# National Competitiveness Levers: How it Looks in Bulgaria

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#### Summary:

Measuring national competitiveness goes beyond the mere ranking of countries by knowing and understanding the factors of competitiveness and by decomposing the sources of competitiveness into their constituent parts. A comparison between countries provides policy makers with the tools necessary to identify areas in which countries are lagging behind. The paper addresses two main issues: the notion of competitiveness and the factors of competitiveness. Within the scope of this study on the evolution of the competitiveness factors are the factors that influence the so called sustainable competitiveness. The relation between competitiveness and productivity, competitiveness and well being and public wealth are discussed and examples from different countries are presented. The two most popular indicators by which competitiveness is measured (the ones of World Economic Forum and International Institute for Management Development) are elaborated upon with regard to the factors that they encompass. Furthermore the competitiveness levers of Bulgarian economy according to the latest competitiveness indices, provided by the World Economic Forum, are outlined and briefly analysed.

**Key words:** competitiveness; competitiveness' factors; competitiveness indexes, sustainable competitiveness

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# Introduction

here is a wide range of diverse ideas and definitions about the notion of competitiveness. They are the starting point in the analysis of the competitiveness factors. This article discusses the variety of interpretations of competitiveness and the main factors of national competitiveness in a historical perspective, starting with Adam Smith and ending with Michael Porter. The main objective of the paper is to anaylze the factors determining competitiveness and their dynamics over time. Another issue at stake is the main indexes used to measure national competitiveness, which are discussed in terms of the factors they encompass. Finally this paper presents an analysis of example the Global competitiveness index for the Bulgarian

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economy, making a brief overview of the major competitiveness factors over the last five years and key obstacles and challenges that the economy faces at present.

#### 1. What does the notion of competitiveness mean and encompass?

Theconceptofnationalcompetitiveness emerged in the United States (US). In 1982 in the US a document titled "Rebuilding the Road to Opportunity: A Democratic Direction for the 1980s", which addresses the competitiveness issue, was subject to debate. In 1983, President Reagan set up the President's Commission on Industrial Competitiveness. The Commission was assigned the task to discuss and come up with recommendations as to ways to increase long-term competitiveness of US industries. In 1984 the Commission published its first report. In the report released in 1985 the nation's competitiveness was defined as "the degree to which it (the country) can under free and fair market conditions produce goods and services that meet the test of international markets while simultaneously expanding the real incomes of its citizens." (Review of the Findings of the President's Commission on Industrial Competitiveness, 1985, p.5) According to the same paper, competitiveness is measured by four key indicators: labor productivity; real wage growth; real returns on capital employed in industry (real returns on assets invested in manufacturing); position in world trade. The paper suggests that these indicators should be accepted as the most comprehensive and widely applied ones to measure national competitiveness.

The debate on Europe's competitiveness dates back to the early 1990s. The European Commission's White Paper on competitiveness, issued in 1993, sets the beginning along with another two White Papers on competitiveness issued in the United Kingdom in 1994 and 1995.

The notion of competitiveness at the country level is poorly defined and more strongly contested than on the other levels. For example, at a microeconomic level, the understanding of competitiveness is far clearer and more straightforward. At the company level, the notion of competitiveness is understood as the capacity of firms to compete, to be profitable and to expand their business.

Well-known are the critical arguments of Paul Krugman about competitiveness. national These arguments have been acknowledged by the proponents of the concept of macroeconomic competitiveness. In Krugman's opinion (Krugman, 1994, pp.28-44.) the concept of national competitiveness can be regarded as a dangerous obsession. The famous three key arguments he raises are:

1. It is misleading and incorrect to make an analogy between a nation and a firm; for example, whereas an unsuccessful firm will ultimately go out of business there is no such an option for a nation;

2. Whereas firms can be seen to compete for market share and one firm's success will be at the expense of another's, the success of one country

or region creates rather than eliminates opportunities for others and also the trade between nations is known not to be a 'zero-sum game';

3. If competitiveness has any meaning, it is simply another term for productivity, given that growth in national living standards is essentially determined by the growth rate of productivity.

