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CHALLENGES OF DEVELOPMENT OF THE CROATIAN ECONOMY AND COMPETITIVENESS

IZAZOVI RAZVOJA HRVATSKOG GOSPODARSTVA I KONKURENTNOST

ABSTRACT

Since 2002, the Republic of Croatia has been included in the Global competitiveness report, which is led by the The World Economic Forum. Likewise, other type of the economic reports are introduced by the organisations like GEDI, GEM, etc.

The competitiveness report encompasses hundred forty-four world's economies. The report traces and measures a stage of national competitiveness on the national state level, as well as a set of institutions, policy and factors, which are determined by level of the productivity.

Seen from 2007 to 2014, the Croatian global competitiveness index has reported his decline for six years out the observed period of eight year. Therefore, the competitiveness index for the Republic of Croatia is located at the bottom of the list of the European Union countries scale and among the European counties in general.

Aim of this paper is to show a current position of GCI, GEDI, and TEA indices, for the Republic of Croatia, that indicate factors that drive the economy, innovativeness efficiency, which furthermore indicate the basis of foundation for the economic growth and development. Also, the aim of this paper is to point out the weakest pillars and component of the indices, as well as those which are currently satisfactory in regard to the others countries. At the end, it will be suggested recommendations and measures that can improve the current economic situation.

Key words: *competitiveness, economy, innovativeness, GCI, GEDI, GEM*

SAŽETAK

Od 2002. godine, Republika Hrvatska je uključena u izvješće o globalnoj konkurentnosti, što je poveo Svjetski gospodarski forum. Isto tako, druge vrste gospodarskih izvješća su uvedene od strane organizacija kao što su GEDI, GEM, itd.

Izvrješće o konkurentnosti obuhvaća sto četrdeset i četiri svjetskih gospodarstava. Izvrješće prati i mjeri stupanj nacionalne konkurentnosti na razini države, kao i niz institucija, politika i faktora koji su određeni razinom produktivnosti.

Gledano od 2007. do 2014., hrvatski globalni indeks konkurentnosti je zabilježio pad od šest godina unutar promatranog razdoblja od osam godina. Dakle, indeks konkurentnosti za Republiku Hrvatsku nalazi se na dnu popisa zemalja Europske unije i među europskim regijama u cjelini.

Cilj ovog rada je prikazati trenutni položaj GCI, GEDI, i TEA indeksa, u Republici Hrvatskoj, koji ukazuju na čimbenika koji utječu na gospodarstvo, inovativnost učinkovitosti, što nadalje ukazuju na osnovu temelja za gospodarski rast i razvoj. Također, cilj ovog rada je ukazati na najslabije stupove i komponente indeksa, kao i one koji su trenutno zadovoljavajući u odnosu na druge zemlje. Na kraju, biti će predložene preporuke i mjere koje mogu poboljšati trenutnu gospodarsku situaciju.

Ključne riječi: konkurentnost, gospodarstvo, inovativnost, GCI, GEDI, GEM

1. Introduction

In the last ten years, both on the global and European Union level, lot of organizations whose aim is to follow economic activities and particular world economies movement trends have been founded. Each of these organizations is focused on specific components that are eventually published, generally in a form of a report. Reports are based on detailed methodology defined within the document, based on good theoretical fundamentals. They usually contain the detailed description of the economic activities of the target group of countries, as well as the rank list according to global or particular measurement index.

The aim of these measurements is multiple. The first aim is to point out the weakest components of particular index to particular economies, as well as those parts that are currently at the satisfactory level. Furthermore, both professionals and the public are to become more aware about the importance of particular measurements. By constructing the rank lists, both competing and aspiration for progress within particular categories are encouraged. By defining the current position, foundations for benchmarking are being established, specific recommendations and guidelines for further development are given on the basis of the obtained results.

This paper will analyse a few different reports in which the Republic of Croatia is participating and which have specific perennial trends. Also, the current position will be stated within the defined coordinate systems. According to that, the current position of the Republic of Croatia in regards to other observed countries will be pointed out. Observed organizations and indices are: World Economic Forum (WEF) – Global Competitiveness Index (GCI); Global Entrepreneurship Development Institute (GEDI) –Global Entrepreneurship Development Index (GEDI); Global Entrepreneurship Monitor (GEM) – index: Total Early-Stage Entrepreneurial Activity (TEA).

