

Trade and Investment Cooperation between South Korea and the Visegrad Group

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I. Introduction

The Visegrad group (V4) is a political alliance of four countries of Central Europe – the Czech Republic, Hungary, Poland and Slovakia, reaching its roots to the beginning of the 1990s, when the countries started reforming their political and economic systems from centrally planned to democratic free market economies. The coalition - consisting of countries with similar historical experience, transformation challenges and level of socio-economic development - aimed at regional co-operation and mutual support on their strategic goal of full membership in the European Union (EU).

The V4 countries are currently full members of the EU (since 2004) with dynamic and competitive economies. The four countries form a market of over 60 million consumers with a share of ca. 7.7% of the EU's GDP (Table 1). Over last three decades V4 countries have ex-

perienced high economic growth, closing a development gap with highly developed countries of the EU. Their economies have opened up to the global trading system, changing directions (mostly towards other EU countries) and expanding volumes of their international trade. Liberalizing economies have become attractive destinations for FDIs due to their central location at the continent, well-educated society as well as restructuration and privatization of many economic sectors (Mazur, 2009).

Joining the European Union in 2004, V4 countries became part of the European Single Market leading to various consequences for economic policy and business conditions. While membership in the EU brought new economic opportunities and enhanced the countries' business attractiveness, it has also had relevant consequences for their trade cooperation with third countries. The V4 states

adopted all rights and commitments from the EU's Common Trade Policy and have since been developing their trade and economic co-

operation with third countries, including the Republic of Korea, commonly with other EU partners and exclusively at the EU level.

Table 1. Visegrad Group (V4) Countries' Trade and Economic Performance

	Czech Rep.	Hungary	Poland	Slovakia	EU-27
Population (mio. 2022)	10.517	9.689	37.654	5.435	446.76
GDP (bn EUR, current prices, 2022)	276.61	170.25	656.91	109.65	15 806.90
GDP per capita (% of the EU average GDP)	91.0%	77.7%	79.5%	68.1%	100.0%
Real GDP growth rate (2022)	2.5%	4.6%	5.1%	1.7%	3.5%
GDP change in 2018-2022 (Calculations in current prices)	31.1%	25.1%	31.6%	22.0%	16.8%
Exports of goods (intra-EU exports) (2022, bn EUR)	230.15 (187.74)	144.08 (112.80)	342.89 (258.99)	102.45 (82.25)	6 802.40 (4 229.68)
Exports change 2004-2022 (2004=100)	399.7	321.3	502.8	445.3	244.0
Imports of goods (intra-EU imports) (2022, bn EUR)	224.82 (161.85)	156.36 (106.70)	362.54 (231.41)	106.90 (82.12)	7 102.18 (4 100.08)
Imports change 2004-2022 (2004=100)	415.0	322.5	568.3	459.3	231.9
FDI inward stock (2021, bn USD)	200.59	101.70	269.22	59.37	11 590.10
FDI outward stock (2021, bn USD)	53.61	38.71	27.56	5.42	13 262.76

Sources: Eurostat 2023, IMF 2023, and UNCTAD 2022.

II. V4 and the Republic of Korea – Bilateral Trade Relations

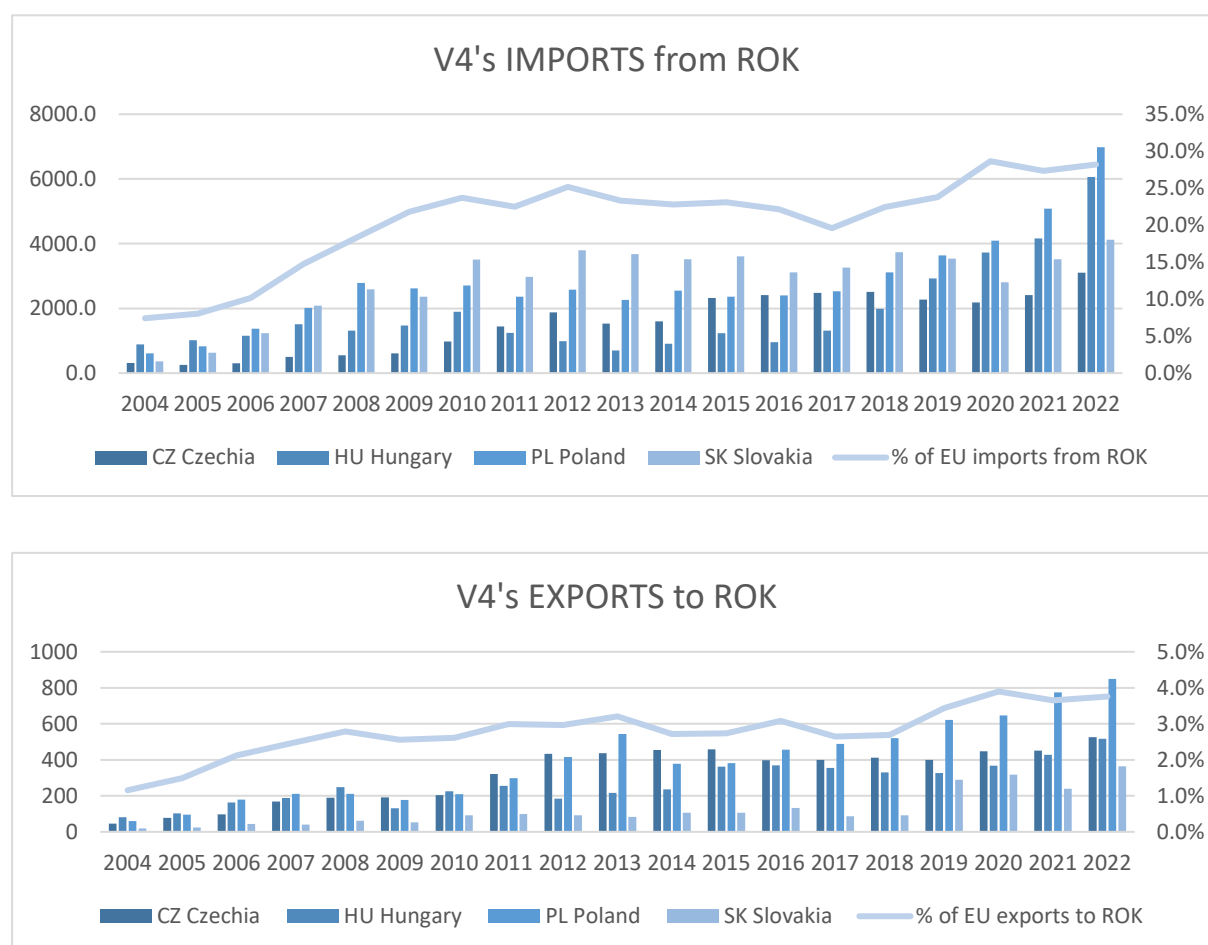
Since 2004 all Visegrad countries have been shaping their relations with South Korea commonly through the EU, including the landmark EU-ROK FTA (since 2011). The agreement

