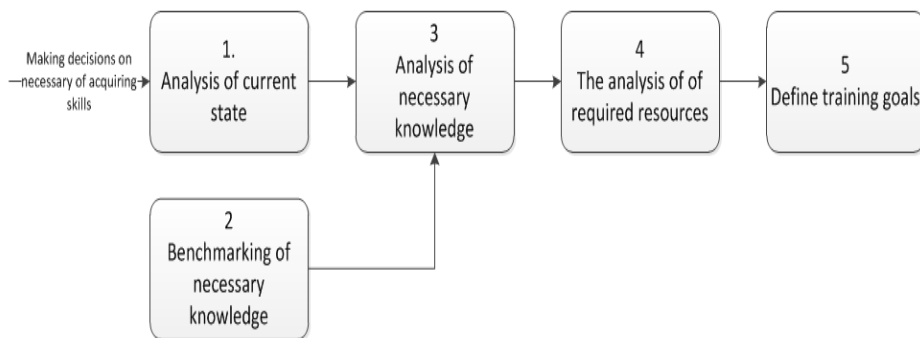


Figure 3: The process of determining training needs

Input into the process of determining training needs is a decision of the need for acquiring knowledge, and the flow has a major role of the person in charge.

There are several methods of identifying the needs of employees, but the choice depends primarily on the time and money available, as well as on how good database of employees is.

The methods that are commonly used to identify the needs are:

- analysis of the database of employees
- filling out the questionnaire
- interviews with employees
- analysis of critical events etc.

When analyzing the required resources, it is necessary to define the time, money and a place where the training will be held and choose the speakers.

It is important to meet the needs of monitoring the training that is comfortable. Room where the training takes place should be provided with fine elements of light, temperature, seating arrangement, number of attendees, rest breaks, security etc.

When you have defined the need for specific knowledge and resources, you need to define the goals.

The learning objectives are based on the needs of the participants, and what participants should be given after the seminar. These expectations may be new knowledge, skills, attitudes but at the same time the goals should be specific, measurable, achievable, time-bound, presented to the participants at the end of the training exercise, evaluation

TRAINING PLANNING

A well-planned training is the basis for achieving the goals previously set. Planning of trainings requires a lot of time, especially determining the duration of training, time, schedule, presentation topics, duration of training in one day, determine what it is that will not be exposed if there is not enough time, all of this depends on the target group of listeners. In other words, it depends on whether these are new employees, experienced ones, operational management, senior management, etc.

In figure 4, the process of training planning is presented.

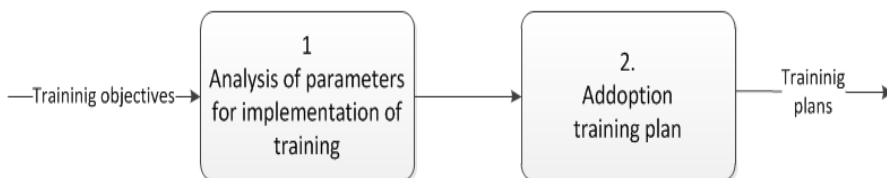


Figure 4: Planning training

Plans for implementing education need to be:

- accurately expressed and measurable
- particular stakeholder group
- areas of application in the organization need to be defined
- time limit for implementation should be defined

Effective planning involves a large number of managers and employees, because it is an integrated process. Successful planning is based on the collection of facts, their allocation, sorting data, drawing conclusions and where necessary, different experiences and knowledge. When planning, organizations use three approaches: centralized planning, decentralized and *ad hoc* planning for individual training.

REALIZATION OF TRAINING

In the process of carrying out the training input, makings plans is a vital role in the training of a teacher or a person in charge of the implementation.

