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IN SEARCH OF A CLEARER GROWTH PATH FOR CROATIAN ENTERPRISES

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Abstract

The purpose of this paper is to foster realistic reflections on the importance of stimulating research and development activities within national enterprises employing over 250 employees, based on the experience of prominent individuals, members of the top management team within these enterprises. Within research of the growth of Croatian enterprises and thereby the national economy, one of the questions that should be asked is: "Does the implementation of innovations ensure the growth of Croatian enterprises and thus the economy?" This question arises from the existing structure of Croatian enterprises in terms of their distribution according to economic activity and concentration of the employees. In fact, both of these parameters are not favourable for economic growth. The research results, based on 67 validly completed questionnaires, generally indicate that business experience is gained over a longer period of time. Therefore, the impact of research and development and thus eventually innovation may result from incremental processes.

Key words: growth of enterprise, knowledge, competitiveness and innovation

1. INTRODUCTION

Economic growth is a long-term process having, among other features, the following characteristics: dynamism, complexity and risk of top management decisions, non-linearity of business results and stable political environment. Economic growth of a country is the result of actions agreed upon by the government and the central bank. This is manifested in the coherence of macroeconomic policies and efficient business operations of enterprises in domestic and foreign markets. Thus, economic growth is the result of reflection and execution of political and business decisions in specific circumstances.

In the search of a dynamic growth of Croatian enterprises, the contributions of great economic growth thinkers should be mentioned. It is believed that primarily K. Marx in the 19th century and J.A. Schumpeter in the eve of World War II significantly contributed to the reflections on the impact of innovation and technology onto the economic growth. The studies of J.M. Keynes in the 1930s and 1940s emphasized the due respect that political authorities paid to processes of creating conditions ensuring economic growth.

In the efforts of ensuring economic growth based on innovation, a kind of inertia in the diffusion of innovation should not be neglected. For example, an organizational innovation, the divisional organizational structure first applied in General Motors in 1920 (Chandler, 1962) is a good example of the above said. Intensive expansion of the divisional organizational structure outside the business world dominantly owned by the DuPont family occurred only after World War II. Therefore, some thirty years after. It should be noted that the economists, based on their research of the practices of a series of North American enterprises, found that there is no direct correlation between research and development costs and the rate of economic growth (Trott, 2002). However, it is believed that technological advances, and therefore research and development, have an irreplaceable impact on the growth of an individual enterprises, industry and the economy as a whole.

As a result, the question that arises is: "Is there another path for achieving economic growth, one that marginalizes research and development as the basic precondition of innovation and technological progress?" Based on former experience, it appears that when it comes to the most influential enterprises in the USA, Germany and Japan, this answer is negative. However, the answer to this question is positive when it comes to enterprises in emerging countries.

Namely, economic growth in developed countries is, first of all, a logical consequence of the centuries-long entrepreneurial activities of innovators and investors i.e. entrepreneurs. In economically emerging countries, economic growth is most commonly the consequence of an earlier acceptance of

innovation[1] from developed countries and possible innovations as the result of years-long experience based on comparative advantages.

The environment which surrounds the innovators, i.e. entrepreneurs and investors, either encourages or discourages their activities. It is believed that an entrepreneurial culture is the most influential key environmental factor stimulating business activity i.e. .demonstrating a tendency to innovate and engage in business. Entrepreneurial culture consists of three values (King Taylor, 1992, p. 46): personal freedom, energy and readiness to take risks.

The activities of encouraging business start-ups are most closely linked to the still commonly unconscious understanding of the impact of acquired knowledge, experience and motivation of the top management and the employees.

It is therefore considered that any reflections on economic growth at macroeconomic level should start with actual possibilities of enhancing research and development, i.e. developing innovations and attracting investors, or, as is often the case with enterprises in emerging countries, by accepting existing practical behaviours as an early follower.

It is believed that the impact of innovation in enterprises in the emerging countries has less economic potential. Namely, implementation of an innovation is not an end in itself. Implementation of an innovation as a follower is only a realistic assumption of creating a competitive advantage within the context of market efforts. In other words, in addition to having the ability to implement an innovation within the context of production, it is also essential to have the ability for sale. Therefore, the help of enterprises from developed countries is a *conditio sine qua non* of business success, especially when it comes to entering foreign markets. This is actually, why it is believed that the skills in market communication are more important than the technical possibilities of exploiting innovation. Namely, market communications are not the result of a specific project or know-how, but the result of a long term efforts in establishing complex and dynamic market or business communications.

Therefore, it can be said that entrepreneurial activity, in a country such as Croatia, should be driven towards adopting innovations from economically developed areas as early as possible. If there is a potential that can generate innovation on Croatian territory, even more so in cases where research is financed

[1] Innovation signifies pioneering, i.e. original conception and creation of e.g.: a new product, design, process, and organizational structure, mode of remuneration, material, assembly or energy-generating product. An innovation is usually patented and thus protected knowledge of creating new use and exchange value, intended for exchange. According to Schumpeter (Schumpeter, 1939, p. 87) innovation, in addition to growth and external factors, is the cause of economic change. This definition of innovation does not imply that innovation is an equivalent of the *change in the method* or the *change in the technique* of production, because such changes can occur as a response to the changes in the relative prices of individual factors. Yet, somehow the closest and mostly used description of innovation understands activities of introducing new products, new production methods and new sources of raw materials, the conquest of new markets and the introduction of a new organizational structure.

by individual ministries, and if it is based on comparative advantages, the research results obtained in terms of innovations should be adopted and put into use by national enterprises. That is, the research that should be encouraged and stimulated is such that potential results in terms of scientific and technical discoveries and eventually innovations may be transformed into a national product.

2. THE IMPACT OF KNOWLEDGE ON ECONOMIC GROWTH

Innovation is the result of acquisition of technical and organizational knowledge through research and development, i.e. a conscious search for solutions in the context of production and marketing communications. Research and development is a creative and experimental activity of an individual or a closely related group of enthusiasts who have the ability to recognize the importance of technical and organizational solutions in the process of having to use a particular product, process or organizational structure in existing or new markets.

In the efforts to encourage economic growth in the Republic of Croatia, for the last fifteen years the term *knowledge*[2] has often been in use in public communication. As a result, the consequent impression is that knowledge *per se* is sufficient for economic growth, i.e. that it is sufficient to successfully find solutions for many macro and micro economic issues and relationships. If the term *knowledge* is expanded to *knowledge society*, it is often considered that the magic formula out of the situation that is called crisis, recession or depression[3] has been found.

In order to emphasize the significance and need for using consistent terminology in professional and scientific discussions within the context of Croatian economic growth, the population of students studying economics in the Republic of Croatia up to the beginning of 1990s serve as a good example. These students learned, for example, that the period between 1929 and 1933 was the period of the Great Crisis and not the Great Depression as it has been termed in

[2]A. Einstein once said: "I believe in intuition and inspiration. At times I feel certain that I am right while not knowing the reason. Imagination is more important than knowledge, because knowledge is limited, whereas imagination embraces the entire world." S. Jobs once said: "Intuition is very powerful thing - more powerful than intellect, in my opinion (HBR, April 2012, p. 97).

