



**THE ROLE OF TRADE OPENNESS IN THE CHINESE INWARD FDI IN
CENTRAL AND EASTERN EUROPE**

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Biographical Note

Gabor Fazekas is a PhD student at the Doctoral School in Regional Policy and Economics at the University of Pécs, Hungary. His subject is the Chinese investments in Central and Eastern Europe with the aim to find and analyse macroeconomic indicators (GDP, infrastructure, labor force, natural resources, taxation, trade etc.) which can help to attract FDI from China.

Abstract

The main objective of this paper is to understand how Chinese investments can be associated with the level of trade openness in Central and Eastern Europe. The scientific literature usually emphasizes the positive effects of trade and highlights its role in the ability to attract foreign capital however, the attraction can vary from country to country and sector to sector. In recent study the dependent variable was the Chinese inward FDI stock. The correlation analysis highlighted the fact that there are differences between the Central and Eastern European countries in terms of how the Chinese investors react to the level of trade openness. It was found that Chinese investors' motivations could be influenced by the independent variables only in a few countries in the region like Bulgaria, the Czech Republic, Estonia, Hungary, Lithuania and Romania.

Keywords: China, Central and Eastern Europe, FDI stock, correlation analysis, trade openness

JEL Classification: F21, F13, E69

1. Introduction

In the age of globalization, both trade and foreign direct investment have become extremely important indicators of small and open economies especially such as Central and Eastern European countries. The regional countries consider these two factors to play a prominent role since both contribute to economic development, revival of innovation, technological improvement and productivity as well. After the enlargement of the European Union, the foreign investment climate and trade activity have developed in the region. Thanks to the liberalized trade and investment policies, commercial and economic ties have quickened and become closer also with those countries previously considered less significant partners in Central and Eastern Europe. One of the best examples is the case of China which can be said to have become one of the most important trading partners of the EU over recent years.

Based on the unbroken willingness to invest and the significant exchange of goods, this paper aims to answer the question whether trade openness in the region can affect the Chinese investors' decisions and if so, which countries are affected and by what extent. The study is part of China's research with the idea to map the Chinese investors' motivations and to analyze the ability to attract foreign capital in the Central and Eastern European region. Chinese commerce presumably can be associated with their investments due to the fact that one of the primary aims of China's foreign investments is the development of trade with individual countries. China is determined to find markets for their products as the Chinese economy is largely oriented to investments and export. The first steps have been made to mitigate the excessive export-oriented economy however, the transition to the consumption-oriented economy is less likely to take place quickly so the world can still count on massive Chinese trade activity.

2. Literature overview

The scientific literature essentially agrees that there is a relationship between FDI and trade however, its extent could be significantly different from sector to sector and country to country. A part of the research is to understand whether inward FDI and trade are substitutes or complements to each other. Some experts discuss the causality between trade openness and FDI, examining whether a liberalized market can expand the options of a country to attract foreign capital or vice versa. Over the past decades, a vast of theoretical literature has been carried out about trade openness however, this study is dedicated to the practical side of the subject and consequently empirical literature will be described primarily.

Trade openness can affect investors in positive or negative way at the same time. On one hand the more significant a country's trading activity is the more attractive it can be for investment

purposes because the investors could get knowledge of the local conditions in the respective market therefore their money can be considered to be in a safer environment. However, negative effects can occur since investors can face greater competition in a commercially active market.

Pourshahabi, Soderjani and Mahmoudinia examined the relationship between trade and FDI among 16 developed countries in Europe¹ (Pourshahabi, Soderjani and Mahmoudinia, 2013). Their study confirmed that trade openness has a significant role in the ability to attract foreign capital. Overall, both export and import can have positive influence. Higher level of export is indicative to foreign investors because it shows that potential market exists in host country. There is a causal relationship between inward FDI as well as export and import therefore attractive FDI policy can contribute to the level of trade and trade openness is likely to stimulate more FDI.

Chakrabarti examined the determinants of FDI (Chakrabarti, 2001). It was identified that trade openness is enormously attractive to investors. Based on the correlation analysis, openness to trade was proved to be much more important changes in wage, net export, growth rate, tax, tariffs as well as exchange rate.

Edwards proved a very strong correlation between trade openness and FDI among developing countries (Edwards, 1990). It concludes that the countries giving the green light to foreign trade and private sector within the framework of structural reforms become more attractive to foreign investors. Making a decision about the magnitude and the geographical location of FDI, multinationals also take the degree of openness into account to a large extent beside exchange rate.

