Historical Studies of Socialist System

ISSN 2432-8774

社会主義 体制史研究

No. 22 (September 2021)

Emigration from and Immigration to Poland A Typical Case of Central Europe

Yoji Koyama (Professor Emeritus at Niigata University)



社会主義体制史研究会

The Japan Collegium for Historical Studies of Socialist System

『社会主義体制史研究』(Historical Studies of Socialist System)

ISSN 2432-8774

Website: http://www2.econ.tohoku.ac.jp/~aoki/hsss.htm

下記の旧 URL からも自動切換(リダイレクト)

IH URL: http://www.econ.tohoku.ac.jp/~aoki/hsss.htm

(違いは www の次に「2」の有無のみ)

publisher: 社会主義体制史研究会

(The Japan Collegium for Historical Studies of Socialist System)

size: A4

mail to aoki_econ3tohoku.4.5 (3=@ 4=ac 5=jp)

不定期刊(原稿があり次第発行)、文字数制限なし、無料のオンライン・ジャーナルです。

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。

表紙写真 An old crane in Gdańsk port (July 21, 2007) © Yoji Koyama

写真 a







- a: Palace of Culture and Science in Warsaw (July 19, 2007)
- b: Statue of Neptune in Gdańsk (July 21, 2007)
- c: Statue of Chopin in the Łazienki Park in Warsaw (July 20, 2007)
- © Yoji Koyama

Emigration from and Immigration to Poland: A Typical Case of Central Europe

Yoji Koyama¹

Abstract

After the system change, especially after EU accession in 2004 emigration became very active. Now about 2.4 million Poles live in advanced EU member states, mostly in Great Britain, Germany, the Netherlands and Ireland. This represents 6.3 % of Poland's total population. It is higher wages in the West that acts as a pull factor. In the medium and long-term, changes in the sectoral composition of the economy have had a significant impact on Poles' decision on emigration. There has been emigration from rural areas to large cities within the country and to foreign countries, leading to depopulation in rural areas. For a long time emigration exceeded immigration. With outflow of young and working generations and continuing aging population, it will become very difficult to maintain the pension finances. Some areas, for example, agriculture and construction are suffering from a shortage of labor. This has been covered by workers from East, especially Ukraine. Immigration has been active especially after the Ukrainian crisis in 2014. Since then Poland has been an immigration country. However, there is no guarantee that immigration from Ukraine will continue at a high level. Population decline cannot be neglected on account of cultural sustainability and inheritance as well as maintenance of pension finances. Therefore, it will be necessary for Poland to have policy measures to increase employment rate and at the same time promote return migration of Poles who have acquired new skills and gained precious experiences abroad.

Key words: Emigration, Immigration, Depopulation, System Change, Transition to a Market Economy, the EU, Changes in Sectoral Composition of Economy

JEL Classification: J61, O52, P51

Introduction

My first visit to Poland was in March 1980 when I visited Warsaw, Poznan and Wroclaw and had an impression of it being poor. My second visit was August 1984 when I visited Warsaw, Gdansk, Poznan and Wroclaw. At that time here and there I found many graffiti of the symbol of the trade union 'Solidarity', which was suppressed and outlawed by the martial law declared in December 1981. On the whole there was a shortage of commodities. I found no attractive commodities in shops. While walking on streets in Warsaw I found a shop of PEWEX where commodities were sold only for foreign currencies. Gloomy atmosphere prevailed in streets of the capital city.

¹ Professor Emeritus at Niigata University (Japan); E-mail: zac00343@nifty.com

The system change in 1989 was crucially important. In 1991 when I visited Warsaw I found that numerous small shops, selling imported merchandise, apparels, foods, etc., were mushrooming in an excellent location from the Warsaw Main Station to the Palace of Culture and Science which had been usually called a gift by Stalin. During the socialist period I had to go to the Central Bank in order to exchange foreign currency for Zloty whereas after the system change while walking I found many small exchange counters in many parts of the city. In the 2000s the above-mentioned excellent location was so nicely improved that I felt as if I came to a difference location with brilliant buildings, offices, a hypermarket, an entrance to the subway, etc. More than 30 years have passed since the system change. During this period we witnessed dramatic changes in Polish society.

After the system change Polish people became able to travel abroad freely. There were many Polish people who went to Western Europe to purchase goods and sold them in their country. The number of migrant workers increased. In March 2004 Polish people's long-cherished desire to join the European Union (the EU) came true thereby Poles became able to participate directly in the labor markets in developed member states of the EU. It has been reported that many skilled workers flowed out of the country. The employment rate has been substantially decreased. There appeared economic activities which had a shortage of labor forces. For this reason, many Polish companies have accepted more and more cheap labor forces from neighboring countries (specifically from Ukraine, Belarus, etc.).

There have been many excellent papers on migration and refugee problems written by Polish researches², but this paper does not discuss labor migration in general. I would like to explain my standpoint. I do not deny the importance of the EU's principle of free mobility, but I have concerns about excessive rapid migration for two reasons: first, host countries' ability to absorb immigrants (in other words, the rate of immigrants' assimilation) is limited, second, sending countries have had problems of loss of capable people who could shoulder the countries' social and economic development and problems of the inheritance of their culture³. This point is crucial for countries like Poland which has decreasing population and aging society. I am very much interested in a problem: what urges people to emigrate? In discussing issues of emigration and immigration I will pay attention to changes in the sectoral composition of the economy accompanying the transition to a market economy after the system change and the subsequent EU accession.

Usually push and pull factors are mentioned in discussions on labor migration. Push factors include, for example, low wages in the country of origin, unemployment, poor working conditions, discrimination against ethnic minorities, and so on. Pull factors include, for example, high wages, high living standards, good working conditions and a friendly attitude towards foreigners in the destination country (Organisciak-Krzykowska and Kowalewska, 2021). Especially after accession to the EU in 2004, overwhelmingly higher wages in the advanced EU member states seem to have worked as a strong pull factor. At the same time, it is thought that in the medium and long-term, changes in the sectoral composition of the economy accompanying the transition to a market economy after the

² For example, Pachocka (2016b, 2016c), Brunarska and Lesinska (2014), etc.

³ I have a great deal of sympathy for Collier's (2013) argument.

system change and the subsequent EU accession have had a significant impact on Poles' decision on emigration. With Poland as a typical case of Central Europe, I will approach this problem from a perspective of economic history. For this purpose, I will read literature and materials extensively and bring out some conclusions in an inductive way.

