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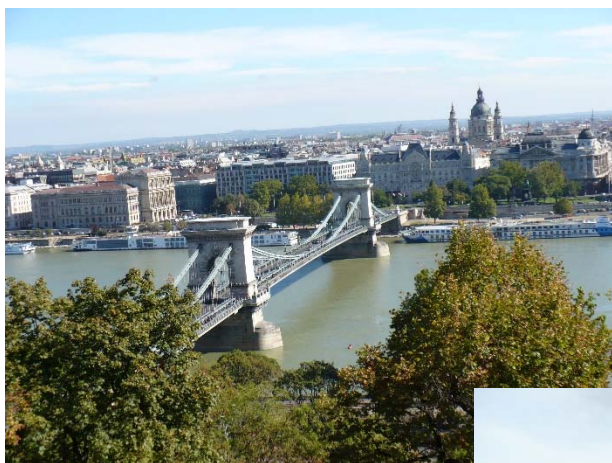
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Germany: Core of EU-Visegrad Economic Relations

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旧社会主義諸国(共産圏)の歴史(「革命」前・体制転換後を含む)と、社会主義や共産主義の思想・理論を対象に批判的検証を志しています。投稿歓迎。



A Cathedral in Regensburg, Germany (September 10, 2016) @Yoji Koyama



The Old Town in Ostrova, the Czech Republic (May 16, 2018) @Yoji Koyama

Germany: Core of EU-Visegrad Economic Relations

Yoji Koyama¹

Abstract

As until recent years the German economy was steadily developing in spite of a negative natural increase in population, it could afford and needed to absorb 300-500 thousand foreigners, whether they were migrant workers or refugees, every year. This paper tries to find one of key determinants of the German economy's strength. Germany made a full use of V4 countries' attractiveness, i.e., geographical and cultural proximity as well as their high technological and educational levels coupled with relatively cheap labor. Since the second half of 1980s German economy have cooperated with firms in V4 countries in the form of outward processing traffic (OPT). In the second half of 1990s FDI has become the main form of cooperation instead of OPT. In this way, the economies of V4 countries have supported Germany's economic development, and at the same time, thanks to such forms of cooperation with German firms, V4 countries have become 'a factory of German products on the EU market'. However, they should not content themselves with such a position but should make efforts to create their own brands recognizable globally.

Keywords: Germany, Visegrad (V4) countries, outward processing traffic (OPT), foreign direct investment (FDI), offshoring, German production network

JEL Classification: F21, L24, O52, P51

1. Introduction

Looking at the EU-27 as a whole, the rate of natural increase in population is still positive, and the net migration rate is at a rather high level. There have been very many migrant workers who have immigrated to Germany, let alone refugees. According to Mara and Landesmann (2016) who studied migration from new EU member states in Central and Eastern Europe (NEM) to EU-15 (old EU member states) during the period from 2000 through 2015, about 6.11 million people migrated from NEM to EU-15. Of which 2.21 million people, well over one-third of the total migration, migrated to Germany. If we add other people who migrated from countries other than NEM, the actual number of immigrants would be much more.

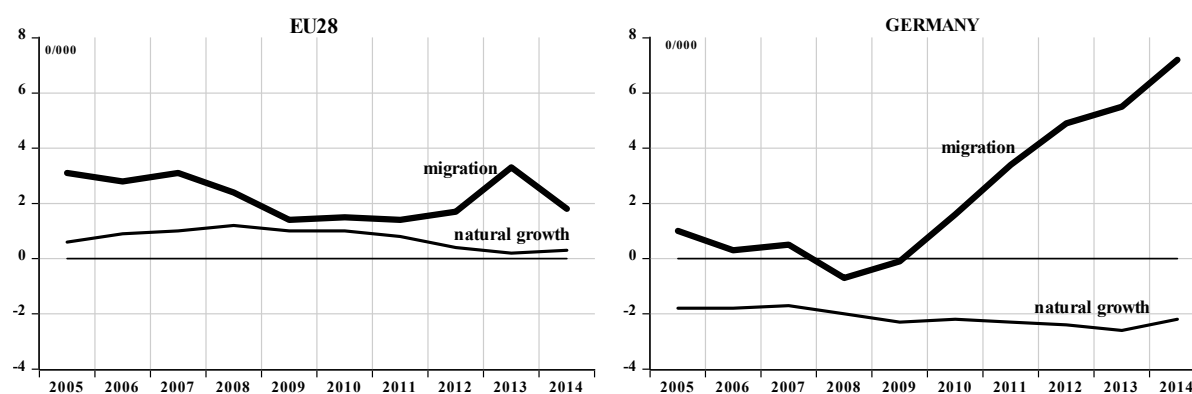
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Germany's population is about 83.15 million (as of September 2019). As for the rate of a natural increase in population, although it once became positive in the year 1990, it has been consistently negative². Domestically supplied labor force is not enough for growing German economy. It is immigration that has covered the labor shortage (see Figure 1). Momozumi (2016), a Japanese specialist on the Germany economy, says, "Germany has been, viewed historically and in terms of economic structure, 'a country accepting migrants and refugees' and therefore needs 300-500 thousand immigrants and refugees to settle down in this country every year". In Europe except Germany, there is no country which can absorb so many immigrants and refugees and at the same time needs their permanent residence. Why has the German economy been so strong that it has needed new labor force from foreign countries? This was my first question when I began to watch people's migration.

