THE COMPETITITVITY FACTORS

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Abstract: To evaluate a nation's competitivity, we have to take into consideration a large number of variables. The difficulty does not exist in the number of factors, but in how you treat them, considering that some of them have an effectively qualitative determination (the style and the capacity of the managers, quality of the products, etc). Their quantification is not easy; especially since it cannot be accomplished unless we use some indicators which take into account the prices, costs, wages, productivities, investments and exports.

Key words: competitivity, Business Competitiveness Index, Growth Competitiveness Index, Global Competitiveness Index

By taking into consideration many factors, the accuracy of the evaluations increases and in the last period of time, a preoccupation with a general character is the measurement of the economical competitiveness of the countries and establishes their hierarchy in accordance with their level and dynamics. Therefore, at the international level there are many organizations which handle this aspect, two of them presenting a special importance. We refer to:

► World Economic Forum – WEF, which started in 1979 to publishing The Global Competitiveness Report;

► International Institute for Management and Development – IMD, which starting editing The World Competitiveness Yearbook in 1989.

Initially, the Global Competitiveness Report was published by both international institutions (WEF and IMD) but later, due to differences in their methods of quantification, they started to supply separate reports on competitivity. The World Economic Forum residing in Geneva (Switzerland) and considered one of the most important global business communities, politically and intellectually and other leaders of the society involved in the improvement of the global state, defines competitivity as being "the ability of a country to record high growth rates of the GDP per inhabitant", while the International Institute for Management and Development which resides in Lausanne (Switzerland) defines competitivity as being "a country's ability to create the added value, increasing the national wealth, by the administrating efficiently the next bilateral terms: processes and products, attractivity and aggressiveness, globality and proximity, social cohesion and taking risks."

Under the coordination of the World Economic Forum, the Global Competitiveness Report is published annually with the objective of evaluating the competitivity of a large number of countries. To accomplish this evaluation and to make a comparison of the competitivity level of contemporary economies they use two composite indicators:

- *Business Competitiveness Index* – BCI, elaborate by Michel Porter from Harvard University and first introduced in this report in 2000.
- *Growth Competitiveness Index* - GCI, elaborate by Jeffrey Sachs and John McArthur and first introduced in this report in 2001- 2002.

The Global Competitiveness Index is calculated and used to analyze the potential of the economies, world wide, observing the health of economic growth areas in the medium and long term time frame. This indicator is based on 3 elements: ♦ the competitivity of the macroeconomic environment of each country analyzed; ♦ the public institutions' quality and the politics that these promote; ♦ the technological efficiency in each country.

The competitivity of the macroeconomic environment is met in macroeconomic stability conditions, considered the first important element for economical growth, because during conditions of macroeconomic instability, with high inflation, firms can not adopt coherent decisions, banking systems cannot function in conditions of a high governmental deficits, and governments can not supply efficient services with high interest's rates due to past debts. In these circumstances the business environment will suffer if the taxes paid by the economic agents are wasted by the government, and we can not even talk about economic growth.

A second analysis element made with the help of the Global Competitiveness Index is referred to the *public institutions*. Though in a market economy the biggest contribution to the creation of the wealth and welfare is due to private firms, but we can't neglect the fact that the private economic agents have to operate and enter in different relations with the created institutions and administrated by the state. It is important to have a correct judicial system,–which grants property rights by law, because foreign firms consider that it is too expensive or even inefficient, to operate in a country where there is excessive corruption.

The third fundamental element of the analysis with the help of the Global Competitiveness Index is referred to as *technological progress*, a real economic growth engine, which, in the long term, can not be made without an improvement to the technologies. Viewing these aspects, the countries are divided into:

- *Innovating economies*, in which the economic growth is determined by their innovation capacity and which are situated very close to the highest technological boundaries of the world. We talk of countries like S.U.A., Japan, Taiwan, Sweden and Switzerland, considered to be the most innovative economies in the world.
- *Imitative economies*, which depend in a large measure from outside technological acquisitions.

Because there is a difference between these two categories of countries, The Global Competitiveness Index has a different calculation, by having a different weight for one or other of these three elements:

For the countries with innovative economies, the weights are: ½ technology index, ¼ public institutions index and ¼ macroeconomic environment index;

$GCI = \frac{1}{2}TI + \frac{1}{4}PII + \frac{1}{4}MEI$, where

TI = technology index

PII = public institutions index

MEI = macroeconomic environment index;

For the countries with imitative economies, the weights are: 1/3 technology index, 1/3 public institutions index and 1/3 macroeconomic environment index;

$GCI = \frac{1}{3}TI + \frac{1}{3}PII + \frac{1}{3}MEI$

Along with the World Economic Forum, another organization measuring the economic competitivity of the world's countries and their hierarchy is the International Institute for Management and Development from Lausanne. They are one of the most important business schools in the world, with over 50 years of experience in the developing leadership competence for international management companies. For over a decade, this institute has been making annually a study on national competitiveness, entitled The World Competitiveness Yearbook, where they analyze the conditions offered by the economic and business environment in each country for the sustainability of the firms' competitivity.