2. Competitiveness

In the last few years the concept of competitiveness has risen as a new paradigm in economic development although Michael Porter has already mentioned it in his book „Competitive advantage of nations“ from 1990 which was based on the productivity that was a tool for competing instead of traditional advantages like natural resources or workforce.

Competitiveness encompasses the consciousness about limits and challenges that global competitiveness brings at the times when the efficient management is bounded with calculation

boundaries and the private sector is faced with significant obstacles when racing at local and foreign market.¹

Competitiveness, according to the OECD definition, indicates a country's ability to, in free and equal market conditions, produce goods and services that pass the international market test while keeping and raising long lasting real population income. The term is often used to describe the loss of the competitiveness when the expenses raise because of the unfavorable influence on the price or the profit/margin without the product's quality improvement.²

Competitiveness especially depends on the proportion of product's quality and price rank. There are a lot of factors which are assumed to have an indirect influence on competitiveness, innovation, service quality or producers' corporative image:³

- Quality of the product (services),
- Productivity - the ability of the production to produce as many products (services) as possible of the defined quality.
- Lower costs enable lower prices
- Quality of services – the ability to satisfy customers, users or citizens' needs
- Image

Competitiveness is measured and followed because it gives an objective image of our strengths and weaknesses that can, when working hard and being willing to change, be both raised and increased and in that way the company, country or region management can be improved and can make some progress.

2. GCI Index

GCI is a Global Competitiveness Index, which is made of different aspects of competitiveness that are captured in 12 pillar and its purpose is to evaluate the productivity and efficiency of countries. GCI attempts to quantify the impact of a number of key factors which contribute to create the conditions for competitiveness.⁴ Its particular focus is on the macroeconomic environment, quality of country's institutions, and the level of country's infrastructure and technology.

Global Competitiveness Index is accepted tool for evaluating country's growth potential. It provides insight into the comparative advantages of each country by comparing most of the world's countries.

GCI estimates the following factors of Economic and Social well-being: the existence of an environment supporting growth, development of human capital, the performance of the governing body and it is an appropriate index to estimate the aforementioned components of Quality of Life, especially when complimented by the IMD Competitiveness Index.⁵

Also, Global Competitiveness Index provides a possibility to compare economic and business potential of countries. For each country, GCI allows decision makers to estimate the productivity of each sectors and economy as a whole.

¹ http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2009-10.pdf (accessed 16/ 04/ 2015)

² <http://www.konkurentnost.hr/Default.aspx?sec=77> (accessed 16/ 04/ 2015)

³ <http://www.konkurentnost.hr/Default.aspx?sec=77> (accessed 16/ 04/ 2015)

⁴ <http://www.gaportal.org/global-indicators/global-competitiveness-index> (accessed 17/ 04/ 2015)

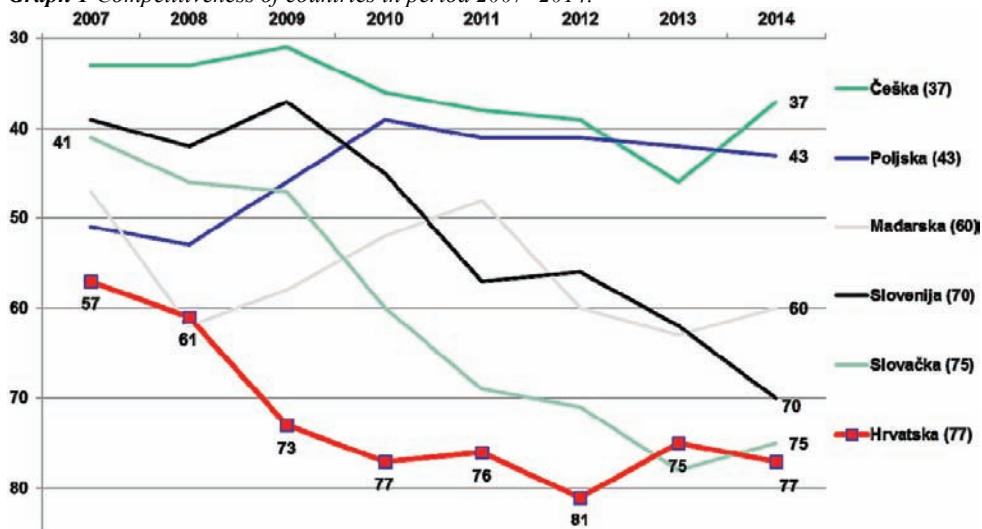
⁵ <http://reut-institute.org/en/Publication.aspx?PublicationId=1312> (accessed 17/ 04/ 2015)

