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Ties of Visegrád countries with East Asia – trade and investment¹

Andrea Éltető, Ágnes Szunomár²

Abstract

As a consequence of the European recession, interest of Central European firms has increased towards Asian markets. Trade and investment relations seem to have intensified between the four Visegrád countries and East Asia. This paper aims to analyse trends of foreign direct investment and the development, geographical and commodity structure of the mutual trade. Our paper also briefly outlines the economic policy of the given countries for the further development of Visegrád-Asian relations.

The applied method is the statistical analysis of Eurostat and National Bank data as well as Chinese statistics. Our main findings are the following: first, trade between the Visegrád region and East Asia is largely influenced by multinational companies in global value chains; second, these networks have interlinked the two regions increasingly strongly in the past years; third, the pattern and intensity of connection to multinational networks vary among Visegrád countries. Based on these findings we propose an economic policy that – apart from the support of local small firms – considers the efficient participation in global value chains.

JEL: F1, F23, F43

Keywords: Visegrad countries, East Asia, trade relations, global value chains, foreign direct investment

Framework of analysis

During the transition Visegrád (V4) countries³ went through radical economic changes. These changes had been largely induced by foreign capital. Foreign multinationals realised significant investment projects in this region and established

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³ Czech Republic, Hungary, Poland, Slovakia

their own production networks. The integration of the Visegrád countries into the global value chains (GVCs) and the drastic changes in production structure since the late 1990s were generally proven by others (Rahman-Zhao, 2013, Timmer et al., 2012). Damijan et al. (2013) also concludes that inflow of FDI contributed significantly to the export restructuring of Central and Eastern European countries, but there are differences among countries. The Visegrád countries increased high-tech exports while the export of other countries is of lower technology level. An explanation for this can be the different degree of integration into the GVCs. Based on world input-output table data, Timmer et al. (2012) show that the use of imported intermediate inputs and the inclusion in global value chains have increased radically between 1995 and 2008 in the case of the Central and Eastern European countries. Stehrer and Stöllinger (2012) have similar results when analysing forty countries. The foreign value added content of exports can be a measure of vertical specialisation and GVC inclusion. Between 1995 and 2011 this foreign value added increased in almost all countries and, within the EU, Central European countries show a very high level (Figure 1).

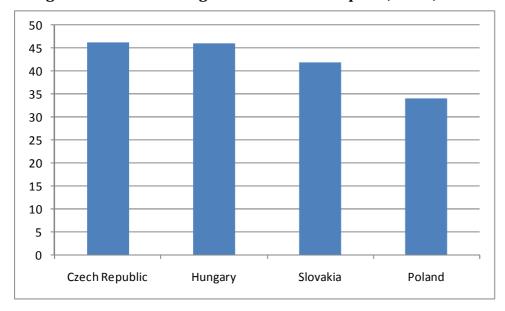


Figure 1. Share of foreign value added in exports, 2011, %

Source: Stehrer-Stöllinger, 2012, p.9., based on WIOD database

Based on these data Hungary, the Czech Republic and Slovakia are especially strongly linked to GVCs, but Poland to a lesser extent. Polish export structure is more dispersed and, in general, the effect of foreign multinational companies on export seems to be lower than in other CE countries.

Asia is another region of the world where economies are strongly integrated into GVCs. We have so far known quite little about the trade between Central European and Asian countries.⁴ There are, however, some papers dealing with this topic, like Éltető-Toporowski (2013) and Ando and Kimura (2013).

Éltető-Toporowski (2013) give detailed analysis of the trade between the Visegrád countries and Asian regions between 2000 and 2012. Applying detailed product classification, they find high geographic and product concentration and changing product specialisation of Visegrád countries towards Asian countries. Based on these, they conclude that the integration of V4 countries into the global value chains of multinational companies is also apparent in their trade with Asia.

Ando and Kimura (2013) analyse the trade and production contacts between Asia and Europe via the Central European countries. They show that in the past 15 years the Visegrád region increasingly connects the two continents in three ways: First, due to the dominance of East Asia in the electronics industry, European multinationals have been importing electronic parts and components from their Asian affiliates and other Asian firms to use them for their production in the V4 region. Second, the automotive industry agglomerations in the V4 import machinery parts and components from Asia. Third, certain Asian firms themselves have invested in the V4 countries and intensified sourcing from Asia. These factors have resulted in tight production links between East Asia and Central Europe to serve the European market.

Asia is a large and heterogeneous continent. Among the different Asian regions the highest trade increase took place with East Asia (mainly China) for all V4 countries. Therefore in the following we concentrate our analysis on Visegrád–East Asia⁵ economic relations, where China has a determinant role in trade and investment flows. We analyse these flows and furthermore, we assess certain effects of the international crisis. Finally we show the relevant economic policy promotion ambitions of the V4 governments - where they exist.

⁴ Economic contacts between China and the CEE region is described by Chen (2012).

⁵ East Asia comprises Hong Kong, China, Japan, North Korea, South Korea, Macao, Mongolia, Taiwan.

Trade between the V4 and East Asia - the role of China in comparison

The European Union has still a dominant role in the trade of the Visegrád countries. The share of Asian countries is much less, but their role has increased during the past years (Table 1). It is shown that for the V4 countries the weight of Asia is generally more significant in imports than in exports. The share of Asia in imports increased, except for Hungary,

Table 1. Share of EU and Asia in the foreign trade of the Visegrád countries

| | | EU | 27 | | Asia | | | |
|-------------------|------|------|--------|------|--------|------|------|------|
| | Exp | ort | Import | | Export | | Imp | ort |
| | 2000 | 2014 | 2000 | 2014 | 2000 | 2014 | 2000 | 2014 |
| Czech Republic | 85.9 | 81.8 | 75.2 | 77.1 | 4.0 | 5.2 | 8.2 | 13.9 |
| Hungary | 83.6 | 78.4 | 66.1 | 74.3 | 3.4 | 4.8 | 16.8 | 11.8 |
| Poland | 81.2 | 76.8 | 69.0 | 69.0 | 3.4 | 4.9 | 10.5 | 12.3 |
| Slovakia | 89.8 | 83.9 | 70.2 | 75.8 | 1.8 | 3.9 | 5.7 | 12.4 |

Source: calculations from Eurostat

Table 2. Increase of export to the EU, non-EU regions and Asia (2000=1)

| Czech Republic | 2000 | 2004 | 2007 | 2008 | 2009 | 2010 | 2012 | 2013 | 2014 |
|----------------|------|------|------|------|------|------|------|------|------|
| Intra-EU | 1 | 1.61 | 2.96 | 3.39 | 2.78 | 3.62 | 5.27 | 5.27 | 5.35 |
| Extra-EU | 1 | 1.79 | 2.82 | 3.13 | 2.54 | 3.11 | 3.64 | 3.63 | 3.96 |
| Asia | 1 | 1.50 | 2.73 | 2.98 | 2.82 | 3.67 | 4.98 | 5.01 | 5.41 |
| | | | | | | | | | |
| Hungary | 2000 | 2004 | 2007 | 2008 | 2009 | 2010 | 2012 | 2013 | 2014 |
| Intra-EU | 1 | 1.51 | 2.93 | 3.22 | 2.53 | 3.29 | 3.92 | 3.83 | 3.60 |
| Extra-EU | 1 | 1.45 | 2.15 | 2.26 | 1.84 | 2.18 | 2.40 | 2.44 | 2.56 |
| Asia | 1 | 1.90 | 3.25 | 3.67 | 3.21 | 4.50 | 4.99 | 4.57 | 3.89 |
| | | | | | | | | | |