Initially, this international competitivity study, was charting over 20 countries on the basis of quantifiable data and state information and diagnosis obtained by investigations which collected *eight aggregate competitivity factors*. These eight factors are: the power of the national economy, internationalization/opening of the economy, the government, the finances, the infrastructure, the management, the science and the technology, the human resources. (Diagram no.1)

The competivity factor is calculated based on these eight factors, which take into consideration a certain number of criteria for each factor as such: the power of the national economy – 48; the opening of the economy – 60; the government – 54; the finances – 35; the infrastructure – 46; the management – 37; the science and technology – 42 and the human resources – 56. The index for the year 1996 is calculated to establish the countries that have the most favourable predictions of stable economic growth, in the next 5 years, on the basis of the economic conditions and the existing institutions in each country.

The principles that estimate the influence of each factor on the international competitivity are the following:

I. The National Economic power: ▪ the productivity that reflects the added value in the short term; ▪ the competitivity in the long term with the ability for capital to form itself; ▪ the prosperity of a country which reflects its past economic performance; ▪ the competition governed by market forces which improves the economic performance;

II. The opening of the economy/internationalization: ▪ a country's success in international trade reflects the national economy's competitivity; ▪ opening of all international economic activities which grows the economic performances of the country; ▪ for the whole world, international investment is allocating economic resources more efficiently; ▪ maintaining a high standard of living needs to integrated into the international economy.

III. The government: ▪ state intervention in commercial activities has to be minimized and orientated to create competitive conditions for the firm; ▪ the government has to give information on the macroeconomic conditions and social predictions which minimizes the external risks for the economic firm.

IV. The finances. ▪ the financial facility of the activities with added value; ▪ a financial sector, which is very well developed, integrated internationally, supports the competitivity of that country.

V. The infrastructure. ▪ a well developed infrastructure, including the availability of natural resources and a functional business system for supporting economic activity; ▪ a well developed infrastructure which includes information technology, performing efficiently in the environment.

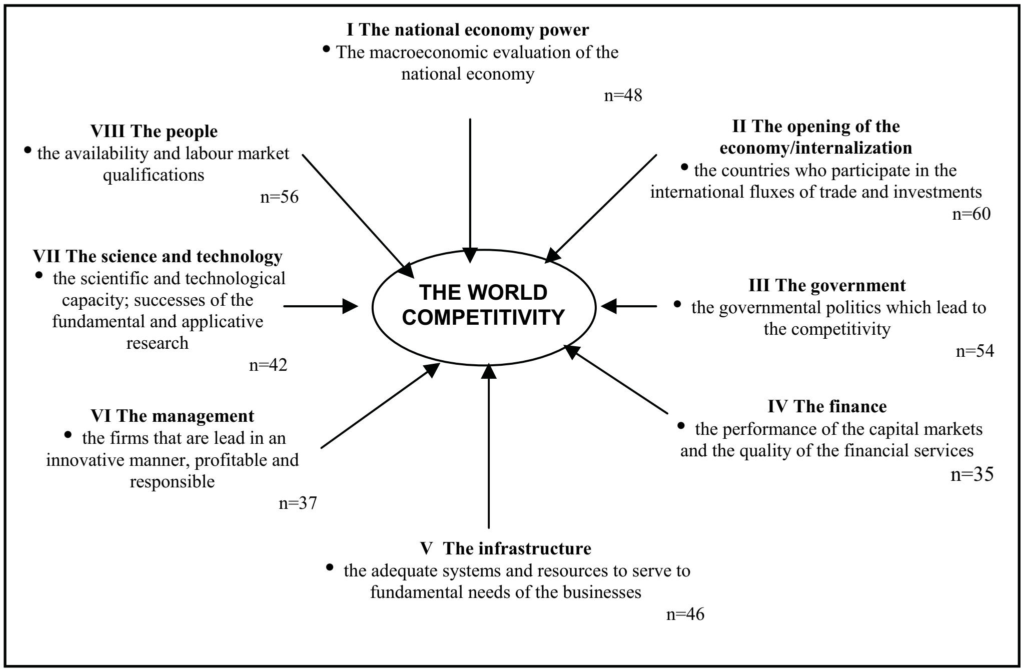

Figure no. 1 The factors that influence the competitivity

VI. The management. ▪ a competitive report of price/quality of the products reflects the managerial ability for a country; ▪ the managerial orientation in the long term increases the competitivity; ▪ the enterprising spirit is crucial for the economic activity in the first phase; ▪ in developed businesses, the corporative management commonly needs the ability to integrate and differentiate the business activities.

VII. The science and technology. ▪ competitive advantage can be built on the efficient application and innovation of existing technologies; ▪ long term investment in research and development is useful for growth of the competitivity of a firm; ▪ private research and development investment are more proper for the growth of the competitiveness of a country, than the public investments in research and development for the defense sector.

