

Mutual trade and investment of the Visegrad countries before and after their EU accession

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Abstract

The paper addresses the period preceding and following the EU accession in 2004 reconstructing the major developments in trade and FDI. It relies on the detailed bilateral trade and FDI data of the Czech Republic, Hungary, Poland and Slovakia. The assessment sheds new light on the growth and restructuring of trade due to integration into the European corporate structures. But unlike trade, FDI between the four Visegrad countries did not change much in the years following EU accession. The conclusion of the paper is that foreign investors coming into these countries from the EU-15 and other advanced countries were the real engines of the revival in mutual trade.

Keywords: intra-regional trade, Visegrad Group, FDI

JEL classification: F13, F14, F15, F23.

1. Introduction

Since their EU accession in 2004 mutual trade of the Czech Republic, Hungary, Poland and Slovakia (the Visegrad Four, V-4) has expanded much faster than these countries' trade with the 'old' EU members (EU-15) and also much more dynamically than before accession. This was a surprising new development after the collapse of mutual trade in the early 1990s and its sluggish recovery thereafter.¹

The research questions we raise are:

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¹ On the development and specific features of intra-Visegrad trade in the 1990s see Broadman 2005, Gács and Winckler 1994, Havlik 1991, Mizsei and Rudka 1995, Réti 1997, Richter and Tóth, G. 1994, Richter 1997.

- How did the *structure* in mutual trade develop in the post-accession period compared to the early years of transition and the immediate pre-accession period? What directions of specialization are discernable?
- What role did mutual FDI and *foreign owned enterprises* in general play in the upturn of V-4 mutual trade?

Our working hypothesis is that upgrading trade structures and mutual FDI have boosted bilateral trade. Dynamism observed in the post-accession development of mutual trade could be explained by the emerging new specialization patterns which, in turn, have been shaped by a division of labour introduced by foreign subsidiaries.

The paper addresses the period preceding and following the EU accession reconstructing the major developments in trade and FDI relying on detailed trade and bilateral FDI data. It first presents the growth and restructuring of trade due to integration into the European corporate structures (sections 2 and 3). Then it discusses various explanations to these phenomena based on theory and empirical research results and points to the importance of intra-industry trade and FDI (section 4). Then it argues that FDI between the V-4 did not change much in those periods (sections 5 and 6) but overall FDI inflow expanded and boosted trade in general (section 7). The paper concludes by assessing the possible trade impact of bilateral FDI in the V-4 (section 8).

2. Trade reorientation and FDI upswing in the wake of the transition to a market economy

The comparison of pre- and post-1990 structure in mutual trade of the Czech Republic, Hungary, Poland and Slovakia shows the immediate impact of the transition to a market economy in general, and that of the collapse of the CMEA² trade system followed by the rapid geographical reorientation, in particular. In 1989 still more than half of intra-V-4 trade fell on SITC 7, machinery and transport equipment, reflecting the most important characteristics of the mutual trade of pre-transition Visegrad countries under the protective shield of the peculiar CMEA trading system. Except for semi-finished products (SITC 6, with 16% share) no other commodity group had a strong position. This set-up dramatically changed by 1995. In the emerging post-transition intra-V-4 trade structure the share of machinery and transport equipment lost close to 40 percentage points. Inputs to production gained in importance: semi-finished products (SITC 6), chemicals (SITC 5) and energy sources (SITC 3). Another remarkable change occurred again between 1995 and 1998: the share of machinery and transport equipment (SITC 7) gained back some of its earlier

² Council for Mutual Economic Assistance (1949-1991), the economic integration bloc under the leadership of the Soviet Union.

proportions, but was still far from the very high pre-transition levels (Richter, 2001).

Significant rearrangements took place also in the four countries' exports to the European Union. Gains in shares were recorded especially in those two commodity groups, SITC 7 and 8 (machinery and transport equipment; consumer goods) where the loss was strong in intra-V-4 trade. In 1989 the share of machinery in V-4 exports to the EU was 14%, corresponding to the level where it 'landed' in intra-V-4 trade after the dramatic decline between 1989 and 1995. Parallel to this, in the exports to the EU this commodity group's share climbed to 25% in 1995 and to 43% by 1998, attaining a level which was already not so far from the share it had in the intra-V-4 trade in the last pre-transition year.

