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## METHODOLOGICAL HOLISM AND THE CONTEMPORARY MAINSTREAM IN ECONOMY

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**Abstract:** *The basis of the methodological holism (methodological collectivism, organicism) is the position that all societal phenomena can only be explained by social structures, institutions or the culture of the society. This methodological procedure emphasizes that social relations dominate psycho-physical characteristics of individuals and accept the stance that attributes of the system define attributes of its constitutive elements. The goal is to penetrate into the essence of methodological holism and its basic postulates. In order to achieve that, the opinions of various theoretical paradigms will be taken into consideration. Special attention will be paid to relevancy and logical sustainability of the arguments that defend and attack the positions of methodological holism.*

**Key words:** *methodological holism, methodological individualism, collective mechanisms, institutionalization of individuals.*

### Introduction

Methodological holism, as one of the basic methodological approaches, presupposes that the basic social phenomena are supra-individual social categories, which is a sufficient reason to base the explanation of the social phenomena on the usage of these categories. Emily Dirkem called these categories 'the social facts' and in theory they are usually made up of the social groups, institutions, culture, habits,

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tradition and all other norms that lead and direct the social influences in which there is a large number of individuals participating.

Methodological holism does not deny the fact that the society consists of individuals, but it emphasizes that it is not a simple set of individuals and their motives. The society represents a specific reality that is characterised by its own characteristics, different from the characteristics of the individuals, and precisely these characteristics are essential for the explanation of the social reality.

### **Methodological holism in the history of the economic thought**

Methodological holism can be found even in Plato's attempts to discover the origin of the state and society. Plato's holistic approach can be observed in a familiar phrase: 'the whole wasn't made for your sake; you were made for its sake'. (17, p. 1) According to Plato, it is perfectly natural for an individual to submit to the whole that is not a mere assembly of individuals, but a natural entity of a higher order. Such understanding of individuality became the basis of civilization, 'and...the greatest of all laws is: nobody, neither a man nor a woman must ever be without leadership and nobody must as a joke or in reality, create habits of doing something independently. Each person, in war and peace alike, has to live in the manner of the constant looking up to his leader and allowing him to govern even his most trivial activities, to stand when this is ordered to him, to march, to take a bath, to eat...' Plato writes.

The presence of the methodological holism can be noticed in Hegel's work as well. According to him, the individual reason or the reason of an individual is nothing but a product of the social heritage, historical development of the social group, or the nation in which the individual lives. That is why, among other things, Hegel perceived the state as an organism. His understanding of the essence or spirit is associated with the collective spirit of the nation that in fact shapes the state. (18, p. 74)

The high intellectual reputation of the Marxism is partly a consequence of the application of the methodological holism. As a matter of fact, Marx's economic determinism, the class theory, the competition theory, the theory of the economy cycle – are deeply holistic, so, according to this, they are consequently opposed to the methodological individualism.

A concise formulation of the Marx's confrontation with the individualism and the psychological approach is represented in his famous sentence 'It is not the consciousness of the people that determines their

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social being, it's vice versa, their social being determines their consciousness'. In the 'Preface to the critique of the political economy' Marx says: 'In the social production, during their life, people enter into certain necessary relations, independent of their own will, the relations of production that are related to a certain degree of development of their material production capabilities. The totality of these relations of production creates the economic structure of the society, the realistic basis for building the legal and political construction with appropriate shapes of the social consciousness. The method of production of the material life conditions the process of the social, political and the spiritual life in general. (11, p. 9).

According to the Marxist, dialectical materialistic theory, a man is primarily a social being that mediates in the transmission and expression of the social laws and changes. The social development itself happens through the struggle of the classes in the conditions of disproportion between the forces of production and the relations of production, which, as opposed to the methodological individualism, emphasizes the importance of the social structures, social formations, and consequently of the transformation of one order into another. (5, p. 3).

The German historical school had an important role in the affirmation of the methodological holism. The creation of this theoretic economic trend is associated with the fourth decade of the nineteenth century and the famous Roscher's enclosure called 'The draft for the lectures on the state economy according to the historical method', published in 1843. Roscher (20, p. 1) thought that the economic theory of the classical school needs to be completed and it that way made it applicable to the new economic circumstances. According to him, the economic behaviour is conditioned by the context – historical, social, and institutional. In the above mentioned enclosure from 1843, he pointed out that the legal and the political history, together with the history of civilization in general, should be included in the study together with studying the history of the economic life. Bruno Hildebrandt (20, p. 2) claimed that the economy of the classical school should be abandoned, or that the economists direct their attention to the exploration of the economic life of the people.

The followers of the so called historical school can be characterised as the typical supporters of the empirical and holistic orientation; of empiric orientation because they denied the possibility to determine the economic laws by the systematic and historical analysis. In order to realize this type of study, the German theoreticians applied descriptive historic method. This meant gathering and analyzing the data about the phenomena from the



economic life and the economic development of certain countries, which was a reliable indicator of their inclination toward the holistic methodological procedure.

The holistic orientation of the younger historical school was most convincingly presented by Menger's key opponent, Gustav Smoler. (20, p. 20). According to him, the economic science needs to be transformed into the science about society with the aim to reach three key goals: to present the development of different economic institutions, to determine the topology of the social conditions inside of which there is an influence of institutions of different economic system, as well to present the historical sequence of economic systems in the forms of phases of the economic development. Smoler insisted on the necessity of examination of rules, as well as on the explanation of the ethical motives of the human actions. (9, p. 81). According to his opinion, the economic science should contribute to the understanding of morality, laws and institutions as a global context inside of which people act.

A theory which during the end of the XIX and the beginning of the XX century started to work toward an ambitious goal of denying the basis of the methodological individualism and promote the positions of methodological holism, was certainly an 'early' (old) institutionalism. The contribution of the early institutionalism (Veblen, Commons, Michels) to this field can be looked at mainly through respecting and evaluating highly the impact of the institutions (especially the informal ones) on the economy and the society in general, denial of the maximising hypotheses and premise of the individuals as the naturally given entities, doing of the numerous empirical studies on the economic cycles, job market, the flow of the prices in the market, etc. It is often mentioned today by a large number of the imminent economic theoreticians that the representatives of the early institutionalism the ones that, during the course of the economic studies, introduced a new approach that points out the significance of the social norms and the mechanisms of their change. It is considered that they, by confronting the individualistic reductionism and simplification, brought the human behaviour into the connection with the strong impact of the institutions, especially with the informal ones such as habits, customs, tradition, morality, etc.

Poper also showed understanding for the methodological holism, although he strongly criticised the some of the Marx's beliefs. In his attempts to explain the nature of the human society and state, he reminded that this process was mainly about the natural convention based on the social nature of man. That social nature has its roots in the imperfection of

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the human individual. *The state, according to this, has to be placed on a higher level than the individual, since only the state can be self sufficient, perfect and capable to turn the inevitably imperfect nature of the individuals into good.* (18, p. 113)

A person that strongly influenced the application of the methodological holism in understanding of the economic reality and that is nowadays considered the creator of the modern macro economy is certainly John Maynard Keynes. One can notice in his work a totally opposed approach to the problems of the socio-economic reality in relations to the others renowned authors from the area of the economic theory, which is mainly a consequence of a different starting point in the methodology of the scientific research work. His concept is basically inspired by uncertainty and the insufficient knowledge of the economic subjects in the process of the economic decision making. Starting from the philosophical ideas of Hume, Bacon and Mandeville, he based the analysis of the economic behaviour of the economic subjects on the unexpected consequences of individual behaviours. (7, p. 2) In this way, his scientific orientation gets the character of proclaiming the application of the methodological holism, which among other things had the impact on Keynes finding the solution of the problem in the state interventionism, denying the understandings that are based on the liberalistic economic ideology. By supporting the economic politics of interventionism and by giving a totally new role to the state, different from the one it had in the eyes of the classicists, he made relative the role of the individuals in the economic sphere of the social life. The state takes the main role in the national economy and by its own mechanisms regulates the economic processes and gets it into the state of balance.

The dominant post-war influence of the Keynesianism started to pale out during the seventies of the XX century. The phenomenon of stagnation, the deficit in the budget, decrease of productivity, inefficiency of the public sector etc. have anew intensified the appeal to the macro economy and its basic source – methodological individualism. The fundamental theoretic researches started to move from the field of conceptualization of the aggregate variables to the problems of the strategies of the companies, the investment decisions, and techniques of production and the development of the companies.

In such a rise of the individualistic doctrine, supported by the neoclassical mainstream and the neo-liberal theories embodied in the monetarism, economy of the supplies and the school of the rational expectations there is the appearance of the neo-institutionalism. The fact

that it appeared in the core of the neoclassicism influenced the authors of this theoretic school to turn to neoclassical marginality instruments in their analysis. However, in the neo-institutional theory, the growth of the social wealth, exchange, distribution and consumption is not primarily explained from the stand of interests and preferences of the isolated individuals, but more and more attention is paid to the study of the of the interrelations among the elements of the economic system. It turns out that by the implementation and the adequate valuing of the institutional dimension of the society, the institutionalism contributed to the completion of the economic analysis and made a step forward in the course of using the parallel methodological procedure and higher valuing of the holistic methodological approach.

The work of the followers of the institutionalism was among other things, dedicated to the realistic analysis of the uncertainty in the light of the fact that the formal and the informal institutions are very important in giving the information about the intentions and preferences of the economic participants. (13, p. 178). The relevance of the study area of the followers of institutionalism, based on the analysis of the fundamental economic phenomena (institutions, property rights, Transactional expenses, contracts, etc) and the application of the category apparatus that is far more realistic in depicting the economic and the social ambience, allows the representatives of this paradigm to raise their voice against any kind of the methodological reductionism and the artificial and simplified analytic distinctions characteristic for it.

#### **The arguments in favour of the holistic methodological procedure**

1) The concrete phenomena of the economic life can not be explained with the help of only one tendency, even if it is as obvious as the hedonistic resistance and the individual's striving to maximize the utility. The proper historical approach does not allow the simplification of the ties, phenomena and the relations characteristic for the whole society, as well as for the certain spheres of the social life. Is it, for example logical for the character of certain foreign affairs to be analysed by a historian, only on the basis of the character and the affinities of the leading diplomats; the development of the art of one period only on the basis of the individuality of the artists that were affirmed at the time; the war successes only on the basis of the gifts and talents of the army commanders.

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Methodological holism, no matter how illogical it may look at the beginning, has its roots in the very core of the individual evaluation and preferences. As a matter of fact, in the very behaviour of the individuals there is a seed of the collective mechanisms which in fact restrict the individual acting from which they were created.

The explanation of the appearance of the collective arrangements on the basis of the non-restricted interactions and free decision of the individuals is very simple and logical. Firstly, the fact that the individuals have their own interests to maximise the utility and to make a profit is not being questioned. However, they do this in the market where different forms of regularities appear in the process of bringing face to face the autonomic, different and conflicting interests, and these different regularities as such, restrict the impact of the individuals, but also protect these individuals from the various forms of violence. 'There is a need for an order without which there can be no functioning or surviving of any organised community. Individuals consciously deprive themselves from their own sovereignty in order to remove the violence as a form of the interpersonal communication, and in order to protect from each other and to save time, energy and the resources that would, in the arrangement of Hobs, have to be spent on saving what the other members of the community produced'. (10, p. 51) The individuals, consequently, create the minimal level of the security in the collective mechanisms necessary for the efficient functioning of the market, which is in the conditions of the uncertainty the necessary precondition for the beginning of the economic activity.

2) Restricting of the individual freedom and decision making is also necessary in the case of obtaining the public goods. It is about the generally accepted problems of the financing of the public goods, which is in theory explained by the non-existence of the individual motives for the paying of the public goods – the phenomenon of the free user (free rider problem). As a matter of fact, the individuals and the economic subjects in general, strive as a rule to the state where the state regularly provides the public goods and finances the building of the institutions in order to reduce the level of the transactional expenses. However, all these individuals are not equally diligent when it comes to financing the public goods. A part of them engages themselves into the adventure of the 'free riding', which is concretely manifested in the disrespect of the laws and the tax evasion. Finally, this comes to the point when the individuals obeying the law and the companies associated with it become mocked, and the regular providing of the public goods becomes endangered. (15, p. 432-433). That is why instead for the market that is inefficient in the domain of the public goods,

there is a need for the institutionalised coercion with the aim of the rational obtaining of these obviously inevitable preconditions for the normal functioning of the community.

3) The seemingly clear and autonomic individual psychological phenomena nevertheless depict the dynamic relationship of the individuals and the state system. As a matter of fact, the ruling neo-classics presuppose the existence of the homogenous human strivings aimed at the fulfilment of the completely rational goals. The practice however, undoubtedly shows that the individuals are still not the uniform agents that strive to reach the identical, mainly highest economic goals. The most recent studies of the economic behaviour stress not only how much the individuals are rational in their attempts to make themselves adaptable to the conditions of the order but also to what extent is their behaviour based on the imitation, inertness, isolation, habits, tradition etc. That is why it's not good to close eyes in front of the fact that in the economic sphere of the social life there are numerous differences on the micro level, which automatically actualises the stand on the relative autonomy of the macro economy. Translated onto the real functioning of the economy, this means that the rules on the systematic level represent the significant 'back-up' that through the positive 'feedback' alliance makes impact on the efficacy of the microeconomic subjects. In this way, the picture of the developed market economy as a complex structural system becomes capable of the development based on the principles of the self-organising.

4) By coincidence, every individual is born in a certain natural and social environment. Even when there isn't enough understanding for this environment it must be admitted that it leaves a deep trace on the mental structure of an individual. Individual simply has no choice but to suffer different influences and to respect certain rules of the ambience in which he lives, no matter whether he looks upon them with approval or doubt. And at the same time it is completely irrelevant in which way certain rules of behaviour were established. If, for example we suppose that the state didn't participate in the process of the structuring of the economic space, it doesn't mean that the individuals will not in their behaviour govern themselves by certain norms of behaviour. In the absence of the state rules certain habits are at their disposal, good business customs, linguistic norms and conventions etc. It turns out that the individual, whether he wants it or not, with the aim of better understanding of the actual (most often unconscious) socio economic circumstances necessarily chooses to apply certain conceptual paradigms. The point is as the sociologists say in the

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phenomenon of certain institutionalisation and culturalising of the individuals.

5) The fourth restriction stems from the collective character, or the mentality of a certain community that could be disinclined toward certain individualistic arrangements and be inclined toward the collectivist forms of organizations. The scepticism toward the enterprise and the developmental impulses based on the realisation of the individual motives and actions is mainly a result of the socialistic heritage, but also of the deep religious roots. For example, the Protestantism implies equality at the start, equality of the citizens (equality in front of the law) but it doesn't exclude consequential property and economic differentiation, which is the result of the impact of the market mechanism. Opposed to this, the idea of equality in the Orthodox Christianity refers more to the equality of the result than to the equality of the conditions of coming to this result or the equality in front of the law (19, p. 110). Consequently it turns out that the dominant aspects of the consciousness of the Orthodox countries are still connected to the egalitarian paternal syndrome, so that the needs for solidarity and collectivism are still important notions in their existence. In this sense, the state of Serbia is not an exception, which in the context of relationship toward individualism can be seen in the strong disapproval of the growing class of enterprises. Although in the economic circles the process of activating the capital is considered to be one of the basic preconditions of the economic recovery, the citizens increasingly get the impression that the owners of the capital and the enterprisers behave in the spirit of the 'wild' capitalism, so that they are the pillars and the promoters of the asocial reaching of the egoistic goals. (14, p. 536). Therefore, it is not at all surprising that from the point of view of the citizens business is not frequently an euphemism for criminal, market a synonym of the political struggle of the mafia clans, and the ownership itself a consequence of the intensive deceits and thefts

These are the facts which should be considered in the process of finding the reasons because of which the wide public in Serbia does not easily accept the fact that the newfangled owners have wide, as they perceive, absolute property rights in the disposal and using of their property. There is even the hope that the state will considerably restrict the property rights of the 'exploitation' oriented enterprisers, so that they wouldn't abuse at the expense of the workers and the wider community. (16, p. 358).

The spirit of collectivism of our citizens can be recognized in the opinion of the majority that the state should solve the problem of the

unpaid salaries in the companies, since the status of the worker, even without the efficiency guarantees the salary to the workers. Together with this appeared the striving that the state should prolong the deadline for allowing the financial compensations for the workers who become unemployed in the process of the privatisation. Also, the majority of the population (it is estimated above 60%) thinks that the state should give the financial support to the companies so that they could overcome the problems of the restructuring and eventually avoid the bankruptcy, notwithstanding the fact that the major part of these companies disrespected the ethics of the market business by not paying what they were obliged. It should also be noted that the largely rooted opinion of the public is that the state is not sufficiently protecting the national manufacturers, leaving them to the merciless foreign competition (8, p. 92, 93).

### **The critique of the methodological holism**

Although methodological holism made possible the creation of the very relevant concepts of certain phenomena in the socio-economic sphere of life, many people warn that its uncritical application is nothing but a kind of reductionism in the economic study (6, p. 64). Similarly to the fact that the explanation of the methodological individualism comes down to exclusiveness of certain parts, the explanation of the methodological holism comes down to the primacy of the social environment. That is why there are realistic warnings that the uncritical and careless application of the holistic principle might cause the researchers in the position of the main exponents of the cultural determinism. In addition to this, it should be mentioned that there are some opinions according to which the old institutionalism lost its relevance precisely because it turned into methodological collectivism that was used for the unrealistic 'over socialisation' of the human behaviour (3, p. 481, 510).

One of the loudest critics of the methodological holism was certainly Karl Menger. It was according to him impermissible that the German historical school didn't notice a distinction between the historical and the theoretic understanding of the social sciences. Menger sees the misconception of the representatives of the historical school in the fact that they want to understand the economic changes only in the strong connection with the social and state development of the people, while they perceive the process in which the economic subjects become independent, their separation from the complex of the national and state life as

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unhistorical and unrealistic act in relation to the life of the people (12, p. 77-83).

Methodological extremism, even when it comes from the promoters of the logically sustainable assumptions of the holistic methodological position, necessarily raises the issue of the infinite regression. As a matter of fact, the aims of the individuals can be explained by the influence of the institutions from the point of view of the extremely understood holistic methodological procedure. However, the logic tells that the appearance of these institutions should be brought in connection with the influence of some earlier institutions, and it makes a vicious cycle. It can be concluded from the above mentioned that any choice made concerning the question of the primate – whether institutional or individual, is analogue to the question what is older – a hen or an egg?

### **Conclusion**

The acquirement of knowledge is a very complex intellectual procedure that depends from a large number of factors. The most important among them is certainly the choice of the methodological approach, or the principles on which on which the scientific research work is based. One of these approaches is certainly methodological holism, very relevant concerning the fact that there are various serious critiques on account of the mainstream economy from its point of view.

It is undeniable that a great step forward has been made thanks to the methodological holism. This is particularly evident in the field of creating assumptions for more objective and thoughtful perceiving of the current socio-economic phenomena. However, the correct methodological procedure implies avoidance of the traps of various kinds of reductionism, individualistic as well as holistic. That is why it is a scientific imperative to create an unbiased methodological core which would proclaim the individual and the social characteristics of the society as the equally relevant entities. In this way, among other things, and in the context of the economic observation we solve the problems related to the explicative primacy, showing that the both levels - micro economic and macro economic are equally important, which only speaks in favour of the relative autonomy and the necessity of their synergy.



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**METODOLOŠKI HOLIZAM  
I SAVREMENI MEJNSTRIM U EKONOMIJI**

**Rezime:** U osnovi metodološkog holizma (metodološkog kolektivizma, organicizma) stoji težnja da svi fenomeni društva jedino mogu biti objašnjeni pomoću socijalnih struktura, institucija ili kulture društva. Ovim metodološkim postupkom ističe se prevladavanje socijalnih odnosa nad psihofizičkim osobinama individua, odnosno prihvata stav da svojstva sistema opredeljuju svojstva njemu pripadajućih elemenata. Cilj ovog rada je da pronikne u suštinu metodološkog holizma i postulate na kojima se on zasniva. U tom smislu biće uvažena mišljenja različitih teorijskih paradigmi, sa posebnim akcentom na relevantnost i logičku održivost argumenata kojima se brane, ali i napadaju pozicije metodološkog holizma.

**Ključne reči:** Metodološki holizam, metodološki individualizam, kolektivni mehanizmi, institucionalizacija individua



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## PERFORMANCE MEASUREMENT SYSTEM FOR THE MODERN BUSINESS ENVIRONMENT

**Bojan Krstić, Ph.D.\***

**Abstract:** *Changed environment, new markets and technologies require new strategies and redesign of traditional performance measurement system. Effective performance measurement system in modern terms is critical determinant of successful strategy implementation in enterprise, its growth and survival. Nowadays, all segments of business activity and success in consumption of all tangible and intangible resources must be measured with the same importance. This requirement could be realized with a set of well balanced financial and non-financial measures of performances. This paper emphasizes the relevance of designing an integrated performance measurement system, because of its great influence on quality of management decision making in contemporary business conditions.*

**Key words:** *performance measurement system, redesign system, modern business environment.*

### Introduction

There are increasing changes in modern business environment, which features more customized product and service and cost-efficient production. The tendency of economic globalization and the advent of all kinds of management technologies largely prompt business competition, as well as provide the opportunity for success. During the last decades, business environments have changed rapidly and dramatically: changing nature of

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work, specific improvement initiative, changing organizational roles, changing external demands, implementing new technology. Communication fosters growing customer expectation that products will be especially suited to their own needs, and perhaps often totally individualized.

Enterprises have found themselves in need to compete by improving product quality, increased flexibility and reliability, expanding product variety, and emphasizing innovation. In the modern economy, employee knowledge and skills, relationship with customers, organization culture and other elements of intangible assets have become the driving currency of organizations wishing to effectively compete.

One tool for managers in controlling their businesses has traditionally been performance measurement. As many of the managerial challenges in the knowledge-intensive organizations seem even more difficult than in the more traditional lines of business, there is a real need for effective performance measurement that can help managers control their businesses. However, the same challenges that affect the managerial work in the knowledge-intensive organization may also cause problem in using traditional performance measurement.

Traditional measurement systems and performance measures are based on financial accounting that has become outdated in modern business environment with the changed emphasis on quality and customer satisfaction and increasing prevalence of new production technologies and management philosophies. Traditional financial control system is ill-adapted to such an environment. Not only is the information which it produces often outdated and too imprecise to provide a basis for decision on customer relationships or products, but also autonomous employees need goal and incentives other than the usual ones which are based on profit and return on investment and modeled on the income statements used in financial accounting. Other guides are needed to show the way consistent with the comprehensive vision or concept of business. The enterprise as a whole must be aware of and understand the overall strategies. For these reasons, new concepts and ideas are needed to provide a new foundation for strategic control.

### **1. Performance measurement system and strategy implementation**

Enterprises strive to achieve competitive advantage through satisfying customers effectively and efficiently. The business success now depends largely on the capability of quick response to customer requirements. Effectiveness requires that enterprises be equipped with customer-focused common goals among all the related suppliers and

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manufacturers. Efficiency demands enterprises to meet with customer requirements economically. Adequate performance measurement has to satisfy different information requirement as well as to reflect success in using material (physical, financial) and human and other intellectual resources of a firm.

Performance measurement could be defined as the process of quantifying effectiveness and efficiency of management action [1, 2]. Performance measurement provides necessary information of management feedback for decision makers and managers. In modern business management, it plays the important roles of monitoring performance, monitoring effects on strategies and plans, enhancing motivation, improving communication, diagnosing problems, etc. Performance measurement has a coordination role, which incorporates coordination information for decision making, internal communication across processes, and external communication with stakeholders. Business performance measurement is a tool for balance among three major tensions within a firm: a) balancing short term results against long-term capabilities and growth opportunities, b) balancing performance expectation of different constituencies, and c) balancing the motives of human behavior and encouraging transformation.

In addition, a performance measurement system enables managers to deal with great size and complexity of business activity by focusing attention on the aspects of business that are critical to success. On other words, performance measurement system will help managers to manage complexity by focusing on the factors that cause it, thereby attacking root causes rather than symptoms [3, 4].

Performance measurement results can be used to monitor the enterprise's progress towards the achievement of the defined goals. Thus enterprise can identify where are and where they are aiming at. The measurement results help in describing the organization's vision of the future to the entire organization. Performance measurement results can help managers evaluate the effect and feasibility of strategies and plans. The performance measurement may also help in integrating short-term goals with respect to long-term goals or describing short-term goals with respect to long term goals. Performance measurement results can also be used to identify where problems' bottlenecks and waste exist. Besides that, performance measurement has a critical role in guiding operations directly. So, the timely and accurate feedback information of operational performance is significant to keep operations consistent with the planned objectives and make timely corrections. Measurement reveals the business progress and highlights the organization's vision and current strategic position. It helps all the personnel

understanding results of their operations to confirm what their achievements are. These facilitate shared understanding and great communication among all the staff and thus motivate their efforts [5].

Performance measurement systems and methodologies continue to be important management tool in today's competitive business environment. However, the environment in which enterprises compete is dynamic and rapidly changing, requiring constant modification of strategies and operations to reflect these changing circumstances. Many enterprises have redesigned their measurement systems to ensure that they reflect their current environment and strategies. One of the major goals of performance measurement system is to motivate managers to implement the enterprise's strategy. It should support the accomplishment of strategy. Because strategies affect multiple time periods, performance measures can indicate only whether or not the enterprise is on track to success. Moreover, strategies are always evolving in response to changing customer needs, competitor initiatives, and enterprise capabilities. Managers are therefore tracking a moving target, and measures should be indicative of whether current activities are moving the enterprise in the right direction.

The new ways of operating, such as rapidly changing business objectives and organizational structures, require specific principles for performance measurement design, implementation, and use. If the measurement system is not adjusted to reflect changes in strategy, managers will stay on the course by continuing to follow the existing measurements. Because measuring performance is a management process that must be designed, managed, and continuously improved, management of enterprise has to take some activities owing to ensure that its performance measurement system remains strategically relevant during economic slowdowns [6].

## **2. The shortcomings of traditional financial performance measurement system**

Traditional financial performance measurement system or management control systems based on financial (accounting) measures of performances. For most of the twentieth century, traditional financial performance measurement system has existed in an environment of mature products and stable technologies. It has sometimes been said that traditional management control stopped developing in 1925. At that time virtually all of the accounting procedures presently used was already in existence [7]: budgets, standard costs, the DuPont model of profitability analysis, etc.

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Sophisticated technologies and production processes have led to new demands on systems of management control. Financial measures of performance showed the effects of decision already taken but failed to provide adequate guidance for long term strategic development. Many began to realize that to be competitive an enterprise needed more complete reporting on the various aspects and dimensions of its business activities [8, 9].

Traditional approaches to performance measurement provide financial, operational, and physical measures for local activities. These measures are usually developed from a bottom-up perspective and do not necessarily measure the core processes and critical success factors. Therefore, they may not provide a coherent set of performance measures that move the organization in the desired direction.

Traditional financial performance measurement systems during the past two decades have been receiving a lot of critics. The problems with traditional performance measurement are highlighted and summarized here as follows attitudes.

First of all, there is a problem of short-term orientation of financial measures of performance (profit, revenue, cost, return on investment, etc.) Information on these performances provides the foundation for enterprise decision-making. Financial measures show the results of past activities. Namely, traditional approaches to performance measurement are focused on the historical performance of internal operations. They can report what happened during last period within the organization but provide no information on how managers can improve performance in the following period. They are retrospective rather than proactive.

The lagging nature of finance-based measurement systems make them useless for proactive actions and performance improvement. They are the results of previous management action and organizational performance which are not focused on the cause of it. Traditional financial performance measurement systems encouraging short term objectives and short-term thinking. On the other side, financial control also discourages long-term thinking. It can lead to reduction in R&D, cutbacks in training, watered-down incentive and motivation programs, and postponement of investment plans. The main problem is thus one of sub optimization over time. The critical challenge is to achieve a balance between the short and long dimension of business activity. This short-run perspective encourages manipulation of financial measures, so that the financial key measures are misleading and lack credibility or purposes of analysis and decision-making.

Besides that, financial and operational performance measures or indicators that should be linked are reported in separate places. It is difficult to see the picture or understand business success when the operational data is in one place and the financial data is in another. Traditional system of performance measurement and reporting should incorporate key performance measures, financial and non-financial, as an integral part of management reporting system for controlling strategy implementation process.

Another problem of traditional performance measurement is the lack of relevance to enterprises' strategies or strategic goals. Many measurement initiatives and systems in enterprises are not derived from strategies and are therefore not supporting the business. The fixation on measurement in financial terms has led enterprises to ignore less tangible, non-financial measure such as product quality, customer satisfaction, delivery time, employee satisfaction, flexibility, new-product lead time, etc. Financial measures used to send misleading signals about the business success of enterprise. In other words, traditional performance measurement systems fail to draw the overall performance due to this lack of relevance, and hence misleading the actions and decisions to provide accurate feedback information.

Traditional control system pays little attention to the business environment. They ignore the customer and competitor perspective and thus cannot give early warning signals of changes in enterprise's industry and business. Financial measures have an internal rather than an external focus. Performance standard should be based on external, industry-recognized benchmarks whenever possible. Business processes should always be considered in light of world-class alternatives. Internally driven standards expose an enterprise to the risk of failing to focus on closing performance gaps. Financial measures are used to make comparison with previous periods on the basis of standards which been developed internally.

Traditional performance measurement system furnishes abstract information to employee. Financial reports give information that is meaningless to a large part of the organization, consisting of the many employees who don't see how their work is related to the numbers shown in the various quarterly and monthly reports. Employees at all levels of the organization need performance data they can act on. This information must be relevant for their day-to-day activities [10].



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Serious problem of the performance measurement system is their attempt to quantify both tangible and intangible performance solely on financial items. Non-financial measures or intangible measures should be included in the modern, integrated performance measurement system. The measurement system should be updated every time the business objectives change. Updating measurement system refers to deleting obsolete measures and choosing new. Organizations in contemporary business conditions have been changing their measurement systems because limitation of traditional performance measurement approaches and have been accepting new approaches to performance management.

### **3. The evolution of traditional performance measurement system**

Traditional performance measurement cannot capture the complexity and insight in today business performance due to the shortcomings highlighted above. Today's competitive and dynamic environment requires organizations to focus on much more areas than ever such as innovation, quality, learning speed, responsiveness and flexibility. These and other requirements point out new approach in designing an integrated measurement system [8,11].

Evolution of performance measurement system could be presented as process which consists of three phases. The first generation measurement systems were based on assumption that financial measure should be supplemented with non-financial or operational measures, such as the Balanced Scorecard or Performance Prism approach [12].

Financial performance dimension in the Balanced Scorecard supplemented with customer, internal and learning and growth perspective. Balanced Scorecard overcomes many limitations of traditional performance measurement systems. First, it minimizes information overload by limiting the number of measures used. Second, it brings together in a single management report different elements of a company's strategy. Third, it guards against sub optimization by forcing senior managers to consider important operational measures together and understand the trade offs of one area versus another. A properly developed Balanced Scorecard should:

- represent financial and non-financial measures from all levels of the organization (from line to executives),
- maintain an equilibrium between external measures (developed for the stakeholders and customers) and internal measures (developed for business processes, innovation, learning and growth),

- maintain an equilibrium between outcome measures (results from the past) and measures that are for future performance,
- maintain balance between objective (easily quantifiable outcome measures) and subjective (judgmental performance drivers) outcome measure,
- include only measures that are elements in a chain of cause-and-effect relationships that communicate the meaning of the organization's (or business unit's) strategy.

Balanced Scorecard concept providing a multidimensional corporate measurement system, that proposed a performance measurement matrix reflecting the need for balanced measurement, emphasizes the fact that the set of measures used by an organization has to provide a 'balanced' picture of the business. To overcome the shortcomings in the Balanced Scorecard model, the Performance Prism was developed. It points out broader view of stakeholders: stakeholder satisfaction, stakeholder contribution, strategies for satisfying stakeholder wants and needs, processes for executing these strategies and capabilities for operating and enhancing these processes. Performance Prism suggests a broader set of financial and non-financial performance measures. Performance prism is an example of a "customized" balanced scorecard framework.

In the second phase of evolution, performance measurement systems addressed this issue by using strategy and/or strategy maps to take into account the dynamics of value creation by transformations of tangible and non-tangible resources. In this phase, Balanced Scorecard and Performance Prism concept will be modified and supplemented with Balanced Scorecard Strategy Map and Success Map [13]. These concepts offer a better visualization of four listed scorecard perspectives and five performance dimension of prism. In other words, they allow visualization of the linkage between intangible assets and business value. As well as, they provide better selection performance measures or indicators for concrete enterprise performance measurement system [14].

The third generation performance measurement system will build on these developments and seek to link explicitly the non-financial and intangible dimension of business performance to cash flow. New models of business performance measurement system must satisfy a few criteria. The future generation model has to reflect the realities of organization. Challenge for it is to maintain the usefulness of current model of visualization of the relevant linkages in addressing the key business areas but in a way which extend the measurement to flows of cash. New model of business

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performance system must provide the right information [15]. One of the biggest challenges for performance measurement is to realize the difference between data and information. Decision-makers must not get raw performance data. Performance measurement system must produce useful information for decision-making as transparent as possible. Performance measurement systems are succeed when they provide relevant fact and data about current performance and show what needs to be improved, either immediately or in the future. Effective performance measurement system play the following important roles in enhancing business success and competitive advantages of a enterprise: ensures customer requirement have been met, provide standard for establishing comparison, highlights efficiency and effectiveness problem and determines which areas requires special attention and priority action, justifies the use of tangible and intangible resources, provides feedback for driving improvement effort [16, 17].

