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SUMMARY OF PhD' THESIS

FOREIGN DIRECT INVESTMENT AND ROMANIAN EXPORT COMPETITIVENESS

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Keywords

Foreign Direct Investment, competition, competitiveness, exports, multinational companies, productivity, performance, competitiveness indicators, indices, direct effects, indirect effects, stock, investment flow, gross domestic product, determinants, regression analysis, market share, exchange rate, real efective exchange rate, competitiveness index.

Summary

This paper aims to identify the nature of relationship between FDI and exports of Romania, in order to establish a causal relationship between the two variables. The question that we want to be explicit is related to the degree and manner in which foreign capital contribute to Romania's exports and, especially, how it affected their competitiveness.

Analyzes that aimed the relationship between FDI and host country focuses on the impact on the whole economy (or just trade in general), as well as its subcomponents. This approach focuses on the relationship between FDI and host country's exports, given the importance of economic policies based on export promotion, a phenomenon that has gained amplitude for developing countries. Concrete situation of Romania's exports where is a clear influence of foreign capital requires an that way approach.

Given that competitiveness is a concept with broad implications for many aspects of economic life, we necessary considered in the first chapter, entitled **Export competitiveness. Conceptual delineations,** to channel its meaning strictly to exports of an economy.

In this regard, we have identified specific elements that differentiate export competitiveness from economy competitiveness. Thus, in terms of exports, competitiveness is only one side of economy competitiveness and it translates into sustained presence in international markets.

To remove as much of the elusive nature of the concept and given the economic complexity that lies under the competitiveness, at the end of chapter we deal with export competitiveness forms and how they can be quantified. There was divided into two main categories: price competitiveness and non-price competitiveness.

Investigation of basic theories that provide development support of interaction between FDI and exports, are the main target of the second chapter FDI – export competitiveness. Theoretical approach. In this sense, the "flying geese" model developed by Kaname Akamatsu in the 1960s, product life cycle theory of Raymond Vernon (1966) and more recent theory of multinational companies put on paper by John Dunning, it constitutes in as many starting points for what is meant to be an analysis of the competitiveness of Romanian exports, with the FDI inflows as main variable.

FDI affect the export capacity of an economy in two ways: directly and indirectly.

In general, the views are converging on direct effects, these materializing in MNC subsidiares share that is held in the host country's total exports. Direct effects are the first that appear and are immediately visible when MNC begin to work, while the export is part of their strategy.

Indirect effects refer to the links that form the capabilities channels transfer from MNCs to local exporters.

In the indirect methods of action we find embodied aspects like:

- Technology transfer that translates into high productivity;
- Adoption of new management and international marketing techniques;
- Demonstration effects, the imitation of certain activities of foreign affiliates;
- Reproduction of certains products and discovery of technological processes by which literature define as reverse engineering.

In all cases, indirect effects succeed to direct effects and, even if they are very difficult to quantify, their importance is far superior in terms of long-term contribution to the economic development of the host economy. Export growth due to the direct activity of MNC subsidiaries will cease once the relocation of their production. In contrast, indirect effects will continue to influence export capacity through local companies.

Since the second part of the paper, namely Chapter III, **FDI** – **exports relationship in Romania,** are capitalized previous findings by extracting and highlighting features generated by the presence of FDI-export competitiveness relationship.

We focused on the two main components of the study, namely FDI and exports generated by them.

Regarding the trend of FDI inflows orientation, evolution is not favorable from the point of view of the positive effects generated in the export field. Although the share of manufacturing in total Romanian exports cumulate over 90 %, FDI flows to this sector declined by over 20% during 2003 – 2010, from 51% to 32%. Moreover, this reduction was achieved at the expense of sectors that generate non-tradable goods and services, financial trade and insurance respectively. First grew quite significant from 9,1% in 2003 to over 20% in the year 2010.

On export orientation, European Union remains the main partner of the Romania, with percentages between 60% and 74%.

Besides geographical proximity and tariff barriers, this is based on the existence of pretty good complementarities of trade. Values above 60%, sometimes approaching 70% of the Trade Complementarity Index show that export offer folds quite well on partners demand.

From the point of view of the processing stage we found that are two trends fairly well defined. First, capital goods increase by almost threefold, reaching a level of over 20% in 2010. Second, consumer goods significantly reduce their share in the structure of exports by almost half compared to the beginning of the period under review.

Regarding the export of high-tech products, trends are positive. Indeed, since 2000, currently, their share in total exports has

doubled, but the percentage remains quite low, about 11% of the total.

In terms of export volume, most of it (70%) is achieved through foreign-owned companies, but this does not necessarily mean more competitive due to specific characteristics of FDI.

Trying to identify competitive products as defined in the WTO (over 3,5% share in world exports for periods of at least two consecutive years), the results are disappointing. During 2006-2010, Romania parade with only seven groups of such products of which, two lose their status in 2008 (shoes and shirts and blouses for women) ant two in 2010 (tram and railway cars and ships including warships and lifeboats other than rowing boats). Thus, in the year 2010 there are three product groups with which Romania can boast worldwide.