Culem carried out a research for six industrialized countries² and studied four types of relationship between them³ (Culem, 1988). Bilateral FDI flows, the participation U.S. FDI in the EEC, the EC FDI in the United States as well as intra-EEC FDI were also in focus during the research. It was concluded that export has a positive impact on the inward FDI however, it was not demonstrated clearly that FDI and trade can be either complements or substitutes. Tariff barriers can usually stimulate FDI since export becomes nearly impossible this way. Because of strong trade barriers, FDI is the only way for the foreign firms to gain access to a highly protected market however, this was insignificantly confirmed and significantly contradicted by the model applied in the study. Apart from intra-EEC relationships, it was found that export flow has a positive impact on FDI.

Kravis and Lipsey examined the overseas investments of U.S. multinational firms⁴ (Kravis and Lipsey, 1980). As a result of the research, trade openness was clearly identified as a factor to

¹ 1976-2008

² USA, Germany, France, United Kingdom, the Netherlands, Belgium

³ 1969-1982

⁴ 1966

attract foreign capital. Generally the U.S. companies tend to make investments in those host countries where high trade propensity exists. The degree of openness is inversely correlated with the costs since it is easier to get access to imported materials at low world prices in a country with liberalized trade policy moreover better transport, finance and other trade facilities will become more accessible as well.

During an analysis also carried out about the location decisions of U.S. multinationals⁵, a negative effect was seen by Wheeler and Mody (Wheeler and Mody, 1992). According to their research for 42 countries based on econometric methodology, trade openness was considered to be significant only in certain sectors. As far as production is affected, openness has a very attractive feature however, a weak negative correlation was observed between the two variables in the electronics industry which is specifically export-oriented. In the study Mexico and Brazil are shown as examples to attract significant investments despite low trade openness in the 1980s. Nevertheless, openness can be interpreted in several ways therefore the authors did not exclude the possible positive effects either. These effects can be visible mainly amongst export-oriented and import-substituting investments.

Martínez, Bengoa and Sánchez-Robles concluded a research⁶ in relation to the European Union member countries in respect of trade and FDI (Martínez, Bengoa and Sánchez-Robles, 2012). It was found that commercial integration and inward FDI go hand in hand in the EU therefore a relationship of complementarity is displayed. That was also proved to be true in case of intra-EU FDI and investments coming from states outside the EU as well. Removal of informal trade barriers⁷, promotion of liberalization as well as reduction of bureaucracy can have a positive impact on trade performance and inward FDI.

Majocchi and Strange conducted a research about investments of Italian companies⁸ in Central and Eastern Europe⁹ (Majocchi and Strange, 2007). It was concluded that trade seriously affects the Italian FDI in the region. Manufacturing and services sector were distinguished as well as it was assumed that manufacturing companies are more sensitive to trade openness than firms in services sector when investing abroad. 172 manufacturing and 100 service companies were included in the entire sample. The hypothesis was proved to be only partially true. Though the manufacturing companies reacted to trade openness better but the difference was not statistically significant.

In their worldwide research, Sin and Leung studied the developing countries (Sin and Leung, 2001). It was found that countries pursuing liberal policies are more attractive in the eyes of

⁵ 1982-1988

⁶ 1995-2006

⁷ social, cultural, wealth, negotiating, communication differences between trading partners

⁸ 1990-2003

⁹ Bulgaria, the Czech Republic, Hungary, Poland, Romania, Slovakia, Slovenia

foreign investors. In essence, the authors emphasized the importance of the policy on FDI as it has a significant impact on the ability to attract foreign investments. In their opinion, government policies have been considered to be less important for economic performance by the economists. Earlier inward FDI had often been limited in developing economies however, by the expansion of liberalization this attitude is changing nowadays.

Sun, Tong and Yu analyzed the inward FDI in China¹⁰ (Sun, Tong and Yu, 2002). They investigated into 30 provinces and as a result of their analysis it was found that openness has significant investment attraction feature. According to the author's proposals the provincial officials should improve the investment climate as failure to do so will result in the multinationals to invest in provinces with fewer FDI competitors.

Brenton, Di Mauro and Lücke researched the relations between the Central and Eastern European countries and the European Union¹¹ attempting to answer whether trade and FDI are complements or substitutes (Brenton, Di Mauro and Lücke, 1999). There was no empirical evidence showing that FDI and trade were substitutes however, complementary relationship could be reported therefore trade liberalization can stimulate FDI.