Figure 1

Dynamics of the rates of migration and natural growth in population in the EU28 and in Germany



Source: Mencinger (2016)

The reunification of West Germany (German Federal Republic) and East Germany (German Democratic Republic)³ came true on October 3, 1990. Under a heavy fiscal burden due to the practical absorption of East Germany, the German economy stagnated from the early 1990s through the early 2000s. At that time Germany was called "Europe's sick man". Since the early 2000s its economy has been doing well⁴. Although its economy declined temporarily by the 2008-09 global financial crisis, it recovered soon, and now the German economy is the most vibrant among EU member states. As for its strength, the following reasons can be easily mentioned: (1) technological power which has been historically formed and inherited from the past; (2) a major role played by regional banks in the development of regional economy⁵. (3) monetary policies that Bundesbank has traditionally pursued with control of inflation

² Sumitomo Shoji Global Research (2017), p. 1

³ For the understanding of the East Germany's economy Shirakawa (2017) was useful. For understanding of the system change in the East Germany and causes and the process of the Berlin Wall's fall, Aoki (1991) and Aoki (1992) were useful.

⁴ For understanding of the German economy the following Japanese books were useful: Tohara and Kato (eds.) (1992) and Fujisawa and Kudo (eds.) (2020).

⁵ Ayuha (2018).

given the first priority on the back of fear of inflation which has been shared by people; (4) a favorable position that the German economy with high international competitiveness and stable price has held in the single currency system in the EU; (5) good labor-management relationship which is symbolized by co-determination system; and (6) close economic relationship with Central and Eastern Europe (Central Europe + South Eastern Europe + the Baltic states), Central Europe in particular.

I would like to explain the geographical concept used in this paper. Generally speaking, during the period of the Cold War ‘Eastern Europe’ referred to the European part of socialist countries. At that time, adjectives ‘Western’ and ‘Eastern’ denoted capitalist and socialist respectively. Of course, the Soviet Union was not included in ‘Eastern Europe’, and consequently the Baltic republics which constituted the Soviet Union were not included to it. After the system change in 1989 ‘Eastern Europe’ became countries which aimed at capitalism. In this respect they are not different from Western Europe. In the early 1990s in Europe an old expression ‘Central Europe’ referring to Poland, Hungary and Czechoslovakia has revived. In parallel to it, southern part of the previous ‘Eastern Europe’ came to be called South Eastern Europe. This is a more neutral expression than ‘the Balkans’ which have a bad connotation such as a group of small countries with repeated conflicts. The Baltic states separated from the Soviet Union and became independent in September 1991, returning to Europe. In expressing countries which previously had a socialist regime in Europe (Central Europe, South Eastern Europe and the Baltic states) as a group I will mention Central and Eastern Europe (CEE) following an example of many European researchers.

Central Europe is also called Visegrad countries (V4)⁶. The German production network came to cover not only V4 but also Balkan countries (Romania, Bulgaria and Serbia, etc.) and further Ukraine. This fact reminds me of a view of Emanuel Todd, a French specialist on historical demography. In his book with a sensational title “The German Empire will bring the World to Ruin”, he says as follows: “If we examine Germany’s economic superpower in the European space we can find that it was formed with the egoistic economic policies such as relocation of its production sites of semi-products to Eastern Europe outside of the eurozone as the means” (Todd, 2016, p. 215). His expression is very radical, but it is very appropriate in the point that he finds key determinants of the German economy’s strength in its economic ties with Central and Eastern Europe⁷. However, his book does not discuss Germany’s economic relations with Eastern Europe, V4 countries in particular, further.

I am not a specialist on the German economy, but a specialist on area studies of Central and Eastern

⁶ As in February 1991 after the system change political leaders of three countries in Central Europe, i.e., Poland, Czechoslovakia and Hungary met at Visegrad, a local city in Hungary, and agreed on cooperation in joining the EU (the EC at that time), these three countries came to be called Visegrad countries. Since the Czech Republic and the Slovak Republic separated peacefully and became independent in January 1993, the Visegrad countries have been consisted of four countries, i.e., Poland, the Czech Republic, Hungary and Slovakia.

⁷ The European integration was “a project which was aimed to tame Germany, an economic giant after the cold war” (Handl, 2018). From 1989 through 1990 socialism has collapsed in Central and Eastern Europe one after another, and new governments aimed at ‘return to Europe’ and the revival of capitalism. The reason why France approved the unification of Germany and then began to put serious efforts into the creation of the single currency euro was to prevent Germany to drift eastward and keep it within Europe. Nevertheless, Germany has become a winner in the European Union in the end. Similarly, Aizawa (2018, p. 210) says, “Although the introduction of euro was never led by Germany, in the end it turned out a breakthrough there by Germany’s economic rule over the whole Europe evolved into its political ‘rule’”. This might be, as Handl (2018) says, a paradox of history.

Europe. In this paper I will consider key determinants of the German economy's strength with focus on the reason (6) from the perspective of a specialist on area studies of Central and Eastern Europe. After that I will refer to the reason (5) too. I would like to say in advance that I paid attention to the reason (6) because I read Limbert's paper "An economic version of 'the Holy German Empire'". It was a very short paper, but I became interested in its bibliography. I obtained all the papers listed in the bibliography that I could download⁸. After having read them, my opinion was not different from that of Limbert and Todd, but I have become able to understand close relationship of the German economy and V4 countries' economies more concretely than before. Then I read other publications on Germany and V4 countries. Now I will discuss concretely the cooperative relationship between Germany and V4 countries as a source of its strength.

The paper is structured as follows: After a historical explanation on system changes in Central and Eastern European countries and their return to Europe, the process in which V4 countries have deepened their economic relations with West Germany from outward processing traffic to foreign direct investment (FDI) is examined. Then the impact of offshoring on internal labor-management relationship in Germany is examined, and finally the paper reaches some conclusions.