Michael Porter (2004, pp. 14-15), who introduced and made popular the notion "competitive advantage of nations", claims that "firms compete in industries, not nations". Furthermore, economic value is indirectly generated by nations through enterprises, hence the role of the nations (countries) is to create an environment that promotes the activities of enterprises.

World Garelli, director of the Competitiveness Center, states that "competitiveness is not an objective in itself but an economic tool. However a tool is linked and dependent on the objectives pursued by the various economic actors, constitute nation."(Garelli, which а Stéphane, 2012, pp. 488-489). This is the reason why competitiveness should be regarded as a dynamic concept that involves a few ideas: (1) achieving efficiency, (2) making choices, (3) the utilization of disposable resources.

Regarding the idea of efficiency some researchers consider that its key determinant is productivity, though not all researchers accept that entirely. Li (2011, pp.28-29), for instance, argues against equating national competitiveness to productivity. In the first place, Li assumes that productivity

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is a consequence rather than a cause of economic growth. He shares the argument launched by other economists that productivity in effect involves measuring and recording the increases in real per capita income. Secondly, Li adopts Reinert's view that "high relative or absolute productivity levels do not necessarily lead to competitiveness". Conceding that it is difficult to be competitive if you have low productivity or efficiency, Reinert calls into question the view that the most efficient producer of an internationally traded product makes a country competitive, in the sense of ensuring rising standards of living. In "Competitive Advantages of Nations" Porter arrives at much the same conclusion. In reality, what can be observed are desperately poor nations and some very efficient producers operating on the national level. For example, one of the biggest world manufacturers of baseballs, which enjoys a large world market share, was established and registered in Haiti, but Haitians' living standard is very low. Therefore, it is not productivity or efficiency but the kind of production that makes a nation competitive. An argument in this respect can be that productivity is a measure focusing on the production side of economy, whereas real per-capita income is a measure focusing on the consumption side. The two measures do not always match and productivity improvement does not always translate into an increase in real per capita income. Another case is the one of a wealthy nation (country) that is not competitive (Switzerland in the 1990s).

The opposite is also true, as shows the case of Ireland in the 1990s. The case of the United States for most of the past decade represents both – a wealthy and competitive nation. Wealth can be a good starting point to boost competitiveness if Porter's assumptions about competitive advantages are taken into account – sustainable competitive advantages are created and not inherited. Being the most efficient agent in the 'wrong' activities may lead to negative development. Another conclusion Porter draws is that the national prosperity is created, not inherited.

<u>The second idea about making choices</u> refers to strategic choices as to where a country can possibly increase the added value in international markets compared to that of its competitors.

The third idea as was stated above concerns the way in which disposable resources are utilized. In reality countries compete to gain access to and manage the various resources that may be drawn from technology, infrastructure, government, education, etc.

The social aspects of competitiveness have received increased attention nowadays. Recently, the World Economic Forum (WEF) calculated two indexes for sustainable competitiveness (WEF, 2012, p.51) - the index on social sustainability and environmental sustainability (comprising aspects: pollution, resource scarcity, water availability, and the regulatory framework as far as it pertains to environmental policies and measures). The definition of WEF (2012, p.52) for sustainable competitiveness is "the set of institutions, policies, and factors that make a nation remain productive over the longer term while ensuring social and environmental sustainability". The term sustainable competitiveness is quite new and is based on the relationships between competitiveness and environmental and social sustainability. Sustainable competitiveness goes beyond mere economic performance to encompass other important elements that render societies sustainable by ensuring highquality growth.

"Competitiveness is an input into the country's production process that generates wealth of the nation."(Zinnes, Clifford at all; 2001, pp.315-353, p. 316). Competitiveness refers also to the distribution of wealth. The concept of competitiveness is important because indicators as firm productivity, GDP (Gross Domestic Product), GDP growth by itself cannot reveal this idea completely. There are two factors that determine wealth - natural resources (the case of Gulf countries) or past competitiveness (the case of Italy and other European industrial countries). There is a phenomenon called a 'curse of natural resources' (Sachs, Jefrey D. et all; 2001 p. 838) in some developing countries. The 'curse of natural resources' idea represents the negative effect of a given country's dependency on natural resources, which may result in declining per capita GDP. As the cases of Canada and Australia show, the export of natural resources may also enjoy increasing terms of trade.