has redefined the bilateral relations and brought about a new reality in EU-ROK trade and economic co-operation. While the agreement has laid foundations for stronger co-operation and trade in traditional sectors (e.g., automotive, electronics and electrical machinery), cutting still existing tariffs and tackling many non-tariff barriers, it has also liberalized

trade in many sectors previously hindered before the FTA, such as chemicals, textile, and agri-food products (Mazur 2012). Thus, the agreement has also created new opportunities to V4-ROK relations, including co-operation and trade in sectors of high importance for

both partners. This framework for trade and economic co-operations has also been supported by elevating individual political relations with South Korea to a strategic partnership by Poland (2013), the Czech Republic (2015) and Hungary (2021).

Figure 1. Merchandise Trade of V4 Countries and the Republic of Korea in 2004-2022 (billions EUR)



Sources Own study on Eurostat/Comext 2023.

Over the last 20 years trade co-operation between V4 countries and the Republic of Korea has expanded dynamically that reflects both the growing role of the partners in internation-

al trade and developing bilateral V4-ROK relations. In 2004-2022 the value of bilateral trade expanded more than tenfold (Figure 1). The imports of all V4 from South Korea have

increased from only ca. 2.2 bn EUR in 2004 to 20.3 bn EUR in 2022, that makes the combined V4 as the most important partner for Korean export to the European Union, accounting for almost 1/3 of total exports to the EU. The value of imports from South Korea places the country among most important import partners of the Visegrad group; South Korea is ranked 2nd most important supplier of goods from East Asia (after China) and 3-4th from extra-EU global partners (respectively for individual V4 members). V4 countries are also important export destination from Korean perspective. The combined markets of V4 absorb 2.93% of Korean exports (2022) and take the 8th position (behind Singapore and before India) among most important destinations for goods exported from the ROK.

The bilateral V4-ROK trade is highly imbalanced. The total exports from V4 countries amounted to only 2.26 bn EUR in 2022 (graph 1). For all V4 countries the ROK is not among main export destinations and takes distanced positions in the hierarchy of export markets. South Korea is mostly ranked in 30th-40th positions as export market for V4 countries and even in extra-EU exports of Visegrad countries Korea does not rank in top 10 (except Slovakia, 9th place, 2022). In 2022 the four analyzed countries were responsible for only 4% of total exports from the EU to South Korea. Respectively only 0.6% of Korean imports

(2021) came from the V4. This highly imbalanced bilateral V4-ROK merchandise trade is visible in growing trade deficit for V4 countries that amounted to 18 bn EUR in 2022 (UNSD 2023.; Eurostat/Comext 2023).

This untapped potential in merchandise trade has been even more visible on the basis of trade intensity index (TII) that determines whether the value of trade between the Partners reflects their significance in world trade.

