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**FOREIGN DIRECT INVESTMENTS OF EMERGING ASIA  
IN V<sub>4</sub> COUNTRIES: HOST COUNTRY DETERMINANTS**

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# Foreign direct investments of emerging Asia in V4 countries: Host country determinants

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### Introduction

In the last two decades, outward foreign direct investment of emerging (developing) economies became a widely researched topic among academics. Several emerging economies, such as China, Hong Kong, South Korea, Taiwan, Singapore, Malaysia and Russia etc., compete with the top traditional investors, like the USA, Japan and Western European countries, in terms of the size of annual FDI outflow. For the first time, in 2014, FDI outflow of developing Asia outpaced that of North America and Europe. This paper carves out a small part of this phenomenon, and focuses on foreign direct investments of six emerging Asian countries (e.g. South Korea, Taiwan, Malaysia, Thailand, Indonesia and Vietnam) in the CEE region, namely Hungary, Poland, Slovakia and the Czech Republic (V4 countries). In this paper we primarily investigate the host country determinants for these investments. To carry out our research, we have used company data provided by Amadeus and in addition, we have collected information about Asian companies located in V4 countries on the websites of companies, investment promotion agencies, embassies, ministries and relevant media sources. In the first part of our paper we shortly outline the theoretical background of our research.

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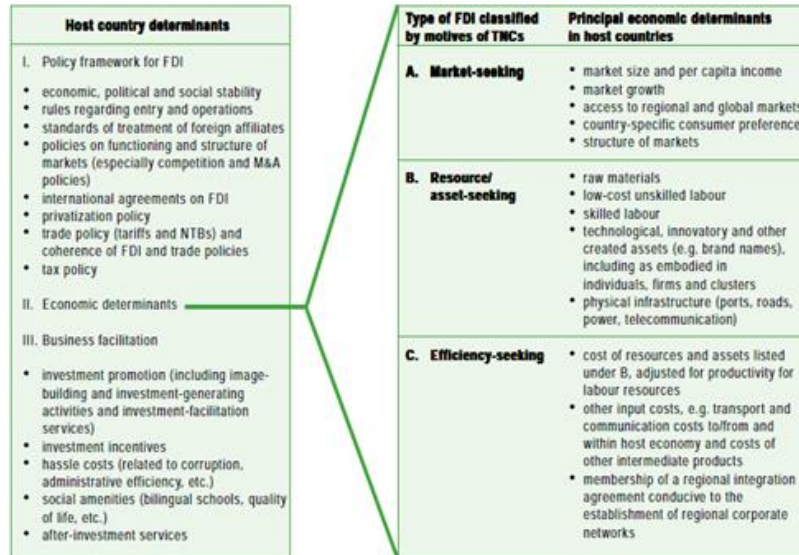
The second part concentrates on the main characteristics of outward foreign direct investments from emerging Asian countries in general and – with a special focus - on that in V4 countries. In the third part, we assess the most important host country determinants of FDI from emerging Asian countries. And finally, we draw some conclusions.

### **Theoretical background**

“The basic rationale for FDI by firms in a global market economy is to increase or protect their profitability and/or capital value” [UNCTAD 2006, p. 142]. “It is widely agreed that foreign direct investment takes place when three sets of determining factors exist simultaneously [Dunning 1993]: the presence of ownership-specific competitive advantages in a transnational corporation, the presence of locational-specific advantages in a host country, and the presence of superior commercial benefits in an intra-firm as against an arm’s-length relationship between investor and recipient” (internalization-specific advantages)” [UNCTAD 1998, p. 89]. In this study we primarily focus on locational-specific or host country’s determinants of FDI (in case of six Asian countries’ FDI in V4 countries). Figure 1 summarizes host country determinants of foreign direct investments. Four motivations of transnational corporations investing abroad can be differentiated here: market-seeking, resource-seeking, efficiency-seeking and strategic asset-seeking. Behind every motivation-type there are several dominant economic determinants. The various elements of host country’s policy framework for FDI and business facilitation are also important factors influencing foreign direct investments. These can also be called together as pull factors.

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**Figure 1:** Host country determinants of FDI



Source: UNCTAD 1998, p. 91

Market-seeking investments mean that transnational corporations “invest in a particular country or region to supply goods or services to markets in these or in adjacent countries” [Dunning – Lundan 2008, p. 69]. In many cases, these markets are supplied by exports from investors’ country. The reason for this change can be trade barriers imposed by host country or larger market with a growth potential. “Market-seeking investment may be undertaken to sustain or protect existing markets, or to exploit or promote new markets. Apart from market size and the prospects for market growth”, there are further reasons “which might prompt firms to engage in market-seeking investment” [Dunning – Lundan 2008, pp. 70-71]:

1. firms follow their main suppliers and customers investing overseas
2. products need to be adapted to local needs, tastes and cultural mores etc.
3. the “production and transaction costs of serving a local market form an adjacent facility are less than supplying it form a distance”
4. it may be necessary to be present in the leading markets served by competitors

In case of resource-seeking investments, the main aim of transnational corporations is to acquire particular types of resources that they are not available at home (like

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natural resources/raw materials or technological capability, management/marketing expertise, organisational skills) or that are available at a lower cost (such plentiful supply of unskilled or semi-skilled labour that is offered at a cheaper price with respect to the home country) [Franco et al. 2008, p. 7]. Nowadays, the term of resource-seeking mainly refers to natural resources/raw materials investments (natural resource-seeking investment). And these two motivations mentioned above have been completed with two others.