It is important to note that, with the transition to a market economy, the trade policy framework of intra-V-4 trade underwent fundamental changes. On 21 December 1992, the Czech Republic, Hungary, Poland and Slovakia signed the CEFTA Document, an agreement on the gradual creation of a free trade area concerning trade in industrial goods, and a gradual reduction of certain, but not all barriers to trade in agricultural good and products of the food industry.

Changes in the FDI framework were even more radical. Before 1990 FDI in the V-4 was almost non-existent but in the course of economic transition, these countries embarked on an FDI assisted economic growth strategy in. Hungary introduced this policy already in the beginning of the 1990s by providing investment incentives and targeting foreign investors in the privatization process. The other countries followed later but by 2000 all four countries became significant receivers of FDI. In 2000, the inward FDI stock per GDP of the Czech Republic and Hungary surpassed 50% that of latecomer Poland and Slovakia 20% (EU-15 average 30%). Most of the FDI to the V-4 came from the EU-15 and went both into efficiency seeking manufacturing subsidiaries and local market oriented trade, telecommunications and financial services. Trade integration and upgrading of export structures were the result of a corporate integration process with the more developed EU members.

3. Upturn of intra-V-4 trade after the EU accession

After the EU accession of the Visegrad countries in 2004 one of the most remarkable developments was the sudden upturn in mutual trade (Table 1). In 2007 the value of aggregate intra-V-4 trade was two and a half times higher than in 2003. The rate of growth in these countries' trade with the 'old' EU member states was only half as much as that.

In the post accession years each of the V-4 countries had higher (in most cases substantially higher) exports growth rates in trade with individual

members of the group than in trade with the EU-15.³ Also, each individual V-4 country had higher growth rates in exports to other V-4 members in the post accession period than in the years before EU accession. As a result the share of V-4 mutual trade in total trade of these countries increased to the detriment of the EU 15 share, though the latter remained predominant yet (Richter, 2011).

Table 1. Growth rates of intra-V-4 trade 1999-2007

Relation	Exports in € million			Rate of growth		Difference in growth rates (percentage points)
	1999	2003	2007	2003/1999	2007/2003	
CZ > HU	440	982	2,799	122.9	185.2	62.28
HU > CZ	346	783	2,625	126.1	235.4	109.36
Total	787	1,764	5,425	124.3	207.5	83.17
CZ > PL	1,375	2,062	5,299	50.0	157.0	107.02
PL > CZ	974	1,923	5,666	97.5	194.6	97.11
Total	2,349	3,985	10,965	69.7	175.1	105.46
CZ > SK	2,038	3,426	7,738	68.1	125.9	57.80
SK > CZ	1,717	2,473	5,337	44.1	115.8	71.76
Total	3,755	5,899	13,075	57.1	121.7	64.57
HU > PL	487	866	2,905	77.8	235.3	157.47
PL > HU	505	1,146	2,972	126.9	159.4	32.56
Total	992	2,012	5,877	102.8	192.1	89.31
HU > SK	261	748	2,907	186.2	288.7	102.48
SK > HU	430	941	2,529	119.1	168.6	49.51
Total	691	1,689	5,436	144.5	221.8	77.29
PL > SK	334	772	2,230	130.9	188.7	57.76
SK > PL	513	924	2,640	80.0	185.6	105.55
Total	848	1,697	4,870	100.1	187.0	86.88

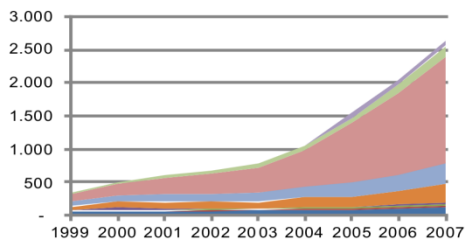
Remark: > denotes direction of trade

Source: Eurostat database (COMEXT), own calculations

Despite similarly rapid expansion, individual intra-V-4 bilateral relations were of diverging character concerning the composition of trade. One extreme was Hungary's excessive specialization in transport equipment and components in exports to the other three Visegrad Group countries (Figures 1, 2 and 3). The other extreme was Slovakia (Figures 4, 5 and 6), where the initial proportions across main commodity groups had hardly changed in the period of rapid extension of trade volumes. The comparison of the Czech Republic's exports to Hungary and Slovakia testifies that strong specialization (in trade with Hungary) and the preservation of a diversified spectrum of commodities (in trade with Slovakia) were both successful options, even in the case of one country, to achieve a rapid expansion of exports (Figures 7, 8 and 9).