While the index¹ for South Korea varied at ca. 0.5-0.8 in recent years (graph 2), that may suggest there is still a potential for Korean companies to export to V4 countries. Individual approach suggests that especially Czech and Polish markets – although dynamic growth of exports in recent years - are not yet fully explored by Korean exports². The mediocre values of V4 exports to the ROK are also visible in TII calculated for the countries. Although the indexes have slightly increased over last two decades, they still remain at very low levels of 0.08-0.13, that represents highly untapped potential of Korean market by V4 exporters. This reflects that extra-EU markets play a decisively smaller role for V4 exports. Although V4 economies are considered to be open and trade-oriented, they are deeply rooted in the European market and their exports address mostly other EU countries. The analyzed indexes calculated only for V4's extra-EU trade bring higher values for trade with Korea (ca. 0.4-0.6), however they still suggest

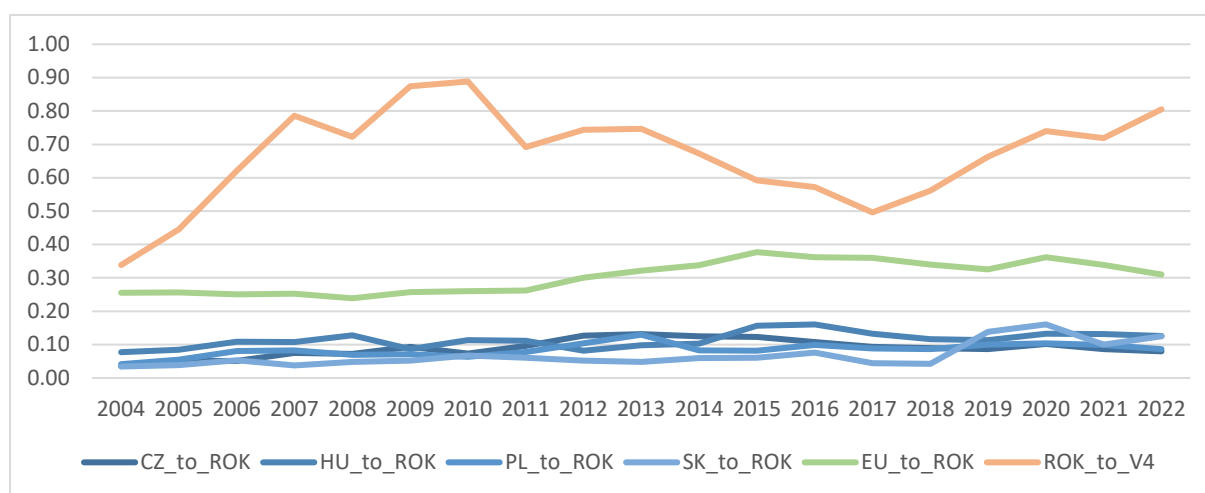
¹ An index of more (less) than 1 indicates a bilateral trade flow that is larger (smaller) than expected, given the partner country's importance in world trade.

² Individual calculations for V4 (2021-2022) differ from ca. 0.4-0.65 for the Czech Republic and Poland to 1.0-1.3 for Hungary and Slovakia.

that Korea is not among priority destinations for V4 export when taken into consideration only non-EU markets. Despite individual success cases of exporters from V4, the bilateral

V4-SK trade and especially V4's export performance has still – taking into account the potential of Korean market and imports - an enormous space to expand.

Figure 2. Trade Intensity Index for V4, the EU and the Republic of Korea (2004-2022)



Sources Own study on Eurostat/Comext 2023, UN Comtrade.

The volumes, high imbalance and the structure of V4-ROK trade have been essentially impacted by Korean foreign direct investments located in V4 countries (see next section). As claimed by Éltető and Szunomár (2015) trade between the Visegrad group and East Asia has been mainly influenced by multinational companies in global value chains and that also applies to the case of V4's bilateral trade with South Korea. Michalski (2018) highlights that neither the EU membership of V4 countries nor the enforcement of the EU-ROK FTA have impacted directly values of bilateral trade between the analyzed countries. He stated that the bilateral V4-ROK trade was shaped by its inter-industry character and that