Therefore, it is not natural resources but rather overreliance on their export that will bring the 'curse' to the country and as a result of such overreliance the enhancing of the capabilities of national industry may be delayed.

Competitiveness of a given country refers also to the sustainable improvements of public well-being. Prosperity may mean incomes of people, standard of living and quality of life, a safe society, the protection of the environment, etc. Specifically the notion of prosperity is defined depending only on the country that is observed. Therefore the term's scope differs from one country to another. In fact defining competitiveness through prosperity suggests taking into consideration the non-economic side of competitiveness. Competitiveness encompasses the economic consequences of noneconomic issues such as sciences, healthcare, education, political stability, and environment. The economic logic behind the economic systems and their structure suggest that competitiveness cannot be reduced only with regard to productivity or profits. For example, environmental degradation may have a direct adverse impact on the productivity of sectors such as agriculture, which in turn can have negative implications both for the economy (especially for countries where GDP is heavily dependent on agriculture) and for food security.

These aspects of competitiveness involve the social responsibilities of countries - the provision of adequate public healthcare and education

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infrastructure and the maintenance of political and social stability. In respect of the non-economic aspects of competitiveness and the government's role, Singapore may serve as a revealing example. Why does Singapore enjoy high competitiveness? This country's government has traditionally engaged in "rewarding the people" by providing better housing, hospitals, education. More than 80% of population in Singapore lives in public houses provided by the state. By contrast, in 1998 in China the government started a housing reform and abandoned house welfare. Around 80% of new houses/flats built since 2003 are sold at market prices. While almost every Singaporean can have a place to live, many Chinese cannot afford to buy a flat. Therefore the ordinary Chinese households are forced to save money to purchase a flat. How do such changes affect the national economy? High savings in China largely reduced Chinese household consumption. As a consequence, the Chinese government had to rely on investments and foreign demand to maintain economic growth.

National governments continue to shape the competitiveness environment in many different ways via taxation and by resolving education or health issues. Switzerland, Singapore, Finland and Sweden, the top four most competitive nations in the Index of WEF for 2013, have reached such a position due to the at times unpopular choices and strategic investment decisions made by their governments. China stands out as

the most competitive among the BRIC economies<sup>1</sup>, having systematically pushed through reforms in the past decades. Brazil has also made significant progress. This advance stands in stark contrast to the stagnant reforms in India and Russia, which until recently inspired notable optimism. In order to boost China's textile exports, the Chinese government provided high tax rebate to textile exporters and kept the Chinese currency undervalued. As a result Chinese textile products succeeded in expanding their share on the global market. However, such market expansion involves certain costs. Western countries like the United States accused China of manipulating its currency, which provoked a number of trade rows. Also, the tax rebate policy may not provide the necessary incentive for many Chinese textile exporters to improve product quality and technologies. Who benefited and who lost from such a policy? It is both foreign buyers and Chinese exporters that gained benefits, while the Chinese government (and Chinese people) may turn out to be the only loser. Nowadays, China enjoys the biggest share in the world market for textile. However, a growing number of Chinese have come to realize this is not a cause for national pride. Such sentiments are clearly detected in a popular statement China's former Minister of Commerce Bo Xilai made, who said that China needed to sell 800 million shirts in order to buy one Airbus A340 plane.

#### 2. Examining competitiveness factors on the national level: evolution in the understanding of competitiveness' levers

The identification of the factors behind the notion of competitiveness requires that they are examined in a historical perspective and their origins are sought in the major schools of economic theory: Classical theory; Neoclassical theory; Keynesian economic theory; Development economics; New economic growth theory (Endogenous Growth Theory) and New trade theory. This paper will present a short overview of the major contributions to that notion from the time of Adam Smith to Michael Porter.