2. System Changes in Central and East European Countries and Their Return to Europe

The Soviet Union and 'Eastern European' countries fell into serious economic stagnation in the 1980s. In the Soviet Union, under the Secretary General of the Communist Party Mikhail Gorbachev (later also the President) who took office in 1985, Perestroika (drastic reforms of the Soviet-type socialism) began in 1986. After Gorbachev expressed his position of non-intervention in 'Eastern Europe' in 1988, reforms and national movement accelerated not only in 'Eastern Europe' but also the Baltic republics of the Soviet Union. Soon the economic crisis and national conflicts deepened in the Soviet Union, leading to the collapse of Perestroika. In September 1991 the Baltic states seceded from the Soviet Union and became independent, and in December of the same year at last the Soviet Union became disintegrated. In this way, newly-emerged countries began their own ways to capitalism. COMECON (the official name was the Council for Mutual Economic Assistance), a socialist version of the economic integration, malfunctioned and ceased its existence in June 1991. During the socialist period 'Eastern European' countries except former Yugoslavia and Albania were engaged in the international division of labor in the framework of the COMECON system, and therefore their economic ties with the West were weak.

Central and Eastern European Countries reoriented their foreign trade and made the EU member states their main trading partners. The EU began supporting the 'Eastern European' countries technically as early as the end of the 1980s. The G7 Archa summit held in July 1989 decided to support Poland and Hungary, where reforms had just begun, and gave the European Commission power to coordinate the support. This was PHARE (the initial of Pologne, Hongrie, Assistance a la Restructuration Economique) Program by G24 (the conference of 24 countries for supporting 'Eastern Europe'), and it was originally designed to support strongly both countries' efforts for building democracy and a market economy. Soon

⁸ The following papers are included: Dustmann, et al. (2014); Handl (2018); Andreff, et al. (2001); Boudier-Bensebaa and Brezinski (2001); Poplawski (2016); and Pellegrin (1999).

this program came to be applied to all post socialist countries in Central and Eastern Europe.

1989 was very significant year for the EU (at that time the EC). At that time the most important challenge for the EU was the currency integration. When political leaders of the Western Europe often met discussing the European construction (which practically meant the currency integration in the context at that time) significant political changes were evolving at the same time. The fall of Berlin wall in November of the same year and the subsequent dynamic political changes foretold the reunification of Germany. French President François Mitterrand was afraid of Germany's eastward drift (which meant that the integrated Germany might turn its back on the currency integration with Western Europe as a center and aim to revive its strong political and economic ties with 'Eastern Europe'). That is why he persisted in inclusion of Germany in the new currency zone in exchange for his consent to the unification of Germany (Bozo, 2009).

Poland, Hungary and Czecho-Slovakia concluded the European Agreement with the EC in December 1991. It was a kind of association agreement, thereby these three countries obtained a position of associate member. As the Czech Republic and Slovakia separated peacefully and became independent states in January 1993, both countries concluded the European Agreement with the EC again. In the same year Bulgaria and Romania concluded the European agreement, and in 1995 also Slovenia concluded the European Agreement.

Country	Area (km ²)	Population (10 thousand)	Per capita GDP (euro)	Currency
Poland	32.3	3,840	20,900	Zloty
Hungary	9.3	978	20,600	Forint
Czech Republic	7.9	1,057	26,700	Koruna
Slovakia	4.9	543	23,300	Euro

Source: Grieveson, Richard, et al. (2018).

The European Agreement provided Central and East European countries with conditions favorable for their foreign trade. According to Momozumi (1999, pp. 16-17), as the European Agreement included not only areas of foreign trade policies but also articles on political and cultural areas, it would not come into effect officially unless all member states of the EC/EU ratified it. Soon, however, its part on foreign trade policies which were under the jurisdiction of the European Commission came into effect as a provisional agreement. The important point was 'free trade zone', which was permitted as 'unilateral preferential treatment'. Namely, the EC/EU should get rid of custom duties, import quotas and other restrictions immediately while the Central and Eastern European countries should aim at materialization of free trade of industrial products in 10 years by decreasing the tariff rates gradually. However, most of agricultural products trade was excluded, and the so-called 'sensitive' products such as steel, chemicals and textiles were made exceptions to the rule.

After 1995 these Central and East European countries officially submitted application for joining the EU one after another. On May 1, 2004 V4 countries were admitted to the EU together with two

island countries in the Mediterranean Sea (Cyprus and Malta), the Baltic States and Slovenia. Already before that, the economic relations between Germany and V4 countries had deepened substantially, but thanks to the Single Market, to which new member states joined, trade of goods and services between the existing EU member states and the new EU member states became duty-free. Since then foreign trade and investment between Germany and V4 countries have rapidly increased. Looking at new EU member states from Central and Eastern Europe including V4 countries individually, the area and the population of each country are relatively small (Table 1). Adding up the populations of V4 countries, however, it amounts to 64.31 million, which exceeds that of Italy (61.05 million) and is comparable to that of France (65.74 million).

Table 2 V4 countries as trade partners of Germany

Country	The amount of foreign trade in 2003 (billion euro)	The amount of foreign trade in 2015 (billion euro)	Ranking in 2003	Ranking in 2015	Increasing rate	Changes in ranking
Poland	32.2	96.8	12	7	201%	5
Czech Republic	34.2	75.8	11	11	122%	0
Hungary	24.1	45.6	15	14	89%	1
Slovakia	12.5	26	21	19	108%	2
Total amount of Germany's foreign trade with V4	1,194	2,034			70%	

Source: Poplawski (2016), p. 20.

V4 countries have another appeal. Namely, they have geographical proximity and cultural similarity. In addition, in spite of relatively high technological levels of local workers, the production costs are moderate there. That is why V4 countries rank 5th in the destination of investment by the German industry. During the period from 2003 through 2015 the amount of Germany's foreign trade increased by 70 %, while its trade with V4 countries increased at much higher pace. It is noteworthy that the amount of its trade with Poland increased by 201 % pushing up Poland's ranking from the 12th to 5th (Table 2).