Unfortunately or fortunately, only in one case the contribution of foreign capital is present: footwear industry. But in this situation, lohn system erodes what could translate into pure competitive products.

We also watched how multinationals activity is reflected in the evolution of the main indicators of export performance, trying to identify a correlation between sectors dominated by foreign capital and performance indicators corresponding to these sectors.

In general, the analyzes showed a direct link between the quartering of FDI in a particular industry and the positive development of Revealed Competitive Advantage index.

Some industries such as electrical and electronic equipment, motor vehicles, tobacco and products thereof or the rubber, which is predominantly foreign capital, have even managed to pass the subunit values of Comparative Advantage Index to the above unit values which implies a certain degree of specialized in the export of these products.

The contribution of FDI to the degree of diversification of

exports is pozitive but quite small, majority foreign-owned sectors recorded assessments in terms of the index (Herfindahl-Hirschman) that measures the size of export competitiveness. Launch or relaunch of sectors such as IT, electronics and chemical industries confirm the contribution of FDI to the degree of diversification of production for the foreign market.

Regarding the differentiation of Romanian exports to world exports, FDI have not contributed positively, oon the contrary, evolution of the Diversification Index showing a tendency to align at the global trend.

In the last chapter **Analysis of FDI** – **Romanian export competitiveness binomial,** there was a FDI – exports relationship approach in three phases.

First, we determined the nature of the relationship between FDI stocks and nominal value of exports, whose theoretical foundation stance within UNCTAD. According to it, the most obvious face of the export competitiveness is given by the nominal growth. Thus, an increase of 1 billion lei in stock of FDI translates into an increase of 0,28 billion lei in exports in the short term and 0,56 billion lei in the long term.

Secondly, an analysis of export competitiveness through constant market share approach identified the factors and how they contribute to support products in the international competition. Thus, the competitiveness of exports generated by FDI enterprises is based on price, supported by cheap labor.

A final approach is to build a composite index of competitiveness of Romanian exports, aiming to establish the level of export competitiveness in a regional comparison with major competitors. Composite index reveals an unfavorable position compared to its main competitors (Bulgaria, Czech Republic, Hungary, Poland and Slovakia), but with a trend indicating a higher speed in catching competition.

The positive effects of FDI on export volume were confirmed by statistical analysis results. Thus, FDI stocks directly and positively affect exports.

Statistical model used to determine the nature of the links between FDI and exports of a country, model recomended by the OECD, pointed out that, alongside the real exchange rate, the specific attributes of FDI plays a positive but secondary role in growth of exports.

In general, the degree of export competitiveness is given by market share. In case of Romania it is among the lowest at the EU and worldwide level. However, at the level of trend there is a slight increase.

Market share shows the competitiveness, but equally important are changes and its determinants. It is essential to know the nature and extent to which certain factors have contributed to movements recorded in export market shares.

For this purpose, using constant market share analysis gave us the opportunity to discover the essence of the ability to compete in exports. The results revealed the following:

- Increasing export quotas was achieved in overwhelmingly based on competitive effect;
- Contribution of structural effect is minimal in supporting export quotas.

In turn, the competitiveness effect decomposes into price competitiveness and non-price competitiveness. Of the two components, the first major determinants can lead to reduced labor costs and higher productivity. FDI can influence productivity, but the labor cost is a specific element of the Romanian economy.

With the productivity of companies in the Romanian economy is half of the European average, price competitiveness had the support of low labor cost. In this case, the merit of MNC is to exploit the comparative advantages of local labor.

Unfortunately, the low labor cost is the most fragile competitive advantage of a country. The index of real effective exchange rate, combined with the unit labor cost, show a rapid loss of competitiveness in this regard, due to wage increases.

Contribution of FDI on productivity is minimal, statistical analysis revealing a very low determination report. This result is fully consistent with the last World Bank official positions that support a slower productivity growth in foreign companies in Romania

Regarding the competitiveness effect, position that MNCs could act most effective is non-price competitiveness. At this point, its contribution to the total competitiveness effect is marginal, MNCs were not directed towards the development of innovative research centers in Romania.

Structural effect, respectively the strategic orientation of exports towards products with growth potential and positive outlook for markets is another component that can influence the market shares. In Romania, the analysis revealed a small contribution of this tipe of effect to relative increase in export market shares. However, it can have desastrous consequences if not taken into account in determining export strategies.

With the data shows a massive concentration of export activity around the MNC, actually around a small group of MNCs, we can say that the attribute "Romanian" associated to exports reflects strictly geographic area where production and labor force is localized.