As a proponent of the Classical Theory, Adam Smith introduced 'division of labour' as a term denoting the idea of economies of scale and differences in productivity across nations. With respect to trade, in his work published in 1776 Adam Smith (2003) revealed the gains from trade when countries enjoy an absolute advantage in the production of various goods. A country will have an absolute advantage and should engage in the export of a specific good if its production involves fewer inputs (labour). And vice versa countries should import goods that other countries can produce using fewer inputs (i.e. where they are produced most cheaply). Another representative of the Classical Theory who also contributes to the notion of

<sup>&</sup>lt;sup>1</sup> BRIC is an acronym that refers to the countries, which are all deemed to be at a similar stage of newly advanced economic development: Brazil, Russia, India and China.

competitiveness is David Ricardo. In his "On the Principles of Political Economy and Taxation", published in 1817, he introduces the concept of comparative advantage. His main idea is that gains from trade could be obtained when two countries specialise in the production of goods with regard to which they enjoy so called comparative advantage. In the Ricardian model, the differences in the production technology across industries and across countries give rise to differences in the comparative labour productivity. As Ricardo's "two counties - two goods representation" model shows, though a country may achieve higher productivity with regard to the production of both goods (i.e. have an absolute advantage in both goods), it should specialise in the production of one of the goods with regard to which it has achieved higher relative productivity. The ideas launched by the Classical Theory refer to the competitiveness of the countries in the field of trade.

Heckscher and Ohlin, who represent the Neoclassical Theory, have developed "factorproportions model" (H-O model), based on the Ricardian model by incorporating two factors of production: labour (as with Ricardo) and capital. The H-O model assumes that technologies are the same across countries and that comparative advantage is derived from differences in the relative abundance of the factors of production. This adds a new aspect to the definition of national competitiveness. The major ideas that the Neoclassical Theory

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has contributed are as follows: perfect information (same technology across countries), constant returns to scale and full divisibility of all factors; trade based on factor endowments (labour and capital) and factors of production (labour and capital) within countries are perfectly mobile across industries.

In the focus of Keynesian Theory is the functioning of markets. The drivers of the system are the consumption function, the investment accelerator, together with export demand. His theory is based on several key basic premises. Price adjustments might be slow, leading to adjustments in quantity. Furthermore, markets are not necessarily in equilibrium and there may be shortages on the demand or supply side. The two factors of production, capital and labour, are complementary.

As a representative of the Development Economics Walt Theory, Rostow launched his theory about the stages of development, in which societies are classified into five different ones: traditional, transitional, take-off, maturity and high mass consumption. Even though the theory has been subject to criticism, it has contributed to the development of economics in the following directions: revealing the importance of agriculture and the role of investment in raising growth rate; setting certain political and social preconditions for countries' development. Other important issues addressed by the Development Economics Theory are that some countries develop more successfully

than others and that economic policy plays an important role in determining a country's success.

The key assumption of the Endogenous Growth Theory is that the accumulation of knowledge increases returns. Knowledge and know-how are not disseminated instantly but need to be acquired. This means that markets do not automatically produce an optimal result and accordingly companies have an incentive to keep knowledge to themselves in order to gain monopoly dividends. In order to ensure the profitability of investments in R&D governments need to find the balance between spreading knowledge, on the one hand, and protecting intellectual property rights, on the other. This theory introduced human capital as a production factor, thus showing that companies and governments have an incentive to invest in employee training and in overall public education. The latter was widely accepted as a factor of competitiveness and is present in the competitiveness indexes.

Contrary to the Classical and Neoclassical Theories, the New Trade Theory as an attempt to explain the trade patterns between industrialised countries focuses on the economies of scale, product differentiation and imperfect competition. A number of categories of such models can be identified, such as the Marshallian economies of scale, according to which external economies of scale provide the basis for the regional concentration of industries. Other models

monopolistic incorporate competition of two types - the first one allows for economies of scale that are internal to companies themselves, while the second type envisages the economies of scale and the product differentiation in the production of intermediate inputs. Trade enables countries to access a wider variety of components/inputs. thus generating external economies of scale. New trade theories suggest that a comparative advantage can be acquired as opposed to the abundance as assumed by traditional theory. There are some major assumptions on which the theory rests. These include the following: the usage of new technology results in decreasing returns to the application of capital and labour; increasing returns to scale in the usage of technology.