This paper is structured as follows: the second section discusses the system change and a road toward capitalism, Then, changes in the sectoral composition of the economy, demographic dynamics and labor market in Poland, actual situations in emigration and immigration, and problems of labor shortages are explained. The 8th section confirms the attainment of the Polish economy and its challenges, and finally some conclusions will be described.

2. Impact of System Change, Transition to Market Economy and EU accession

During the socialist period heavy and resource-consuming industries accounted for a significant proportion of the economy. Agriculture also played a significant role in the economy, but unlike other socialist countries, it resembled the former Yugoslavia (for different reasons), and private farming accounted for a large proportion of agriculture. In a politically critical situation in 1956, Gomulka was revived as the supreme leader. Under the new leadership, there was "relaxation of pressure to force collectivization", and there were many agricultural cooperatives which "were spontaneously dismantled" (Brus, 1984).

Authorities did not abandon the policy of ultimately collectivize private farming. but the proportion of private farmers remained high. Authorities allowed private farming, yet treated it coldly. The consumer goods industry was inadequately developed. As Sachs points out, a comparatively small number of workers worked in the commercial and service sectors. And there were many state-owned enterprises, lacking small and medium-sized enterprises (Sachs, 1993, p. 13).

Table 1 Poland's vs. Hungary's agrarian structure during the period of Socialism										
Poland		Hungary								
Private farms	about 75%	Cooperative farms	about 75%							
State farms	about 20%	State farms	about 20%							
Cooperative farms	about 5%	Private farms	about 5%							
Source: Gazinski (2016	o), p. 73									

The impact on Polish society of the system change in 1989 and transition to a market economy was significant. Round-table talks were held between representatives of the government and "Solidarity" trade union. Based on agreements at the round table, on June 4 in the same year free elections, albeit limited, under a multi-party system were conducted for the first time since 1948, and "Solidarity" has won. On August 24 Tadeusz Mazowiecki, who served as an adviser to "Solidarity" was elected Prime Minister. On September 12 Mazowiecki submitted a list of Cabinet members including Balcerowicz as Minister of Finance and Vice Prime Minister in charge of economic reform to the Sejm (the Lower

House) and got approval. Thus, for the first time in the socialist world, a government with non-Communist members as prime minister and key ministers emerged. When Balcerowicz took office, he formed a team to put together a government economic program (the so-called Balcerowicz Plan) within a short period of time. It was put into practice on January 1, 1990. International financial institutions, including the IMF and the World Bank, have actively supported the Balcerowicz Plan. It was Jeffrey Sachs (then a professor at Columbia University) who acted as a bridge between the Polish government and the IMF as well as the US government. He served as an economic adviser in Bolivia, which was suffering from hyperinflation, and succeed in overcoming it. With this as a proven track record of success he became an advisor to the Polish government. He frequently met with "Solidarity" executives and new government officials, stating that a shock therapy was needed. "Originally, 'Solidarity' was formed in opposition to significant price increases by the communist regime, but Sachs' plan proposed to do the same on a much larger scale" (Klein, 2011, p. 249), so the "Solidarity" leaders were reluctant to agree with Sachs' idea. Nevertheless, they finally agreed because he assured them "If they follow his new advice, Poland can become not a special but 'an ordinary' country, that is, 'an ordinary country in Europe' (Klein, 2011, p. 251). The Paris Club (a group of public debt creditors) in the West also supported Poland with a very generous measure of about 50 % reduction in Poland's foreign debt. This strongly defined the direction of Polish economic development. Like other Central and Eastern European countries, Poland was strongly recommended the Washington Consensus prescribing price liberalization, trade liberalization, privatization of state-owned enterprises, and reduction or abolition of state support through public finance.

Certainly, the restrictive monetary policy has calmed hyperinflation and succeeded in stabilizing the macro economy, but the Polish economy suffered from transformational ⁴ recession. The unemployment rate increased from 6.3% in 1990 to 13.6% in 1992. The number of unemployed people exceeded 2.5 million (Taguchi, 2005, p. 132). Balcerowicz was forced to resign.

Although referred to as shock therapy, the implementation of privatization in Poland was rather slower among the post-socialist countries. 80.7 % of the companies registered as state-owned enterprises as of 1990 had been privatized by the end of 2003. The delay in privatization also had advantages, which guaranteed transparency and close monitoring and did not produce oligarchy as in Russia (Piatkowski, 2018, p. 196). Today, mergers and acquisitions are fairly frequent, and the Warsaw Stock Exchange is booming⁵.

Poland signed a European agreement with the EU in December 1991 and gained status of an associate member state. The EU side immediately eliminated tariffs (except for so-called sensitive items such as steel, chemicals and textiles). In order to enter EU single market, Poland was to reduce tariffs gradually⁶. Poland applied for membership in the EU in April 1993. After long negotiations

 $^{^4}$ Morita (2020) says that it should be called a "transition crisis" rather than an easy one such as a "transitional recession".

⁵ Information provided by Mr. Piotr Jerzemowski .

⁶ Momozumi (1999).

the country joined the EU together with seven other Central and Eastern European countries in May 2004, but before that, these new EU member states, including Poland, received various pre-accession supports from the EU⁷. The main ones were support from the EU 's Common Agricultural Policy (CAP) and the Structural Fund as well as the Cohesion Fund.

3. Changes in the Sectoral Composition of the Economy

Import and Export Structures

Marian Gorynia (2002, p.76) says, "Exports of Poland and other Central European (CEE) countries to the OECD were much below the level determined by economic factors, while the exports to CMEA [Council for Mutual Economic Assistance, i.e. COMECON] countries were much higher". As Table 2 shows, Poland's trading partners were certainly biased towards the COMECON countries, especially the Soviet Union, even at the end of the socialist era.

Table 2 Geographical Structure of Foreign Trade of Poland at the End of Socialist Period (in 1988) (%)								
	Export	Import						
COMECON countries	46.5	47.1						
of which the USSR	24.5	23.3						
Countries of developed market economies	43.5	45.9						
of which the EC	28.3	28.3						
West Germany	13.1	13.3						
Developing countries	9.9	7.0						
Source: SGH (1990), p. 41.								