Selected references

- 1. Aitken, B., Hanson, G.H., Harrison, A.E. (1997), Spillovers, Foreign Investment, and Export Behavior, *Journal of International Economics*, 43;
- 2. Akamatsu, K. (1962), A historical pattern of economic growth in developing countries, *Journal of Developing Economies*, 1(1):3-25,
- 3. Balassa, B. (1964), The Purchasing-Power Parity Doctrine: A Reapraisal, *The Journal of Political Economy*, Vol.72, No.6, pp.584-596, The University of Chicago Press;
- 4. Bîrsan, M., Buiga, A. (2008), FDI in Romania: Evolution and Main Types of Large Firms in the Manufacturing Sector, *OECD Global Forum on International Investment*;
- 5. Blomstrom, M. (1990), *Transnational Corporations and Manufacturing Exports from Developing Countries*, United Nations Publications,
- 6. Boscaiu, V., Mazilu, A. (2001), Investițiile străine directe și competitivitatea industriei prelucrătoare din România, CRPE-Lucrare Nr.29-Noiembrie;
- 7. Buckley, P.J., Wang, C., Clegg, J., Kafouros, M. (2007), The Impact of Foreign Direct Investment on the Nature and Intensity of Chinese Manufacturing Exports, *Transnational Corporations*, Vol.16, No.2;
- 8. Cho, D.S., Moon, H.C. (2005), A New Stage Model and Its Aplication to Asian Countries. From Adam Smith to Michael Porter: Evolution to Competitiveness Theory, *World Scientific, Asia Pacific Business Series*, 2;
- 9. Dunning, J.H. (1992), *The Competitive advantage of countries and the activities of transnational corporations*, Transnational Corporations, 1 February, No.1, 135-168;
- 10. Ekholm, K., Forslid, R., Markusen, J. (2007), Export-Platform Foreign Direct Investment, *Journal of the European Economic Association*, MIT Press, Vol. 5(4), p. 776-795, 06.
- 11. Girma, S., Kneller, R., Pisu, M. (2007), Do Exporters Have Anything to Learn From Foreign Multinationals?, *European Economic Review*, No.4;
- 12. Gugler, P., Brunner, S. (2007), FDI Effects on National Competitiveness: A Cluster Approach, *International Advances in Economic Research*, Vloume 13, No.3, 268-284;
- 13. Hunya, G., Holzner, M., Worz, J. (2007), How to Asses the Impact of FDI on an Economy?, OECD;
- 14. Iorga, E. (2010), Competitivitatea Exporturilor Românești: quo vadis?, BNR, București;

- 15. Kaminski, B., Ng, F. (2004), Romania's Integration into European Markets: Implication for Sustainability of the Currnt Export Boom, *World Bank Policy ResearchWorking Paper 3451*;
- 16. Ketels, C. (2010), Export Competitiveness: Reversing the Logic, WBP;
- 17. Kogut, B. (1991), Country Capabilities and the Permeability of Borders, *Strategic Management Journal*, Vol.12, 33-47;
- 18. Krugman, P.R. (1979), Increasing Returns, monopolistic Competition and International Trade, *Journal of International Economics*, No. 9, pp.469-479, North-Holland Publishing Company;
- 19. Lall, S. (2005), FDI, AGOA and Manufactured Exports by a Landlocked, Least Developed African Economy: Lesotho, *QEH Working Papers*, University of Oxford.
- 20. Lipsey, R.E. (1999), Affiliates of U.S. and Japanese Multinationals in East Asian Production and Trade, *NBER Working Paper*, No. 7292, disponibil la http://www.nber.org/papers/w7292
- 21. Mauro, F., Forster, K. (2008), Globalization and the Competitiveness of the Euro Area, European Central Bank, Occasional Paper Series, No. 97;
- 22. Mises, L. (1995), *Politici Economice. Gânduri pentru cei de azi și cei de mâine*, disponibil on-line la http://mises.ro/162/;
- 23. Moon, H.C., Rugman, A.M., Verbeke, A. (1998), A Generalized Double Diamond Approach to the Global Competitiveness of Korea and Singapore, *International Business Review*, 7, (1998), 135-150;
- 24. Narula, R., Wakelin, K. (1995), Technological Competitiveness, Trade and Foreign Direct Investment, *Structural Change and Economic Dynamics*;
- 25. Porter, E. M., Ketels , C., Delgado, M. (2008), The Microeconomic Foundation of Prosperity: Findings from the business Competitiveness Index, *The Global Competitiveness Report*, 2007-2008, WEF;
- 26. Porter, M. (1998), *The Competitive Advantage of Nations*, Free Press, New York, 1990;
- 27. Rodrik, D. (2009), Growth After the Crisis, *Commission on Growth and Development*;
- 28. Rugman A.M., Van den Broeck, J., Verbeke, A.J. (1995), Global Strategic Management Beyiond the Diamond, Greenwich, Conn: JAI Press;
- 29. Samuelson, P.A. (1964), Theoretical Notes on Trade Problems, *The Review of Economics and Statistics*, Vol.46, No.2, pp. 145-154;
- 30. Smith, A. (2011), Avuția Națiunilor, Ed. Publica, București;
- 31. Vuksic, G. (2005), Impact of Foreign Direct Investment on Croatian Manufacturing Export, *Financial Theory and Practice* 29(2), 131-158;