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The economic crisis has given the opportunity for the world to reconsider the use of resources, so the subject of competitive advantage has became actual. There are several relevant papers on national competitiveness, but we consider that there are still important issues to discuss in order to identify the economic sectors in Romania that have the potential to create successful products for the global market. The paper applies modern competitivity models on the features of our country, and concludes about the best use of our resources, in terms of increased productivity and optimal results. The goal is to encourage exporters to extend on several international markets and multinational companies to invest in developing new businesses in Romania.
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## 1. Introduction

The competitive advantage of a country refers to it's ability to offer products or services on the global market, at the best price/quality ratio on a certain moment in time, and the national strategy for development should indicate the directions for assuring the sustainability of present competitive advantages and identifying new ones as the demand and offer on the global market changes. Obviously, the global financial and economic crisis, which started in 2007, had a strong impact on the global prices and sales on international markets. For example, the oil demand has decreased in 2009, and the price has fallen almost a $100 \$$ a barrel from a record high of $147,27 \$$ a barrel. The consumption of oil worldwide can show a good perspective on the slowdown of the global economy.
In this context, it is vital to reconsider our position on the international market, as a recovery after an economic crisis is always a time for earning new advantages or losing former ones. It is up to the country's leaders to formulate a winning strategy at this critical moment, and the economists must do their best to offer the theoretical basis for it.

## 2. Literature review

The main reference paper on the subject of national competitiveness is Competitive Advantage of Nations (Porter, 1990), where the author develops the diamond model, proposing five factors that influence a country's competitivity on the global market. In his book, Porter argues that national prosperity is not inherited, but created under the influence of indigenous and exogenous variables. The indigenous variables are Factor Conditions, Firm Structure, Strategy and Rivalry, Related and Supporting Industries, and Demand Conditions. The exogenous variables are Government and Chances.
There were several developments of Porter's model, which are briefly presented in Figure 1.

Figure 1: Extensions to the Diamond Model


Source: Moon, Hwy-Chang, 2006, Competition and Cooperation between Korea and Japan: A Business Perspective, 21COE, University of Tokyo MMRC Discussion Paper No. 65

The horizontal axis shows the extension to the diamond model in terms of the sources of national competitiveness. The vertical axis, on the other hand, demonstrates the extension with regard to the scopes of national competitiveness.
The two extensions double the original single diamond in two distinct ways. Model 2 in Figure 1 introduces a new diamond of human factors as an extension to sources of national competitiveness.
On the other hand, Model 3 doubles its original diamond as an extension to scopes of national competitiveness, from a domestic context to an international context. Thus, the integration of these two extensions into a single framework results in a dual double diamond. At the lower right hand corner of Figure 1 is the DDD model, encompassing the previous extensions. The DDD model considers both physical and human factors in both domestic and international contexts. ${ }^{72}$ There are two international institutions that publish national competitiveness reports: the International Institute for Management Development (IMD) and the World Economic Forum (WEF). The first report was published in 1989, when the two institutions were not divided, and they started to develop separate reports since 1996.

Table 1: Original models of the two reports (1996-2000)

| IMID Report (1989-2000) | WEF Report (1996-1999) |
| :---: | :---: |
| Domestic Economy | Civil Institutions |
| Internationalization | Openness |
| Government | Government |
| Management | Management |
| Finance | Finance |
| Infrastructure | Infrastructure |
| Science and Technology | Technology |
| People | Labor |

Source: Cho, D.S. and Moon, H.C., National Competitiveness:Implications for Different Groups and Strategies, International Journal of Global Business and Competitiveness 2005, Vol. 1, No. 1, pp 1-11

[^0]We can see the similarity of factors which are taken into consideration by the two reports, still they have different views on the definition of competitiveness and their models have been evolving over years, as it can be seen in Table 2.

Table 2: Revised Models of the Two Reports

| IMD Report (2001 - 2009) | WDF Report (2001-2009) |  |
| :---: | :---: | :---: |
| Economic | Aggregate Country | Macroeconomic |
| Performance | Performance Indicators | Environment |
| Government | Public Institutions, Law | Public Institutions, <br> Corruption |
| Business | Company Operation \& | Domestic <br> Efficiency |
| Strategy | Competition |  |
| Infrastructure | General Infrastructure | Cluster Development |
|  | Technological Innovation | Information and <br> Communications <br> and Diffusion |
|  | Environment Policy |  |
|  | Comnology |  |

Source: Cho, D.S. and Moon, H.C., National Competitiveness:Implications for Different Groups and Strategies, International Journal of Global Business and Competitiveness 2005, Vol. 1, No. 1, pp 1-11

## 3. Research metodology

After comparing the models found in the relevant litterature on the competitive advantage theme, we chose an extension of Porter's diamond model, the nine-factor model proposed by Cho, 1994; a comprehensive scheme is presented in Figure 2.

Figure 2: The nine-factor model


Source: Cho, D.S. and Moon, H.C., National Competitiveness:Implications for Different Groups and Strategies, International Journal of Global Business and Competitiveness 2005, Vol. 1, No. 1, pp 1-11.

The study we conducted applies this model on Romania, identifying the main features of each factor mentioned in the figure above. The informations were colected from official websites, reports and surveys among key-decision makers in the central administration.