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| Poland | 2000 | 2004 | 2007 | 2008 | 2009 | 2010 | 2012 | 2013 | 2014 |
|----------|------|------|------|------|------|------|------|-------|-------|
| Intra-EU | 1 | 1.84 | 3.34 | 3.98 | 3.09 | 3.90 | 5.36 | 5.99 | 5.85 |
| Extra-EU | 1 | 1.74 | 2.89 | 3.23 | 2.79 | 3.41 | 3.87 | 4.06 | 4.49 |
| Asia | 1 | 1.50 | 2.76 | 3.60 | 3.44 | 3.97 | 5.57 | 6.39 | 6.81 |
| | | | | | | | | | |
| Slovakia | 2000 | 2004 | 2007 | 2008 | 2009 | 2010 | 2012 | 2013 | 2014 |
| Intra-EU | 1 | 2.26 | 4.29 | 5.40 | 4.33 | 5.82 | 7.77 | 8.65 | 7.98 |
| Extra-EU | 1 | 1.68 | 3.22 | 3.59 | 3.00 | 3.58 | 4.62 | 4.66 | 4.76 |
| Asia | 1 | 1.85 | 4.14 | 5.17 | 4.70 | 6.98 | 9.67 | 11.99 | 11.10 |

Note: Extra-EU contains Asia too

Source: own calculations based on Eurostat data

The most dynamic increase took place with East Asia, the share of which is dominant in V4-Asian trade, it gives above 70% in imports and generally around 40-45% in exports (except for Slovakia where it is around 70%, heavily concentrated on China).

Table 3. Share of the main North Asian countries in Asian trade of V4 countries, 2014

| Export | Hungary | Czech Republic | Poland | Slovakia |
|-------------|---------|----------------|--------|----------|
| China | 35.01 | 22.29 | 21.15 | 53.05 |
| Hong Kong | 4.91 | 4.00 | 5.27 | 1.84 |
| Japan | 10.11 | 11.16 | 6.19 | 3.95 |
| South Korea | 5.86 | 6.59 | 4.76 | 4.10 |
| Import | Hungary | Czech Republic | Poland | Slovakia |
| China | 53.47 | 44.61 | 51.90 | 32.38 |
| Hong Kong | 0.57 | 7.85 | 1.01 | 0.44 |
| Japan | 9.50 | 5.61 | 5.28 | 3.82 |
| South Korea | 9.73 | 9.93 | 12.58 | 45.16 |

Source: Eurostat Comext

Table 3 shows the distribution of trade among the main East Asian partners. As seen above China has become the most important country of the region by far⁶. Other East Asian countries play smaller roles in the bilateral trade flows, although the share of South Korea is important in imports for the Visegrád countries (except for Hungary).

⁶ For Hungary, this has not always been the case, since Japan held the leading position in imports until 2002 and in exports until 2004. The following years the share of Japan declined radically.

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Czech imports from Hong Kong are also quite high. Exports to Japan are the most important also in the case of the Czech Republic, while Japan has the highest share in Hungarian import. North Korea, Mongolia and Macao also belong to East Asia, but there is almost no Visegrád trade with them.

A common feature of V4 trade with East Asia is the considerable deficit that is present in every country (driven by the deficit with China). Poland as the largest country has the highest trade figures. The share of China is similarly important for the Czech Republic, Hungary and Poland. An exception is Slovakia, because in its import from East Asia China has a rather small role (South Korea has a bigger role), but in its export the weight of China is outstandingly high. In the Slovakian trade balance the Chinese share is negligible.

Commodity structure of trade

All Visegrád countries export mainly machinery and transport equipment (SITC 7) to East-Asia. In the case of the smaller V4 countries (Hungary, Slovakia, Czech Republic) the machinery and transport export is above 70% within the total export, while in Polish exports the weight of this group has been smaller, around 25-50% in the past decade. There is a considerable share of other manufactured goods and food and livestock in the Polish exports.

Observing the traded goods in more detail, concentration on certain product groups is generally high. The concentration indices calculated by Éltető-Toporowski (2013) show that the values of these indices are much higher (0.35-0.55) for the Visegrád-East-Asian countries' trade than in the case of Visegrád trade with EU countries (around 0.11-0.15 in general). However, there are differences in the degree of trade concentration among Visegrád countries: Slovakian trade seems to be the most concentrated and Polish trade relatively the least. It is also to note that concentration has increased considerably since 2000.

Not only has the degree of concentration changed over time, but significant structural changes have also taken place during the past decade. The results of Éltető-Toporowski (2013) show that in almost all cases the main changes happened before the crisis,

export structures of 2000 – 2007 are much less similar than export structures of 2007 – 2013. This means that the present trade structure had largely been developed before 2007 between the V4 countries and their East Asian partners.

Table 4. Share of high-tech products in Visegrád trade

| Asia | Ехр | ort | Imį | port | |
|----------------|--------------|-------|--------------|-------|--|
| | million euro | % | million euro | % | |
| Czech Republic | 1495.54 | 23.5 | 5027.02 | 34.8 | |
| Hungary | 1469.11 | 31.3 | 4060.24 | 43.7 | |
| Poland | 878.61 | 11.8 | 3084.64 | 19.2 | |
| Slovakia | 111.84 | 4.0 | 2853.65 | 37.8 | |
| East Asia | Ехр | ort | Import | | |
| | million euro | % | million euro | % | |
| Czech Republic | 603.64 | 20.44 | 4452.31 | 41.90 | |
| Hungary | 472.61 | 20.20 | 3521.83 | 46.59 | |
| Poland | 350.34 | 11.08 | 2677.71 | 21.57 | |
| Slovakia | 39.03 | 2.07 | 2666.88 | 39.78 | |
| EU+extra EU | Ехр | ort | Imį | port | |
| % | Extra-EU | EU | Extra-EU | EU | |
| Czech Republic | 18.3 | 12.4 | 25.0 | 11.6 | |
| Hungary | 19.5 | 12.8 | 26.5 | 11.2 | |
| Poland | 8.4 | 5.9 | 10.4 | 10.1 | |
| Slovakia | 10.1 | 9.3 | 19.9 | 14.8 | |

Source: own calculations based on Eurostat data for 2013

Both increased concentration and structural changes resulted in the increase of high-tech intensity of trade. The high tech export volume and share to Asia is the highest in the case of Hungary and quite high for the Czech Republic but low in the case of Poland and Slovakia. For the sake of comparison the table includes high-tech intensity of trade with the EU and non-EU countries too. It is seen in table 4 that the Visegrád-Asia trade is much more high-tech intensive than the Visegrád-EU trade. In the table we also give data

for East Asian trade separately. It shows that Asian high-tech import of V4 countries comes mainly from East Asia but V4 high-tech export goes elsewhere in Asia (like the United Arab Emirates, Israel, Kazakhstan).

The high technology intensity of trade is mainly due to automotive, electronics and telecommunications products. This is based on the activity of multinational companies in the global production networks (see Ando-Kimura, 2013 as already mentioned). It is even more obvious if we observe the most traded products closely. Using the more detailed product classification of SITC 3 we calculated the shares of the first five product groups in the given Visegrád countries' trade. Results are presented in the Annex table. This classification contains almost 300 product groups, but in several cases only one or two product types dominate in one group. The high concentration of trade is striking. The most extreme case is of Slovakia, where 73% of exports to East-Asia (China) are given by one group: motor cars. In Slovakian import "optical instruments" (LCD devices)⁸, telecom equipment and automotive parts have a dominant role.