[3]According to Galbraith (Galbraith, 1995, p. 86) crisis, depression and recession are synonymous, i.e. they denote a completely identical content. Galbraith writes the that phenomenon which appeared at the end of the nineteenth century and in the first decades of the twentieth century (1907, 1921, 1930 to 1940) and which was described as panic, crisis, depression, recession, associated with unemployment and complete hopelessness, was a frightening phenomenon that was theoretically incompatible with the traditional system. It should be noted that there is a different approach to this in literature (Trott, p. 39), where the term *recession* marks a downward wave in the economic cycle i.e. the decrease in business activity. The term *depression* marks the trough, which at the same time is the turning point of the business cycle in which business activity start to increase.

the western, traditionally capitalist professional literature. Therefore, for many students in the period 1945-1990, the term *crisis* represented the most terrible thing that could happen in the capitalist world. At the same time, even to this day, American authors mostly use the term *crisis* when referring to deterioration in business conditions and decline in business performance. It is believed that the use of the correct term is often crucial in identifying and determining the nature of a specific content, because the significance of the term within professional discourse overflows to the context of possible solutions. What is extremely important in establishing the terminology, as a derivative of the original meaning the term has, most often, in American English professional discourse, is to appropriately translate a specific term by translating its content and thus making its meaning in the target language identical or similar to that of the original term.

Precisely because of this, it is considered that knowledge *per se* is not the solution to contents which generate widespread discontent and thus tension and propensity for quick fix solutions. Therefore, the question that poses itself is: "Knowledge, certainly - but to what purpose?" Is knowledge a dependent or independent variable? Knowledge *per se*, as an independent variable, is a useless fact, which gives pleasure only to its owner and a potential listener. If knowledge is a dependent variable, then it is interesting to know the direction, intensity and interrelation of individual influences e.g. is knowledge the dependent (the result) of learning, research or experience. Maybe it is dependent of the mere interest in knowledge, as a prerequisite of an individual's or a set of individuals' supremacy over their competitors. It is believed that knowledge should be, above all, put in use for the welfare of most diverse entities. If knowledge is viewed in terms of microeconomics, then knowledge should contribute to an increase in productivity, as the basis of establishing competitive relations among enterprises. By doing so, knowledge contributes to an enterprise's business success and, at the same time, facilitates employment growth, strengthens political stability and eventually leads to an improved standard of living.

All of the above should be publicly established in the Republic of Croatia. Why? This is so, because the business environment changes over time i.e. the individuals, enterprises, the social, political and technological contexts change. Let the example of changes be the political activity of the Prime Minister of the United Kingdom in January 2013, when David Cameron announced that he will initiate a referendum on whether or not UK is to remain a member of the European Union by the end of 2017. At the same time, mostly traditionally emerging European countries, such as the Republic of Croatia, had striven to become an EU member. One of the rational reasons behind these efforts, maybe even unconscious, is the impatience, resulting from insufficient dedication of time and efforts during the past centuries, in acquiring different skills and experience i.e. knowledge needed to undertake, maintain and increase business activity. In the context of the Croatian economy, it is considered that, on average, there has been insufficient acquisition of skills related to wisdom of reflection, undertaking and management of business operations which provide satisfaction to the

entrepreneur in terms of business success and the user, in his/her satisfaction with the use of the purchased product. This is why, the imposing opinion is that there is insufficient acquisition of wisdom of reflection, undertaking and managing of business operations intended for market exchange, which can nowadays be interpreted as a reason behind the insufficient level of economic development and the unfavourable economic structure and in this respect, possibilities of the influence of various aggravating circumstances, such as inadequate cultural, legal, technological, commercial and political legacies. These specifically include for example the culture of work and the reflection of the understanding of risks in the acquisition, maintenance and development of private property i.e. the understanding of the freedom of entrepreneurship and political democracy.

The lack in enumerated legacies represents an obstacle in developing the awareness of the objective dimension of social stratification and the traditional role and influence of the state in fostering economic growth and meeting social needs e.g. in transport, education, health and social welfare. Simultaneously, what has also been lost in past times is the sense for an objective need for an incremental, therefore evolutionary, and not revolutionary economic growth and a democratic approach to politics, which has, in Croatia, recently been reflected in the closeness of communication processes.

The question that imposes itself is "Does this closeness prevent timely dissemination of diverse knowledge". At the same time, the closeness of different communication processes can be considered to be the main source of salient forms of corruption[4].

It is difficult to make up for the lost experience, as a synonym of ignorance or lack of knowledge, in a short time. Therefore, efforts should be oriented towards uncovering the influences that could in a short period of time contribute to a slow and, above all, stable growth of the Croatian economy, i.e. enhance the competitiveness of Croatian enterprises on national and international markets.

The mention of economic growth principally emphasizes the need for increases in the relevant values of individual enterprises e.g. the scope and structure of production effects, revenue, profits, value of assets, equity capital, productivity, market share, investment in research and development, innovation and intensity of marketing activities. Just to emphasize, the sum of all values of the national enterprises business success represents the gross domestic product that combines the value of domestic market sales, net exports, investment and state consumption Enterprises are the only source generating the growth of the national economy, i.e. the enterprises generate the real preconditions for the growth of gross domestic product. The role of government is to in cooperation with the central bank create conditions fostering this growth through established

[4] Corruption is the process of establishing and developing relations within which an individual or an interest group gains advantage and power to dispose of assets outside the scope of competitiveness i.e. in a non-transparent manner.

instruments of monetary and fiscal policies by taking into account the order of objectives established by the political option in power. Therefore, operational fostering of economic growth implies fostering the performance of enterprises. Creating an illusion that the state fosters operational investments in the economy, i.e. enterprises outside traditional operational policies causes entrepreneurial inertia, indifference and apathy. "Government's proper role is to push and challenge its industry to advance, not provide 'help' so industry can avoid it. At this time when much of the world is re-examining its economic structures, the need for proper choices has never been greater. National economic prosperity need not come at the expense of the nations, and many nations can enjoy it in a world of innovation and open competition (Porter, 1990).

Indeed, the so far achieved economic growth of developed countries is a consequence of the supremacy of the enterprises in these countries whose business operations are closely linked to the innovation of products, organization, technology and marketing, i.e. market communications over a long period of time. It is precisely these experiences that have contributed to the inauguration of term *value innovation* (De Win and Meyer, 2004, pp. 464 -465) by which the authors emphasize the importance of incremental improvements in the process of continuous efforts to strengthen competitiveness, i.e. to find a combination of factors for achieving and maintaining a prestigious market position. This of course does not deny the technical, commercial and organizational importance of innovation. The authors of the study, Kim and Mauborgne, among other things, state: "After expending tremendous effort, enterprises often achieve no more than incremental improvement- imitation, not innovation… Many people play tennis because they find the task of hitting a little golf ball with a little golf club head too daunting. Recognizing a business opportunity, Callaway made a golf club with a larger head that made playing golf less difficult and more fun. The result: not only were new players drawn into the market, but Callaway captured an overwhelming share of existing players as well." (De Win, Meyer 2004, pp. 464 -465).