De Belue and Van Den Bulcke analyzed the Chinese and Indian greenfield investments made in developing countries (De Belue and Van Den Bulcke, 2012). The results justified that economies being more committed towards international trade, can attract more FDI. If a host country pursues liberal trade policy, the import of components, parts and semi-finished products can be realized easily at lower prices therefore Chinese and Indian investors can have an interest in setting up subsidiaries with export-import ability.

3. Correlation analysis

In the analysis the explanatory variables are represented by trade-related indicators. During the research, the export-import share of GDP was applied to measure the degree of trade openness. Its importance has been confirmed several times by relevant scientific literature. The research was based on the Eurostat database ensuring similar statistical methodology and comparability between countries.

However, it needs be noted that there is a significant difference between Eurostat and national statistics as in the calculation of export-import Eurostat ignores some items. In terms of the differences in imports, the most important point is that the EU statistics only consider elements to be Chinese import where the goods were delivered directly from China to the relevant EU Member

¹⁰ 1986-1998

¹¹ The Central and Eastern European countries were not member states of the EU at the time when the study came out.

State. As far as destination is concerned, cases cannot be handled as import when the delivery is completed via another member country¹². Regarding such transactions, import is counted by Eurostat in the statistics of that country where the product first reached in the EU. Such transactions are treated by Eurostat as import within the EU however, the national statistics consider it as an import from the country of origin.

Chinese FDI stock represents the dependent variable. The figures do not include the investments from Hong Kong as China and Hong Kong are fully managed separately by the scientific literature and international statistics. Eurostat data include shares, other shares and reinvested earnings. The sample only consists of companies where the equity exceeds a certain amount so smaller businesses are not represented. Due to the nature of the research, the analysis focuses only on the classical elements of the labor and investment capacity expansion and omits the items of other capital¹³ eliminating transactions between parent and subsidiary companies. FDI represents a long-term investment in a foreign company with more than ten percent ownership. During the research, the correlation was no longer relevant¹⁴ over five percent significance level. Chinese investments were very small in Croatia, Slovenia, Latvia so these countries have not been included in the analysis.

The number of relevant studies and research on the subject are relatively limited since China is still considered a capital importing rather than exporting country by the international literature therefore the experts prefer dealing with the investments in the Asian country itself. The shortage is visible especially in the Central and Eastern European region, which has not been in focus from Chinese investment point of view. In terms of China-Central and Eastern Europe relations, the subject of the study can be said to be relatively new since the scientific literature has dealt barely with the exploration of the relationship between the Chinese FDI and trade openness so far. The results of the correlation calculations can be interpreted only with certain restrictions. One of the key limitations is that the data from FDI has only been available since 2001 therefore definitive conclusions can be drawn with difficulties due to a short period of time. The methodology highly depends on the options and due to the shortage of observations, only correlation analysis could be justified professionally. The strength of the relationship between these variables came to light but the methodology did not provide explanation to causality and underlying content of the relationship. On the other hand, it highlighted those countries where correlation exists between FDI and trade

¹² For example, considering sea freight, the EU classifies the import coming from states outside the EU in the statistics of the country where the goods reach the EU for the first time. In such cases the import from the country of origin is included in the statistics of the state where the port is located instead of the real country of destination.

¹³ shareholder loans; dividend receivables, payables; cash-pool and settlement accounts receivables and payables; intercompany loans; securities signifying creditor relationship; other receivables, payables

¹⁴ strength of correlation: weak $R < |0,4|$, moderate $|0,4| < R < |0,7|$, strong $|0,7| < R < |0,9|$, very strong $R > |0,9|$

openness meaning that for the larger-scale of Chinese investments, it would be practical to develop trade purposefully in these states. Despite its limitations, the current analysis can contribute to the mapping of the Chinese investors' motivations in Central and Eastern Europe though further research is essential for a comprehensive understanding.