Hungarian exports are concentrated on "spark ignition piston engines", imports are even more concentrated on "telecommunication equipment" (mobile phones and parts). In Polish imports electronic data processing machines, parts and telecommunication equipment have a large share but in exports ships, boats and meat have an important role. The dominant Polish export product to East Asia (China), however, is copper. Although this is a raw material, it is a base material for producing integrated circuits and electronic parts, 9 the key components of electronic devices produced in GVCs. Thus, with

⁷ The most popular cars exported from Slovakia to China are the Audi O7 and the Volkswagen Touareg. In 2012 the territorial dispute between China and Japan over the Senkaku Islands was an advantage for the Slovakian industry. Because of the conflict, the Chinese boycotted Japanese vehicles and turned to German models instead. Volkswagen produces the three big sports models which were in high demand in China: the Bratislava factory produces the VW Touareg and Audi Q7 models as well as the bodywork for the Cayenne (http://www.voxeurop.eu/en/content/news-brief/2839471-china-and-japan-spatprovides-work-slovaks). Furthermore, the Volkswagen plant in Slovakia also began exports of Skoda cars 2013 and 100,000 China wants to reach cars within (http://www.automotivelogisticsmagazine.com/intelligence/vws-european-exports-to-china-will-stillgrow).

 $^{^8}$ Samsung Electronics Slovakia has operated in Galanta since 2002 and produces LCD TVs. It therefore imports liquid crystal devices (AMLCD) from South-Korea. Production is continually modernised, and the Galanta company has become the largest manufacturing plant of Samsung in Europe. In ten years it produced 60 million products and has invested more than € 350 million. Samsung and its suppliers employ around ten thousand people in the region, however this depends on the demand for TV sets.

⁹ Europe's second biggest copper producer is the Polish KGHM Polska Miedź S.A. and closely cooperates with Chinese Minmetals.

this base material Poland also participates in multinational networks, but in a lower, non-high-tech intensive level. The Czech exports are the least concentrated. In imports however "automatic data processing units" (laptops, notebooks) and "telecommunications equipment" (mobile phones and parts) dominate.

These characteristics show that the bulk of foreign trade between Visegrád countries and East Asia has been and still can be bound to certain products and certain (multinational) companies.

Asian direct investments in the Visegrád countries

Although Visegrád countries differ in many respects, they have some common features as possible locations for far-east investors. Their economies have been in the process of catching up over the last decades, their development paths are defined mainly by the global and European powers, rules and trends and FDI has a key role in the restructuring of these economies. There was investment from East Asian countries in the V4 as early as the nineties (for example the Japanese Suzuki factory in Hungary). Most of these countries became increasingly interested in developing good relations, boosting trade relations with and attracting investments from East Asian economies, however, the economic and financial crisis of 2008 drew the attention of these countries more than ever to the potential of this economic relationship.

Let us have an overview of national banks' statistics on FDI from East Asian countries. Altogether in the four countries around 90 per cent of foreign investments are from Europe, while only an average of 7.4% of foreign capital comes from countries outside Europe, with the USA, the Republic of Korea, Japan and China being the most significant investors. Typically, equity capital and reinvested earnings represent the larger share of East Asian invested capital, while other forms are not that significant. The only exception is Poland, where the "other investment" category (meaning mainly intercompany loans) outnumbers equity capital and reinvested earnings in the case of Chinese and Japanese investments.

Table 5. FDI stock in the V4 from the main East Asian countries, 2012 (million EUR)

| | China | Japan | South Korea |
|----------------|-------|--------|-------------|
| Czech Republic | -7.1 | 1058.1 | 1228 |
| Hungary | 65.4 | 772.6 | 1047.7 |
| Slovakia | 47.1 | 92.9 | 1899.1 |
| Poland | 218.5 | 1093.1 | 625.8 |

Source: national bank data in the case of Czech Republic, Hungary and Poland and OECD data in the case of Slovakia

As table 5 shows, according to V4 national banks' data South Korea has a dominant role in all countries except Poland; Japan is the largest East Asian investor in Poland, and the second largest in the Czech Republic, Hungary and Slovakia; while – based on these data – China is less significant.

The role of Chinese capital in Visegrád countries, compared to all the invested capital, is still very small, but in the last few years this capital inflow has accelerated significantly and has also played an important role in the region's recovery from the crisis. In the case of the selected countries there has been a growing demand for attracting Chinese companies in the last two to five years. In Hungary this process began as far back as 2003. Figure 2 shows the Chinese FDI in V4 countries based on a Chinese data source. There is a discrepancy with the above mentioned V4 national data, especially in the case of Czech and Hungarian data. According to Chinese statistics, Chinese FDI in the Czech Republic started to increase from 2006 (in 2005 it was 1.38 million USD, compared with 14.67 million USD in 2006) and reached 202 million USD in 2012. The official statistics explain this huge increase with the recalculation of stock for 2012 after adjustment of historical data, however, experts in the Czech Republic have no information on the components of this supposed growth. There is an inverse discrepancy in the case of Hungary as, according to Chinese data, the amount of Chinese investments reached 507 million USD by 2012.

30,600? **20,500**? **3**0,400? **30**,300? **3**0,200? **30,100**2 **30,000**? 20032 20092 20042 20052 20062 20072 20082 20102 20112 20122 ◆Czech? **--**Hungary⊡ **→** Poland ② **--**Slovakia⊡

Figure 2. China's OFDI stock in Visegrád Countries, 2003-2012, (USD million)

Source: CEIC China Premium Database, 2012; MOFCOM 2013.

According to the well-known theory of Dunning (1993), we can distinguish four kinds of motivations to invest abroad: market seeking, efficiency seeking, natural resource seeking and strategic asset seeking. A foreign direct investment has a *market seeking* motivation if it aims to supply the local market or markets in adjacent territories. It may represent a deeper involvement of the firm, following the success of exports, or the expansion of the firm to a new market. Transportation costs and government regulations can be good reasons for market seeking FDI. Following the firm's clients in their foreign expansion, the need to adapt products to local conditions and tastes, or the reduction of transaction can also play a role. *Efficiency seeking* FDI has two main forms. First, firms often seek to increase their cost efficiency by transferring a part of production to low labour costs locations. The second type of efficiency seeking FDI corresponds to investment aimed at rationalising the operations of existing MNEs. *Natural resource seeking* FDI flows mainly in utilisation of location specific minerals, raw materials and agricultural products. Firms increasingly use FDI to obtain tangible or intangible strategic assets that may be important to their long-term strategy but are not

available at home. This is a *strategic asset seeking* motive. FDI may be a tool to build the ownership advantages that will support the firm's expansion at home and abroad.

When searching for possible attractive factors of the region for East Asian investors, we should keep in mind that labour costs are lower in the Visegrád region than the EU average, although there are differences within the region as well. The V4 workforce is also considered to be skilled compared to other CEE countries. Concerning market size, Poland is the biggest market in terms of the size of population (38.1 million), while the others are medium-sized (10.5 million in the Czech Republic, 9.9 million in Hungary) or small (5.4 million in Slovakia)¹⁰, although from the Chinese point of view all of them could be considered to be rather small. The Czech Republic and Slovakia are relatively affluent markets as well: based on Eurostat's data on GDP per capita in purchasing power standards (PPS) – where EU28=100 – GDP per capita was highest in the Czech Republic (84), somewhat lower in the Slovak Republic (76) and relatively lower in Poland (68) and Hungary (68) in 2014¹¹.