Table 3 Geographical Strucuture of Foreign Trade of Poland in 2019							
Export	100.0						
Developed countries	86.8						
of which EU	74.0						
of which Euro area	57.5						
Central and Eastern European countries	6.0						
Developing countries	7.2						
Import	100.0						
Developed countries	65.8						
of which EU	55.8						
of which Euro area	46.1						
Central and Eastern European countries	7.8						
Developing countries	26.4						
Source: GUS, Socio-economic situation of the count	try in January 2021, p. 58						

_

⁷ Stawarska (2005) gives a detailed explanation on the EU's Pre-accession support.

After the system change, the geographical composition of trading partners changed drastically. In terms of exports, developed countries, especially the EU, have a large share. Among them, the euro area is important. Central and Eastern Europe does not account for a large proportion. The share of developing countries is also small. In terms of imports, developing countries account for a fairly large share.

Economic cooperation with Western European countries

Western European countries, especially Germany, have approached Central Europe since the system change in Central and Eastern Europe. Germany began with outward processing traffic and then deepened its economic ties with Central European countries through foreign direct investment (FDI). Germany took advantage of Central Europe's attractiveness (such as geographical proximity and cultural similarity, as well as relatively high technical and educational levels despite moderate wages)⁸.

FDI inflow

The motives of Poland as a host country are also obvious. First, in order to ensure investment funds that are missing decisively in the country Poland was willing to accept inward FDI. Second, as it was built into the socialist international division of labor in COMECON system for many years, machinery and equipment of Polish enterprises had been lagging behind significantly from the West technically, and moreover as equipment investment was insufficient in the 1980s to the mid-1990s the equipment was aging. Moreover, the people of this country did not have enough management know-how necessary for the market economy. Therefore, there was an urgent need to introduce foreign advanced technology and management know-how through inward FDI. Third, in order to sell more of their own products in the world market it was necessary for Polish companies to enter the network of multinational enterprises (MNE).

Looking at which country invested the most in Poland, as of 2016 the Netherlands ranked first (19.3 %) in terms of inward FDI stock. This is a bit puzzling, but it seems that a significant number of MNE outside the EU have invested in Poland via the Netherlands 9. In fact, it is estimated that Germany (16.6 %) had the highest proportion. The two countries were followed by Luxembourg (13.3 %), France (10.1 %), Spain (5.8 %), the United Kingdom (5.1 %), Italy (4.2 %) and Austria (4.0 %).

Let us see in which areas FDI has flowed in a lot. Looking at the stock of inward FDI as of 2016, the manufacturing industry accounted for 31.5 % of the total. This was followed by financial and insurance services (19.0 %), wholesale and retail commerce and repair of motor vehicles, etc. (14.7 %),

-

⁸ See Koyama (2021).

⁹ PAIiIZ's 2011 material *Major Investors in Poland* has a list of major investors (companies) by investing country. It lists the country of registration and the country of origin. In most countries, the two are in agreement, but in the Netherlands, some investors have different country of origins. In 2011, there were 174 investors in the country of registration in the Netherlands, of which 42 were not in the country of origin in the Netherlands. There were as many as 42 investors whose country of origin was the United States.

professional, scientific and technical services (8.3 %) and real estate (8.2 %). Looking at the breakdown of EDI especially in the manufacturing industry, "transport equipment" has the largest stock accounting for 20.0%. The second place was "food, beverages and tobacco products" (19.7 %), the third place was "other manufacturing and machinery, equipment repair and installation" accounting for 16.1 %. "Wood, paper products and printing" and "rubber, plastics and other non-metal mineral products" were the same ratio in the fourth place, accounting for 8.1 % (Hunya, 2018, pp 102-104).

Next, let us look at inward FDI by region. Looking at top five provinces (voivodships) in descending order of stock of inward FDI, Mazowieckie province including the capital city of Warsaw (96,592 Zloty) is by far the best, followed by Wielkopolskie province (21,930.9 Zloty), Ślanskie province (17,094.3 Zloty), Dolnośloaskie province (16,875.2 Zloty) and Małopolskie province (12,578.1 Zloty). The smallest level of FDI was recorded in Podlaskie province (438.5 Zloty). There is a statistical data on the number of foreign companies per 10 thousand people. According to which, in 2015 the largest number was recorded by Mazowieckie province including the capital city of Warsaw with 18.8, followed by Zachodniopomorskie (8.8), Dolnoślanskie (7.8), Wielkopolskie (6.6) and Lubuskie (6.5) provinces. These are the western part of Poland near Germany and areas which had flourished heavy industry. The least was in Świetkrzyskie province (1.4) (SGH, 2018, pp. 87-88).

Changes in the Sectoral Composition of the Economy

In this way, the industrial structure has changed drastically. Let us look at the industrial structure by the number and proportion of people working by sector (Table 4). As of the end of 2018 the total number of people who worked in Poland was 15,949,700, of which the public sector had 3,403,700 people, and the private sector had 12,546,000. Looking at the employment structure by sector, the manufacturing industry had the largest employees with 17.6 %. The next was agriculture (14.9 %), but the number of people working in this sector decreased significantly compared to the time of system change. The third place was commercial/automobile repair (14.8 %).

Let us look at changes in employment structure. I wanted to compare absolute numbers and shares at different times, taking a time span as long as possible, but the oldest data which are comparable with the present data are only available for 2004. So, let me describe characteristic features about changes from 2004 to 2018 (see Table 5). First, the number of employees has increased from 2.515 million to 2.812 million. Second, industries where the number of employees has decreased in terms of both absolute numbers and proportions are food products, beverages and tobacco products, textile, apparel, leather and related product, coke and refined petroleum products, chemicals, electrical equipment, machinery and equipment, and furniture. Among others, the decrease of employees in textile, apparel, leather and related products was remarkable with its proportion decreasing from 12.4% to 6.2%. Third, industries where the number of employees and their proportion has increased remarkably are transport equipment, rubber, plastics, and other non-metal mineral products, and basic metals.