There are many complex factors that affect evolutionary change within organizations and hence the evolution of traditional performance measures and measurement systems. These issues can be grouped in two main themes: a) drivers of change (those factors that cause change to be necessary), b) barriers of change (those factors that must be overcome of change is to be effective) [18]. There are two relevant questions: what factors encourage and what factors inhibit the introduction of new measures, modification of existing measures and deletion of obsolete measures. Drivers of change are external and internal. External drivers of change are, for example, customers, the marketplace, legislation, new industries, nature of the work, future uncertainty. Internal drivers are following: actual performance, dysfunctional behavior, effective review/monitoring systems reflecting different levels of review. The main barriers to change include corporate culture, internal capabilities, technology, availability of necessary resources and capabilities, motivation for change or support for measurement.

Installing a performance measurement system and embedding it in management processes involve bringing about organizational change. Successful design and implementation will not occur automatically, but several moments can elevate the probability of success significantly. Leadership is critical in designing and deploying effective performance measurement and management systems. Clear, consistent, and visible involvement by senior executives and managers is necessary. Besides that, a conceptual framework is needed for the performance measurement system in the firm. Every organization needs a clear and cohesive performance

measurement framework that is understood by all levels of the organization and support objectives and the achievement of results. Also, effective internal and external communication with employees, process owners, customers, and stakeholders is very important for successful development and deployment performance measurement systems. Each company must develop a unique set of performance measures tailored to its particular needs and operating environment. In general, the key performance measures will be related to the following categories: financial, human resource, internal business processes, competitor indicator, environmental indicator, etc. On the other side, performance measures should be derived from the enterprise's strategy and data collection and methods of calculating the level of performance must be made clear.

Performance measurement system of the enterprise should be under periodically review in the following circumstances: the business strategy is modified, stakeholders state new requirements, the implemented performance measures are not useful, new operational information technology systems are put in place, and new information technology opportunities emerge. Maintaining the effectiveness of the organization and the measurement systems requires a systemic review process [19]. The process of reviewing performance is a complex task that spans the whole organization. Involving the appropriate persons in spending sufficient time reviewing the performance measurement system is costly, but very important to the continuous adjustment of the business and its performance orientation in today's markets.

### **Conclusion**

Performance measurement has an important role in the efficient and effective management of organizations. Designing and using the performance management system remain much debated issues. Business performance management has become an increasingly important aspect of competitiveness, and this has led to the development of new performance framework and systems. There is a growing trend toward managing performance improvement through focusing on the underlying drivers of performance, be they improvements in the processes or the underlying resources that give these processes capability. The past obsession with financial performance is decreasing and there may be recognition that there is now a significant trade between hitting today's financial results and sustaining the capabilities and competencies that allow companies to compete effectively in the future. The shortcomings of traditional accounting

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performance measures include failing to convey strategies and priorities effectively within an organization, encouraging short-term perspective, backward looking nature and inflexibility to change. This led to the development of innovative performance measurement frameworks which viewed business performance through more than one perspective and identified that performance measurement had to be coherent with low-level action taken within the business.

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## **SISTEM MERENJA PERFORMANSI ZA SAVREMENO POSLOVNO OKRUŽENJE**

**Rezime:** Promenjeno okruženje, nova tržišta i tehnologije traže nove strategije i redizajn tradicionalnog sistema merenja performansi. Efektivni sistem merenja performansi u savremenim uslovima, ključna je determinanta uspešne implementacije strategije preduzeća, njegovog rasta i opstanka. U današnje vreme, svi segmenti poslovne aktivnosti, kao i uspešnost upotrebe svih materijalnih i nematerijalnih resursa mora biti merena sa istom važnošću. Ovaj zahtev mogao bi se ostvariti setom dobro izbalansiranih finansijskih i nefinansijskih merila performansi. Ovaj rad ističe značaj dizajniranja jednog integrisanog sistema merenja performansi, s obzirom na njegov veliki uticaj na kvalitet odlučivanja menadžmenta u savremenom poslovnom okruženju.

**Ključne reči:** sistem merenja performansi, redizajn sistema, savremeno poslovno okruženje.



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## ENERGY MANAGEMENT AS A SUSTAINABLE DEVELOPMENT FACTOR OF SERBIA

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**Abstract:** *Energy policy has a new responsibility to manage the environmental impact of its activities and in the way to support national and international environmental policy. Energy is going to become the dominant factor of business risk. Energy management is needed in order to change a way of getting and distribution of energy. Control of climate changes and their unwanted consequences is imperative in the future of the global energy management. Environmental acceptability is one of the most important criteria in evaluation of applicability for new technologies and investments; current regulations for emission limits in the European countries are very rigorous, with trends to become more rigorous. Those regulations Serbia must apply in the near future. The task of the energy management consists of finding the most compatible instruments which will enable the realization of the wanted goal. The reality, on the contrary, shows the different problems in the realization of these goals. The renewable energy sources and investments into this field are not given appropriate attention in the economic and energy development in Serbia. In this paper we will show evaluation of the energy management state and its influence on sustainable development of Serbia. Energy policy doesn't predict the future; it shows necessary measures in order to realize aims of sustainable energy perspective and illustrates possibilities of system change of energy supply. The basics and the results of the Serbian energy policy in planning and spending area of different energents are also included, as well as the effects of needed rationalization of energy spending.*

**Key words:** *sustainable development, energy management, role of a state, renewable energy sources*

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### **Introduction**

The global energy crisis of the early 1970s confronted the world with an increasing shortage of energy. Numerous estimates of energy resources and their limited quantities became the center of world public attention, while most of the European countries introduced national energy policy and conservation programs. During the mid-seventies of the last century, average worldwide annual growth rates in energy consumption were about 5.5-6%. Such conditions inevitably provoked the development of a new economic theory and a new energy policy that was expected to offer new solutions for old problems in the light of a general energy shortage, accompanied by constant rise in prices of power sources in the world market. Dependent on the type and consumption of energy sources, predictions are that most of the available reserves of fossil fuels shall be exhausted by the middle of this century. Nowadays, a general attitude prevails that previous level and method of exploiting the resources, as well as their consumption manner, are impossible to sustain. This fact has practically been confirmed by the ecological crisis at local, national and global levels.

Regarding the level of Serbian economic power, predominant line of thought in introducing new energy technologies should be related to their economic justifiability, investment return period, as well as to the changes in electric energy and natural gas prices. The adverse economic situation of Serbia and thereby conditioned non-observance of the energy efficiency increasing program during the last decade of the 20<sup>th</sup> century brought about the following consequences, among others:

- a high consumption of electric energy for heating the residential areas,
- a low energy efficiency in industry, together with obsolete, energy-intensive production technologies,
- energy inefficient systems of central and district heating,
- outdated energy solutions in industry,
- technically worn-out, energy inefficient and "dirty" municipal energy supply services,
- a low degree of using the existing potentials of renewable energy and waste-to-energy sources,
- underdeveloped application of the effects of combined production of electric and thermal power,
- financially untenable business operations of the enterprises for electric power production, transmission and distribution, due to the energy selling prices that do not justify real production costs,



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- insufficiently developed and applicable energy management (energy management in developed countries is practiced as one of the regular measures for enhancing the energy efficiency).

There is an undeniable need for big investments into the energy sector in order to improve and modernize the energy infrastructure, as well as a need for developing and implementing a comprehensive policy of promoting energy efficiency and exploiting renewable energy sources, but the improvement potential is also big. The reform of Serbian energy sector represents de facto an establishment of a new energy policy, in the sense of defining aims and priorities under the Strategy of Energy Sector Development and determining the role of governmental bodies and energy entities within the framework of a new institutional organization of energy-related activities in Serbia. The changes have to conform both to the economic development of Serbia and to the EU energy practices and the standards set up for EU candidate countries.

#### **1. The imperative for a new energy management in Serbia**

A definition of new energy management is the basis of Serbian energy sector reform, in the sense of defining the targets and priorities under the Strategy of Energy Sector Development and determining the role of governmental bodies and energy subjects within the new institutional organization of energy-related activities in Serbia. Thus conceived national energy policy enables the entities of the power supply industry to realize the priorities within their plans and strategies of the development of relevant energy sectors, including the certainty of conditions for private and foreign investments into new energy-producing facilities in Serbia.

The new energy policy basis implies the estimated growth of energy needs and electric power production, together with the increased participation of domestic resources. All the sectors of final energy consumption, like industry, civil engineering and traffic, exhibit an obvious years-long underdevelopment regarding the energy efficiency. This falling behind is evident in relation both to the developed EU countries and to our immediate surroundings.

Taking into consideration that energy in Serbia still represents an instrument of the social policy, the employment policy and the policy of attracting foreign investment, the parity prices of energy resources and services are not realistic. The facts that Serbia earmarks over billion dollars per year only for the import of high-quality energy sources (oil, gas, coke,

electric power) and that almost the same amount goes to the costs of final energy production from domestic energy resources indicate the need of urgent intervention, starting from regulations to technical measures which would provide a decrease of evidently high energy losses both in the power-source production and distribution systems and in the energy consumption sectors.

High losses and irrational consumption of energy, as well as an increasing dependence on import, represent a serious and sufficient reason for Serbia to include the increase of energy efficiency and the usage of local, particularly renewable energy sources into its development priorities.

The essential aims of the new energy policy of Serbia are:

- A reliable domestic production and an unfailing supply of power from the existing energy sources with improved technological and technical operational characteristics,
- A harmonization of the entire energy system operation and development with the consumption sector needs for energy and with the development of relevant sectors of economy,
- Efficient production and rational economic-effective and energy-efficient exploitation of energy sources aimed at influencing volume and structure of the consumption of high-quality power sources and efficient protection of the living environment,
- An introduction of new legislative and institutional settings for the business operations of energy companies and other energy-related entities,
- Gradual structural economic changes in energy companies, adequate for market-oriented activities in the domestic and regional energy markets.

Notwithstanding a positive orientation toward the improvement of the conditions in the area of renewable energy sources and power-source efficiency, significant obstacles still persist in the implementation of measures aimed at the energy consumption reduction and at the increased usage of renewable sources. Major obstacles may be classified in the following manner:

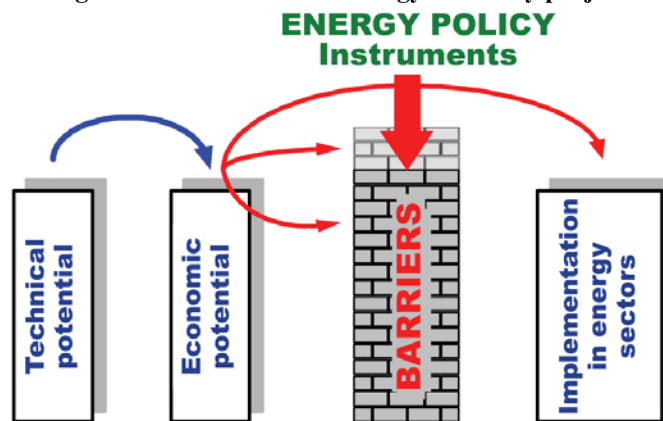
- lack of information and distrust of various possible users related to available technologies and potential financial gains;
- inadequate institutional and legal framework for launching and supporting projects in the field of renewable energy sources, energy efficiency and environmental protection;

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- high direct investment costs and limited financial capacities of end-users for investing;
- lack of local users' experience in developing cost-effective projects;
- shortage of information and experience about the operation of new financial mechanisms, like the ESCO (Energy Saving Service Company)<sup>1</sup> mechanism, for launching projects of renewable energy sources and energy efficiency;
- deficient experience and information about the constructed and tested plants;
- insufficiently developed or nonexistent market of services and energy products equipment in the sphere of energy efficiency and renewable energy sources;
- lack of experience and absence of institutions that provide funds for such projects;
- non-availability of systematic governmental incentive (funds for renewable energy sources and energy efficiency, preferential import taxation, etc.).

Numerous empirical studies have indicated the existence of substantial technical and economical potentials in the sphere of increasing energy efficiency and renewable energy sources but, nevertheless, many obstacles in their application require undeferrable implementation of energy policy instruments (Figure 1.).

**Figure 1. Barriers for the energy efficiency projects**



<sup>1</sup> The companies offering their clients reductions in energy costs through investing their own money and being paid back by the achieved savings. There are several performance contract modalities. These companies are specialized in power and water supply areas.

In consequence of the existence of these and other obstacles, the local market of services and products related to energy efficiency and renewable energy sources is underdeveloped. Interventions are also necessary in both the aspects of demand (information and motivation of users in the application of economically justifiable measures of energy efficiency and renewable energy source technologies) and of supply (provision of production and service capacities). The EU countries are far ahead of us in exploiting renewable energy sources, which are estimated to have the potential of providing about 30% of electric power production up to 2020. For example, wind energy already provides ca 20% of the total gross electricity production in Denmark, 8% in Spain and 6% in Germany.<sup>2</sup>

Considering the fact that Serbia lacks energy sources, as well as regarding the global trends in power supply development and preservation of environmental potentials, it is our opinion that the following directions of energy supply in Serbia are optimal:

1. Increased energy efficiency;
2. Enlarged share of renewable energy sources;
3. Use of waste for energy production, reduction of environmental pollution and raw material provision;
4. Tightening up the requirements for the environmental pollution reduction, in particular the decrease in emissions of CO<sub>2</sub>, as well as introducing stricter marginal emissions;
5. Energy market deregulation followed by emphasizing a distributed energy production;
6. Stimulating mechanisms for a promotion of investment into the energy sector.

The stated energy potential is undoubtedly significant and it stands at about 10-15% of the present final energy consumption in Serbia. The exhibited necessary investments do not have additive structures, but they should be selectively analyzed upon determining top-priority lines of activities.

Since a principle is proclaimed to develop Serbian economy as a knowledge-based economy, and inasmuch as scientific and professional institutions should considerably contribute to the new energy policy creation and implementation, their development would have to focus on:

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<sup>2</sup> "An Energy Policy for Europe" (2007), European Commission, Brussels

### **Energy Management as a Sustainable Development Factor of Serbia**

1. Their strengthening and restructuring with the aim to attain higher levels of applied research and to increase their self-sufficiency, preserving at the same time their scientific identity;
2. The improvement of service users' capabilities to develop, employ, adjust and commercialize technologies.

### **SWOT ANALYSIS**

<p style="text-align: center;"><b><u>STRENGTHS</u></b></p> <p>Good potential of renewable energy sources (biomass, geothermal sources...)</p> <p>Comparatively well developed gas and electricity distribution network</p> <p>Solid technical human potential</p> <p>Relatively good economic activities of industries</p> <p>Gradual liberalization of the electric energy market</p> <p>Formation of reliable tariff regulation systems for renewable energy sources</p> <p>Development of energy equipment production capacities</p>	<p style="text-align: center;"><b><u>WEAKNESSES</u></b></p> <p>Absence of energy development strategy in Vojvodina (energy savings through energy efficiency and participation of renewable energy sources in energy supply)</p> <p>Slow demonopolization of electric power production and trade</p> <p>Inadequate level of financial independence in organizing and realizing development programs</p> <p>Unrealistic energy parity prices</p> <p>Slow pace in enacting necessary laws and decrees</p> <p>Lack of penal regulations</p> <p>Non-disposal of property</p> <p>Nonexistence of fiscal rebates</p> <p>Nonexistence of subsidized energy prices for renewable energy sources and modern energy efficiency technologies</p> <p>Low interest for the studies of power systems and related technical fields</p>
<p style="text-align: center;"><b><u>OPPORTUNITIES</u></b></p> <p>Assembling and mobilizing qualified personnel</p> <p>Creation of a market of knowledge and of new technologies production and services</p> <p>Enactment of adequate laws and regulations that would enable energy sector development</p> <p>Formation of a fund of energy efficiency and renewable energy sources in Serbia</p> <p>Increase of the level of information and improvement of education</p>	<p style="text-align: center;"><b><u>THREATS</u></b></p> <p>Bureaucracy</p> <p>Resistance to changes</p> <p>Political instability and consequential slowness in realizing proclaimed reforms</p> <p>Brain drain of scarce professionals in power supply</p> <p>Reactions of local population</p>

An enlarged and strengthened technological basis and developed links between scientific research institutions and industry shall help enterprises to enter the global market more efficiently. Thus formulated aims clearly indicate the need for a reorientation of particular faculties and institutes to applied science and direct communication with potential clients. The restructuring of the significance and role of scientific research institutes implies:

- Building up the management structure and the structure of strategic planning and management, as well as introducing the management of changes;
- Improvement of operational and financial structures by implementing a modern information management system;
- Human resource development: improvement of the human resource policy, upturn of the system of reward/promotion, personnel structure alteration, staff training;
- Upgrading of physical infrastructure (laboratory equipment and facilities);
- Strengthening of business development and marketing, management of contracts and intellectual property, introduction of transparent criteria for launching and supporting research programs and individual projects, establishment of scientific technology parks and, where feasible, profit centers.

Moreover, it is necessary to establish mechanisms of monitoring the reorientation process of scientific educational institutions in order to achieve optimal common results.

## **2. Economic instruments of energy management**

In the Freedom House report<sup>3</sup>, Serbia is characterized as "one of the biggest consumers and polluters in the Western Balkans". This conclusion is based on the following facts:

- Energy intensity is extremely high - the ratio of total primary energy supply per unit of GDP is 5 times more than the world average and 8 times more than the average in the OECD.
- The intensity of carbon emission is 6.6 times more than the world average and almost 11 times more than the OECD average.

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<sup>3</sup> "Energy in South East Europe: A Legal Snapshot of Serbia and Kosovo" (2007), Freedom House

### **Energy Management as a Sustainable Development Factor of Serbia**

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- Electric energy consumption is inefficient in terms of value creation.
- Energy inefficiency is clustered in the most densely populated areas.
- Serbia is spending increasing amounts of high-quality energy (electric energy, petroleum products) for disproportionately small gains in GDP.

A successful accomplishment of the task of attracting foreign direct investments to increase and implement investing into renewable energy sources requires a synchronization of the operation of several institutions in order to complete the following activities: determination of programs and measures for the promotion of investment into the region; preparation of a presentation of opportunities and advantages for foreign investors; alleviation of administrative procedures for new investments; ensuring assistance to investors in making connections with relevant institutions; provision of information, advice and prompt administrative services; rendering help in establishing necessary infrastructure; adopting a long-term policy of using, buying and selling land for commercial purposes, with no discrimination and restrictions related to foreign investors. All these activities, together with special promotion of available human resources, should be synchronized on both local and regional levels, including the institutions in the domain of local government, business associations and employment agencies.

EU legislation in the sphere of energy efficiency and usage of renewable sources is very dynamic, enacting new laws, adopting strategies and guidelines and monitoring the enforcement of the existing regulations. The European Commission adopted (in 1996) the Green Paper on energy efficiency, which identified the need for introducing specific measures to improve energy efficiency at all levels - national, regional and local. Specific directives subsequently emerged from this document. European Union energy consumption grows steadily year by year, thus increasing the consumption of fossil fuels. At the same time, the electric energy demand in the EU grows at the rate of 1.5% per year.<sup>4</sup>

Serbia is lagging substantially far behind in this area and its attempts to approach Europe often remain only declarative. This situation is additionally aggravated by the fact that the data on energy sector are actually considered "top secret" and remain unpublished for years, although they should be available to the public. In compliance with the EU standards, guidelines and "The Green Paper on Energy Efficiency", it is possible to

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<sup>4</sup> "An Energy Policy for Europe" (2007), European Commission, Brussels

define modes of clean energy use and form strategic plans for the implementation of such programs in Serbia. Electric energy consumption grows progressively, while the energy deficit is very pronounced in the Balkan area. Only Bulgaria of all the Balkan countries used to have a favorable energy balance and to fully satisfy its own needs, until the closure of its nuclear plants. Serbian electric power industry cannot pride itself on a single newly constructed production plant in the last fifteen years.

The results like these are surely disturbing and it is very difficult to predict how to achieve balance between the galloping consumption and the stagnating production. In recent years, due to droughts, hydro-power plants have not been capable of producing 15% of the total energy supply, which is not sufficient, notwithstanding excellent work of thermo-electric power plants. Therefore, great quantities of electric power have had to be compensated through imports. The disastrous pricing policy (designed to preserve social peace) has in the last decades produced long-term consequences the effects of which are yet to be felt.

It should also be mentioned that from 1990 to 2005 the consumption in Serbia increased by 5.86 billion kWh and that not a single electric power plant was built in that period. At the same time, it is most certain that the existing power plants shall never reach previous records in electric power production, so it may be concluded that Serbia might face electricity supply problems in the near future. The pricing policy is also highly questionable. Large quantities of electric power are imported at considerably higher prices, causing a significant outflow of foreign currency that could have otherwise been invested into new production capacities. Moreover, a very small number of bidders in tenders released by the Electric Power Industry of Serbia show capability to fully supply the required quantity of electric power. This is an indication that the energy crisis has spread to the entire region. An additionally aggravating circumstance is that it is very difficult to find energy in winter, when Serbia needs it the most. For these reasons, the Electric Power Industry of Serbia should rely more on its own electric power plants. After the standstill of 15 years, it is imperative to construct new plants that would provide additional 800 MW, by which electric energy import would be avoided.

A solution is seen in the creation of the South East Europe Regional Energy Market, through contractual energy exchanges and joint investments into building new capacities and finishing the facilities in construction. According to the World Bank studies, the Balkan region shall be lacking 15500 MW of electric power by 2020, but if this problem is jointly approached, the demand could be satisfied with 11000 MW, by which



### **Energy Management as a Sustainable Development Factor of Serbia**

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considerable financial means would be saved. The Balkan Network development shall have a tremendous significance in minimizing the number of "bottlenecks" in the future regional electricity market. The "bottlenecks", i.e. shortages of transmission capacities between the producers and consumers shall represent the biggest problem upon opening the electricity market. Consequently, we have to prepare the transmission system for new requirements that it shall have to meet, because it was made and optimized for the conditions of a regulated market in which power flow changes are relatively small through the year. As soon as the number of "bottlenecks" gets minimized, economic reasons shall tilt the balance in favor of deregulation. The future electricity market shall have no technical restrictions in fulfilling economic demands and it will be ready to operate with the least possible expenses. Only then we may expect full advantages of a free market.

The significance of the regional integration in the Balkans is maybe greater than in other parts of the world. On the one hand, there is a fairly large number of relatively poorly interconnected small systems, while on the other, these systems were developed (especially in the ex-Yugoslav countries) as parts of a larger system. Beside that, electric energy production shows a surplus in some countries and a deficit in the others. The Balkan system as a whole would show a mild surplus. Although most of the Balkan countries are now integrated into the 2<sup>nd</sup> UCTE Zone, this is not sufficient. It means that, even with the existing transmission system, a bigger system in its entirety would be more stable as compared to isolated systems of individual Balkan countries. Alongside with the regional integration, a higher-level integration with other European, and especially EU-member countries should be insisted upon.

### **Conclusion**

Pursuant to the universally accepted sustainable development principle, energy policy has a novel responsibility to manage the impact of human activities on the living environment and thus support national and global ecological policies. Ecological acceptability has become an obligatory criterion in evaluating the implementation of all energy technologies worldwide. Strict regulations to reduce harmful gas emissions, tending to become even stricter, shall inevitably have to be applied in our country as well. However, the practice has pointed out different problems in the realization of these goals, since the investment into renewable energy sources has not yet assumed a significant place in the power-supply and industrial development of Serbia.

Growing needs for energy, as well as ever greater problems related to the environmental protection, impose economically and ecologically efficient energy production. As large power plants are less agreeable solutions from the aspect of environmental protection, the development of smaller, independent power plants located in the energy consumption areas has been promoted. Degrees of utilization for the energy production technologies and the "ecological quality" of electric power are essential energy management factors. Most of the European countries have introduced national programs of energy policy and conservation, while new technologies using less energy per production unit are being developed and implemented parallel with that. Numerous research institutions and teams dealing with new technologies, renewable energy sources and environmental protection have been formed. Sweden, for example, has more than 185000 geothermal heating and cooling stations by today, while bioethanol already accounts for 4% of fuel in the petrol market.

Serbian economy is also burdened with an irrational energy consumption, which can be illustrated by unfavorable indicators of energy consumption per unit of GDP, by the share of energy costs in the gross domestic product, both total and by sectors, and particularly by industry groups. From the beginning of the 1990s until now, the mentioned energy consumption indicators have deteriorated so much that all analyses suggest that the planned economical recovery of Serbia by 2012 may be accomplished only under the condition that the energy consumption indicators be brought to the level of 1990 at least. This way, the economic effectiveness of consumed energy and the energy efficiency of power use would be leveled with those of central and east European countries that achieved rapid economic development in the previous decade.

High losses and irrational consumption of energy, as well as the growing dependency on imports, represent a serious reason for Serbia to include the increase of energy efficiency and the use of local, especially renewable energy sources. Direct instigation of thus oriented activities in the energy consumption sectors requires the formation of a designated fund for energy efficiency, the issuance of the National Program for Rational Energy Use, as well as the adoption of a special Law on the Rational Use of Energy, which should provide a legal framework for the realization of mentioned activities. All the planning documents of the Republic of Serbia (the Energy Law, the Strategy of Energy Development up to 2015, the National Economic Development Strategy), together with the activities of competent institutions and programs they are carrying out, identify the previous statements as priorities, that is, as preconditions for catching up with European standards in the sphere of energy efficiency and use of renewable

energy sources. In addition, a public promotion should be worked on related to the significance of this problem not only for the economic development of Serbia but also for the environment protection and the population life quality improvement, since the impression is that public benefits of the energy sector reform have not been sufficiently comprehended.

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## ENERGETSKI MENADŽMENT KAO FAKTOR ODRŽIVOG RAZVOJA SRBIJE

**Rezime:** U uslovima visokih stopa rasta potrošnje energije na globalnom nivou, došlo je do razvoja nove ekonomske teorije i politike i novog energetskog menadžmenta od kojih se zahteva da za stare probleme ponude nova rešenja u svetlu opšte nestašice energije, praćene kontinuiranim poskupljenjem energenata na svetskom tržištu. Prema uputstvima Kjoto protokola, radi smanjenja emisije gasova staklene bašte neophodno je smanjenje upotrebe obnovljivih energenata za 8%. Programi i akcioni planovi kojima se obezbeđuje povećanje energetske efikasnosti postali su važan deo mnogobrojnih dokumenata, politika, strategija i mera za usaglašavanje sa Kjoto protokolom i pojavljuju se u svim relevantnim dokumentima kao deo daljih obaveza. Primenom principa energetske efikasnosti smanjuje se upotreba konvencionalnih izvora energije koji, osim što su ograničeni, predstavljaju i najznačajnije incidentne elemente u prirodnoj ravnoteži. S obzirom na stepen ekonomske snage Srbije, dominantna razmišljanja pri uvođenju novih energetskih tehnologija bi trebalo da imaju u vidu njihovu ekonomsku opravdanost, vreme povraćaja investicija, kao i promene cena električne energije i prirodnog gasa. Primena gotovo potpuno zanemarenih obnovljivih izvora energije, čiji potencijali postoje u Srbiji ali nisu dovoljno ispitani i tehnološki usavršeni, takodje se nudi kao jedno od rešenja koje treba da dovede do očuvanja preostalih resursa, očuvanja životne sredine i održivog razvoja energetike. Veliki gubici i neracionalna potrošnja energije, kao i rastuća uvozna zavisnost su dovoljni razlozi da Srbija u svoje razvojne prioritete svrsta povećanje energetske efikasnosti i primenu lokalnih, posebno obnovljivih izvora energije.

**Ključne reči:** održivi razvoj, energetski menadžment, uloga države, obnovljivi izvori energije



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## VIRAL MARKETING AS A SPECIFIC FORM OF INTERNET-BASED MARKETING OF PRODUCTS AND SERVICES

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Dražen Marić\*

**Abstract:** *Analysing the factors that have contributed to the revolution in to viewing marketing philosophies is inconceivable without analysing the impact of the development of information technology and its use in interaction with consumers. The expanding use of the Internet, with its sub-forms such as intranet and extranet, electronic and other technology-based forms of trade, requires a new way of thinking about the necessary marketing activities, as well as their assessment in an environment where new technologies have given rise to new marketing forms. At a time when marketing theories and practices are focussed on relationships – between companies and consumers, companies and employees, and among consumers themselves, viral marketing is one of the most recent forms of consumer-to-consumer interaction, and as such is a very specific and efficient form of using the Internet in the placement of products and services on the market.*

**Key words:** *Viral marketing, word-of-mouth, consumers, interactions, communication, Internet*

### Introduction

The dynamic development of technology, information science, but, most of all, changes in the characteristics of consumers, their habits, preferences and demand structure, have revealed all the shortcomings and limitations of the traditional transaction market concept. The new, alternative

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way of thinking in marketing highlights the fact that exchange *per se* is not the focus of marketers' analysis, but must give up their priority to relationships between different sides on the market - company-to-consumer, in-company, and consumer-to-consumer. The new philosophy, called *relationship marketing*, is overtaking the positions of the old transaction marketing philosophy. The greatest challenge to early 21<sup>st</sup> century marketers is this third dimension of relationships, i.e. relationships between consumers, their mutual impact on preferences and purchase decisions, and – most of all – the possibility to incorporate consumers into the company's marketing mix. At the time of information revolution and the emergence of the notion of internet consumers, companies aiming to survive on the increasingly competitive market must pay maximum attention to the phenomenon of viral marketing which is, in essence, consumer-to-consumer interaction.

### **The Mechanism and Principles of Viral Marketing**

Viral marketing is one of the most recent phenomena in marketing theory and practice, with numerous definitions. Solomon defines viral marketing as a strategy where consumers sell the product for the benefit of the producers (1, p. 335). Schiffman and Kanuk call viral marketing 'buzz marketing' or 'snowball marketing' and define it as a strategy encouraging individuals to forward marketing messages thus creating a possibility for exponential growth in the number of those exposed to the impact of these marketing messages (2, p. 501). Basically, viral marketing is a hybrid of e-mail and word-of-mouth communication, and was named so due to the speed of its dissemination, similar to that of a virus.

The growth and development of global economy and increasing market diversification have given rise to viral marketing. With expanding economies, which constantly improve their performances and potentials, the range of tastes and preferences keeps widening, and the list of required, desired, or – more appropriately – products in demand is getting longer and more complex (7, p. 205).

In essence, viral marketing is a communication strategy using ideas, slogans, symbols or a combination of all of these to convey marketing messages about products and services to target groups on the market most efficiently and effectively. Viral marketing is a part of the total marketing strategy aimed at opinion leaders, i.e. innovative early adopters of given products and services on the market. As a strategy, viral marketing enables the companies that use it to exploit all the advantages of their first-mover position. Although viral marketing is predominantly used in the information

### **Viral Marketing as a Specific Form of Internet-Based Marketing of Products and Services**

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sphere, e.g. Hotmail e-mail services, software such as Netscape Navigator, Winamp, Adobe Acrobat Reader, Instant Messenger etc., and its use is gaining momentum in entertainment industry as well. Pop singer Britney Spears used viral marketing as the pivotal point of her campaign, and this marketing form has also contributed to the great success of the film *The Blair Witch Project*. Volkswagen, Vespa, Procter&Gamble are only some of successful companies owing their success to the use of viral marketing.

The most common reason why consumers inform one another about some products and services is the fact that they are impressed by them, and that these products are important in their lives in one way or another. In their attempt to draw the target market's attention to themselves and their offer, insurers spend a major part of their marketing budget on promotional handouts, although its benefits are far inferior to opportunities offered by the Internet. Each buyer that receives advice or a message from a friend can forward it to thousands of other friends, acquaintances, or, simply Internet users, up to epidemic proportions, like influenza spread by sneezing, coughing or handshake. This is the reason why this marketing form was named viral or virus marketing. There are various techniques of applying viral marketing, but their common denominator is that they enable interaction among consumers. Each of these techniques must imply the use of the following principles (3, p. 196):

- ***The product or the service must be a part of the communication process.*** If viral marketing is to make a strong impact on the boost in the sales of products or services on the market, potential consumers, either individually or in groups, must communicate in any information exchange mode available on the Internet. The most successful example of excellent results and market acceptance of a product promoted via viral marketing is ICQ – web-based service enabling online contacts among users. As ICQ means nothing to its user unless his/her friends or acquaintances possess it as well, friends encouraged each other through viral marketing, in terms of sending advice and recommendations by e-mail, to acquire ICQ software so that everyone could use the benefits it offers. The most interesting thing about ICQ software are related marketing activities, i.e. total absence of marketing activities related to the launch of ICQ software on the market. The only promotional material that its Israeli designers made is a printed brochure on the features of this software, which was never used. Success of this software is the outcome of personal motivation of users, who persuaded their environment in writing and by word of mouth to acquire ICQ.