Export. The export share of GDP is among the most important indicators of trade openness. Paradoxically, Chinese export means a huge challenge to East and South-East European exporters as both parties have similar export structure (Silgoner, Steiner, Wörs and Schitter, 2013). As a result of high competitive ability and excellent trade relations, competition seems to have strengthened in recent years since China and the Central and Eastern European countries strive to exploit the market opportunities in Western Europe which are almost endless. Since commercially it is a very competitive region, China has failed to crowd out the Central and Eastern European products in Western European markets. After the Great Recession from the late 2000s, the decline of trade was quickly restored between the two regions of Europe, by contrast, China was forced to suffer significant losses due to termination of trade relations and decline of the trade volume with Western Europe. The facts illustrate very well that China is both an opportunity and a challenge for the Central and Eastern European region and the rest of the world.

The export share of GDP shows a continuous increasing trend in Central and Eastern Europe. There are significant differences between countries as it is just over 20 percent¹⁵ in Croatia while it was almost 90 per cent in Slovakia in 2013. In 2013 the ratio was 55 percent in Central and Eastern Europe which is a significant increase considering that fact that it was just 33 percent in 2001. Therefore this data suggests that market openness is becoming more and more significant in the region and it suggests that the export share of GDP has increased steadily in recent years. The data reveals significant trade relations achieved following the integration into the European Union in most parts of the period.

Table 1. Export share of GDP in Central and Eastern Europe, 2001–2013

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bulgaria	36,7	35,6	36,3	39,2	39,7	44,4	43,9	42,9	33,5	43,2	52,6	52,0	55,7
Croatia		18,4	18,1	19,6	19,6	20,8	20,8	20,2	16,8	20,0	21,7	22,1	20,7
Czech Republic	51,8	48,8	51,0	60,4	60,0	63,9	67,8	64,7	57,0	66,9	75,3	79,9	81,3
Estonia	53,0	46,8	45,9	49,2	55,4	57,6	50,0	52,2	46,4	60,2	74,1	71,7	65,9
Hungary	57,7	51,8	51,6	54,4	57,0	66,9	70,0	69,9	65,1	74,8	81,6	83,1	83,1
Latvia	24,2	24,6	25,7	28,9	32,1	30,7	28,8	30,1	29,8	39,9	46,7	49,4	46,5
Lithuania	35,0	36,6	37,1	41,0	45,3	46,7	43,5	49,6	44,3	56,5	65,1	70,0	70,9

¹⁵ It could also happen due to the fact that Croatia joined to the EU at the latest in comparison to other member states.

Poland	18,9	20,8	24,8	29,5	29,4	32,4	32,9	31,9	31,5	34,0	36,6	37,8	39,0
Romania	28,0	30,2	29,7	31,0	27,9	26,4	23,7	24,1	24,6	30,1	34,4	34,2	34,8
Slovakia	59,7	58,7	65,5	65,6	66,6	74,9	77,9	75,1	64,0	74,0	83,1	88,2	89,8
Slovenia	45,3	44,6	43,7	48,3	53,8	59,6	63,5	62,3	53,0	62,1	69,1	70,9	72,8
CE	32,6	34,1	36,9	41,3	41,3	44,7	45,1	44,3	41,1	47,3	52,6	54,3	54,8

Source: Eurostat

Apart from Bulgaria, Estonia and Hungary, the data suggests that export did not have any demonstrable influence on Chinese investors' motivations in main part of the region. Regarding the strength of the relationship, Hungary has the strongest correlation on a regional scale while export has a moderate impact on the Chinese motivations in Bulgaria and Estonia.

Import. The second important measure of trade openness is the import share of GDP which has started to rise in all the countries in the region since the EU accession. Examination of the indicator has been also justified since one of the key goals of China is to provide markets for its products which can also be supported financially when needed in a given case. The export share of GDP exceeded the import share of GDP only in the Czech Republic, Hungary, Slovakia and Slovenia in 2013 and among them Hungary is considered the major destination for Chinese investors. Other regional states can be characterized by trade deficit basically implying the fact that rising import has not been able to be compensated by export.

The import share reached the highest value (86%) in Slovakia in 2013 while the lowest value (37%) was recorded in Croatia however, this may have been influenced by the Croatian EU accession realized only that year. Due to the continuous increase of import, the data suggests that it has not reached its peak potential so the rate is expected to be even higher in the coming years.