Table 4 Employment in National Economy in 2005 and 2018, as of the end of the year (in thousands)								
Sectors	2005	(%)	2018	(%)				
Agriculture, forestry and fishing	2,134.1	16.6	2,382.9	14.9				
Mining and quarrying	186.4	1.4	138.6	0.9				
Manufacturing	2,400.2	18.6	2,811.8	17.6				
Electricity, gas, steam and air conditioning supply	150.5	1.2	124.1	0.8				
Water supply, sewerage, waste management and remediation activities	120.5	0.9	159.2	1.0				
Construction	661.5	5.1	967.0	6.1				
Trade, repair of motor vehicles	2,068.5	16.0	2,360.9	14.8				
Transportation and storage	633.1	4.9	901.0	5.6				
Accommodation and catering	219.4	1.7	295.9	1.9				
Information and communication	183.2	1.9	381.6	2.4				
Financial and insurance activities	296.6	2.3	354.1	2.2				
Real estate activities	174.2	1.4	227.7	1.4				
Professional, scientific and technical activities	408.2	3.2	707.0	4.4				
Administrative and support service activities	327.2	2.5	572.1	3.6				
Public administration and defence; compulsory social security	871.4	6.8	988.2	6.2				
Education	1,043.0	8.1	1,189.0	7.5				
Human health and social work activities	689.0	5.3	908.9	5.7				
Arts, entertainment and recreation	130.9	1.0	157.3	1.0				
Other service activities	192.8	1.5	322.3	2.0				
Total	12,890.7	100.0	15,949.7	100.0				

Source: GUS (2010), Employment in National Economy in 2009, p. 16 and GUS (2019), Employment in National Economy, p. 18.

Table 5 Employment Structure within Manufacturing in Poland				
Sectors	2004	(%)	2018	(%)
Food products, beverages and tobacco products	470,940	18.7	461,607	16.4
Textiles, apparel, leather, related products	312,474	12.4	174,909	6.2
Wood and paper products and printing	282,127	8.0	255,558	9.1
Coke and refined petroleum products	16,012	0.6	14,141	0.5
Chemicals and chemical products	102,629	4.1	85,142	3.0
Pharmaceuticals, medical chem. & botan. Products	n.a.		25,006	0.9
Rubber, plastics, other non-metall. Mineral products	273,963	10.9	373,519	13.5
Basic metals, fabricated met. prod. excluding machinery & equip.	298,430	11.9	433,688	15.4
Computer, electronic, optical products	54,257	2.2	64,730	2.3
Electrical equipment	121,588	4.8	121,128	4.3
Machinery and equipment n.e.c.	188,564	7.5	139,901	5.0
Transport equipment	103,197	4.1	265,060	9.4
Furniture	210,779	8.4	198,515	7.1
Othe not elsewhre classified industries	n.a.		134,105	4.8
Other manufacturing, repair, intallment of machinery & equipment	n.a.		64,814	2.3
Total of Manufacturing	2,515,395	100.0	2,811,822	100.0
Source: GUS (2010), Employment in National Economy, pp. 20-22; GUS	(2019), Employ	ment i	n National	

The rise and fall of industry

Let us look at the changes in the sectoral composition of the economy a little more concretely. Heavy and massive industries developed during the socialist era. These were primarily suitable for exports to COMECON countries, but lacked competitiveness in the capitalist world market. And these became excessive production capacities in the internal market of the EU, forcing them to shrink or close. Below, I will introduce cases of the shipbuilding industry, coal mining industry, steel industry, and textile industry as examples of sunset industries. Before that, I would like to introduce a case of agriculture, which is not a sunset industry but occupies a large weight in the economy.

Let me describe the situation in agriculture, mainly based on Gaziński (2016). After Agriculture the system change co-operative ownership was recognized as a form of private ownership. The socialist sector has disappeared and is now commune-owned. On the Western and Northern territories, which were incorporated into Poland after the second world war, state ownership exceeded 50 % while in old areas peasant farms prevailed. The collapse of state-owned farms in areas where they were dominant has led to increased unemployment. The shock therapy has hit the farmers hard. "The opening of the border has led to a temporary flood of Polish market by imported food. The positive food balance, existing for many years, has become negative" (Gaziński, 2016). Moreover, agriculture in EU member states was subsidized, and comparatively cheap EU foods removed Poland from third-country markets such as Russia. But agriculture-related people in Poland also learned how to do business in the capitalist world. The food industry, for example, has learned the way of packaging, labeling, etc. from the imported products of its Western peers. During the period of some 15 years prior to the Polish EU accession all branches of the agro-food industry including dairy plants, breweries, meat processing or confectionery have been thoroughly modernized. Thanks to rapidly increasing food exports, already in 2003 the agro-food industry recorded a trade surplus for the first time in many years. The Polish agriculture received support from the EU's two pre-accession program: SAPARD (Special Accession Program for Agriculture and Rural Development) and ISPA (Instrument for Structural Policies for Pre-Accession). EU funds were used in the areas of 1) investment in farms, 2) processing and market sales of agricultural and marine products, 3) diversification of economic activity, and 4) development of rural infrastructure. Polish peasants benefited quite a lot from the EU accession thanks to an increase in their agricultural exports in the EU's internal market and subsidies from the EU. Poland is now the greatest beneficiary of EU funding. Initially peasants were critical to the EU accession, but now they are the largest supporter of the EU.

In the long-run, however, the Polish agriculture is facing problems¹⁰. Compared with advanced EU member states, the number of people engaged in agriculture is very large. In areas with fragmented agricultural structures, where a farm size was too small to provide family existence, the phenomenon of so-called peasant-workers was widespread. There is an estimate that hidden unemployment in Polish agriculture, which still occurs, can be as high as some 2 million people. A number of

_

¹⁰ Szymanska, et al (2009) discuss changes in the rural age structures in Poland.

state-owned enterprises, where peasant-workers were able to work, have vanished in the process of privatization. As having another source of income, peasant-workers lost the work in the first instance and were forced to return to their overpopulated households. One of their consequences was the exodus, especially o young people, to work abroad. The direct payments from CAP are regarded by the small-scale farmers as a kind of social rent. This is slowing down the processes of the agricultural land concentration and does not seem to solve the problem in the long-run. Gaziński (2016), reports estimates by economists that in Polish conditions, prosperous farms should have an acreage of at least 30 hectares, and that there are no more than approximately 100,000 of such farms from the total number above 1,400,000.