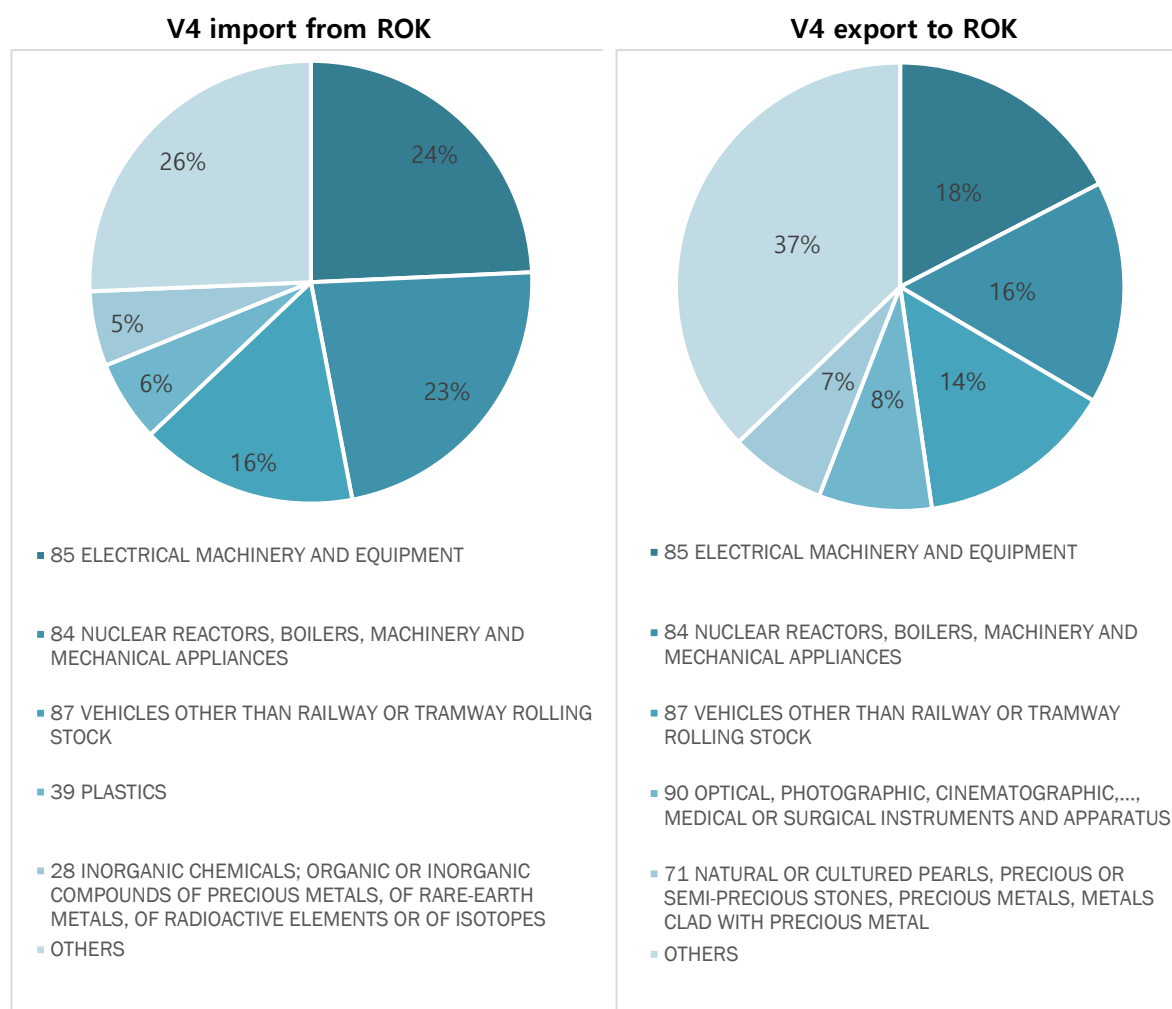
the South Korean companies located in the region produce goods mostly with the intention of exporting to other EU markets.

Bilateral V4-ROK trade is contracted within sectors where most of regional South Korean investments have been located, namely automotive industry, machinery as well as electrical and electronic products. The dominant sectors for both import and export are mechanical and electrical machinery (HS84 & HS85), and motor vehicles (HS87), including their parts and accessories. These sectors alone are responsible for almost 2/3 of V4 imports from South Korea and almost half of their exports (graph 3). It is clearly visible that the structure of trade, as was stated above, has been dominantly fueled by the FDIs, where V4's import

from SK is substantially purposed for production processes by Korean investments/factories in those countries (Michalski 2018). The

detailed structure of mostly traded goods (4-digit HS headings) for individual V4 countries is presented in table 2.

Figure 3. Trade Intensity Index for V4, the EU and the Republic of Korea (2004-2022)



Sources: Own study on Eurostat/Comext 2023.

Korean investment projects located in the V4 countries have not only determined the structure of trade, but it might be expected that they influenced the technological sophistication of trade between the parties, as well as with other V4's trade partners (as SK's investments in the region have been located also with an intention of production and export to other EU

markets). The sectoral profile of Korean investments in the region, and their mentioned impact on the structure of trade, might suggest the assumptions about the positive change of technological sophistication of V4's exports (Michalski 2018). This assumption might be supported by general transformations of V4

economies towards more developed and absorbing new technologies into their production sectors.

Table 2. Most Important HS Heading for V4-South Korea Bilateral Trade (2018-2022)