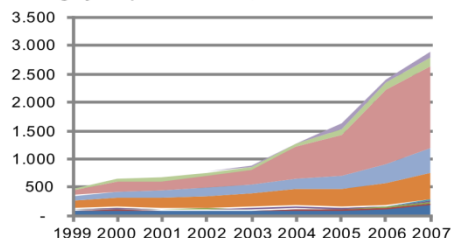
³ The only exception is Slovak exports to the Czech Republic (1 in 12 observations).

Figure .1 Hungary's exports to the Czech Republic, in € millio

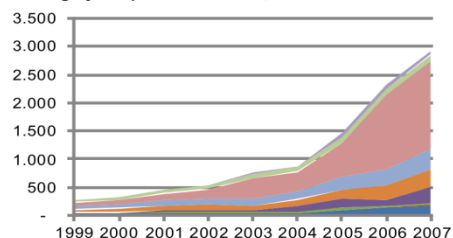


- comm. & trans. not class. elsewhere in the sit
- miscellaneous manufactured articles
- machinery and transport equipment
- manufactured goods classified chiefly by material
- chemicals and related products, n.e.s.
- animal and vegetable oils, fats and waxes
- mineral fuels, lubricants and related materials
- crude materials, inedible, except fuels
- beverages and tobacco
- food and live animals

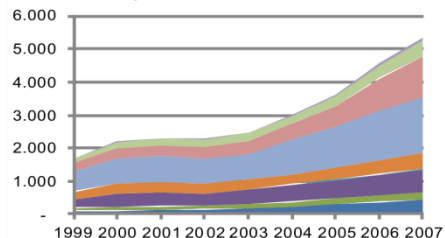
2. Hungary's exports to Poland, in € millio



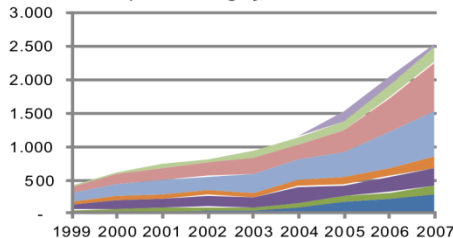
3. Hungary's exports to Slovakia, in € millio



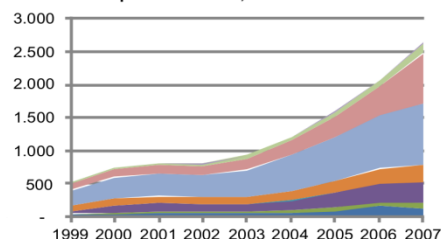
4. Slovakia's exports to the Czech R., in € millio



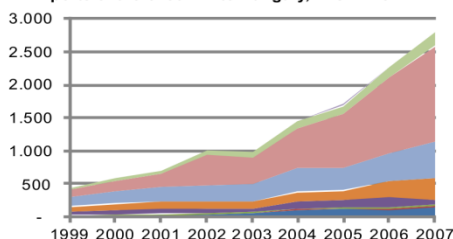
5. Slovakia's exports to Hungary, in € millio



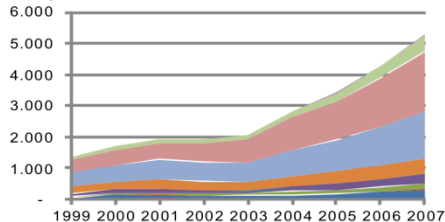
6. Slovakia' exports to Poland, in € million



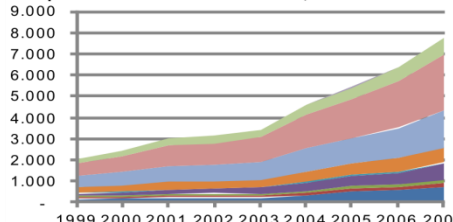
7. Exports of the Czech R. to Hungary, in € millio



8. Exports of the Czech R. to Poland, in € millio



9. Exports of the Czech R. to Slovakia, in € millio



Source: Eurostat database (COMEXT), own calculations

The division of the period 2000-2007 into a pre-accession and a post-accession segment does not reveal outstanding changes in the composition of intra-V-4 trade by *factor inputs*.⁴ Though *technology driven* industries gained substantially in importance over the whole period, the process was gradual with no significant change in the speed of the rearrangement following the accession data. A less spectacular yet remarkable change (a drop) occurred in the weight of *capital intensive* industries, but the date of EU accession seems to have played no role in the process either. In the case of intra-V-4 trade decomposed by *skill intensity*, the date of accession seems to have no special importance either, trends already present before the EU accession were carried on without substantial changes.