It should be noted that e.g. industrial growth *per se* also shows gradual progression. The initial industrialization process, i.e. the first phase of the industrial revolution began in the second half of the 18th century in the United Kingdom with the introduction of the steam engine, which contributed to the development of production and processing of iron ore and textiles. The second phase of the industrial revolution occurred a hundred years later, primarily in the United States and lasted until the beginning of the 1970s. The second phase of the industrial revolution is associated with electrification, steel production, chemical industry, including the production and processing of crude oil, production of vehicles, road construction, and the introduction of the telegraph and very soon the telephone.

The first phase of the information technology revolution or the third phase of the industrial revolution, which occurs mainly in the same Western Europe countries and the United States of America, implies information, nuclear and aviation technology. The second phase of the information technology revolution involves nanotechnology, biotechnology, artificial intelligence, robotization and information networks (Evonik Magazine 2/2012, p. 9).

Accordingly, it is considered that economic growth is the result of long term efforts in entrepreneurial activities encompassing two endeavours. The first endeavour involves creating an organizational form for running business operations. The second involves efforts to create innovations, or to, as early as possible, take part in the diffusion of innovations in developed forms of running business operations.

3. SOURCES OF CROATIA'S ECONOMIC GROWTH

Economic growth is the sublimation of the interaction of production and consumption and the impact of macroeconomic policies in a country. Production allows employment, which generates the purchasing power of the population, i.e. the potential of household and public administration spending. The macroeconomic policy of the government in close cooperation with the central bank allows for the creation of the economic and political framework of economic growth.

However, what is the fundamental, real strength of economic growth? It is believed that these are the scope and structure of enterprises based in a particular country and business communications with foreign enterprises.

Table 1 shows the structure of enterprises in Croatia according to industry and the number of employees

Table 1

Structure of the economic potential in the Republic of Croatia at the end of 2014

	Number of employees								
Industry (economic activity)	**up to 50**	%	**51-250**	%	**251-500**	%	**Over 501**	%	**Total**
Agriculture, forestry and fishing	1,725	96.74	45	2.52	6	0.34	7	0.39	1,783
Mining and quarrying	211	95.04	10	4.50	0	0.00	1	0.45	222
Manufacturing	10,387	93.24	610	5.48	77	0.69	65	0.58	11,140
Electricity, gas, steam and air conditioning supply	597	96.75	14	2.27	3	0.49	3	0.49	617
Water supply; sewerage; waste management and remediation activities	526	83.08	96	15.16	11	1.74	0	0.00	633
Construction	11,595	98.03	200	1.69	20	0.17	13	0.11	11,828
Wholesale and retail trade; repair of motor vehicles and motorcycles	25,487	98.52	299	1.16	49	0.19	33	0.13	25,869
Transporting and storage	3,209	96.19	96	2.88	14	0.42	17	0.51	3,336
Accommodation and food service activities	5,538	98.10	87	1.54	11	0.19	9	0.16	5,645
Information and communication	4,378	98.49	57	1.28	7	0.16	3	0.07	4,445
Financial and insurance activities	576	98.79	2	0.34	4	0.69	1	0.17	5,83
Real estate activities	4,605	99.74	11	0.24	0	0.00	1	0.02	4,617
Professional, scientific and technical activities	14,264	99.47	71	0.50	3	0.02	2	0.01	14,340
Administrative and support service activities	3,759	97.91	68	1.77	11	0.29	1	0.03	3,839
Public administration and defence; compulsory social security	9	89.99	1	10.00	0	0.00	0	0.00	10
Education	975	99.59	4	0.41	0	0.00	0	0.00	979
Human health and social work activities	974	98.08	18	1.81	1	0.10	0	0.00	993
Total	88,815	97.73	1,689	1.86	217	0.24	156	0.17	90,880

Source: http://www.hgk.hr, 11.9.2014

The data shown in Table 1 indicate three characteristics of the distribution of Croatian enterprises according to the number of employees:

1) Dominance of small enterprises (up to 50 employees);

2) Dominance of enterprises involved in: (1) wholesale and retail trade; repair of motor vehicles and motorcycles (2) professional, scientific and technical activities (3) construction, (4) manufacturing and (5) accommodation and food service activities and

3) Absence of four economic activities according to the NKD 2007(National Classification of Activities): (R) Arts, entertainment and recreation, (S) other service activities (T) Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use and (U) Activities of extraterritorial organizations and bodies.

The first characteristic of Croatian enterprises, the dominance of small enterprises (up to 50 employees) is extremely advantageous in terms of adaptability to market demands, but not from the aspect of competitiveness founded on the experience curve. This is a characteristic of large enterprises. Small businesses objectively require protectionist measures by the national government when it comes to market competition on the national market, which is not in line with EU regulations. That which is possible in practice, in circumstances fostering competitiveness in the EU market, is free market activity and thus the application of strategies of horizontal and vertical integration and acquisition. These strategies have already been applied by successful Croatian enterprises.

The second characteristic of the Croatian economy, the dominance of certain industries, represents strengths and opportunities for growth. Namely, the initial dominance of trade is a historical fact of the economic growth of the most developed countries. However, it should be noted, that these countries, in modern economic sense, began their development in the 15th century and had practically no interruptions in the fundamental political and economic parameters as did Croatia during the 20th century. Only a partial retrospection of the historical events on the territory of today's Republic of Croatia indicates that the political and economic environment have changed four times during the last ninety years. It is a historical fact, and thus one of the characteristics of the development of capitalism, that economic growth was originally related to the development of trade, and, later on, to industrial development. The Croatian noble families Zrinski and Frankopan, for example, had noticed as early as in the 17th century the importance of enhancing trade and manufacture for their own benefit and to avoid the economic downturn of the national economy when compared to the surrounding economies.

The current dominance of trade enterprises in the Republic of Croatia shall be accepted as the power and opportunity, i.e. the flywheel of growth. Therefore, the existing enterprises should be encouraged to grow further by being

prone to, in addition to the mentioned integration strategies, apply diversification strategies which will increase and enhance their own business operations and at the same time, their supply on the national market. Naturally, the opening of new enterprises should also be encouraged, because without competition there is no economic growth.

Trade is followed by the dominance of enterprises involved in professional, scientific and technical activities. This fact is very interesting due to the much emphasized need for acquiring and disseminating knowledge

Construction is the third ranking activity, according to the number of employees, in Croatian economy. This fact is interesting, because the business results of enterprise involved in construction, according to the experience of developed countries, are the first indicator of the upswing and the downswing in an economy as a whole.

These are followed by enterprises involved in manufacturing, which can indicate two opposite directions. If we observe the productivity of manufacturing enterprise, it is logical that the number of employees decreases with the application of modern technologies. However, if the proportion of employees in manufacturing decreases due to the closing down of industrial plants, this is not fortunate because modern economic growth is based on the activities of industrial (manufacturing) enterprises.

The share of employees involved in accommodation and food service activities ranks fifth, which is not fortunate, because, regardless its technological superiority, the competitiveness of this industry is based on personal communication in the execution of these services.

