

A BRIEF ASSESSMENT OF ROMANIA'S COMPETITIVE LEVEL

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Abstract: The central issue of this paper is linked to competitiveness, in the context of integration in European Union. Big economic-social changes linked to: GLOBALISATION, FREE-TRADE, BUSINESS' INTERNATIONALIZATION, TECHNOLOGICAL REVOLUTION makes today competitiveness problems to become the problem number one, of surviving, for all leaders and economic and political decision factors.

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It is important to stop comparing us with ourselves, through exhaustive observations, with rich historical approaches, but to compare us with global dynamic, with international competitiveness, taking as reference point the best competitors, for each area. *Competitiveness* means the capacity of goods and services to resist at market test in profitable conditions, having as a result steady growths of productivity and life-standards. Competitiveness begins at local plan, so we must have: competitive inputs, competitive industries/suppliers and goods, competitive institutions to economy's support, loyal and evident competitiveness policies, free markets, with growing potential for our goods, sectorial strategies of export which can ground, basing on the „added value chain”, properly economic policies regarding joining/partnerships, taxes, investments, typical market's mechanisms of stimulation and promoting.

For Romania, integration to European Union represents a chance, but not a guarantee for passing to a superior competitiveness, because most of factors which ensure competitiveness, exclusively belongs to economic operators' capacity of restructuration and adaptation to further challenges, such as: frequently changes from competitive environment and free trade, Acquis Communautaire's endorsement (technological, environmental norms, standards, work legislation, etc.), goods and services restructuration, taxes and payments system's reform, growing of sale markets, new institutional and associative structures, using European funds, growing output costs through internal environment costs, international business, producers specialisation, capacity of using services for market, very sophisticated (logistic, management, ITC, consultancy, etc.)

Romanian companies must follow the convergence of their own productivity mechanisms with the one from UE, and not a convergence of products range or of competitive ways.

Competitiveness does not produce itself, it must be planned. Information is useful just if we use it to touch a well determinate purpose. Information has not to remain just a “final product” for market, it must become a “raw material in decisional process”, strategically planned.

This model represents a modern way of obtaining useful economic information using a certain set of criteria, from national, regional or international sources, which allow an analysis of competitiveness, in the context of European Union integration process.

The results of fuzzy analysis based on clusters are, at the same time exact and stiff, and they also allow a higher degree of flexibility of recorded results, unlike the classic mathematics' rigidity, and this again proves the compatibility of this technique with economic area, and, especially with the analysis linked to competitiveness.

It is easy to ascertain that countries hierarchy is, taking into account a series of criteria used to establish competitiveness ranks, an important measure, unsuitable with what is usually known, in case of countries hierarchy by criteria putted at the base of economic development level, mainly GDP/habitant.

The answer of this problem begins from a general formula: “global competitiveness in an area of economic theory which analyses facts and policies that design the ability of one nation to create and maintain a proper environment to sustain registration of increased values for its enterprises and for the prosperity of its people”. In this context it is specified that the notion of global competitiveness isn't, in necessarily way, an indicator of welfare, neither a potential indicator nor one of economic performance for different countries.

Global competitiveness is given by a different criteria combination, subordinated to a number of four global criteria: Economic Performance –macroeconomic evaluation of internal economy; Economic Efficiency –the measure in which enterprises realize their performance in a profitable and responsible manner; Governmental efficiency –the measure in which governmental policies are favorable to competitiveness; Infrastructure –the measure in which basal, technological, scientific and human resources are according to demands of business promotion.

Regarding at first criteria –*economic performance*- it is considered that this have to be approached and analyzed in a very complex manner. So, here are just a few of approaching manners of these criteria: - actually prosperity of a country also reflects it's economic performances from past; - competition governed by market's forces ensures long term performances for a nation; - more bilaterally internal competition, much competitive national firms when they act on external market; - a country's successful at external trade's level shows competitiveness of it's companies (if we do not take into account commercial barriers); - opening of one country to international economic activities, usually leads to the growth of internal economic performances of that country; - international investments determinate a more reasonable economic resources allocation at global level.

Second criterion taking in analysis –*business environment's efficiency*- supposes capitalization of some elements, as: - optimal efficiency, together with the adoption ability to changes in competitive environment, are important managerial attributes for firm's competitiveness; - a well developed financial system and integrated at global level sustain national economy's competitiveness; - maintaining a high living-level needs the integration of internal economy in the global one; - entrepreneurial spirit is decisive for economic activity, especially in it's incipient stage; - creating and maintaining an instructed labor force contributes in great measure to competitiveness' growth; - productivity is reflected at added value's level; - the attitude given by work affects positively or negatively competitiveness of one nation.