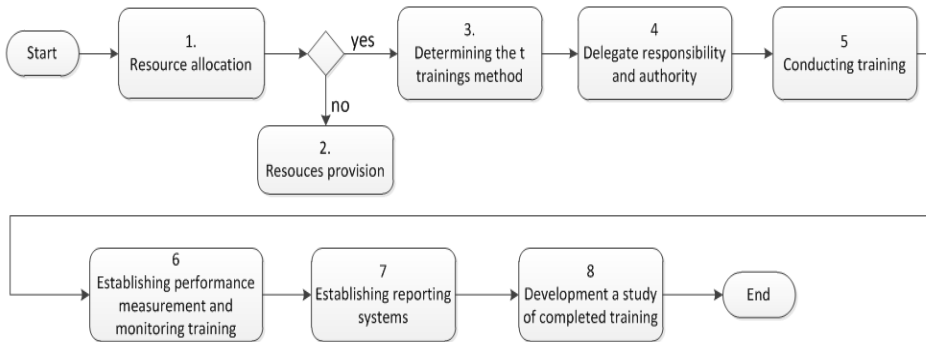


Figure 5: Realization of training

Within the organization of training, a system of measuring the satisfaction of attendants needs to be defined, when determining the measurement systems primarily.

The most common type of measurement satisfaction is filling in anonymous questionnaires. Measuring of satisfaction results were as accurate as possible. It is necessary that the questions in the questionnaire be clear, unambiguous and objective, as well as that they are primarily related to seminar participants.

Measuring satisfaction should contribute to a further improvement of the training and improvement of teachers and listeners.

When it comes to measuring training satisfaction and evaluation of training, a questionnaire contains the question: "Rate new knowledge in this area". Many believe that it is a mark of level of knowledge gained. However, this is the opinion of the attendants and gives a particular rating and it should be taken with caution. There are several ways to measure the level of knowledge acquired and some of them will be presented later in this paper.

MEASURING KNOWLEDGE

It must be recognized that the process of measuring knowledge is rather complex, so we have made performance results of the acquired knowledge. What are most commonly used methods?

Kirkpatrick suggests that testing takes place before and after training with the same questions in order to see the difference about the level of knowledge. However, this method is rarely used.

The true measure of the results obtained by training may be seen if the assessment of the situation of the organization is performed before training and 2-3 months after the end of the same. It is also very difficult to measure, but certain tests and interviews with employees who attended the training can be of certain avail.

Kirkpatrick is often cited: "Be content with what is obvious, as is usually impossible to obtain evidence".

WHAT ARE THE PRACTICAL EXPERIENCES?

Throughout working with employers, managers of public and public utility companies, heads of local government, ie. leaders of local municipalities, it was found, and demonstrated in practice through the project "Improve the business culture," that the leaders with its activities, knowledge and targets can have a significant impact on improving level of knowledge.

Leaders should have the appropriate personal characteristics that make them leaders, but when it comes to their impact on non-formal education, they should only be willing to understand the knowledge management phenomenon of the 21st century and to consider the needs of knowledge a benefit rather than a cost.

The company's capital is not just financial (tangible) - assets of the company, but it is more commonly intangible capital, which refers to employees as human capital that a company has. Recalling that the phenomenon of the 21st century is knowledge management, this brings us to the fact that the main working tool is the human brain. The conclusion is that the competence of the company depends on the competence of its employees.

Leadership role in this case is that he shall comply consistently with the interests of employees. In order to be competitive, an enterprise leader must invest in human capital and encourage employees to training and to adopting new skills and developing them further. Of course, it is necessary to analyze needs for knowledge of different groups of employees, so as to create different training packages.

The biggest problem in terms of non-formal education in our country is a lack of high-quality teachers and trainers who can point out the importance of education, we do not have people that know how to pass on good communication skills to leaders. Also, they should know what is obtained if educational programs are planned and implemented in time. Another problem is that many leaders think that this is unnecessary, and the employees do not want to learn, because they think they have already learned everything in school.

So as to solve these problems, it is necessary to make good common training plans (for employees and organizations) , to provide good and current teachers and

to create an atmosphere of training through the attraction of these educational programs, which means that the participants are satisfied.