“The motivation of efficiency-seeking FDI is to rationalise the structure of established resource-based or market-seeking investment in such a way that the investing company can gain from the common governance of geographically dispersed activities. Efficiency-seeking FDI is of two main kinds. The first is that designed to take advantage of differences in the availability and relative cost of traditional factor endowments in different countries (developed countries – developing countries). The second kind of efficiency-seeking investment is that which takes place in countries with broadly similar economic structures and income levels and is designed to take advantage of the economies of scale and scope, and of differences in consumer tastes and supply capabilities” [Dunning – Lundan 2008, p. 72].

Strategic asset-seeking investments can be described by asset-augmenting activity of transnational corporations. “They are motivated to venture into international markets in order to acquire “strategic” created assets such as technology, brands, distribution networks, R&D facilities and managerial competences (quite commonly through M&As)” [UNCTAD 2006, p. 142].

Motivations listed above are often combined and complex in an FDI deal. In the next parts of the study we will determine the main motivations and pull factors of FDI of the six Asian countries in V4 countries.

### **Outward FDI of emerging Asia in V4 countries**

The six Asian countries selected for this paper represent at least three stages of the sequential economic development in Asia. South Korea and Taiwan belong to the first-tier newly industrialized countries in Asia. Malaysia, Thailand and Indonesia represent

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the second-tier newly industrialized countries which has been followed by Vietnam in the third round. The scale of each country's outward direct investments reflects the economic advancement of each country. Of the six countries, South Korea and Taiwan have the largest outward FDI stock and they even manage to get into the annual UNCTAD list of top20 FDI home countries. In the list of 2016, South Korea and Taiwan were ranked at the 13th and 20th place, respectively. Of the ASEAN member countries, only Malaysia can be considered as an important investor in global scale. Outward FDI from South Korea, Taiwan and Malaysia have started to increase substantially since the 1990s and all three countries have become a net FDI source country. Companies of

**Table 1:** Foreign direct investment of six Asian countries in V4  
(stock, million US dollars, 2016)

	<b>Czech Republic<sup>1</sup></b>	<b>Hungary</b>	<b>Poland<sup>2</sup></b>	<b>Slovakia<sup>3</sup></b>
<b>South Korea</b>	2184	1523	1187	2506
<b>Taiwan</b>	633	96	231	n. a.
<b>Malaysia</b>	**	8	258	173
<b>Thailand</b>	**	11	27	15
<b>Indonesia</b>	0	-4	0	1
<b>Vietnam</b>	5	-2	0	25

Source: OECD. Stat.

<sup>1,2</sup>data according to ultimate investors

<sup>3</sup>UNCTAD (data of 2012)

\*\*non-publishable and confidential data

Thailand, Indonesia, and especially Vietnam have begun to increase their investments abroad in the recent decade. Outward FDI from each of the six countries show regional, namely, (East) Asian bias. South Korea, which is a significant FDI source country in global terms, has the strongest presence through several companies in V4 countries. The second largest investor is Taiwan, but with much less companies located in V4 countries.

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Foreign direct investments from the four ASEAN countries are sporadic - or even missing - in V4 countries.

Foreign direct investments in V4 countries mainly originate from the EU. Slovakia, Hungary, Poland and the Czech Republic are deeply integrated into the GVCs, especially the European ones. But outside Europe, South Korea is one of the most important FDI source country for V4 countries. For example, in case of Slovakia, South Korea is the biggest non-European foreign investor. According to the OECD statistics of ultimate investors, in case of the Czech Republic, South Korea is the second largest FDI source country (after Japan) outside Europe. In case of Poland, South Korea is the fourth largest FDI source country (after the USA, Canada and Japan) outside Europe.<sup>3</sup>

Companies from Korea, Taiwan and the four ASEAN countries located in V4 countries have been predominantly operating in the manufacturing industry (see Annex 1-6). Korean companies are mainly present in the automotive and electronics industry. There are two Korean car assembly factories in V4 countries, namely, Kia plant in Zilina (Slovakia) and Hyundai plant in Nosovice (Czech Republic), and several car parts manufacturers (in many cases suppliers of the two car factories aforementioned) in automotive subsectors such as plastics & chemical industry, electrical engineering, mechanical engineering, composite materials, iron & steel industry, textile industry (see Annex). In the electronics industry a similar situation can be observed. For example, Samsung Electronics has plants in every V4 country surrounded by a number of Korean suppliers. In addition to manufacturing sector, we can find some Korean companies in different service industries such as logistics, finance, real estate, construction, IT services, and wholesale/retail etc.

Taiwanese companies in V4 countries' manufacturing sector are dominantly ICT related OEM/ODM manufacturers such as:

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<sup>3</sup> <https://stats.oecd.org/>



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- Wistron: desktop computers, servers, LCD monitors/TVs (Czech Republic)
- Foxconn: LCD TV (Sony) (Slovakia); computers and workstations for home and businesses (HP, Cisco) (Czech Republic); desktop computers, servers, storages, telecommunication devices (Huawei) (Hungary)
- Compal: computers and peripheral equipment (Poland)
- Darfon: computers and peripheral equipment (Czech Republic)
- Ideal Bike: bikes (Poland)
- Eson: (metal frames and stands for LCD TVs (Sony), Slovakia)
- AU Optonics: LCD module for TVs (Slovakia); solar module (Czech Republic)
- Ferroxcube: electronic components and boards (Poland).

In the service sector we can find Taiwanese companies active in repair, logistics, customer services, real estate, and ICT services.

In case of the four ASEAN countries, only some companies are present in V4. In comparison with South Korean and Taiwanese FDI, ASEAN investments in Hungary, Poland, Slovakia and the Czech Republic is rather sporadic or missing. Although, V4 countries have attracted ASEAN companies in several industries such as food (Vinamilk, Thai Union in Poland; Thai Presidents Food in Hungary), automotive/chemical (Indorama Ventures in Slovakia, Czech Republic), petrochemicals (Indorama Ventures in Poland), wholesale/retail (Vakomtek in Poland) and IT services (FPT Software in Slovakia), and property development (Kwasa Europe SARL in Poland).