Referring to the third criterion –*governmental policy's efficiency*- the elements which define it are: - state's intervention in business activities can be in part minimized through creating conditions for existing loyal competitiveness between companies; - government can however establish macroeconomic and social conditions which are predictable, so, external risk for economic enterprises being minimized; - governments must be flexible in their activity, adapting their economic policies to the changes appeared in international environment (global); - public administrations have to offer a society's structure, based on correctness, equality and justice, destined to ensure people's security.

Last criterion taken into account –*infrastructure*- has an important role to ensure an internal and international competitiveness. This, at least, in following senses: - a well developed infrastructure includes an efficient business system and it sustain economic activity; - also, a modern infrastructure includes information's technology and efficient protection of natural environment; - competitive advantages must be obtained through innovative and efficient applications of existing technology; - investments in basal research and innovative activities are very important for a country in different stages of it's economic development; - long term investments in research-develop are made to grow up competitiveness level of firms; - life quality represents an essential part of one country's activity; - properly and accessible educational resources help to one economy's based on innovation and creativity growth.

In this way, it must be avoid the confusion that can appear by assimilating competitiveness' methodology, and, implicitly, of results with another concepts from the area of comparisons regarding economic development's level of countries. So that, a country with a high level of development is not necessarily a leader in competitiveness' acceptation, such another, with a lower level, isn't implacable placed on lower sits, if it answers to high competitiveness criteria.

Using international institutions' methodologies of evaluating, the study is basing it's analysis of some big categories of competitiveness' indicators: economic performance, investments, financial department, science/technology, infrastructure and governmental policies. So, measuring Romania's

competitiveness in this analysis can be realized through packs of “representative indicators” for the following areas: 1. Economic efficiency: -GDP/habitant, economic growth; 2. Investments; 3. Science and technology: -PC/1000 habitants, researchers and engineers, research and development, INTERNET servers, Hi-Tech exports; 4. Exports: export/habitant, 2007 export, tourism \$/habitant

Table no 1 presents competitiveness indicators’ values for European Union’s states. We have considered that is useful basing fuzzy analysis on this set of data, for surprising competitiveness for a few developed European Union’s states, for 2004 endorsed states, and also new entered in 2007.

Data presented in this table shows a few essential elements. In general terms, it can be said that indicators of economic growth referring to GDP (real growth of GDP in real growth of GDP per habitant), life-cost’s index, services export, rate of benefit tax of enterprises, global public debt, financing RDI activities (real growth of GDP), days number for a company’s foundation, and also the indicators resulted from the opinion investigation, which shows the growing of life’s quality, improving superior education which start to answer competitiveness’ needs, correlating linguistic abilities with companies needs, improving the management of public finances having a positive impact on Romania’s competitiveness growing and on occupancy actually position in 2007.

On the other side, direct investments from other countries, subventions, electricity cost for industrial costumers, current account balance, cashing for tourism, inflation, goods export, low level of research and health cost, together with another indicators obtained through opinion investigation in business environment, which means political instability risk, brains migration, a deficiency in managers credibility in society, companies carelessness for continue training of employees, implementation deficiency of ethics practices in business had a negative impact, reducing Romania’s competitiveness growth in 2007.

Table 1 - Competitiveness indicators

	GDP (% from UE GDP) – (1)	FDI mld eur – (2)	Reserch- development expenses (% from EU27 sum) – (3)	FOB exp (at 1 mld EUR) – (4)
Bulgaria	38,1	5,4	0,48	5,31
Cehia	81,5	5,9	1,54	13,18
Estonia	72,1	1,8	1,14	2,40
Letonia	58	1,3	0,7	1,67
Lituania	60,3	1	0,7	4,41
Hungary	63,5	15,6	1	14,70
Polland	53,6	2,8	0,56	21,61
Romania	40,7	6,5	0,45	8,26
France	111,2	86,1	2,09	240,31
Germany	113,2	35,8	2,53	141,12
Italy	101,4	22,1	1,09	143,23

Source: data from ECB, Eurostat, European Comission and IMF

(1) - GDP per capita in PPS, GDP per capita in Purchasing Power Standards (PPS) (EU-27 = 100) Gross domestic product (GDP) is a measure for the economic activity. It is defined as the value of all goods and services produced less the value of any goods or services used in their creation. The volume index of GDP per capita in Purchasing Power Standards (PPS) is expressed in relation to the European Union (EU-27) average set to equal 100. If the index of a country is higher than 100, this country's level of GDP per head is higher than the EU average and vice versa.