Table 2. Import share of GDP in Central and Eastern Europe, 2001–2013

Country	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bulgaria	52,3	49,4	52,3	57,0	53,7	58,3	71,0	70,8	48,3	53,4	60,8	63,8	64,7
Croatia		40,2	41,5	40,5	41,5	43,0	43,4	43,8	34,0	34,1	36,8	37,3	36,5
Czech Republic	56,4	51,6	54,2	61,2	58,8	62,7	65,4	62,6	53,0	63,7	70,3	72,0	72,3
Estonia	68,8	65,3	65,5	69,2	73,6	80,0	71,2	67,1	52,0	63,8	77,4	79,3	73,4
Hungary	63,8	56,7	57,2	59,3	60,3	69,6	70,1	70,2	61,0	69,1	74,4	76,4	76,9
Latvia	42,5	43,6	46,5	51,1	54,1	57,5	53,2	47,9	38,0	48,9	57,9	60,2	57,3
Lithuania	49,6	52,6	51,4	54,6	59,6	64,0	62,0	65,2	49,2	63,7	73,7	75,5	76,5
Poland	26,4	27,9	31,5	35,3	33,4	37,2	38,9	39,1	34,5	37,9	40,8	40,6	39,6
Romania	38,3	38,8	40,3	43,0	40,8	41,7	41,1	40,9	33,0	37,7	41,8	41,5	38,9
Slovakia	69,9	67,4	67,6	70,6	72,4	80,5	80,7	78,0	63,5	74,4	83,2	84,7	85,5
Slovenia	49,7	47,1	47,4	52,4	56,9	61,9	66,6	67,6	53,7	64,0	70,6	70,6	71,5
CE	40,1	41,9	44,8	48,7	47,7	51,9	53,2	52,4	44,0	50,1	55,2	55,9	55,0

Source: Eurostat

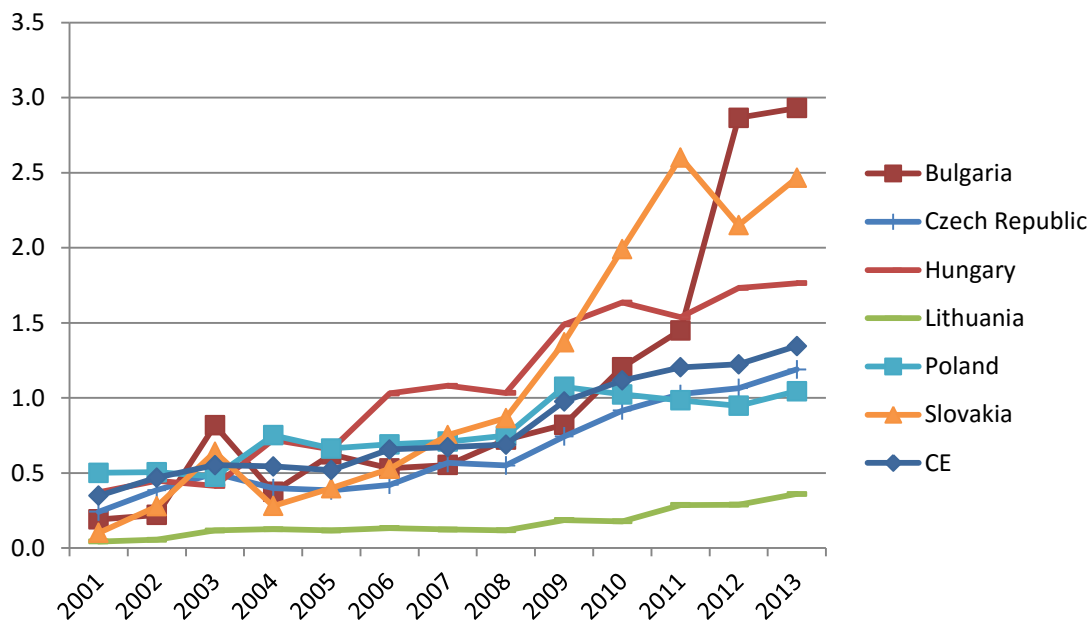
Through the correlation analysis, it was found that the import itself had no demonstrable influence on Chinese investors' motivations as Hungary is the only country where relevant relationship existed and it was proved to be relatively strong. Nevertheless, the Hungarian results are less surprising as it is commonly known that Hungary has the highest Chinese FDI stock among the regional countries, in addition, the expansion was continuous and some stagnation was visible only in 2012.