- ***Consumers must interact.*** A basic fact in market research is that consumers very often talk about their daily routines. The more a company and its offer constitute a part of their daily lives, the greater is the chance of new consumers being recruited through daily word-of-mouth communication. The success of Internet sites used for e-commerce and auctions, such as eBay.com, is a typical example of how large profits can be made based on consumer interaction. Each purchase or sale, i.e. transaction made through the Internet, results in various comments that consumers subsequently disseminate. The main logic of eBay was to initiate a maximum possible number of transactions on their site, and to keep their offer attractive for various social classes and strata. The key point for companies that want to use viral marketing in their market entry is to create a system that will establish links among consumers and encourage them to communicate among themselves. The role of web site hereby gains importance, and it is therefore not surprising that many business schools in the world have included web page design and development as one of compulsory courses of their curricula.
- ***Consumers must be encouraged and motivated to spread the information by word of mouth.*** The use of viral marketing must imply that the company's Internet site offers the possibility for consumers to forward free electronic messages to their friends and acquaintances. Sending the electronic message must be highly efficient and simplified, so that the consumer does not waste a lot of time on this activity, and wear off his/her delight in the product or company. It is important to acknowledge that consumers owe nothing to the company. The main motive of sending recommendations electronically is the consumers' awareness that their friends rather than the company will benefit from this recommendation. For this reason, companies that want to use viral marketing must find the most acceptable (user-friendly and unintrusive) form of consumer appeal, so that the latter can forward their product satisfaction. Any aggression and pointing to possible harm from not forwarding the message will not encourage the consumer to send the message to his/her environment; on the contrary. Dissatisfaction may be generated and multiplied.

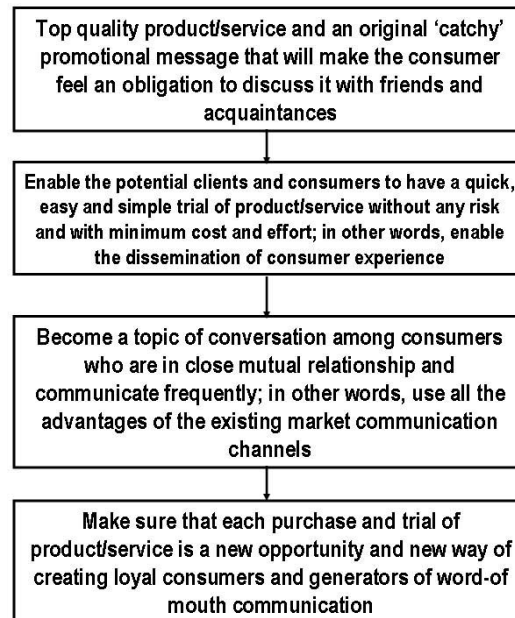
One of the greatest authorities in the field of viral marketing and word-of-mouth communication is George Silverman, who proposes four steps in the use of viral marketing (4, p. 107):



## Viral Marketing as a Specific Form of Internet-Based Marketing of Products and Services

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**Fig. 2: Viral marketing**



Source: George Silverman, *The Secrets of Word of Mouth Marketing*, Amacon – American Management Association, 2001, p. 107

The phenomenon of the Internet has been analysed, overviewed and explained in a lot of academic and other discourse. One of the main features of contemporary business environment is the comparative freedom of media and a rapid growth in the number of internet users (7, p. 214). Basically, the Web was envisaged as a means for scientists to communicate and exchange information, i.e. it was devised to speed up communication process. It is interesting note that only the commercial application of the Internet lead to a rapid increase in the amount and speed of communication among people. Acceptance of new products today is inconceivable without internet-based marketing activities, without a specific electronic form of word-of-mouth communication called viral marketing. However, although the Internet is a perfect medium for viral marketing, the success of its application must be based on high degree of trust – first between the seller/provider and the customer, and later among customers themselves. Internet sites such as [www.epinions.com](http://www.epinions.com) and [www.deja.com](http://www.deja.com) are the best examples of the application of viral marketing and word-of-mouth communication on the web. They offer the ratings of almost any product available on the Internet, as well as consumers' comments on them.

## Viral Marketing Vs. Word Of Mouth

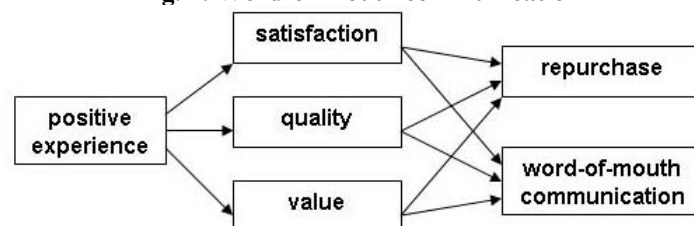
All of the above inevitably leads to the comparison between the notions of viral marketing and word-of-mouth communication. Similarities between these two concepts are numerous, as they are based on high-quality product or service and original promotional message.

Word-of-mouth communication is communication on products and services between people who are considered to be independent of companies offering products and services, and this communication flows through media that are also independent from companies whose products are discussed. (4, p. 25)

Word-of-mouth communication can occur as conversation between two or more people, or as a lecture by an individual to a wider auditorium; it can be direct or indirect – via telephone, e-mail or any other means of communication. Currently, over 80% of purchase decisions result from somebody's direct and informal recommendation or advice (7, p. 166). The key element comprising word-of-mouth communication is that it flows between individuals who have no material interest in whether the recipient will buy a product or service or not. If the sales message is the one that a company sends to the target auditorium through its representatives, then word-of-mouth communication is created by a third party and spontaneously transmitted to inadvertent or targeted auditorium entirely independent of the producer or supplier.

Most of word-of-mouth communication occurs spontaneously, but it often happens that some companies, i.e. their marketing departments deliberately initiate this communication, aware of its importance and impact it can have on consumers. Such an approach is called guerrilla marketing (7, p. 167), and is often related to the phenomenon of viral marketing.

Fig. 2: Word-of-mouth communication



Source: Lorik Molinari, *Satisfaction, Quality and Value and Effects on Repurchase and Positive Word of Mouth Behavioural Intentions for B-2-B Services*, Nova Southeastern University – Dissertations 2004, p. 10.

### Viral Marketing as a Specific Form of Internet-Based Marketing of Products and Services

As well as word-of-mouth communication, viral marketing implies the existence of advanced social networks among consumers, used for exchanging their experiences of products and services. However, there are some specific features and differences between these concepts, as shown in the figure below.

**Fig. 3: Differences between viral marketing and word-of-mouth marketing**

	<b>word-of-mouth communication</b>	<b>viral marketing</b>
<b>speed</b>	moderate	high
<b>dissemination type</b>	verbal rather than usual	visual rather than verbal
<b>possibility of control</b>	relatively low (live word tends to distort the original content)	relatively high (electronic messages remain unchanged regardless of the number of repetitions)
<b>impact on the environment</b>	two-way information flow – receipt and transmission in personal contact	predominantly sending information without personal contact
<b>scope of application</b>	unlimited	limited to internet users

Source: Michael Solomon, Gary Bamossy, Soren Askegaard, *Consumer Behaviour – A European Perspective*, Prentice Hall, 2002, p. 339

When speaking about the effects of viral marketing and word-of-mouth communication, it must be noted that these effects depend on several factors (3, p.25):

- **The nature of the product or service:** there are many products or services that generate hardly any word-of-mouth communication. It mostly occurs with the following product categories:
  - products or services that excite consumers, such as books, music or films;
  - New and innovative products that induce numerous consumers' comments, who mostly express their amazement by the ingenuity of individuals and companies who have invented them. These include all new software packages and the numerous opportunities offered by the Internet;
  - products and services that entail unforgettable experience when using them, such as cars, hotels, restaurants etc.;
  - complex products, where word-of-mouth communication arises from the consumer's need to reduce the risk when purchasing and using such products, including various medicines and remedies;

- expensive products, such as technical and electronic goods, where the basic motive for the occurrence of word-of-mouth communication is also the effort to reduce the purchase risk;
- Easily perceptible products such as clothing, cars and mobile phones, which the whole environment may notice and comment on their owner.
- **The type and characteristics of the target market and market segment:** various cultures, social structures and political systems affect the extent to which people are open to one another, how capable of communicating they are, and, thus, of asking and giving advice and recommendations for the purchases of products and services. It is well known that in the world's most populous city, Mexico City, the locals boast that none of them have a city map, but rather rely on their fellow citizens' help when enquiring about a street or quarter. Likewise, consumers of various ages use a different word-of-mouth communication than that characteristic of younger categories of consumers. Migrations may give rise to intensive word-of-mouth communication, which is especially significant for Serbian market, with a high influx of refugees and displaced persons over the past fifteen years.
- **Consumer networks:** in highly developed countries with highly developed consumer protection, there are numerous consumers' associations, organizations and movements, maintaining extremely good communication and exchanging information, advice and suggestions.
- **General marketing and sale strategies,** which can also influence the existence or non-existence of viral marketing and word-of-mouth communication related to products and services.

Communication strategy, including viral marketing, is an inseparable part of business strategy of companies on the market. What must be especially highlighted is the fact that 90% of consumers who are dissatisfied with a product or service convey their dissatisfaction through oral communication and viral marketing (7, p. 168), which evidences that viral marketing has not only an informative function, but also educational, aesthetic and persuasive function, which gives it a special place and high importance in the marketing communication mix of companies on the market.

### Conclusion

The possibilities of applying viral marketing for companies in countries with highly developed markets are far wider than Serbian market. However, the informational literacy of consumers in Serbia is growing at a

### **Viral Marketing as a Specific Form of Internet-Based Marketing of Products and Services**

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high rate and the number of Internet users is growing daily, which means that this form of marketing should be considered and its application should start immediately. At no time should companies disregard the fact that viral marketing also entails the problem of the 'avalanche' of electronic messages, cards and coupons, which might discourage consumers from participating in the company's campaign. These are the reasons why viral marketing should never be intrusive, implicit and bounding, but on the contrary, good viral marketing is always moderate and unpretentious.

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### **VIRALNI MARKETING KAO SPECIFIČNA FORMA MARKETINGA PROIZVODA I USLUGA BAZIRANOG NA INTERNET**

**Rezime:** Analiza faktora koji su doprineli zaokretu u posmatranju marketing poslovne filozofije se ne može zamisliti bez analize značaja razvoja informacione tehnologije i njene primene u interakciji sa potrošačima. Sve šira primena Interneta, sa njegovim podformama – Intranet i Ekstranet, elektronske i drugih tehnološki zasnovanih oblika trgovine, zahteva i nov način razmišljanja vezano za marketing aktivnosti koje su potrebne, kao i za njihovu valorizaciju. Nova tehnologija omogućila je pojavu novih formi marketinga. U vremenu kada se u fokusu marketing teorije i prakse nalaze odnosi – kompanije i potrošača, kompanije i zaposlenih, i između samih potrošača, Viralni marketing predstavlja jedan od najnovijih oblika interakcije potrošača između sebe, te je kao takav veoma specifičan i efikasan oblik upotrebe interneta u plasmanu proizvoda i usluga na tržištu.





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## MARKETING CHANNEL DESIGN

**Aleksandar Grubor, PhD \***

**Abstract:** *The purpose of marketing channel design is to deliver value to final consumers. Similar to differences in the ways economic theoreticians have approached the study of value in different historic periods, marketing also displays noticeable differences in creating and delivering value. The 21<sup>st</sup> century marketing theory has been enriched by a new approach – the concept of holistic marketing, which regards the creation and delivery of value from the aspect of value network. According to the holistic marketing concept, marketing channel design starts from the first suppliers, distributors and consumers, but such a starting point is extended to the entire supply and delivery chain, placing the company into the centre of the value network. Building a system of partnerships and alliances facilitates the creation and delivery of supply on the highly competitive contemporary market.*

**Key words:** *design, marketing channels, value delivery, value network.*

### 1. Introduction

Designing marketing channels is one of the most sensitive areas of decision making in marketing management, having in mind that it implies delivering value and the company's presence on the final consumer market. In contemporary business practice, companies in most cases do not deliver their goods to final users directly, but rather build a network of intermediaries, partners and institutions whose function is to connect producers and final consumers, in accordance with defined marketing goals.

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Marketing channels are a part of the marketing mix concept, whereby a company aims to respond rationally to the impact of dynamic marketing environment factors. Together with product, price and promotion, marketing channels participate in combining, designing and connecting marketing elements, leading to the best accomplishment of business goals in particular market conditions in given time.

Linguistically, the word “channel” is of French origin, and in marketing it refers to the pathway a product follows from the place of production to the place of final consumption. As most producers in modern marketing are not involved in the direct sale of their supplies to final consumers or users, efficiency in spanning the space and time gap between production and final consumption is accomplished by appropriate marketing channel design.

## **2. Marketing Channels In Marketing Mix Concept**

The term ‘marketing mix’ was first used in 1953 by Professor Nill Borden in his American Marketing Association (AMA) presidential address, although the idea of the concept is credited to Professor James Culliton, who elaborated on it analysing marketing costs, concluding that marketing managers are ‘mixers of elements’ aimed at creating a profitable market supply. The marketing mix concept rapidly gained universal acceptance in marketing theory, with some differences in classifying instruments included in this concept.

Although not the only one, the most frequently used classification of marketing mix instruments in contemporary marketing is that of McCarthy, defining instruments as product, price, place and promotion. This classification is based on clear criteria, stemming from the basic marketing functions. Combining these marketing mix instruments, companies perform the basic marketing functions, where each of the marketing mix instruments most contributes to the realisation of marketing function. Marketing mix concept facilitates it for companies to overcome barriers in the process of exchange and accomplish the defined marketing and business goals.

The development of marketing mix concept implied a declining significance of pricing as the basic instrument whereby a company influences the demand for its offer. Marketing mix concept highlights the importance of the so-called non-pricing instruments influencing the demand for a particular company’s supply, but without price modification. Pricing competition is, in fact, a movement along the demand curve of a certain



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commodity, while non-price competition refers to moving the demand curve in favour of a certain commodity.

Marketing channels are thus the non-pricing instruments of the marketing mix, and their function is to draw benefits from 'place', or, in other words, marketing channels enable the disposal of the product to the other side in the process of exchange.<sup>1</sup> The expert public regards marketing channels as perhaps the least researched marketing mix instrument, which also appears in practice as substantial opportunity cost.

In business practice, marketing channels feature various agents i.e. intermediaries, which can be consumer-dependent and independent organisations. Intermediaries buying products and selling them to final customers are merchants or retailers, while those who act as intermediaries between producers and final consumers are referred to as agents, brokers, dealers etc., as they do take title of the products they distribute. Finally, marketing channels may also include intermediaries providing various types of assistance in distributing products from producers to consumers, so that they can be referred to as facilitators (banks, insurance companies, marketing agencies, transporters etc.).

A set of marketing channels used by a particular company is called marketing channel system.<sup>2</sup> Decisions related to the set of marketing channels reflect on all other marketing management decisions, starting from decisions on price, hiring sales force, establishing partnerships with other companies, down to joint conduct of promotional activities. In addition, managing marketing channels implies the company's decision to use push or pull strategy.

Marketing channels as an element of marketing mix concept increasingly take on the characteristics of essential association, linking producers and final consumers, where this interdependence is manifested in intra-company as well as extra-company merger of a larger number of functions.<sup>3</sup> Marketing channels are an important instrument in marketing

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<sup>1</sup> A. Grubor, *Marketing istraživanja – integralni deo međunarodnog marketing programa* [Marketing research as an integral part of the international marketing programme (monograph)], Ekonomski fakultet Subotica, Subotica, 2008, p. 63.

<sup>2</sup> Ph. Kotler and K. L. Keller, *Marketing menadžment* (Serbian translation of *Marketing Management*) 12<sup>th</sup> ed., Data Status, Belgrade, 2006, p. 468.

<sup>3</sup> A. Grubor, Informacije međunarodnih marketing istraživanja u funkciji kanala distribucije [International marketing research information in the function of distribution channels], in *Anali Ekonomskog fakulteta u Subotici* [Annals of the Faculty of Economics in Subotica], vol. 14, 2005, p. 14. i 15.

programme implementation, and should be designed in a way that will enable flexibility and adaptability to specific market conditions.

### 3. Marketing Channels And Value Networks

Analysing value networks in marketing channel design serves the purpose of creating optimized marketing mix, bearing in mind that decisions on distribution channels reflect significantly on the marketing programme's efficiency and effectiveness. Designing an advanced and serviceable system of marketing channels is a problem frequently burdened by the achievement of competitive advantages, which undermines the coordination of marketing and production.<sup>4</sup> It is therefore necessary to extend the concept of supply chain, so as to overcome the limitations of partial approach to planning demand chain.

Extending this concept implies placing the company in the centre of the value network<sup>5</sup>, referring to a system of partnerships and alliances built so that a company can create, augment and deliver its supply. Value network includes both the company's suppliers and its suppliers' suppliers, immediate and final customers, i.e. consumers of products supplied. In a wider sense, a value network also encompasses other marketing environment factors affecting the delivery of a given company's supply to final consumers, which points to the significance of developing and enhancing relationships within marketing channels.

Value network concept stands in the function of delivering superior value to target market segment, as an enhancement in demand chain planning. Developing value network concept may lead to alternative solutions to generally accepted marketing mix instruments, known as SIVA, referring to the role of solutions, information, value and access in accomplishing defined marketing goals.<sup>6</sup>

Implementing value network concept implies companies' increased investment in developing information technologies and software packages. It is about the necessity of enhancing the management of cash flows, production processes, human resources, purchasing and other contemporary business system functions. Separating and enhancing business functions

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<sup>4</sup> A. Grubor, Kreiranje optimalnog međunarodnog marketing miksa [Creating optimum international marketing mix], in *Marketing*, Vol. 36, No 3, 2005, p. 139.

<sup>5</sup> Ph. Kotler and K. L. Keller, *op. cit.*, p. 471.

<sup>6</sup> M. Troy, From Supply Chain to Demand Chain, a New View of the Marketplace, *DSN Retailing Today*, 13 October 2003, pp. 8-9.

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should result in simplified realisation of individual processes in business operations.

Moreover, enhancing supply chain planning enables reviewing earned revenues at the beginning and the end of business process, which facilitates decision-making on backward and forward integration. Furthermore, it facilitates reviews of sudden diversions in any section of the supply chain, thereby reducing pressures to change costs, prices and supply chains. In addition, companies can liaise with their business partners in developing marketing communication and integrate transactions, thereby reducing costs and increasing business efficiency.

In business practices, marketing managers still pay the most attention to the part of value network focussed on final consumers of products. Such an approach may result in a more active role of final consumers in planning companies' marketing activities, especially in marketing channel design. With the growing role of value network in marketing channel design, contemporary marketing managers are increasingly likely to become value network managers, unlike previous product or account managers.

#### **4. The Functions, Flows And Dynamics Of Marketing Channels**

Marketing theory devotes most attention to building marketing channel structure, while the study of functions and flows is secondary to institutions, i.e. subjects in marketing channels. Regardless of approach to marketing channel design, they must perform all marketing functions characteristic of product distribution. Marketing channel functions include relevant tasks and operations such as negotiating, ordering, purchasing, classifying, transporting, warehousing, labelling, promoting, risk-taking, selling etc.

These functions are almost always performed in business practice, even in situations when a company sells its products directly to final consumers. When designing marketing channels, functions are transferred to other participants, as they cannot be eliminated. There are known examples when, in certain situations, final consumers take over some marketing channel functions.

In most cases, marketing channel design involves multiple intermediaries, who carry out various activities. In system approach, a

channel is viewed as a single institution, run and coordinated by someone cast in the role of marketing channel leader.<sup>7</sup>

Marketing channel design should result in a developed distribution system, capable of surviving in competition with differently designed marketing channels. If not, individual participants in a particular marketing channel could define strategies contrary to interests of other members of the marketing channel, which would, in the long run, undoubtedly lead to business failure both of the marketing channel system as a whole, and the less viable members of the marketing channel.

Marketing channels can, therefore, include a larger or smaller number of members, who perform marketing channel functions and are linked by different types of flows, the most significant of which are:<sup>8</sup>

- physical flow, i.e. physical movement of product from raw material to the end user, i.e. consumer;
- right of disposal flow, regulating the transfer of title from one legal entity to another within a designed marketing channel; and
- information flow, to be understood as deliberate channelling of effects through various forms of promotion and publicity from one member of the designed marketing channel to the others.

These flows should include payment flow as well as marketing channels also include various payments which accompany physical flow and right of disposal flow and are effected through commercial banks and other financial institutions.

Marketing channel functions and flows refer to their principal role, i.e. facilitating exchange or removing the gap between the quantity and structure of supply and demand for a particular product. This gap in most cases stems from producers' narrow specialisation in producing large quantities of a smaller range of products on the one hand, and consumers' demand for smaller quantities of a wide range of products on the other.

Marketing channel dynamics refer to decisions on whether to design conventional, vertical or horizontal marketing channels. Conventional marketing channels are recognisable by isolated and autonomous participants, performing a smaller number of traditional distribution

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<sup>7</sup> S. Vasiljev, *Marketing principi* [Marketing principles], 4<sup>th</sup> ed., Prometej, Novi Sad, 2005, p. 301.

<sup>8</sup> G. Lancaster and L. Massingham, *Marketing management* (Serbian translation), Grmeč, Belgrade, 1997, str. 248.

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activities. Coordination within marketing channels is performed by individual negotiations between individual participants.

Vertical marketing channels are integrated distribution systems, which are the most common in developed market economies. They function as a single distribution system where the behaviour of individual members is controlled, with the aim of overcoming possible conflicts arising from individual members' aspirations to accomplish partial goals. Principal members of vertical marketing channels accept mutual dependence, justified by the accomplishment of long-term business interests. Contemporary business practice recognises various types of vertical marketing channels, the most common of which are corporate vertical systems and franchising.

Horizontal marketing channels refer to linking companies of the same level, or industry. Such marketing channel design points to the willingness of two or more independent companies to pool resources and marketing programmes, so as to exploit favourable market situations. Horizontal linking in most cases result in joint ventures, used in joint targeting of particular market segments.

### **5. Marketing Channel Strategy And Management**

Marketing channel design implies making very important strategic decisions in marketing management, which should be in accordance with other decision-making related to creating marketing programmes. As marketing channels comprised in the marketing programmes are managed while moving products from producers to final consumers, it is necessary to develop appropriate strategies and management of marketing channels. Developing marketing channel strategy implies:<sup>9</sup>

- choosing the most effective marketing channel;
- deciding on the intensity of distribution;
- deciding on the degree of marketing channels integration .

When selecting the most effective marketing channel, a company should appreciate the impact of relevant factors, most notably market factors, producer factors, product factors, and competition factors. Reviewing the impact of these factors, a company can most effectively meet the demands of the increasingly diversified contemporary market for the

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<sup>9</sup> D. Jobber & J. Fahy, *Osnovi marketinga* (Serbian translation of *Foundations of Marketing*), 2<sup>nd</sup> ed., Data Status, Belgrade, 2006. p. 311.

delivery of required, desired or - perhaps most aptly - requested products and services.<sup>10</sup>

Deciding on the intensity of distribution refers to choosing between three basic options, i.e. inclusive, selective and exclusive distribution. Intensive distribution prevails in products targeted at mass market; selective distribution achieves good market coverage by using a smaller number of retail outlets, while exclusive distribution is an extreme form of selective distribution, where only one distributor is engaged on the target market segment.

Deciding on the degree of marketing channels integration includes the choice between conventional marketing channels, building a franchising system, all the way to taking title of the channel by the producer. In conventional marketing channels, the producer has little or virtually no control of agents, in view of their independence. One exception refers to commercially strong producers with developed strong brands, resulting in vertical marketing systems in business practice.

Developing a franchising system implies the existence of a legal relationship between the producer and the agents, stipulating all the rights and obligations of all system members. Franchising systems are examples of vertical marketing systems, as they rely on formal coordination and integration of total marketing and distribution activities.

Taking the title of the channel by the producer leads to total control of activities of the employed intermediary, serving as a basis for developing a corporate vertical marketing system. On this way, by acquiring retail outlets, the producers achieve a full control of production, purchasing and other marketing activities in their own retail outlets. The advantages of this marketing channel strategy are based on balancing the control with the acquisition price of retail outlets, i.e. the risk of excessive extension of managing activities.

After developing marketing channel strategy, the next stage is its effective implementation, i.e. continuous management of marketing channel strategy. In other words, the follow-up activities in marketing channel design are related to decisions on marketing channel management. Marketing channel management decisions include choice, motivation, training and

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<sup>10</sup> R. Kovač Žnideršić and D. Marić: *Društvene determinante ponašanja potrošača* [Social determinants of consumer behaviour], Ekonomski fakultet Subotica, 2007, p. 205.

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assessment of channel members, as well as resolving conflicts within marketing channels.<sup>11</sup>

Selecting marketing channel members implies the identification of potential members and definitions of selection criteria. After choosing marketing channel members, the next stage is motivating them, so that distributors devote sufficient attention and resources to particular company's products. Training marketing channel members is determined by their internal abilities, especially in the areas of management, marketing, finance and human resources management. Assessment of marketing channel members affects decisions on retaining, training and motivating selected distributors. Assessment produces information on which the distributors should be retained, and which should be substituted. Finally, marketing channel management includes conflict management, especially in a situation when the producer and chosen distributors are independent. Conflicts may arise from different objectives, introduction of additional product lines, or the use of multiple marketing channels.

Conflict management is facilitated by developing partnerships between producers and chosen distributors, i.e. marketing channel members, and is achieved by reaching consensus on sales targets, staff training in conflict resolution, market segmentation, enhancing marketing performances, as well as acquisition, i.e. commitment of the other side.

## 6. Contemporary Practices In Marketing Channel Design

The changing business conditions on the contemporary market also require adjustments in the application of marketing concepts, implying a different approach to marketing functions, especially marketing channel design. Contemporary practices in marketing channel design increasingly point to the unity of functional areas related to the transfer of products, services, capital, knowledge, ideas, skills and other relevant elements of contemporary business effort.<sup>12</sup>

The development of information and telecommunication technologies has also resulted in changes in marketing channel design. The emergence of e-business, e-trading and e-marketing has set new demands on

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<sup>11</sup> D. Jobber and J. Fahy: *Osnovi marketinga marketinga* (Serbian translation of *Foundations of Marketing*), 2<sup>nd</sup> ed., Data Status, Belgrade, 2006, p. 314.

<sup>12</sup> A. Grubor: Marketing i globalizacija – međunarodni marketing program [Marketing and globalisation – international marketing programme], in *Montenegrin Journal of Economics*, Vol. 1, No. 2, December 2005, p. 125.

marketing channel design. Moreover, contemporary business practices know examples of internet-based (pure-click) companies, i.e. organisations that first set up web sites and were only subsequently incorporated.<sup>13</sup> Still, the majority of contemporary companies are both brick-and-mortar and internet-bases (brick-and-click), having created online sites featuring the necessary infrastructure of e-business, i.e. e-marketing.

Marketing channel design is justified in situations when consumers expect substantial benefits when ordering products, i.e. expect low distribution costs. E-marketing channels also enable information exchange on all the significant elements of supply. Pure-click companies only build e-marketing channels. The effects of such business practices are best illustrated by the data on the high capitalisation levels of pure-click companies in the final years of the twentieth century.

In addition to traditional ones, brick-and-mortar companies increasingly design e-marketing channels, thereby converting to brick-and-click. Initial consideration was that the development of e-distribution might lead to conflict between marketing channels, as it was supposed that there would be competition between online and offline distribution. The fear of withdrawal of traditional agents is partly justified, but companies can develop strategies for achieving coordination among intermediaries.

The contemporary practices offer three most frequent strategies for achieving coordination of intermediaries. Firstly, e-marketing can offer the consumers different brands, i.e. products. Next, offline partners can be stimulated by higher commissions so as to overcome the negative impact of online distribution. Finally, products can be ordered online, with delivery and collection done traditionally.

Contemporary marketing channel practices also refers to designing consumer-focussed marketing structures, aimed at highlighting the central role of consumers in achieving business performance.<sup>14</sup> The emergence and development of relationship marketing is conducive to designing consumer-focussed structures, as relationship marketing is an intrinsically different approach to doing business than transaction marketing. Building and maintaining long-term consumer relations is becoming an essential determinant of market survival, especially in cases of companies with high overheads and high profit margins in doing business with particular

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<sup>13</sup> Ph. Kotler and K. L. Keller, *op. cit.*, p. 493

<sup>14</sup> A. Grubor: Oblikovanje strukture međunarodnog marketinga usmerene na kupca program [Designing consumer-focussed international marketing structure], in *Strategijski menadžment* [Strategic Management], 3/2005, p. 37.



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customers or customer categories. Moreover, in consumer goods retailing, long-term relationship building and maintenance enables earning stable and predictable revenues throughout the business year.

### **7. Conclusion**

Marketing channel design at the beginning of 21<sup>st</sup> century is increasingly focussed on their optimisation, which means that companies cooperate with marketing intermediaries in building new and frequently unified retail and distribution systems. Such focussing results in the integration of new forms of transport, new methods of stock control and handling materials, as well as information exchange systems, reducing distribution costs, and at the same time consumers receive high quality and service levels.

Modern retailing and product distribution is characterised by high quality and level of service supplied to consumers, starting from the smallest to highly specialised and exclusive retail facilities, and services rendered to consumers in e-marketing channels. On the other hand, marketing channels are still an underdeveloped area of marketing, which, if researched more thoroughly, could lead to significant cost reduction. High product distribution costs require adequate approach to managing relevant marketing channel design factors.

Contemporary marketing channel design serves the purpose of successful delivery of value to final consumers. From the aspect of holistic marketing, creating and delivering value to final consumers is viewed from the angle of value network, which means analysing the entire supply chain from raw materials and production components to the delivery of final products to final users. Accordingly, in designing marketing channels, contemporary companies focus on building and managing value networks under permanent development.

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## DIZAJNIRANJE MARKETING KANALA

**Rezime:** Dizajniranje kanala marketinga jeste u funkciji isporučivanja vrednosti krajnjim potrošačima. Slično kao što su ekonomski teoretičari u određenim vremenskim periodima različito pristupali izučavanju vrednosti, tako su i u marketingu primetne promene u kreiranju i isporučivanju vrednosti. Teorija marketinga u XXI veku obogaćena je novim pristupom, odnosno konceptom holističkog marketinga, u okviru kojeg se kreiranje i isporučivanje vrednosti posmatra sa aspekta mreže vrednosti. Prema konceptu holističkog marketinga, u dizajniranju marketing kanala polazi se od prvih dobavljača, distributera i potrošača, ali se ovakva polazna osnova proširuje sa celokupnim lancem snabdevanja i isporučivanja, kojim se kompanija dovodi u centar mreže vrednosti. Izgrađivanjem sistema partnerstva i alijansi olakšava se kreiranje i isporučivanje ponude na visoko konkurentnom savremenom tržištu.

**Ključne reči:** dizajniranje, marketing kanal, isporučivanje vrednosti, mreža vrednosti.



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## CONCENTRATION AND TRANS-NATIONALIZATION OF INDUSTRIAL PRODUCTION

**Dr Gorica Bošković\***

**Abstract:** *Modern processes of the development of industry in the world proceed in the conditions of a very fast concentration and centralization of capital, unhindered flow of goods and services, capital, people, knowledge, idea, information and technology. The development interests of the most developed countries and the largest world (multinational companies) are at the base of these processes. The trans-nationalization of production represents a new way and new conditions of the business of economic subjects that are conditioned, in the first place, by a new character of international economic relations forming, today, in the world. In essence, the trans-nationalization of production supposes the internationalization of production and development of international integration, underlined by industrial cooperation.*

**Keywords:** *concentration, centralization of capital, multinational companies, trans-nationalization of production, internationalization, international integration.*

### Introduction

1. Contemporary processes of the industry development in the world proceed in the conditions of the integration of global production with the globalization of the world market. In this matter, the processes of globalization in economy, in general, are generated, above all, by the globalization of industrial production.<sup>1</sup>

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<sup>1</sup> OECD as an organization of 24 most developed countries of the world defines globalization as "a cross-border activity of a firm bound for investments, production,

The globalization ended the process of finalization of the products in a country. The products are completed in the parts of a firm that are situated in many countries of the world, meaning that there is no clear national distinction of the product. This process is a combination of economic, technological, sociocultural and political forces.

Globalization is often used to refer to economic globalization, that is, integration of national economies into the international economy through trade, foreign direct investment, capital flows, migration, and the spread of technology.

This is a strong and unstoppable process, initiated by the most powerful countries of the world with the basic aim of keeping and enhancing their previously acquired positions.

2. The process of globalization is characterized by fast concentration and centralization of capital, unhindered flow of goods and services, capital, people, knowledge, idea, information and technology. However, at the base of all these processes are the development interests of the most developed countries and leading world companies.

One of the main characteristics of globalization is the increasing concentration and monopolization of economic resources and power of multinational companies.

These processes, are marked, in contemporary economic literature, as trans-nationalization, in which several multinational companies get a great share in the managing of world resources, production and market.

## 1. Concentration in Industry

1. **Concentration of capital** supposes the grouping of capital and production in one place and within an enterprise, while **centralization of capital** represents the merging of capital in the sense of ownership i.e. grouping of ownership rights in the hands of a few capital owners, as a result of mutual competition.

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trade and development, i.e. opening of new markets, expansion of technical and organizational advantages and costs and risk reduction". (Globalization of industry, overview and sector reports, OECD, 1996.).

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In the contemporary economic literature, this notion comprises the **measure of the degree of competition**, the measure of monopolistic power in a concrete market.