3. Outward Processing Traffic

In addition to ordinary foreign trade, especially outward processing traffic (OPT) has played a significant role between the West European countries and the Central and East European countries in the first half of the 1990s. French researchers, Andreff, et al (2001) explain the circumstances in which this kind of foreign trade develops as follows: Semi-finished products are exported from an orderer firm in a home country to a firm in a host country. Between both firms a subcontract relationship is formed where the firm in the host country produces specific products, which meet the plan and technical specification given by the orderer firm, for the interest of the order firm. In the host country the subcontract firm processes the semi-finished products and produces finished products (or more elaborate semi-processed goods), generating value added. Then the finished products (or more elaborate semi-

processed goods) are exported to the orderer firm in the home country. This kind of trade is called outward processing traffic (OPT)⁹. If in the process of this kind of foreign trade custom duties are applied to such products twice, to and from, without distinguishing them from ordinary exports and imports, the orderer firms would lose interest in such a double flow of export-reimport. In order to settle such a problem preferential treatments were being applied since 1986. Namely, at the time of re-import the trade restriction was mitigated by the preferential treatment of trade. Its purpose was to avoid taxation on goods originating from EU member states and apply custom duties only values added by subcontract firms in foreign countries. However, in order to benefit from this preferential tariff, the amount of value added which was generated in processing at subcontract firms in foreign countries should not exceed 50% of the total value of the final products of the orderer firms (pp. 5-9).

There must be some conditions for this kind of foreign trade to develop: First, labor cost must be sufficiently low. Especially, industries which need many labor forces, for example, textile/apparel industry suit outward processing traffic. Second, transportation costs must be low. For this to exist there must be communication technologies, good infrastructure and efficient transportation network. Third, a host country must offer production capacity which is applicable to the product standards of orderer firms and minimum political stability as well as ability to guarantee the continuity of bringing in semi-products and bringing out final products (or more elaborate semi-products) (Andreff, et al, 2001, p. 12).

Boudier-Bensebaa and Brezinski (2001) explain OPT. as follows: OPT had been carried out by West German firms well before the system change in 1989. It is Germany that established the closest relations in foreign trade and made full use of OPT. Other major countries in the EU such as Austria, Italy, the Netherlands, Denmark and France were lagging behind Germany in this respect (Table 3). In both total foreign trade and OPT of the Central and East European countries three main EU member states, i.e., Germany, Italy and France occupied large shares, but it is clear that Germany had an overwhelming share (Table 4). The amount of this kind of trade increased rapidly especially in the 1990s but decreased after 1998 (Table 5).

	Germany	Austria	Italy	Netherlands	Denmark	France	EU-15
Poland	44.90%	0.90%	13.80%	64.30%	94.70%	45.50%	43.30%
Hungary	18.60%	68.80%	55.20%	21.40%	2.10%	36.40%	25.60%
Czech Republic	30.40%	18.80%	6.90%	3.60%	0.50%	9.10%	23.50%
Slovakia	6.10%	12.50%	20.70%	10.70%		9.10%	7.60%
V4 countries	29.6	3.2	2.9	2.8	1.9	1.1	43.4

Note: In the original table Ecu was used, but as Euro was created in 1999 in this table the present author (Koyama) changed it to Euro, based on the rate 1 ecu = 1 euro.

Source: Pellegrin (1999), p. 4.

⁹ Papers written in French express this kind of trade as 'le trafic de perfectionnement passif' (TPP). If literally translated into English it means trade of passive perfection.

In the outward processing traffic Germany, the Netherlands, Denmark and France used Poland most frequently while Austria and Italy used Hungary most frequently. In the case of Austria, perhaps, its geographical location as Hungary's neighbor and its historical tie that Hungary was under the rule of the Habsburg Empire and formed the dual Empire together with Austria from 1867 through 1918 might be effective still now. In the case of Italy, although it does not adjoin Hungary, its historical circumstances that part of Northern Italy used to belong to the Habsburg Empire might be still effective. In this way, the vertical division of labor with Germany as a center was promoted on a regional scale.

Table 4
The Share of Main Trading Partners in Central and East European Countries' Foreign Trade and Outward Processing Traffic with their Main EU Member States

Year		Germany		Italy		France		Total of the 3 countries	
		Export	Import	Export	Import	Export	Import	Export	Import
1993	Total foreign trade	51	46.9	15.9	18	9.4	10.5	76.3	75.4
	Outward processing traffic	73.3	73.5	9.3	6.5	5.5	6.4	88.1	86.5
1994	Total foreign trade	49.5	46.5	17.2	18.4	8.6	9.5	75.1	74.5
	Outward processing traffic	74.7	72.4	10	8.8	4.8	6.1	89.5	87.3
1995	Total foreign trade	41.1	42.4	14.8	14.6	7.6	8.5	63.5	65.6
	Outward processing traffic	67	65.3	10.1	9.2	5.1	5.7	82.2	80.2
1996	Total foreign trade	39.2	41.7	15.7	13.3	8	9	62.9	64
	Outward processing traffic	60.4	60.4	12.1	12.1	5	5.7	77.5	78.2
1997	Total foreign trade	39	40.7	14.5	14.3	8.4	8.4	61.9	63.5
	Outward processing traffic	57.2	59.3	12.7	13.4	5.2	6.6	75.2	79.3
1998	Total foreign trade	41.1	42.3	13.9	13.8	8	7.5	63	63.6
	Outward processing traffic	53.5	54.4	13.3	13.7	5.6	6.1	72.4	74.1

Source: Boudier-Bensebaa and Brezinski (2001), p.38.

Three major countries, i.e. Germany, Italy and France accounted for substantial share in CEE's foreign trade with the EU. In 1993, for example, these three countries accounted for almost three quarters of CEE's total foreign trade with the EU, and they accounted for nearly 90 % (88.1 % of the export and 86.5%) of the OPT (Table 4). Among others, Germany's share was large, accounting for about 50 % of CEE's total foreign trade with the EU and about 73 % of their OPT. Later, Germany's share decreased gradually, but its superior position remained unchanged. Why has Germany gained the superior position in the OPT? It is, as Poplawski mentions, because of its 'geographical proximity and cultural similarity'. In the 1930s V4 countries were included in Germany's 'wide economic area' (Berend and Ranki, 1978). Due to Germany's defeat in the World War II and the subsequent inclusion of V4 countries in the socialist (Soviet) block, their economic relation with the German economy became weak, but the previous economic ties could be easily revived by the collapse of the socialist system.