Using the mentioned motivation framework of Dunning, we can find examples of the four types in the case of East Asian investors.

Concerning Japanese multinationals, Kawai (2006) analyzed motivations and locational determinants of investments in Central and Eastern European countries (CEECs) and found that Japanese MNCs' investments were motivated by relatively low labour and land costs and a well educated labour force necessary in manufacturing sectors. A large majority of Japanese FDI in CEECs was directed at the manufacturing sector, especially transport equipment and electronics (like Yazaki, Toyota, Suzuki, Sumitomo, Panasonic, Sony). Toyota built a joint venture factory (TPCA) with Peugeot in the Czech Republic in 2001 (producing from 2005) and opened a transmission factory in Poland during the same year and an engine factory in 2005, that supplies TPCA. TPCA produced 203000 cars in 2014 that were sold in the EU-countries. In the first half of 2015 production was 38% more than one year before in the same period. .¹². Several Japanese investors in the V4 manufacturing sector preferred countries with lower corporate tax and a high rate of GDP growth. Thus, overall, Japanese FDI in CEECs is

¹⁰ Eurostat, data, 2014

¹¹ Eurostat data, 2014

¹² http://www.praguepost.com/economy/48720-tpca-increased-production-in-h1

characterized by efficiency-seeking and market-seeking motives (Kawai, 2006; McCaleb-Szunomár, 2014).

Access to EU markets was an important market-seeking factor (Woon, 2003). The very first big Japanese investment in the transition countries was of Suzuki in Hungary: in 1991 Magyar Suzuki Corporation was established and serial production of cars started in 1992. By July 2014 over 2.5 million cars had rolled off the assembly line. The main motivation here was to get behind "EU walls", as Hungary had signed an association agreement in 1991 and had prospects for membership. Suzuki continually invested in developing its factory, increased share of local supplies (in order to reach the local content level required for tariff-free exports to the European Union) and therefore was basically the only greenfield car producer in the region with high local content.

South Korea has had similar motives when investing in the region. Among the first, being a risk-taker and market seeker, Daewoo established a basis in Poland in the automotive industry (purchasing the FSO factory) and in electronics. The large Korean producer exploited the opportunities of the Polish privatisation process when taking over FSO in 1996. Its suppliers later followed and also invested in Poland. Later, other South Korean car producers (Kia and Hyundai) made use of cheap labour and relatively good production conditions in the region and moved their development centres to the V4 to produce cars for European customers. The Hyundai Mobis plant is the third major South Korean investment project in the Czech Republic¹³. The Hyundai car plant was built between 2006 and 2008. It essentially started its production in 2009 and is still following an increasing trend in output. It is one of the most advanced automotive factories in Europe. There is also a Nexen tyre factory planned in the north part of Czechia, the agreement was signed in June 2014 and building begins in 2015 autumn.¹⁴

¹³ In July 2014 the Czech Prime Minister and the General Manager of Hyundai Mobis Co., Ltd. signed an Investment Agreement about the construction of the company for production of headlamps in Mošnov. The planned investment is 4.2 billion CZK, including state incentives The construction of the company is planned for September 2015 offering around 6-900 jobs. http://www.mobis-auto.cz/en/aktuality/140804.php

 $^{^{14}}$ South Korea's Nexen Tire Corp. has committed to spending \$1.1 billion to build a tire plant in Zatec, Czech Republic, that will have a capacity estimated at 6 million units annually with more than 1,000 employees. The plant will be built on a 375-acre site in the Triangle Industrial Zone near Zatec, with construction to start in 2015.

 $[\]frac{http://www.rubbernews.com/article/20140627/NEWS/140629958/south-koreas-nexen-tire-signs-czech-plant-deal\#}{}$

The plant will produce for EU market. In 2004 KIA Motors started to operate in Slovakia. It was the first manufacturing plant of this company in Europe. KIA Motors Slovakia employs 3 500 workers and produces five car models and also engines (ICEG, 2012). These heavily export-oriented investments had the aim of acquiring markets utilising a qualified labour force.

Generally, Chinese investments can be characterized mainly by natural resourceseeking, market-seeking (Buckley et al., 2007) and recently also by strategic assetseeking motives (Di Minin et al., 2012; Zhang et al., 2012). Considering the motivation of Chinese investments in the V4, the change of the institutional setting of Visegrád countries due to their economic integration into the EU has been the most important driver that has spurred Chinese FDI in the region, especially in the manufacturing sector. The majority of these firms that invested in the V4 countries after their EU accession were motivated mainly by accessing the old EU-15 markets, while local markets were of secondary importance (market-seeking). EU membership of the V4 countries allowed Chinese investors to avoid trade barriers and the countries served as an assembly base due to the relatively low labour costs (efficiency-seeking, see McCaleb-Szunomár, 2014). The main type of Chinese FDI thus in the region is market-seeking investment: by entering the Visegrád markets Chinese companies will have access not only to the EU market but also to markets of the CIS, the Mediterranean region and EFTA. However, parallel with the increasing number of mergers and acquisitions in the region, strategic asset-seeking motives have become more and more important for Chinese MNCs in recent years.

Chinese investors typically target secondary and tertiary sectors of the Visegrád countries. Initially, Chinese investment has flowed mostly into manufacturing (assembly), but over time services have attracted an increasing amount of investment as well¹⁵. The main Chinese investors targeting these four countries are interested primarily in telecommunication, electronics, the chemical industry and transportation.

¹⁵ For example, in Hungary and Poland there are branches of Bank of China and Industrial and Commercial Bank of China as well as offices of some of the largest law offices in China, Yingke Law Firm (in Hungary in 2010, in Poland in 2012), Dacheng Law Offices (in Poland in 2011, in Hungary in 2012). In Slovakia the Chinese Lenovo Group created a service centre in Bratislava. It was followed by Huawei and Mesnac, that has opened a research and technical centre aimed at designing and producing tyre molding machines and spare parts (Szikorova, 2012)

Their investments are motivated by the seeking of brands, new technologies or market niches that they can fill in European markets.

Describing Chinese investments in the CEE region, Jacoby (2014) observes that their characteristics differ somewhat from those in the EU. Among the three forms of FDI (greenfield investment, mergers & acquisitions and strategic alliances) we can find more greenfield projects and fewer strategic alliances from the Chinese side than in the EU.

Characterising Asian investments and their motivation in the Visegrád region we have to mention the role of state subsidies and incentives. Especially before EU membership, but also afterwards, governments and local authorities applied sometimes tailor-made incentives to attract large investors. In the case of Hungary the so-called "customs free zones" were highly attractive for greenfield foreign investors (among them Asian ones) during the nineties. These export oriented automotive, electronics and other firms provided a huge share of foreign trade of the country. Poland and Slovakia too, provided corporate tax allowances and other incentives for foreign investors. The Czech government has also given subsidies, for example about €200 million in tax allowances and other investment incentives to draw Hyundai to a high unemployment region. Similarly, TPCA¹⁶ was granted generous incentives from both the Czech state and from the town of Kolín, which paid for the complete development of the industrial zone, costs of traffic route extensions, sound barriers, new housing units and other adequate infrastructure. As a result of all of this the town of Kolín is indebted until 2019 (Guidote, 2008). The recently concluded agreements with Hyundai and Nexen have also included state incentives.¹⁷

¹⁶ The company is situated in the industrial zone Kolín-Ovčáry with around 3500 employees. Eighty percent of all parts for cars are sourced in the Czech Republic. More than 100 supplying firms (about 60 of them Japanese and a similar number of them from Western Europe) followed TPCA to the Czech Republic to work also for other car factories.