The greater the number of enterprises in an industrial semi-group, group, branch, sector or industry as a whole, the higher the degree of concentration.<sup>2</sup>

A high degree of concentration in the market is a potential source of monopolistic power, meaning that concentration is, really, the measure of the intensity of competition in a certain market.

The following factors have the greatest influence on the process of concentration and its intensive development in developed countries: contemporary scientific and technical progress and the need for greater capital investment in research and development activities, structure change in economy, phenomenon and development of new products and new industrial branches, heavy competition in domestic and world market, enhancement of economic function of the state and development of military-industrial complex.

2. Thanks to the following factors, concentration and centralization of production have acquired different and more complex forms:

- a) horizontal concentration was developed first, through enlargement of enterprises which produce raw material and similar finished products within the same industrial branch. This has to do with reproduction connection in the same production. This form of concentration had been dominant in the US before the First World War and between two wars in Europe.

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<sup>2</sup> The concentration ratio varies in a number of ways, including over time at different rates, and even in opposite directions in different industries and countries; it evolves in response to European and global market and specific industrial factors. To explain concentration, we turn now to these factors. We deal here with two EU-specific explanatory variables:

- (1) The change in the dimension of the integrated area,
- (2) The change in the intensity of integration in this area.

A number of other factors also influence concentration ratios. There are broad, global developments such as the changes in enabling technologies that have facilitated internationalization of production, international division of labour and regional concentrations of rising and declining industries.

- b) The integration of two or more enterprises, in which the successive phases of modification are performed, into a new enterprise which represents the technological unity of related operations and work processes, gives vertical concentration.

Vertically integrated enterprises, as a rule, increase market share and economic power which is controlled through anti-monopolistic legislation. This kind of concentration was dominant in the US between two wars and in Europe in the first half of the 20<sup>th</sup> century.

- c) The most known form of corporation enlargement, which is realized through connection of multiple production (by joining small enterprises with different production programs, technological characteristics and strategies of managing and development) is called diversified (conglomerate) concentration.

Large conglomerates go beyond the bounds of national economies, mainly of the developed countries, extend over a great number of different branches with diversified selection of products thus dividing the risk of conjuncted fluctuation into a number of products. Through many changes of production programs enable branch capital movement (though it stays located in the same firm) and breakthrough into technologically new perspective branches.

Conglomerate form of concentration in Europe became the dominant one in the second half of the 20th century while in the US became dominant after the Second World War.

3. The largest degree of concentration and centralization of capital under modern conditions realize transnational companies in industrially developed countries.

## **2. Trans-nationalization of Production in Industry**

1. Trans-nationalization of production represents a new way and new conditions of business activity of economic subjects, conditioned, in the first place, by a new character of international economic relations that are forming, today, in the world.

Essentially, trans-nationalization of production supposes internationalization of products and development of international integration at the base of which lies industrial cooperation. At that, one should have in

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mind that phrase “trans-nationalization of production” is used in a wider sense of the meaning of the terms cooperation and integration.

The subjects of international business mentioned here have different names: trans-national cooperation, multinational company, trans-national company etc.<sup>3</sup>

2. Multinational corporation (MNC) or transnational corporation (TNC) is a corporation or enterprise that manages production or delivers services in more than one country.

The first modern multinational corporation is generally thought to be the Dutch East India Company, established in 1602. Very large multinationals have budgets that exceed some national GDPs. Multinational corporations can have a powerful influence in local economies as well as the world economy and play an important role in international relations and globalization.

In a highly competitive world, companies seek to reduce their costs as much as possible. The prospect of a foreign company setting up in a country where labour is cheap is attractive both for the company and a host country's government.

Many multinational corporations are large in relation to the national income of the countries in which they are located. This means that it is not as easy for the host governments to enforce national laws on multinational corporations.

Generally speaking, governments want investment from these multinational corporations because they generate jobs and incomes. Other benefits include training of local workers in new and potentially transferable skills. Technology transfer is also an incentive. The local community would benefit since land would develop, eg. New roads.

- Horizontally integrated multinational corporations manage production establishments located in different countries to produce the same or similar products. (example: McDonald's)
- Vertically integrated multinational corporations manage production establishment in certain country/countries to produce products that serve as input to its production establishments in other country/countries. (example: Adidas or Nike, Inc.)

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<sup>3</sup> It is not rare that the same authors use different names or chose one, with or without explaining social and economic essence of that notion.

- Diversified multinational corporations manage production establishments located in different countries that are neither horizontally nor vertically nor straight, nor non-straight integrated. (example: Best Western or Hilton Hotels)

Others argue that a key feature of the multinational is the inclusion of back office functions in each of the countries in which they operate. The globally integrated enterprise, which some see as the next development in the evolution of the multinational, does away with this requirement.

Large multinational corporations can have a powerful influence in international relations, given their large economic influence in politicians' representative districts, as well as their extensive financial resources available for public relations and political lobbying.

3. Transnationalism is a social movement grown out of the heightened interconnectivity between people all around the world and the loosening of boundaries between countries.

The term was coined in the early 20th century by writer Randolph Bourne to describe a new way of thinking about relationships between cultures.

Transnationalism as an economic process involves the global reorganization of the production process, in which various stages of the production of any product can occur in various countries, typically with the aim of minimizing costs. Economic transnationalism, commonly known as globalization was spurred in the latter half of the 20th century by the development of the internet and wireless communication, as well as the reduction in global transportation costs caused by containerization. Multinational corporations could be seen as a form of transnationalism, in that multinational corporations seek to minimize costs, and hence maximize profits, by organizing their operations in the most efficient means possible irrespective of political boundaries.

Proponents of transnationalism seek to facilitate the flow of people, ideas, and goods between regions. They believe that it has increasing relevance with the rapid growth of globalization. They contend that it does not make sense to link specific nation-state boundaries with for instance migratory workforces, globalized corporations, global money flow, global information flow, and global scientific cooperation.

Transnationalism designates a recent shift in migration patterns. Migration used to be a rather directed movement with a point of departure and a point of arrival. It is nowadays increasingly turning into an ongoing



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movement between two or more social spaces. Facilitated by increased global transportation and telecommunication technologies, more and more migrants have developed strong transnational ties to more than one home country, blurring the congruence of social space and geographic space.

4. The first wave of integration processes began in the first half of the 19<sup>th</sup> century, second wave began in the 20s, third wave in the 60s and fourth in the 80s and 90s of the 20 century.

Activity of transnational corporations in the starting phase of the internationalization of capital, reduced to two following sectors: extractive industry, infrastructure.

In fact, transnational corporations of the first generation have mainly been centered around the exploitation of natural resources (copper, lead, zinc, oil) in colonies.<sup>4</sup>

The second generation of transnational corporations was organizationally formed in a form of trusts<sup>5</sup> and focused on the area of processing industry and connection with state and military-industrial complex.

The third generation of these corporations creates and uses broadly the results of modern techno- technological progress and contributes to their spreading on other countries that make the peripheral zone of the world economy. Their organizational form was mainly that of a concern<sup>6</sup> and conglomerate

The fourth generation of transnational corporations developed at the beginning of the 80s of the 20<sup>th</sup> century. It is characterized by the domination of few global transnational corporations, the coordination of a great number of foreign branches (through new information technology) and a great political and economic influence on home countries in which transnational corporations work through their branches.

5. After the Second World War, the industry became the most attracting for direct investment of transnational corporations. The most important investors in industry sector, at that time, were the following

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<sup>4</sup> Uneven arrangement of raw material makes transnational corporations from countries that are poor in raw material try to be dominant in that area.

<sup>5</sup> Trusts represent higher form of monopolistic joining that is formed by joining more enterprises into one, where individual enterprises lose their independence and their owners become the shareholders of a trust.

<sup>6</sup> Concern represents the most developed form of monopoly-industrial complex that realizes integral control over huge mass of capital.

countries: the US, Great Britain, Japan, Canada and Germany. About 47% of investment is directed towards industry, 28% towards extractive activity (oil, mining), and the rest towards service sector. American transnational corporations directed direct investments mainly towards Western Europe, avoiding customs and non-customs obstacles and, at the same time, exploiting their technological and organization advantages in creating competitive position in that area.

Since the mid 70s of the 20<sup>th</sup> century the direct investments of West European transnational corporations in American economic field had begun. At that time the arrival of Japanese corporations in American and European economic field and industrial sector of high technological level.

6. Transnational corporations dominate, today, the world goods, service and capital market. They reflect the concentration and centralization of capital, that strives to realize the maximum of profit.

From one perspective, transnational corporations represent the transmission of development and from the other, they are the transmission of exploitation in the world. They own modern technology, knowledge and capital that are easily movable between different countries.

Business philosophy of transnational corporations says that the world is an integral market and act accordingly. These corporations find places where they can produce cheaply and sell where there is demand. Investment of transnational corporations is performed in different ways, mainly through direct investments but also by founding economic institutions and their owning and managing. Investments don't often move freely but only within a corporation.

The transnationalization of production is, today, dominant in the car and airplane industry. It is expected that, in the future, a greater number of branches will be encompassed by this international organization form that will include more and more countries.

7. In economic literature, effects of transnational production are valued differently. The controversy manifests itself in relation to its advantage.

The different evaluations of the effects of the trans-nationalization of production, that display a reserve towards this form of production organization, are related to a possibility of keeping the design of complex and final product parts by developed countries and giving up, undeveloped countries, the production and raw material processing as well as production

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of final products and simple parts for final products that belong to the so-called "dirty technology".

- a. Some authors assert that transnationalization of production represents a new form of neocolonialism that increases economic and political dependence of undeveloped countries on the developed.
- b. For developed countries, economic advantages of the transnationalization of production are numerous, because in that way they (1) reduce the transport costs (2) become free of the branches that are embraced by techno-technological progress and those that engage low qualified work force, (3) use natural resources and cheap work force from undeveloped countries, (4) avoid the pollution of the environment.
- c. Positive sides of the trans-nationalization of production for undeveloped countries are reflected in (1) increase of employment and production and (2) growth of the life standard of population.

The representatives of trans-nationalization point out that the post-industrial society will see the coming of more complex forms of international production cooperation, that will be useful for all their participants. This kind of society should have completely changed attitude towards riches and material assets in relation to consumer society, where material assets, as a form of social prestige, should be replaced by knowledge.

### **Conclusion**

Contemporary processes of industry development in the world proceed in the conditions of the integration of global production with globalization of the world market. In this matter, the processes of globalization in economy, in general, are generated, above all, by the globalization of industrial production

Transnational corporations dominate, today, the world goods, service and capital market. They reflect the concentration and centralization of capital, that strives to realize the maximum of profit. These processes, are marked, in contemporary economic literature, as trans-nationalization, in which several multinational companies get a great share in the managing of world resources, production and market.

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## KONCENTRACIJA I TRANSNACIONALIZACIJA INDUSTRIJSKE PROIZVODNJE

**Rezime:** Savremeni procesi razvoja industrije u svetu odvijaju se u uslovima veoma brze koncentracije i centralizacije kapitala, nesmetanog kretanja robe i usluga, kapitala, ljudi, znanja, ideja, informacija i tehnologije. U osnovi svih ovih procesa se nalaze razvojni interesi najrazvijenijih zemalja i najvećih svetskih (multinacionalnih) kompanija. Transnacionalizacija proizvodnje predstavlja nov način i nove uslove poslovanja privrednih subjekata uslovljene, u prvom redu, novim karakterom međunarodnih ekonomskih odnosa koji se formiraju danas u svetu. U suštini, transnacionalizacija proizvodnje podrazumeva internacionalizaciju proizvodnje i razvoj međunarodne integracije, u čijoj osnovi leži industrijska kooperacija.

**Ključne reči:** koncentracija, centralizacija kapitala, multinacionalne kompanije, transnacionalizacija proizvodnje, internacionalizacija, međunarodna integracija.



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## THE ELEMENTS OF PERSONAL INCOME TAXATION

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**Abstract:** *Personal income tax is one of the most important taxation forms. With him it is possible collect the big sum of gross revenues. In this article, we present the elements of tax structure in income taxation. An emphasis is on tax rate and flat taxation. This is new manner of taxation, with single tax rate from personal income tax and corporative income tax. In such a way, tax authority may reduce tax expense and realize principle efficiency.*

**Key words:** *personal income tax, tax unit, tax base, tax rate, flat taxation*

### Introduction

The income tax is the most significant sources of tax revenue in developing and developed economies. In the taxation of income is important application the general principles of taxation. Income taxes discourage people from earning income, causing a substitution from income to activities not subject to the tax. The individual may also mean substituting out of work and into leisure. However, an offsetting effect can occur if people work harder to make up for income lost to the income tax.

The income taxation can be organized as synthetic or global, analytic or cedular and combined system. The analytic taxation is the system of income taxation where every income that a single person has realized is being taxed, with the proportional rate. The synthetic taxation regards income as a whole, which has one tax form, with the progressive tax rate. In the end, the combined system represents combination of previous two systems.

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However, the synthetic system has certain advantages in relation to remaining two systems.

Synthetic tax income synthetizes all incomes which the tax payer realizes and imposes a tax on net income. In such a way, synthetic income taxation ensures appreciation the principles of efficiency and equivalence in taxation, because it imposes a tax on total economic power. Also, that system of taxation enables much larger government revenues and by that system the sum of net incomes is being taxed.

The taxation of income encompasses a number of other significant issues. Whether the tax discourages a saving and an investment? Who is the tax unit- individual or family? Who must pay tax? 7

Certainly, a tax on consumption rather than income would encourage more saving, but there may be equity reasons for favoring an income tax over a consumption tax.

### Elements of tax structure

We need to know who is subject to tax, called the tax unit; what is subject to tax, called the tax base and how the base is taxed, called the tax rate schedule. This is very complicate.

**The tax unit** may be the individual or the family. Most countries apply the individual taxation, rather than the family taxation.

Table 1: Tax unit in chosen countries

<i>Country</i>	<i>Tax unit</i>
Australia	individual
Austria	individual
Belgium	individual/family
Canada	individual
Czech Republic	individual/family
France	family
Germany	family/individual
Greece	individual
Hungary	individual
Italy	individual
New Zealand	individual
Poland	individual
Sweden	individual
United Kingdom	individual
United States	family/individual

Source: [www.books.google.com](http://www.books.google.com)

### **The Elements of Personal Income Taxation**

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In our tax system, the tax unit is the individual. In the United State, the tax unit is the family. Deductions and tax rates schedules depend on the taxpayer's marital status and the number of dependents. Taxpayers who are married must file as married and taxpayers who are single must are file as single, or as head of household if they have dependents. Married taxpayer can file joint or separate tax returns; however, married taxpayers who file separately are not treated the same as single taxpayers. Married taxpayers filing a joint return pay taxes on their combined family income according to the tax schedule for married taxpayers. Married taxpayers who file separately keep their incomes separate, but they pay tax according to the married tax schedule.<sup>1</sup>

The combined tax is usually increased when two taxpayer with similar incomes get married. This is popularly know as the marriage tax or marriage penalty. The amount of tax paid depends on the marital status of the taxpayers. In cases where two people marry and only one of them earns income, amount of tax they pay may decrease instead.

In other case, dependents are usually the taxpayer's children, but they may be other relative such as grandchildren, parents, and grandparents, aunts, uncles etc. For each eligible dependent, the taxpayer can take a deduction called the personal exemption.

**The tax base** is the amount of income that is taxed, specifically taxable income. This is defined according to two principles. First, it is measure on a net basis, meaning that expenses incurred to acquire incomes are subtracted from the gross receipts of the taxpayer. In practice, however, not all cost the taxpayer incurs by working can be subtracted.

In the most countries, taxable income includes income earned as a consequence of employment, or earned income; income received as a consequence of owning property, or capital income; and some types of transfer income. In Serbia, taxable income includes all type of income as annual income, but it exist analytical taxation.

The first step in calculating taxable income is to find the sum of incomes received from all taxable sources. Incomes from taxable sources are wages and salaries, including self-employment income, the value of fringe benefits unless explicitly exempted, income from barter, unemployment compensation, interest on bank account and bonds, dividends received from the ownership of stocks in companies, realized capital gains from the sale of property, rental incomes and royalties etc.

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<sup>1</sup> Harvey S. Rosen, Public Finance, McGraw-Hill International Edition, New York, 2005, p. 359.

The second step is to reduce this sum from adjustments, personal exemptions and deductions.

*Taxable income = gross receipts from taxable sources - adjustments*

*Personal income tax base = taxable income - personal exemption - deductions*

Personal exemptions is a fixed amount that taxpayers deduct from the sum of income. Another fixed amount taxpayers can subtract from the sum of income is called the standard deduction. The amount of the standard deduction depends on whether the taxpayer is single, a head of household, or married.<sup>2</sup>

The discussion of income taxation has been simplified because it assumed that there is no difficulty involved in determining what constitutes income for the purpose of taxation. On the surface, the definition of income seems relatively straightforward, but some ambiguities arise, especially concerning income in kind and the treatment of change in the value of a person's wealth. The company could pay the employees a large salary and allow the employee to buy his own car and insurance, but the payment in kind might be preferred by both parties for a number of reasons:

- the company may find it cheaper to buy automobiles and insurance in quantity and pass some of the savings on to the employee as a benefit of employment rather than pay the employee additional salary to purchase such items;
- the payment in kind may not be taxed as regular income to the employee, and avoidance of income taxes can provide a large benefit that can be shared between the employer and the employee to make both better off. The payment in kind is an attractive alternative to money income.<sup>3</sup>

Another problem in defining income for tax purposes is deciding how changes in a taxpayer's wealth resulting from unrealized capital gains should be figured into taxable income. Under Irving Fisher's definition, a capital gain would not count as income because it would not represent a sustainable flow.

From the income taxation it's necessary precise definition of income. The definition of income may be double:

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<sup>2</sup> Neil Bruce, Public Finance, Addison Wesley Longman, Washington, 2001, p. 393.

<sup>3</sup> Randall Holcombe, Public sector economics, Pearson Education, New Jersey, 2006, p. 272.



### **The Elements of Personal Income Taxation**

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- with economic-theoretical aspect and
- with fiscal-accounting aspect.

The economic-theoretical concept define the income as economy category. In this sense, the income is consumption without the reduction of the possessions.

In the science of finances, the definition of income include two theories:

1. theory of source and
2. theory of net income.

The theory of source include the income with three features: permanence source, safety and regularity of income. But, with fiscal aspect, most income isn't include in this definition, so the theory of net income remove the imperfections of the theory of source. Some authors define an income as "distinction between inicial and final state of the possessions one person in the time."<sup>4</sup>

Professors Haig and Simons define income as the sum consumption and change of net possessions one person in one year. However, some authors consider that H-S definition should be limited in income realized.

Irrespective of the imperfections of H-S definition, it's adequate with equity and efficiency aspect.

The H-S criterion requires the inclusion of all sources of potential increases in consumption, regardless of whether the actual consumption takes place, and regardless of the form in which the consumption occurs. This criterion also implies that any decreases in an individual's potential to consume should be subtracted in determining income. An exemple is expenses that are incurred to earn income.

The H-S definition encompasses: wages and salaries, business profits, rents royalties, dividends and interest. However, it also includes certain unconventional items:

- employer pension contributions and insuranse purchases,
- transfer payments, including social security retirement benefits, unemployment compenzation and welfare,
- capital gains,
- income in kind.

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<sup>4</sup> Dejan Popović, Gordana Ilić-Popov, Ekonomija oporezivanja i poresko pravo, Pravni fakultet, Beograd, 1996, str.237

Pension contributions, even though not made directly to the recipient, represent an increase in the potential to consume.

Transfer payments, including social security retirement benefits, unemployment compensation and welfare are income. Any receipt, be it from the government or an employer is income.

Increases in the value of an asset are referred to as capital gains, decreases as capital losses. If a owner sells this shares at the end of the year, the capital gains is realized; otherwise it is unrealized. From the H-S point of view, it is absolutely irrelevant whether a capital gain is realized or unrealized. It represents potential to consume and is income.

Some people receive part or all of their incomes in kind- in the form of goods and services rather than cash. For example, an official car, floor-level seats, courtside seats, access to apartment, a satellite TV etc. Farmers provide field hands with food; corporations give employees subsidized lunches or access to company fitness centres. One important form of income in kind is annual rental value of owner-occupied homes. The imputed rent is equal to the rental payments that would have been received had the owned chosen to rent the house out, after subtracting maintenance expenses, taxes etc.

**Table 2: Progressive tax rate and number of tax bands**

COUNTRY	TAX RATE (%)	TAX BANDS
Austria	21-50	4
Belgium	25-50	-
Cyprus	20-30	4
Denmark	38-59	-
France	10-48	-
Germany	15-42	4
Greece	0-40	5
Hungary	18-36	2
Italy	23-43	5
Japan	5-40	6
Poland	19-40	3
Portugal	10,5-40	7
Slovenia	16-50	3
Sweden	0-56	-
Turkey	15-35	4
United Kingdom	0-40	3
United State	0-35	6

Source: Revenue statistics OECD 1965-2006

### The Elements of Personal Income Taxation

In theory, *the tax rates* may be proportional, progressive and regressive. But, the most countries use progressive tax rates. This is called tax rate schedule. The personal income tax rate varies according to the taxpayer's income. The tax rate varies because of the graduated tax rate schedule, which imposes different tax rates on income in different tax brackets. The tax brackets are defined by taxable income thresholds.

#### Flat taxation

An income tax that has a single tax bracket is popularly known as a flat tax. A flat tax has several advantages. The first is greater compliance. Under current systems in wealthy countries, the incentives for the rich to avoid high taxes (legally or otherwise) are enormous. Furthermore, the opportunities to do so, which arise from the very complexity of the codes themselves, are also large. In the flat tax system, the rich usually end up paying the same amount as they do under an orthodox code, since the appeal to high earners to be compliant with a flat rather than a graded tax, is obvious.

Another advantage of the flat tax is, that it is simpler to administer and results in government savings. The costs of administering a conventional system are outrageous. For example, it costs the United States between 10% and 20% of revenue collected to administer and enforce its own tax code.<sup>5</sup>

However, flat taxes are not synonymous with low taxes, though most countries have cut their tax rates as they have flattened them. In 1994, Ukraine's top rate reached level of 90%, before descending to its current single rate of 13%.

**Table 3: Flat-tax economies**

Country	Flat tax adopted	Personal Income Tax Rates
Hong Kong	1948.	16%
Estonia	1994.	26%
Lithuania	1994.	15/27%
Latvia	1997.	25%
Russia	2001.	13%
Serbia	2003.	10/12/20%
Slovakia	2003.	19%
Ukraine	2003.	13%
Georgia	2004.	12%
Romania	2005.	16%
Macedonia	2007.	12% (10%)
Czech Republic	2008.	15%

Source: [www.worldwide-tax.com](http://www.worldwide-tax.com)

<sup>5</sup> Randall Holcombe, Public sector economics, Pearson Education, New Jersey, 2006, p. 392.

The first country who introduced the flat tax is *Hong Kong*. But, in new history this is *Estonia*. This country used flat taxation from 1994. Estonia was a first of the current crop of flat taxes, initially at a rate of 26 percent. This rate has been lowered since, and is now scheduled to reach 20 percent in 2009.

*Lithuania* introduced its flat tax in 1994, at 33 percent, which was the highest of the marginal rates imposed prior to the reform. Revenue from the personal income tax rose with movement to the flat tax.

The flat tax in *Latvia* was introduced in 1997 at the rate of 25 percent. In the year prior to this, Latvia had an unusual degressive rate structure, with a starting marginal rate of 25 percent followed by a marginal rate of 10 percent on the highest incomes. Unusually adoption of the flat tax in Latvia thus resulted in increased tax liability at the very highest incomes.

*Russia* unified its marginal rates of personal income taxation at 13 percent in 2001. The threshold for taxable income increased only modestly in real terms. Revenue from the personal income tax rose by nearly one-quarter in real term: an experience that prompted much interest and emulation elsewhere. With flat's revolution in Russia, most countries of the East Europe start to use flat tax rate.<sup>6</sup>

In *Ukraine* a flat tax at 13 percent tax replaced a personal income tax with marginal rates ranging from 10 to 40 percent. The Ukrainian variant is not truly flat and, above the critical income level at which the allowance is withdrawn, becomes a proportional tax.

The *Slovak Republic* implemented a major and innovative tax reform in 2004, establishing a single common rate not only for the personal income tax and corporative income tax, but also for VAT.

A flat tax on personal income of 12 percent was introduced at the start of 2005, replacing a schedule with rates of 12, 15, 17 and 20 percent. A unique feature of the *Georgian* flat tax is that there is no basic allowance: in this case, the tax on labor income is not merely flat but, at all income levels, proportional.

In *Romania* effective January 2005, a flat rate of 16 percent replaced a personal income tax schedule with five marginal rate, rising from

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<sup>6</sup> Anna Ivanova, Michael Keen, Alexander Klemm, The Russian Flat Tax Reform, IFM Working Paper, WP/05/16

### **The Elements of Personal Income Taxation**

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18 to 40 percent. Revenue from the personal income tax fell following the reform by a total of around one percentage point of GDP.<sup>7</sup>

In considering the impact of income tax systems, it is important to understand the difference between average and marginal tax rates. A person's average tax rate is the amount of tax paid divided by the person's income. A person's marginal tax rate is the percentage of any additional income that will have to be paid in tax. This is an example of a progressive tax structure because the percentage of income paid in tax rises as income rises. Note that with progressive taxation, the marginal rate exceeds the average rate. The reason for using a progressive tax structure is its redistributive characteristics. A progressive tax structure applies the ability-to-pay principle by having people with larger incomes pay a higher percentage of their incomes in taxes. But it also has the effect of making marginal tax rates higher than average tax rates, which increases the excess burden of taxation when compared with a proportional tax structure that raises the same amount of revenue.<sup>8</sup>

### **The tax income in Serbia**

In our country the income taxation has very specific form. This is combination of analytical and global taxation. Any income is taxable with proportional rate, and in the end of year, annual income is taxable with progressive tax rate. Exactly, annual tax treats only this income who is bigger from legitimate amount.

Tax unit of income tax is personal. Any person pay the tax from all type of income. Our law regulate eight types of income:

1. wages/salaries,
2. income of agriculture and forestry,
3. income of own-self work,
4. yield of capital,
5. income of real estate,
6. capital gains,
7. income of copyrights and industrial property rights,
8. the others incomes.<sup>9</sup>

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<sup>7</sup> Michael Keen, Yitae Kim and Ricardo Varsano, The "Flat Tax(es)": Principles and Evidence, IFM Working Paper, WP/06/218

<sup>8</sup> Dejan Popović, Gordana Ilić-Popov, Ekonomija oporezivanja i poresko pravo, Pravni fakultet, Beograd, 1996, p. 284.

<sup>9</sup> Zakon o porezu na dohodak građana, Službeni glasnik RS, br. 24/01, 80/02, 135/04, 65/06

Every income has different rate. The table around present these types of incomes and theirs rates.

**Table 4: The types of income and tax rates in Serbian income tax**

Type of income	Tax rate
Wages/salaries	12%
Income of agriculture and forestry	14%
Income of own-self work	10%
Yield of capital	20%
Income of real estates	20%
Capital gains	20%
Income of copyrights and industrial property rights	20%
The others incomes	20%

Source: [www.poreskauprava.com](http://www.poreskauprava.com)

In the end of year, taxpayer who has an income bigger from legitimate amount, must pay the annual tax. In such a way, income taxation in our tax system has a heterogeneous form. The annual tax has a progressive tax rate. From income which present amount less of six average income, the tax rate is 10%, but from income bigger of this amount, tax rate is 15%.

### **Conclusion**

The large number of countries in the world has synthetical form taxation, whith different tax reductions and exemptions. The tax rate is progressive.

Our tax system has analytical form, with one synthetic element-the annual taxation. But, it's necessary to take up a radical reform in income taxation. The tax base should be total income. This income must include all sorts of income: wages/salaries, income of agriculture and forestry, income of own-self work, yield of capital, income of real estate, capital gains, income of copyrights and industrial property rights, others incomes. It's necessary introduce progressive tax rate. In such a way the principle equality and efficient in taxation will be satisfied.

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**ELEMENTI POREZA NA DOHODAK FIZIČKIH LICA**

**Rezime:** Porez na dohodak fizičkih lica je jedan od najznačajnijih poreskih oblika. Pomoću njega je moguće prikupiti veliki procenat ukupnih poreskih prihoda. U ovom radu, prikazaćemo elemente poreske strukture poreza na dohodak fizičkih lica. Naglasak je stavljen na delu o poreskim stopama i flat oporezivanju. Ovo je novi način oporezivanja, sa jednom poreskom stopom za oporezivanje dohotka i fizičkih i pravnih lica. Na taj način poreske vlasti mogu smanjiti troškove oporezivanja i omogućiti realizaciju principa efikasnosti u oporezivanju.

**Ključne reči:** porez na dohodak fizičkih lica, poreski obveznik, poreska osnovica, poreska stopa, flat oporezivanje







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## MARKET ENTRY STRATEGIES WITHIN FOREIGN INVESTMENT DECISION PROCESS IN TRANSITION ECONOMIES

**Suzana Stefanović, Ph.D.\***

**Abstract:** *Foreign Direct Investment (FDI) has become one of the most important determinants of economic growth, especially in developing countries and transition countries. Therefore, the study of types, benefits, and flows of FDI in contemporary world is of great importance. The paper represents the author's attempt to point out the vast importance of FDI for economic growth of transition countries, especially in relation to the process of privatization and transition to market economy. So, the author also tries to relate the flow of FDI to MNCs' mode of market entry. This relation between market entry strategy and FDI flow is especially important for Serbia, which is relatively behind the countries from the region with privatization of state enterprises, as well as with transition to fully market economy.*

**Key words:** *foreign direct investment, strategy, market entry, transition country*

### Introduction

Foreign Direct Investment (FDI) has become one of the most important drivers of economic development in the contemporary world over the last decades. Today, they are a basic mechanism of globalization of the world economy, and key factor for economic development. Foreign Direct Investment refers to investment of capital of foreign company or person in order to do some profitable business at some other country/market. As one can notice, foreign investor can be company that has a headquarters at

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foreign country, foreigner, and in Serbia, even citizen who has residence abroad at least for one year.

Foreign investments are of the substantial importance for both domestic country and foreign investor. For the country in which some capital is going to be invested, foreign direct investment means growth of business activity, increase of export, and employment, as well as initiation or acceleration of economic growth and development in a country. At the other hand, they are also important for foreign investors as means of foreign capital entry, which facilitate acquisition of assets, and management and control of acquired capital. As multinational companies struggle to go global and do business at many markets as possible, they are enforced to displace their manufacturing capacities close to those markets. Also, they are not interested for foreign markets only to sell their products, but to buy low cost raw materials, energy, and labour at those markets.

### **1. FDI inflow and FDI types in transition countries**

The 1990s were the period of significant growth of FDI in the world, which was initiated by the globalization of the world economy, rapid economic growth of the Southeast Asia countries economies, and transition of Central and East European countries to market economy. FDI at the global level decreased from 2000 to 2003, in the context of a decline of the economic growth of the world economy, as well as in the decrease of equity business. In 2001 the decrease of FDI amounted to 40% in contrast to 2000 [10, p.96]. However, by 2004 these unfavorable global trends changed, and the growth of FDI is evident, particularly in Asia (because of a growing importance of China as a leading country for new foreign investment), and Central and East European countries (which have practically completed the EU integration process). Although FDI in CEE countries are still mainly concentrated in Poland, Hungary, Czech Republic, and Slovakia, the FDI inflow increase is also evident in new EU member countries – Romania, Bulgaria, and among West European countries, Ireland is the example of successful FDI attracting. The figures about inflow of FDI as a percentage of GDP for chosen SEE and CEE countries are presented in Table 1 [10, p. 104].

**Market Entry Strategies Within Foreign Investment Decision Process  
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**Table 1. Inflow of FDI as percentage of GDP – chosen countries of SEE/CEE**

Country	1995	2000	2001	2002	2003	2004
Bulgaria	0.7	8.0	6.0	5.8	7.1	11.7
Croatia	0.6	5.9	7.9	5.0	6.9	3.5
Czech Republic	4.9	9.7	9.3	11.5	2.9	4.1
Hungary	10.7	6.0	7.6	4.4	3.0	4.6
Poland	2.9	6.0	7.6	4.4	3.0	4.9
Romania	1.2	2.8	2.9	2.5	2.7	8.7
Serbia and Montenegro	-	0.6	1.4	3.0	6.4	5.3
Slovakia	1.3	9.5	7.6	17.0	1.8	3.1

Source: OECD, WIIW, And UNCTAD In: Strategy of enhancement and development of foreign direct investment, 2006, p. 104

All FDI can be categorized according to different criteria. One of the basic is dividing on primary and special forms of foreign direct investment [2, p.13]. Based on these criteria, primary forms of foreign direct investment refer to:

- Flotation (which implies building of manufacturing capacities by the investors; also known as Greenfield investment);
- Acquiring majority of ownership share in existing enterprise (privatization, acquiring of stocks, or direct acquisition of enterprise).

Special forms of foreign direct investment are:

- Concession (acquiring for the defined period of time a right to use some natural wealth or public goods for doing business of interest – stakes);
- B.O.T. (Build-Operate-Transfer) tasks (to give permits to foreign investor to build and use the building, layout, or machinery, as well as objects of infrastructure and/or communication, but with obligation to transfer ownership rights after determination of contract).