The third characteristic, the absence of four main economic activities; R) Arts, entertainment and recreation, (S) other service activities (T) activities of households as employers; undifferentiated goods - and services - producing activities of households for own use and (U) activities of extraterritorial organizations and bodies, is actually extremely questionable. Why? It is precisely these activities that provide great opportunities of employment and are, at the same time, the consequence of the living standard growth.

4. OVERVIEW OF RESEARCH ON THE IMPACT OF INNOVATION

Professional literature on issues related to the impact of innovation on economic growth and improvement of business performance can be grouped according to many characteristics. For the purposes of this paper, professional literature is thus divided into that by foreign and that by domestic authors.

The reference to foreign authors should start with Schumpeter, who in 1939, emphasizes innovation as the underlying cause of economic cycles and

changes (Schumpeter, 1939). More recent research stressing innovation as a precondition for the growth of enterprises is that, for example, by Klepper (1996), Quinn (1997), Hansen (2006) and Koellinger (2008). Porter (1990) argues that, at enterprise level, innovation does not just involve the introduction of new technologies, but applies to new solutions within the processes and organizational structures. Porter emphasizes the importance of the international dimension of innovation, i.e. that the effects of innovation should also be marketed on the international markets in order for an enterprise to achieve expected competitive advantages. Porter believes that successful innovations occur exactly when enterprises are under strong competitive pressure. Senera and Sarıdoğan (2011) refer to product, process, market and organizational innovation, and regard the annual number of reported patents as an important indicator of the level of a country's innovativeness. Raymond (2010) refers to product innovation, process innovation and organizational innovation. Damanpour and Wischnevsky (2006) distinguish those enterprises that generate innovation from those that only adopt innovation and highlight the following types of innovation: new product, new service, new production method, new markets and new business organization. In their research, they try to explore the link between innovation and the age and size of the enterprise, i.e. the interrelationship between innovation and individual contingency factors.

It is worth to mention the annual reports of the European Commission, the European Innovation Scoreboard (EIS) (http://ec.europa.eu/enterprise/policies /innovation/files/ius-2011_en.pdf, 15/09/2014). The reports provide for indicators related to innovation development in the EU Member States in comparison to Japan, Brazil, China, India and Russia. The indicators are divided into several categories: 1. Drivers of innovation (including human and financial resources); 2. Enterprise activities related to innovation (investments, partnerships effects of innovation on population) and 3. Economic effects of innovation.

The Eurostat survey focuses on product, process, organization and market innovations. Part of the results of the 2013 survey indicated that 57% of entrepreneurs in Europe had invested in the development of products and processes in the period 2008-2010. In Germany this percentage amounted to 79% of entrepreneurs, and in the Republic of Croatia to 42.2% of entrepreneurs. Furthermore, apart from German enterprises, the ones that invested the most are the enterprises from Belgium, Portugal, Sweden and Ireland, while among those that invested the least are the enterprises from Bulgaria, Poland, Latvia, Romania and Hungary.

The domestic authors through their scientific activities seek to contribute to the knowledge on the impact of innovation on the growth of the enterprise and the economy. The most influential authors, according to the time of their publications, are:

1.) Andrijević Matovac (2005): the author publishes results of the research conducted in 2001 and 2002 on a sample of 91 Croatian enterprises. The

study contains information on the number of innovations by industry and the average amount of investment in research and development activities in the period 1995- 2000. At the end of the paper, industries are ranked according to the level of undertaken innovation activities. The first three ranking industries: food industry, chemical industry and the energy sector. In the second paper, entitled *Innovative Practice of Successful Enterprises in Croatian Industry*, she argues that there is a distinction between internal and of external factor influences on the development of innovation in Croatian enterprises. The internal factors emphasized by Croatian entrepreneurs include: the enterprise vision, human resources and research potential. The external factors emphasized are the availability of information on market trends. According to this study on Croatian enterprises, the greatest attention to scientific research is given in those involved in the pharmaceutical and food industries, and telecommunications.

2.) Aralica & Bačić (2005) stress that the global estimates indicate that most innovations occur in multinational enterprises. The authors in the study chose 17 indicators grouped into four categories: 1. Human resources; 2. Knowledge creation; 3. Transmission and application of new knowledge and 4. Innovation finance, market and output.

3.) Švarc (2006) studies the influence of five factors on enterprise's innovativeness: the degree of intensity of investment in research and development, the ratio of R&D expenditure in gross domestic product, public investment in research and development, the percentage of researchers in private and public sectors, the number of researchers per 1000 employees and the number of new PhD graduates in the population aged 25 – 34. In the article, the author discusses the inadequacy of cooperation between science and industry, the problem of the unstimulating environment which impacts the creation of an unstimulating climate. Lack of communication and cooperation between the academic world and the economy reduces the success of both parties. The faculties are not sufficiently familiar with the problems of the economy, and businesses are not sufficiently aware of the potential of the academic community.

4.) Veža & Prester (2006) propose the division of innovations into incremental and radical innovations. Incremental innovations include continuous small improvements in line with the logic of the Japanese *kaizen*. Radical innovations involve completely new developments, for example, in those in nanotechnology. The paper mentions the following categories of innovation: new product or service, new process of production or provision of services, new market and new business model. Factors that influence the occurrence of innovation in an enterprise are: the impact of the industrial sector, enterprise size, the national system of promoting innovation, industry life expectancy i.e. application of technology, continuous or radical innovation, and the role of the research and development agency. In addition, the authors point out that it is precisely the small enterprises that are the generator of innovation, but that they are often faced with the problem of financing innovative ideas. The model establishes the correlation between the following variables: new product, process

innovation, management innovations and their individual impact on the financial result.

5.) Bartlett & Čučković (2006) review the scope of knowledge transfer policies, institutional framework and policy outcomes for innovation development in Croatian and Slovenian enterprises. The paper concludes, firstly, that policies to support technology parks and business incubators have failed to generate much spin-off activity in either country. Secondly, Slovenia has been relatively more successful in its policies to develop technology networks than Croatia. Thirdly, the overall level of innovative activity is above the average of EU countries.

6.) Radas & Božić (2008) published a study based on a postal survey of 448 SMEs in Croatia performed. The research period was from 2001 to 2003. Following Keizer, Dijstra and Halman from 2002, the authors divided the factors effecting innovation into those internal and external. Internal factors refer to characteristics and policies of SMEs. External factors refer to opportunities that SMEs can seize from their environment. The authors added to those factors three new factors: (1) market scope, (2) presence of organizational and strategic changes in the firms and (3) market orientation of the firm. Following the authors' knowledge the first and second added factors were used in such a survey for the first time. The survey logic based on differentiation of the five types of innovation: product, process, line extension, "me-too" and radical. The conclusion of that survey has been: "...we can say that most factors that are found to be important in studies of SMEs in developed economies are also confirmed to be important in this study, such as having external links with other enterprises and having links with academic and research institutions....". In Croatia, we found that policy should be encouraging SMEs to implement changes involving corporate strategy and organizational structure. This can be done through offering training for SMEs, so that firms can become informed about possible organizational and corporate structures, trends and strategies. Another way to enable changes could be through sponsored consulting programs run with the purpose to help enterprises assess what is right for them and assists them in making necessary changes. Another policy measure (n particular in small economies) should be encouraging SMEs to become exporters.