¹⁷ Under terms of the Nexen contract, the Czech state will provide investment incentives valued at a maximum of \$190 million, according to the Ministry of Industry and Trade. Of this, \$100 million represents tax relief on corporate income, \$50 million will be for financial support in the framework of strategic investments, \$15 million for job creation, \$15 million from the Ústí region as a discount on the land and \$4.5 million in financial support for training. http://www.tirebusiness.com/article/20140627/NEWS/140629917/nexen-settles-on-site-for-czech-tire-plant

Box 1. Chinese FDI in Hungary

Chinese investment in Hungary started to increase significantly after the country joined the EU in 2004. In 2010, Hungary itself attracted 89% of the whole Chinese capital flow to the region (Chen, 2012). By 2012, the amount of Chinese investments had further increased and reached 507 million USD (according to MOFCOM data), which is by far the highest in the region. Nevertheless, this amount is far greater when taking into account cumulative Hungarian data, since a significant portion of Chinese investment is received via intermediary countries or companies, therefore it appears elsewhere in Chinese statistics. According to Hungarian reports, Chinese investment in Hungary by 2014 was more than 3 billion USD, which represent around 2-2.5% of Hungary's total FDI stock.

More than 1.5 billion USD from that is the investment of the Chinese chemical company Wanhua, which acquired a 96 per cent stake in the Hungarian chemical company BorsodChem through its Dutch subsidiary in 2010 and 2011 and later also invested in the development of BorsodChem. It is the largest Chinese investment in the CEE region so far.

In Hungary, most of the significant Chinese TNCs operate in the manufacturing sector and have started to increase their investments in the last few years. Chinese TNCs have bought plants of other companies or replaced former partners of electronic manufacturing service providers. These investments have saved and/or created jobs and contributed to the economic growth of Hungary with their investments and exports during the crisis. Furthermore, many of them (e.g. Lenovo, ZTE, Huawei, Bank of China) have turned their Hungarian businesses into the European regional hub of their activities (Szunomár et al., 2014).

Hungary's importance as a regional distribution centre can also be observed in the field of trade. Some big retail and wholesale trade centres, as well as business matching centres in Budapest – e.g. Asia Center, China Brand Trade Center, Budapest Fashion Center, Budapest China Mart¹⁸ - support the distribution of different Chinese (or other Asian) products¹⁹ in the CEE region and also supply Hungarian customers. Besides retail, Chinese immigrants often operate restaurants in Hungary.

In addition to manufacturing, the investment of Chinese companies in Hungary covers industries such as chemical industry, telecommunications, trade, wholesale and retail, banking, hotels and catering, logistics, real estate and consultancy, etc. According to the data of the Hungarian Investment and Trade Agency more than 5000 Chinese companies operate in Hungary, including several multinationals, but most of them are small businesses operating in the service or retail sector: restaurants, perfumeries, and so called 'Chinese shops', selling bargains that comprise everything from shoes and clothes to plastic toys. According to the Hungarian Central Statistical Office, the number of Chinese-controlled foreign affiliates increased steadily between 2008 and 2010 and then decreased slightly in 2011.

In addition to Wanhua, other major investors are Huawei, ZTE Corporation, Lenovo, Sevenstar Electronics Co., BYD Electronics and Comlink. Concerning entry mode, there are examples of quasi-greenfield²⁰ investments (Huawei, ZTE, Lenovo), as well as M&As (Wanhua) and joint ventures (Orient Solar, BBCA). Another significant investment is the China Brand Trade Center (the investment of the Chinese company Genertec), which is a market platform for branded and competitive Chinese products and their suppliers. Typically, while Hungary would prefer greenfield investments (as they create jobs), in the past years Chinese investors tend to choose mergers and acquisitions and joint ventures when investing in Hungary.

 $^{^{18}}$ Asia Center and China Brand Trade Center are owned by Strabag SE. Budapest Fashion Center and Budapest China Mart are owned by Chinese investors.

¹⁹ e.g. entertainment electronics, household electronics, IT products, bags, gifts, crafts, accessories, jewellery, shoes, footwear, textile, home textile and garments, etc.

²⁰ Parent companies of Huawei, ZTE or Lenovo have not built up new operational facilities (as they chose the form of contract manufacturing) but created new long-term jobs by hiring new employees.

Crisis effects on trade and FDI

The international crisis in 2008 had generally negative effects on global value chains. The big trade collapse in 2009 was made even worse by the general credit crunch. Global value chains are channels for the rapid transmission of both real and financial shocks. Demand drop for final goods can immediately affect flows of intermediates, especially when supplier contracts are short-term. Credit market problems can have a negative international chain effect through global value chains. (Milberg & Winkler, 2010). Although, supporting a contrary opinion, others (eg. Altomonte & Ottaviano, 2009) point out that supply chains could have also been a factor of resilience in the crisis, as existing supply chains are difficult to abolish because of contractual arrangements and high initial sunk costs.

Trade drop and quick recovery could have been caused by the effect of the crisis on GVC trade that is mentioned by several authors as the "bullwhip effect" (Escaith et al. 2010, Altomonte et al. 2012, Zavacka 2012). This means that low demand expectations force lead firms to adjust by their inventories. After the crisis, if demand for the product is recovered, sold out inventories can be accumulated again, so trade increase can also be magnified by GVCs. Sass-Szalavetz (2014) reviews and sums up the empirical literature on the role of GVCs in the crisis and concludes that the results depend on the different approaches and different methodologies, datasets and time period. They also reinforce the twofold effects of GVCs: on the one hand transmitting and amplifying the crisis contributing to the decrease of international trade; on the other hand producing a stabilizing effect. This latter took place in a slightly longer run, attributed to the bullwhip effect and to the fact that companies inside the value chain helped each other by financing or network rebuilding. The bullwhip effect has been well manifested in the rebound of Visegrád-Asian trade too.

The international crisis resulted in reorganisations and relocations of firms. Trade flows largely controlled by multinational companies and their production in the global production chains have been affected by the relocation decisions of these firms. Companies relocated to improve their competitiveness as a consequence of the crisis and this had both negative and positive effects on the trading countries. Hunya – Sass (2014) found increasing relocation activity to Hungary in the post-crisis years until

2011 and found evidence for re-shoring or back-shoring as well. Also, some additional investments have been relocated from Western Europe to Poland due to low cost seeking by multinationals (Éltető-Toporowski, 2013). On the other hand, relocation also took place from Hungary, decreasing the Hungarian export capacity significantly in 2012-14. This relocation only favoured the East-Asian countries²¹.

Automotive industry plants were hit Europe-wide by the crisis and it affected Asian-owned firms in the Visegrád region too. The scrappage incentive programme introduced as an anti-crisis measure significantly helped the Czech TPCA company as it is focused on the production of small ecological cars, which were targeted by the scrappage. Mass production in the Hyundai factory was launched in November 2008, at the time of one of the most ignificant impacts of the crisis in the Czech Republic., Hyundai generally suffered a big loss because of the economic crisis, but figures for the Czech plant improved the following year. A three-shift system was introduced and the production capacity extended (Šerý, 2011).