Sunset Industries

There are shipyards in Gdańsk, Gdynia and Szczecin. With the loss of the Shipbuilding COMECON market and the transition to a market economy, all of these have become loss-making companies. They aimed for reconstruction by foreign capital, but "companies where strong trade unions exist are evaded by foreign capital. In fact, the Gdansk shipyard, the birthplace of 'Solidarity', could not find strategic investors either domestic or foreign" (Taguchi, 2021, p. 294). Today, this shipyard produces small passenger and pleasure boats (in 2018, it accounted for 7.8 % of Gdansk's exports, SGH 2018, p. 75). The Gdynia shipyard which was established in 1922 has experienced extreme economic ups and downs. After the system transformation, especially after its restructuring the shipyard was in good shape, acquired the Gdansk shipyard and was awarded as 'the biggest shipyard in Europe'. As the shipyard was struck by the global financial crisis in 2008 and fell into financial difficulties it received financial support by the government. However, the European Commission judged the support as violation of the EU rule and recommended sales of the company's assets and dismissal of employees. Therefore, the government was obliged to liquidate this shipyard¹¹. The Szczecin shipyard was once mentioned as an excellent example of resurgence in the late 1990s after a management innovation. However, government subsidies were sometimes criticized by the EU and the shipyard was obliged to return them to the national treasury. Currently, passenger ships, pleasure boats and ferries are the main exports of the city of Szczecin (in 2018, it accounted for 35.8 % of the city's exports, SGH 2018, p. 76).

Coal Industry After World War II, Western countries have experienced an energy revolution of switching from coal as a major energy source to oil. In Japan, for example, there was an energy revolution around 1960, forcing many coal mines to close and caused a large-scale labor dispute. However, there was no energy revolution in socialist countries. The coal industry was an important industry in Poland. "After World War II, coal mines helped haul Poland's economy out of the wreckage. Until the 1980s, the country was one of the world's five largest producers. At that time, coal exports supplied up to 80 per cent of sorely needed foreign currency. At its peak the industry employed almost half a million Poles and amassed privileges in the form holiday cash bonuses,

_

¹¹ Information provided by Mr. Piotr Jerzemowski. His e-mail in August 2021.

various family allowances, shorter working hours and earlier retirement" (Wilczek, 2020, p.7). Inheriting its glorious tradition, status of this industry's worker has been high and their treatment has been good ¹². After the system change, however, Poland was forced to downsize its coal industry. The country's coal industry trade unions have been highly organized and militant. The coal industry is still alive, albeit partially shrunk. The EU is currently working on a green deal, aiming for carbon neutrality by 2050. So, the Polish government and the coal mine unions agreed to keep coal mines survive until 2049.

Steel Industry During the socialist period, the steel industry was the most popular industry. In the suburbs of Krakow an industrial city of the steel industry called Nowa Huta was built, where the Lenin steelworks were built using technology imported from the Soviet Union, but it is not currently in production¹³. Steelworks built in Katowice, Gierek's turf, turned out to be nothing more than a money pit¹⁴. Prior to the system change in 1989, there were 26 steel plants in the country's steel industry, of which 18 plants began their operation before the World War I and were considerably decrepit. As a result, it was inefficient and lacked the ability to compete with the steel industry in other countries. Restructuring efforts have been made. In 1990 145,000 people were employed in the industry (Rokicki and Baran, 2015). The impact of the 2008 global financial crisis on the economy was significant, but the Polish economy as a whole managed to maintain positive growth in 2009. However, its negative impact on the steel industry was rather great. In the foreign trade with the EU countries steel products belong to a sensitive area. Export of steel products to old EU member states has not been easy. It seems that Polish steel products could not compete with the products from the old EU member states in terms of quality. Imports of steel products have been increasing. The share of imports in total domestic consumption of iron and steel production increased from 52% in 2006 to 73% in 2019. The number of people employed in this industry decreased from 30,692 in 2004 to 23,500 in 2019 (Gaidzik, 2021).

Textile industry Since the early 19th century textile industry had been developing in Poland, especially in Łodz, which grew to the third largest city next to Warsaw and Krakow. After the system change, however, as the market economy was developing and the Polish economy was incorporated into the world economy, companies in Łodz were obliged to compete with other companies in the developed countries and other Asian countries, but they could not compete with their products in terms of quality and price and were forced to go out of business. The population of Lodz decreased by 17.5% from 848 thousand in 1990 to 700 thousand in 2015 (SGH, 2018, p. 198). Łodz is trying to make itself into a cultural, academic and medical city¹⁵.

¹² 41,000 miners employed by the PGC (the Polish Mining Group) receive 7,600 Zloty (€ 1,670) a month, well above the national average of about 5,000 Zloty (Wilczek, 2000, p. 5).

¹³ There people can see buildings in the architectural style of Socialist Realism.

¹⁴ In 1983 Lenin steelworks, the largest steelworks in Poland, had a total sale of 91.6 billion zloty and received a subsidy of 0.24 billion zloty resulting in financial accumulation of 4.3 billion zloty while Katowice steelworks had a total sale 89.8 billion zloty and received a subsidy of 5.8 billion zloty resulting in financial accumulation of minus 0.4 billion zloty (Yoshino, 1987, p. 246).

¹⁵ https://www.polandforvisitors.com/lodz

Growth-enhancing industry

This industry accounts for 11.8 % of Poland's GDP, is the second largest **Automotive industry** industry next to food in the manufacturing industry, and exports € 1.57 billion, accounting for 16 % of total exports. The history of the Polish automobile industry dates back to the 1890s. During the difficult times after the Great Depression, the government sought to collaborate with foreign companies, reached an agreement with FIAT on production based on licenses. After the Second World War, in 1965 state-owned enterprises FSO agreed with Fiat on the license contract, producing Polski Fiat. After the system change, not only Fiat and Daewoo from South Korea, but also Volkswagen (VW) from Germany, GM Europe, VOLVO, Opel, etc. entered the Polish market. Total capacity car production in Poland expanded to more than 600 thousand in 1990. However, as the South Korean company Daewoo, which established a joint venture company with FSO in 1995 and produced more than 200 thousand cars in 1999, collapsed the joint venture company also went bankrupt. In addition, due to a slump in Italy, Fiat's model produced in Poland was transferred to Italy. Toyota Japan finally entered Poland in the 2000s and began producing transmissions in Wałbrzych. This is for assembly plants in the Czech Republic and other countries. Although automobile production by foreign-affiliated companies continues, Poland has become a base for car parts production for production networks in Central Europe¹⁶. In the future, the automobile industry will change drastically worldwide. With the tightening of carbon dioxide emission regulations, the shift from gasoline and diesel engine vehicles as well as hybrid vehicles to electric vehicles will progress rapidly. As a result, the European automobile industry is also under pressure to reorganize, and the Polish automobile industry and electromechanical industry will also undergo major changes¹⁷. Information and Telecommunications Industry Looking at the employment structure of the national economy (Table 4), the percentage of people engaged in this industry increased from 1.9 % in 2005 to 2.4 % in 2018. Looking at the international comparison of the proportion

_

¹⁶ For Polish automobile industry, Hosoya (2011) and Okazaki (2016a, 2016b) are informative.