4. Intra-Visegrad trade explained by trade theory and FDI theory

Why and how did EU accession give an important impetus to intra-V-4 trade? As already shown above, the commodity structure did not undergo an abrupt change.

The Heckscher-Ohlin theory may not convey sufficient explanation for the rapid expansion of mutual trade among the Visegrad countries. The reason is that these economies do not differ much either in their resources, technology or output structure. The Visegrad countries are at a relatively similar level of development.⁵

Support for understanding intra-Visegrad trade's current weight and predicting its growth potential is provided by gravity models. Gravity models calculated for the CMEA bloc as a whole in the early 1990s predicted the collapse of mutual trade from the artificially high levels emerged under the protectionist 'umbrella' of the CMEA and the revival of trade relations with Western Europe (Havrylyshyn and Pritchett 1991; Baldwin, 1994). A part of the research underlying this paper, conducted by Neil Foster, was devoted to the evaluation of gravity determinants in intra-Visegrad trade after these countries' accession to the EU (Foster, 2011; Foster, Hunya, Pindyuk and Richter, 2011). Foster's results point to the significance of higher GDP growth rates of the V-4 after their EU accession coupled with an increased GDP growth differential relative to the EU 15.

A determinant can be associated with the elimination of trade barriers on the date of accession. Hornok (2010) comes to the conclusion that the elimination of non-traditional trade barriers following the EU accession may have been a significant contribution to the upturn in trade flows. The author

⁴ For details see Richter 2011.

⁵ Compensations for employees per month are similar in the region: € 1005 (Hungary), € 1134 (Slovakia), € 883 (Poland) and € 1283 (the Czech Republic), all 2010 data. For comparison, the respective figure is € 3,217 in the EU 15, at average. Gross wages plus indirect labour costs, according to national account concept. wiiw database.

mentions the following non-traditional trade barriers: elimination of customs procedures and border waiting times; elimination of technical barriers through completion of harmonization; lower legal and information costs for exporters and reduced political risk. Nevertheless, the sudden acceleration of trade expansion among the four countries can only partially be explained by the removal of invisible trade barriers upon accession. Free trade for industrial commodities had been long in place. Most of the restrictions on agricultural and food industry products had also been already removed by 1 May 2004, and this applies to trade with the EU-15 and intra-regional trade as well.

More support to the V-4 trade upswing can be expected from economies of scale and intra-industry trade (Krugman and Obsfeld, 1994, pp. 113-138). Marginal intra-industry trade indicators show the relevance of intra-industry trade in trade changes (increments) in the intra-V-4 trade. The indicators calculated for the intra-V-4 trade point at somewhat higher levels of marginal intra-industry trade (at aggregate level) in the period after the EU accession than before it in three of the four bilateral relations (see for details Richter, 2011 and Foster, Hunya, Pindyuk and Richter, 2011).

Intra-industry trade is to a large extent intra-firm trade, a result of FDI and production segmentation (Ng and Kaminski, 2001). Empirical results show that foreign direct investment abroad stimulates the growth of exports from countries of origin and is complementary to trade (Fontagné, 1999; Marcusen, 2002). This link has been found valid also in the case of transition countries (Broadman, 2005). The question is if FDI between the V-4 countries boosted trade between these countries or whether it was a different origin FDI?

5. Size of bilateral FDI inadequate to boost trade

Capital account liberalization allowed foreign companies to invest in the V-4 countries well before EU enlargement. The rules for attracting FDI were harmonized by applying the common EU competition rules and discretionary incentives were phased out. In early 2000s already, investment decisions of transnational companies took into consideration forthcoming EU membership. The rather long preparation period of an FDI decision suggested that the accession date in itself would not change the behaviour of investors. Early studies did not expect dramatic changes in the intensity of FDI flows due to enlargement (Kalotay, 2006). Revisiting the subject may bring some more insight.