		EU		Germany		Italy		France	
		Export	Import	Export	Import	Export	Import	Export	Import
1994/93	Total foreign trade	17.5	24.2	14.1	23.1	26.5	27.5	5.8	12.5
	Outward processing traffic	20.6	22.6	22.8	20.8	29.5	65.5	5.6	5.7
1995/94	Total foreign trade	40.3	30.5	76.5	19.1	21.1	3.6	26	17.3
	Outward processing traffic	21.2	17.6	8.8	6	23	22.7	28.8	11.6
1996/95	Total foreign trade	20.7	6.3	15.3	4.4	27.9	-3.5	26.9	12.2
	Outward processing traffic	14.5	11.6	3.1	3.3	36.9	46.5	12	9.8
1997/96	Total foreign trade	25.7	19.6	25	16.8	15.7	29.2	32.3	11.8
	Outward processing traffic	4	3.1	-1.4	1.1	9.5	14.4	8	21.2
1998/97	Total foreign trade	6.3	8.5	11.9	13.2	2.3	4.9	1.2	-3.2
	Outward processing traffic	-20.8	-19.3	-26	-26	-17.2	-17.4	-15.1	-26.3

Source: Boudier-Bensebaa and Brezinski (2001), p.39.

Boudier-Bensebaa and Brezinski (2001, p. 37) explain Germany's OPT from perspective of sectors. In the period 1988-1998 total of six types of products occupied 80-90% of Germany's total reimport of products after processing [perfection]. In 1998 clothing accounted for a little over 50 % of Germany's reimport in 1998. Clothing was followed by electric appliance which increased the share from 8.9% in 1988 to 24.9% in 1997 with some fluctuations. Also assembly of automobile was increasing its share in the total reimport (18% in 1998). In contrast, leather and footwear industry decreased its significance, and its share decreased from 8.5 % in 1988 to 2.2 % in 1998. The share of optical industry, albeit small, was stable, and its share increased slightly from 0.9% to 1.4% in 1998.

Table 6 prepared by Pellegrin (1999) provides us with the information by sectors and countries. From this table we can find that the total amount of the EU's OPT (re-import if viewed from the EU-15) was € 4.34 billion. Looking at this table vertically we can find that at what percentage main EU member states reimported from individual countries of V4. The amount of textile and clothing was € 2.91 billion occupying an overwhelming share (67%) of the total. The second place was electrical machinery with € 0.59 billion occupying 13.6%, followed by mechanical machinery and furniture (13.6% and 13.6% respectively), and footwear (2.5%) (Pellegrin, 1999, p. 6).

	Germany	Austria	Italy	Netherlands	Denmark	France	EU-15
All products							
Poland	21.1%	1.0%	4.1%	22.2%	33.2%	5.9%	18.8
Czech Republic	15.2%	5.9%	3.8%	4.6%	1.1%	3.0%	10.2
Slovakia	10.4%	7.5%	13.5%	22.1%	2.4%	2.9%	3.3
Hungary	13.6%	15.5%	16.7%	16.9%	7.8%	8.3%	11.1
V4	29.6	3.2	2.9	2.8	1.9	1.1	43.4
Textile and Clothing							
Poland	86.1%	40.4%	58.0%	89.4%	93.5%	52.6%	15.3
Czech Republic	63.3%	49.1%	17.1%				4.3
Slovakia	67.2%	60.3%	54.3%	80.7%			2.5
Hungary	79.4%	83.8%	75.6%	50.7%			7.1
V4	18.5	1.7	2.0	2.7	1.7	1.3	29.1
Electrical machinery							
Poland	18.8%			6.5%			1.0
Czech Republic	26.9%	23.4%		29.2%			2.4
Slovakia	11.8%	21.6%					0.3
Hungary	14.4%	21.0%		25.8%			2.2
V4	4.2	1.0		0.2			5.9
Mechanical machinery							
Poland	4.6%						0.2
Czech Republic	11.2%						0.8
Slovakia	11.3%						0.1
Hungary	3.9%						0.4
V4	1.4		0.1				1.6
Furniture							
Poland	14.3%						
V4	1.5						1.6
Footwear							
Poland	9.9%		18.9%		89.1%		0.2
Czech Republic	30.0%		27.8%				0.2
Slovakia	1.1%		17.7%				0.1
Hungary	27.1%		31.1%				0.6
V4	0.6		0.4		0.1		1.1

Source: Pellegrin (1999), p. 6.

Looking at all products, Germany was the largest user of OPT. Countries other than Germany lagged behind conspicuously in this area. Among V4 countries Poland was the largest host country with its total amount being € 1.88 billion and occupies the first place in textile and clothing (86.1%). In electric machinery the Czech Republic was the largest host country. In mechanical machinery Slovakia was the largest host country, but its share was almost same as the Czech Republic. In furniture OPT was carried out almost exclusively by Poland among V4 countries. In footwear Hungary was the largest host country, but its amount was very small.

Pellegrin (2001, p. 8) points out negative effects of ‘maquiladorization’ on host countries, saying,

“without giving them [maquiladora] real chances for upgrading along the production chains of their partner. Maquiladora¹⁰ were also charged of keeping wages increases below productivity rise and of bringing about little backward linkages with other local Mexican firms” .

4. Transitional Character of Outward Processing Traffic

OPT increased rapidly in the first half of the 1990s, but it lost momentum in the mid-1990s and began to decrease in 1998. In the case of Germany in particular, the rate of increase became a little over 3 % in 1996 and since 1997 it was decreasing (Table 5).