Table 1 Pillars of Global Competitiveness Index.

Basic conditions	Efficiency enhancement	Innovations and sophistication
Subindex	Subindex	Subindex
1. pillar: Institutions	5. pillar: Higher education and training	11. pillar: Business sophistication
2. pillar: Infrastructure	6. pillar: Efficiency of commodities market	12. pillar: Innovation
3. pillar: Macroeconomic environment	7. pillar: Efficiency of labor market	Basis for economies based on innovation factors
4. pillar: Health care and primary education	8. pillar: Development of financial market	
Basis for economies based on primary factors	9. pillar: Technological readiness	
	10. pillar: Market size	
	Basis for economies based on efficiency factors	

Source: Report on global competitiveness 2014.-2015., WEF

Graph 1 Competitiveness of countries in period 2007- 2014.



Source: Report on global competitiveness 2014.-2015., WEF

According to the Graph 1., it is noticeable that in 2014 Croatia has the lowest global competitiveness index of the countries in EU that are taken into sample, and Croatia also holds the lowest place of them all (Czech Republic, Poland, Hungary, Slovenia, Slovakia). According to the global competitiveness index Croatia was 77th (with 4.1 index), following 76th Slovakia, 76th Slovenia, 60th Hungary, 43rd Poland and, 37th Czech Republic. In the period of 2008 and 2007 the decrease of the index is noticeable among all countries (except for Hungary and Poland where the

decrease is seen one or two years after), and that decrease is caused by world crisis that had started in 2008 and spread quickly which led to losses, deficits, production volume reduction and has consequently affected investment climate that became worse which led to efficiency and competitiveness decrease.

Slow increase is noticeable with Slovakia and Hungary in 2014, while Croatia, Poland and Slovakia all have a decrease, Slovenia having the biggest decrease especially in last three years which is probably a consequence of political instability that was going on in Slovenia in that period of time.

3. GEDI index

A composite indicator that points out to the quality of the development of entrepreneurship of particular economy is GEDI (Global Entrepreneurship Development Index). Whole measurement is synthesized with one number called GEDI Index.⁶

That number represents the composition of a few important categories that are furthermore divided in concrete economic indicators. GEDI Index shows the entrepreneurship status, education status, workforce status, innovation status, technology and financial status, and is interesting for its proper correlation with gross domestic product of a specific country.⁷ It can be said that using the GEDI Index it is possible to „diagnose“ the growth of the specific economy. *Picture 7* graphically shows the correlation of GEDI Index curve with gross domestic product per capita figure.

In the annual edition for year 2013 results for Croatia and Slovenia are shown in the Table 2.

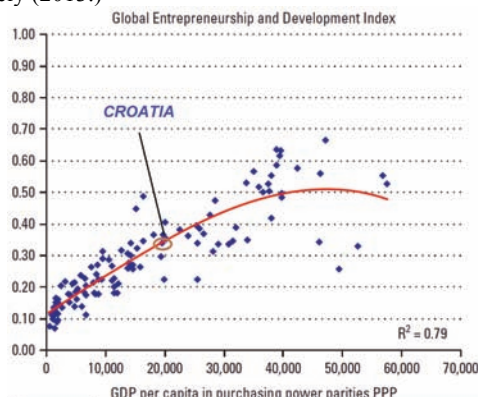
Table 2 Comparison of GEDI index and subindex for Croatia and Slovenia

Results 2013.	BDP	GEDI index	Rang	ATT subindex	ABT subindex	ASP subindex
The Republic of Croatia	19,516	0,34	37-43	0,31	0,4	0,31

Source: <http://www.thegedi.org>, accessed 03/12/2015

For 2013 Croatia is on 37th – 43rd place (same place held by more countries).