A close look at the bilateral FDI flows reveals diverging tendencies in the four countries. The amount of total FDI inflow was higher after accession than before it; only marginally in Slovakia, very much so in Poland (Table 2). The inflow from the V-4 countries was approximately equal in the two periods, but there were important differences between the individual countries. Both the V-4 FDI inflow volume and its share in total inflow increased in the Czech Republic

and Poland, stayed at roughly the same level in Hungary and declined in Slovakia. Czech Republic and Slovakia remained the most significant targets of intra-V-4 FDI both before and after enlargement.

Table 2. FDI inflows to the V-4 countries in the pre-accession period (2000-2003 cumulated) and the post-accession period (2004-2007, cumulated) by host country

	Czech Republic		Hungary		Poland		Slovakia	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Total EUR billion	22.6	25.8	12.5	19.4	25.1	51.6	10.2	10.6
Visegrad EUR billion	0.47	1.82	0.05	0.05	0.07	0.33	2.82	1.51
Visegrad in % of total	2.1	7.1	0.4	0.3	0.3	0.6	27.6	14.2

Source: wiiw database relying on the National Banks of individual countries

In terms of FDI outflow, all Visegrad countries invested significantly higher amounts in the post-accession period than before (see Table 3). Outflows to the other V-4 countries increased significantly from the Czech Republic and Poland, less so from Hungary and declined from Slovakia. The largest investor in the post accession period became Poland followed by the Czech Republic and Hungary. In the pre-accession period FDI in the V-4 countries made up a large part of the FDI outflows from the Czech Republic, Hungary and Slovakia but in the post-accession period they retained significance only in the case of the Czech Republic. Except for Poland emerging from a very low share, the importance of FDI into V-4 countries diminished in the outward FDI of the four countries.

Table 3. FDI outflows from the V-4 countries in the pre-accession period (2000-2003 cumulated) and the post accession period (2004-2007, cumulated) by home country

	Czech R.		Hungary		Poland		Slovakia	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Total EUR billion	0.63	3.16	2.82	8.42	0.42	14.7	0.44	0.95
Visegrad EUR billion	0.19	0.86	0.68	0.81	0.02	1.12	0.13	0.09
Visegrad in % of total	30.2	27.2	24.1	9.6	4.8	7.6	29.5	9.5

Source: wiiw database of FDI relying on the National Banks of individual countries

Both inward and outward FDI data indicate that bilateral FDI is, in most cases, less significant than bilateral trade among V-4 countries. Thus it may not be bilateral FDI that boosted trade. FDI is high only between the Czech Republic and Slovakia as a result of the former common state; cross-border ownership remained in a few companies after the split-up of former Czechoslovakia in

1992. Nevertheless, the share of Czech-Slovak FDI flows in the total FDI of both countries has been declining.

FDI data are incomplete as activities with low capital intensity may not show up in the invested amounts. In order to broaden the picture beyond invested capital, one can look at various characteristics of the investment projects. Foreign affiliates' data (EUROSTAT FATS) reveal that high numbers of investment projects and high production values characterize the mutual relationship between the Czech Republic and Slovakia. While the number of Czech projects in Slovakia increased from a low level between 2003 and 2006 the number of Slovak projects in the Czech Republic declined to a certain extent but remained rather high. Employment in foreign affiliates shows again the major significance of Slovakia for the Czech Republic and vice versa. Polish investments in the Czech Republic or Hungarian investments in Slovakia, on the other hand, are not very numerous but have both large production value and employment.

Wider information is available on greenfield FDI projects (*fDimarkets* database) which suggest that these were small in number but increased after EU enlargement (Table 4). In 2003 only one greenfield project by companies from the other V-4 countries was announced in the Czech Republic, Hungary and Poland each. Slovakia received more, 7 projects mainly from the Czech Republic confirming the special relationship between the two countries already presented above. Following enlargement the annual number of new projects remained roughly constant in Slovakia while it increased in the other three countries albeit unevenly.