As a reaction to the global financial crisis the V4 countries started to search for new opportunities for their recovery from the recession. For example, Hungary's "Eastern Opening" policy was initiated after (and partly as a result of) the crisis. Accordingly, China took these opportunities and have increased sectoral representation of Chinese firms in CEECs in recent years. Another reason for this higher representation could be a diversification strategy, because recently Chinese global investment strategy places great emphasis on diversification in all respects.

Economic policy towards Asia in the Visegrád region

In the case of *Poland*, the major objectives of economic policy are the expansion of exports to Asian markets, attracting FDI to Poland, and supporting Polish enterprises in their business interests in Asia. In recent years officials and experts have often called for

²¹ In 2012 Nokia downgraded its affiliate in Hungary, switched assembly to Nokia's plants in South Korea and in Beijing. Therefore, in 2012 the previously huge export of cellular phones from Hungary decreased. In 2014 Microsoft (the owner of Nokia Komárom) announced the closure of the firm.

²² This enabled TPCA to hire about 100 new workers in 2009 and some extra shifts could be created. Therefore the company was able to produce about 8,400 vehicles more than in 2008.

a strategy in Polish foreign policy towards Asia. In the priorities of Polish foreign policy for 2012-2016, four Asian countries were identified as important in terms of developing bilateral relations: China, India, Japan and South Korea. These countries can have an important role not only in investments to Poland but also in developing commercial contacts in such sectors as infrastructure, finance, tourism and the creative industries. Poland has good connections with Japan and in 2014 the Polish government stated that it intends to raise relations to the strategic level.²³

China gained special interest in Polish foreign economic policy not only due to its huge market and the growing interest of Chinese enterprises to invest abroad but also because of the huge trade deficit that needs to be narrowed. A new chapter in bilateral relations was opened in December 2011, when Poland became the eighth strategic partner of China in the EU. Later, in April 2012 during his visit to Poland at the First CEEC-China Summit, the Chinese prime minister officially launched a cooperation plan with CEE countries called "Warsaw initiative". The plan includes 16 countries in the region: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, The Czech Republic, Estonia, Lithuania, Latvia, Macedonia, Romania, Serbia, Slovakia, Slovenia Poland and Hungary. The "2nd Regional Forum, Poland - China" was held in Guangzhou in June 2014. 150 local government officials, scholars and entrepreneurs attended the conference promoting tourism, trade and investment.²⁴ China is opening new trade routes, which is important for increasing trade volume with Poland. The Chengdu-Łodź direct cargo rail link (crossing Kazakhstan, Russia and Belarus) was launched in 2013. So far the Chengdu-Łodź connection is used only to import products from China and trains return almost "empty" to Chengdu (Szczudlik-Tatar, J., 2014).

In the *Czech Republic*, ties with many Asian countries went through a substantial shift during the period 2000-2013. Although there is no strategic document focusing directly on Asia, Czech companies together with the Czech government are trying to decrease the dependency of the Czech economy on the EU market and this effort is mostly focused on BRICS and Asian countries (Križ, 2013). The "Export strategy 2012-2020" has set 12

^{2:}

http://www.msz.gov.pl/en/news/prospects for polish companies expanding into japan?channel=www

²⁴ http://www.globaltimes.cn/content/864825.shtml

priority countries, among them China. (Czech political relations with China were among the coldest in the whole of Europe. The current left-wing coalition perceives China as one of the top future economic priorities and recently declared a "restart" of Czech-Chinese relations.) In August 2014 a two-day Chinese Investment Forum was held in Prague attended by over 500 Chinese and 700 Czech and other European delegates. "The development of cooperation with China is a priority of the Czech government", said the attending Czech Prime Minister and emphasized the necessity of a direct air link between Prague and a major Chinese destination. The Chinese deputy Prime Minister stressed China's will to cooperate with all of Central and Eastern Europe, especially in construction of infrastructure (roads, railways and ports), and its interest in importing Central European technologies.²⁵

The Czech government has good relations with Japan and South Korea. Czech-Japanese science and technology days are regularly organised. In 2014 new large Korean investments were announced and high profile meetings took place.²⁶ The Czech Republic is the only Central European country with a direct air link to the Republic of Korea.

A look into major documents of *Slovak* foreign policy reveals an interesting feature: more recent documents seem to pay less attention to China than somewhat older documents. In a 2010 document it is written that "the foreign policy activities of Slovakia in Asia will be oriented toward strengthening economic and political dialogue with the most important countries of the region – China, Japan, India and the Republic of Korea²⁷". But for instance, the recent mid-term strategy of foreign policy until 2015²⁸ does not mention China or Asia in general at all, and instead the document presents a

http://www.ansa.it/nuova_europa/en/news/sections/news/2014/08/29/great-investment-forum-in-prague-to-attract-chinese-business_c694ca79-e8af-470c-b919-28d99f9d10c7.html

²⁶ Ministers of Foreign Affairs of the Czech Republic and the Republic of Korea met on 16 July, 2014 and discussed ways to raise the partnership between the Czech Republic and the Republic of Korea to a strategic level and opportunities for further broadening the cooperation, including the areas of energy, science and modern technologies.

http://www.mzv.cz/jnp/en/issues and press/x2014 07 16 minister zaoralek met foreign minister of r epublic of korea.html

²⁷ Orientation of the Foreign Policy of the Slovak Republic in 2010. http://www.foreign.gov.sk/App/wcm/media.nsf/vw_ByID/ID_78DED0BDDD8B3A35C1257706002D8E9_C_EN/\$File/Zameranie_2010_fin_EN.pdf

 $^{^{28} \}underline{\text{https://www.mzv.sk/App/wcm/media.nsf/vw ByID/ID D9D5A743A2CE0A4FC12578950037A688 SK/\$File/strategia\%20ZP\%20SR.pdf}$

rather 'traditional' European and Atlantic approach. Similarly, there is only one single and indirect mention of China in the government program declaration of 2012²⁹ as part of developing economic diplomacy towards Russia and other BRICS countries. The declaration of foreign policy direction for the year 2014³⁰ mentions EU-China strategic partnership; proposes the possible development of relations with China in the platform of the V4 and mentions the possibility of utilizing Chinese economic potential. In 2014 a ministry level meeting took place in Beijing (Turcsányi, 2014).³¹ A European-Chinese business centre was also built in Slovakia, to help Chinese businesses (Szikorova, 2012).

The most pronounced and the earliest official government strategy towards Asia can be found in *Hungary*. The global crisis has opened a new and more intensive phase in Hungarian-East Asian relations. Several organizations have been established and a new foreign economic policy has been launched with special emphasis on the so-called "Eastern opening". This new foreign economic strategy was approved by the government in the spring of 2012. The government would like to maintain Hungary's strong and important economic relations with Western industrial countries, while simultaneously diversifying Hungary's foreign economic relations and developing Eastern (or Asian) relations. Rapidly growing Asian countries are considered as ones able to provide several business opportunities and China is considered as an alternative source of external financing.

In the field of export development, the foreign economic strategy puts forward an active state intervention to diversify Hungary's export markets and structure, and also to develop the export capability of small domestic companies.