IMPORT from ROK		EXPORT to ROK	
CZ-Czechia			
8708 Parts and accessories of the motor vehicles	31.9 %	9027 Instruments and apparatus for physical or chemical analysis	10.9 %
8512 Electrical lighting or signaling equipment, windscreen wipers, defrosters and demisters	4.2%	4011 New pneumatic tyres, of rubber	6.2%
8407 Spark-ignition reciprocating or rotary internal combustion piston engine	3.8%	8708 Parts and accessories of the motor vehicles	4.7%
8703 Motor cars and other motor vehicles principally designed for the transport of persons	2.8%	4002 Synthetic rubber and factice derived from oils; mixtures of natural rubber	4.5%
8526 Radar apparatus, radio navigational aid apparatus and radio remote control apparatus	2.7%	9012 Electron microscopes, proton microscopes and diffraction apparatus	4.5%
HU-Hungary			
3824 Prepared binders for foundry moulds or cores; chemical products and preparations	15.1 %	8708 Parts and accessories of the motor vehicles	9.6%
3002 Blood, immunological products; vaccines, toxins, cultures of microorganisms	14.8 %	8507 Electric accumulators; parts thereof	6.5%
8479 Machines and mechanical appliances having individual functions; parts thereof	14.2 %	8471 Automatic data-processing machines; (...) machines for transcribing and processing data	6.2%
8471 Automatic data-processing machines; (...) machines for transcribing and processing data	6.8%	8516 Electric water heaters; electric space- and soil-heating apparatus; electro-thermic appliances	4.6%
8703 Motor cars and other motor vehicles principally designed for the transport of persons	4.4%	6909 Ceramic wares for technical uses	3.9%
PL-Poland			
8507 Electric accumulators; parts thereof	14.1 %	7112 Waste and scrap of precious metal or of metal clad with precious metal (...)	17.9%
2841 Salts of oxometallic or peroxometallic acids	8.9%	8510 Electric shavers, hair clippers and hair-removing appliances; parts thereof	5.0%
2853 Phosphides; inorganic compounds; compressed air; amalgams	5.5%	8212 Non-electric razors and razor blades of base metal	4.5%
8703 Motor cars and other motor vehicles principally designed for the transport of persons	4.6%	6909 Ceramic wares for technical uses	3.7%
8529 Parts suitable for use solely or principally with the apparatus of headings 8525 to 8528	3.6%	8504 Electrical transformers, static converters, and inductors; parts thereof	2.4%
SK-Slovakia			
8708 Parts and accessories of the motor vehicles	23.0 %	8703 Motor cars and other motor vehicles principally designed for the transport of persons	55.0 %
8409 Parts suitable for use solely or principally with internal combustion piston engine	9.4%	4011 New pneumatic tyres, of rubber	8.2%
8407 Spark-ignition reciprocating or rotary internal combustion piston engine	7.0%	8708 Parts and accessories of the motor vehicles	6.1%
8414 Air or vacuum pumps; compressors and fans; ventilating or recycling hoods incorporating a fan	5.2%	8479 Machines and mechanical appliances having individual functions; parts thereof	4.2%
8529 Parts suitable for use solely or principally with the apparatus of headings 8525 to 8528	3.4%	8414 Air or vacuum pumps; compressors and fans; ventilating or recycling hoods incorporating a fan	3.5%

Sources: Own study on Eurostat/Comext 2023.

However, the structure of V4-ROK trade over latest years deliver some interesting observations on the technological sophistication of bilateral trade. From the perspective of the V4 region it is clearly visible the downward trend of the share of high-tech goods in import from South Korea (table 3). While in 2004 those products amounted to more than 60% of the region's total import value, lately it has decreased to only ¼ of the total value. Contrary the medium-tech goods (MTM) have recorded strong increase in the share of V4's imports from South Korea, mostly in the group of goods defined as MTM 'engineering' and 'process'. The share of MTM goods for automotive industry imported to the V4 region remained relatively stable in the analyzed period. However, at the country's level it can be noticed an increased importance of those goods in import to the Czech Republic (from 19.5% in 2004 to 32.2% in 2022) and Slovakia (from 8.0% to 24.1% respectively). Contrary for Hungary the share of automotive goods has decreased to only 4.6% (2022) from 11.4% at the beginning of the analyzed period. The analysis of the import's structure delivers also an interesting observation of growing dynamically - in last few years – imports of resource-based manufactures. While just a few years ago those goods played a marginal role in imports to V4 countries, lately the share has been dynamically growing. This refers predominantly to Poland – in 2022 the share of resource-based products increased to ca. 30% of import value (2.1 bn EUR). This is mostly

caused by growing import of inorganic chemicals (table 2).

Similarly, to import, the importance of high-tech goods in V4's export to South Korea has decreased in the analyzed timeframe. In 2004-2022 the combined share for all V4 countries decreased from 32.8% to 22.9% in 2022, but at individual country level situation is more complex. This general downward trend has been fueled by Hungary (from 55.4% in 2004 to 34.2% in 2022) and Slovakia (31.6% to 4.6% respectively), while some positive trends have been noted by the Czech Republic (from 17.5% in 2004 to 31.2% in 2022) and Poland (14.5% to 18.3% respectively). At the same time, the general region-level analysis suggests quite stable share of medium-tech goods exported to Korea, but also here there are essential differences between countries. Poland and the Czech Republic have experienced decreasing share of those goods in their export to the ROK (from 54.4% and 53.1% in 2004 to 30.0% and 33.8% in 2022). Contrarily, Hungary (from 19.2% to 34.5%, respectively) and Slovakia have expanded their export in this category. The latter one has achieved the highest share of MTM exports from all V4 - 87.7%, of which the vast majority were automotive goods (63.4% of total Slovak exports to South Korea in 2022). It is also clearly perceivable the decreasing share of primary products in V4's exports to South Korea and growing importance of resource-based goods (table 3), including agro-based products.