(2) - Foreign direct investment (FDI) is the category of international investment that reflects the objective of obtaining a lasting interest by an investor in one economy in an enterprise resident in another economy. The lasting interest implies that a long-term relationship exists between the investor and the enterprise, and that the investor has a significant influence on the way the enterprise is managed. Such an interest is formally deemed to exist when a direct investor owns 10% or more of the voting power on the board of directors (for an incorporated enterprise) or the equivalent (for an unincorporated enterprise).

(3) - **Total R&D expenditure - % of GDP** The indicator is defined as the percentage share of GERD (Gross domestic expenditure on R&D) in GDP. Research and experimental development (R&D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge.

(4) - **Exports in 1 000 million of ECU/EURO** Exports are expressed in value terms and measured fob (free on board).

The algorithm is applied for data set presented in the table, and optimal number of clusters is chosen through maximize average dimension of data set's silhouette. Table no 2 means optimal partition.

Applying the fuzzy analysis based on clusters shows a high degree of data dispersion, the Dunn coefficient being in this case approximately 0.5, and medium dimension of silhouette showing the measure in which formatted groups are different between them, being approximately 0.48, showing the fact that structure is present.

Table 2 - Coefficients matrix
Case with n=11objects (states) and p=4 variables (competitiveness criteria)

0.946303	0.053697
0.732893	0.267107
0.937249	0.062751
0.925461	0.074539
0.854111	0.145889
0.789363	0.210637
0.889915	0.110085
0.935132	0.064868
0.237130	0.762870
0.142793	0.857207
0.130962	0.869038

Source: own estimations

Dunn = 0.548732

Silhouette = 0.489935

For the 2007 considered moment in this analysis, the optimal number of clusters is two (on countries groups), from competitiveness point of view (which is depending by 4 criteria: economic efficiency, investments, science and technology, exports): the bolded ones (values which correspond to the 11 countries) from the first and the second clusters, a group including: Bulgaria, Czechia, Estonia, Lithuania, Letonia, Hungary, Poland and Romania, and the second one, including France, Germany and Italy.

As we can also observe from the graphic representation of clusters, and countries position inside them –for a part of criteria Romania has an unfavourable position, this situation not compulsory being a negative trend from the point of view of obtained performances at internal plan, but the fact that, were although registered economic growths, year by year, comparing with growths registered by another country, these were bigger and relatively more homogenous distributed on the considered criteria's area.

If we focus on the results, we can see some significant conclusions. Main problems of Romania are: microeconomic liberalisation, sustaining entrepreneurial initiative and macroeconomic stability, which will lead to budgetary conditions worsen. Romania in confronting with more worsens of competitive capacity, shown by structural flaws of politic, economic and institutional environment. General worsen of competitiveness appears like this; -because of reforms delay, there is an uncertainty regarding durability and stability of politic options, regarding solutions of restructure and economic development: -although, there already exist an action plan, because the delay of institutional and managerial reforms, there are big uncertainties regarding the capacity of transforming words in real facts, and of establishing objective priorities; -the way of law's application destabilises economy's or whole society's competitiveness; -the weaken political and institutional frame abrades country competitiveness by discouraging investments; -banking system is unprepared yet, with a low capacity of intermediation, high capital costs, deficient financial discipline, poor allocation for credits, limited specialised services, but in process of formatting; -corruption and untransparent procedures diminish Romania's competitiveness and attractiveness, as destination for foreign

investments; -physical infrastructure is relatively poor, and it affects territorially economic development -mechanisms and institutional frame's delay on hiring high technologies and economic activities with big added value abrade competitiveness and real economy's growth; -although labour force is cheap (uncertain comparatively advantage), it's missing the capacity and entrepreneurial approach and a properly management system. Information's liberalisation implicitly supposes easy access to information. In Romania, paradoxically, access to information is predominantly based on paid services, which explores bureaucracy, as a raw material; - in the process of elaborating governmental policy, it is missing private sector consulting, and elaborated policies do not reflect attention and do not have private sector's support; - there are missing necessarily links and reactions between civil society actors, between NGOs and government, having a marginal impact in influencing social and economic policy.