¹⁷ According to Iemoto (2021), East Asian companies in Japan, China and South Korea are going ahead of companies in other countries in the manufacture of batteries for automobiles. In Europe, as of December 2020, there are only two companies, Northbolt, which is based in Sweden, and Tesla, which is a US company located in the suburbs of Berlin, Germany, and European companies are lagging behind. In order to overcome their inferior positions, "European battery alliance" was established on October 11, 2017 on the initiative of the European Commission. The alliance includes EU agencies, as well as German, French, Italian, Finnish, Spanish, Swedish, Norwegian, Belgian, Austrian, Polish, and US and UK raw material battery material suppliers, battery cell manufacturers, and government agencies. Also investors and research institutes are participating. They are cooperating for the development and manufacture of lithium-ion batteries, which combine the four essential elements of "lightweight, maintenance-free, low cost, and safety," as well as next-generation batteries. With the inauguration of the new chairman, von der Leyen (December 2019), the European Commission announced a large-scale policy system aiming at the reconstruction and revitalization of Europe. The large-scale policy system is based on the two wheels, i.e. the "European Green Deal" aiming to transform the present economy into a "circular economy" that realizes sustainable growth as well as "digital transformation". As a part of the policy systems, the European Commission announced its full support to a significant increase in production and sales of EV cars and batteries for such cars. In parallel with this, there is a "pan-European research and development and innovation project" (2020 - 2031), which promotes the construction of a comprehensive supply chain covering six areas: starting materials, materials, cells and manufacturing equipment, packs and systems, applied products, and recycling/reuse. For this project the European Commission has approved multi-year state aids by the participating countries as exceptional matters.

of ICT professionals in total employment in 2019, the EU average is slightly less than 4% while in the case of Poland, the rate is slightly more than 3% ranking the 4th from the bottom in the EU member states. The highest was Sweden at about 7 %, followed by Finland at slightly less than 7 %. It is likely that employment in this area will increase further in the future.

Changes in Trade Structure

These changes in the sectoral composition of the economy are also reflected in the changes in the trade structure (Table 6). Machinery and transportation equipment account for a large proportion of both exports and imports, and intra-industry trade accounts for a large proportion in this area. Intra-industry trade can be divided into horizontal intra-industry trade (between developed countries) and vertical intra-industry trade. In the case of Poland, vertical intra-industry trade with developed EU member countries, especially Germany, accounts for a large proportion.

Table 6 Foreign trade indices and structure by SITC sections in 20						
Exports	100.0					
Food and live animals	10.7					
Beverages and tobacco	2.0					
Crude materials inedible, except fuels	2.2					
Mineral fuels, lubricants and related materials	2.1					
Animal and vegetable oils, fats and waxes	0.1					
Chemicals and related products	9.1					
Manufactures goods classified chiefly by materials	18.2					
Machinery and transport equipment	38.1					
Miscellaneous manufactured articles	17.3					
Imports	100.0					
	100.0					
Food and live animals	7.1					
Food and live animals Beverages and tobacco						
	7.1					
Beverages and tobacco	7.1 0.8					
Beverages and tobacco Crude materials inedible, except fuels	7.1 0.8 2.9					
Beverages and tobacco Crude materials inedible, except fuels Mineral fuels, lubricants and related materials	7.1 0.8 2.9 7.6					
Beverages and tobacco Crude materials inedible, except fuels Mineral fuels, lubricants and related materials Animal and vegetable oils, fats and waxes	7.1 0.8 2.9 7.6 0.4					
Beverages and tobacco Crude materials inedible, except fuels Mineral fuels, lubricants and related materials Animal and vegetable oils, fats and waxes Chemicals and related products	7.1 0.8 2.9 7.6 0.4 13.5					
Beverages and tobacco Crude materials inedible, except fuels Mineral fuels, lubricants and related materials Animal and vegetable oils, fats and waxes Chemicals and related products Manufactures goods classified chiefly by materials	7.1 0.8 2.9 7.6 0.4 13.5 16.5					

Poland Competitiveness Report 2008 discusses the intra-industry trade between developed countries (EU-15) and Poland in detail. According to the report, 28.27 % of the total trade between Poland and EU-15 was intra-industry trade in 2000 while in 2006 this ratio increased to 36 %. In section 16 (machinery, electrical equipment, parts) intra-industry trade increased. It is section 17 (automobiles, aircraft, ships, transportation equipment) that has the most active

intra-industry trade. In this sector, the proportion of horizontal intra-industry trade declined relatively significantly (by 7.2 percentage points) during this period. High-quality vertical trade also increased (by 5.4 pp), but less than the decline in horizontal intra-industry trade. Instead, low-quality vertical trade increased significantly (by 14.1pp from 18.1 % to 32.1 %).

The *Report 2008* says, "this means that Poland is still primarily a supplier of low-quality automotive components, spare parts and vehicles. In fact, the country has strengthened its position in this type of trend. This trend is not very promising in the future because such suppliers are relatively weak on international market, especially in industrialized countries" (p.98). At this point, as Norkus (2012) points out, Poland appears to remain a semi-core country subordinated to the core of world capitalism such as Germany¹⁸.

4. Demographic Dynamics and Domestic Labor Market in Poland

According to the data of the Polish Statistical Office (GUS), the population is 38,382,576 as of the end of 2019. Approximately 2.4 million Poles live in advanced EU member states, mostly in Great Britain, Germany, the Netherlands and Ireland (Piatkowski, p. 154). This represents 6.3 % of Poland's total population. After the Second World War the total fertility rate was highest in 1955 at 3.61. After that it decreased to 2.09 in 1967. It recovered to 2.42 in 1983. Since then, the total fertility rate has continued to decline, reaching 1.22 in 2003. With this as a bottom, then it recovered somewhat fluctuating around 1.40. In 2019 it was 1.42. Some scholars call it "a birth depression" (Karbowski, 2017) ¹⁹.