Michael Porter introduces the competitive advantage term and provides a systemic view of the competitive advantage of nations through the "diamond model". He analyzed four interlinked factors that contribute to the global competitiveness of particular industries of a nation: factor conditions, demand conditions, related supporting industries, and firm strategy, structure and rivalry. Contrary to the classical international trade theories, which argue that comparative advantage is based on the factor endowments that a country inherits, Porter suggests that the key factors of production (or specialized factors), such as skilled labour, capital and infrastructure, are created rather than inherited.

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Table 1. Key driving forces	for the competitiveness	according to the schools	of the economic theory

Schools of Economic Theory	Key driving factors	Implications for competitiveness					
Classical theory	<ul> <li>Investment in capital (i.e. improved technology) enhances the division of labour (specialisation) and, hence, raises productivity.</li> <li>Trade provides an engine for growth (static gains from trade)</li> </ul>	<ul> <li>All countries have a role in the division of labour based on their comparative advantage. But if technology, and hence productivity, is the same across countries then no basis for trade.</li> <li>Even though a country may be more productive (absolute advantage/productive efficiency) in the production of a good, it may nonetheless see this industry decline with free trade.</li> </ul>					
Neoclassical theory	<ul> <li>Trade (move from autarky to free trade) provide an engine for growth (static gains from trade).</li> </ul>	<ul> <li>All countries have a role in the division of labour based on their relative factor proportions. But if factor proportions are same across countries then there is no basis for trade.</li> <li>Factor price equalisation implies convergence of returns to capital and labour.</li> <li>Given (universal) perfect competition, the notion of "competitiveness" is essentially not relevant in the long run.</li> </ul>					
Keynesian economic theory	<ul> <li>Capital intensity</li> <li>Investment</li> <li>Government spending, such as investment in the public domain and subsidies/tax cuts for enterprises</li> </ul>	<ul> <li>Governments can intervene successfully in the cycles of the economy</li> <li>Assumption of imperfect markets allows for regional differences</li> <li>Convergence of regions can be achieved through economic policy</li> <li>Capital intensity increases productivity and growth</li> </ul>					
Development economics	<ul> <li>Move from agriculture to higher value added sectors</li> <li>Openness to trade</li> <li>Foreign direct investment (FDI)</li> <li>(Foreign) development funds</li> </ul>	<ul> <li>Policies should take into account a country's stage of development</li> <li>Policies are needed to promote 'spread effects', e.g. through FDI or development funds</li> </ul>					
New economic growth theory (endogenous growth theory)	<ul> <li>R&amp;D expenditure</li> <li>Innovativeness (patents)</li> <li>Education level</li> <li>Spending on investment in human capital (schooling, training)</li> <li>Effective dissemination of knowledge (knowledge centres)</li> </ul>	<ul> <li>Countries' differences in productivity and growth can be accounted for by differences in technology and human capital</li> <li>Improvements in technology and human capital are engines for growth</li> <li>Open trade may be supportive of growth and technological development</li> <li>Investments in research and development are crucial</li> <li>Improving human capital (by schooling and training) is of key importance</li> </ul>					
New trade theory	Factors influencing 'first mover' advantage, e.g.: • Skilled labour • Specialised infrastructure • Networks of suppliers • Localised technologies	<ul> <li>Specialisation is needed at the industry/branch level, in order to allow external economies of scale</li> <li>Size of home markets is crucial for obtaining internal economies of scale.</li> <li>Investing in skilled labour, specialised infrastructure, networks of suppliers and localised technologies enhance external economies of scale.</li> </ul>					

Source: Martin, Ronald L., 2004, A Study on the Factors of Regional Competitiveness, A draft final report for the European Commission, Directorate-General Regional Policy; p.2-5

The presented overview of economic levers - starting with Adam Smith's theories reveals the evolution of the understanding of competitiveness' labor through the neoclassical

views of investment in physical capital and infrastructure, and, more recently, to such factors as education and training, technological progress, macroeconomic stability, good governance, firm sophistication, and market efficiency. What further complicates the current national policies in the sphere of competitiveness is that all of the listed factors are not mutually exclusive but, on the contrary, are complementary.