From the primary motives perspective, there are four main types of FDI [3, p. 158]:

1. FDI motivated by acquiring resources (which determine to costs decrease),
2. FDI motivated by market (its size, profit potential, etc.),

3. FDI motivated by increase of efficiency (economic of scale),
4. FDI motivated by strategic assets (technology, knowledge, skills, etc.).

The first and second of motives are characteristic for foreign investment in developing countries, like most transition economies, while two others are present in developed countries.

According to origin they can be divided into: FDI coming from non-market resources (The World Bank, European Bank for Reconstruction and Development-EBRD, European Investment Bank-EIB, etc.), and FDI coming from private sources. Non-market funds invest according to political priorities and trends (donations, credits for particular projects, etc.); whereas private investors invest exclusively in accordance to the chances they are given on a certain market and its profit potential.

FDI originating from private investors can be divided further on to [10, p.21]:

- Greenfield investments – where a foreign enterprise starts out on a completely new place, which demands constructing new objects and obtaining new technology,
- Brownfield investments – where an enterprise with foreign capital starts working in a building or a place used previously for production or other business, and where exists certain infrastructure,
- Joint venture – where a foreign enterprise has a considerable share in newly-founded domestic enterprise,
- Reinvestment,
- Portfolio investment (investment in securities without managerial attentions),
- Investment duty execution from privatization process, and
- Public-private partnership (cooperation of public sector of local autonomy with foreign companies in founding a firm).

## **2. Relation between FDI and modes of foreign market entry**

One of the most important strategic issues in relation to FDI is the question of the choice of the entrance mode of foreign companies at particular country/market. Beside standard forms of entry like classic export, licensing and franchising, now days there are many other forms like joint ventures, business cooperation contracts-BCC, strategic alliances, wholly-owned subsidiaries-WOS (which corresponded with Greenfield investment),

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and acquisitions, which corresponded with Brownfield investment and privatization process, mentioned above [7, p. 578]. The modes of entry, which contributed to foreign direct investment the most, are 1) establishment of wholly owned subsidiaries (Greenfield investment), 2) joint ventures, and 3) acquisitions (either as portfolio investment or as an investment duty execution from privatization - Brownfield investment). They are so-called direct investment models, which substantially impact the host economy development.

The role of Greenfield investment is potentially greater than one of the acquisition, because after acquisition of domestic enterprise foreign investor can decide to divest some units or activities, and exit from certain business [12, p. 135]. But generally, acquisition of domestic firms by MNCs or other private investors can rise production and export, and increase efficiency of domestic business. This is especially important in condition of globalization, because it is hard for domestic firms to play alone on world market for two reasons: first, there are substantial costs of entry to global market, and second, there is severe competitiveness of world-class brands on global market, and to achieve such competitiveness of products/services, domestic firms have to invest in economic propaganda and other related marketing activities.

Although WOS (related to Greenfield investment) allow the highest level of control of investment, and the lowest level of technological risk (related to protection of intellectual property rights), they demand significant resources. This is the reason why MNCs take them in consideration when the risks of investment at certain market/country are generally low, i.e. in stable economies [6, p. 159]. However, the most common mode of FDI during transition period certainly was joint venture. This is the form of cooperation of foreign and domestic enterprise, where foreign investor has a considerable share in newly founded business. This is the most popular mode of entry of strategic partner interested in obtaining resources or market share at host country. Foreign partner is interested in joint venture when technology, which it brings, is not its core resource, and when it does not have enough knowledge and information to effectively and efficiently perform operations at that market [8, pp. 110-112].

Also, we can mention three groups of factors, which need to be considered and analyzed in order to make decision about entry: 1) country-specific factors, 2) industry-specific factors, and 3) venture-specific factors [11, pp. 441-463]. Country-specific factors refer to country risk and cultural distance of the host country. Country risk refers to the economic and

political events occurring at macro-level (currency crises, inflation, deflation, unemployment, fiscal deficit), or micro-level (local government officials corruption, unrealized contracts, and difficulties in obtaining permits or licenses) in a country that threaten firm profitability.

Industry-specific factors are concerned with characteristics of the industry in which foreign firm (MNC) operates. This refers to ability of MNC to provide differentiated products through its own brand name. Another of these factors is competitive intensity, which refers to number of firms on the market.

Venture-specific factors are investment amount, duration of investment, partner alignment, etc. Venture-specific factors are associated also with normal business or commercial risks, such as change in economic costs or demand, change in competition in the market, or risk of new products/services introduction [5, p. 768].

### **3. Foreign direct investments trends in transition countries and Serbia**

The question arises why FDI is so important both for MNCs and for local companies in transition countries. As we notice above, big MNCs through FDI displace globally their production capacities and operations in attempt to secure the most favorable supply of cheap raw materials, energy, and labour, on one side, and secure the most favorable product and service marketing, on the other. The most obvious interest of transition countries is reflected in a need for fresh capital, although there is more to it than a mere capital transfer. Investments of MNCs, as a rule, include the whole investment package, which contains, beside the capital, advanced technology, marketing, and managerial knowledge and know-how as well, including the possibility of foreign market access [8, p. 110].

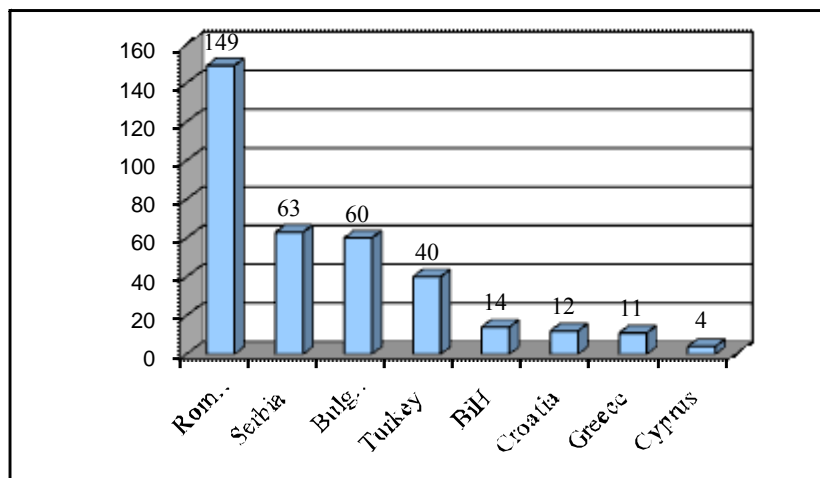
On the other hand, opening and integration of transition economies into the global market economy brings many problems in terms that MNCs from developed market economies make competition on local market more severe. Facing these difficulties, as well as the problem of their own inefficiency in business, many local companies lost their market share. Based on the theoretical and practical research of many authors, three strategies which domestic firms facing the entrance of MNCs, can take, are: to become MNCs themselves, to merge or cooperate with existing MNCs, or to exit the market [9, pp. 117-130].

Regarding FDI in South-east European countries, there is a significant upsurge in the number of FDI projects for the period 2006-2007,

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which indicate that this region has become very interesting for foreign investors. Namely, whereas we can notice the incline of the number of FDI projects in Nordic countries of 13%, and stagnation of new investment projects in Western Europe (increase of only 2%) and Central Europe (increase of only 3%), there is substantial increase in number of FDI projects in South-east Europe (18%). The only region in Europe that has bigger rate of FDI projects number is Russia, Byelorussia and Ukraine with 62% upsurge [from research of Ernst & Young Southeast Europe, 4, p. 20].

In South-east Europe, Romania and Serbia are the countries with the biggest increase in FDI projects, as we can see in Figure 1, which is based on research by Ernst & Young Southeast Europe [4, p.21]. For the considered period of time Serbia has the greatest up growth of foreign direct investment projects (increase of 174%), then Turkey (43% increase), Bosnia and Herzegovina (40%), and Romania with only 6% increase of FDI projects number from 2006 to 2007; but other countries have had a decrease in foreign direct investment projects (Croatia by 20%, Bulgaria by 12%, Greece by 8%). Cyprus also has an increase of FDI projects, but there were only 4 of those projects for one-year period of time.



**Figure 1. Number of FDI projects in South East European countries for the period from 2006-2007**

Attractiveness of South-east Europe rises when we focus on manufacturing activities. As research has shown 38% of executive directors from world companies argue that South-east Europe region is the most attractive for manufacturing, 12% of executives think that is Central, and

same percent that is a Western Europe, 5% that are Russia, Byelorussia and Ukraine, 2% that are Nordic countries, and only 1% that Baltic countries are the most attractive for manufacturing activities in Europe. But when comes about most attractive location for research and development, South-east Europe region downfalls on third place with 7% (same as a Nordic countries); and more attractive among executives for R&D activities are Western countries with 44%, and Central Europe with 11% of all answers [data from 4, p. 10 and 12].

Regarding FDI in Serbia, it must be underlined that its level has been inadequate so far, that being the consequence of a negative impact of all three groups of factors: country-specific factors, industry-specific factors, and venture-specific factors. However, without bigger FDI inflow, and entrance of important MNCs into our market, we cannot count on a more serious increase of production and export potential of our enterprises, and employment increase, mainly for two reasons. First, there are high expanses of entering the new market, where competitiveness of world-known manufacturers' products exists. Second, high expanses of acquiring new technologies and marketing activities in relation to products impact export potential of domestic firms.

Since 2001, total FDI in Serbia have reached 8.9 billion of US dollars. The year 2006 brought a 283% up growth against the previous year, with a record of 4.387 billion US\$. Based on the data from Economic Review of National Bank of Serbia [13], net FDI flows in Serbia from 2001 to 2006 were: 2001 – 165 US\$ millions, 2002 – 475 US\$ millions, 2003 – 1,360 billions of US\$, 2004 – 966 US\$ millions, 2005 – 1,550 billions of US\$, and in 2006 – 4,387 billions of US\$.

There are also data about FDI in Serbia per country, although the following overview should be discounted given that the National Bank of Serbia reports the FDI data by country of payment and not by country of actual investment. These data are presented in Table 2 contributed by SIEPA and based on the data of National Bank of Serbia [14].

As one can see from Table 2 investors from the EU top the list, with the increased portion of South East European countries. The reason why Norway took the first place is the privatization of local mobile phone operator by the telecom giant Telenor. It is followed by Greece, Germany, Austria, and Hungary. Throughout a 6-year period, largest FDI came from Norway, Germany, Greece, Austria, the Netherlands, Slovenia, France, Great Britain, Hungary, and Luxemburg. The actual amount of US investment is significantly higher than official figure says due to their



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companies investing primarily through European affiliates. This also holds for Germany, Italy, Belgium, and some other countries. Among countries in the region, the greatest investment came from Greece, and than Slovenia, and significant amount came also from Hungary, Croatia, and Bulgaria.

**Table 2. Net FDI per country (in 000 USD)**

Net FDI in Cash by Countries (000 USD)							
Country	Year						Total
	2001	2002	2003	2004	2005	2006	
Norway	2	74	280	0	29	1,546,993	1,547,378
Germany	9,788	82,801	75,708	51,985	187,320	905,824	1,319,578
Greece	1,280	12,496	62,268	52,968	249,536	923,698	1,302,580
Austria	1,421	33,876	93,747	146,104	201,189	520,356	996,876
Netherlands	102	2,248	598,963	102,008	92,113	-214,119	581,315
Slovenia	11,254	9,561	29,036	15,706	183,563	201,241	450,394
France	81	87,489	7,858	24,022	62,347	159,085	340,882
Great Britain	1,225	6,618	20,631	79,620	63,330	135,915	307,339
Hungary	275	1,167	4,224	16,567	24,677	244,045	290,955
Luxembourg	128	3,619	4,108	2,387	108,885	8,843	127,970
Croatia	1,096	5,243	34,446	10,806	40,484	25,240	117,315
Italy	594	7,553	21,325	10,149	18,316	52,752	112,695
France	86	2,913	12,559	29,401	56,990	-15,421	86,563
Bulgaria	0	133	129	9,910	655	54,270	65,097
Slovakia	10	10	18,342	0	25,447	19,325	63,137
Latvia	0	5	15,330	17,082	6,441	10,527	49,385
USA	1,906	18,099	15,068	18,187	22,257	-29,612	46,248
Russia	3,581	2,556	3,359	538	14,324	15,992	41,086
Belgium	0	344	1,925	2,523	12,407	6,464	23,663
Israel	0	260	207	3,052	14,294	4,544	22,357
BiH	169	2,951	5,056	2,104	4,692	-16,750	-1,589
Israel	216	57	2,162	2,974	-41,316	-17,538	-53,445
Liechtenstein	2,045	41,717	31,581	16,310	71,551	-387,154	-223,188
Other	129	4,664	13,098	182,000	21,175	131,859	353,401
Total	35,388	326,454	1,071,410	796,403	1,440,706	4,286,379	7,967,992

Source: National Bank of Serbia

When we consider leading companies-investors, the data about their investment in Serbia as well as preferred investment type are presented in Table 3 [also contributed by SIEPA].

**Table 3. Leading companies investors in Serbia and investment type**

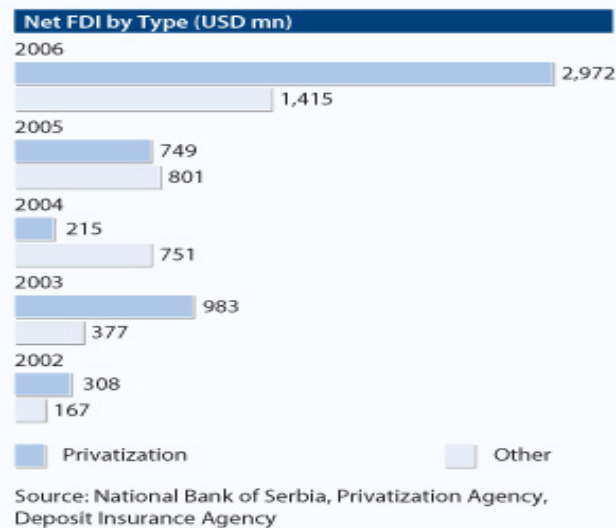
Company	Country of Origin	Industry	Investment Type	Investment Value (E million)
Telenor	Norway	Telecommunications	Privatization	1,513
Philip Morris	USA	Tobacco	Privatization	611
Mobilkom	Austria	Telecommunications	Greenfield	570
Cuprom	Romania	Mining	Privatization	533
Banca Intesa	Italy	Banking	Acquisition	508
Stada	Germany	Pharmaceuticals	Acquisition	475
InBev	Belgium	Food and beverages	Acquisition	462
NBG	Greece	Banking	Privatization	425
Biotech Energy	USA/Hungary	Energy	Greenfield	380
Mercator	Slovenia	Retailing	Greenfield	240
Lukoil	Russia	Energy	Privatization	210
Holcim	Switzerland	Construction	Privatization	185
OTP Bank	Hungary	Banking	Privatization	166
Alpha Bank	Greece	Banking	Privatization	152
U. S. Steel	USA	Metal processing	Privatization	150
Metro	Germany	Wholesale	Greenfield	150
OMV	Austria	Energy	Greenfield	150
Coca Cola	USA	Food and beverages	Acquisition	142
Lafarge	France	Construction	Privatization	126
San Paolo IMI	Italy	Banking	Acquisition	122
Airport City	Israel	Real estate	Greenfield	120
CIMOS	Slovenia	Automotive	Privatization	100
JTI	Japan	Tobacco	Privatization	100
Droga Kolinska	Slovenia	Food and beverages	Acquisition	100
Carlsberg	Denmark	Food and beverages	Acquisition	100

Source: data from SIEPA[14]

### Market Entry Strategies Within Foreign Investment Decision Process in Transition Economies

As we can see the biggest foreign buyers of domestic firms were MNCs such as: Phillip Morris, BAT, Lukoil, Holcim, US Steel, Lafarge, Carlsberg, Titan, Henkel, Banca Intesa, NBG, OTP Bank, etc. Somehow greater inflows until 2003 arose from selling tobacco industry firms (Tobacco Factory Nis – DIN, and Tobacco Factory Vranje – DIV), and until 2005 because of selling of domestic banks. In 2006 bigger inflow of investment came from privatization of local mobile and telecommunication operator by Telenor. Consequently, leading investors came from following industries: telecommunications, tobacco industry, energy and mining industry, banking, construction industry, metal processing industry, food and beverages industry, automotive industry, wood and furniture industry, leather and footwear industry, textile industry, pharmaceutical industry, aviation, tourism, agribusiness, and real estate. These were the most attractive industries for privatization and acquisition in other transition countries also, because of profit potential of those businesses. But indirect effects of the FDI are also expected in diversification of investments such as the case of automotive industry where significant investments in automotive components industries, i.e. the business of automotive suppliers, are to be expected. In that sense, there is a great potential for economy development from upcoming investment of Fiat-Italy in Zastava-Kragujevac, which will have great impact on development of automotive component industry in Serbia, also.

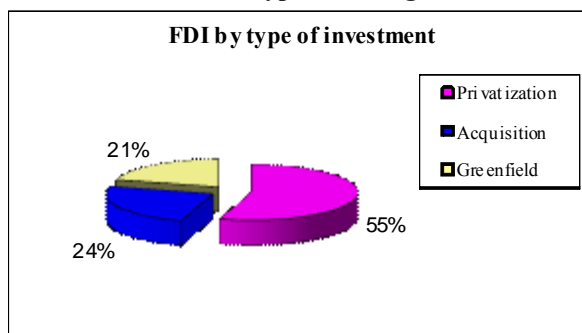
**Figure 2. the role of privatization as a FDI type in Serbia**



Until now, the greatest inflow of FDI in Serbia, as well as other transition countries in the region, has originated from the privatization of socially-owned and state enterprises. These inflows are, however, insufficient and low in comparison with other countries in region. Foreign investors mostly took part in privatization of domestic firms by the mode of tender, while in case of auctions the investments of domestic investors are dominant. Until the end of 2005 extremely low FDI inflow in Serbia came through Greenfield projects. Between 2000 and 2005 they never exceeded the amount of 150 millions US\$ annually, and only two bigger investments were those by Ball Packing and Coca Cola by the data from research of Center for free market [1, p. 27].

But situation has been changed during past three years, and greater inflow of FDI by Greenfield investment was present in Serbia. Estimates by National Bank of Serbia in relation to Greenfield investment in 2006 showed that they reached one billion US\$, out of which 1/3 came from investment of VIP in relation to the third mobile telephony permit. As a result, the Organization of Economic Co-operation and Development (OECD) awarded Greenfield projects in Serbia as the largest Greenfield investment in South East Europe for the year 2006. However, the inflow of Greenfield investment is still low for the development needs of Serbia, especially when inadequacy of domestic investment funds are in consideration as well as tendencies of privatization inflow decrease after initial privatizations of the most attractive enterprises. Namely, after the termination of privatization of socially-owned and state enterprises, new investments will depend exclusively on FDI, especially in the mode of Greenfield investment. That is why we should work on quality advancement of business environment in an effort to attract foreign investors.

**Figure 3. Share of different types of foreign investment in Serbia**



Source: Our own calculation based on the data presented in Table 3  
(contributed by SIEPA)

### Market Entry Strategies Within Foreign Investment Decision Process in Transition Economies

Obviously, low position of Serbia regarding the FDI attracting is understandable having in mind that, in comparison with selected countries in the region, Serbia has the lowest GDP per capita, the highest inflation rate, the highest unemployment rate, and the lowest total export. The seriousness of the situation is emphasized by the fact that fifteen years ago, according to general indicators of economic growth, Serbia was ahead of the countries mentioned above. Serious work is necessary on the improvement of all economy performances and creation of favorable environment for investments, given that we are uncompetitive in contrast to the countries of the region. This proves the data by World Economic Forum, according to which Serbia ranks 87 among 125 countries by global competitiveness index for year 2006 [16].

**Table 4. Comparative data about country-specific factors for 2004**

	Serbia	Bulgaria	Croatia	Romania	Slovakia	Estonia
Population (in millions)	7,5	7,9	4,4	22,3	5,4	1,3
GDP per capita (in US\$), 2004	2972	3137	7557	3358	7607	7930
Growth rate of GDP (2003/2004)	7.5%	5.5%	3.7%	8.3%	4.9%	6.2%
Inflation rate in 2004 (%)	13.7	6.1	2.1	9.3	8	3
Unemployment rate in 2004 (%)	18.5	12	18.2	7.8	16	9.7
Total export (as % of GDP), 2003	13.8	37.3	21.9	30.9	65.5	49.9
FDI inflow (in billions of US\$), 2004	0,97	2,49	1,08	5,17	1,12	0,93
FDI cumulative (in billions of US\$, end of 2004)	3,95	7,57	12,99	18,01	14,5	9,53
FDI cumulative per capita (in US\$), end of 2004	526	958	2952	807	3222	7330

Source: Strategy of enhancement and development of foreign direct investment, 2006, p. 104

As we can see in Table 4 comparative data about some country-specific factors for 2004 are given, which prove low competitiveness of Serbia in relation to chosen countries in the region.

Some of the clearly recognized weaknesses of Serbia, which impose bad image of Serbia and diminish attractiveness of domestic environment for foreign investments are [4, p.30]:

1. Telecommunication infrastructure,
2. Transport and logistics infrastructure,
3. Quality of life,
4. Transparency and political stability,
5. Social climate,
6. Availability and quality of research and development.

The need for intensive attracting of FDI necessarily also imposes an analysis of the comparative advantages of Serbia, i.e. country-specific factors, emphasized by the companies, which we mentioned above as the biggest investors in Serbia for the past 6 years. The following key advantages of Serbia by those investors are often emphasized [10, p.16]:

1. People, and their capabilities (skilled, educated labor, with knowledge of English language, and traditional exposed position toward foreign countries),
2. Central (strategic) position in South East Europe, and a good market access through regional agreements about free trade as well as Agreement with Russia about free trade,
3. Lower labor price, especially for qualified and trained workers,
4. Industrial/research tradition and experience,
5. Natural resources for production in agriculture and industry,
6. Better investment climate, numerous tax and financial incentives for foreign investors.

In order to increase competitiveness of domestic economy and create favorable environment for attracting FDI, Serbian government has already taken steps in terms of law regulative, infrastructure improvement, tax system reform, and tax relief and credits. Total low tax rate of enterprises is acknowledged as the best approach, from the aspect of economic factors, because that way the real picture of domestic economy conditions is formed, and a serious stimulus is given to investors. In that sense, Serbia has taken serious steps, which resulted in having the lowest corporate income tax rate of 10%, the lowest standard value added tax in the region of 18%, and one of the lowest salary tax of 12%. Beside Bulgaria, which also has corporate profit tax rate of 10%, other countries in the region have much higher rate (Romania and Hungary 16%; Slovakia and Poland 19%; Croatia 20%; and Czech Republic 24%). Also, other countries in the region have higher salary tax rate (Bulgaria 12-24%; Croatia 15-45%; Romania 16%) [15].

## Market Entry Strategies Within Foreign Investment Decision Process in Transition Economies

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### Conclusion

Serbia should particularly pay attention to attracting FDI of those MNCs, which bring recognizable brands, which contribute to new employment, and bring new technologies. In that sense, regulations should be brought that secure the allocation of tax credits and relief to investors who invest in training programs and vocational re-training, in R&D, marketing activities, etc. The government should provide all the necessary infrastructure and protecting of property rights and intellectual property. However, beside economic risks and stimuli, political risks should be also dealt with. Some political risks for investing in Serbia are present even today, for example, unresolved status of Kosovo and Metohija, organized crime and corruption, unsolved issues involving refugees and return of their property. Those problems and risks reduce FDI in all countries in Balkan region and present obstacle to bigger FDI inflow and entry of MNCs in this region.

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## STRATEGIJE ULASKA NA TRŽIŠTE U PROCESU ODLUČIVANJA O STRANIM DIREKTNIM INVESTICIJAMA U ZEMLJAMA U TRANZICIJI

**Rezime:** Strane direktne investicije (SDI) su postale jedan od najznačajnijih faktora ubrzanog ekonomskog razvoja, posebno nedovoljno razvijenih zemalja i zemalja u tranziciji. Stoga, proučavanje vrsta, koristi i tokova stranih direktnih investicija u savremenom svetu ima izuzetno veliki značaj. Ovaj rad predstavlja pokušaj autora da ukaže na izuzetan značaj SDI za ekonomski napredak zemalja u tranziciji, posebno u vezi sa procesima privatizacije i prelaska na tržišnu ekonomiju koji se odvijaju u ovim zemljama. Zato se i pokušavaju dovesti u vezu modeli ulaska multinacionalnih kompanija na ta tržišta sa prilivom SDI. Posebno je značajno praćenje odnosa priliva SDI i modela ulaska MNC u Srbiji, s obzirom da ona prilično kasni u odnosu na zemlje iz okruženja sa procesom privatizacije i prelaska na potpuno tržišni sistem privredjivanja.

**Ključne reči:** strane direktne investicije, strategije, ulazak na tržište, zemlja u tranziciji





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## USING DATA MINING TECHNIQUES IN MARKET RESEARCH

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**Abstract:** *Data mining techniques have recently gained popularity with researchers, in part because they overcome many limitations of traditional statistics and can handle complex data sets. Data mining is a process of extracting previously unknown, valid, actionable, and ultimately comprehensible information from large databases and then using the information to make crucial business decisions. Data mining techniques offer a powerful complement to statistical techniques and have useful research applications for customer satisfaction.*

**Keywords:** *Data mining, market research, data visualization, association rules, case-based reasoning, neural networks, genetic algorithms*

### 1. Introduction

Like any other discipline, marketing is concerned with finding predictable relationships among variables. What are the characteristics of loyal consumers? What attitudes and behaviours lead to a purchase? Why do people switch brands? What attributes and characteristics of a customer contribute to his or her creditworthiness?

Human behaviour being complex, such questions are not easily answered. For instance, customer loyalty may involve a number of factors such as a person's age, gender, place of residence, income level, marital status, availability of alternatives, and past purchase patterns, to name a few. Even when we know the factors that influence purchase behaviour, there is

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still the problem of knowing the combination of characteristics that would best predict what we are interested in – in this example, customer loyalty. The major problem here is that thousands or even millions of combinations of predictor variables are possible. It is impossible to sift through all possible combinations of relationships except by mechanical means.

Data mining is the mechanical search for patterns and relationships in data. Consider these examples:

1. A large bank has considerable information on its customers. A customer asks for a large loan. From the characteristics of the customer – age, income, place of residence, marital status, number of children, net worth, date of inception of account, average monthly balance, etc. – can the bank calculate beforehand how risky it is to lend money to this customer?
2. A supermarket chain wants to assess what non-baby products it should stock in the baby products aisle, so it can increase the sale of unrelated items when a customer comes to buy baby products. This means understanding the patterns of purchase by thousands of customers of thousands of products.
3. A hotel chain would like to understand the patterns of guest registration and behaviour so it can offer discounted rates at slow period to attract additional sales without greatly reducing its revenue through discounting.
4. A telephone company is interested in managing its customer relationships based on individual customer characteristics.

From a broad perspective, data mining involves all of the following:

- data collection (data warehousing, web crawling);
- data cleaning (dealing with outliers, errors);
- feature extraction (identifying attributes of interest);
- pattern discovery and pattern extraction;
- data visualization;
- results evaluation.

However, from a more focused perspective, the term “data mining” is generally applied to pattern discovery and pattern extraction.

Conceptually, data mining applications in marketing fall into two broad categories – grouping of variables and identifying functional relationships among variables. While the basic multivariate techniques discussed in this book thus far cover these two aspects, data mining techniques are concerned with achieving these objectives with potentially large databases with a large number of variables. Condensing a large number

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## Using Data Mining Techniques In Market Research

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of variables into potentially meaningful groups and finding relationships among a large number of variables- often without any underlying hypotheses – characterize these techniques. In that they resemble exploratory data analysis.

Although data mining may be the only available way to deal with the analysis of complex patterns, it is best to consider it as an exploratory technique to generate hypotheses rather than as a confirmatory technique that leads to conclusions. As Bonferroni's theorem warns us, if there are too many possible conclusions to draw, some will be true for purely statistical reasons, with no, physical validity.

### 2. Data mining models

Data mining uses a variety of analytic tools to uncover patterns in data. Although there are many such tools, the following are the ones most frequently used:

- Data visualization
- Association rules
- Case-based reasoning
- Neural networks
- Genetic algorithms

#### 2.1. Visualization

Data visualization takes advantage of the capacity of human beings to recognize and distinguish patterns of observable characteristics. Visualization is particularly effective for exploring and condensing large amounts of messy data into compact understandable pictures. These techniques range from exploratory techniques such as simple histograms, box plots, scatter diagrams, and link analysis networks to more complex techniques such as rotating multicolored three-dimensional surface plots in three dimensions.

#### 2.2. Association rules

Association rules state the relationships between the attributes of a group of individuals and one or more aspects of their behaviour. The purpose of these rules is to enable predictions about the behaviour of other individuals who are not in the group but possess the same attributes. Association rules are stated in dichotomous terms such as good credit risk vs. bad credit risk, buyer vs. non-buyer. These rules assign probability – like numbers to actions.

Association rules are of the form  $\{X_1, X_2, \dots, X_n\} \Rightarrow Y$  : if we find all of  $X_1, X_2, \dots, X_n$ , then we have a high probability of finding  $Y$ . As an example of an association rule, suppose a mail-order institution is interested in cross-selling a personal digital assistant to those who have just ordered several electronic items. Promoting a PDA to unlikely customers may antagonize them while wasting the salespeople's time. Therefore, the company would like to restrict the offer to customers who have a high probability of buying a PDA. To accomplish this the company can analyze purchase who bought a CD player and a wireless telephone on one call where much more likely to buy a PDA on a subsequent call than customers who ordered tape recorders or calculators. Consequently, when the association rules are incorporated in the company's order entry system and the system identifies that the customer on the phone recently ordered a CD player and a wireless telephone, it prompts the sales person to make the offer on a PDA. On the other hand, if the system finds that the caller bought a tape recorder or a calculator on the last order, the built-in decision rules will not prompt the salesperson to make that offer (but presumably an offer of another product which has a high probability of purchase for those who bought tape recorders or calculators).

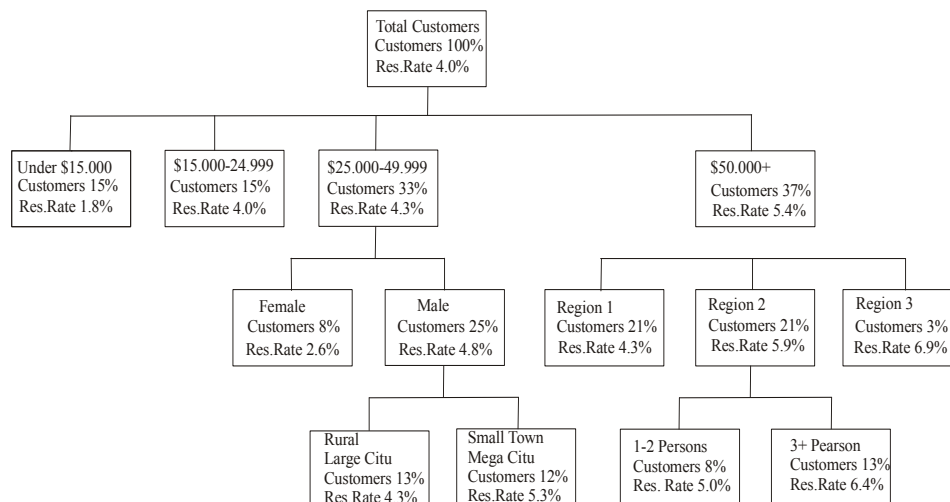
The probability level of finding  $Y$  for us to accept this rule is known as the confidence of the rule. Generally, we would search only for rules whose confidence is above a certain threshold and is significantly higher than what would be obtained if  $X$  s is chosen at random. The purpose of the latter condition is to avoid spurious associations. For instance, a supermarket might find a rule like  $\{chocolate, cigarette\} \Rightarrow newspaper$ , but that might only be because a lot of people buy newspapers, irrespective of what else they might buy.

### 2.3. Three-based methods (decision trees)

Three-based methods are used to sequentially partition the data set using independent variables in order to identify subgroups that contribute most to the dependent variable. The most commonly used techniques for automatic sequential splitting are chi-squared automatic interaction detectors (CHAID) and classification and regression trees (CART). Three-based methods are good at identifying the most important variables, interactions among independent variables, and non-linear relationships. They help to identify the most important variables and eliminate the irrelevant ones. The results obtained using these methods are relatively easy for users to understand and interpret. Decision-tree algorithms are robust to outliers and erroneous data.

## Using Data Mining Techniques In Market Research

Consider a simple example of identifying customers of a bank who are likely to respond to a direct mail campaign; data are available on net worth, income and gender. (In practice, three-based methods in data mining are unlikely to be used when there are only three independent variables. However, the principle of splitting is the same, whether one uses 3 or 300 independent variables). Records show that 20% of those who were sent the direct mail responded. The objective of the analysis is to identify subgroups that will have a much higher probability of responding to the offer, based on the three independent variables. To keep things simple, let us group each of the independent variables into just three categories: net worth (high, low), income (high, low) and gender (male, female) (male, female). At the first lever of analysis, our question is which of these three independent variables differentiates responders from non-responders from non-responders. Suppose the data show that the response rates are as follows: among males 15%, and females 25%; among those with high net worth 35%, and low net worth 7%; among those with high income 30%, and low income 14%. Obviously, among the three variables, a person's net worth maximally differentiates between responders and non-responders the best. So customers are split into two groups; high net worth and low net worth. This process is repeated separately for the high net worth and the low net worth. This process is repeated separately for the high net worth and the low net worth groups with the remaining two variables. When there are a number of independent variables, similar analysis is automatically performed at each stage process until a prespecified criterion is met (e.g. statistical significance or a minimum specified difference between the groups).