Recommendations regarding further actions for growing Romania's competitiveness are given by professional, technical, business, consulting and social associations structure, in specialized networks by "Business Support Organizations" which will protect professional branch interests, and which will make adequate sectorial policies, collaborating with public administration and strategic investors.

a) In private sector, - new competitive firms must realize a direct exposition to the most exigent customers and markets, adapting their products, services and strategies as permanent research-development activities (by assimilating the best practices). This can constitute an impulse for receptivity and opening to innovation and permanent change (perfecting); - innovation's introducing in Romania, with the support of some professional networks supporting private investors and some governmental mechanisms, especially created for introducing in production the research's and innovation from specific areas; - encouraging industrial, inter-institutional, horizontally and vertically between factories groups and syndicates, on usually contractual bases, with staked out strategic objectives respectively industrial branches, and on the "vector product" base, caste anchor and designed to market or final users' demands; - step by step transforming of coarse, versatile industrial activity in an activity of industrial assembling and fitting, with collateral services, very specialized and professional, including industrial or civil building sector; - a better cooperation between public and private sector for developing international trade and investment's climate, access to markets and technology. Replacing good-intentions statements through institutional structures and economic-financial mechanisms, of market, created for concrete and punctually objectives.

b) In public sector, - Groups and Professional Industrial associations (specialized networks for Business Support Organizations) which will analyze economic and institutional reforms, for specific economic sectors; - Education must be linked to practice through studies and concrete researches to real economy, for developing analytic and managerial abilities, regarding: educational disciplines centered to markets and customers, consulting, impact studies, cost-benefit analysis, interdisciplinary approaches, investments, software, demands of European integration for specific domains.

Romania presents main discrepancies of competitiveness reporting to the western and central European states. Reasons which determinate these delays are at the level of all elements which determinate competitiveness capacity. Finally, all of them can be translated in a low productivity, which defines Romania's competitiveness problem. The GDP level at PPC represents just 50% from the average of states members of the UE, integrated in 2004.

After we had analyzed actual situation, we can see an unfavorable situation at many factors which influence competitiveness. In spite of registered progress regarding privatization, efficiency, and financial sector settlement, firm access at capital still remains limited. Using some old technologies and equipments, which need much energy, reduces productivity in most of industrial sectors. The SME sector is the most affected one, through quasi-absence of some specific financial instruments, some guaranteed schemes, for supporting market access in perspective of supporting competition's growth in all domains, and although through very limited access to technology. Scientific researches had to suffer because of the lower and lower level of investments from public and private sector, of high-qualified specialist's number and as a result of a lower number of excellence centers.

At internal demand's level, solvability is low, taking into account the average of net wage. Demand's sophisticated level in a lot of area is under the European average. In these conditions, internal pressure for certificating and standardization were very low, and this fact limits penetration's capacity

of Romanian goods on external markets, and, finally, the competitiveness on its own market, in conditions of integration in EU and trade liberalization.

Regarding companies' strategies and competition, taking into account low abilities in management area, they represent a permanent deficit and they can be meeting at all levels. Most national firms are still basing their competitive strategies on low costs and not on improving productivity. Innovative firms represent three or four times less as percent in total companies, comparatively with European Union. Intellectual property's protection had made justice progresses, but not so practical. There isn't an infrastructure of sustaining innovative start-up, and past initiatives (business incubators) do not have continuity, because of improperly planning and management.

About connected industries and support services, Romanian economy presents important flaws. Many economic sectors had been developed as a result of natural advantage (wood's processing, construction's materials, and tourism), or as a result of major state intervention (machines and big equipments). Both reasoning had determined a lower level of aggregation and cooperation in the same sectors, with serious flaws regarding, ensuring some quality inputs for final goods and some distribution networks, and innovational or promoting companies. Business infrastructure presents various delays, and support services have still a low level of development. The SME sector, which hires almost 2 millions persons, does not practically have access to specialized consulting services.

And there are another determined competitiveness' factors, which aren't directly included in this strategy, but which can be analyzed in a strong correlation with the process of competitive development. Infrastructure presents important flows, quantitative and qualitative, after decades of insufficient investments. The access to university education remains under regional average, with an unfavorable situation in what regards graduated people from country-side (corroborated with a low level of urbanization at the whole country level).

Taking into account things presented before, like in case of other central-European states, Romania has to base its real convergence perspective on two directions: *Structural Management Transforms*: macro-stability, social and health, and *Management of competitiveness' improving (horizontal policies)*: -Innovation, Informational Society, -SME and entrepreneurial, Human Capital Development. According with the action lines proposed by European Commission regarding the frame of Competitiveness and Innovation 2007-2013, the priorities for Romania's competitiveness strategy are: - Improving companies access of market, capital, technology, especially of small or medium ones; - Developing economy based on knowledge, including innovation promotion, and also developing a competitive informational society; - Improving energetic efficiency and valuating regenerated energy resources. These priorities take into account the directed lines proposed by European Commission for cohesion policy 2007-2013. So, Romania's priorities were confirmed by the expressed intention of Commission to sustain the following processes: - improving finances access; - growing and improving investments in Research and Development; - innovation facility; - promoting informational society; - solving the problem of intensive consumption of energy from traditional sources at European level.

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