### **Motivations and pull factors**

In V4 countries, economic transition started at the beginning of the 1990s. These countries opened up their economies to foreign direct investments which brought industrial restructuring, modernisation and economic development for them. “The automotive industry was at the forefront of their FDI-driven development strategy in which foreign transnational corporations took over the CEE automotive industry through heavy capital investment, restructuring it and incorporating it into European and global production networks in the 1990s and 2000s” [Pavlínek 2015, p. 209].

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Daewoo Motors was a forerunner of Korean motor vehicle manufacturers investing in V4 countries. In 1995, it purchased state-owned FSO and FSC plants in Warsaw and in Lublin to assemble its own brands and to manufacture commercial vehicles. In 1998, Daewoo Motors (with Austrian Steyr) bought a 50.2 per cent stake in Avia truck manufacturer in the Czech Republic. During the 1997-98 Asian financial crisis Daewoo Group collapsed and sold their automotive investments in Poland and the Czech Republic. The second wave of Korean carmakers in V4 countries is represented by green-field investments of Hyundai and Kia which opened their first factories in Europe. Kia plant in Zilina, Slovakia started to operate in 2006. Near to this plant, but on the other side of the border in Nosovice, the Czech Republic, Hyundai plant began to produce cars in 2008.

Kia and Hyundai invested in CEE region, because they wanted to fulfil the increasing demand of the EU market from a low-cost production base (market and efficiency-seeking motives). Their decision was also significantly influenced by the EU membership of V4 countries (2004) which provided free access to the regional markets as well as the whole EU market (institutional factor). Beyond these factors, skilled labour, government incentives and relatively developed infrastructure also influenced the investment decision of these Korean investors [Dore 2004; Doležalová – Dailida 2016, pp. 77-79]. The Korean car manufacturers have attracted their domestic suppliers representing different automotive subsectors to V4 countries (market-seeking motive). Just to mention the most important ones which are often present in two or three V4 countries: Mobis (axle & control panel, brake systems), Yura (cable harnesses), Hanon Systems (air conditioning), Sungwoo Hightech (metal body parts), Sejong (exhaust systems), Seoyon E-HWA (plastic interior parts), Dymos (car seats), Donghee (suspension and fuel tanks) and Hysco (steel products). Korean car and car components manufacturers have become integrated into the automotive cluster of V4 countries (CEE region) where several Western European, American and Japanese car – as well as car components – producers have been operating.

Of the other five Asian countries, Taiwan, Malaysia and Thailand have outward foreign direct investments in the automotive industry, but these are rather rare in V4 countries, therefore we cannot speak about trends here. It may be worth highlighting –

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for example – the strategic asset-seeking investments of Thai Indorama Ventures in the automotive subsector of petrochemicals in Slovakia and the Czech Republic. In 2018, Indorama Ventures, a global petrochemicals producer acquired Europe's largest producer of tire cord fabrics, Kordárna Plus with two production sites (in the Czech Republic and Slovakia) located in the European Tire Industry Hub to expand their global footprint in high value added tire cord segment. This deal was preceded by three other acquisitions (PHP, Performance Fibers, Glanzstoff) of Indorama Ventures. In 2017, the Czech subsidiary of Glanzstoff (Glanzstoff Bohemia) also became part of Indorama Ventures.

Beside automotive industry, consumer electronics sector of V4 countries is very attractive for transnational corporations, among others, South Korean and Taiwanese companies. Samsung and LG (surrounded by several suppliers) from South Korea are operating in every V4 countries with manufacturing and/or service activities. Taiwanese foreign direct investments in V4 countries are vigorously concentrated in consumer electronics [EIAS 2015, p. 70]. Some of these Taiwanese OEM/ODM companies and components manufacturers (mentioned above) are also often present in more than one V4 country.

The first Korean investors appeared in V4 countries' consumer electronics sector in the 1990s. For example, the first Korean investor in V4 countries' consumer electronics sector was Samsung Electronics which created a joint venture with Hungarian Orion TV producer in Jászfényszaru, Hungary in 1989. In 1990, Samsung became the sole owner of the factory which has been expanded and continuously developed since then. In 1998, Samsung Electronics relocated its TV production from England to Hungary. In 1996, Samsung Electronics opened its sales office in Warsaw Poland. In 1992, LG (formerly Goldstar) established its first sales office (and regional headquarter in CEE) in Budapest. In 1999, LG opened its first factory in Mława, Poland while relocating its TV production from England [Kim – Kim 2006, p. 217]. In 1994, Daewoo Electronics opened a factory of TV sets in Pruszków, Poland, which had been operating till 2009. Korean early-comers in V4 electronics industry were looking for low-cost production base for fulfilling European demand [Radosevic 2004, p. 162] (market- and efficiency seeking motives).

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In case of Taiwan, foreign direct investments started to flow very slowly into V4 countries. In the mid 1990s, Taiwanese government proposed to establish Taiwanese industrial zones in Pilsen, Czech Republic and in Lodz, Poland, but ultimately these industrial zones have not been realized [Tubilewicz 2007, p. 68]. Foreign direct investments of Taiwanese electronics companies began to increase in V4 countries only in the late 1990s and early 2000s. The V4 countries' upcoming accession (2004) to the EU played a significant role in the jump of Taiwanese - as well as Korean - investments in V4 consumer electronics sector. V4 countries providing trade barrier free access to the whole European market and relatively low-cost production base became more attractive for market-seeking and efficiency-seeking investors. Anti-dumping tariffs imposed by the EU on goods originating from Asian countries (television sets, refrigerators, bicycles, polyethylene terephthalate – PET) constituted an additional incentive for establishing plants within the EU [Kaliszuk 2016, p. 63]. Beside the access to the EU market and low labour cost, government incentives and adequate quality of infrastructure also underpinned the growing interest of Korean and Taiwanese investors in V4 countries.