Table 4. Number of investment projects from V-4 countries by host country

	Czech Republic	Hungary	Poland	Slovakia
2003	1	1	1	7
2004	3	1	7	4
2005	4	1	1	7
2006	3	5	3	7
2007	5	3	5	5

Source: <http://www.fdimarkets.com>

In 2006 and 2007 (also in 2008) the annual number of new projects was 3 to 5, higher than before. On the whole, we have a rather small number of new projects, 18 in each of the last two years of the post-accession period. These are negligible compared to the hundreds of projects V-4 countries received from the EU-15.

6. Low bilateral FDI due to lack of investing firms

The reason for relatively low FDI and low FDI-related trade creation among V-4 countries may lie in the lack of potential investors. According to the

theory of the multinational enterprise, FDI flows to a country are determined by the interaction of a set of firm-specific and country-specific factors. Companies can expand and invest abroad if they possess firm-specific competitive advantages that they can use against their competitors (Caves 1996). Firm-specific advantages are developed within the firm and transferred from the firm's home country to other countries into the subsidiaries of the firm. Location-specific advantages, on the other hand, are immobile, related to the host country.

The question is whether there exist domestic companies in the individual Visegrad countries that have the firm-specific advantages to invest abroad? Basically, there are very few multinationals in these countries. The transformation shocks, the privatization of former state-owned enterprises and foreign takeovers have left relatively few medium-sized and large companies in domestic ownership. The banking sector became almost totally foreign owned, the manufacturing sector also to a large extent. Thus the pool of companies with firm-specific advantages that could be exploited by FDI is rather limited.

Large investors are confined to a handful of regional multinationals. In Hungary's outward FDI, for example, the oil company MOL and the commercial bank OTP are the main investors. In addition, the pharmaceutical company Gedeon Richter and the chemical industry enterprise BorsodChem can be mentioned. These are all former state-owned enterprises which were not privatized to a foreign owner but through the stock exchange to diverse investors. Also, the Czech energy giant CEZ has widespread activities internationally.

As to location-specific advantages, the V-4 countries are quite similar to each other in terms of production cost level and business conditions. The application of the *acquis* and joining the EU made them even more similar to each other. From an efficiency seeking point of view these countries are not good FDI options for each other; comparative advantage cannot be augmented. Therefore, it makes little sense for the firms operating in one of the V-4 countries to locate production in another country of the Visegrad region with the aim of lower sourcing costs and exports to third countries.

7. Bilateral FDI does not go into export-oriented activities

We look into the activity distribution of FDI to see the significance of the tradable sectors and of those which are generally export oriented.⁶ In the Czech

⁶ The activity composition of FDI is available for the stock data for 2003 and 2007. Bilateral data could only be collected from the Czech National Bank website and was received from the Hungarian National Bank for the purpose of the research project underlying this paper. Data for Slovakia refer to FDI in other Visegrad cumulated. A low number of reporting companies usually hinders the publication of disaggregate data.

Republic, the Hungarian FDI stock increased significantly between 2003 and 2007. It became more diverse in and more concentrated on the manufacturing activities after EU enlargement than before. Nevertheless, the share of the most important activity, the chemical industry, rose from 33% in 2003 to 46% in 2007. More than 80% of the FDI stock from Poland in the Czech Republic went into other business activities (NACE 7.2) which are usually holding companies with no real activity in the host economy. From Slovakia FDI was spread across several activities with the highest weights in trade, mechanical engineering and construction. This diversity, also reflected in the trade data, indicates a high level of integration between the two countries on the corporate level which may also be reflected in intensive trade activities.

The small amount of FDI stock in Hungary from the V-4 countries concentrated in trade and other services; in the FDI from Slovakia, the production of construction material is also significant. The main targets of Hungarian outward FDI in the Czech Republic were the chemical industry, hotels and restaurants; in Poland, the chemical and the paper industry; in Slovakia, manufacturing but especially oil refining dominated both before and after EU accession. Activity related data thus reveal that FDI in tradable sectors comprise a significant part of mutual FDI, but most activities are with low potential trade creation including the production of construction materials, chemicals and the construction industry. The industrial sectors such as the automotive or the electronics ones, known for international cooperation, are hardly present. Car producers in the region are subsidiaries themselves which often distribute and repair their products through own subsidiaries but do not invest in production abroad.

There were 64 greenfield projects for which the business activity of the subsidiary is available (see <http://www.fdimarkets.com>) showing that almost half of the projects were set up in sales and retail. The 13 manufacturing projects are mainly Czech investments in Slovakia. The prevalence of trade and real estate related projects indicates low significance of greenfield investments for international trade. Such projects may generate some imports but no exports of the host country.