The foreign economic strategy aims at geographical diversification of export. The Hungarian policymakers would like to have Hungarian companies benefit from the rapid

Beijing. http://www.fmprc.gov.cn/mfa_eng/wjbxw/t1168138.shtml

²⁹https://www.mzv.sk/App/wcm/media.nsf/vw_ByID/ID_D79B776034EEB158C12577850041BCAC_SK/ \$File/120511_programove_vyhlasenie_vlady_zahranicna_politika.pdf

³⁰https://www.mzv.sk/App/wcm/media.nsf/vw_ByID/ID_CCDA4C778C8470ADC1257C7F0048B977_SK/ \$File/Zameranie%20zahrani%C4%8Dnej%20a%20eur%C3%B3pskej%20politiky%20Slovenskej%20rep ubliky%20na%20rok%202014.pdf

³¹ On June 19, 2014, Chinese and Slovak directors of the Policy Planning Departments of the Foreign Ministries held consultation on foreign policies between the policy planning departments of the two Foreign Ministries of both countries in

growth of Asian markets. The foreign economic strategy puts emphasis on developing trade (and technology) relations with China, India, Russia, South Korea, Turkey, ASEAN member states, Arab countries and the CIS. Developing indirect exports to Asian (or other emerging) markets means that Hungarian companies should become suppliers of big European (e.g. German, Austrian and Scandinavian) exporters with a strong position in emerging markets (Éltető-Völgyi, 2013).

To enhance SMEs'entry into emerging (Asian) markets, the opening of state-owned *trading houses*³² took place. At the beginning of 2013, the state-owned National Trading House³³ was established and opened 29 trading houses by mid-2015 in several Asian countries like China, Saudi Arabia, Russia and Kazakhstan. Trading houses are intended to help Hungarian SMEs to sell their products abroad. In addition, the policymakers will also take possible cooperation with private trading houses into consideration.³⁴

The foreign economic strategy also recommends the development of economic diplomacy, e.g. the network of attachés for foreign economic relations and more aligned cooperation among export financing state banks, the Ministry of National Economy and the Trade and Investment Agency. Beside these institutions, we should pay attention to the growing importance of different chambers, committees and business forums in the framework of the "Eastern Opening". Within the Hungarian Chamber of Commerce and Industry, new (Chinese, Kazakh and Turkish) departments have been established. Reactivating the work of Joint Economic Committees (intergovernmental organisations) and the growing number of meetings of high-ranking politicians (in Asia or Hungary), as well as business forums underpin Hungary's strong commitment to the 'Eastern Opening.' Invigorating Hungarian-Chinese economic relations traces back to 2003. Since then, there have been several annual meetings of high-ranking politicians either in Hungary or China. These events have had an important effect on Chinese-Hungarian trade.

³² By creating trading houses, the government would like to help Hungarian companies that lack capital with its knowledge of foreign trade and foreign markets to enable these companies to enter new emerging markets. In export development, trading houses will function as integrators between Hungarian SMEs and foreign buyers.

³³ http://www.tradehouse.hu/index.php?mid=450

³⁴ In December 2012, Széchenyi Bank opened a trading house in Baku, Azerbaijan. QUAESTOR, a financial consultancy company is planning to establish a trading house in Moscow, Russia.

In 2004, the Hungarian consulate in Shanghai was reopened and in 2010, a new consulate was opened in Chongqing. Some vocational organisations, e.g. ChinaCham Hungary (Hungarian-Chinese Economic Chamber), and the Chinese-Hungarian Business Committee have been established recently to intensify bilateral business relations. In addition, Hungary has the opportunity, together with other CEECs, to develop economic relations with China in a multilateral forum. The first China-CEE Economic and Trade Forum was held in Budapest, in June 2011. After that, the first meeting of the leaders of China and those of the CEE countries was organised in Warsaw, in April 2012. The Secretariat of China-Central Eastern Europe Cooperation was established within the Ministry of Foreign Affairs of the PRC and the first meeting of national co-ordinators was held in Beijing, in September 2012. The cooperation among China and CEECs includes trade, investments, infrastructural development and building of technology and industrial parks, etc.

The Hungarian policy presented above not only concentrates on developing trade, but also on attracting FDI from emerging (Asian) countries. Earlier, Hungary had strong ties with Japan but mutual trade has decreased constantly.³⁵ Besides 'old' Asian investor partners (e.g. Japan, South Korea), China is considered to be an investor with growing importance for Hungary. The export of Hungarian technologies (e.g. agriculture and water management) can also play a significant role in developing economic relations with emerging (Asian) countries.

Interestingly, despite the deliberate steps, only minor amounts of fresh Chinese investment have arrived to Hungary after the announcement of the Eastern Opening Policy, big investment projects - similar to the investment of Wanhua or Huawei – are still awaited. This setback is partly due to the Eurozone crisis and partly due to some loss of trust in business circles. In spite of the strong, high-level support from both Budapest and Beijing, businessmen have not found real major opportunities. The reason behind this was probably the diverging economic interest of the two sides. Hungary

³⁵ In the electronics industry, several Japanese companies (e.g. Sunarrow, TDK, Sony and Sanshin) recently closed their subsidiaries in Hungary. The Suzuki car factory's annual production has decreased from a 300,000 peak in 2006 to 170-180,000 units for today. The global crisis, the strong yen and possibly the use of alternative sources of supplies (planting Japanese production units to China) have caused a negative tendency in Hungary's imports from Japan (Éltető-Völgyi, 2013).

would gladly receive Chinese greenfield investment and cheap if not free financial support. Meanwhile the Chinese are interested in infrastructure investment through public procurement and in providing credit lines which are not compatible with EU regulations. (Szunomár-Völgyi-Matura, 2014 p 22).

Finally, it should be mentioned that recently interest in Chinese economic policy has also increased in the region. In April 2012 China opened a ten billion dollar credit line for Chinese investment in the CEE. A Business Forum was launched and a Secretariat for China-Central and Eastern Europe Cooperation was established (Jacoby, 2014). Furthermore, it seems that Chinese leaders are determined to implement the "New Silk Road" strategy and have included Central and Eastern Europe in it (Szczudlik-Tatar, J., 2014). At the second CEEC-China Summit in Bucharest, 2013, China suggested closer cooperation in the transport and infrastructure sectors, which may facilitate economic cooperation. In the joint CEE16–China declaration released after the summit, both sides declared the intention to construct international railway transport connections and establish preferential economic areas along them that may facilitate trade. At the third CEEC-China summit in Belgrade in 2014, the Chinese prime minister highlighted capital projects and investment in infrastructure as the most important forms of cooperation between the CEE region and China.

These events already show that growing Chinese interest and the channelling of this interest into official ways will probably further intensify policy steps on the other, Visegrád side too.

Summary, future prospects

Having examined the Visegrád-East Asian economic ties, we can conclude that while Japan and South Korea previously had larger roles, recently China is pushing forward. Partly a deliberate policy from the Chinese side and partly the fact of increasing trade relations justify this trend.

Our paper showed that the Visegrád region is not homogeneous and that there are differences in the economic relations between Visegrád countries and East Asia too. It is

also obvious that trade and foreign direct investment are intensely linked. In this respect we can speak about three "models".