As we mentioned before, Samsung Electronics has been present in Hungary since the beginning of the 1990s. Its main activity is assembly of TV sets which first started with color TV sets and gradually (in line with technological development) has moved towards LED and OLED TV sets. The upsurge of foreign direct investments after 2000 have brought new Samsung investments to V4 countries. In 2000, Samsung Electro-Mechanics was established as a new subsidiary in Szigetszentmiklós, Hungary to produce electronic parts of TV sets. Now it only deals with packaging and trading services. In 2002, cathode-ray tube and plasma display panel factory, Samsung SDI Magyarország was opened in Göd, Hungary which was operating till 2014 when was closed due to decreasing demand for plasma TVs. In 2017, the factory was reopened and expanded to produce battery of electric cars for European market.

Samsung Electronics opened its second TV factory in Galanta, Slovakia in 2002. It moved its production of its factory in Barcelona to Galanta (efficiency-seeking motive). In 2008, a new factory, Samsung Electronics LCD began the production of LC panels (key component for LCD TV sets) in Voderady, Slovakia. Largest part of the production at Samsung Electronics LCD heads to Galanta factory and Foxconn factory in Nitra, Slovakia

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[SARIO, 2011 p. 15]. Samsung Electronics' subsidiaries belongs to the most important electrotechnical companies in Slovakia. But in 2018, Samsung Electronics announced that it would consolidate the production of its Slovakian factories and close one of them to enhance efficiency.

In Poland, Samsung opened an R&D Institute in Warsaw in 2000 to respond the needs of European market while increasing the manufacturing facilities parallel in V4 countries. "The institute developed at a very fast pace and claims to be the biggest and fastest-growing modern technology R&D centres in CEE region. The institute expanded geographically in Poland, opened a branch in 2011 in Poznan and two others in 2013 in Lodz and Cracow" [Magasházi et al. 2015, p. 171]. Samsung Electronics has not established any TV factories in Poland but it acquired Polish Amica factory (in Wronki) in 2009 to attain a leading position in the European home appliance market (market-seeking motive). By considering anti-dumping duty imposed in 2006 on Korean refrigerators (LG, Daewoo Electronics), the acquisition of Amica factory was also a preventive move [Kaliszuk 2016, p. 64]. Beside the opportunity for increase of European sales, other pull factors such as advanced technology, qualified staff (strategic asset-seeking motive) and strategic location of Amica also played a significant role in the acquisition.

In the Czech Republic, Samsung Electronics does not have any manufacturing facilities. Its sales and business development subsidiary, Samsung Electronics Czech and Slovak was established in Prague in 2005.

Beside Samsung it is worth mentioning the other significant electronic company of South Korea, LG Electronics which has a strong presence in Poland among V4 countries where it has been operating several LG subsidiaries. LG opened its TV assembly plant in Mlawa in 1999 which was expanded with a new plant in 2006. Similarly to Samsung Electronics, the technological development of TV sets has been continuous at LG factories. In 2006, LG opened its new LCD TV factory in Wroclaw and it also started to produce refrigerators (and washing machines) at this new factory to avoid anti-dumping measures (LCD TVs, refrigerators) imposed by the EU. In Wroclaw the Korean company created LG's Poland Cluster with the establishment of further subsidiaries to fulfil the growing European demand: LG Innotek was established in 2006 to produce inverters

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and power modules; LG Display (formerly LG. Philips Display) was launched in 2005 to produce LCD modules; LG Chem was opened in 2005 to produce polarizers. This production cluster serves as the main European production hub of LG and employs more than 10 thousand employees (including those of supplier companies) [Dudáš 2015, p. 126].

Samsung and LG are important players in the consumer electronics sector of V4 countries. They have attracted further South Korean component manufacturers (market-seeking motive). Just to mention few of them: 1. Samsung: Dong Jin Precision (2003, Slovakia), Nuritech SK (2004, Slovakia), Seong Ji (2005, Slovakia; 2009, Hungary), Hansol Technics Europe (2007, Slovakia), Fine DNC (2007, Slovakia), Jin Young G&T (2009, Slovakia), Sangjin Micron (2012, Hungary); 2. LG: Heesung Electronics (2005, Poland), Dong Yan Electronics (2004, Poland), Dongseo (2006, Poland), Starion (2006, Poland), Ssang Geum (2005, Poland).

Taiwanese electronic companies prefer to settle down in the Czech Republic, but there are some companies which are present in more than one V4 country, such as Foxconn, AU Optronics, Asus and Acer.

Foxconn created its first subsidiary in Pardubice, the Czech Republic in 2000 which has become its regional headquarter for Europe, the Middle East and Africa. Foxconn's second Czech plant was opened in Kutna Hora in 2008. Foxconn has become the second largest exporter of the Czech Republic. In Hungary, Foxconn has been present – through its subsidiaries (PCE Paragon, FIH Europe) since 2004. It opened its first factory in Komarom next to its main vendor, mobile phone manufacturer Nokia. For a certain period, it was operating three other factories in Szekesfehervar, Pecs and Debrecen. The last one of these factories was closed in Szekesfehervar in 2014, and the production of this factory was moved to the Komarom plant which also lost its main customer, Nokia when it moved out in 2012. Now the only plant of Foxconn in Hungary produces computers, servers and telecommunication equipment (Huawei). In Slovakia, Foxconn bought 90 per cent of Sony's LCD module factory in Nitra in 2010. "Sony has entered a new strategic alliance with Foxconn for the production of LCD TVs for the European region" [Schröter 2010].