Picture 1. Correlation GEDI indeks curve depending on gross domestic product per capita figure. Croatia is shown separately (2013.)



Source: <http://www.thegedi.org>, accessed 03/12/2015

⁶ <http://www.thegedi.org>, Global Entrepreneurship Development Index (accessed 03/12/2015)

⁷ Pšeničny, V, Jakopin E., Vukčević, Z. and Čorić. G. (2013): **Dynamic entrepreneurship - generator of sustainable economic growth and competitiveness**, International Conference: Challenges of Europe, Proceedings. Faculty of Economics, University of Split, October 21-23, pp. 353-376.

Composite GEDI index consists of three main blocks or subindices that are also called 3A:

- ATT - entrepreneurial attitudes
- ABT - entrepreneurial abilities
- ASP - entrepreneurial aspirations⁸

Those three subindices or blocks are additionally divided into 15 pillars whose constitution is a combination of individual and institutional variables that show micro and macro view of entrepreneurship. (Picture 2.)

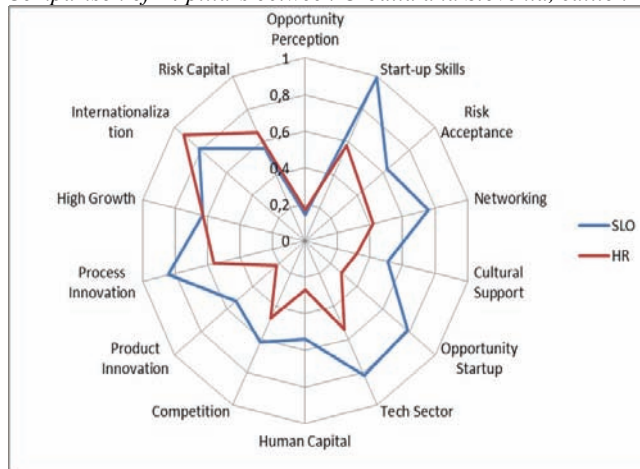
Picture 2 GEDI index with 3A categories and 14 pillars

GLOBAL ENTREPRENEURSHIP AND DEVELOPMENT INDEX (GEDI)													
Entrepreneurial Attitudes Sub-Index				Entrepreneurial Activities Sub-Index				Entrepreneurial Aspirations Sub-Index					
OPPORTUNITY PERCEPTION	STARTUP SKILLS	NONFEAR OF FAILURE	NETWORKING	CULTURAL SUPPORT	OPPORTUNITY STARTUP	TECHNOLOGY SECTOR	QUALITY OF HUMAN RESOURCES	COMPETITION	NEW PRODUCT	NEW TECH	HIGH GROWTH	INTERNATIONALIZATION	RISK CAPITAL

Source: <http://www.thegedi.org>, accessed 03/12/2015

The worst link is the ability to recognize an opportunity which 0,17 for Croatia. Croatia also has very bad results in the field of innovative products, recognized opportunity, human capital etc., and the best one in the field of internationalization.

Picture 3 Comparison of 14 pillars between Croatia and Slovenia, edition GEDI 2015



Source: <http://www.thegedi.org>, accessed 03/12/2015

4. GEM index

Founding the consortium of Global Entrepreneurship Monitoring in 1999 attempts were to unify and consolidate particular researches on country levels in order to get a good basis for further

⁸ <http://www.thegedi.org>, Global Entrepreneurship Development Index (accessed 03/12/2015)

research. Accordingly, different variables have been introduced, and one of them was extremely useful and that was the motivation to enter the entrepreneurship world.⁹

By dividing the entrepreneurs' motivation to enter on those who started their business because of necessity and those who started their business because of opportunity, a clearer image about connection of entrepreneurship and economic activities is gotten.