Lack of trade enhancement of greenfield investments is supported by the dominant answer of investors to the question concerning the motivation for their new investment project (see <http://www.fdimarkets.com>) which is market seeking. This type of FDI may generate some imports for the host economy but does not lead to more exports while, for the home country, it may generate some exports.

8. FDI in V-4 is export oriented in general

Further indication on the impact of FDI on exports can be derived from data on majority foreign owned enterprises (Eurostat, FATS). Exports data are

available only for the Czech controlled enterprises in the other three Visegrad countries in the year 2007 showing that export per turnover for Czech outward investments was 14% globally. It was only 3% for the Czech subsidiaries in Hungary and 13% in Poland. At the same time it was especially high, 28% in Slovakia reflecting the special relationship between the two countries. Mutual FDI and mutual trade are inter-related between the Czech Republic and Slovakia but not between the Czech Republic and the other two countries.

For Hungary, one can rely on exports data referring to foreign investment enterprises (FIEs) with 10% or more foreign ownership in the Central Statistical Office database. These show that FIEs are the dominant exporter of the country in general. Their share in total exports has declined from the 2001 peak of 81% to 76% in 2004 and 68% in 2008. For the latter year only, also the share of FIEs in the exports to the V-4 countries could be calculated. This was with 60% significantly lower than in the case of total exports. While most of the companies exporting to the V-4 countries are the same FIEs which dominate Hungarian exports in general, one can identify a broader than average room for domestic enterprises.

9. Conclusions

Intra-regional trade of the V-4 countries has been a success story since these countries' EU accession. Three years after the EU accession the share of intra-V-4 trade attained the level experienced in 1985. The fundamental difference is, however, that in the 1980s that level was achieved under the extreme protection provided by the CMEA which efficiently excluded competition from the world market. The current level has been attained under the conditions of the single European market, without any protection for the intra-V-4 trade.

The causes of trade expansion are far from obvious. Liberalization of mutual trade took place before accession and thus, this cannot explain the boom in mutual trade although the elimination of some non-tariff barriers did have some positive effect. This paper looked at various further possible explanations, including the increasing trade specialization and mutual FDI among V-4 countries.

By looking at various changes in mutual trade specialization, we found that trade specialization itself did not explain the revival of mutual trade. It turned out that both extreme strong specialization and a virtual lack of specialization were recorded in countries achieving very high export growth rates in intra-V-4 trade.

Our other field of investigation, intra-V-4 FDI flows, demonstrated that while FDI inflows have been playing a decisive role in the economic growth of the V-4 countries, the significance of mutual FDI is small to negligible. The only exception is Slovakia. This general picture has not changed after EU

accession. Low mutual FDI has been in line with the lack of firm specific and country specific advantages these countries may offer to each other. Furthermore, most activities in mutual FDI are with low potential trade creation. Affiliates owned by V-4 investors are in general less export oriented than the foreign sector of these countries in general.

What remains as an explanation for fast intra-V-4 trade growth is economic growth itself and FDI in general. As to FDI, this has expanded fast and integrated the V-4 countries into the European production networks. Most of the exports of the V-4 countries are generated by subsidiaries of multinational corporations from the EU-15 and other developed countries. These subsidiaries are linked by intra-company trade, sourcing and selling in the Visegrad region. A rationalization of subsidiaries took place in fewer locations serving several countries in the region (Bellak and Narula, 2009). Foreign investors have concentrated the production of consumer goods sold in the region to a lower number of locations after EU enlargement which also generated trade among the V-4 countries. What most probably changed in the wake of enlargement was the specialization of subsidiaries.

EU accession must have played an indirect role unrelated to the exact date of enlargement. Despite the hesitant attitude of the incumbent EU members towards eastern enlargement in the 1990s and lack of their final commitment up until 2002, with closing in on the year of accession it became more and more obvious that the accession would take place indeed. In this gradual process of self-conviction, the foreign firms involved in the intra-V-4 trade gradually embarked on a new, geographically more diversified sales/procurement strategy. In the new strategic concepts of the main exporting firms (mostly multinationals) the Visegrad region has been upgraded both as a target for sales and as a host of potential co-operation partners for production.

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