Export to China. Recently China is the second biggest trading partner of the EU while China manages its largest trade traffic with the EU (European Commission, 2011). Despite the huge volume, the Central and Eastern European exporters also have to face several issues in the Chinese market. As a result of the Chinese exchange rate policy to keep the Yuan undervalued, China can only import goods at higher prices resulting in a reduction in the standard of living. Consequently there is a decrease of demand for quality products while domestic production is unable to substitute the entire range of imported products. The situation is also complicated by the fact that the Central and Eastern European products are less known to consumers, there are significant cultural differences, the Chinese market is very special and there are risks of potential financial problems.

In addition to the obstacles mentioned above, EU companies exporting to China are faced with a number of non-tariff barriers during their operation (European Commission, 2006). The most important elements are the product certification, labelling standards, import approval, custom clearance delay, non-standardized legal framework, different regional customs rules as well as unreasonable sanitary and health requirements. Obstacles cause high compliance costs and extended delays making it more difficult for SMEs mainly.

Nevertheless, the Chinese market is a huge opportunity and total export to China has increased in all the countries in the region over the past decade accordingly. Bulgaria, the Czech Republic, Hungary, Poland and Slovakia are amongst the highest exporters representing 87 percent in the Central and Eastern European export in 2013. The country with the highest export was Bulgaria with 3 percent of the total exports going to China while this value was just over 1 percent in Central and Eastern Europe.

Graph 1. Share of export to China in relation to the total export, 2001-2013



Source: Eurostat

Amongst the five major countries in the region with major indicators, export could have an influence on the Chinese investors' motivations only in Bulgaria and Hungary. Both countries were characterized by expressly strong relationship. With less export in Lithuania the correlation was also relevant although, compared to the two states mentioned previously, its moderate relationship means lower investment motivation.

Import from China. One of the main pillars of China's economic development is the export-oriented policy and as a result, China is considered as the world's leading exporter nowadays. The development is not without precedent as other Asian countries¹⁶ also have pursued a similar policy in the recent period (Xing and Pradhananga, 2013). The success of the model is undisputed however, the Great Recession and the slowdown of the Chinese economy serve as warn of the potential risks that can also exist in its operation. According to the critics of the model, China heavily depends on external demand making it extremely vulnerable to the world economic crises. For sustainable economic growth, it is presumed that internal consumption should be also in focus however, full implementation is expected to be completed later.

¹⁶ Hong Kong, Japan, Korea, Singapore, Taiwan

Having joined to the WTO after the millennium, China has been more and more subject to external demand however, the membership has introduced several positive effects on its foreign trade:

- the discriminatory trade barriers of the Chinese products disappeared
- the goods can flow freely
- export has increased
- due to the extensive rules of the WTO, monitoring of the member states as well as the assurance of the quality and the origin of goods have become feasible
- as a member state, China can participate in the discussions with equal rights
- China is treated by the national treatment principle¹⁷

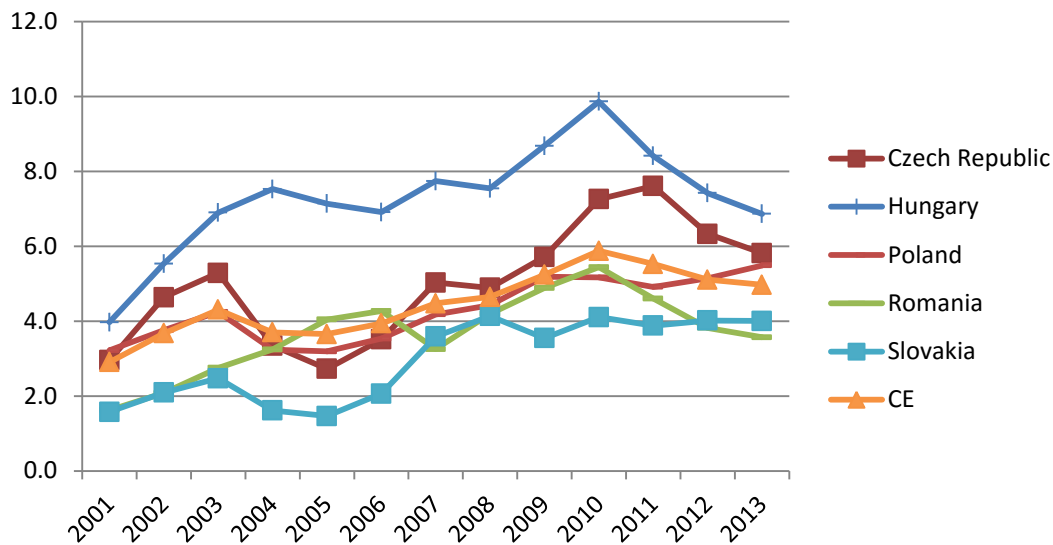
Nevertheless the seamy side of the process has become apparent. As a result of the membership, the free market competition is slightly in jeopardy because trade imbalances have appeared due to the Chinese exchange rate policy. Following the WTO membership, the undervalued Yuan meant a serious competitive advantage for China (Gábor, 2009) and Chinese products poured into the whole world.