## 4. Investors view on the competitive advantage of Romania

Sustaining the exporting activity is a rather difficult task for the goverment, as the economic situation doesn't seem to improve rapidly and the budgetary expenditures must be reduced.
So we can identify two main directions that should be included in the strategy for sustaining the romanian exports: the first one is offering taxe reduction for the sectors which are identified as main export industries and te second one is to attract foreign investors for these.
Long-term investors seek attractively priced companies with prospects for sustainable value creation. Value creation means a company generates returns in excess of the cost of capital on its investments. ${ }^{73}$
Companies with global activity seek optimal supplying for material and components and choose locations for production in countries where they can get the highest scale economies.
Other resources that should be taken into consideration are the natural resources, like surface and underground waters, fertile agricultural land, oil and gas.

The table below shows the major macroeconomic development of Romania during 2005-2009.

|  | UM | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GROWTH AND ASSOCIATED FACTORS |  |  |  |  |  |  |
| GDP growth | $\%$ | 4.2 | 7.9 | 6.2 | 7.1 | -7.2 |
| Final consumption (\% in <br> GDP) | $\%$ | 69.5 | 68.9 | 66.9 | 64.8 | 62.8 |
| Gross Fixed Capital <br> Formation (\% in GDP) | $\%$ | 23.7 | 25.6 | 30.2 | 31.9 | 25.6 |
| TRADE AND INVESTMENT | Mil. Euro | 22255 | 25850 | 29549 | 33614 | 29036 |
| Exports FOB | Mil. Euro | 30061 | 37609 | 47371 | 51813 | 35790 |
| Imports FOB | Mil. Euro | -7806 | -11759 | -17822 | -18199 | -6754 |
| Trade balance | Mil. Euro | -6888 | -10156 | -16677 | -16877 | n.a |
| Current account deficit |  |  |  |  |  |  |


| INFLATION |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| CPI (average) | $\%$ | 9.0 | 6.56 | 4.84 | 7.85 |

## EMPLOYMENT

| No. of employees in <br> economy | Thou. pers | 4559 | 4667 | 4885 | 4806,0 | 4594,6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Unemployment | Thou. pers | 523 | 460 | 367 | 403 | 709 |
| Unemployment rate | $\%$ | 5.9 | 5.2 | 4.0 | 4.4 | 7.8 |

EXCHANGE RATE

| RON/USD (average) | - | 2.9137 | 2.8090 | 2.4383 | 2.5189 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| RON/EURO (average) | - | 3.6234 | 3.5245 | 3.3373 | 3.6827 |

FOREIGN DIRECT INVESTMENTS

|  | Mil. Euro | 5237 | 8723 | 7047 | 9308 |
| :--- | :--- | :---: | :---: | :---: | :---: |

Source of data: INS, BNR, Eurostat

[^1]As political advantages we can name the EU and NATO membership and as geographical location, Romania is situated at the turning point between EU, the Balkans and CIS countries, Romania is crossed by three important pan-European transportation corridors: corridor no. IV linking Western and Eastern Europe, corridor no. IX connecting Northern and Southern Europe and no. VII - Danube River, facilitating inland water transportation, at the same time connecting the Romanian Port of Constanta (the biggest Port to the Black Sea) to Northern Europe, through the Rhine. ${ }^{74}$
An increased interest of Foreign Investors has been noticed, Romania was found as leader destination for FDI in the region in a survey by Ernst\&Young, April 2008. ${ }^{75}$
Still, the effects of the financial crisis can be observed at the level of Foreign Direct Investments in Romania, which has decreased in 2009, by almost $50 \%$ compared to the previous year.
An important resource advantage which our country can offer is a highly skilled labour force at competitive prices. The main sectors identified by the Romanian Agency for Foreign Investment are IT, engineering, and foreign languages use.
The premises for the development of the IT sector are insured if we take into consideration the numbers revealde by recent studies. There are over 13.000 IT companies in Romania ( 9.000 of which are exporters) and $€ 400$ million in software and IT services revenue each year.
As for the specialists in the IT sector, our country is the European leader and 6th in the world, in the number of certified IT specialists it produces: 230 IT specialists per million people graduate every year, one of the highest rates in the world and greater than that of the US and Russia. ${ }^{76}$
The Romanian market is, following Poland's, the second largest market in Central and Eastern Europe, with the fastest growing and the fourth IT market in Europe. Romanian companies serve the world's most demanding offshore customers in IT outsourcing, business process outsourcing, call center support, and product development.

## 4. Conclusions

In terms of implementing business projects, Romania offers an incredible potential for obtaining high profit margins. Whether they are situated in the western part of the country where business has grown bringing high rates of FDI, or the North Eastern area where lower FDI but high availability in terms of labor pool and land, locations for implementing business projects are spread all over the country. ${ }^{77}$ Investors can choose between greenfield or greyfield investments, as locations for buying or renting are available at lower prices than in developed countries in the EU, and there are several existing plants, which can be bought at acceptable prices, and can be modernised at affordable costs.
As for the main sector that has the greater potential for exports, is the IT sector we recomand that invetments should be encouraged by taxes reduction and special condition in credit offers.
The industry has two main segments: IT services and hardware production. Both segments will be drivenby some large projects for the upgrade and extension of IT systems in large Romanian companies, in banking, telecom, utilities or manufacturing, areas where the privatization process or fierce competition play key roles in IT adoption.
As for the exports of the Romanian IT sector, there are already foreign companies that are using services for software testing or creation and others that have delocalizated their call centers for customers support. National policies should encourage investors to choose Romania for establishing their offshore businesses.

[^2]
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