The evolution of economic theories and the understanding of the notion of competitiveness is evident in the variety of definitions found in different publications. Belkacem (2002) notes that almost every paper on this topic struggles to define it. Some definitions, on the basis of which we can identify the factors that are generally viewed as competitiveness levers, are discussed below.

The Organisation for Economic Cooperation and Development (OECD) defined national competitiveness as the degree to which, under the conditions of a free and fair market, a country can produce goods and services which meet the test of international markets. while maintaining and expanding the real incomes of its people in the long term. The official definition<sup>2</sup> that OECD provides is: "Competitiveness is a measure of a country's advantage or disadvantage in selling its products in international markets". The OECD Secretariat offers two different measures of competitiveness based on the differential between domestic and competitors' unit labour costs in manufacturing and consumer prices both expressed in a common currency.

In the European Competitiveness Report, the European Commission (2007, p.13) interprets competitiveness "as a sustained rise in the standards of living of a nation or region and as low a level of involuntary unemployment as possible".

In its Global Competitiveness Report (2012, p 4), the World Economic Forum defines competitiveness as "the set of institutions, policies, and factors that determine the level of productivity of a country". The productivity sets the level of prosperity that can be reached by an economy, while the productivity level determines the rates of return obtained by investments in an economy, which in turn are the fundamental drivers of economic growth.

The International Institute for Management Development's (IMD) World Competitiveness Yearbook defines the concept as the ability of a nation to create and maintain an environment that creates more value for its enterprises and more prosperity for its people. In brief competition involves the country's management of the totality of its resources and competencies to boost public prosperity.

Laura Tyson (1992) understands international competitiveness as a country's ability to produce goods and services that meet the test of international competition,

<sup>2</sup> OECD, http://stats.oecd.org/glossary/detail.asp?ID=399

Table 2. Competitiveness factors

Infrastructure and accessibility	Human resources	Productive environment
1. Basic Infrastructure	1. Labour force characteristics	1. Entrepreneurial Culture
• road	<ul> <li>productivity and flexibility</li> </ul>	<ul> <li>low barriers to entry</li> </ul>
• rail		<ul> <li>risk taking culture</li> </ul>
• air	2. Management skills	
	<ul> <li>internationalised</li> </ul>	2. Internationalisation
2. Technological	<ul> <li>levels of professionalism</li> </ul>	<ul> <li>exports/global sales</li> </ul>
Infrastructure	<ul> <li>levels of efficiency</li> </ul>	<ul> <li>investment</li> </ul>
• ICT		<ul> <li>business culture</li> </ul>
telecoms	3. High skilled workforce	
internet	<ul> <li>scientists and engineers</li> </ul>	3. Technology
	<ul> <li>symbolic analysts</li> </ul>	<ul> <li>application</li> </ul>
		<ul> <li>management</li> </ul>
	4. High participation rates in post	
	school education	4. Innovation
	<ul> <li>tertiary education</li> </ul>	patents
	<ul> <li>vocational training</li> </ul>	R&D levels
		<ul> <li>research institutes and</li> </ul>
	5. Educational infrastructure	universities
		<ul> <li>linkages between</li> </ul>
		<ul> <li>companies and research</li> </ul>
		5 Consider availability
		5 Capital availability
		6. Nature of competition
		7. Sectoral balance

Source: Martin, Ronald L., 2004, A Study on the Factors of Regional Competitiveness, A draft final report for the European Commission, Directorate-General Regional Policy; p.2-23

while ensuring its citizens a standard of living that is at once rising and sustainable.

Michael Porter supports the view that competitiveness at the national level means productivity, defined as "the value of the output produced by a unit of labour".

The most popular definitions all share the view that successful (economic) performance on the national level is typically judged in terms of rising living standards or real incomes and open market conditions. Furthermore, a more competitive economy is the one that is likely to sustain growth.