Considering the reasons mentioned above, it is not surprising that without exception there is a negative balance of trade with China in every Central and Eastern European country and on a regional scale, the export-import ratio has only showed a steady downward trend in the recent years. Within the region, only the Czech Republic, Hungary and Romania could be reported that there is a relationship between FDI stock and import. Romania showed strong correlation while the Hungarian and Czech relationship was proved to be moderate. These three countries import a significant amount of Chinese goods making them the largest importers in the region besides Poland and Slovakia. 85 percent of regional import was managed by these five countries together in 2013. In four¹⁸ of five countries the import share from China in relation to the total import has increased continuously and only halted after 2010.

¹⁷ Non-discriminatory trade to ensure fair situation. The contracting partner of China needs to provide the same conditions granted to a third party before. As a result, individual countries are entitled to no special advantage and disadvantage since all the contracting parties receive similar treatment.

¹⁸ with the exception of Poland

Graph 2. Share of import from China in relation to the total import, 2001-2013



Source: Eurostat

China is likely to continue to pursue a policy based on exports as well as the supply capacity will be improved by the development of infrastructure therefore the Central and Eastern European region can still expect significant imports from China.

Conclusions

The scientific literature usually demonstrates that there is correlation between trade openness and FDI however, there may be different results from sector to sector and from country to country. Both trade openness and Chinese FDI can be an actual subject to discuss since these factors are playing a prominent role nowadays. Within the framework of the EU integration, both trade and foreign investment have undergone significant development because Central and Eastern Europe mostly consists of small and open economies. Trade and foreign investment are considered to be a solution to economic problems by the regional states therefore measures have been taken to broaden the existing relationships and seek new partners for the past decade. Thanks to WTO membership and exchange rate policy, China has an essential place among the world's leading exporters however, its foreign investment is still not commensurate with its economic strength. Nevertheless, past few years have shown that the situation can change in the future since China is increasingly becoming active in investing abroad.

In this study the exploration of the relationship between trade openness and inward Chinese FDI in Central and Eastern Europe was possible by using statistical methods. The correlation analysis revealed that trade openness itself does not exert as much attraction as it had been expected

previously despite the fact that trade development is one of the integral elements of the Chinese investment policy. Relevant correlation appeared only in few countries in the region. From the point of view of the Chinese investors, export was proved to be a more important factor than import in the region despite the fact that it is extremely important for China to ensure market coverage for their products.

The trade with China itself revealed more relevant results however, the level of exchange of goods can motivate the Chinese investors only in few countries. Overall, the most relevant correlations were detected in Hungary as investors were influenced by all four independent variables virtually. The correlation is not coincidence since most FDI stock is located there among the regional countries and it has undergone continuous expansion in recent times. In addition to Hungary the business decision makers act in context with the evolution of certain explanatory variables only in Bulgaria, the Czech Republic, Estonia, Lithuania and Romania trade with China does not belong to the elements being able to attract foreign capital in the rest of the region.

It can be seen that considerable differences lie between the Central and Eastern European countries in terms of the relationship between the examined explanatory variables and Chinese FDI stock. However, further research is required in order to draw definitive conclusions about the extent how Chinese investors are influenced by trade and to reveal its real causes. A more detailed analysis is needed to find out why trade is indifferent to the Chinese investors despite the fact that China is currently pursuing an export-oriented policy and it is expected to remain the same in the near future.

Nevertheless, trade development itself is a priority due to relations between China and EU as well. Since the flow of Chinese goods into the EU can be said to be almost constant therefore trade relations with the Asian country is expected to be further deepened. In this globalized and challenging world it is essential for the Central and Eastern European region and more widely to the EU to exploit economic opportunities in the emerging Asian, Latin American countries. Regarding Chinese investments, the aim is to achieve that the Asian country could take the Central and Eastern European region into account more seriously. Should the case occur, it could contribute to job creation, productivity improvement as well as economic development.