Foreign direct investment (FDI) was not made until the system change in 1989. Automobile-assembling firms faced necessity to invest in human capital. At firms in Central and Eastern Europe it was not enough to use cheap labor forces. They did even recruitment for retired managers who would be able to reorganize their organizations within firms. Namely, formal knowledge which could be written in operating manuals became insufficient, and therefore it became necessary to transfer tacit knowledge which managers had acquired by many years of experiences to workplaces in Central and Eastern Europe. It means that OPT is in a stage immediately before the stage where injections of tacit knowledge to production processes by direct investment become necessary (Boudier-Bensebaa and Brezinski, 2001, p. 46).

According to Limbert (2018), as differences in tariff rates disappeared with free trade agreements OPT lost its advantage, in the second half of the 1990s, and instead of it foreign direct investment gained advantage. Boudier-Bensebaa and Brezinski put emphasis also on problems of transaction cost. If orderer firms want to expand OPT, they have to secure more subcontract firms in host countries. It took time to explore partners who could deliver products with quality meeting German standards within the time limit. Consequently, the transaction cost has become higher exceeding the advantage of low unit labor cost. A firm in Freistaat Sachsen, for example, preferred cooperation with Central and Eastern European firms which were owned by foreign capitals and controlled in a Western way. A firm which carried out OPT chose to acquire a firm in a host country or to establish a firm there (Boudier-Bensebaa and Brezinski, 2001, p. 45). Thus FDI has become popular replacing OPT.

5. Foreign Direct Investment

Let us look at Table 7, which was prepared by Gabor Hunya (2018) at Vienna Institute for International Economic Studies (WIIW). This shows FDI stock by investor countries as of December 2016. The column at the right end shows the shares of investment by an investor country in the total FDI inflow in 10 NEM. We can find that the first place is unexpectedly occupied by the Netherlands with its share being 19.2%. In V4 countries except Hungary the Netherlands is the number one investor country. Similarly to the so-called ‘Rotterdam effect’¹¹ on foreign trade, however, there might be a circumstance in which the amount of investment by the Netherlands looks inflated in the case of FDI. Presumably, for

¹⁰ ‘Maquiladora’ is a Spanish term, and its English equivalent is ‘in-bound plant(s)’. However, the term ‘maquiladora’ has become so familiar that I use this term in this paper.

¹¹ It means that as some of goods exported from or imported to Germany via Rotterdam port are counted as foreign trade by the Netherlands figures of this country are inflated. Poplawski (2016), p. 21.

example, American firms and Japanese firms may have invested in Central and Eastern European countries via subsidiaries which these firms established in the Netherlands, but I am not sure.

Table 7 FDI Inflow Stock in V4 Countries by Investor Countries (as of December 2016, %)

Investor Countries	Host Countries				
	Czech Republic	Hungary	Poland	Slovakia	Total of New EU member states
Austria	11.0	10.2	4.0	16.0	9.2
Belgium	1.4	2.8	3.5	5.4	2.6
Cyprus	4.2	1.8	3.3	4.0	3.9
Denmark	0.7	0.9	1.7	0.8	1.2
Finland	0.1	0.1	0.8	0.3	1.2
Finland	7.8	3.5	10.1	1.1	6.3
Germany	14.1	26.7	16.6	5.2	14.1
Greece	0.0	0.0	0.0	0.0	0.8
Hungary	0.3		0.2	5.5	1.2
Italy	3.0	3.2	4.2	2.1	4.1
Japan	1.2	1.1	0.4	0.1	0.6
Luxembourg	11.9	4.3	13.3	10.6	9.0
Netherlands	23.4	15.7	19.3	24.8	19.4
Norway	0.2	0.6	0.7	0.4	0.8
Russia	0.6	0.1	0.2	-0.5	0.9
Spain	0.9	1.1	5.8	1.3	2.6
Sweden	1.0	0.5	2.0	0.7	2.7
Switzerland	4.1	6.5	2.7	1.4	3.6
UK	2.9	4.0	5.1	1.0	3.5
USA	1.1	-2.1	2.5	-0.2	1.2
Other Countries	9.9	19.1	3.5	19.9	11.1
EU-15	78.5	76.6	87.7	70.2	77.9
EU-28	87.1	79.8	92.2	92.6	85.9
Total	100.0	100.0	100.0	100.0	100.0
Total (million euro)	115,627	76,062	176,005	41,496	603,679

Source: Hunya (2018), p. 69.

Aside from the Netherlands, the country which has invested the largest amount in V4 countries is Germany, followed by Austria which has invested a large amount in the Czech Republic, Hungary and Slovakia. France has invested a relatively large amount in Poland. Italy's investment in NEM is unexpectedly small with its share being 4.1%. Luxembourg, a very small country, has invested a relatively large amount (5 %). It is presumed that this country has actively invested in the sector of financial intermediation.

Looking at FDI inflow stock by sectors (Table 8), the largest amount was occupied by manufacturing industry, followed by financial intermediation, real estate/rental/business support, and retail and wholesale trade, albeit there is a slight difference among countries. The next largest amount was occupied by electricity/gas/water supply. In the period 2004-2012 the amount of FDI from Germany to V4 countries has doubled from € 36 billion to € 77 billion. As for the amount of FDI inflow stock by

countries as of 2016, Poland has attracted the largest amount, followed by the Czech Republic, Hungary and Slovakia. Looking at the amount of FDI inflow stock by per capita, Hungary and the Czech Republic have attracted the largest amount, and Poland has attracted only one third of the amount that of these two countries. However, the growth in investment in Poland from Germany in the period 2004-2012 was fastest with the rate of cumulative increase in FDI being 160%, followed by Slovakia (129 %), the Czech Republic (111 %) and Hungary (32 %) (Poplawski, 2016, p. 33).