One is the model of Slovakia, which is built on the automotive industry. As we have seen, Slovakian export to East Asia is extremely concentrated on cars. This has partly specific reasons (like the substitution of Japanese luxury cars with Slovakian produced ones in China) and partly general reasons: Slovakian car export is high to everywhere. (Currently, the auto industry accounts for 25 percent of Slovakian exports, one third of the country's industrial production and a quarter of its GDP.) However, as Fidrmuc et al., (2013) conclude, this Slovakian trade pattern that concentrates on motor vehicle exports can be vulnerable. Up until now successful export-led growth strategy has been built on mobile industries which could move in quickly, but could also leave easily. Apart from that, the automotive sector is largely vulnerable to changes in demand. (Kia in 2013 produced less vehicles compared to 2012. In order to eliminate overcapacity, the Renault/PSA factory in Slovakia introduced reduced working hours in 2012. VW Slovakia also responded to the first decline in sales caused by the economic crisis with cuts to working hours and the laying off of temporary workers.³⁶)

In order to decrease vulnerability and increase stability, domestic value added should be increased and positions in global chains improved.³⁷

Another model is that of Poland, which is to a lesser extent included in global production networks. It is perhaps better to say that Poland is included on another level, being an important exporter of copper to East Asian firms of global chains. Poland has a larger internal market and its trade is less concentrated, with fewer high-tech products than that of the other V4 countries.

A third model is exemplified by the Czech Republic and Hungary, both being strongly integrated to GVCs, also relying a lot on the automotive industry but in a more diversified way than Slovakia. They have relatively intensive trade relations with East

³⁶ http://www.wsws.org/en/articles/2013/04/10/auto-a10.html

³⁷ As Baláž (2013) writes: "When Volkswagen arrived in Slovakia twenty years ago, nearly 90 per cent of the components had to be imported from outside the country. Today, the auto industry still imports components that make up more than 60 per cent of the total cost of the vehicle. In most cases, however, these suppliers are the traditional foreign partners of multinational companies, and Slovak companies can break into those multinational networks only with great difficulty. What's more, foreign suppliers established in Slovakia usually only manufacture their products here, while keeping the more refined, well-paid activities, such as design, financial services, research and development, at home."

Asia. Japanese, Korean and Chinese capital favoured these economies (mainly Hungary) in the past decades. Hungary has a strategic policy towards Asia, and terms of relations are improving between the Czech Republic and China. It is to be expected that the economic relations of these two countries with East Asia will remain intensive or become stronger in the following years.

Regarding the fact that the international crisis strengthened interest in both East Asian and V4 partners to cooperate, it is quite possible that in the future these three kinds of "models" and the bilateral relations will become more similar.

As detailed above, most of the Visegrád governments lack a unified strategy towards East Asian countries with Hungary being the only exception. Visegrád countries might enhance their economic relations with East Asian countries by evolving focused strategies or policies towards the East Asian region.

In order to attract more investment, governments should be able to offer more opportunities and incentives for potential investors while – for example in the case of China - authorities should also help the investors to familiarize with laws, regulations and business habits in the host country. Simultaneously, Visegrád societies should learn more about East Asia and East Asian business practices as business cultures are differ in many respects.

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Annex

Table A1: First five product groups in Visegrad-East Asia trade, 2013

| CZECH REP. | IMP | CZECH REP, | EXP | HUNGARY | IMP | HUNGARY | EXP |
|--|-------|---|---|---|-------|--|-------|
| AUTOMATIC DATA-PROCESSING MACHINES AND UNITS THEREOF | 19,87 | ELECTRICAL APPARATUS FOR SWITCHING OR PROTECTING ELECTRICAL CIRCUITS | 7,34 TELECOMMUNICATIONS EQUIPMENT AND PARTS AND ACCESSORIES | | 44,88 | INTERNAL COMBUSTION PISTON ENGINES AND PARTS | 20,65 |
| TELECOMMUNICATIONS EQUIPMENT AND PARTS | 14,76 | BABY CARRIAGES, TOYS, GAMES AND SPORTING GOODS | 6,84 | ELECTRICAL APPARATUS FOR SWITCHING OR PROTECTING ELECTRICAL CIRCUITS | 5,18 | MEASURING, CHECKING, ANALYSING AND CONTROLLING INSTRUMENTS | 8,07 |
| PARTS AND ACCESSORIES SUITABLE FOR USE WITH MACHINES WITHIN GROUPS 751 AND 752 | 9,17 | INTERNAL COMBUSTION PISTON ENGINES AND PARTS THEREOF | 5,23 | PARTS AND ACCESSORIES SUITABLE FOR USE WITH MACHINES WITHING GROUPS 751 AND 752 | 4,60 | AUTOMATIC DATA- PROCESSING MACHINES AND UNITS THEREOF; | 7,96 |
| PARTS AND ACCESSORIES OF THE MOTOR VEHICLES OF GROUPS 722, 781, 782 AND 783 | 7,30 | PARTS AND ACCESSORIES OF THE MOTOR VEHICLES OF GROUPS 722, 781, 782 AND 783 | 4,64 | 4,64 THERMIONIC, CATHODE VALVES AND TUBES | | TELECOMMUNICATIONS EQUIPMENT, PARTS | 5,43 |
| ELECTRICAL MACHINERY AND APPARATUS, N.E.S. | 3,04 | ELECTRICAL MACHINERY AND APPARATUS, N.E.S. | ''' ''' | | 4,32 | TRANSMISSION SHAFTS AND CRANKS, GEARS | 4,49 |
| SLOVAKIA | IMP | SLOVAKIA | EXP | POLAND | IMP | POLAND | EXP |
| OPTICAL INSTRUMENTS AND APPARATUS, N.E.S. | 19,96 | MOTOR CARS AND OTHER MOTOR VEHICLES | 74,34 | TELECOMMUNICATIONS EQUIPMENT, AND PARTS, | 15,86 | COPPER | 16,62 |
| TELECOMMUNICATIONS EQUIPMENT, AND PARTS, | 14,78 | OTHER MACHINERY AND EQUIPMENT SPECIALIZED FOR PARTICULAR INDUSTRIES | 7,72 | PARTS AND ACCESSORIES SUITABLE FOR USE WITH MACHINES WITHIN GROUPS 751 AND 752 | 5,38 | OTHER MEAT AND EDIBLE MEAT OFFAL | 8,07 |
| PARTS AND ACCESSORIES OF THE MOTOR VEHICLES OF GROUPS 722, 781, 782 AND 783 | 10,52 | PUMPS AIR OR OTHER GAS COMPRESSORS AND FANS | 2,05 | AUTOMATIC DATA-PROCESSING MACHINES AND UNITS THEREOF | 5,23 | INTERNAL COMBUSTION PISTON ENGINES AND PARTS | 5,70 |

| AUTOMATIC DATA-PROCESSING | 5,51 | FURNITURE A | AND PARTS | 1,02 | ELECTRICAL MACHINERY AND | 4,71 | SHIPS, BOATS | 5,20 |
|--|------|------------------------------|------------|------|--|------|---|------|
| MACHINES AND UNITS | | THEREOF; | | | APPARATUS, N.E.S. | | | |
| THERMIONIC, COLD CATHODE OR PHOTO-CATHODE VALVES AND | | TRANSMISSION CRANKS,GEARS | SHAFTS AND | 1,01 | ELECTRICAL APPARATUS FOR SWITCHING OR PROTECTING | 3,18 | TELECOMMUNICATIONS EQUIPMENT, AND PARTS | 5,16 |
| TUBES | | | | | ELECTRICAL CIRCUITS | | | |

Source: own calculations based on Eurostat Comext data, SITC 3 digit