References

Brenton, P., Di Mauro, F. and Lücke, M. (1999), "Economic Integration and FDI. An Empirical Analysis of Foreign Investment in the EU and in Central and Eastern Europe", *Empirica*, Vol. 26 No.2, pp. 95–121

Chakrabarti, A. (2001), "The Determinants of Foreign Direct Investment. Sensitivity Analyses of Cross-Country Regressions", *KYKLOS*, Vol. 54, No.1, pp. 89–114

- Culem, C. G. (1988), “The locational determinants of direct investments among industrialized countries”, *European Economic Review*, Vol. 32, No.4, pp. 885–904
- De Beule, F. and Van Den Bulcke, D. (2012), “Locational determinants of outward foreign direct investment. An analysis of Chinese and Indian greenfield investments”, *Transnational Corporations*, Vol. 21, No.1, pag. 34
- Edwards, S. (1990), “Capital flows, foreign direct investment and debt-equity swaps in developing countries”, *NBER Working Paper*, No. 3497, pag.44
- European Commission (2006), Fiche on Non-Tariff Barriers, Brussels
- European Commission (2011), Trade and Investment Barriers Report 2011, Brussels
- Eurostat, Statistics*, <<http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>>
- Gábor, T. (2009), “Kína árfolyam-politikája és a globális egyensúlytalanságok”, *Hitelintézeti Szemle*, Vol. 8, No. 2, pp. 111–124
- Hungarian Central Statistical Office: STADAT*, <<http://www.ksh.hu/stadat>>
- Kravis, I. B. and Lipsey, R. E. (1980), “The location of overseas production and production for export by U.S. multinational firms”, *NBER Working Paper*, No. 482, pag. 39
- Majocchi, A. and Strange, R. (2007), “The FDI location decision. Does liberalization matter?”, *Transnational Corporations*, Vol. 16, No. 2, pag. 40
- Martínez, V., Bengoa, M. and Sánchez-Robles, B. (2012), “Foreign Direct Investment and Trade. Complements or Substitutes? Empirical Evidence for the European Union”, *Technology and Investment*, Vol. 3, No. 2, pp. 105–112
- Pourshahabi, F., Soderjani, E. S. and Mahmoudinia, D. (2013), “Panel Causality Relationship among FDI and Trade”, *Iranian Economic Review*, Vol. 17, No. 1, pp. 115–133
- Silgoner, M., Steiner, K., Wörz, J. and Schitter, C. (2013), “Fishing in the same pool? Export strengths and competitiveness of China and CEESE in the EU-15 market”, *Working Paper, European Central Bank, Frankfurt*, No. 1159, pag. 35
- Sin, C. Y. and Leung, W. F. (2001), “Impacts of FDI liberalization on investment infows”, *Applied Economics Letters*, Vol. 8, No.4, pp. 253–256
- Sun, Q., Tong, W. and Yu, Q. (2002), “Determinants of foreign direct investment across China”, *Journal of International Money and Finance*, No.21, pp. 79–113
- Wheeler, D. and Mody, A. (1992), “International investment location decisions. The case of U.S. firms”, *Journal of International Economics*, Vol. 33, No.1-2, pp. 57–76
- Xing, Y. and Pradhananga, M. (2013), “How Important is Exports and FDI for China’s Economic Growth?”, *GRIPS Discussion Paper, National Graduate Institute for Policy Studies*, Vol. 13, No. 04, pag. 20

Annexes

Annex 1.: Results of the correlation analysis, 2001-2012

Country	Export/GDP		Import/GDP		Export/GDP China		Import/GDP China	
	R ²	R ² sig	R ²	R ² sig	R ²	R ² sig	R ²	R ² sig
Bulgaria	0,47	0,01	0,10	0,30	0,75	0,00	0,01	0,77
Czech Republic	0,17	0,16	0,09	0,33	0,20	0,13	0,31	0,05
Estonia	0,33	0,05	0,00	0,87	0,05	0,49	0,02	0,65
Hungary	0,71	0,00	0,60	0,00	0,80	0,00	0,40	0,02
Lithuania	0,25	0,08	0,14	0,20	0,35	0,03	0,01	0,76
Poland	0,09	0,32	0,04	0,52	0,20	0,12	0,20	0,13
Romania	0,01	0,82	0,05	0,56	0,34	0,08	0,55	0,01
Slovakia	0,26	0,11	0,19	0,18	0,03	0,59	0,23	0,14