7.) Kiessling et al. (2009) consider the Eastern European Economies offer many major business opportunities but due to the transitional nature of their economies, these are highly complex and fraught with the socialist cultural disposition. The study based on Croatian firms suggests that knowledge management positively affects organizational outcomes of firm innovation, product improvement and employee improvement.

8.) Horvath (2011): VERN Polytechnic, monthly paper Lider and the consulting enterprise Sense Consulting conducted a study which found that just a bit over one-third of Croatian enterprises have an established system of innovation. This fact ultimately affects the low share in the part of revenues

resulting from the influence of innovation. According to the survey, only 17% of enterprises have a person, team or office that is responsible for promoting innovation. Such a low proportion of persons responsible for promoting innovation, indicates that the process of gathering, assessing and selecting ideas is insufficiently structured. As a result, the innovation process usually happens by accident. In this study, the author(s) highlights the division of innovations into: product innovation and process innovation. This research confirms the result of the research of the Croatian Bureau of Statistics in 2008 that emphasizes the importance of SMEs in view of their speed in the possible commercialization of innovations, and that the large enterprises have a much easier access to finance innovations.

9.) Bečić & Dabić (2012) explain the role of innovation as key drivers of economic growth, primarily through the improvements they generate in productivity as a result of technological progress. Authors emphasize that better products and improvements in physical and human capital are the most important determinant of growth in economies such as Croatia. For small countries like Croatia government policies play a direct role in fostering innovation across the public investment in science and innovation research. Authors explore the impact of the financial investments in science and R&D on economic growth in Croatia. According to them, the investments in science and R&D indirectly reflect the country's capacity.

10.) Daim et al. (2014) define innovative capacity as an ability of conducting innovation activities. The success of innovation activities is evaluated through the level of innovative products and/or processes introduction. The study is conducted in selected CEE countries. Authors found the level of annual expenditure on R&D and innovation as a percentage of total sales positively influence local subsidiaries performance.

11.) The Croatian Bureau of Statistics published the data on innovations in Croatian enterprises for the period 2004 - 2006 at www.dzs.hr June 27, 2008. The sample includes 3,998 enterprises. In this period, 27.7% of these enterprises achieved some form of innovation. Large enterprises are more innovative in relation to small enterprises and innovations are more present in the production sector than in the service sector.

12.) The internet portal *Poslovni dnevnik* published a research by Bloomberg on the intensity and presence of innovations in 50 countries. The study revolves around seven criteria: (1) the intensity of scientific research and development works, (2) the level of labour productivity, (3) the density of high technology, (4) the percentage of researchers per million people, (5) manufacturing capability, (6) the level of education and (7) registered patents. The research results rank the Republic of Croatia on the 34th place (http//www.poslovni.hr, 05.02.2013)

In an effort to create a more realistic picture of the potential for stimulating the growth of the Croatian economy based on some form of

innovation, the activities of the following instances should be mentioned: the State Intellectual Property Office in Zagreb, the Union of Inventors in Zagreb, the Business Innovation Croatian Agency (BICRO) and the Croatian Program for Innovative Technological Development (HITRA) developed within the Ministry of Science, Education and Sports of the Republic of Croatia.

Analysis of the domestic literature on the efforts to create and apply innovation, imposes the view that in practice, innovative activities primarily refer to product innovation, and then to process innovation. At the same time, the mentioned studies indicate that only a small number of enterprises in the Republic of Croatia based its growth and business on the principle of innovation. When talking about successful examples of enterprises based in the Republic of Croatia, many successful products and processes should not be stressed: the medicine Sumamed by Pliva, Zagreb, the seasoning Vegeta by Podravka, Koprivnica, the 9mm pistol by HS Produkt, Karlovac, the nasal spray with sea salt Aqua Maris by Jadran Galenski laboratories, Rijeka, passenger cruise ships of Kvarnerska plovidba during the 1930s, the technology of the underwater welding of hull in Uljanik, Pula in the 1980's and kidney transplantations in the Clinical Hospital Center Rijeka at the beginning of 1970's.

5. THE RESEARCH

5.1 Research tools

In the attempt to find an acceptable approach to the growth of Croatian enterprises based on innovation, a field research was conducted. For this purpose, a research instrument containing 12 questions has been developed. The question dynamics is the result of the logic, knowledge and reflections of the authors.

The research instrument starts with the question: "The structure of the Croatian economy points to the dominance of small enterprises of up to 50 employees. Do you believe that in such circumstances, innovation can contribute to the growth of the business success of enterprises based in the Republic of Croatia? ". The respondents were also asked to add their comments in regard to the expressed attitude.

This question was intended to provide information on the views of the relevant people in large Croatian enterprises on the impact of innovation on enterprise growth in the environment dominated by small enterprises. Based on the collected data it is possible to discuss the entrepreneurial spirit and guidelines for the growth of Croatian enterprises.

By asking the following three questions, the authors of the study developed three variables:

- The first variable, "Enterprise goals" ranks the importance of achieving certain business goals and consists of four items: 1. Increase

productivity and thus competitiveness; 2. Achieve larger market share; 3. Ensure long-term enterprise survival and 4. Increase in employment in view of the installed capacity.

- The second variable, "Positive factors for the development of innovation", explores the importance of individual stimulating factors in the process of innovation development. This variable consists of seven items: 1. The existence of tax benefits that follow investments in research and development; 2. Government initiative, i.e. the initiatives of respective ministries to stimulate research and development activities; 3. The possibility of using external infrastructure and equipment for experiments, measurements and other research, such as, institutes and incubators; 4. The possibility of financing projects from different EU pre-accession funds; 5. The possibility of obtaining bank loans to finance research and development activities; 6. Foreign direct investment or venture capital research and 7. Innovation, as a result of continuous research in the enterprise.

- The third variable, "The limiting factors for the development of innovation", examines the level of impact of the limiting factors on the process of innovation, and consists of five items: 1. Risky investments in people and equipment that can be invested otherwise; 2. Lack of tax reliefs; 3. Unfavourable employee structure in terms of their number, knowledge, skills and competences; 4. Insufficient attention of the top management to the possibility of creating and using innovation and 5. Lack of own financial resources.

All three variables are composed in form of a Likert scale, where the scale of possible answers ranges from 1- extremely unimportant for the enterprise to 5-extremely important for the enterprise.

Since the scales for individual variables are based on authors' reflections, it is important to check the reliability of each scale and the research instrument as a whole. Therefore, the authors conducted an exploratory factor analysis and checked the Cronbach coefficient alpha (α) (Tables 2 and 3).