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Acer and Asus have been running sales/customer service and repair activities in every V4 country. In the Czech Republic, AU Optronics launched a solar module factory in 2010 to fulfil the needs of European customers through local production in an atmosphere of growing EU antidumping measures [Olson 2012]. AU Optronics opened its second European factory in Trencin, Slovakia in 2011 to produce LCD modules for TV makers nearby.

In case of ASEAN countries, we found only two companies which invested in V4 countries' consumer electronics sector. HIT Electronics from Indonesia established its first European factory in Poland in 2006 which is a supplier for LG factory in Mława. We suppose that HIT Electronics followed the strategy of other suppliers and opened a factory near to the European plant of its main vendor, LG (market-seeking motive). The other ASEAN company example is LED indoor and outdoor lightening manufacturer, Ligman from Thailand. Ligman established a plant in Prešov, the Czech Republic which is used as a platform to the company's expansion in the European market (market-seeking motive).

Finally, we can highlight those FDIs which are related to services provided to manufacturing companies. For example, Nepco operates waste management for Samsung factories in Hungary and Slovakia. Hyundai Glovis provides logistics services for Hyundai factory in the Czech Republic and Kia factory in Slovakia. These companies followed their vendors to gain new markets (market-seeking motive).

## **Conclusions**

In our paper we investigated six Asian countries' outward foreign direct investments in four Visegrad countries from the perspective of main motivations and pull factors. Of the six Asian countries South Korea and Taiwan are present with several companies in every V4 country. Outward FDI of ASEAN countries (Malaysia, Thailand, Indonesia and Vietnam) in V4 countries are rather sporadic or missing. Sectoral distribution of outward FDI is wide. Companies from the six Asian countries can be found in automotive, electronics, food industry, construction, repair, logistics, customer services, real estate/property development, wholesale/retail trade and IT services.

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Most of the companies investigated in this research are related to automotive industry (South Korea) and consumer electronics (South Korea and Taiwan). Foreign direct investments from South Korea and Taiwan in the aforementioned sectors have started to increase especially after 2000. These investments primarily have market-seeking characteristics. South Korean and Taiwanese companies in V4 countries are interested in serving local and EU markets.

In many cases, their investment decision has been influenced relatively lower labour cost of CEE region which they can use as export platform. We have also found evidence of relocation of investments from other parts of the EU to V4 countries. Therefore, efficiency-seeking motivation we can also consider to be underpinned. V4 countries' accession to the EU (2004), trade barrier free access to the EU market has also made V4 countries attractive for Korean and Taiwanese investors.

There are some further determinants such as government incentives and relatively adequate infrastructure/connection to important nearby markets (a potential reason for choosing V4 countries as an export platform) which have influenced the investment decision of Korean and Taiwanese companies.

In case of the other Asian countries (Malaysia, Thailand, Indonesia and Vietnam) we cannot identify trends because the investments of their companies in different V4 countries are rare or totally missing. We can only highlight some examples, the strategic asset-seeking investment of Thai Indorama Ventures in automotive industry or the market-seeking investment of Indonesian HIT Electronics in electronics industry.



## References

- Doležalová, E. – Dailida, Y. (2016): Foreign direct investments in the Czech automotive industry: A case study of Hyundai Motor Company. Norwegian School of Economics: Bergen, Spring 2016.  
<https://brage.bibsys.no/xmlui/handle/11250/2403794>
- Dore, C. (2004): Plant background. Kia Press  
<https://press.kia.com/content/dam/kiapress/EU/downloadfiles/Corporate/1087657378-slovakia-Plant-Background.doc>
- Dudáš, T. (2015): Korean investments in V4 countries: Past, present and trends for the future. In: Grešš, M. – Grančay, M. (ed.): *Mutual relations between the Republic of Korea and V4 countries in trade and investment: Conference Proceedings – International Scientific Conference and Workshop*. Vydavateľstvo Ekonóm: Bratislava, pp. 120-129.
- Dunning, J. H. (1993): *Multinational Enterprises and the Global Economy*. Addison-Wesley: Wokingham
- Dunning, J. H. – Lundan, S. M. (2008): *Multinational Enterprises and the Global Economy, Second Edition*. Edward Elgar: Cheltenham & Northampton
- EIAS (2015): A survey on 10 leading Taiwanese enterprises investing in the EU and its member states. September 2015  
<http://www.eias.org/wp-content/uploads/2016/02/A-Survey-on-10-Leading-Taiwanese-Enterprises-Investing-in-the-EU-and-its-Member-States.pdf>
- Franco, C. – Rentocchini, F. – Marzetti, G. V. (2008): Why do firms invest abroad? An analysis of the motives underlying foreign direct investment. ETSG 2008 Warsaw,

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Tenth Annual Conference, 11-13 September 2008, University of Warsaw and  
Warsaw School of Economics

<http://www.etsg.org/ETSG2008/Papers/Franco.pdf>

Kaliszuk, E. (2016): Chinese and South Korean investment in Poland: a comparative study. *Transnational Corporations Review*, Vol. 8, No. 1, pp. 60-78.

Kim, D. J. – Kim, Y. C. (2006): *Newly Industrializing Economies and International Competitiveness: Market Power and Korean Electronics Multinationals*. Palgrave Macmillan: Basingstoke & New York

Magasházi, A. – Szijártó, N. – Tétényi, A. (2015): Integrated in global value chains by Korea-V4 participation. In: Grešš, M. – Grančay, M. (ed.): *Mutual relations between the Republic of Korea and V4 countries in trade and investment: Conference Proceedings – International Scientific Conference and Workshop*. Vydavateľstvo Ekonóm: Bratislava, pp. 156-177.