The research has shown that the bigger entrepreneurship activity because of necessity does not serve the economy development while activities of entrepreneurs who have started a business because of opportunity significantly correlate with economy growth. Detailed research has proved that the proportion opportunity/necessity has an exceptional connection with economy growth.¹⁰

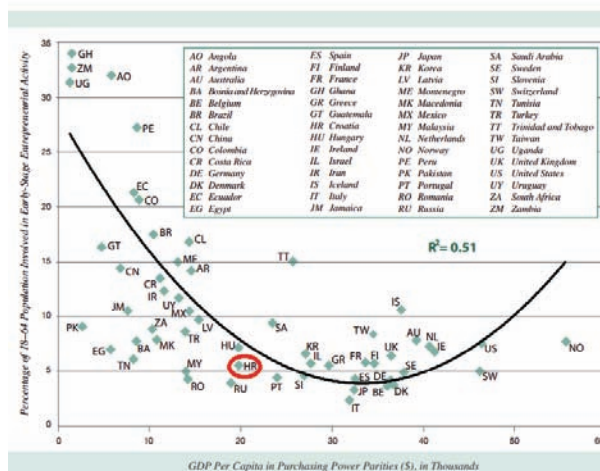
Initial research problem of entrepreneurs' behavior, attempts and success was non – standardization of research on the particular countries level. That was the reason there was no common denominator to carry out consistent results. Project GEM (Global Entrepreneurship Monitor), that runs the research on annual basis (until 1999), was the solution for that problem.¹¹

When defining the variables there was a question how to actually measure entrepreneurs' activity which was later defined by two indicators: activities of nascent business and activities of start – up business that have survived the initial phase (up to 42 months old). Also, in addition to entrepreneurs' activities, motivation to enter the business was also measured consistently, and it was later proven to be the key correlation indicator of the main economic indicators of the particular economy.¹²

Generally, the common activity of entrepreneurship can be shown using the „U“ graph (Picture 4), where undeveloped and developed economies are on the borderline, while developing countries are in the middle.¹³

Picture 4 Total entrepreneurs' early phase activity Per Capita GDP 2010.

Figure 5 : Total Early-Stage Entrepreneurial Activity Rates and Per Capita GDP 2010¹⁴



Source: Amorós, J.E., Bosma, N.S. and Levie, J. (2011): *Ten Years of Global Entrepreneurship Monitor: Accomplishments and Prospects*, International Journal of Entrepreneurial Venturing, forthcoming, Global Report

⁹ <http://www.gemconsortium.org/>, The Global Entrepreneurship Monitor (GEM) (accessed 03/11/2015)

¹⁰ Z.J. Acs, P. Arenius, M. Hay and M. Minniti, (2005): **Global Entrepreneurship Monitor**, London Business School and Babson College, London

¹¹ Z.J. Acs, (2006): **How Is Entrepreneurship Good for Economic Growth?** Innovations, Vol. 1, No. 1, pp. 97-107.

¹² Z.J. Acs, (2006): **How Is Entrepreneurship Good for Economic Growth?** Innovations, Vol. 1, No. 1, pp. 97-107.

¹³ Z.J. Acs, (2006): **How Is Entrepreneurship Good for Economic Growth?** Innovations, Vol. 1, No. 1, pp. 97-107.

5. Conclusion

The Republic of Croatia is currently in the transition phase from the efficiency – driven economy into innovation – driven economy. In the last few years from the global economical crisis emersion according to the mentioned indicators the economy has shown a negative transition trend, and convergence to developing countries.

Croatia is a little bit under the world economies average per certain index (CGI, GEDI, TEA). From the results mentioned above it can be concluded that there is a lot of space for development especially in the field of state levies, human resources, legal framework, employees education, innovation, raising awareness about entrepreneurship opportunities and motivation to enter the business enterprise. Listed items, indicate the least developed components of Croatian economy development.

There are structures that currently are on the satisfactory level but those mainly refer to IT, traffic and other types of infrastructures, on the low inflation rate, quality of life and so on.

In order to develop further on, it is needed to work on the weakest points and pillars shown in this paper by introducing the combination of structural and short – term measures that may be the most adequate at this point of time. Institutions like GEDI, do also give special instructions and suggestions how to and in which way to direct the further economy development.

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