Through the "Improve business culture" leaders have fulfilled all expectations, because they involved approximately 100 participants in five one-day lectures on topics: Business behavior, Business etiquette and Time management, Team and team work, Business communication and negotiation skills, Motivation of employees and Measuring customer / service users satisfaction. Project participants (executives and managers of public and public utility companies and local authorities), after completion of training made the decision to do the same processing issues in their organizations, where the participation was taken by over a thousand employees, which is now very rare.

It is also important that the leaders of the local municipality must be the bearers of actions on non-formal education, as the Adult Education Act gives the possibility for local municipality to express their needs and define plans for non-formal education.

Satisfaction results of participants in the project are given in the following chart, and they confirm that by improving the knowledge, employees are more motivated and hence greater customer satisfaction, which is the ultimate goal for each local municipality - to raise the quality of life.

After each of the lectures, participants had a chance to indicate their level of satisfaction with offered contents through anonymous survey. While using the previously mentioned principles for drafting the questionnaire, participants were asked six simple questions, with the possibility of evaluation from 1 to 10 for each of these points, noting that the lowest mark indicates the lowest level of agreement with the statement, and vice versa. Participants also rated statements concerning the following topics:

- seminar topics
- theoretical part of seminar
- method of presenting information
- organization of seminars
- the ability to acquire new knowledge
- engagement of lecturers

The results after each session, showed a high level of satisfaction of seminar participants from the seminar topics, organization and commitment to the speakers. The local municipality has adopted non-formal education by organizing these types of seminars, especially for management personnel and for all other employees. It had a positive response and sparked off great interest in the same time.

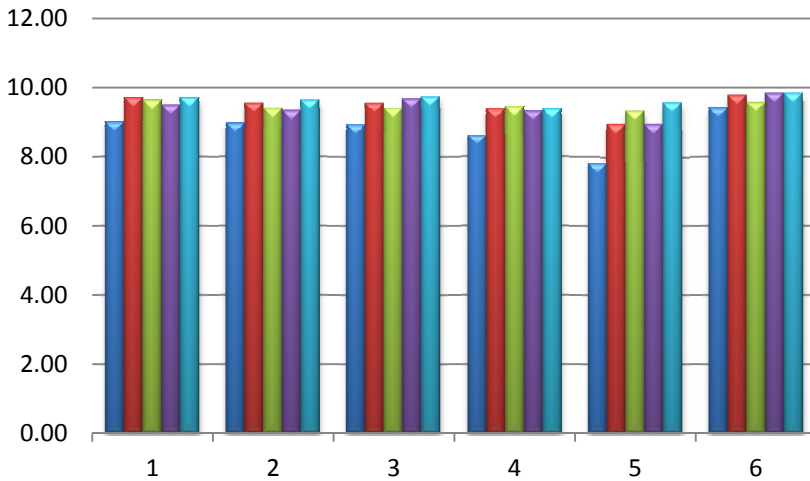


Figure 6: Review of individual assertions by seminars

If we embark upon a deeper analysis, we could see the average score of participant satisfaction in the project "Improve the business culture". Details are shown in figure 7.

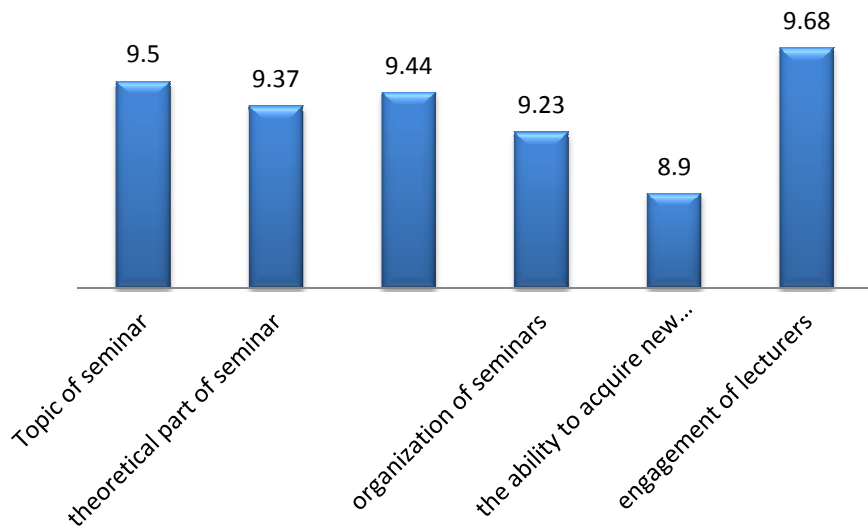


Figure 7: The average level of participants' satisfaction in the project "Improve the business culture"