Table 2

Results of the exploratory factor analysis

Item of the variable	**Components according to the exploratory factor analysis**		
	1	2	3
Goal 1			,683
Goal 2			,640
Goal 3			,525
Goal 4		,470	,457
Positive factor 1	,683	,320	
Positive factor 2	,714		
Positive factor 3	,502		,326
Positive factor 4	,815		

Positive factor 5	,827		
Positive factor 6	,740		
Positive factor 7	,479		,424
Limitation 1		,396	
Limitation 2		,807	
Limitation 3		,735	
Limitation 4		,538	
Limitation 5		,599	

Source: Authors' own calculations

For the purpose of the exploratory factor analysis, the principal axes method with oblimin rotation of factor axes was adopted. The factor analysis also recognizes three components, as initially assumed by the authors of this paper and several factors with double loading. The exploratory factor analysis indicates the existence of only four factors with double loading. It should be noted that while performing the exploratory factor analysis, the Kaiser-Meyer-Olkin (KMO) and Bartlett's test conditions were satisfied ($p < 0.01$; 49,82% of variance explained). These tests confirmed the adequacy of the sample for conducting further statistical analyses. After the exploratory factor analysis, the authors tested the level of reliability of measurement scales through Cronbach alpha coefficient (α).

Table 3

Testing the Cronbach alpha coefficient (α) of reliability for certain variables

Variable	No. of items	α - coefficient
Enterprise goals	4	0.483
Positive factors for the development of innovation	7	0.838
Limiting factors in the development of innovation	5	0.711
Average α - coefficient		0.81

Source: Authors' calculations

The first variable, "Enterprise goals" measures the importance of achieving individual business objectives. The Cronbach alpha coefficient for this variable is $\alpha = 0.483$. As such, it is below the acceptable level. The level of reliability would not increase by excluding any item from the variable.

The second variable, "Positive factors for the development of innovation", measures the importance of individual incentive factors in the development of innovations. The Cronbach alpha coefficient (α) of this variable is satisfactory and amounts to α=0.838.

The third variable, "Limiting factors in the development of innovation", measures the impact of individual limitations on the development of innovation. The Cronbach alpha coefficient (α) of this variable is α=0.666. By excluding the first item, "Risky investments in people and equipment that can be invested otherwise", the reliability of the scale for this variable increases to α=0.711. The Cronbach alpha coefficient (α) for all three variables together is α=0.81.

The fifth question, raised as dichotomous, examines the attitude of respondents about the impact of imports on the development of domestic innovation. This is intended to provide answers to the thesis that a years-long international trade deficit is unfavourable for domestic innovation development.

The sixth question is an open question and investigates the sources of enterprise competitive advantage.

The last part of the questionnaire, questions 7 to 12, combines various enterprise features: 1. The presence or absence of a person or department responsible for the research and development within the enterprise; 2. Economic activity; 3. Number of employees; 4. Market placement (domestic or foreign); 5. Attitude towards enterprise position in regard to adopting innovations: innovators, early or late followers and 6. Form of ownership.

5.2 Organization of research and sampling

The research began in March 2013 and ended in late March 2015 (Table 4). The questionnaire was directed to employees engaged in research and innovation or members of top management if the enterprise does not hold an R&D department. In each enterprise a single attitude was investigated.

Table 4

Dynamics and number of obtained questionnaires

Dynamics of questionnaire sending	**Obtained answers**
First round (March 2013)	1
Second round (April 2013)	2
Third round (October 2013)	5
Fourth round (October 2014)	45
Fifth round (November 2014)	13
Sixth round (January 2015)	9
Total	**75**

Source: Authors' data

Using the Lime Survey application, each research participant received a link for accessing the questionnaire via e-mail.

The research was planned to include the representatives of Croatian enterprises employing over 250 employees. On the eve of the research, according to the Croatian Chamber of Economy, there were 395 of such enterprises.

The final rate of return of correctly completed questionnaires was 16.96%. Out of the 75 received, only 67 questionnaires were correctly completed and were taken in further research.

Data were analyzed using the statistical programme SPSS v. 21.

Tables 5, 6, 7 and 8 describe the structure of the responses according to ownership, market placement of products/services, economic activity and enterprise size.

Table 5

Structure of correctly completed questionnaires according to ownership

Ownership	Number and structure (%)
Private	53 (79.1)
State	13 (19.4)
No response	1 (1.5)
Total	67 (100.0)

Source: Authors' calculations

Table 6

Structure of correctly completed questionnaires according to market placement of products/services

Market placement of products/services	Number and structure (%)
Mostly domestic market	34 (50.74)
Mostly foreign market	31 (46.27)
No response	2 (2.99)
Total	67 (100.00)

Source: Authors' calculations

Table 7

Structure of correctly completed questionnaires according to economic activity

Economic activity	Number and structure (%)
Wholesale and retail trade	6 (8.95)
Professional, scientific and technical activities	5(7.46)
Construction	9 (13.43)
Manufacturing	29 (43.28)
Accommodation and food service activities	3 (4.48)
Information and communication	2 (2.99)
Transporting and storage	7 (10.45)
Agriculture, forestry and fishing	4 (5.97)
No response	2 (2.99)
Total	67 (100.00)

Source: Authors' calculations

Table 8

Structure of correctly completed questionnaires according to enterprise size

Enterprise size in no. of employees	Number and structure (%)
0-250	19 (28.36)
251-500	26 (38.81)
501-1000	6 (8.95)
Over 1000	15 (23.88)
No response	1 (1,48)
Total	67 (100.00)

Source: Authors' calculations

According to the structures presented in the previous four tables it can be concluded that:

1. The majority of enterprises are privately owned, which assumes potentially serious reflections on the significance of changes and hence of the need for research and development of products, markets, organizations and processes.

2. The enterprises' market placement of products/services is more or less equally distributed on the domestic and foreign markets, which may neutralize the intensity of the orientation towards research and development, i.e. recognition of the need for an unambiguous orientation towards finding innovative solutions for business activities, from production, marketing, employment to financing.

3. The greatest proportion of correctly completed questionnaire was obtained from manufacturing enterprises. This fact is considered optimistic, because the business success of manufacturing enterprises significantly depends on the dynamics of their engagement in business research and development, i.e. the tendency of an early acceptance of innovation

4. As already mentioned, this research was primarily directed towards large enterprises and correspondingly, the proportion of such enterprises was, according to table 8, 71.64%. We believe that the remaining 28.36% refers to enterprises that have, over time, reduced the number of employees but that this was not recorded in the Croatian Chamber of Economy. It is therefore considered that the said share of 28.36% cannot distort the results, since these enterprises have also, in the recent past, created the same system of values as the enterprises that at the time of completing the questionnaire actually employed more than 250 employees. Furthermore, the average number of employees of enterprises involved in the research is 235, and there are no extreme values which could significantly skew the data distribution.

5.3 Research results

Question 1 in the applied questionnaire was developed in the context of the reflections characterized by doubts on the possibility of the development and subsequent use of innovations in Croatian enterprises. The reason for this line of thought is the current structure of the Croatian economy which is dominated by small enterprises. However, most of the respondents, 83.58%, believe that innovations can be developed even in such circumstances. In other words, the respondents claim that large enterprises do not necessarily have to be the drivers of innovation processes. The respondents' attitudes lead to a potential conclusion that small enterprises, as well, can foster innovation processes. Therefore, it is considered that the ratio between large and small enterprises in an economy is not a sole measurement on which the potential intensity of innovation can be determined.