**Exhibit 1 CHAID analysis**

Exhibit 1 shows an example of this type of analysis. Each group can be profiled by following the three hierarchies. Decision trees provide a defined way to develop segments in terms of a single dependent variable. However, since decision trees split the sample sequentially, they use up data rapidly and, therefore, are not suitable for use in small databases. These techniques are highly sensitive to noise in the data and they tend to *overfit* data. As a result it is important to cross-validate the findings obtained using decision-tree results.

## 2.4. Case-based reasoning

In case-based reasoning (CBR) systems, we compare the attributes of a new case with corresponding attributes in a collection of previously known cases. The objective is to identify examples that provide generally positive solutions and use them to generate a template for the current case. As an example, consider a fast food chain looking into setting up new outlets. Among the specifications of such outlets, it needs to consider such matters as floor space, number of counters and whether or not it include a salad bar. It will also need to compare the attributes of the locality in which any potential new outlet is situated, such as average income, the number of teens and preteens, traffic flow, and number of commercial establishments to the corresponding attributes for all of the company's existing outlets, along with their design specifications, annual sales and profitability. The CBR system is used to identify existing locations whose attributes most closely resemble those of the proposed locations and develop design specifications for the proposed outlets. Obviously this is not meant to be a mechanical exercise since any successful site may have some features that are unique. In other words, the characteristics of successful outlets are used as a template to be modified as required and not as a mould that is inflexible.

The value of case-based reasoning systems rests on the fact that it forces the user to focus on the similarities and differences between different situations in a structural way using the attributes that define the cases. In doing so CBR are easy to understand and implement on the computer. They accommodate qualitative and quantitative variables and can deal with discontinuous variables.

On the negative side, CBR's represent *what was actually done* in the past, not necessarily *what is optimal* under similar circumstances. The solutions of the past may not necessarily be optimal under current conditions, and using them to solve current problems may simply perpetuate mistakes and sub optimal solutions of the past. Establishing and maintaining CBRs will require considerable expertise and time investment. It is not a simple task to

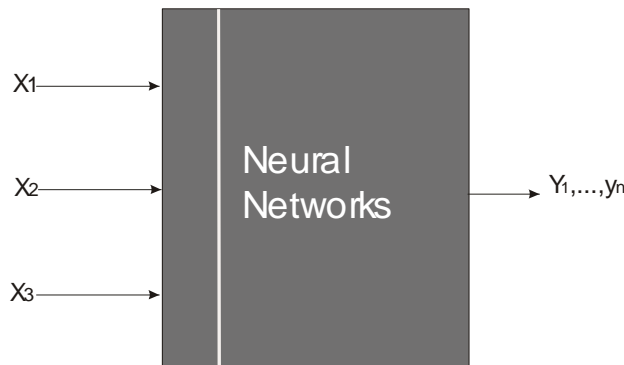
first identify attributes that are related to specific outcomes and then to assign weights so that new situations can be matched to the most appropriate outcomes. Even more importantly, CBRs may lead to misleading conclusions when there are significant interactions among variables under consideration.

## 2.5. Neural networks

Neural networks are computer models that are designed to simulate human brain processes and are capable of learning from examples to find patterns in data. Although they have been around for decades, only recently have they begun to make an impact in marketing. This may be attributed to the rapidly reducing costs of computing and the emergence of better theoretical frameworks. Unlike in conventional computing, neural nets do not rely on specified methodology based on a standard set of instructions. Rather, a neural net is “trained by example”, just as a rat learns a maze or a child learns to walk.

### *Supervised neural network*

Conceptually, a neural net is a “black box” that produces a set of outputs on the basis of a set of inputs (Exhibit 2). The network is presented with a “training set” in which both the inputs and outputs are known. Using this as an example, the network is “trained” to model the outputs from the inputs. This is known as “supervised training”.



**Exhibit 2 The neural network black box**

The “black box” consists of a collection of processing units (analogous to neurons of the brain) that are connected and form a “network”. “Training” involves varying the weights assigned to the connections between

neurons with a view to minimizing the difference between the network's outputs and the actual outputs obtained from the training set. The model thus generated is then validated by applying it to a separate "test set" of data.

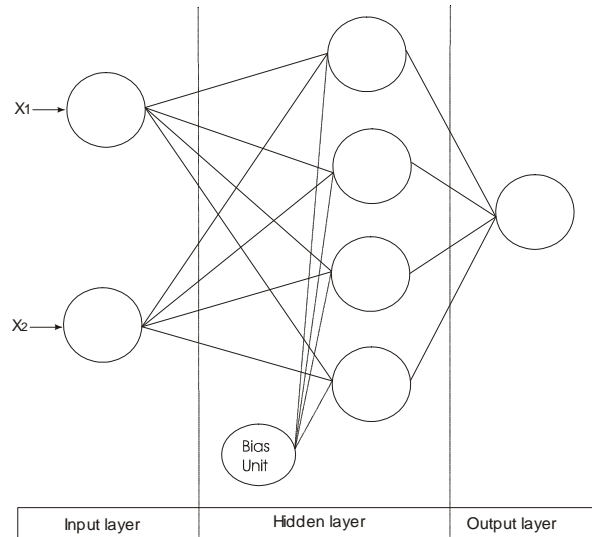
### *The multiplayer perceptron*

A common model of neural nets used in business is one known as the multiplayer perceptron (MLP). In the example shown in Exhibit 3, there are two inputs and one output, and there are three layers of neurons. The neurons in one layer are connected to every neuron in the next layer. The neuron takes the sum of its inputs and applies to every neuron in the next layer. The neuron takes the sum of its inputs and applies a function to this sum. Such a function can be either linear or non-linear (e.g. sigmoid function). A pair of input values  $(x_1, x_2)$  are presented to the input layer neurons. After being processed by the input layer, the values are passed to the connections at the hidden layer. They are then modified by applying weights  $(w_1, w_2, \dots)$  as they pass through this layer. The assigned starting weights are generally random but are then modified during training. The hidden layer neurons process these weighted values. The processed values are passed along the final set of connections and are modified by another set of weights  $(u_1, u_2, \dots)$  before reaching the output neuron. The output neuron applies an additional process to compute the value of  $Y_1$ , the network output. "Bias units" output a fixed unit value analogous to the constant terms in the equations defining the processes carried out by the network.

As noted earlier, "training" is essentially a process of adjusting the connection weights so as to make the network reproduce the known output values in the training set. It is the minimizing of mean square error (between the network and the training sets). Although the initial training can be time-consuming and computer-intensive when large networks are involved, once trained the weights in the network are fixed. Then it is simply a matter of calculating the output value corresponding to any pair of inputs, a relatively quick process. It is the non-linear hidden layer neurons which provide MLPs with their power in modeling data patterns. These units are frequently referred to as "feature detectors" – they decompose the data patterns into simpler features.

However, when we face complicated networks, the precise role of particular hidden neurons is usually very difficult to discern. Although we used a fairly simple and straightforward illustration, neural networks cover a number of algorithm that deal with classification and clustering.





**Exhibit 3. Multilayer perceptron: an example**

Neural nets have several advantages. They can efficiently combine information from many predictors and cope with correlated independent variables. Compared to traditional techniques such as regression and discriminated analysis, neural nets do handle non-linearities and missing data more effectively. Because of their ability to detect non-linear relationships automatically, neural nets have a significant advantage over regression-type models. Compared to standard multivariate techniques, neural net procedures and results are easier to communicate. Since these models adapt to changing input much more easily than techniques such as multiple regression analysis, they are considered to be especially appropriate in dynamic, fast-changing situations when the relationship between behaviour – (e.g. customer attrition) - and a set of predictors is subject to frequent change.

Neural nets also have several disadvantages. Building the initial neural network model can be very time-consuming since it involves extensive data cleaning, data verification, data transformation, and variable screening. Many of these procedures require specialized skills. Another main limitation of neural nets is that there is no explanation for the outcomes produced by neural nets – In most cases, it is essentially a black box technique as far as the end-user is concerned. Neural networks need to be “trained”. Training is conceptually similar to deriving weights in a regression equation and involves reading sample data and iteratively adjusting network weights to produce a best prediction. Once such weights are assigned, the model can be applied to others to make predictions. However, training requires large amounts of data. This can be a problem in some cases.

## 2.6. Genetic algorithms

Genetic algorithms (Gas) are used to solve prediction and classification problems or to develop sets of decision rules similar to the rules that are inferred from decision-tree models. Gas is based on the evolutionary biological processes of selection, reproduction, mutation, and survival of the fittest. They are suitable for use with poorly understood, poorly structured problems because they aim to generate several alternative solutions simultaneously, unlike, say, a regression model which attempts to find a single best solution<sup>1</sup>. Gas can also incorporate in the model any decision criterion. If, for instance, the marketer is interested in maximizing the response rate in a particular segment, this can be built into a GA model (but not into traditional multivariate models such as logistic regression analysis). For example, a GA can explicitly model maximizing the proportion of responses in the top 20% of a direct marketing lift analysis, something logistic regression cannot do. Another feature of Gas is that they are capable of producing unexpected solutions: they may identify combinations of independent variables that may not have been initially obvious. GAs can be used by those who may not be technically skilled. Gas are not suitable for the automatic search of large databases with a large number of candidate variables since GA software tends to be slow because the process of evaluation of the fitness function tends to be time-consuming, when the database and number of variables are large. In such cases decision trees may be more appropriate. Constructing Gas can be quite time-consuming and many runs may be required in the fitting process. GA solutions are difficult to explain as they do not provide statistical measures to enable the user to understand why the technique arrived at a particular solution.

## 3. The knowledge discovery process

Data mining can be conceived as the knowledge discovery process (KDP). Peter Peacock (2000) provides a model of KDP and the exposition below follows his model (see Exhibit 4). KDP is not new. It is the application of scientific discovery methods to large databases. The terms may be new, but the concepts are not. The elements in Exhibit 4 are described below. Although the exhibit does not have feedback loops, the KDP process is iterative in that there is a substantial flow of information back to prior steps in the process. Although KDP is generally discussed in the context of data mining, it is in fact common to all model building.

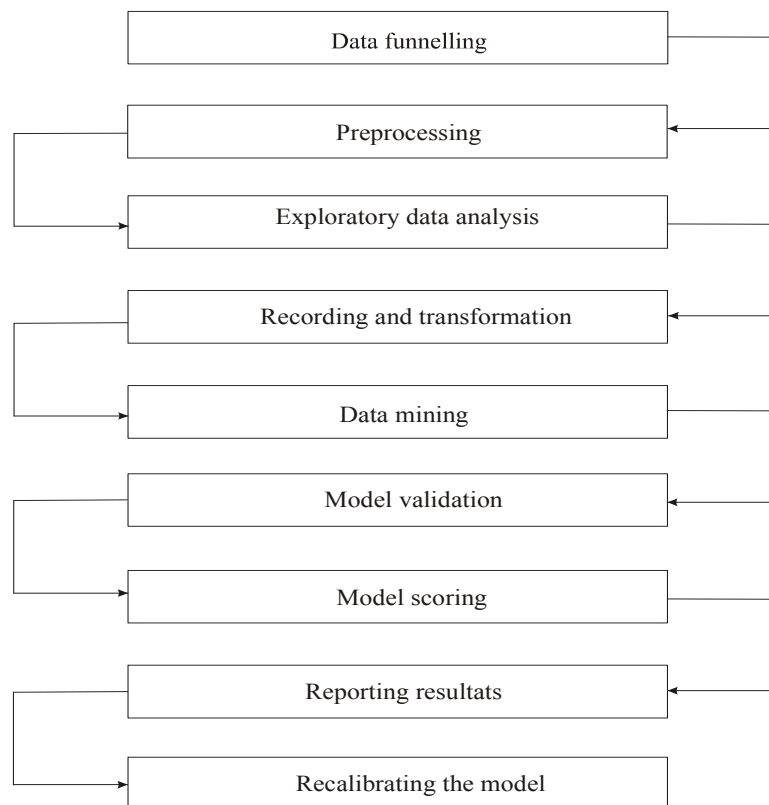
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<sup>1</sup> Radovic O., Lepojevic V., "Genetski algoritam u resavanju NP klase problema", SYM OP IS 1996., Zlatibor, 246-247

*Data funneling*

Data mining techniques assume that the data quality is high. Data funneling is a set of procedures that ensure that the data collected are suitable for analysis. They include the identification of internal operational data, appropriate external data, moving them to a data repository, evaluating data quality, and obtaining better data when necessary. Data quality is assessed by running simple queries, applying basic visualization techniques, and running automatic validation procedures. The objective here is not to make the data flawless- a near-impossible objective when we deal with large databases-but rather to make sure that there are no gross errors such as wrong type of data, outliers that are clearly wrong and right data in the wrong column.

Data funneling also includes choosing the subset of variables to be analyzed from the larger set of all characteristics available in the data repository.



**Exhibit 4 The knowledge discovery process**

### ***Preprocessing***

The next step, data preprocessing, includes the following aspects:

1. *Reformatting*. Formatting data from different sources to a common format.
2. *Standardizing*. Standardizing data attributes to conform to a standard. For example, an organization may have standard specifications for an attribute. The data may have to be converted to conform to this standard. This is particularly true of text-based attributes.
3. *Removing records with sparse data*. Removing records with insufficient information for analysis purposes.
4. *Removing duplicate records*.
5. *“Householding”* When the target unit for the analysis is a household rather than an individual, individuals must be assigned to households. This operation is generally performed by software that looks for sets of common variables such as last names, address components, and phone numbers.

### ***Exploratory data analysis***

Exploratory data analysis is used to identify the anomalies and outliers that remain in the data set after it has passed through the previous checks. It also provides the researcher with a “feel” for the preprocessed data through ranges, means, measures of central tendency and dispersion, shape of the distributions, and correlations among variables. The analyst looks for largest and smallest values, central tendency, dispersion, the shapes of the distributions of individual variables, and the structure of the relationships among variables. This step often enables the analyst to generate preliminary hypotheses with regard to the nature of relationships among variables.

### ***Recoding and transformation***

In this phase, additional operations are performed on the data. This may include recoding the data to conform to the analyst’s hypotheses, creating new variables by combining the existing variables, and the application of data transformation to non-linear data. Data may also be recoded into other values using simple decision rules. Recoding is used to convert continuous data to a nominal form for use with tools such as neural nets and decision trees. It can also be used to convert nominal text label data into numeric values.

### ***Data mining***

This phase includes techniques of machine learning from patterns in data using major discovery tools, association rules, decision trees, neural nets, and genetic algorithms.

### ***Model validation***

Once the model is built, it is important to assess its validity because models that might have worked on a training set may not work very well when applied to other data. A common approach to model validation is to draw two random samples from the preprocessed data: a “calibration sample” and a “holdout sample”. The calibration sample is used to build the model. This model is then tested against the holdout sample to validate the model. If the model performs very poorly on the validation sample then the analyst must modify the model and even rebuild it from scratch.

### ***Model scoring***

Model scoring refers to the application of the model developed by the analyst to the entire database. It is done through a set of classification rules developed on the basis of the calibration sample. For example, an equation such as  $y = a + b_1x_1 + b_2x_2$  developed from a sample of the data is applied to the entire population of records. The scores derived by applying the formula to the entire database, the  $y$  s, are placed in a new column in the data base. These are generally known as *scores*, and the process as *scoring*. Scoring may also refer to the process of identifying cluster membership of individual observations when cluster analysis is carried out.

### ***Reporting the results***

Once the above processes are completed, the researcher interprets the results and presents them to the decision-maker along with supporting information.

### ***Recalibrating the model***

Because marketing is a dynamic process, behaviour patterns identified today may not work two years from now. All models- especially in applied disciplines such as marketing – deteriorate over time, and should be

recalibrated regularly, preferably at definite intervals established beforehand. Recalibrating is the process of rebuilding the model with a recently constructed data set. The recalibrated model may differ from the original I terms of weights applied to the attributes in the models, include new attributes or even have a completely different formulation.

#### 4. Summary

Customer satisfaction research has become commonplace over the last 20 years, with businesses and academic researchers touting continuous improvement strategies driven by customer satisfaction data. Traditionally, researchers have used statistical techniques have limitations, especially in customer satisfaction research. In practice, many researchers ignore assumptions and limitations, which may produce biased and misleading results.

Data mining uses a variety of mathematical algorithms to analyze historical data. The results of this analysis are then used to build models based on real world behavior, which are in turn used to analyze incoming data and make predictions about future behavior.

Data mining can be applied to marketing data in a wide variety of ways. Data mining applications in marketing fall into two broad categories – grouping of variables and identifying functional relationships among variables. While the basic multivariate techniques discussed in this book thus far cover these two aspects, data mining techniques are concerned with achieving these objectives with potentially large databases with a large number of variables. Condensing a large number of variables into potentially meaningful groups and finding relationships among a large number of variables- often without any underlying hypotheses – characterize these techniques.

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## KORIŠĆENJE DATA MINING TEHNIKA U ISTRAŽIVANJU TRŽIŠTA

**Rezime:** Data mining tehnike su od skoro postale popularne kod istraživača, posebno zbog toga što se njima prevazilaze mnoga ograničenja koja nameće tradicionalna statistika i što mogu baratati i kompleksnim setovima podataka. Data mining je proces izvlačenja nepoznatih i važnih informacija iz velike baze podataka radi daljeg korišćenja istih za donosenje krucijalnih poslovnih odluka. Data mining tehnike su moćna dopuna klasičnim statističkim tehnikama i nude korisne aplikacije radi istraživanja satisfakcije potrošača.

**Ključene reči:** Korišćenje podataka, istraživanje tržišta, vizualizacija podataka, pravila pridruživanja, tumačenje bazirano na slučaju, neuronske mreže, genetski algoritam







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## THE POSITIVE AND NEGATIVE EFFECTS OF ACCESSION TO THE EU - LESSONS FOR SERBIA-

**Dr Ivan Marković\***

**Abstract:** *The Europe witnessed spectacular changes in its economic, social and political landscape during the last decade. Equally remarkable are the forthcoming changes over the new decade. The past and the forthcoming changes in Europe manifest themselves, among other things, by dramatic reshaping in the positions of the countries, of their economic systems; of the economic, social, professional, generational, regional and other interests. The Eastern enlargement of the EU is a strategic undertaking, aiming at economic, social and political wellbeing for all European countries and their people.*

**Key word:** *EU, Accession Strategy, Costs and Benefits of Integration*

Even in the most thoroughly designed social projects, however there is no guarantee that everybody will get equal gains at the same time. The overall aggregate outcome may be positive, but it may not be equally beneficial for all participants in the integration process. Economic theory provides no assurances that all economic agents benefit from the integration. Behind the positive total outcome of the expanded EU, there will inevitably be partial misbalances, which occur as loosing (though temporarily) countries, regions or groups of the population. The positive and the negative effects will not be shared evenly. Some countries, regions and sectors may get net positive effects at the beginning, and later on may transform into losers. Some may get direct positive and negative effects, while others get them indirectly.

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The positive and negative effects are dynamic. Current positive effects may evolve into negative ones after a while, and vice versa, if in the balance of measurable effects one adds the immeasurable economic and non-economic effects, such as national and personal security, stability; political, psychological, ethnical, religious and other considerations. The quantitative assessment of the overall effects proves more difficult, even impossible. As stated above, the horizon of this study is confined to the likely 10-year long pre-accession period for Serbia. This is a long enough period, full of uncertainty, making nearly impossible the measurement of the net positive and/or negative effects of the preparation for accession, because: One does not know whether the pre-accession period will be ten years or longer; one cannot foresee the institutional reforms within the EU during this period. The controversial outcome of the Nice Conference (December 2000) strengthens the uncertainty. Hardly anybody would venture to forecast the outcome of the next Intergovernmental Conference, scheduled for 2004; Even more difficult to foresee are the future reforms of the Common Agricultural Policy (CAP), the structural and social policies, the intensity and the implications of the Eastern enlargement; Negative global shocks are possible (energy prices, ecological factors, fluctuations in the world financial system, etc.) as well as positive ones (consequences of the information technologies, of the genetic engineering, of the "New Economy", etc). They will affect the functioning of the EU and its relationships with other powerful regional communities and centers.

Important changes in the multilateral rules of global trade within the framework of the WTO are also forthcoming. They will certainly affect the internal economic, social and other policies of the EU. There are still uncertainties about the future development of the EMU and of the common currency. The same is true, concerning the development of the EU itself - will it develop into an organization of the present type, a Federation of European States, a Union of States, integrating politically, economically, socially, and moving ahead by several speeds. It is difficult to foresee the development of the CEECs before and after accession. Although Serbia is a small country, it could also offer unexpected developments over the next ten years and later. The western part of the Balkans is even less predictable. So far there is no comprehensive broadly based quantitative assessment of the effects of the European integration – for the Community as a whole, for the applicant countries, and for the member countries. The attempts for a quantitative measurement on macro- and sectoral level contain so many uncertainties and simplifying assumptions that their authors even call for caution.

## **The Positive and Negative Effects of Accession to the EU - Lessons for Serbia-**

### **Assessment of the Short- and Medium-term Effects**

Major features of the European integration during the last ten years were the short-term actions and capturing of short-term benefits. The EU companies benefited from the liberalization of trade and capital flows. They increased exports to Serbia and other CEECs on readily available markets, doing almost nothing for their development. Moreover, their trade surpluses kept growing. The West European companies were major beneficiaries through exports of modern capital goods for structural and technological modernization of the CEE economies. The size of these exports will be much larger over the coming years within the context of their preparation for EU accession. The large negative trade saldo of the CEE countries should be treated as their costs over the past decade. This is likely to go on for the new decade. Trade liberalization was more beneficial for the EU countries as they were better prepared than the CEECs. Although unprepared, the CEECs were compelled to open their markets for goods and services from the EU bearing heavy economic and social consequences, being unable to benefit from "jocks" (accesses to EU structural and social funds), or "vents" (emigration of a redundant man power, generated by import competition). As stated earlier in section 4.2 and 4.4 Greece, Portugal and Spain were treated more fairly in this respect. They have got and continue to receive 40-60 times more net EU transfers per capita than the CEECs. The same is true for the liberalization of capital flows, although the benefits were shared less unevenly between the partners.

The net benefit in favour of the EU was (and is) most pronounced in sharing benefits from labour migration. The EU countries have nearly blocked the migration flows. This is good for them, but heightens the tension on the CEECs labour markets at a time of drastic structural adjustments to prepare for accession. The net positive effects of the EU countries are even larger and these of the CEECs –smaller from the EU governments' policies to attract highly skilled experts from the East. This affects the CEECs negatively and will go on increasing over the coming years and decades. The analysis confirms an obvious asymmetry in sharing of net effects from liberalization (or lack of liberalization) so far between the EU and the CEE along the major integration flows. The EU companies have already captured a large proportion of the positive effects from these flows. The CEECs sustained so far predominantly negative effects (costs for accession preparation, losses from import competition, accumulated trade deficits, losses from skilled labour emigration) and got only meager positive effects. The short- and medium term overall net effects for the EU countries were

obviously positive, while for the CEECs – clearly negative. The same holds true for Serbia.

Large multinationals from the EU, USA and others benefit from the low labour, energy, land and other input costs in the CEECs by establishing new production capacities, aimed at the CEE market as well as for current and future exports to the EU. This is beneficial for both sides, but more for the foreign investors. The past decade was marked by large costs of the CEECs for transition and accession preparation. As stated in sections 1. and 2. the two are complementary. With or without accession, transformation serves economic and social development of the CEECs. What matters in this case is, that past years, and for Serbia – the next ten years will witness large imbalance between positive and negative effects. Serbia has spent and will continue to invest even more for accession preparation, without receiving even partial commensurable benefits. Positive net benefits are expected to emerge only a few years after accession.

The composition of accession preparation costs also deserves attention. One can see in Fig. No 1. that EU pre-accession transfers will be around 5% of the overall investment during 2000-2005, and 10% for the second half of the decade. The EU transfers are expected to cover up to 15% of the investments directly related to accession preparation. As stated above, Serbia must provide the bulk from domestic saving, FDI, and external loans. This will burden the budget with infrastructure investment and public debt servicing, while revenues from import tariffs will be on decline, due to trade liberalization. As a result, the external debt servicing will be even more difficult. This will necessitate greater economic and social mobilization, in spite of accumulated social fatigue from transition and high expectations for better incomes and consumption. The burden of accession preparation costs will grow year after year during the pre-accession period and also after accession. Particularly over the 4-5 years after accession, if the present pattern of gradual switching in to EU funds is to be applied for the second wave of new members.

One could argue that the constructive external pressure for faster compliance with the *Acquis* and related standards would accelerate modernization of CEECs. This may be true if such pressure was exercised over countries with financial and other capacities for modernization. For some of the CEECs, and particularly for Serbia, this is not the case. For the more backward CEECs still in transition recession, the external pressure would be constructive if supplemented by financial assistance. In the absence of such support it would not lead to anything beneficial. One should also bear in mind that these standards were designed for advanced European

### **The Positive and Negative Effects of Accession to the EU - Lessons for Serbia-**

countries, and developed over many decades with huge resources. The CEECs are not in a position to meet these standards within much shorter time, much smaller resources and less favourable environment. In addition to time and resources needed, compliance with technological, ecological, social and other standards of the EU by CEE companies will be damaging to their cost competitiveness, at least in short- and medium term. This would crowd them out from traditional markets for a long time.

Serbia and other CEECs countries are burdened excessively due to overlapping of the transition and preparation for accession. It is well known that transition necessitates large costs for restructuring of the real and financial sectors, development of technical and institutional infrastructure and many other components of the functioning market economy. And this must be done by weak exhausted economies due to the deep recession and radical transformation of the economic systems. The private sector is expected by definition to perform better and be helpful to the state and society. In the short term (in Serbia - in the medium term) the poor quality private sector will not be loyal to society. Of course, this does not apply to the entire private sector, but only to the portion, which is in the grey area between law and crime. As a matter of fact, much of this private sector was initiated in semi-criminal environment. It is very active and inventive in tax, customs and social security payments evasion, violation of labour code, etc. As a result, for several years after privatization, the economy is in a poorer shape than before privatization. The post-privatization ailing may last longer in Serbia. Serbia and other transition countries are burdened by additional costs for compliance with the EU standards in this complex environment. The CE countries, more advanced in transition, are better prepared for accession and can afford more easily the related costs. The countries, which have not yet solved the most acute transition problems (such as Serbia) must carry on the two at the same time – market transformation and preparation for accession, and burden themselves with two types of costs. It is true that the two processes are complementary, but their sequential implementation is less painful than the simultaneous one.

It is logical to expect that the progress of transition and preparation for accession accumulates a potential for higher growth, productivity, competitiveness, employment and incomes and not only costs. This will produce economic and social relief for the population. It is logical indeed for most of the CE countries, but not for Serbia – backward both in transition and in preparation for accession. The Serbian economy is and will be in the foreseeable future at a stage of development of economic, institutional, social and other prerequisites for both - transition and preparation for

accession. This means - at a phase of investing. It has not yet reached the indispensable minimum of economic maturity to "harvest the fruits" of these investments. With appropriate economic policy and enhanced preparation for accession the more favourable stages of development and maturation may start surfacing after 6–7 years, at the earliest. More visible results are to be expected later on. From the above it follows that the EU countries first capture the benefits from integration (liberalized trade and capital flows, large exports of capital goods to transition countries, large trade surpluses, participation in speeded up privatization, blocking of migration flows for low-skilled labour, and draining the most skilled experts). Only later on they will make expenditures (potential transfers, opening labour markets) for aiding the CEECs. Only a comparison of accumulated trade surpluses with transfers made so far and promised for the future proves that short- and medium term net effect is positive for the EU and negative for the CEECs. This is true for Serbia as well.

The longer this asymmetry lasts, not only in the size of the positive and negative effects, but also in their sequencing in time, the larger the positive effects for the EU and the negative ones for the CEE. Other researchers of the effects of integration of CEECs into the EU draw similar conclusions. The applicant countries in the Eastern enlargement are placed from this point of view in less favourable position than were the applicants for the Southern enlargement in the 80s. It is well known that from an economic point of view one cannot commensure nominal figures occurring at different time. One \$ worth of profit today is much more valuable than \$ 1 five years from now, and even more so, than 10 years from today. The opposite is true for costs. The sequencing of the effects of CEECs integration so far, and the expected one for the new decade, taking into account the "time factor", leads to the following conclusion: The net present value of the overall positive effect for the EU is much larger, than the net present value of the overall positive effect for CEE. To be precise – in the short- and medium term there is no positive overall net effect for CEE, neither nominal, nor discounted. The net present value of negative effect for CEECs is more unfavourable than the net nominal negative effect as a sum of nominal annual numbers.

The transfers from the pre-accession funds are useful and indispensable for Serbia and the other applicant countries. They are free and, therefore, provided under more favourable terms, than the softest official loans. However, one has to state that these transfers are not beneficence to Serbia and the other applicant countries, made despite the interests of the donors. The utilization of the transfers proves that they are at the same time a

### **The Positive and Negative Effects of Accession to the EU - Lessons for Serbia-**

form of self-financing the economies, the budgets and the citizens of the donor countries. The transfers are used for consultants' fees from the donor countries, 30-50 folds higher than fees for local experts of comparable quality (and part of them goes to their budgets as income tax). The funds are used for engineering – designing services, provided predominantly from the donor countries' companies (and part of them contributes to their budgets as corporate and income taxes, and VAT). They are used for procurement of equipment, technologies, information, software, transport and insurance costs, and others, again by companies from the same countries (and part of them transforms into budget proceeds as taxes). A portion of these resources transfers into contributions to the social security systems of the EU countries. It would therefore be more appropriate to say that pre-accession transfers are free assistance to the applicant countries, which matches adequately the interests of the EU members.

### **Assessment of the Long-term Effects**

Serbia and the other CEECs face serious problems in estimating the long-term effects of integration into the EU for many reasons. One of them is the uncertainty about the standards that should be met before and after accession. The negotiations will produce agreements. The EU Acquis, however, is changing constantly. Standards become more demanding and require even larger costs to be met and upheld. Present members have decided the modifications, but they will be compulsory for the new ones who did not take part in the decision making process. This contributes to greater uncertainty for the candidates regarding their rights and responsibilities as future members in 5-10 years or later. Problems for prospective members arise due to difficulties in commensuring costs and benefits. It is easier to measure the cost, but it is not so with the benefits. If the objective is to increase the growth potential, productivity, competitiveness, the outcome is easier to measure. This is, however, not the case with the improvement of environment, working conditions, protection of consumers, nuclear safety, and protection of external borders. It is even more difficult for benefits, such as protection of national security, regional stability and so on. In those cases one cannot commensurate costs and benefits in the traditional sense. This, however, does not question the soundness of such costs and benefits. The assessment of long term effects of integration is impeded by the remaining uncertainties with the investment climate. Many potential investors are not yet convinced of the irreversibility of the integration between EU and CEE as far as some important details are concerned: preparedness of the applicant countries, readiness of the EU itself, the terms

and conditions of accession, nature, scope and number of transitional arrangements, etc. The configuration of these prerequisites determines the effects of the investment decisions. An unfavourable economic environment increases the risks for the investors. The memories of the East Asian and Russian crises are still fresh. The recollections of the dramatic events on the Balkans over the last 9 years and the fears of their re-emergence in a modified form are even stronger.

Though difficult to estimate, the long-term effects are the major inducement for the integration efforts of CEE and the EU. It is even more important for the CEECs as the short- and the medium-term effects are negative for them so far. The misgivings that future transfers from agricultural, structural, social and other funds to the new members will be thinner, than the present ones to the less developed members, inject additional mixed expectations. This notwithstanding, the new members, such as Serbia will get probably 2,5 – 3,5 % of their GDP after accession. In spite of the unfavourable short- and medium-term net effects, Serbia and the other CEECs may count on net positive long-term effects under normal conditions. The prospects are better for applicants who will accede by 2005 – three to five years after accession. For Serbia and the other applicants, who will accede by 2018-2020, the prospects are more distant – 3 to 5 years after accession. The estimates of S.Richter from the Vienna Institute are similar. The perspective is not attractive, but there is no sound alternative for the CEECs. The theoretical scenarios could be the following:

- Accession to another integration community;
- Independent foreign economic policy with closed economy;
- Independent open foreign economic policy, consistent with modern trends of globalization.
- Alternative integration community does not exist in Europe, neither it is likely to emerge. Isolationist foreign economic policy is a recipe for economic disaster. Only countries such as Switzerland and Norway could afford for some time to have fully open foreign economic policy of their own. This is, however, unthinkable for Serbia.