Regarding the topics that were discussed at the seminars, the highest level of satisfaction was expressed by the topic "Measuring customer / service user satisfaction".

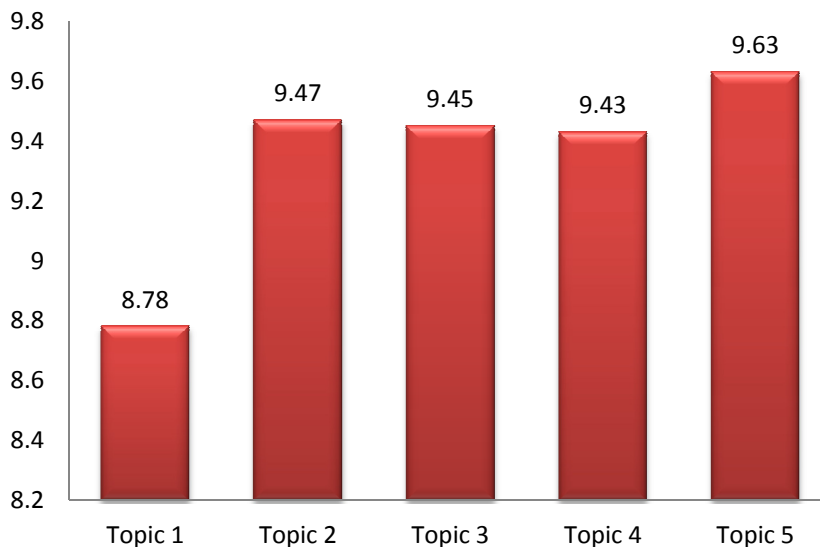


Figure 8: The level of projects' participant satisfaction by seminars

These results show just how much the participants were satisfied with the training, as well as how they acquired new knowledge, but it is quite difficult to get the results about what it represents for the application of new knowledge in the organization and what influence it had on consumers.

Sadler-Smith, for example, in his study (1999), considered that the training evaluation is of more operational nature, serving as a feedback to the individuals, rather than as an execution of plans that were previously set up.

CONCLUSION

Experience and research show that non-formal education is an important factor of improving the business and identifying the training needs to move onto identifying learning needs.

Learning needs are expressed by those who aspire to new knowledge, rather than to the ones that are imposed by a decision, so that individuals are able to develop their skills and competences.

We are delighted by the fact that there is an increasing interest in the development of personal skills in relation to technical capabilities, but it does diminish interest in maintaining the ability to do a good job. A joint work of individuals and organizations should be developed with an aim of improving the methods for knowledge acquisition.

Non-formal education and training for life becomes more than the rights of employees, it is a key to success in the 21st century. It is a factor of environmental development, promotion of democracy, justice, equality, social and economic development.

Adult education means a series of continuous learning processes, where adults develop their abilities, enrich their knowledge and improve their technical or professional qualifications, or use them in order to satisfy their own needs or the needs of society (The Hamburg Declaration on Adult Learning - Hamburg, 1997, pp 1).

According to observing local municipalities, public and public utility companies, there is a "hunger" for knowledge of organizational behavior, ethics, teamwork, knowledge management, where is necessary to make a long-term learning programs, but for the majority of employees, in order to have a higher level of citizen satisfaction on completion of their education.

In order to do this, representatives of local authorities should possess a single leadership quality - they should want things to happen, because the biggest problem is when a person possesses the skills, but not the willingness to do something.

Hopefully, the statements "I do not want" and "I will not" belong to the future.

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