Table 3. Technological Sophistication of the V4-ROK Trade for Selected Years (% of total)

	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
IMPORT										
Primary products PP	0.4%	0.3%	0.2%	0.3%	0.1%	0.2%	0.3%	0.5%	2.1%	2.2%
RBM	1.2%	0.9%	1.7%	1.6%	1.8%	2.6%	2.9%	2.9%	6.7%	13.2%
RBM agro based	0.6%	0.6%	1.0%	0.8%	1.2%	1.8%	2.2%	2.0%	1.5%	1.7%
RBM other	0.6%	0.3%	0.6%	0.8%	0.6%	0.8%	0.7%	0.8%	5.2%	11.5%
LTM	7.5%	5.2%	6.1%	5.4%	6.0%	8.0%	9.7%	9.9%	7.7%	6.6%
LTM textile garment footwear	2.8%	1.0%	0.6%	0.5%	0.6%	0.8%	1.3%	1.1%	0.7%	0.4%
LTM other products	4.7%	4.1%	5.6%	4.9%	5.4%	7.2%	8.4%	8.8%	7.1%	6.2%
MTM	28.5%	26.4%	26.9%	27.7%	39.2%	43.2%	53.2%	52.5%	48.1%	54.0%
MTM automotive	11.0%	11.3%	9.0%	9.8%	17.2%	17.4%	22.2%	20.3%	14.7%	12.8%
MTM engineering	12.4%	12.0%	14.7%	15.2%	19.1%	20.7%	24.5%	24.9%	23.9%	24.1%
MTM process	5.2%	3.1%	3.2%	2.6%	3.0%	5.1%	6.5%	7.3%	9.4%	17.1%
HTM	62.2%	67.2%	65.1%	65.0%	52.8%	45.9%	33.9%	34.2%	35.3%	24.0%
HTM electronic and electrical	57.8%	54.7%	50.7%	49.1%	30.9%	30.4%	24.6%	24.7%	26.4%	19.8%
HTM other	4.5%	12.5%	14.3%	15.9%	21.9%	15.5%	9.3%	9.5%	8.9%	4.2%
EXPORT										
Primary products PP	13.0%	13.3%	5.6%	4.3%	8.2%	3.0%	4.8%	1.5%	1.2%	2.5%
RBM	9.9%	12.4%	8.4%	11.7%	10.3%	12.0%	14.7%	19.7%	24.8%	23.6%
RBM agro based	1.3%	2.0%	2.3%	2.2%	3.5%	4.9%	6.7%	9.0%	9.2%	8.1%
RBM other	8.6%	10.4%	6.1%	9.5%	6.8%	7.1%	8.0%	10.7%	15.6%	15.6%
LTM	5.5%	6.3%	7.2%	9.7%	15.7%	17.6%	13.1%	13.6%	11.0%	9.6%
LTM textile garment footwear	0.6%	0.5%	0.4%	0.7%	1.1%	0.9%	1.2%	1.3%	1.1%	1.4%
LTM other products	4.9%	5.8%	6.7%	9.0%	14.6%	16.8%	11.9%	12.3%	9.8%	8.2%
MTM	38.8%	43.6%	57.4%	45.5%	49.7%	51.5%	47.6%	40.9%	39.9%	41.2%
MTM automotive	11.0%	15.1%	15.6%	11.0%	7.8%	10.3%	8.9%	7.1%	17.0%	16.4%
MTM engineering	22.3%	25.3%	37.1%	30.7%	37.3%	36.3%	34.0%	28.2%	17.8%	20.4%
MTM process	5.5%	3.3%	4.8%	3.8%	4.6%	4.9%	4.7%	5.6%	5.1%	4.4%
HTM	32.8%	24.4%	21.3%	28.7%	16.1%	15.7%	19.7%	24.1%	23.0%	22.9%
HTM electronic and electrical	29.5%	19.1%	16.4%	22.3%	8.7%	8.0%	9.5%	13.2%	13.3%	13.1%
HTM other	3.3%	5.2%	4.9%	6.3%	7.4%	7.7%	10.2%	10.9%	9.7%	9.8%

Notes: Technological categories by UNCTAD (Lall (2000); SITC rev.3 products): RBM - Resource-based manufactures, LTM - Low technology manufactures, MTM - Medium technology manufactures, HTM - High technology manufactures.

Sources: Own calculations on Eurostat/Comext 2023.

The reasons behind the structural changes in technological sophistication of trade have multidimensional character and only more in-depth analysis at individual country- and prod-

uct-level would provide more detailed conclusions. The above regional perspective (V4) induces to draw general assumptions that the perceivable tendencies, including growing

share of MTM in V4's imports, have been fueled by Korean investments in the region followed by growing import of input to production. Moreover, the growing share of MTM classified as 'engineering' and 'process' may be related to higher diversification of trade and increasing importance of Korean import in other sectors than only electronic/electrical or automotive. The expanding share of resource-based manufactures may have two-fold causes. Firstly, there is a perceivable growth of export of agri-food products from V4 to Korea. Although the value of exports in this section is still modest, there is a clear upward trend. Secondly, evolving structure of production in Korean automotive investments located in the region e.g., towards EV components requires increasing import of RBM (such as inorganic chemicals). Although those processes explain some of observed changes, further detailed analysis would deliver more comprehensive causation.