In the open segment of question 1, the respondents elaborate on their attitudes based on the following facts:

- Small enterprises are typically more flexible and can adapt more easily to new situations
- Teamwork, as a prerequisite for the development of innovation, is more common in smaller enterprises
- Communication channels function better in small enterprises
- Training programs and development of specific skills and competences are more common in small and medium-sized enterprises and
- Small enterprises usually do not have strictly defined boundaries of behavior; they are not slaves to traditional values and do not expect help from the state, and as such, are left to innovation and human resources to create added value.

Another group of respondents that is in the minority, 16.42 % of them, has the opposite view and argues as follows:

- Only large enterprises can allocate significant funds for innovation. Innovation development requires a huge financial commitment for several consecutive years, from the idea stage through its commercialization and
- Small enterprises are critical to the development of the local community, but at national level, according to the amount of generated revenues cannot be considered as drivers of economic growth.

Furthermore, the respondents commented that if innovation is understood in the strictest sense, i.e. as a first-time use of a new product, market, organization or process at the global level, then there is very little innovation in Croatia. Enterprises generally do not allocate significant funds for expensive and long-term research. At the same time, they are constantly improving the existing

products and processes using technical improvements in order to enhance the rationality of business and their competitive position in the market. This statement is especially meaningful true for enterprises placing products and services on foreign markets.

Question 11 asked the respondents to classify their enterprise into one of the following groups: innovator, early follower or late follower. The largest number of enterprises, 52,23%, considers themselves to be early followers. These enterprises generally do not develop innovation, but follow the technical and technological solutions of others and try to implement them as soon as possible. The percentage of innovators is not negligible, but should be interpreted with caution given the sample size. The remaining 20.90% of respondents consider themselves as late followers, which means they need many years to introduce world's best practices. The remaining 26,87% define themselves as innovators.

Question 3: "According to your opinion, rate the importance of individual stimulating factors in the process of innovation development in your enterprise?" is in form of a Likert scale, with answers ranging from 1- extremely unimportant for the enterprise to 5-extremely important for the enterprise (Table 9).

Table 9

Assessment of the importance of positive factors fostering innovation

Positive factors fostering innovation	N	Mean		Std. Deviation	Variance
		Statistic	Std. Error	Statistic	Statistic
The existence of tax benefits for investments in research and development	67	3,612	,1442	1,1801	1,393
State initiative, i.e. the initiatives of respective ministries to stimulate research and development activities	67	3,672	,1300	1,0644	1,133
The possibility of using external infrastructure and equipment for experiments, measurements and other research (institutes, incubators, etc.)	67	3,463	,1463	1,1976	1,434
The possibility of financing projects from different EU pre-accession funds	67	4,045	,1266	1,0362	1,074
The possibility of obtaining bank loans to finance research and development activities	67	3,642	,1323	1,0829	1,173
Foreign direct investments	67	3,343	,1420	1,1619	1,350
Innovation, as a result of continuous research in the enterprise	67	4,239	,1065	,8719	,760

Source: Authors' calculations

According to the conducted research, what seems to be of most importance in large Croatian enterprises is continuous investment in research and development, and seizing the opportunities provided by various pre-accession EU funds. The respondents rated the support activities of institutes and incubators, and direct foreign investment as the least important factors. This conclusion is extremely important in view of the years-long policies of the Ministry of Science, Education and Sports of the Republic of Croatia and all seven Croatian universities which, as the most authoritative scientific and educational institutions in the Republic of Croatia, see institutes and incubators as the potential for an intensive growth in the volume and quality of innovation.

The reflections on the development of innovation are often accompanied by discussions about the role of the government in encouraging enterprises to develop and market their innovations. Indeed, the government, through its monetary and fiscal policies, adequate legislation and administrative framework, should promote entrepreneurship, which often represents the application of innovation, whether as a result of organized research and development, or as a consequence of the idea of the genius of an individual. In this context the government can be a good catalyst. In their answers to question 3, the respondents lamented that government initiatives for the development of innovation are very weak in the Republic of Croatia. Even more so, as sometimes in isolated situations of innovation development, there are unpleasant issues of protecting intellectual property and of financing initial commercialization.

Regardless of the current government policy on stimulating innovation financial investment in research and development should be an imperative for every enterprise, not an exception. The small number of innovators in the Republic of Croatia according to question 11, 20.90% of them, indicates that the culture of innovation, i.e. inclination towards organizing continuous research and development, is not sufficiently present. In their opinion, external factors cannot significantly improve the expectations towards the government administration are often overestimated.

By performing the t test in the context of questions 3 and 12, the authors wanted to see whether there are significant differences in the opinions between private and state owned enterprises in terms of their perception of the usefulness of available stimulating factors for the development of innovations in enterprises. The results suggest that there is no statistically significant difference between the opinions of these two groups of enterprises.

ANOVA test has been used to see whether there are significant differences rating the importance of stimulating factors between innovators, early followers and late followers (questions 2 and 11). It was found that these groups differ significantly only in their views on the possibilities of using pre-accession funds ($F(2.\ 66) = 3.281$; $p = 0.013$). There is a considerable difference in opinion between the innovators and the early followers on one hand and the late followers on the other. As far as other stimulating factors are concerned, the analysis showed no significantly difference between their opinions.

Question 4: "The following factors indicate the limitations for innovation development. Please rate, from 1 to 5, the impact individual factor have on the development of innovation in your enterprise? ". This question is in form of a Likert scale, with answers ranging from 1- extremely unimportant for the enterprise to 5- extremely important for the enterprise. The descriptive statistics, according to calculated means, primarily indicates that there are no statistically significant differences in the assessment of the limiting factors. However, the respondents believe that the insufficient attention of the top management on innovation development is the main reason behind the small

number of innovations in Croatian large enterprises. This is followed by the unfavourable structure of employees, which is unsuitable for the development of innovation, and the lack of financial resources (Table 10).

Table 10

Assessment of the importance of limiting factors for innovation development

Limiting factors for innovation development	Mean		Std. Deviation	Variance
	Statistic	Std. Error	Statistic	Statistic
Lack of tax reliefs	3,507	,1448	1,1854	1,405
Unfavourable employee structure in terms of their number, knowledge, skills and competences	3,701	,1427	1,1679	1,364
Insufficient attention of the highest management to the possibility of creating and using innovation	3,985	,1174	,9613	,924
Lack of own financial resources	3,687	,1349	1,1038	1,218

Source: Authors' calculations

Examining the differences in perceiving limiting factors between innovators, early and late followers the ANOVA test was used. A significant difference exists in their views on "the lack of tax reliefs," which is mostly lamented by early followers. Innovators and late followers give higher importance to other factors ($F(2.65) = 5.232$; $p = 0.008$). Innovators probably believe that the dimensions of the internal environment are of more important for the development of innovation, while the ambitions of late followers for the development of innovation are in any case very low. These are enterprises that do not explore the possible opportunities and threats in developing innovations; they try to achieve competitive advantages in other ways.