	Host Countries				
	Czech Republic	Hungary	Poland	Slovakia	Total of V4 Countries
Agriculture, forestry and fishing	0.3	0.7	0.5	0.4	0.9
Mining and quarrying	0.6	0.3	0.2	0.2	0.7
Manufacturing	31.6	42.3	31.5	33.3	30.5
Electricity, gas, steam and air conditioning	3.2	3.0	2.8	4.2	3.9
Water supply, sewerage, waste manag. Remediation	0.8	0.1	0.2	0.3	0.4
Construction	1.4	1.2	4.7	1.0	3.3
Wholesale, retail trade, repair of motor vehicles, etc.	10.3	10.0	14.7	9.0	12.4
Transportation and storage	1.2	2.4	1.3	4.0	1.9
Accommodation and food service activities	0.4	0.9	0.5	0.2	0.9
Information and communication	5.8	6.4	6.2	5.1	5.6
Finance and insurance activities	27.0	8.0	19.0	24.4	20.2
Real estate activities	8.3	7.1	8.2	7.1	8.9
Professional, scientific and technical activities	5.5	7.5	8.3	3.5	5.9
Administrative and support service activities	1.0		1.2	6.3	1.5
Education	0.0		0.0	0.0	0.0
Human health and social work activities	0.2		0.4	0.1	0.2
Arts, entertainment and recreation	0.1		0.2	0.2	0.2
Other service activities	0.2		0.1	0.1	0.1
Other not elsewhere classified activities	0.0	8.0	0.0		1.9
Private purchase and sales of rea estate	2.3	2.1	2.6	2.0	0.8
Total	100.0	100.0	100.0	100.0	100.0
Total by activities (million euro)	115,627	76,062	176,005	42,265	604,448

Source: wiiw (2018), p. 71

According to Poplawski (2016), the structure of German exports to the individual V4 countries is similar. The majority of sales by German companies are the flagship products of the country's economy, namely machines and cars, most to Hungary, slightly less to the Czech Republic and Slovakia, and the least to Poland. Some of these exports were components for the factories of the German corporations located in these countries. A significant share of the exports from Germany to V4 countries is made up of the semi-finished products, other finished products and chemical products (Poplawski, 2016, p. 26). These components were assembled, and part of the finished goods was sold on V4 markets while most of them were sold on European markets.

Germany's FDI in Central and East European countries amounted to 1.8 billion DM in 1991, and it increased to 42 billion DM in 1999. German firms' main motive for investment in Central Europe is

sales and customer service on local markets as well as reduction in costs (Poplawski, 2016).

Case Studies

Appendix of the work by Poplawski, et al (2016) includes case studies on sectors such as automobile industry, electric mechanical sector, logistic sector, retail sector and banking sector. I will present only the essence of two cases of automobile industry and electric mechanical sector. On the case of service sector, I will present the case in Poland, based on a study by Polish researchers.

Case of automobile industry

Most of German firms decided to decrease their production in Western Europe and increase their production in V4 countries. Before the 2008-09 global financial crisis the number of automobiles produced in Germany exceeded the number of automobiles produced in factories of German firms located in foreign countries. After 2010, however, this proportion has been reversed. In 2013, 5.4 million cars were produced in Germany while 8.6 million cars were produced in foreign countries (this includes not only V4 but also China, etc.).

Production of components for automobiles came to be produced in Central Europe. The firm which produced components most in foreign countries is Volkswagen (79 %), followed by Audi (53 %), Daimler (40 %) and BMW (36 %). Looking at a wider region including not only V4 but also Slovenia and Romania, 33 factories of German automobile firms operate there and produce 3.6 million cars in a year. This is equivalent to 21 % of total automobile production in the EU as a whole. A majority of cars produced in the above-mentioned wider region are sold on the West European markets, and only 0.7 million cars were bought by local consumers (Poplawski, 2016, pp. 48-49).

Case of electric mechanical sector

Electric appliance industry is the second important sector next to automobile industry in German economy. German electric mechanical companies have many subsidiaries in V4 countries. Many of these subsidiaries in this industry are committed to V4 countries as a subcontractor for car companies. In contrast to automobile companies, German electro-mechanical companies decided not to move their productions of advanced goods to V4 countries and have preferred to focus on manufacturing the machines' simplest components in the region, and keeping the most important production processes in Germany (Poplawski, 2016, pp. 50-51).

Case of service industry

As for offshoring in the service sector, the following cases are well-known: advanced industrial countries established call centers and outsourced diagnosis of x-ray picture and accounting work, etc. via satellite communications in developing countries where labor costs. Advanced countries including Germany are doing offshoring in the service sector. *Poland Competitiveness Report 2008* says that most of offshoring projects in service sector can be classified as section K (real estate, rental and business support) of NACE classifications. In 2006, one third of FDI inflow in Poland, i.e. € 5 billion was invested in

industries which belong to section K. Of which € 3 billion were invested in firms which represent the group 741 of NACE triple digit classification (legal service, accounting work, book-keeping and audit operation) (SGH, 2008, pp. 259-260).

6. German Production Network

According to a study by Dustman, et al (2014), the final product in manufacturing contains a large share of input produced in other sectors: In Germany, the value added in manufacturing is only roughly one-third of the value of the final product, with remainder of value added being contributed through inputs from other industries, either domestically or from abroad. Hence, the manufacturing sector may have benefited from low wages in other domestic sectors and from cheap imports from abroad (p. 173). Compared with input by domestic industries, the use of imported inputs has been increasing. Germany has used imported input purchased from foreign countries, especially from Central and East European countries much more than other countries. In 2000, imported inputs purchased from V4 countries amounted to about 8.5 % of inputs in Germany, compared to 2.5 % in Italy and 1.9 % in France (relative to GDP) (Dustmann, 2014, p.176).