Olson, S. (2012): AUO starts EU project with solar module factory located in Czech Republic.

[https://www.pvtech.org/news/auo\\_starts\\_eu\\_project\\_with\\_solar\\_module\\_factory\\_located\\_in\\_czech\\_republic](https://www.pvtech.org/news/auo_starts_eu_project_with_solar_module_factory_located_in_czech_republic)

Pavlínek, P. (2015): Foreign direct investment and the development of the automotive industry in central and eastern Europe. In: Galgóczi, B. – Drahokoupli, J. – Bernaciak, M. (ed.): *Foreign investment in eastern and southern Europe after 2008. Still a lever of growth?* European Trade Union Institute: Brussels, pp. 209-255

Radosevic, S. (2004): La industria electrónica en los países de Europa Central y Oriental: Una nueva localización de la producción global. *Información Comercial Española*, ICE: Revista de economía, 818, págs. 151-164.

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SARIO (2011): Electrical Engineering Industry.

[http://www.sario.sk/sites/default/files/content/files/electrotechnical\\_industry.pdf](http://www.sario.sk/sites/default/files/content/files/electrotechnical_industry.pdf)

Schröter, A. (2010): Foxconn to buy 90per cent of Sony's Slovakian LCD facility.

<https://evertiq.com/news/16589>

Tubilewicz, C. (2007): *Taiwan and Post-communist Europe: Shopping for Allies*.  
Routledge: Abingdon & New York

UNCTAD (1998): *World Investment Report 1998: Trends and Determinants*. United Nations: New York & Geneva

UNCTAD (2006): *World Investment Report 2006: FDI from Developing and Transition Economies: Implications for Development*. United Nations: New York & Geneva

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**Annex 1: Poland**

<b>Company name</b>	<b>Sector</b>
<b>South Korea</b>	
Ace Rico Poland	Manufacturing (plastic products)
Bmc Poland	Manufacturing (treatment and coating of metals, machining)
Daedong System Poland	Manufacturing (wiring and wiring devices)
Deefros Europe	Manufacturing (abrasive products, non-metallic mineral products )
Dongsung Poland	Manufacturing (car parts)
Dong Yang Electronics	Manufacturing (electronic components and boards)
Dong-A Poland (Biskupice Podgorne)	Manufacturing (car parts)
Dong-A Poland (Wroclaw)	Manufacturing (car parts)
Dongseo Display Poland	Manufacturing (display appliances)
G&S Engineering Construction Poland	Construction
Hanyang Polska	Manufacturing (rubber products)
Hanyang ZAS	Manufacturing (car parts, plastic and metal products)

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Heesung Electronics Poland	Manufacturing (computers, electronic and optical products)
HTNS Poland	Logistics
Humax Poland	Manufacturing (digital TV decoders and LCD TV sets)
KCP	Manufacturing (casting of metals)
KFTC Poland	Manufacturing (car parts)
Kwang Duck Poland	Manufacturing (plastic products for automotive industry)
LG Chem Poland	Manufacturing (electronic components, polarizer)
LG Chem Wrocław Energy	Manufacturing (car battery (battery for electric vehicles))
LG Display Poland	Manufacturing (TFT-LCD display)
LG Electronics Polska	Wholesale trade (computers, electronic and optical products )
LG Electronics Mława	Manufacturing (computers, electronic and optical products )
LG Electronics Wrocław	Manufacturing (TV sets, home appliances)
LG INNOTEK Poland	Manufacturing (electronic components, inverter, power modules)

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Mando Corporation Poland	Manufacturing (car parts, brake and steering systems)
Joongpol	Manufacturing (non-metallic mineral products)
Neo Plus Technology	Manufacturing (rubber and plastic products for automotive and electronics industry)
Neotech	Manufacturing (electronic components, cables)
Pearl Stream	Manufacturing (plastic products for automotive and electronics industry)
D.K. MFG	Wholesale trade
Samsung Electronics Polska	Wholesale trade (home appliances, mobile phone, ICT equipment)
Samsung Poland R&D Centre	Research & development
Samsung SDS Global SLC Poland	IT services
Samsung Electronics Manufacturing Poland	Manufacturing (home appliances (refrigerator, washing machine))
Sekonix Poland	Manufacturing (car parts)
Seoyon E-HWA Automotive Poland	Manufacturing (car parts)
Shinchang Poland	Manufacturing (car parts)

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SKC Europe Pu	Manufacturing (chemical materials for car seats and insulator for construction/refrigerators)
SKC Haas Polska	Manufacturing (display films for liquid crystal (LCD) and plasma displays)
Sungsan-Zem Polska	Manufacturing (electric lightening equipment)
SL Corporation	Manufacturing (car parts/head, rear, fog lamps)
Ssang Geum Mława	Manufacturing (packaging, aluminium/zinc die-casting, TV stand)
Starion Poland	Manufacturing (parts for TV, refrigerator, washing machine)
UN WHA Polska	Manufacturing (car parts, seatbelt)
<b>Taiwan</b>	
ACER Polska	Sales/Customer service
Asplex (ACER)	Repair/Logisitics (computer hardware)
ASUS Polska	Sales/Repair/Customer Service
Compal Europe (Poland)	Manufacturing (computers, peripheral equipments)

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Delta Energy Systems (Poland)	ICT services (wired telecommunication activities)
Ferroxcube Polska	Manufacturing (electronics, passive components)
Ideal Europe	Manufacturing (bicycle)
Tex Year Industries	Manufacturing (chemical products, hot-melt adhesive)
Zyxel Communication Poland	ICT services/Wholesale trade (router, switch, modem)
<b>Thailand</b>	
Indorama Ventures Poland	Manufacturing (petrochemicals)
Lucky Union Foods	Wholesale trade (food, beverages, tobacco)
S. Khonkaen Foods	Wholesale trade (food)
Thai Union Poland	Manufacturing (food)
Merallience Poland	Manufacturing (food)
SuperDrob	Manufacturing (food)
<b>Malaysia</b>	
Petronas Lubricants Poland	Wholesale trade (automotive lubricants)
Vakomtek	Wholesale/Retail trade