III. South Korea as a Foreign Investor in V4 Countries

The economic transformation of V4 countries launched in the early 1990s has been accompanied with opening of those economies not only to global trade, but also to foreign direct investments. The restructuration of many economic sector and privatization of state-owned enterprises (especially in the first phase of economic transformation) required inflows of external capital to the region. Developing economies of V4 had become attractive place

for locating FDIs that were engines of structural changes, growing productivity and increasing innovativeness of V4 economies (Mazur and Takemura 2020). While in the first phase of economic transformation foreign investments were coming mostly from Western Europe and other developed countries (US, Japan), in the following years the region has also drawn attention and attracted FDIs from other Asian countries, including the Republic of Korea (Éltető and Szunomár 2015).

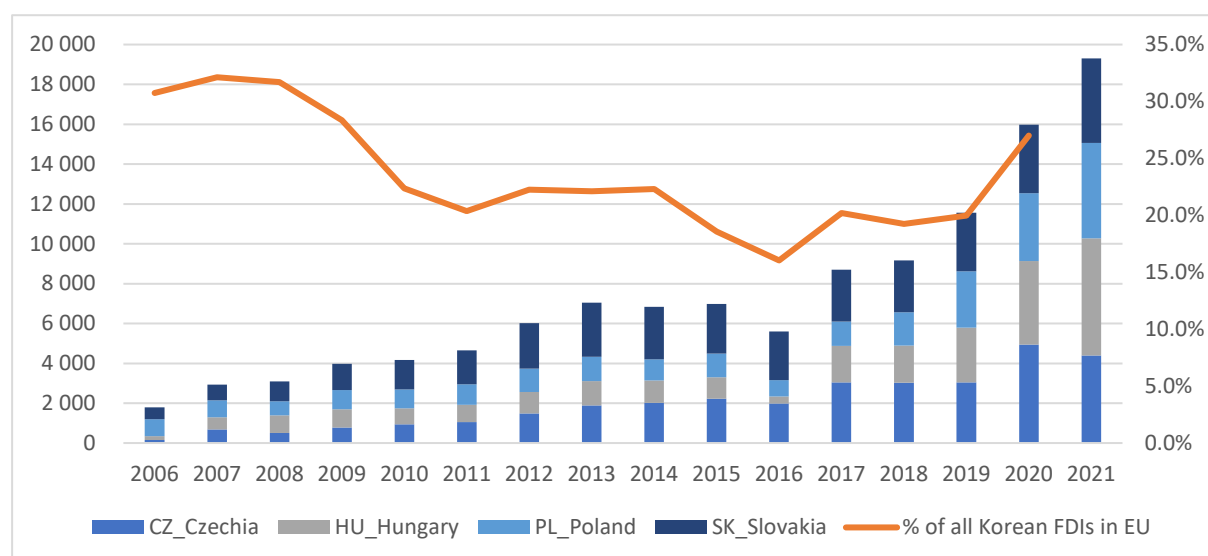
South Korean investors have been present in the region since the beginning of the V4's economic transformation, although initially at a marginal level. The rising trend of Korean FDIs coming to the region, that accelerated in the mid-1990s, was slowed down by the Asian financial crisis of 1997. The second acceleration of FDIs inflows to the Visegrad countries was related to their membership in the European Union. The analyzed countries attracted more attention from external investors in years following their unification with the Single European Market. However, the most dynamic increase in South Korean investment projects has been observed in recent years (graph 4). This proves the strong position of V4 as host countries for Korean investors. Stable economic situation in the region and positive experience of investors from previously implemented investment projects, some recovery of EU economy in the second half of the 2010s and growing trend towards electromobility that requires new large-scale investments, have fueled the latest wave of South Korean investments coming to V4. Moreover, many

projects have been located in the region not only to serve other EU markets and Korean investors are increasingly aware of growing demand in the region itself.

By the end of 2021 South Korean companies were among the most significant foreign investors in V4 countries. The total value of Korean FDIs in the V4 amounted to 19.3 bn USD. That constituted more than ¼ of all Korean FDIs in the EU (orange line in graph 4). This ranks the Republic of Korea as the most important Asian investor in V4 countries (except Hungary for which Singapore is a leader), outpacing Japanese and Chinese companies in the

region (5.5 bn USD and 5.0³ bn USD respectively). For the Czech Republic, Poland and Slovakia the Republic of Korea is also the most significant non-European investor. This is particularly evident in the case of Slovakia, where South Korea is the 5th largest investor globally and is responsible for approximately 80% (2021) of all non-European investments located in the country (for the Czech Republic and Poland the shares amounted to 30-40% respectively). The share is definitely lower for Hungary (3.5%), but even in this case South Korea remains in top 10 most important investors.

Figure 4. Korean FDI Positions in V4 Countries in 2006-2021 (millions USD)



Source: Own elaboration on OECD 2023.

Korean investment projects in V4 have been heavily concentrated in manufacturing sector. In 1991-2021 almost 90% of all SK FDI inflows to the region were located in this sector

(for Slovakia the share was extremely high and amounted to 98.3%). The remaining sectors, in which Korean investors located their capital in V4 countries, were: wholesale and

³ The combined value of investments from the PRC and

Hong Kong SAR.

retail trade – 3.6% of all FDIs (with a relatively high share in the Czech Republic – 8.7% of Korean FDIs in this country), real estate activities – 2.6% (with the highest value for Poland – 5.3%) and construction – 2.1% (4.5% in Poland). Korean FDIs in financial and insurance activities constitute also relatively high share of 6.6% only in Hungary while they are marginal or nonexistent in other countries of the region.