According to Poplawski, Central Europe has become an attractive place to invest capital for Germany's small and medium-sized enterprises. Some bulky goods destined for the European market such as automobiles or machines were not worth producing in Asia due to transportation costs. So, many German firms have invested in Central Europe and strengthened their production ability (Poplawski, 2016, p. 11). Poplawski says that it was Germany that benefited most from the investment in Central Europe financed by the Cohesion Fund. A significant proportion of these funds was spent on infrastructure, which made it easier to transport goods between Germany and V4 countries. It was crucial for the German automobile companies for whom a good transportation network was a precondition for building modern production facilities in the V4 countries (Poplawski, 2016, p. 13).

Poplawski says, "Thanks to its relatively low wages and high productivity, Central Europe has become a factory for German products on the EU market whose production could not have been moved to Asia"(Poplawski, 2016, p.10), He also says, "the role of V4 countries as suppliers for Germany's export firms has greatly increased in recent years" (p. 19).

Indeed, having received FDI from advanced Western European countries, Central Europe has achieved rapid economic development, but they could not be entirely delighted with this achievement. Poplawski points out problems for Central Europe. Even if firms in V4 countries sell products with German firms' brand name, it does not help to create its own strong brand recognizable globally. R&D expenditure as a percentage of GDP in V4 countries is still low. It is necessary for them to strengthen 'non-price competitiveness'¹². Without such efforts, there remains risk of falling into "middle-income country's trap".

¹² A Czech economist Michal Mejstrik is not so optimistic about his own country's future. In his opinion, wages and unit labor costs are increasing, which are causing a decline in price competitiveness and comparative advantage of the country on the European markets. He picks up non-price competitiveness and stresses the international competitive strategy that the government decided (Mejstrik, 2016, pp. 105-109).

7. Influence of Offshoring of Productions on Industrial Relations within a Country

A new possibility of offshoring of productions to neighboring countries has changed power balance between workers and employers, leading to, in many cases, a decline in workers' wages. As many authors (for example, Poplawski, 2016; Aizawa, 2018) argue, I pointed out influences of the Harz reform (2003) which were carried out under the Schröder government led by the Social Democratic Party. The reforms were aimed at increasing the flexibility of labor markets (including an increase in the share of irregular workers, reduction in the period of unemployment benefit, etc.), thereby causing a decrease in unit labor cost and an improvement of the competitiveness. Although disadvantageous contents, representatives of workers were aware that they had to make a compromise, and "the opposition movement to the laws aimed at increasing the flexibility of employment collapsed halfway" (Limbert, 2018), resulting in a decrease in wages.

However, there are researchers who argue that different factors rather than the Harz reforms contributed to an improvement of the international competitiveness of German industry. Dustman, et al (2014), for example, attach importance to changes which started after 1995. They say as follows: "the specific governance structure of the German system of industrial relations allowed for an unprecedented increase in the decentralization of the wage setting process, leading to a decrease in real wages, in particular at the lower end of the wage distribution" (p. 181).

Legal minimum wage was introduced on January 1, 2015 (Herzog-Stein, 2018, p. 2). Till then according to Dustmann, et al (2014), the principle of autonomy of wage negotiations was stipulated by the German Constitution, wages were to be negotiated without government's direct influence. That is why there was no legal minimum wage till then. Minimum wages were practically decided by regular negotiations between trade unions and employers' associations at industry level and regional level. Dustmann, et al (2014) say that this model of labor-management relations worked very well. Negotiations with trade unions and the participation by management council in decision-making processes have played major roles in the promotion of common interests and the improvement in productivity. As exemplified by a small number of working days lost by strikes, etc., labor-management negotiations had no confrontational stance.

Previously, wages were decided by negotiations at an industry level. An industry-wide wage level was decided by agreements by employers' associations, trade unions and management councils. Later, however, decisions of wages were decentralized. The institutional mechanism remained basically unchanged, but the way of its functioning changed. First of all, the share of trade unions which were covered by agreements in which trade unions were involved have sharply decreased. Previously wages were decided at an industry-level, but since the early 1990s employers requested more firm-specific regulations, and under their pressure incomes came to be determined at an individual firm level. Such a decline was caused by a decrease in the number of industry-wide agreements. During the period from 1995 through 2008 the share of workers who were covered by industry-wide agreements decreased from 75 % to 56 % while the share of workers who were covered by firm-level agreements decreased from 10.5 % to 9 %. In 1995–1997 the share of workers who were not covered by any agreement was the highest in the tradable service (22 %). It was 9.8 % in the tradable manufacturing and 12 % in non-

tradable sector. Until 2006-2007 the share of non-members of trade unions has remarkably increased with its share in the tradable services, manufacturing and non-tradable services being 40 %, 27 % and 32 % respectively. In 2010 at firms with at least 10 employees 41 % of the total employees in the sectors Manufacturing, Mining and Services were not covered by any collective wage agreement (Dustmann, et al, 2014, p. 178).

Summing up, a continuous decrease in the union coverage, decentralized determination of wages since mid-1990s, and in addition to these, the Harz reforms caused a relative decline in the wage level. It could be said that these were conducive to the improvement of German economy's competitiveness.

8. Conclusions

First, Germany made a full use of V4 countries' attractiveness, i.e. geographical proximity and cultural similarity as well as their higher technological and educational levels coupled with cheaper labor. It also matched with the interests of V4 countries which aimed at 'return to Europe' and economic restructuring and development after the system change. German firms began their cooperation well before the system change in V4 countries first in the form of OPT. In the second half of the 1990s FDI has become main form of cooperation instead of OPT.

Second, OPT had an influence also on labor-management relations within Germany. Employers' position has become stronger with a possibility to relocate their production to foreign countries, and decentralized decision of wages as well as a decrease in the union coverage caused a relative decline in the wage level. All these were conducive to the improvement of German economy's competitiveness at the sacrifice of workers' interest in Germany.

Third, the economies of V4 countries have supported Germany's economic development, and at the same time, thanks to such forms of cooperation with German firms, V4 countries have become 'a factory of German products on the EU market'. However, they should not content themselves with such a position but should make efforts to create their own brands recognizable globally.

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