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Galeria Katowicka (Kwasa Europe SARL)	Real estate/property development
Gdański Business Center (Kwasa Europe SARL)	Real estate/property development
Pelita ASEAN	Catering
<b>Indonesia</b>	
HIT Electronics Poland	Manufacturing (electronic components and boards)
<b>Vietnam</b>	
Vinamilk Europe	Manufacturing (food)

**Annex 2: Hungary**

<b>Company name</b>	<b>Sector</b>
<b>South Korea</b>	
Daejung Hungary	Manufacturing (car parts, plastic part of car air-conditioning)
Doosan Corporation Europe	Manufacturing (battery copper foil for electric vehicle batteries)
Hanon Systems Hungary	Manufacturing (car parts, compressors, air conditioning lines, thermal and emission products, fuel pumps, regulators, fuel and diesel delivery)

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	modules)
Hanwha TechM Hungary	Real estate
Hankook Tire Magyarország	Manufacturing (tires for motor vehicles)
HTNS Hungary	Logistics
Hyundai Technologies Center Hungary	Engineering services
KDB Bank Europe	Finance
LG Magyarország	Wholesale trade/Customer service/Repair
Lotte Advanced Materials Magyarország	Manufacturing (industrial material for plastic components (automotive and electronics industry))
NEPCO Hungaria	Waste management
Samsung Electronics Magyar	Manufacturing (TV sets)
Samsung Electro-Mechanics	Packaging/Trading services
Samsung SDS Global SLC Hungary	IT services
Samsung SDI Magyarország	Manufacturing (car battery (for electric vehicle))
Sangjin Micron Hungary	Manufacturing (metal parts for LCD TV)

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Samyang EP Hungary	Manufacturing (plastic products for automotive and electronics industry)
Seong Ji Electronics Hungary	Packaging service, wholesale
Shinheung Sec EU	Manufacturing (car parts, battery parts (electric vehicles))
SK Innovation	Manufacturing ( car battery (for electric vehicles))
UI Logistics Solution	Logistics
Wooshin Hungary	Manufacturing (pharmaceuticals)
<b>Taiwan</b>	
ACER	Sales/Customer service
ASUS Hungary	Sales/Repair/Customer service
Chi Fu Central Europe	Real estate
Chi Fu Investment Hungary	Real estate
MAG Hungary	Manufacturing (machine tools for automotive and truck industry)
PCE Paragon Solution (Foxconn)	Manufacturing (telecom equipment, PC, server)
Zyxel Communication Hungary	ICT services/Wholesale trade (router, switch, modem)

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<b>Thailand</b>	
Thai President Foods (Hungary)	Manufacturing (food)
<b>Malaysia</b>	
Gano Excel Hungary	Wholesale trade

**Annex 3: Czech Republic**

<b>Company name</b>	<b>Sector</b>
<b>South Korea</b>	
Auto Trim Czech	Manufacturing (car parts, seat head textile)
Daechang Seat Frydek	Manufacturing (car parts, car seat parts)
DAS Czech Republic	Manufacturing (car parts, car seats)
Donghee Czech	Manufacturing (car parts, suspension)
Doosan Bobcat Engineering	Manufacturing (heavy machinery)
GS Caltex	Manufacturing (industrial material for plastic components (automotive and electronics industry))
Hyundai Glovis Czech Republic	Logistics
Hanjin Global Logistics Europe	Logistics
Hanon Systems Autopal	Manufacturing (car parts, compressors,

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	air conditioning lines, thermal and emission products, fuel pumps, regulators, fuel and diesel delivery modules)
Hanon Systems Autopal Services	Research & development
HITECO Czech	Manufacturing (metals)
HM Czech	Manufacturing (steel products)
HTNS Czech	Logistics
Hysco	Manufacturing (car parts, steel components)
Hyundai Engineering Czech	Construction
Hyundai Dymos Czech	Manufacturing (car parts, seats)
Hyundai Motor Manufacturing Czech	Manufacturing (passenger cars)
Hyundai Steel Czech	Manufacturing (cold rolled steel)
LG Electronics CZ	Wholesale/Retail trade
KOS Europe	Manufacturing (stainless steel wires)
Max People	Manufacturing (steel products)
Mobis Automotive Czech	Manufacturing (car parts, front end modules, rear chassis and front chassis modules and cockpit )
Nexen Tire Corporation Czech	Manufacturing (tires for motor vehicles)
Samsung Electronics Czech and Slovak	Wholesale trade

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Samsung SDS Global SLC Czech	IT services
Sejong Czech	Manufacturing (car parts, exhaust system)
Sungwoo Hightech	Manufacturing (car parts)
PyeongHwa Automotive Czech	Manufacturing (car parts, latches, strikers)
UI Logistics Solution	Logistics
Yura Corporation Czech	Manufacturing (car parts, wire harnesses)
<b>Taiwan</b>	
ACER Czech Republic	Sales/Customer service
ASUS Computer Czech Republic	Sales/Repair/Customer Service
AU Optronics (Czech)	Manufacturing (solar module)
BTTO	Wholesale trade (fiberglass yarn)
Chicony Electronics CEZ	Manufacturing (computer peripherals)
Dafron Electronics Czech	Manufacturing (electronics)
Delta Electronics (Czech Republic)	Sales
Foxconn CZ (Pardubice)	Manufacturing (computers and workstations for homes and businesses, cartridges for inkjet printers, metal and plastic components), customer service, logistics, warehousing