Serbian accession to the EU has no viable alternative! There is no room for hesitation whether to join the EU or not. For a poor country such as Serbia the alternative "economic neutrality" is non-existent. The only question is when to accede and under what terms? Some people share the view: "the sooner, the better". This is hardly a wise decision! There are other alternatives, in our view – more promising. The analysis in previous sections provides the arguments. One should consider them and assess the pros and

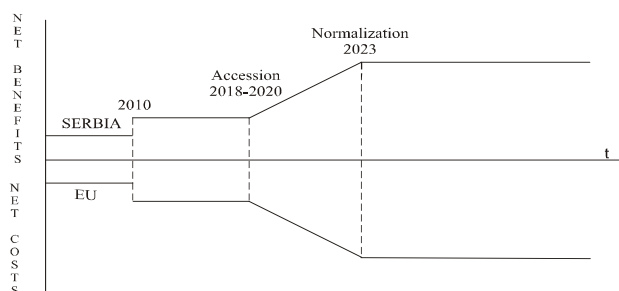


### **The Positive and Negative Effects of Accession to the EU - Lessons for Serbia-**

the cons. The final political decision should be taken on the basis of overall net effects – measurable and immeasurable. The decision will be political, but based on solid economic, social, security and other arguments.

Under the present situation of on going accession negotiations the solution is a full mobilization of the national energy for the best possible preparation for accession at the most favourable terms feasible. It is easy to be said and very difficult to be implemented. As stated above, a comprehensive measurement of positive and negative effects of integration is not possible. The most one can estimate now is a tentative picture of the trends of these effects and their tentative sharing between the EU and the applicant countries. They can be presented in a graphical form. This is more a qualitative than a quantitative estimate. Any attempt even for such qualitative assessment contains a number of conditionalities. Such estimates should be interpreted cautiously and serve only as a starting point for reflection and further comprehensive investigation. On figure No. 1 one can see (qualitative) graphic assessment of the new revenues Serbia expects from EU transfers prior to and after accession:

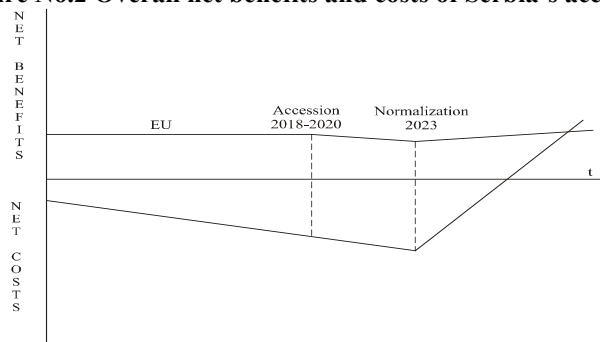
**Figure No.1 EU pre-and post accession transfers**



During the first half of the pre-accession period (2000–2005) Serbia expects annual gross budget transfers from EU around 260 mill. Euro. During the second half (2006–2010) – after the accession of the first group of applicants the transfers will probably double. One assumes that the pattern of gradual switching in to EU agricultural, structural and other funds, envisaged for the first group of new members will be applied to Serbia from 2018 to 2020. As it is impossible to forecast transfers beyond 2020 (which is assumed as a normal one) we expect they will remain at least at the same level over the following years. The assessment of these costs is more difficult than of budget transfers.

Serbia will gradually develop features of a medium level market economy over the next decades. The transfers from the EU would stabilize at a fairly high level. The great development efforts over the first two decades of the New Century would gradually bear fruits – sustained growth, higher productivity, competitiveness, incomes and consumption. One would still need high saving and investment rates, though slightly lower than the picks from 2010–2020. It is risky to use numbers for such a distant future, but if investment rates were 31–33% in 2010–2020 they might fall to 28–30 % over the third decade of the Century. One should not put the responsibility for this type of investment curve on the EU. These are investments of Serbia - for Serbia, by present generations – to the future ones. The relation with the EU is that investment rates are higher (say by at least 10 percentage points) than would have been otherwise, because the country must urgently prepare for an urgent accession. Figure No.2 presents a qualitative graphic assessment of the overall net (direct and indirect) effects from Serbian integration into the EU. It is hardly necessary to explain how difficult it is to venture an assessment for such a long period of time. The trends presented here for the net effects and their sharing between Serbia and the EU should be considered only as tentative. Any contribution, leading to precision is welcome.

**Figure No.2 Overall net benefits and costs of Serbia's accession**



This graphic is totally different from similar experiments of West European experts. Both numerically and graphically they present different sharing of integration effects between CEECs and the EU. They estimate positive net overall effects for the CEECs both before and after accession. The effects increase sharply after accession. Net effects for the EU are estimated as slightly positive, but smaller than the net positive effects for the CEECs before accession. They decline sharply after accession and stay negative for many years tending towards the zero in the distant future. Even

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then, they are expected to be much smaller than the overall net positive effects for the CEECs.

The above publication foresees leveling of the average representative CEE country-member of the Union in terms of income per capita with the one for the Community (i.e. over 75% of the average). This means discontinuation of the prevailing part of transfers. We do not share such an expectation for the next two-three decades (and much less for Serbia). All studies on European economic integration we are aware of confirm that convergence will take decades not just years. Our studies also prove that several decades will be needed for CEE as a whole to reach 75% of the EU-15 average. We, therefore, do not envisage discontinuation of transfers from the EU structural funds.

Figure No.2 provides a general (qualitative) graphic expression of what has been said so far concerning the short-, medium- and long-term effects. The net effects for Serbia will stay negative during the pre-accession period (by 2020) and afterwards until normalization of its status as EU member (tentatively by 2023). Their negative size will grow up to accession. It will go on increasing, though at a lower pace, by 2025 (tentatively) because of:

1. low level of economic and social development – the lowest among the applicant countries;
2. too short preparatory period, particularly taking into account the backwardness of the country;
3. huge investments needed for convergence with the EU standards within a short period of time and limited transition periods;
4. modest transfers from the EU pre-accession funds;
5. gradual switching in to agrarian, structural and other funds after accession;
6. expected curtailment of agrarian, structural and other transfers to new EU members, compared to their levels up to 2000;

A major reason for the negative overall effect is that Serbia and the other applicant countries have been left alone to bear the bulk of the costs for preparation. They will have to be financed from domestic saving by an economy which is in a deep recession; additional external borrowing at already high external indebtedness; attracting FDI at unfavourable investment environment. On top of that, efficiency of economic activity in this country is low, and will remain such for many years to come. The main reasons for this are domestic. If one looks for external reasons, they are in the EU, which is not willing, or able to provide larger transfers prior to and after accession, symmetric to the short pre-accession period and the limited

transitional arrangements. Here, too, caution is needed in the assessment, as the EU member countries have their own problems, constraints and interests. If we were they, we certainly would have given preference to our national interests and would have behaved in the same way!

Moreover, the EU countries have sufficient ground for reservations with regard to Serbia. It would be difficult to persuade their politicians and the public opinion for more transfers to Serbia, owing to the large-scale macro- and microeconomic irresponsibility and ownerlessness, criminality and corruption, more than 25% abeyant fertile lands, etc. Who would guarantee that EU transfers would be used properly in Serbia, if the authorities were helpless with regard to corruption and crime for ten years already!

After the normalization of the status of Serbia as EU member by, say 2023-2025 one may expect an augmentation of the overall net effects. The negative components would decline and the positive ones would increase, until the net volume would have reached zero and entered the positive area, improving further.

To summarize: over the next 10–15 years the overall net effects from the Serbian integration will be negative, or close to zero. Only the distant long-term net effects would be positive. This is not surprising! It may be normal for the development of a poor country towards economic maturity. Many other countries have done it. Serbia too must make it predominantly on its own. Nobody offers such gifts! If the overall pre- and post-accession investments were reduced by  $\frac{2}{3}$ , the directly related accession costs will be smaller, the net overall effects will remain negative for a bit shorter period, but the general trend would be the same. As seen from Figure 2 the net overall effects for the EU from the integration relations with Serbia and the other CEE countries are positive throughout the pre- and post-accession years. They may fall slightly after accession due to higher transfers, but would grow again later on, and in the distant future would equalize with the positive net effects of Serbia and of the other CEECs, while the two curves stay positive. The distant positive effects of Serbia may grow faster due to large investment, human, institutional and other efforts during preceding decades.

In the cost component of the overall net effects for the EU the budget transfers to Serbia and the other CEECs will prevail. The benefits component will comprise benefits from liberalization of goods and capital flows; surpluses in trade with CEECs, huge deliveries of hard and soft capital goods for modernization of the CEECs for decades; attraction of the most skillful brains from these countries for the coming decades. There is an

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important issue for clarification here. At first glance the attraction of the most skilled experts from Serbia and the other CEECs by the EU may seem harmful to the East and beneficial to the West. This is, however, only at first glimpse. If the talented young people stayed in Serbia, they would have contributed to her development, but the innovative potential of these talents would not have been displayed in its full strength. The CEE countries cannot provide the indispensable informational, technological, financial, institutional, experimental, and other prerequisites. A comprehensive full-scale development of their intellectual potential is possible only in the advanced countries. And they will, of course, extract large benefits. The burning issue is not the "brain drain" from the poor to the affluent countries. The real issue is the rational (and fair) sharing of the benefits between the sending and receiving countries.

One of the most important challenges before the EU and the CEE countries within the context of the long-term effects of integration is to identify a rational compromise between timing of accession, size of transfers, and scale of transitional arrangements. This is of crucial importance in order not to destabilize the Single Market and not to threaten the economic and social cohesion of the Union. In this sense the EU and the applicant countries face a complex dilemma: If the EU makes small transfers to the candidate countries, their preparation will be poor and accession postponed. If accession, nevertheless, takes place, it would be risky and should be supplemented by a number of transitional arrangements, which in turn will bewilder the normal functioning of the Single Market. The "price" of such disturbance may prove higher than "savings" from pre-accession transfers.

If the EU increased the transfers the applicants would prepare better, accession would take place in time, with less transitional arrangements and fewer risks. This may enable the new members to become equal (or nearly equal) participants in the Single Market from the outset. It may accelerate the integration process in Europe and shorten the time between exertion of efforts and obtaining of benefits by the CEECs. All that would contribute to smoother functioning of the Internal Market and boost the global confidence to the EU and its common currency. The second approach seems to be sounder. The larger pre-accession transfers to Serbia and the other applicant countries during the next ten years would produce earlier and larger net positive effects, greater stability and security for the expanded Union.

The enlargement must be fair and the people should be able to feel it. Temporary deviations in the sharing of the net effects among countries, regions and social groups are possible, but they should not last for a long

time. If people feel that year after year the benefits go to some of the countries while the others bear the costs, misgivings and tension may emerge. The past ten years have witnessed asymmetry in the sharing of positive and negative effects by the EU and the CEECs. Further tolerance, keeping silent and postponement of appropriate decisions benefit nobody. As already stated, Serbia and the other CEECs have no viable alternative to accession. It is, however, of fundamental importance not to allow shortsightedness to discredit this brilliant gigantic undertaking!

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## POZITIVNI I NEGATIVNI EFEKTI PRISTUPANJA EU – POUKE ZA SRBIJU

**Rezime:** Evropa je tokom poslednje decenije suočena sa spektakularnim promenama u ekonomiji, socijalnoj i političkoj sferi. Naročito će biti interesantne promene u deceniji koja sledi, i to za zemlje koje teže da uđu u EU. Proširenje EU zemljama istočne Evrope je bio strateški potez, koji je u mnogome odredio ekonomsku, političku i socijalnu budućnost ovih zemalja i njihovih naroda.

**Ključne reči:** EU, Strategija pristupanja, troškovi i koristi integracije



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## THE CONTRIBUTION OF INSTITUTIONAL AND NEW AUSTRIAN ECONOMICS TO UNDERSTANDING THE TRANSITION PROCESS

**Zoran Stefanović, Ph. D.\***

**Abstract:** *Different efficiency of the post socialist economies in the transition process, brings about necessity to reconsider standard neoclassical approach to transition. The paper sketches the approaches of institutional and new Austrian economics to transition. It is suggested that these two schools of economic thought conceptualize transition as evolutionary process. The goal of the paper is to demonstrate superiority of such an approach in relation to transition orthodoxy. Achievements of institutional and new Austrian economics can be usefully applied in the analysis of the relevant dimensions of the post socialist transformation, especially of less successful transition economies.*

**Key words:** *transition, institutional economics, new Austrian economics, evolution, institutions.*

### Introduction

The process of transformation of post socialist economies into market economy was uneven and with sometimes diametrically different effects. The differentiation between successful transitional economies (countries of Central Europe and Baltic) and less successful transitional economies (Balkan countries and most of the countries of former USSR) has become common in the transition theory. While the first group of countries relatively quickly came out of transformational recession and established the key preconditions of market economy, less successful countries in transition

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face with severe restrictions, that bring into question the establishment of the market economy as the outcome of the transition process. Given that all post socialist countries applied the same, neoclassical model of transition, the need of reviewing its overall range in the process of market transformation is evident. In this regard, the paper presents comprehensions that indicate excessive degree of simplification inherent in the framework of the neoclassical model of transition as well as its static character. Then, the paper points to dynamic, evolutionary considerations of economy and their theoretical elaboration in the framework of institutional economics and new Austrian school. The differences of these two schools of economic thought in relation to neoclassical economics result from a fundamentally different understanding of economic processes. While the approach of neoclassical economics mimics physical processes and aims at the analysis of equilibrium, institutional and new Austrian economics are more inspired by biological metaphor and perceive economy not as a mechanical balancing, but as a complex, evolutionary process, shaped by historic and cultural influence. The goal of the paper is to demonstrate the relevancy of the approach of these two schools of economic thought for comprehension of the transition process, especially of those post socialist economies labeled as less successful in transformation.

### **Transition Ortodoxy**

Neoclassical model of transition, applied in most of the post socialist economies, demanded swift, radical and the simultaneous implementation of all reforms necessary for the establishment of the market economy. Basis of reforms was the establishment of effective price system, in pursuance of the postulates of neoclassical economics according to which once the equilibrium prices are established in all sectors, the system will stabilize and thus conditions for full realization of reforms will be created. The protagonists of this approach considered that the transition of post socialist countries, although the historical precedent, in the economic domain can hold on the experiences of developed market economies in a certain stages of their development. Thus it appeared that the problem of shifting to market economy was known and that all what was necessary was to implement solutions that conventional neoclassical economics offers. Neoclassical economics offered standardized recipes, previously applied in the countries of Latin America in their fight against inflation, known as Washington consensus. It insists on price and trade liberalization and privatization as supporting elements of establishing a market economy. Particularly important place within the transitional orthodoxy takes a commitment to



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rapid market reforms, which are described as "jump into market economy" [24]. Countries in transition, according to the opinion of neoclassical economists, faced with so serious macroeconomic misbalances, that they could not afford slow implementation of reforms. Slow changes lead to inappropriate definition of property rights, dysfunctional markets, ineffective investments, closed economy, high inflation, social unrest, corruption, etc. Fast changes, known as "shock therapy", were, according to such understanding, the only effective route of reforms, which minimize the private and social costs, and ensure benefits in a relatively short time. Consider also that people are more likely to change their behavior in an environment that is radically changing than in an environment passing through a gradual, disputed transformation.

The problem of institutions in the framework of transition programs was, at least initially, mostly treated as secondary. Countries in transition had to develop an adequate legal infrastructure that protects the property rights and the rules of negotiations, which presupposed the destruction of the legal and political processes from the past. Thereby, the priority was spontaneous development of market relations between economic entities, which was to be achieved by removing the limitations on individual economic activities. Simple market relations that occur in the initial stage of transition do not require extensive institutional regulation [1, p. 11]. In the later stages, elements of property rights culture arise, which are not the result of habit, conviction, nor the rule of law [10, p. 950], but the product of self-enforcing mechanism, initiated by spontaneous market behavior of economic actors. Therefore, the institutions of market economy have a secondary character in the process of transition; they emerge spontaneously as the product of market behavior. In the framework of neoclassical economics, the needs of market exchange always create optimal institutional structure, as opposed to the state, which does not have sufficient knowledge to design adequate institutions, and thus can not have a key role in institutional engineering.

Thus conceived model of transition was a widely accepted primarily because of its simplicity and clearly defined goals. Transitional policy should therefore remove the imbalance in the various segments of the economy, caused by distortion of prices and eliminate negative influence of the state on economy through privatization. However, already during the implementation, the program came to its revision. Experience shows that Poland, successful country in transition, carried out transitional strategy that is much less orthodox from the one carried out by Russia, less successful transitional economy. Given that market mechanisms were not established in

the initial stage of transition, certain transient, non-market arrangements, have shown as more effective. Thus Poland has not performed deregulation wages, interest rates were not completely liberalized in the beginning, customs duties have largely been retained, energy prices were gradually brought to their equilibrium level [2, p. 179-180]. It turned out that many elements of transition program were impossible to implement quickly, without devastating consequences on the economic and social sphere, which could bring into question the successful transformation into market economy.

### **Institutional Approach to Transition**

Institutional economics challenges neoclassical mechanical approach in which individuals have all the relevant information at their disposal (above all the information about relevant prices). According to neoclassical economics, actors always have optimal reaction to the market impulses and maximize their individual utility, thus contributing to the general equilibrium. Considering his perfect knowledge of the environment, an individual is completely rational, and the subject of interest of neoclassical analysis; every other cultural or socio-psychological uniqueness of individual is irrelevant to economic reasoning. Institutional economics suggests that neoclassical analysis neglects the very essence of economic behavior of individuals, and institutions represent this essence. According to contemporary institutional economics, institutions represent constraints, formed by people that structure their political, economic and social interactions [16, p. 366]. Within modern institutional economics, present are also the definition of social institutions as structures that, through the actions of traditions, customs and legal restrictions, tend to create lasting and routinized models of behavior [6, p. 10]. In pursuance of the function that they perform in society, there are several types of institutions [19, p. 37]. Associative institutions make easier interaction between different interest groups (business networking, social class, interest associations, etc.). Behavioral institutions standardize social norms that manifest in the activities of individuals and groups, as reflection of these norms (habits, routines, shared beliefs, rules of the game). Cognitive institutions are ideological standards that express the expectations of the community of individuals (cultural and social values, folk wisdom, etc.). Regulatory institutions are different types of prescriptions (carried out by the state as a monarch, bearer of law, judicial authorities and law enforcer). The constituent institutions form the basis of social interaction (the actions of

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state agencies, companies, syndicates, non-governmental sector, language, property rights agreements, the families).

Through these functions, institutions perform their fundamental influence on the behavior of individuals; shape their economic calculus, which effectuates on long-term economic performance of the society. Institutional environment is subject to a process, which is analogous to evolution of population of living organisms. Founder of institutional economics, Veblen, was very clear in a statement that the socio-economic systems evolve in a manner that is consistent with principles of variation, heredity and selection [7]. Principle of variation represents differences between members of species or populations. Meaning of this principle in economy refers to the creation, growth, survival, and variation of institutions. Diversity of institutions results from their different reactions to the new configuration of foreign factors and the various trajectories of institutional evolution. Veblen also connected this principle to the mutations metaphor for social and economic institutions, speaking about growth and mutation of "institutional fabric". Principle of heredity means that institutions have relative stability and continuity in time, because they ensure that a lot of behavior patterns and varieties transfer from the period to the period. Because of their characteristics, for Veblen are the institutions sources of the psychological inertia and conservatism. The principle of selection means that better adapted units leave more numerous offspring, or that only those varieties that are better adapted to the struggle for survival, prevail. Relative stability and durability of institutions makes them the main subject of evolutionary selection in the socio-economic systems.<sup>1</sup>

Unlike neoclassical approach, in which individuals are only atomistic elements in the balancing mechanics, institutionalist observe individuals in the context of their socio-psychological profile, which is the result of interactions with the institutional environment. Evolution of institutions that shape the behavior of individuals is a historically conditioned process, filled with complex cultural and social influence.<sup>2</sup> In the framework of institutional economics, there are different schools of opinion on the nature, origin and mechanisms of institutional evolution.

Representatives of the so-called "new" institutional economics see central problem of the economy in the existence of transaction costs, i.e.

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<sup>1</sup> Detailed elaboration of principles of institutional evolution within institutional economics can be found in [14].

<sup>2</sup> The analysis of the differences between methodology of institutional and neoclassical economics and between their approaches to transition can be found in [15].

costs of measuring economic dimensions of exchange items and costs of concluding and enforcing of agreements. If the general economic equilibrium is optimal economic form, transaction costs represent measure how much is the specific economy distanced from the aforementioned ideal. Evolution of institutions reflects permanent efforts of economic actors to reduce uncertainty in the exchange, through an adequate specification of property rights, in order to minimize transaction costs in the process of achieving optimal allocation of resources. According to the representatives of this school of thought, economizing on transaction costs is essential determinant of evolution of institutional arrangements a society. In this matter, although the entering of transaction costs into analysis is a recognition of flaws of neoclassical equilibrium model, a concession has been made to neoclassical economics by characterizing the process of institutional evolution as a simple correction of information discrepancies between economic actors, by continuous adaptation of institutions, especially those that relate to property arrangements.

Within the new institutional economics, failure of some countries in transition is ascribed to their inability to successfully economize growing transaction costs generated by uncertainty, which is a regular companion to transition process. Negative influence of transactional costs on economic activity is reflected in prolonged transformational recession and poor entrepreneurial initiative. Some theoreticians [18] propose to impose new system of property rights, complete break with the institutions from the past and starting a new path of institutional evolution. Pejovich [21] is not for violent interruption of flows of institutional evolution, but for a selection of institutions through a competitive struggle between existing non-market institutions and new market institutions. The result of this process would be the choice of market institutions by the actors in countries in transition, as economically superior. However there is a strong tendency of existing, historically and culturally conditioned institutions to survive. The ability of new market institutions to eliminate the tendencies towards preserving the existing institutional order is not guaranteed. This is also noted by the quoted theorist [22], through the observation that only the countries in transition that had historical experience with the rule of law and individualist culture (in the framework of Austria Hungary Empire, or through certain commercial links) possessed welcoming basis for the absorption of market economy standards.

Theorists who follow Veblenian tradition offer fruitful analysis of the process of institutional evolution in the countries in transition. In that context, it is suitable to use an analytical apparatus known as mental models of individuals [4]. They are the result of transmission activity of institutions

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on the behavior of individuals and represent perception of individuals of the relevant elements of the environment. Mental models consists of beliefs of individuals how their environment is structured in terms of causal relations, what its tendencies and essential characteristics are. These beliefs represent the information basis of individuals that define their goals and direct their actions. Content of mental models of individuals in society in a certain period provides important information for evolutionary analysis. First, it defines the dominant institutional patterns and the existing institutional variety in each time interval. Also, the reconstruction of existing mental models of individuals can insulate institutions with most powerful influence on the behavior of individuals, which enables carrying out further conclusions about the potential flows of evolutionary selection of institutions. In fact, historically rooted cultural institutions often prevail over the new institutions, which means that the continuity of the existing evolutionary trajectory of economy is ensured.<sup>3</sup>

In other words, attempts to reestablish economy on a new institutional basis have weak effects. It is demonstrated by the experience of many of less successful transition economies. This suggests that it is necessary to make an insight into institutional determinants of individual behavior, in order to form some assumptions about the reasons that slowed the transition of less successful transition. In this regard, historical circumstances and cultural influence that are shaping the current mental models, or directing the evolution of existing institutions, should be briefly considered. Key relations, which define patterns of behavior are represented by the relationship between the individual and society, state and the citizen, rights and obligations, freedom and authority, equality and hierarchy.

While the Poles, Czechs, Hungarians adopted the institutional order and culture of the West, within Austria Hungary Monarchy, Russia and the majority of the Balkan nations were relatively isolated from the influence of contemporary ideas. Individualistic concepts, such as private property, were largely repressed. In Russia and the former Ottoman Empire state had a key role in the economy and society. In the socialist era, extensive social engagement of states continued, with different ideological orientation. Because of discretion, expressed in the application of formal rules, the relationship of individuals with the state presupposed the mixture of obedience and corruption [23, p. 896]. This institutional influence had as its evolutionary product institutional order based on hierarchy and declarative egalitarianism, with fatalism as the dominant worldview of individuals. It is

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<sup>3</sup> For further elaboration of institutional approach to transition see [13].

characterized by the feeling of inferiority in relation to the environment, distrust in the ability of successful resources management and disbelief in usefulness of institutions. People that belong to this opinion pattern do not have confidence in credibility and stability of property rights, nor in those who protect them. Probability that the individuals in that environment follow formal rules is low, because very often neither the state itself does follow them [23, p.896.].

The type of general institutional arrangement in the less successful transition countries is called “pessimistic”, because of the lack of trust in the society. This affects both horizontal trust (between actors in the economy) and vertical trust (between state and actors) [17, p. 69]. The lack of trust leads to uncertainty, which raises transaction costs and reduces entire economic activity.

Conclusion suggested by the institutional analysis is unambiguous: inherited institutional basis of the less successful transition countries is essentially different from the one that demands a market behavior, based on individualism. It takes time to strengthen market institutions’ position on mental map of individuals in these economies, through a gradual evolutionary selection. Market institutions are themselves generated through evolutionary process in developed economies, and are therefore less able to be fully and currently absorbed in their developed form in those transition economies, whose evolutionary path was significantly different. Given that the process of institutional evolution is by definition non teleological in character, the outcome of transition can be any of varieties of market economy, which can but does not have to be similar to market economies in the West. Overall process does not exclude the role of a responsible state, because of its ability to support the establishment of institutions that lack initial self-enforcing mechanisms. Such engagement of the state is especially significant in establishing and protecting the system of property rights. In fact, it can be said that the most significant problem of transition lies in the complex interaction between the state and individuals. The most complicated institutional problem to be solved in less successful transition countries is the dichotomy between institutionalized disobedience of citizens toward the state, which is historically conditioned and inherited from the previous systems, and simultaneous extensive requests imposed on the state in the process of transition.<sup>4</sup>

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<sup>4</sup> For a detailed discussion see [15] and [25].

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### **New Austrian Economics and Transition**

New Austrian economics arises from the earlier subjectivist tradition, represented in the works of Menger, Bohm-Bawerk and Vizer, but the decisive role in the formation of its conception had contributions of later Austrian economists, Mises and Hayek, who, beginning from 1930-s, made a significant turnaround in relation to the neoclassical analysis. Their dissatisfaction with the neoclassical theoretical framework grew from the fact that the assumption by which the markets are always in the equilibrium is unrealistic. Also, there is a view that the neoclassical economics reduced individual decision-making process to mechanical maximization under constraints, which deprives human choice of qualities such as imagination, boldness, and surprise. Economic theory should offer explanations of how economy gets from the initial non-equilibrium conditions to establishing equilibrating tendencies - to explain the market process. The component parts of processual comprehension of markets are adequate conception of the role of knowledge and entrepreneurial discoveries. According to understanding of contemporary representatives of the Austrian school, entrepreneurial activity is the driving force for the market process, Activities of entrepreneurs seeking to profit on discrepancies in prices lead to their elimination, creating a market tendencies toward equilibrium. Thereby, mathematical description of various states of equilibrium is not primary; the key problem is the market process analysis [11, p.352, in: 8, p. 67].

Hayek considered the nature and the role of knowledge in the market process and came to the conclusion that knowledge is not given to individuals, but is dispersed between them. Knowledge is composed of beliefs and expectations, and the process of competition allows the emergence of adequate knowledge, as a technique for solving problems. Moreover, the market process itself is the result of permanent small adjustments that people make, which are the result of certain improvement of existing knowledge. In this context, equilibrium is defined as a situation in which the beliefs of all individuals are such that their plans are mutually foreseeable, which enables them to realize their individual plans successfully [26, p. 131-132.]. The basic instrument of coordination of individual knowledge, which enables individuals to improve the mutual consistency of its plans, thus preserving the tendency toward equilibrium, are the market prices. During this process, the information potential is in the change and flexibility of prices, not in their equilibrium character.

A system of price falls, however, in a broader class of phenomena that provide cognitive support to individuals in the market process. These are

the rules, both formal and informal in nature, that help individuals to achieve their individual plans. They perform their function by enhancing predictability of social interaction, and by serving as the repositories of knowledge that showed useful in the course of development of society. Development of society represents a process of evolution of these rules, which takes place through the actions of individuals. Some individuals are capable of a variety of ways to overcome resistance by the community to a new way of solving the problem [5, p. 59]. In this case, the rest of the society imitate their actions and provide that the new way of behavior will be converted into norm, which enters into the fund of knowledge of society. Each community has a certain set of rules created by such choices, where it looks as if they were designed by some unique intelligence, and in fact they are the product of individual human actions aimed toward individual goals. How long would this norm be useful for the group that follows it, depend on the outcome of the struggle for resources with other, rival groups, with their inherent formal and informal rules. This means that survive only those groups whose norms proved superior in the competition for resources. In other words, evolution takes place through the evolutionary selection of the rules followed by the groups, which is the evolutionary mechanism known as group selection, or the selection of social orders.

In this sense, there is undoubtedly a kind of superior spontaneous order, catalaxy, which is the result of the market, within which people behave in accordance with the rules of ownership, tort and contract. Such a structure supports certain type of exchange relationships that contribute to cooperative networking of individual independent plans, thus giving contribution to continued growth of the wealth of the community [26, p. 138-139].

Modern Austrian economists develop the concepts of entrepreneurs, discoveries and competition within the market process. Apart from the unrealistic state of complete equilibrium, every market is characterized by the opportunities for pure entrepreneurial profit. They were missed due to earlier entrepreneurial errors, which caused shortages or surpluses, bad allocated resources. Bold and ready entrepreneurs detect these errors, buy where the prices are too low, sale in markets where prices are too high, correcting in this way earlier disparities, in the direction of equilibrium prices. In this matter, detection of earlier mistakes of entrepreneurs implies their surprise because of the missed opportunities that already existed, but were not implemented. Market process is run by entrepreneurial boldness and imagination, and it is constituted by series of discoveries of the ready entrepreneur that competes, trying to outperform the other by offering better



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deals to consumers. Competition as a characteristic of the market process frees up the information for which no one was aware that he was missing [8, p. 73].

Some representatives of the new Austrian school, such as Lahman, believe that the market process is so dynamic that it is not possible to assert that the forces of equilibrium will overcome disequilibria tendencies. That would mean that we cannot talk about system that produces coordination of individual plans in Hayekian sense [8, p. 79].

New Austrian school offers a dynamic picture of market economy that works thanks to the joint effects of price system and a series of formal and informal norms, that are by evolutionary mechanisms integrated into the collective knowledge of society. Relying on these "landmarks" entrepreneurs enter the market transactions and create the market process itself. In analyzing the process of transition, the new Austrian school primarily considered the extent to which all the aforementioned pillars of the market order are present in post socialist economies. Qualification criteria for these economies are the acquisition of knowledge, the development of individual responsibility and free access to markets [3, p. 65]. The unique opinion is that the acquisition of knowledge in these countries is significantly facilitated compared to the previous period. Conditions for the activation of entrepreneurial discoveries are established, but the less successful countries in transition still lack individual initiative to launch actions in this regard. The reasons for the absence of entrepreneurial preparedness and boldness should be sought in the insufficient presence of norms compatible to entrepreneurial behavior in these societies. Absence of market norms in the collective conscience of the society becomes even more evident when considering presence of individual responsibility. This criterion in the broadest sense includes tendency to entrepreneurial behavior, but also the willingness of individuals to accept the appropriate normative patterns through which the market process is realized. There are, of course, formal and informal norms inherent markets to economy, whose absence or insufficient implementation represent one of the main reasons of slow transition of certain post socialist economies. In some countries, implementation of new formal rules may be significantly obstructed due to various agreements by leading interest groups, in which conservative side often have a better negotiating position.

However, much more significant is the insufficiency of pro-market informal norms in these countries, which may reflect in two ways. First, in the minds of individuals there may be certain ethical forms necessary for

market transactions, such as trust, honesty, responsibility, but they are insufficient for the development of entrepreneurial potential. The reason is the prevalence of some other, market-non-supportive informal norms, such as antipathy toward uncertainty or strong preference toward stability. On the other hand, in some transition economies, entrepreneurial inclinations are present, but they have not followed the appropriate ethical informal forms, which are related to the ownership rules, tort and contract norms. The result of such a constellation of informal norms is directing entrepreneurial efforts to illegal activities and rent-seeking projects [22].

Theoretical framework that explains such trends in some transitional economy abuts on the previously exposed understanding of the roles that rules play in the economy. Formal and informal rules represent the "points of orientation of economic actors" [9], they help the coordination of their individual plans and make it possible to connect the knowledge dispersed between individuals. If a part of these norms is exposed to destruction in the course of reforms, coordination of economic actors can be closed and remains an open question, in which extent will the new formal standards reestablish the process on the new basis. Given that each social order is coherent, formal and informal norms that it is constituted of are mutually complementary. Entering new formal rules into the order violates the coherence of the system, due to the different speed changes of its elements. While the formal rules change relatively quickly, they can be "imported" as a product of the evolution of other economic system, informal norms are changing only gradually, through isolated and mutually independent actions of individuals. Consequently, slower change of informal rules is the result of the time necessary for people with specific entrepreneurial skills, innovators [9, p. 78] to come to the new rules as well as the time necessary to finish the process of imitating new rules by individuals in society. Slow transition of individual economies is caused by inadequately coordinated rapid transformation of formal regulations with the long lasting and gradual process of evolution of informal rules, which leads to miss coordination of the entire economic activity.