Another common point is that usually competitiveness is defined in terms

of the outcome (ex. living standards/ incomes) rather than the factors that determine competitiveness. The real challenge is to identify the factors that determine competitiveness rather than to describe its outcome(s).

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Researchers have come up with various ideas about the sources of national competitiveness. They include, among others, relative labor costs real exchange rate, manufacturing, knowledge-intensive service sector, foreign direct investment, technology, innovation, institutions and government policies, and regulations. Contemporary

national factors of competitiveness (Martin, Ronald L., 2004, p. 2-23) may be classified in three groups.

The same factors are used in the most popular competitive indexes calculated by WEF and IMD.

#### 3. Measuring competitiveness

The goal of measuring national competitiveness is to explain fully the countries' performance. A variety of indicators that measure international<sup>3</sup> competitiveness The exist. index developed by Zinnes, Clifford, Yair Eliat and Jeffrey Sachs (2001, pp. 315-353, p. 316) includes components that contribute to sustainable economic growth, which have been elaborated on in modern economic theory and popular business literature. The definition of competitiveness on the basis of which they develop the indicator focuses on the synergies among companies and among companies, markets, and government, as well as the role of the institutions.

There is a wide range of sources that measure national competitiveness such as:

- The IMD's World Competitiveness Yearbook;
- The World Economic Forum's Global Competitiveness Report;
- OECD's indicators of relative competitiveness;
- UK Government's Productivity and Competitiveness Indicators.

Two indicators that reveal the complexity of measuring national competitiveness are those suggested by the IMD and WEF. The IMD's World Competitiveness Yearbook (WCY) recognises that "competitiveness needs to balance economic imperatives with the social requirements of a nation as they result from history, value systems and tradition". The study places emphasis on GDP per capita as an indicator of overall competitiveness but also recognises standards of living as a key indicator. The Yearbook ranks and analyses the ability of nations to provide an environment in which enterprises can compete. The research focuses on the competitiveness of the economic environment and not a nation's overall economic competitiveness. The main areas that are assessed are economic performance, government and business efficiency, infrastructure. The study offers a total of more than 300 criteria. National economies are ranked according to their performance along each of these criteria. Hence the researchers claim to provide "a high-definition wideangle picture of how nations compete internationally for resources and competences" (Garelli, Stéphane, 2012, in: IMD World Competitiveness Yearbook 2012, p.489).

World Economic Forum's Global Competitiveness Report (GCR) bases its competitiveness analysis on the Global Competitiveness Index (GCI) that measures the microeconomic and macroeconomic foundations of national competitiveness. GCI is calculated on the basis of indicators that represent different aspects if competitiveness is grouped under the

<sup>3</sup> International competitiveness will signify national competitiveness. Both terms will be regarded as synonyms.

so-called 12 pillars. The report offers the following aspects of competitiveness: (1) institutions; (2) infrastructure; (3) macroeconomic environment; (4) health and primary education; (5) higher education and training; (6) goods market efficiency; (7) labor market efficiency; (8) financial market development; (9) technological readiness; (10) market size; (11) business sophistication and (12) innovation. These pillars are interdependent and may either reinforce each other or possibly weaken each other.

One aspect of national competitiveness can be found in the "Ease of Doing Business index", calculated by the World Bank. This index measures the regulations directly affecting businesses and does not directly measure more general conditions, such as a nation's proximity to large markets, quality of infrastructure, inflation or crime rate. A nation's ranking on the index is based on the average of 10 subindexes: Starting a business; Dealing with construction permits; Getting electricity; Registering property; Getting credit; Protecting investors; Paying taxes; Trading across borders; Enforcing contracts; Closing a business; Employing workers. In the last 5 years (2009-2013) Singapore has topped the ranking. In 2013 Bulgaria occupies 66th place while in 2009 it ranked 424.