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Foxconn CZ (Kutná Hora)	Manufacturing (servers, containerized data centre, 3Par storage)
Inventec (Czech)	Manufacturing (computers and peripheral equipment)
Marwi CZ	Manufacturing (bicycle pedal)
Pegatron Czech	Manufacturing (set-top box, DT PC, LCD TV sets)/ Repair
Servis Acer	Repair
SMS Infocomm (Czech)	IT services
Tatung Czech	Wholesale trade (solar components, system)
Textonnia Czech	Wholesale trade (yarns and fabrics)
Wistron Infocomm	Manufacturing (desktop computers, servers, LCD monitors/TVs)
Zyxel Communication Czech	ICT services/Wholesale trade (router, switch, modem)
<b>Thailand</b>	
Glanzstoff Bohemia	Manufacturing (fabrics)
KORDÁRNA Plus	Manufacturing (fabrics)
Ligman Europe	Manufacturing (lightening system)
<b>Malaysia</b>	

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Evektor	Manufacturing (aviation)
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**Annex 4: Slovakia**

<b>Company name</b>	<b>Sector</b>
<b>South Korea</b>	
Advanced Engineering Solution	Manufacturing (transport pallets)
Coavis Slovakia	Manufacturing (car parts)
BANG JOO Electronics Slovakia	Manufacturing (electronics)
Daejung Europe	Manufacturing (car parts, plastic products)
Donghee Slovakia	Manufacturing (car parts, suspension, fuel tank)
Dongil Rubber Belt Slovakia	Manufacturing (car parts, rubber seals)
Dong Jin Precision Slovakia	Manufacturing (electronics)
Dongwon Metal Industrial	Manufacturing (car parts, door frames)
Fine DNC Slovakia	Manufacturing (aluminium and steel products for LED TV sets)
Glovis Slovakia	Logistics
Hanil E-Hwa Automotive	Manufacturing (car parts, interior and exterior plastics and textile fabrics)
Hanon Systems Slovakia	Manufacturing (car parts, compressors,



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	air conditioning lines, thermal and emission products, fuel pumps, regulators, fuel and diesel delivery modules)
Hansol Technics Europe	Manufacturing (electronics)
HITECO Slovakia	Manufacturing (car parts)
HMSK	Manufacturing (steel products)
HMSK Logistics	Logistics
HTNS Slovakia	Logistics
Hyundai Dymos Slovakia	Manufacturing (car parts, seats)
Hyundai Engineering Slovakia	Construction
Hyundai Steel Slovakia	Manufacturing (cold rolled steel)
Hysco	Manufacturing (car parts, steel components)
Iljin EU	Manufacturing (car parts)
Jin Young G&T Slovakia	Manufacturing (slim speaker)
Joongbo Chemical Ind. Co	Manufacturing (chemicals)
KFTC Slovakia	Manufacturing (car parts)
KIHWASK	Manufacturing (plastics products (electronics))
Kia Motors Slovakia	Manufacturing (passenger cars)
Mobis Slovakia	Manufacturing (car parts, front end

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	modules, rear chassis and front chassis modules and cockpit )
NEPCO SK	Waste management
Nuritech SK	Manufacturing (electronic components and boards)
POSS-SLPC	Manufacturing (slitting metal coils)
PyeongHwa Automotive Slovakia	Manufacturing (car parts, latches, strikers)
SAMIL BALENIE	Manufacturing (packaging modules)
Samsung Electronics Slovakia	Manufacturing (TV sets)
Samsung Electronics LCD Slovakia	Manufacturing (LCD panels )
Samsung SDS Global SCL Slovakia	IT Services
Sejong Slovakia	Manufacturing (car parts, exhaust system)
Seong Ji Slovakia (Nitra)	Manufacturing (electronic components and boards)
Seong Ji Slovakia (Galanta)	Manufacturing (electronic components and boards)
Sewon ECS Co. (Lednické Rovne)	Manufacturing (car parts)
Sewon ECS Co. (Rimavská Sobota)	Manufacturing (car parts)
Seoyon E-HWA Automotive Slovakia	Manufacturing (car parts)
SHIN HEUNG Precision Slovakia	Manufacturing (car parts)

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Shinwa Intertek Slovakia	Manufacturing (chemicals, industrial adhesives)
Sungwoo Hightech	Manufacturing (car parts, car body parts)
Topaz LGP	Manufacturing (LED panel lightning)
UI Logistics Solution	Logistics
UNI-TECH	Manufacturing (chemicals, industrial adhesives, sealant)
Woory Slovakia	Manufacturing (car parts, HVAC actuator, heater control assy)
Yura Corporation Slovakia	Manufacturing (car parts, wire harnesses)
Yura Eltec Corporation Slovakia	Manufacturing (car parts, wire harnesses)
<b>Taiwan</b>	
Acer Slovakia	Sales/Customer service
ASUS Slovakia	Sales/Repair/Customer Service
AU Optronics (Slovakia)	Manufacturing (LCD modules for TV sets)

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Delta Electronics (Slovakia)	Manufacturing (power supplies, components of power systems, solar inverter, complete power systems)
ESON Slovakia	Manufacturing (metal frames and stands for LCD TV sets)
Foxconn Slovakia	Manufacturing (LCD TV sets)
Zyxel Communication Slovakia	ICT services/Wholesale (router, switch, modem)
<b>Thailand</b>	
KORDÁRNA Plus	Manufacturing (fabrics)
<b>Malaysia</b>	
Triplus SK	Manufacturing (components for automotive and electronics industry)
<b>Vietnam</b>	
FPT Slovakia	IT services