Among the reasons that the new Austrian school lists for the purpose of explanation of missing true entrepreneurial activities are also many indirect or direct obstacles to free entry of new entrepreneurs in individual branches. This is achieved through protecting and subsidizing certain branches and manufacturers, which in certain ways discriminate entrepreneurs who want to pursue their activities in competitive companies or branches [3, p. 70]. They will be less prone to entrepreneurial actions because the potential reward for their readiness will be smaller than on the

### **The Contribution of Institutional and New Austrian Economics to Understanding the Transition Process**

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free market. According to the new Austrian school, the conduct of developed countries, which limit the movement of labor by immigration policies also affect the entrepreneurial activities.

It can be concluded that the new Austrian school offers a much more complex theoretical framework for analyzing problems of post socialist economies than neoclassical economics. It observes market as a process affected by economic, cultural and social mechanisms, as opposed to neoclassical mechanical understanding of market phenomena, deprived of these relevant dimensions. Transformation into a market economy involves many changes in normative pattern of economy, which are often mutually uncoordinated. Evolution of informal norms undoubtedly is a process that essentially determines the success of transition.

### **Conclusion**

Neoclassical economics conceives transition as the rapid and radical removal of the system disequilibria through correcting price disparities and their causes. Once put into the state of equilibrium economic system should produce conditions for long-term and stable economic growth. Contrary to this mechanical reasoning, institutional approach to the problem of transition offers a different conceptual framework, based on evolutionary metaphor. Economic system is perceived as the product of a set of social institutions that are the result of historically and culturally conditioned evolutionary process. Inherited institutions have a strong tendency toward self-enforcement and stability in the process of introducing new market institutions, which are themselves evolutionary product from economies with different history and culture. The outcome of the selection between the aforementioned institutions determines not only the efficiency of transition but also the type of market economy that occurs as a result of institutional evolution. New Austrian school emphasizes the importance of flexible market prices but also formal and informal norms as the basis for the functioning of a competitive process. Normative pattern of economy is the result of long and spontaneous process of selection of useful rules in society. In the process of transition, they change at different speeds. Informal rules change is slow and evolutionary, which may be the source of various discrepancies with the imported formal rules. In the less successful economies in transition, the discrepancy between the above standards is greater, which contributes to poor coordination within the economic system and significantly slows down the whole transformation into market economy.

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**DOPRINOS INSTITUCIONALNE EKONOMIJE  
I NOVE AUSTRIJSKE ŠKOLE  
RAZUMEVANJU PROCESA TRANZICIJE**

**Rezime:** Različita efikasnost tranzicije postsocijalističkih privreda nameće potrebu rekonsideracije standardnog teorijskog promišljanja ovog problema, baziranog na neoklasičnoj ekvilibristici. U radu se skiciraju pristupi tranziciji institucionalne ekonomije i nove austrijske škole. Sugerise se da pomenuti pravci transformaciju ka tržišnoj privredi sagledavaju kao evolutivni proces. Cilj rada je demonstracija superiornosti ovakvog pristupa u odnosu na tranzicionu ortodoksiju. Ukazuje se na svrsishodnost upotrebe dostignuća institucionalizma i nove austrijske škole u analizi relevantnih dimenzija procesa postsocijalističke transformacije, naročito manje uspešnih tranzicionih privreda.

**Ključne reči:** tranzicija, institucionalistička ekonomija, nova austrijska škola, evolucija, institucije.





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## THE EASTWARD ENLARGEMENT OF THE EUROZONE: CHALLENGES FOR THE CURRENT MEMBERS AND FOR THE EUROPEAN CENTRAL BANK

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**Abstract:** *The eastward enlargement of the euro area entails significant implications both for acceding countries, for the current member States of the Euro zone and for the European Central Bank (ECB). The present analysis assesses the challenges. The focus is on the difficulty of implementing a unique currency policy in view of growing heterogeneity within the enlarged monetary union, and secondly – the issue of the voting mechanism within the ECB. When analyzing those two issues, it is conclusive that the difficulties for ECB and even for the actual Euro zone member will increase. For the enlarged Euro zone, which is becoming more divergent, it will be very hard to find suitable recipe for the needs and requirements of all.*

**Key words:** *European Monetary Union; EU enlargement, Monetary policy, ECB reform*

### 1. Introduction

The EMU enlargement is taking place at the time when the Union faces institutional and functional adjustments in the implementation of monetary and fiscal policies in the EMU. The European Central Bank (ECB) does not adjust its monetary policy in order to address economic challenges faced by every individual member state, whereas fiscal policies are tailored to national frameworks and, although limited by the prescribed restrictions regarding the budget deficit and public debt, often not properly coordinated. Consequently, there is a possibility of significant asymmetries between the

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centralized monetary policy and different inflation rates in the Eurozone member countries.

In this context, the EMU enlargement to take in new member states could additionally intensify asymmetries within the Eurozone having regard to heterogeneous economic structures of new EU member states, namely from Central and Eastern Europe (CEE). Thus there is a motive, at least in theory, to slow down the entry of new member states until a higher level of economic convergence within the EU-27 has been reached.

According to the *acquis*, the new EU member states have the obligation to adopt the euro and are currently undergoing the phase, this begs few important questions: 1) from the aspect of new member states, the question of transition pace towards adopting the common European currency and 2) from the aspect of the current 15 Eurozone member states, the accentuated question is whether and as to what extent monetary policy will have to be modified in order to recognize the needs and circumstances in new member states.

This paper summarizes the enlargement essence and implications to the Eurozone monetary policy, with a special overview of reform of the ECB decision-making process in view of the Eurozone expansion from the current 15 to 24 or more member states.

## **2. The Eurozone enlargement**

The euro's first decade was characterized by the the largest enlargement of the European Union (EU) to a new ten Member States in May 2004 and another two in January 2007. The total number of Member States rose from 15 to 27, whereas the number of inhabitants rose from 100 million to nearly 500 million. However, the economic effect of the enlargement was less impressive although the EU GDP rose by less than 10 percent when taken into account that GDP per capita of the "new Member States"<sup>1</sup> was mostly below EU average.

As of 1999, when the euro became the common currency of 11 EU Member states, the Eurozone has expanded three times: Greece joined in 2001, Slovenia in 2007, and Cyprus and Malta in 2008. Ten years after its

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<sup>1</sup> The term "old EU member states" is used for the EU-15, i.e. the EU composition until the fifth wave of enlargement in 2004, whereas the term "new EU member states" covers twelve EU member states which received full EU membership during the fifth and the sixth EU enlargement in 2004 and 2007, respectively.



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introduction the euro is used by 15 EU Member States and it is expected that this number will increase considerably over the medium-term.

Currently, 12 EU Member States do not use the euro, having significant differences in the legal status of this issue and the degree of convergence. Denmark and Great Britain enjoy the special status based on the “exemption clauses” proposing that the degree of convergence for entering the Eurozone shall be considered only if these countries request it. The other ten states (Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Hungary, Poland, Romania, Slovakia, and Sweden) are “Member States with derogation”. This means that they have the legal responsibility to adopt the euro. On the other hand, the time and the optimum pace of convergence to the euro adoption will be considered by all relevant European institutions individually.

It is envisaged that the EU enlargement will continue in the years to come, although at a slower pace. At the moment, three countries have the candidate status: Turkey as of 1999, Croatia as of 1994, and FYR Macedonia as of 2005. The remaining Western Balkan countries, displaying difference in the achieved progress, have the status of potential candidate countries and the EU membership prospects. Taking into account the aforesaid, along with the fact that the obligation of joining the EMU is an integral part of the EU Accession Agreement for new member states providing that they meet the prescribed convergence criteria, the EMU could see a significant, and maybe even threefold, enlargement with new member states (Radović, 2007).

### **3. Speed of transition of new EU Member States towards adopting the common currency**

With regard the transition pace of new EU member countries towards adopting the euro, there are two tendencies at odds. The first addresses the aspiration of some countries to adopt the euro as soon as possible (Eichengreen and Ghironi, 2001; Rostowski and Dabrowski, 2006). Most of the new member states meet the criteria for public debt, fiscal deficit, and central bank independence (ECB, 2008). The current non-concordance with the monetary convergence criteria, due to somewhat higher inflation rates and long-term interest rates, is the result of numerous circumstances at the global level and to a great extent due to the lack of capacity of the current transition mechanism to adopt the euro, in the sense of incongruousness of the Maastricht Convergence Criteria with the current EMU enlargement (Dabrowski and Rostowski, 2006). Previous EMU experiences proved that these inflation and long-term interest rates have

shown fast tendencies of reaching the desired values with approaching a full-fledged EMU membership.

The new EU Member States are open economies with developed trade with the old 15 EU member states – around 60% of their import and export (Angeloni, Flad and Mongelli, 2005). Therefore, a stable exchange rate is preferred, i.e. the adoption of the euro, as was the case with the current Eurozone member states. The remaining in the exchange rate mechanism ERM II may be optimal in short- and medium-term, but non-introduction of the euro in long-term could expose countries to financial crisis, as it had been the case with the EU in 1992 (Angeloni, Ehrmann, 2003).

On the other hand, there are some opinions that the possibility of faster transition of new member states towards the EMU calls for caution (Dabrowski and Rostowski, 2006). In countries striving towards fiscal consolidation, the usual effect is economy contraction leading to the freezing of wages, that is, the inability to move towards wage convergence with the Eurozone. Taking into account that new member states are much more exposed to risk considering the heterogeneity of their economic structures in comparison with Eurozone average, logic imposes that, in order to achieve efficiency of fiscal policy in neutralising asymmetric shocks, these countries need more space to manoeuvre within the public debt benchmark prescribed by the EMU fiscal framework. All attempts to abruptly reduce structural deficit after joining the EU are contrary to the need of new member states to put the emphasis on increasing public investments in order to reach the EU development level. Therefore, considering that the reality in Central and Eastern European countries involves political priorities to finance new public investments and to converge the increase in income and standard with EU average, their commitment to fiscal consolidation will certainly remain a difficult challenge.

Generally speaking, this imposes the conclusion that too short a transition process of new member states towards the EMU could lead to a situation whereby a premature abandonment of monetary and exchange rate policies, and partly fiscal policy, could prejudice the opportunity of new member states to improve the process of real convergence and ensure proper structural reforms of their respective economies (Angeloni, Flad, and Mongelli, 2005).

#### **4. The impact of enlargement on the ECB monetary policy**

Some of the real implications of the EMU enlargement to take in new member states have materialised to some extent. To wit, although it is expected that the EMU accession affects an increase in trade and investments against eliminating transaction costs and exchange rate uncertainty, a number of new member countries are *de facto* EMU members with some of them having currency boards or other forms of stronger or weaker connection with the euro, yet it is logical that the increase in the volume of trade and investments, albeit expected, will not be impressive.

The enlargement will certainly affect the monetary policy decision-making through changes in the ECB Governing Council, both through increasing the complexity of the decision-making process and growing uncertainty with regard to drafting optimal monetary policy for the enlarged monetary union.

Expectations of a part of the academic circles (Dabrowski and Rostowski, 2006) are that the impact of enlargement will be limited. Namely, by recognising the relative economic “weight” of new member states in the expanded Eurozone, which is estimated at some 10 percent of EU GDP, economic consequences of EMU accession of Central and Eastern European countries should be limited. Additionally, if due to the Balassa-Samuelson effect higher inflation rate remains in the new member states, it is important to stress that in such case inflation is confined to non-tradable goods and thus insignificantly contributes to inflation increase in other Eurozone countries.

Some preliminary research has shown that the theoretical Philips curve of the enlarged Eurozone indicates the expected probability of deterioration in counterbalance to inflation and unemployment (Nava, 2003). Therefore, should the ECB, respecting structural problems present in many of the new EU member states, decide to keep the current monetary policy in the enlarged Eurozone, this would lead to an increase in average unemployment rate in some of the new member states. The ECB would then have to consider the option of revising its target inflation rate upwards in order to avoid calling into question the enlarged Eurozone growth. The ECB – taking into account that the enlargement itself, with the previously explained risks, could contribute to generating structurally higher levels of inflation in the EMU- in accordance with the aforesaid, could also decide not to choose a more flexible approach in the monetary policy formulation. Thus, if structural reforms aimed at strengthening the capacity of offer in the

EU-27 have been slowed down, the ECB would have to opt for one of the two alternatives: 1) to completely adhere to the target inflation of below 2 percent and thus accept a long-lasting higher level of unemployment in the enlarged Eurozone or 2) to abandon the target value of inflation of below 2 percent in order to adapt itself to the needs of new member states. Both scenarios indicate the probability that the EMU will not see any serious enlargement as long as there is no visible progress in new EU member states with regard to structural reforms and approaching the EU growth standards.

#### **5. Euro system and decision-making in the enlarged EMU: changes in the ECB Governing Council**

Economies of the new EU Member States are characterized by structural shocks unlike those exposed to by old member states. Typically, the current big EMU member states like Germany and France show low or negative correlation regarding supply and demand shocks to which economies of new member states are exposed (Fidrmuc and Korhonen, 2003). This indicates that the new member states would often prefer a different monetary policy than the current EMU members, thus reinforcing the dimension of the existing problem that a common monetary policy does not benefit everybody. Moreover, some of the new countries have been experiencing high rates of growth and stronger inflationary pressures owing to, *inter alia*, the Balassa-Samuelson effect (Kenen i Meade, 2003).

With a view to preventing potential complex situation regarding the ECB monetary policy design, the European Council adopted a plan in 2003 aimed to change the institutional approach in decision-making on monetary policy after the number of the EMU member states exceeds 15 (ECB, 2003). It was the finding of a solution for the institutional dimension of the EMU enlargement was convincingly the most complex task considering that 24 members (the current 15 EMU members and the remaining new 9 EU Member States committed to adopt the euro, excluding Denmark, Sweden, and Great Britain) call into question the balance between the ECB Executive Council and NCB governors sitting in the ECB Governing Council by moving the balance towards NCB governors. A prevailing national component in the ECB Governing Council, i.e. in the decision-making on monetary policy, could affect an increase in inflation expectations, either due to uncertainty arising from greater heterogeneity in managing structures or due to a possibility that monetary policy strategy could be conceptualized in line with national interests of a group of countries rather than the general interest of the EMU as a whole.

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In order to provide timely solution for this challenge, the European Commission and the ECB Governing Council proposed a reform of their composition in 2003, which was supported by the European Council. The new arrangement envisaged that 6 members of the ECB Governing Council would retain full voting rights. As far as the remaining votes are concerned, 3 rotation systems were established, each to come into force progressively in accordance with an increase in the number of Eurozone member states.

According to the new system, NCB governors of larger member countries will be a part of the ECB Governing Council and will exercise full voting rights more frequently than their counterparts from smaller EMU member countries, whereas the number of NCB governors with voting rights in the ECB Governing Council will remain limited to 15 in order to ensure the strategic position of the ECB Executive Board in decision-making with regard to conceptualisation and implementation of the common monetary policy.

#### **5.1 Reform of the decision-making process in the ECB Governing Council in light of enlargement**

As prescribed by Article 107 of the Agreement, the European System of Central Banks (ESCB) shall be governed by decision-making bodies of the ECB – the Governing Council and the Executive Board. The ECB Governing Council currently consists of 6 members of the ECB Executive Board and 15 NCB governors of the EU Member States that have adopted the euro. In light of a further EMU enlargement, the ECB Governing Council could, in the medium-term, considering the recent two waves and the upcoming EU enlargements, and through the growing presence of NCB governors, end up with over 30 members.

Against such backdrop, an efficient and timely decision-making of the ECB Governing Council could be challenged, as well as the decision quality itself, from the aspect of required reflection of Eurozone average.

Taking into account the possibility of unbalanced influence of small states on the EMU decision-making process, with a view to “preparing the EU institutions for the Union enlargement”, Article 10 of the ECB Statute was amended in Nice in 2000 with regard to the part concerning voting

rights in decision-making of the ECB Governing Council<sup>2</sup>. It was envisaged that the Commission and the ECB would prepare a proposal to be adopted by the European Council after consulting the European Parliament. This had been the grounds for initiating the reform in 2003, and the solution proposal was adopted and ratified in spring 2004.

The reform of the exercise of voting rights in the decision-making process by the ECB Governing Council is seen as an optimum solution in given circumstances and as a success in balancing conflicting positions, confirmed by unanimous vote and prompt ratification by 15 member states. It basically limits voting rights to a number smaller than the actual number of members of the ECB Governing Council. The voting is established through asymmetric rotation that is developed progressively, adopting varying modalities with the Eurozone enlargement. The asymmetry is reflected in the division of NCB governors, first in two groups and then, with the EMU enlargement, in three groups in accordance with the classification of states based on their share in aggregate EU GDP and aggregate balance sheet of monetary institutions of members states (Angeloni and Ehrmann, 2003).

Each group of countries is characterised by a certain number of allocated votes and each governor may have the same voting frequency within his group as other governors in the same group.<sup>3</sup> Although this is a complex solution, it has been evaluated that it enables efficient functioning of the ECB Governing Council ECB (Gros D., 2003). The most important features of such system are that it preserves the strategic position of the ECB Executive Board as well as the participation of national governors in the decision-making process, in accordance with economic power of their respective states. At the same time, governors of national central banks (NCB) without voting rights are entitled to participate in the discussion.

## **5.2 Implementation of the reform in two stages**

In order to ensure a smooth introduction of the rotation system in the ECB Governing Council, and to “correct” the situation in which the “one member, one vote” principle, in case of a coalition of smaller member states, could affect interests of the system as a whole, the project is established in two stages. The system will start operating as soon as the 16<sup>th</sup> member state

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<sup>2</sup> EU Council Decision EU 2003/233/EC of 21 March 2003 on an amendment to Article 10.2 of the Statute of the European System of Central Banks and of the European Central Bank, OJ L 83/2003, 1/04/2003, pages 66–68.

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enters the Eurozone, first on the basis of two groups. Once the number of EMU countries has increased to 21, there will be three groups.

During *the first stage* applicable on the monetary union of 15 to 21 member states, governors will be allocated to two groups. The first group is composed of governors from five strongest economies in the Eurozone (measured by the size of their GDP, i.e. their share in the aggregate GDP of the EU, and the size of their banking sector). The first group thus shares 4 or 5 votes depending on the number of EMU members (see Table 1). The second group is composed of all other NCB governors, representing smaller economies. The total number of national representatives – NCB governors – is restricted to 15. As the following table shows, the allocation of voting rights to the two groups may be changed depending on the number of states joining the Eurozone, ensuring that the voting frequency of the NCB governors in the first group is in balance with the voting frequency of those in the second group and that it conforms with the economic strength of countries represented by the governors.

<b>Table 1: Two-group rotation system (first stage) – voting frequencies of governors in each group</b>							
<b>Number of governors in the Governing Council</b>	16	17	18	19	20	21	22 +
<b>1<sup>st</sup> group:</b>							
<b>No. of voting rights/No. of governors</b>	5/5	5/5	5/5	4/5	4/5	4/5	IT GOES TO PHASE II
<b>Voting frequency</b>	100%	100%	100%	80%	80%	80%	
<b>2<sup>nd</sup> group:</b>							<b>Total number of votes 15</b>
<b>No. of voting rights/No. of governors</b>	10/11	10/12	10/13	11/14	11/15	11/16	
<b>Voting frequency</b>	91%	83%	77%	79%	73%	69%	

Source: ECB, Monthly Bulletin, May 2003.

*The second stage* will start as soon as the 22<sup>nd</sup> member state enters the Eurozone. The voting system in the ECB Governing Council will operate on the basis of three groups. In this case, the first group will share 4 votes (members of this group will have voting rights 80% of time); the second group that will be composed of half of EMU member states will share 8 votes; and the smallest economies will share 3 votes, i.e., their governors will vote between 37 and 50% of time depending on the size of EMU (see Table 2).

**Table 2: Three-group system (second stage) –  
Voting frequencies of governors in each group**

<b>Number of governors in the Governing Council</b>	16-21	22	23	24	25	26	27
<b>1<sup>st</sup> group:</b>							
<b>No. of voting rights/No. of governors</b>		4/5 80%	4/5 80%	4/5 80%	4/5 80%	4/5 80%	4/5 80%
<b>Voting frequency</b>	PHASE I						
<b>2<sup>nd</sup> group:</b>							
<b>No. of voting rights/No. of governors</b>	<b>Total number of votes</b>	8/11 73%	8/12 67%	8/12 67%	8/13 62%	8/13 62%	8/14 57%
<b>Voting frequency</b>	<b>15</b>						
<b>3rd group:</b>							
<b>No. of voting rights/No. of governors</b>		3/6 50%	3/6 50%	3/7 43%	3/7 43%	3/8 38%	3/8 38%
<b>Voting frequency</b>							

*Source:* ECB, Monthly Bulletin, May 2003.

Since representatives of the respective groups exercise their voting rights on the basis of the rotation system, “larger” states exercise this right more frequently than “smaller” member states, according to their economic power. All member states holding voting right at the moment have the same weight. Simultaneously, all member states, through NCB governors in the ECB Governing Council, have the right to participate in the discussion of monetary policy and thus the EMU members without voting rights contribute with their expertise and articulated views to the forming of opinion. Members of ECB Executive Board keep all 6 voting rights, so that the total number of votes in the ECB Governing Council is maintained at 21, whereby the reform is reduced to the centralization of monetary policy, with the relative power being transferred towards the Executive Board.

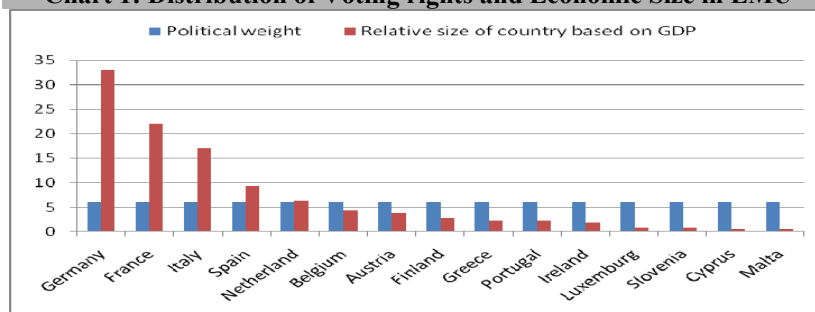
### **5.3 Pragmatism and complexity of monetary policy in the enlarged EMU: effects of implementation of the reform of the ECB Governing Council**

EMU enlargement is a continuing process running parallel to the EU enlargement. From the today’s perspective, EMU membership will exceed 15 countries as soon as in January 2009, while a much larger number of member states are expected over the medium term.



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**Chart 1: Distribution of Voting rights and Economic Size in EMU**

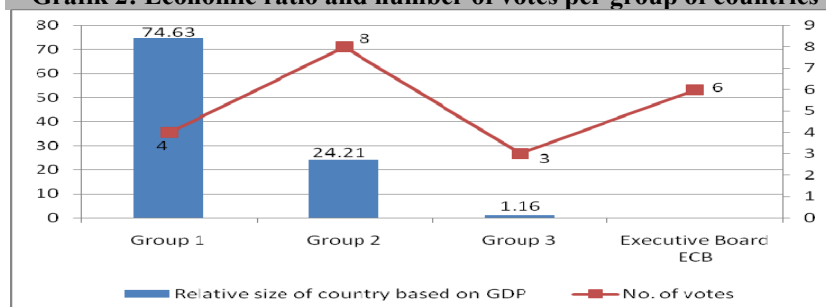


Source: Sebea (2006)

In the previous part of this paper, the vote rotation system in two stages is presented as an optimum solution in given circumstances and as a result of appreciation of conflicting positions of “larger” and “smaller”, both old and new EU member states. In practice, if we take a governor with a 5-year term as an example, depending on the size and economic power of the country represented by him, when the number of member states exceeds 21, such governor will have to abstain from voting for monetary policy formulation for one year (if it is a country in the first group), and for 1.35 or even 2.5 years if his country is in the second or third group.

Evidently, this reform of decision-making process in the ECB favours governors of larger countries and, as suggested by Chart 2, it indicates a lack of symmetry between the economic importance of countries and roles that they will have with the Eurozone enlargement. In addition, it points to the lack of correlation between the economic power of countries and role of national governors in the decision-making process: the first group with economic weight of 74.63% has 4 votes in the ECB Governing Council, while the group of countries with a share of 24.21% in EU

**Grafik 2: Economic ratio and number of votes per group of countries**

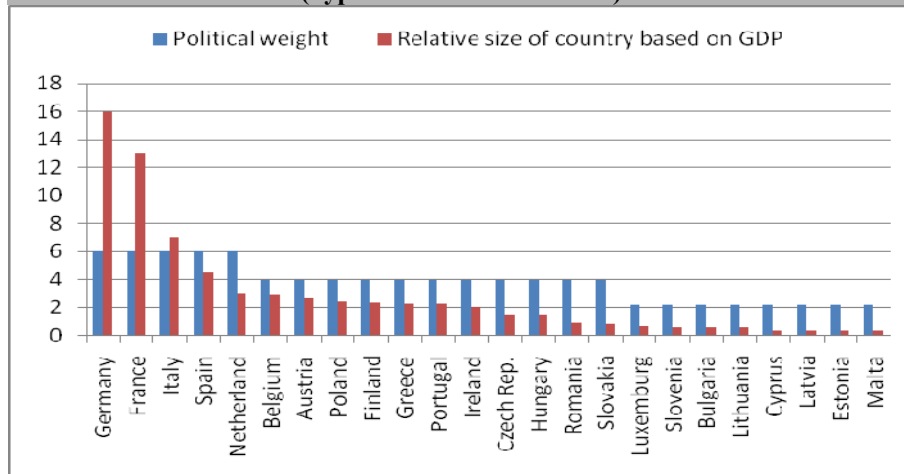


Source: Sebea (2006).

GDP has 8 votes. The last group of countries represents only 1.16% of EU GDP and they will share 3 votes in the ECB Governing Council (Sebea, 2006).

Another negative aspect is that the new rotation system will not increase the efficiency of the Governing Council because all NCB governors will be entitled to take part in the discussion and increase the cost of decision-making. Over the short and medium term, that will really be the case because the Governing Council will grow in size from 21 of today, to possibly over 30 members.

**Figure 3: Distribution of Voting rights and Economic Size in EMU (hypothetical case EMU 24)**



Source: Sebea (2006).

One of the recommendations to overcome these problems, ensure adequate designing of monetary policy and prevent deepening of gap between old and new, both “larger” and “smaller” EU member states, is further centralisation of EMU, through the transfer of decision-making or part of decision-making to the ECB Executive Board.

Of course, the implementation of decision-making mechanisms in the ECB Governing Council on new principles is connected to qualitative changes that the reformed decision-making system introduces with respect to the outcome of monetary policy design for Eurozone as a whole. In that context, special attention should be devoted to distinctive features of economies of new member states and the attained level of convergence with Eurozone.

### **6. Increased divergence of monetary transmission**

One of the most important challenges of monetary policy associated with the enlargement lies in the fact that the new ECB Governing Board will, in its decision-making, be faced with increased heterogeneity of economic structures among EMU member states after the enlargement. Diverse structures of economy, industry, different banking systems, different levels of centralisation of labour markets suggest that the monetary policy transmission will be more complex in comparison to the current EMU 15, where a dose of divergence in the transmission has been evident in the recent years (Angeloni and Ehrmann, 2003). Individual empirical studies (Ganev et al, 2002) indicate that the ECB monetary policy has asymmetric effects in countries aspiring towards EMU membership. This raises the question of what it means for the ECB monetary policy.

When the effects of the monetary policy in Eurozone are concerned, the more an individual country deviates from an average, the less adequate ECB policy will be defined to suit the Eurosystem average and, accordingly, the higher the risk of output fluctuation and higher inflation rates in new member states will be. As a result, there are proposals concerning the need to pay special attention to the countries deviating from average performance, where asymmetry in monetary policy transmission is more striking (Gros and Hefeker, 2002, Benigno, 2004). This implies that problems in the transmission have been defined and that the central bank may influence on correcting it, which need not be the case in enlarged EMU or at least not immediately after the enlargement. In addition to asymmetric monetary policy transmission, one might also expect uncertainty, though ECB cannot estimate with certainty the effects of monetary policy on real variables in new member states, regardless of the fact that a great deal of them are in the process of restructuring (De Grauwe and Senegas, 2004). The usual answer of central banks in such cases is weaker reaction of the central bank to economic shocks, which leads to a conclusion that ECB will lead less active monetary policy than it was the case in the past.

The fact is that in the previous period the ECB used to be frequently criticised for its less responding strategy in comparison to the American Fed, but the reality is such that the design and implementation of monetary policy in Eurozone is far more complex than in the US, taking into account heterogeneity of economies of EMU members states in relation to other optimum currency areas. This challenge for ECB becomes more prominent

with the EMU enlargement, and it is therefore to be expected that ECB will be more cautious in leading monetary policy.

In this context, there is also a dimension of repercussions of a less active monetary policy on financial markets and private sector. As monetary policy will not be available as an instrument of salary increase adjustment in the enlarged Union, which is particularly emphasised in larger new member states that have not renounced independent monetary policy, one could expect less aggressive approach of trade unions and more cautious approach of employers in forming salaries, which leads to positive effects with respect to lower exposure of these economies to shocks (Hefeker, 2005; Posen and Gould, 2006).

Beside private sector, governments will need to adjust to growing uncertainty of the responding function of ECB, in the sense of increasing political will to implement politically undesirable structural reforms on the labour market (Hefeker, 2006). With the loss of national monetary policy as an instrument for alleviating economic shocks, more space will have to be created for private sector, and the role of the government will be instrumental in increasing the flexibility of labour market and production in order to make economy less susceptible to shocks. With the loss of monetary policy, even the governments that must pay a significant political price for the reform of structural policies will be “forced” to conduct reforms, while the growing uncertainty in the behaviour of ECB will additionally stress the need for the implementation of quality structural reforms.

### **7. Growing uncertainty in the ECB's actions**

In addition to growing uncertainty of ECB itself, the enlargement and how it is reflected on decision-making in Eurosystem entails even bigger uncertainty for financial markets and private sector. This was the case during the first years of EMU in operation. Financial markets needed time to form adequate perception of the behaviour and response of ECB to economic developments (Goldberg and Klein, 2005). In the circumstances of the EMU enlargement, the stress is on the fact that new member states with differing preferences with respect to monetary policy have seats on the ECB Governing Council, and as their number becomes bigger, effects on monetary policy decisions will be changed as compared to EU 15, taking into account that systemically different preferences have an impact on medium solution determining the monetary policy (Hefeker, 2003).

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There are also opposing views that the ECB Governing Council makes decisions that are primarily in the interest of larger member states and that the currently valid “one member, one vote” principle does not reflect the *de facto* distribution of power (Fatum, 2006). Namely, even some analysts from national central banks support the opinion that reform of the decision-making process in the ECB Governing Council contributes to uncertainty, although there is still a number of unknowns about the manner and quality of decision-making in the enlarged EMU (Servais, 2006). In the hypothetical scenario presented in Chart 3, with 24 members of Eurozone, including Romania and Bulgaria, up to 30 governors will participate in meetings of the ECB Governing Council.

### **8. Conclusion**

Insufficient degree of political unification of the European Union caused monetary policy to be characterised by an institutional framework unique by the manner of its functioning and responsibilities. In such context, the EMU enlargement process brings additional challenges: for future members of the Eurozone – renouncing of national sovereignty in this part and the process of inevitable transition, particularly from the aspect of real convergence: for the current Euro zone members – increased heterogeneity and uncertainty in accepting economies that have not been adjusted to Eurozone average yet and for the ECB – the implementation of efficient monetary policy for 24 or 27 member states.

Although the reformed decision-making in the ECB Governing Council reflects more “equitably” a relation of economic power and influence, there is a general agreement that the system favours governors of larger countries. In addition, it is certain that the reform will not contribute to raising the efficiency of ECB because all NCB governors will be entitled to take part in the work without voting right and increase the cost of decision-making, which is not negligible considering the intensity of the Eurozone enlargement.

While the conclusions on the impact of EN enlargement and the reform of decision-making system in the ECB Governing Council on the EMU's stability remain in the zone of speculation, there is a significant degree of agreement that eventually the underdevelopment and insufficient degree of real convergence of new member states with Eurozone, and consequently significantly different interests in monetary policy designing, could result in a less active monetary policy of ECB and could bring in a

dose of uncertainty in the discussion of quality of sustainability of the European monetary project.

Further centralisation of monetary policy imposes itself as a sustainable and superior solution.

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### **ISTOČNO PROŠIRENJE EUROZONE: IZAZOVI ZA AKTUELNE DRŽAVE ČLANICE I ECB**

**Rezime:** Istočno proširenje Eurozone ima značajne implikacije za nove zemlje članice koje imaju obavezu da pristupe EMU, za aktuelne članice Eurozone i Evropsku centralnu banku (ECB). Analiza ukazuje na izazove u ovom domenu. Fokus je na teškoćama implementacije jedinstvene monetarne politike sa aspekta rasta heterogenosti monetarne unije s proširenjem, kao i na pitanju glasačkog mehanizma pri donošenju odluka u ECB. Analizom ovih pitanja dolazi se do zaključka da će poteškoće za ECB i aktuelne članice Eurozone biti naglašene. Za proširenu Eurozonu, s naglašenim divergentnim procesima, biće izuzetno teško prilagoditi monetarnu politiku zahtjevima i potrebama svih.

**Ključne riječi:** Evropska monetarna unija; proširenje EU, monetarna politika, reforma procesa odlučivanja ECB

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