In addition, many of the younger age groups migrated to foreign countries. As a result, the population of the younger age groups decreased. The share of younger age group aged 0-14 in total population decreased from 24.8% in 1990 to 15.3% in 2019. The working-age population aged 15-64 accounting for 71.3% in 2010 decreased to 66.6% in 2019. The share of older people (aged over 65)

¹⁸ The core of world capitalism (the "top league") includes most capital-affluent and advanced postmodern countries on the frontier of radical or incremental technological innovation, where the highest added value production is concentrated. The semi core includes modern countries with capabilities to manufacture products developed in the core, but which are still unable to autonomously develop and organize (as intellectual property owners and marketeers) commodity chains to produce high-tech or brandied products or provide related services. The semi-periphery includes countries with the skills and economic environments sufficient to produce semi-manufactures and simple manufacturing products of low added value. Low labour costs are a key factor for international competitiveness of such products. The periphery countries are able to compete on the world markets as raw materials producers. If they are not endowed by nature, they survive by exporting labour force with emigrant remittances being an essential element for their international payments balance, and by foreign aid (Norkus, 2012, p. 112). Similarly to Bohle and Greskovits (2012), Norkus identified four types of countries depending on whether the exports are dominated by (1) heavy-basic, (2) light-basic, (3) heavy-complex, (4) light-complex production (p. 112). Countries specializing in manufacturing type (1) and (2) products are classified as semi peripheric countries. Such countries include Bulgaria, which specializes in exports of type (1) products as well as Romania, Latvia and Lithuania (pp. 112-113). Capitalism which has appeared in Central and Eastern Europe after the system change is called Patchwork capitalism by Rapacki (ed.) (2019).

¹⁹ The right-wing populist party PiS, which won a victory in elections in October 2015 and gained power, implemented "family 500+" program" in 2016. Its main point is payment of children's allowance. However, many researchers view this policy negatively. For example, Czerniak and Rapacki (2018, p. 108; 2019, p. 160) evaluate that the impact of the "Family 500+" program on labor supply will be negative in the medium term.

increased from 10.2% in 1990 to 18.1% in 2019 (GUS, 2020a, p.35). The phenomenon of aging society with decreasing number of children is remarkable.

The Polish Statistical Office breaks down the population into urban and rural areas. It sounds strange at first glance but the phenomenon of urban-to-rural migration and urban shrinkage has been occurring. The increase in the number of rural dwellers was remarkable in Pomorskie province (125 %), Wielkopolskie province (112.3 %) and Małopolskie province (111.7 %). In this case, the increase in population of rural areas is, in fact, an expansion of the suburbs of the city. It seems that the Polish Statistical Office puts an emphasis in the administrative divisions of the urban areas and rural areas. This may be a problem of definition.

In 1995-2017 the population declined in 6 provinces out of the 16 provinces. Eastern Poland is a significantly depopulated area (Wojewodzka-Wiewiorska, 2019). The main industries in such regions are steel and coal industries. Taking the Katowice Conurbation as an example, the population increased until 1991. Since then, however, the population has declined. Long-term forecasts suggest that the population will decline further.



Map of Poland

Source: Provided by Professor Marian Turek.

There are two trends in population outflow. One is outflows to domestic big cities like Warsaw, Krakow and Wroclaw and the other is outflows to foreign countries. Since 2004 many people have permanently emigrated to foreign countries, according to the official census, many people allegedly still live in their previous addresses, but Spórna, et al. (2015) say that 90 % of them will not return to Poland.

From what part of Poland so many people have emigrated? In 2000 the number of people who emigrated permanently from urban areas was about 22 thousand while the number of those from rural areas was slightly over 5,000. In 2006, when emigration was largest, about 34 thousand people emigrated from urban areas while about 13 thousand people emigrated from rural areas. The number of emigrants decreased considerably in 2019 when slightly less than 8,000 people emigrated from urban areas while about 3,000 people emigrated from rural areas. In this way, the number of emigrants from urban areas was always two to four times more than that of rural areas (GUS, 2020a, p. 85). Looking at the permanent emigration from the entire Poland in 2019, emigration from urban areas accounts for 70.1 % and emigration from rural areas accounts for 29.9%. Looking at this figure by province, Opole (60.1%), Małopolskie (47.4%), Świetokrzyskie (45.3%) and Podkarpackie (39.4%) have the highest number of emigrations from rural areas (GUS, 2020a, p. 86).

There are big differences among regions. According to Wojewodzka-Wiewiorska (2019) who analyzed changes in population during the period between 1995 and 2017, 38.6 % of rural commune experienced depopulation (loss of over 5 % of the population), of which 10.7 % were rural villages that lost more than 15 % of their population. The depopulation process was found primarily in the communes of Podlaskie, Opolskie, Lubelskie, Świetokrzyskie and Łodzkie provinces. Particularly worrying is the high percentage of communes where population reduction exceeded 15 %. Such communes existed in Podlaskie, Opolskie and Lubelskie provinces, where such communes accounted for 41 %, 31 % and 28 % respectively (p. 128).

People in these regions have made efforts to counteract the process of depopulation. The most important issue was and is the lack of jobs on the spot. In order to develop tourism authorities in a commune in Podlaskie province opened a holiday resort, but they did not succeed. Generally speaking, local authorities do not have tools and money to do something, but authorities at higher level than the commune – the level of the province - can afford to do something. A good example of counteracting depopulation can be found especially in the Opolskie province²⁰. In order to effectively counteract unfavorable demographic trends, in 2014 the province launched a Special Demographic Zone (SDZ) program²¹ covering the entire administrative area. The aims of the SDZ program are to increase

_

²⁰ Professor Agnieszka Wojewodzka-Wiewiorska responded kindly to my inquiry on concrete cases of efforts for counteracting depopulation, explaining the problems of depopulation in Poland and sending me two papers (Legutko-Kobus, 2017 and Jastrzebska, 2018). Her e-mail in September 2021.