#### 4. The Competitiveness of the Bulgarian Economy

According to the latest WEF's GCI, Bulgarian economy belongs to the group

<sup>4</sup> World Bank, http://www.doingbusiness.org/rankings

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of countries at stage 2 (*efficiencydriven economy*). This means that a country increased its competitiveness and productivity and raised wages. The following aspects are typical of the countries belonging to that stage: *more efficient production processes and improved product quality*. The main driving forces on that stage of economic development are *higher education and training, efficient goods markets, wellfunctioning labor markets, developed financial market, the ability to use the potential of existing technologies, and a large domestic or foreign market.* 

Among 144 countries Bulgaria holds the 62<sup>nd</sup> place with a score of 4.27 out of 7.00. In comparison the leader in the ranking is Switzerland with a score of 5.72; China shares the 13<sup>th</sup> position with Taiwan and the two countries have the same score of 5.28. Our neighboring country Romania holds the 78<sup>th</sup> position with a score of 4.07.

When we have a look at the three sub-indexes – basic requirements, efficiency enhancers, innovation and sophistication factors, we may notice that Bulgarian economy holds the highest rank for the second sub-index "efficiency enhancers" – 59th position. This sub-index is composed of the following factors: higher education and training (63d position), goods market efficiency (83d position), labor market efficiency (49th position), financial market sophistication (80th position),

technological readiness (52<sup>nd</sup> position), market size (62<sup>nd</sup> position). For the basic requirements it holds 65<sup>th</sup> position and in terms of innovation and sophistication factors – 97<sup>th</sup> out of 144.

A comparison on the basis of the data for the last 5 years (from the table above, Table 3) shows that the overall competitiveness index has improved insignificantly largely due to the improvement in basic requirements, while its improvement cannot be attributed to such an extent to the factors belonging the "efficiency enhancers" to subindex. Unfortunately, the innovation and sophistication factors show no change and have preserved their levels.

The research on the most problematic factors for doing business confirms a few factors that stay on the top of the list. The most problematic one for the last five years is corruption, followed by inefficient government bureaucracy, inadequate supply of infrastructure and inadequate educated workforce. The access to financing, albeit improving during the years, was pointed out by the respondents as one of the top five problematic factors.

#### Conclusion

Though there are various interpretations of competitiveness, providing too broad and or at times too narrow definitions of the notion, one thing is certain: competitiveness is a dynamic and complex concept that is not easy to define or measure. Nowadays competitiveness is understood not so much as a goal but rather as an economic tool (Garelly, 2012). A wide range of factors can influence a country's competitiveness. The identification of the specific factors depends on the countries' stage of development. The main factors that researchers have agreed upon are

			Subindexes													
		Basic requirements					Efficiency enhancers						Innovation and sophistication factors			
		score for the subindex	Institutions	Infrastructure	Macroeconomic stability	Health and primary education	score for the subindex	Higher education and training	Goods market efficiency	Labor market efficiency	Financial market sophistication	Technological readiness	Market size	score for the subindex	Business sophistication	Innovation
GCI 2008	4.03	4.20	3.28	2.79	5.21	5.53	4.05	4.09	4.11	4.42	4.18	3.65	3.83	3.30	3.69	2.91
GCI 2009	4.02	4.13	3.19	2.88	4.93	5.54	4.08	4.11	4.02	4.51	4.09	3.82	3.94	3.29	3.68	2.90
GCI 2010	4.13	4.43	3.29	3.57	5.00	5.85	4.07	4.14	4.00	4.51	3.95	4.01	3.79	3.22	3.52	2.91
GCI 2011	4.16	4.46	3.32	3.62	5.13	5.80	4.10	4.16	4.08	4.49	3.99	4.11	3.80	3.24	3.55	2.94
GCI 2012	4.27	4.63	3.39	3.79	5.42	5.92	4.18	4.31	4.17	4.54	3.97	4.30	3.82	3.30	3.62	2.98

Table 3. Global Competitiveness index of Bulgaria (scores: 1-7)

Source: WEF, Global Competitiveness Index {2008-2009} - {2012-2013)

classified in three groups: *infrastructure and accessibility, human resources, productive environment.* The last five global competitiveness indexes for Bulgaria show that the Bulgarian economy is lagging behind in the areas of technologies and technological development, business sophistication and especially innovations. In order ensure progress and enter a higher stage of development, Bulgaria needs to make advancements in the field of technologies and innovations.

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