The opinions on whether imports are harmful to the development of innovation in the Republic of Croatia are divided. Namely, 56.7% of enterprises responded positively and considers that imports are in contradiction with innovation development, while the remaining 43.3% believe that import does not have an adverse effect on the development of innovation.

Based on the open questions no. 6: "What is being done within your enterprise in terms of improving competitiveness?" and no. 8: "Which economic activity is your enterprise involved in?", it has been found that in enterprises involved in providing services, such as, tourism, transporting and storage and trade, the competitive advantages are based on market research, benchmarking, aggressive promotion and continuous training of employees. The development of innovative technologies, as a source of competitive advantage, is generally present in manufacturing enterprises. Furthermore, investments in new equipment and machinery and insistence on enhancing productivity and improving the quality of products are present in manufacturing, construction, agriculture, forestry and fishing.

According to question 7, "Is there a person or department responsible for the research and development within your enterprise?" 61.2% of enterprises

responded affirmatively. According to the results of this study, it can be concluded that such departments are predominantly present in manufacturing, construction and professional, scientific and technical activities, and are least present in trade, tourism and transport.

6. CONCLUSION

The desk research for the purpose of this study evolved around browsing through the literature in which the focus of lamentation was on the impacts of innovation on enterprise growth. The results of the browsing indicate two fundamental experiences with respect to the position of research and development activities. The experience of enterprises in developed countries and the experience of those in emerging economies[5]. The experience of developed countries is based on the development of large enterprises, whereas the experience of emerging countries, on the experiences of small and medium enterprises. Namely, large enterprises in developed countries probably would not be large if, in the past, they had not invested in research and development as a response to the rising demand in view of their volume and structure. Enterprises in emerging countries, due to long-term political and demographic facts, have not had the opportunity and need to become bigger. Of course, there are a number of exceptions resulting from different features. Trying to stay within boundaries of 'possible', one should ask oneself about the expediency of research and development in large enterprises in emerging countries, regardless of the opposing views. "Small and medium-size enterprises (SMEs) are considered to be the engine of economic growth and employment. One of the primary means through which SMEs are expected to accomplish this task is by developing and commercializing innovations. Innovation may be even more important for SMEs than for large firms (Radas et. al, 2008). In fact, the question whether to stimulate or not the research and development in emerging countries, knowing that the domestic market is dominated by small enterprises, and that international markets are dominated by large enterprise with thousands of employees around the world, is extremely important for two reasons. First, competition has already achieved unattainable levels of all forms of effectiveness and efficiency. Second, the process of globalization is a consequence of the first reason. Therefore, the question of aspirations toward innovations in emerging countries becomes more dramatic when it comes to small countries in regard to population, and therefore the size of the national market. Croatia is undoubtedly one of these countries. The research and development should not be seen as art for art's sake, but as a serious business with respect to (1) research costs and (2) risks in applying research results in production and sales. At the same time, the risk of disposing of

[5] Probably in an effort to euphemize the term, the term used for countries that are not developed has changed over time. Originally these countries were referred to as 'underdeveloped countries' or 'third world countries', then as 'developing countries', whereas nowadays they are termed 'emerging countries'.

necessary factors of production (1) assets and (2) employee skills, at all levels of thinking and business operations of an enterprise should also be emphasized.

Despite the doubts, for the needs of this analysis, field research was also conducted. It is believed that the intensity of the correctly completed obtained research instruments provides statistical seriousness and significance. Namely, during the period of field research, from March 2013 to January 2015, the authors managed to collect a total of 67 correctly completed questionnaires, which are slightly less than 17% of the assumed sample size of 395 large enterprises in Croatia.

In view of the presented research results in Section 5, it is considered that the way out of years-long negative trends in gross domestic product of the Republic of Croatia should be sought in advancing the business success of existing enterprises and putting an emphasis on efficiency growth. At the same time, special attention should be paid to social behaviour, i.e. social communication, because co-operation and establishment of trust among all stakeholders of political and economic life in the Republic of Croatia, e.g. researchers and entrepreneurs, entrepreneurs and the state, employees and managers, manufacturers and users, residents and politicians, journalists and the public is of essential importance and the only path to a brighter future.

Therefore, it is deemed necessary to undertake a variety of research, especially in the field of social studies, psychology and sociology. It is considered that the magic wand which will solve the problems of economic growth in the Republic of Croatia does not solely lie in a knowledge society, but in an early adoption of knowledge and dedication to work in addition to the exclusion of any form of corruption. Thus, incremental acquisition of knowledge and skills is the only direction to the future.

It should be emphasized that, in the context of enterprise business success and growth, not much can be done in a short time frame. However, it is suggested that, in the context of Croatia's economic growth, efforts should be oriented towards education and training and the concentration of financial resources towards those projects which contribute to the growth in production and therefore, the competitiveness of Croatian enterprises at national, European and world markets. What type of projects? Those projects, which could, among other, have an effect on the reduction of imports because such production already exists in Croatia, e.g. textile, food and furniture industry, pharmaceutical industry, production and processing of crude oil and the production and distribution of gas. Let's take for example the intensive debates between the experts and politicians, more and more out of the public eye, on the construction of the thermal power plant in Plomin in Istria. Why is there even a debate on this issue, when a brief study by an individual expert from the University of Rijeka suggests that thermal power plants on gas yield more than those on coal? At the same time, they are more environmentally friendly.

To conclude, it is considered that the contributions of this work are visible primarily in the identification of the most significant positive and limiting factors in innovation development in regard to enterprises in the Republic of Croatia.

The research results may also be important when considering the role of innovation in the context of the competitive advantages of Croatian enterprises, in the increase of production, exports and better utilization of installed capacity.

Further research in this area should expand the sample to include small and medium size enterprises and examine the opinion of a large number of respondents within each enterprise.

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TRAGANJE ZA JASNIJIM PUTEM RASTA HRVATSKIH PODUZEĆA

Sažetak

Svrha rada jest potaknuti realna promišljanja o važnosti poticanja istraživanja i razvoja u hrvatskim poduzećima koja zapošljavaju više od 250 zaposlenih na temelju iskustva utjecajnijih pojedinaca, članova najvišeg poslovodstva unutar tih poduzeća. U procesima istraživanja rasta hrvatskih poduzeća i time nacionalnoga gospodarstva trebalo bi postaviti ovo pitanje: „Osigurava li primjena inovacija rast hrvatskih poduzeća i time gospodarstva?“ Pitanje proizlazi iz činjenice o postojećoj strukturi hrvatskih poduzeća s aspekta distribucije prema gospodarskim djelatnostima i koncentracije broja zaposlenih. Naime, oba parametra nisu povoljna za značajan ekonomski rast. Rezultati istraživanja temelje se na 67 korektno ispunjenih upitnika te načelno ukazuju na to da se iskustvo odvijanja posla stječe u dužemu vremenskom razdoblju. Stoga je utjecaj istraživanja te razvoja i eventualne inovacije rezultat postupnih procesa.

Ključne riječi: rast poduzeća, znanje, konkurentnost i inovativnost

JEL klasifikacija: L25, O31