The sectoral structure of Korean investments in the V4 has been strongly determined by motives of Korean companies standing behind their decisions on locating FDIs in Central Europe. Those are based on competitive advantages and opportunities provided by V4 as hosting countries. Firstly, V4 countries - due to their central location at the continent and continuously developing infrastructure (logistics, transport and communication infrastructure) - have been providing easy access to the whole EU/European market. The competitive edge of V4 has also been strongly improved by their membership in the EU, and in particular in the European Single Market with its all opportunities. Transforming economies of the Visegrad Group have been experienced growing productivity and they still offer relatively cheap (when compared to West European countries) workforce. As Endrődi-Kovács, Kutasi and Stukovszky (2015) claimed in their analysis of motives of Korean FDIs in the region, the relatively cheap and well-qualified workforce makes V4 countries as one of the best places in Europe in terms of price and quality relation. The analyzed countries have

also a historical industrial experience (incl. automotive industry), that has been an asset when taking into account a sectoral structure of Korean investments (mostly automotive industry, electronics). This historical and modern manufacturing experience of V4 has also been mirrored in numerous and diversified high-quality automotive suppliers, including small and medium-sized companies cooperating with global investors/producers. That is of paramount importance when ca. 90% of SK investments in the region are concentrated in manufacturing.

The strong presence of SK investors in Central Europe and the role of V4 countries as a gateway for Korean companies seeking business expansion in the EU market lay a solid foundations for further development of Korean investments in this region. New opportunities for investment co-operation will be greatly influenced by transformations towards green and digital economy that are among priorities for the EU. This policy agenda significantly shapes economic processes and the necessity of structural changes in V4's economies, production and trade. In this context the general trend towards electromobility has created new opportunities and Korean companies have already launched investments related to the production of electric cars and automotive components for electromobility. Already now V4 countries have become an important hub for production of EV batteries, solidifying their important position in EU electromobility sector. This generates new investment opportunities also for Korean automotive sector and investors.

Green and digital transformations require many adjustments and new investments in V4 countries in sectors such as energy production and infrastructure. Consequently, this creates new prospects for co-operation in power generation, including hydrogen and nuclear energy (e.g., the construction of new (Poland) and modernization of existing (Czech Republic) nuclear power stations). The green and digital transformation creates also a growing space for trade and investments in fields such as broadband networks, intelligent transportation systems, e-government or smart cities. V4 countries also seek for broader co-operation in new fields such as material research, artificial intelligence, nanotechnology, or biotechnology. Economies such as Slovakia are over-dependent on automotive industry and they look for higher diversification of investments and stronger co-operation in other sectors. As the countries have been losing gradually their relative advantage of low-cost production (increase of salaries, high inflation), greater emphasis should be placed on innovation-based manufacturing and R&D sectors.

IV. Concluding Remarks

Over the last years trade co-operation between V4 countries and the ROK has expanded dynamically and was strongly correlated with the growing role of the partners in international trade. Stable and continuous growth of bilateral V4-ROK trade has led to the current situation in which the combined market of all 4 Visegrad countries is the most important destination for Korean exports to

the EU. The collective V4 countries are also among top export markets for SK's exports globally.

Since V4 countries joined the EU in 2004 the bilateral V4-South Korea trade have expanded dynamically; both exports and imports have increased more than tenfold. However, there is a strong structural imbalance in this trade. While V4 countries are among top importers of goods exported from Korea to Europe, their presence and exports to the Korean market is still very limited. Over last 20-30 years the structure of trade between the partners have been strongly influenced by Korean direct investments located in those countries. However, the latest years have brought a higher sectoral diversification of trade that might suggest that new sectors and new products may come as important ones for future bilateral trade between Visegrad countries and the Republic of Korea.

V4 countries have also been an attractive place for Korean investments in Europe. Their unique central location in the European continent, membership in the EU with an unrestricted access to the Single European Market, well-qualified and still relatively cheap workforce have made those countries a very attractive place for South Korean investments. While historically most of SK FDI in the region has been located in manufacturing (automotive, electronics), there are potentially attractive growing prospects for investments in other sectors such as energy production, infrastructure, transportation and digital economy.

The evolving political situation in Europe has also created new conditions for closer relations of the V4 and South Korea. In 2022 Poland and South Korea signed weapon contracts (ca. 9 bn USD in the first phase) to supply Korean tanks, rocket launchers and aircrafts to the modernizing Polish army. While this is the biggest contract of this kind for Korean producers and opens new opportunities for

ROK's weapon export to Europe, there is also a political dimension at play here. South Korea is seen, in the current unstable global political situation, as a reliable and trustworthy political partner for Central European countries. This is of paramount importance for further development of closer bilateral trade and investments relations in the context of decoupling global economic system. **KIEP**

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