VIII. The human resources. ▪ the qualification level of the labour market increases the competitivity of a country; ▪ the growth of competitivity tends to increase the expectation level for the quality and standard of living.

Later, this study charted the most competitive areas of the world, but it has been increasing the number of the counties and analyzed regions (60), on the basis of 323 criteria, grouped after 4 competitivity factors:

► *Economic performance*, considering the following indicators:

- National economy: GDP, private consumption, governmental expenses, native investments, saving rate, the weight of the main economic sectors (production, services, agriculture) in GDP, GDP/inhabitant reported to the parity of the buying capacity, predictions viewing the GDP evolution, consuming, investments, savings, inflation, unemployment and the current account balances.

- International trade: the external pay balance, the commercial balance, the export, the import, the international commercial changes reported to GDP, income from tourism.
- International investments: direct foreign investments, investments on the capital market, relocation of production, services, research and development.
- Labour market: the number of workers in the economic sectors, employees with part time and temporary work, the unemployment rate, long term unemployment and unemployment among young people.
- Prices: inflation rate, the cost of living (the value of the products and services for the citizens in the urban localities), living space rent and office rent.

► *The efficiency of the governmental politics*, which have a lots of contributing indicators

- Public finances: budgetary deficit, internal public debt, external public debt, the total public debt, the public finances management, currency and gold reserve, governmental expenses.
- Fiscal politics: total incomes from taxes and other taxes, income tax, profit tax, social assurance contribution, the level of the corporative taxes and the way these discourage the contractor initiative, the level of tax evasion.
- The institutional frame: the short term interest rate, the cost of capital for the business development, interest rate at credits compared to the interest rate in deposits, the country's rating for external loans, the central bank's policies, the stability of the currency exchange rate, the coherency of governmental public policies, the legal frame of the proceeding businesses, the flexibility and the adaptability of the governmental policies, the degree of understanding of the global challenge at a political class level, the transparency of the public institutions, the bureaucracy and corruption.
- Commercial and businesses legislation: custom settles, protectionist policies, public auctions for awarding public work contracts, access to credit, export assurance, governmental subsidies, legislation in competitive fields and protection against monopoles, price control, parallel economies, working legislation, legislation concerning the migration of the labour market.
- Social frame: efficient functioning of the justice system, private property protection and citizen's security, social cohesion, crime rate, social disparities (extreme poverty and extreme wealth), discrimination against minority groups.

► *The efficiency of the businesses*, who have a series of contributing indicators:

- Businesses productivity: working productivity, GDP/worker hour, productivity in industry, agriculture and services.
- Human resources: the oral cost of the labour market in the manufacturing sectors, the remuneration of the professional services, the remuneration of the managerial jobs, the number of days and hours of working/year, the working relations, motivations and labour market attitude, investment in training and professional guidance, the abilities and labour market forces, worker qualifications, the "brain drain" to foreign countries, a highly qualified and available labour market, the existence of a senior managers with an experience in international work.
- Financing: access to banking credit, the number of credit cards issued by banks, the volume of transactions made by credit cards, the evaluation of investment risk, the access to the risk capital (venture capital), the development of a banking-financing network (retail banking), the stock exchange capitalization, the transaction values and

the number of native companies listed in the stock exchange, the index of exchange values, the rights and obligations of the shareholders, the transparency of the financial institutions, the cash flow for the auto financing of the companies, corporate debt.

- Managerial practices: adaptability and flexibility in decisions, business ethics, managerial credibility, the administrating council capacity to survey and control the executive directors, the preoccupation for satisfying the client and marketing orientation, the corporative and social responsibility, the preoccupation for environment protection, consumer health and working protection.

► *The infrastructure*, which has some contributing indicators:

- Basic physical infrastructure: the land surface, arable fields, degree of urbanization, the dimension of the internal market, the density of the road network, the density of the railways, air transportation, access to the utilities, import and the production of energy and fuel, energetic intensity (the energy consumed for generating a single product unit), the cost of the energy for industrial consumers.

- The technological infrastructure: telecommunication investment, the number of telephone lines/1000 per inhabitant, the number of mobile telephones, the number of owned computers, the number of internet users, broadband services, IT abilities in the labour market, technological cooperation between companies, technological development financing, intellectual property protection.

- The scientific infrastructure: the budgetary expenses for research and development, companies expenses for research and development, the number of the wage earner~~s~~ researchers, the fundamental research for long term development, the number of published scientific articles, teaching science in schools, the license registrations (inventions, innovations) the use of the licenses to generate profits.

- Health and environment: health expenses, the hope to live and reproduce, the medium time life, the number of doctors and nurses relative to the population, medical services infrastructure availability, the human development indicator, alcohol and drugs abuse, recycling of packaging, used water treatment, carbon dioxide emission, life quality, population and environmental legislation.

- Education: education expenses, the ratio teachers' to children of school age, the number of graduates, the quality of superior education, the analphabetism degree, the comprehension of economic and financial notions among the population, the qualified engineering demand for the investors' needs, the technological and know-how transfer.

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