According to Legukto-Kobus (2017) and Jastrzebska (2018), the SDZ program is composed of four packages:

1) Works means a safe family, 2) Education and the labor market, 3) Nursery and pre-school care, and 4) Golden Autumn. Especially the package 'the Golden Autumn' is intended for senior (people aged 50+) promotes development of their favorable living conditions and help making use of their potential for the regional

inhabitants' living standard, stimulate the labor market, attract investors and create jobs. In cooperation with local governments in communes, authorities at the province level try to involve enterprises and universities in implementation of this program. It takes some time to judge whether the SDZ program brings effects.

Table 7 Unemployment Rates in Central Europe																		
	2000	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Czech Republic	8.8	8.3	7.9	7.1	5.3	4.4	6.7	7.3	6.7	7.0	7.0	6.1	5.1	4.8	2.9	2.2	2.0	2.6
Hungary	6.4	6.1	7.2	7.5	7.4	7.8	10.0	11.2	11.0	11.0	10.2	7.7	6.8	5.1	4.2	3.7	3.4	4.3
Poland	16.1	19.0	17.8	13.8	9.6	7.1	8.2	9.7	9.7	10.1	10.3	9.0	7.5	6.2	4.9	3.9	3.3	3.2
Slovakia	18.6	18.1	16.2	13.4	11.1	9.5	12.8	14.4	13.6	14.0	14.2	13.2	11.5	9.7	8.1	6.5	5.8	6.7
Source: For the	period	2000-2	2008 w	iiw. C	urrent	Analys	ses and	l Forec	asts, v	various	issues	: For	the ve	ars afte	er 2009	onwa	rd Eur	ostat.

Indeed, unemployment rate has substantially decreased from 19.0% in 2004 to 7.1% in 2008²²(Table 7), but a specialist on migration problem Kaczmrczyk (2021), criticizes the so-called 'unemployment export' hypothesis, i.e. emigration of unemployed people to advanced EU member states has brought lower unemployment in Poland. According to him, the fall in unemployment as observed since 2004 was also strongly correlated with a rise in employment: employment rates increased from 44% to 50.1% between the second quarter of 2004 and the second quarter of 2008. During the period the number of unemployed people decreased by 2 million from 3.2 million to 1.2 million, but the scale of migration from Poland was not so large enough to substantially impact on the unemployment level. It seems that rather growth of the Polish economy as a whole, in his view, has expanded employment, causing a shortage of labor force. Advance of multinational enterprises in this country has brought an increase in demand for labor, causing a decline in unemployment rate. However, he says that quantitative and qualitative research at the local level tells a different story. According to him, growth was uneven across Poland. In some locations with less economic growth and a high level of unemployment, or employment in the informal economy, 'unemployment export' seemed very visible to the casual observer.

Due to the economic growth after the EU accession, a shortage of labor appeared in several sectors (mainly in construction and manufacturing). Kaczmarczyk (2021) says, "Considering the skill structure and work experience of post-accession migrants, it is hardly possible that these job vacancies could be filled by the migrants choosing EU labor markets". He further says, "The point is that post-accession migration comprised large numbers of persons with tertiary education and, additionally, persons who were leaving abroad directly after completing their formal education and without experience on the Polish labor market. They were not interested in taking up low-skilled jobs in their location of origin, even if they were ready to take this kind of job while staying abroad" (Kaczmarczyk, 2021, p. 100).

development. For this purpose three specific objectives have been identified: Improvement of the quality and accessibility of services, promotion of active aging, and development of digital literacy of people aged 50+.

22 As for developments of the Polish labor market in several years of EU accession, detailed explanations are given by Iemoto (2004, 2008, 2009, 2010).

As we have seen there are many highly educated young people²³, Kaczmarczyk does not view emigration of all highly educated people as 'brain drain', but he rather calls into question low absorption ability of the domestic labor market. He tells us the commonly acknowledged view that due to the general situation on the Polish labor market (an oversupply of university-educated labor), post-accession migration is to be assessed more in terms of 'brain overflow' than 'brain drain' (Kaczmarczyk, 2021, p. 100).

5. The Actual Situation of Emigration

According to Iglicka (2001, p. 19), a demography expert, there were actually emigrations to the West (mainly West Germany) even during the socialist period. Between 1950 and 1965 the number of emigration from Poland to West Germany was 20,300 on average in a year. During the period between 1966 and 1980 the number is 18,300 on average, and between 1981 and 1986 it increased to 27,800 on average. Between 1987 and 1990 the number rose considerably to 143,200 on average. Such an increase supposedly reflects critical political and economic situation in the 1980s. There was a lot of brain drain in the early 1980s. During the period of Solidarity and martial law, the proportion of scholars among emigrants was high. As many as 15% of Polish scholars, mainly computer scientists, physicists and biologists emigrated either permanently or left the country on long-term contracts mainly for the USA. After the system change, from 1991 to 1993 the annual average of emigration was 21,000, returning to the previous level. Unlike in the 1980s, political reasons did not play an important role in changes in population mobility. Challenges and opportunities were given to the relatively young cohorts of the urban professionals, while social and economic transformation created unemployment, difficulty in adapting to market requirements and lack of security among middle-aged and poorly educated people in the working class and rural areas. It seems that many people were forced to relocate to Western Europe, especially Germany, which influenced changes in migration patterns. In the socialist period, there were more women than men in emigration. The reason is that at first men immigrated to West Germany illegally. They were given the status of Aussiedler²⁴ in West Germany, and after getting a job, women moved to West Germany legally for family reunion. However, thanks to the system change, it became possible to move legally, so that men became dominant among emigrants. Another interesting feature of the transition period (referring to the 1990s after the system change) is that the average age of emigrants increased and middle-aged persons became dominant among them. More specifically, the age groups of the 35-39 and 40-44

²³ Thanks to EU accession, opportunities for young people to study abroad have increased. In 2019 total number of Polish students who went to OECD countries for study was 25,087. The largest number of Polish students studying abroad in 2019 was recorded in the UK (7,520), followed by Germany (5,379), the Netherlands (1,476), Denmark (1,431), USA (1,404). I think that also issues on young people's study abroad should be considered regardless of changes in sectoral composition of the economy(of course, the selection of their future occupations will reflect changes in the sectoral composition of the economy (ZUS, 2020).

²⁴ 'Aussiedler' refers to German ancestry and their families who lived in the former Soviet Union and Eastern Europe and immigrated to West Germany. This category does not apply to immigrants from East Germany. Information provided by Professor Aoki.

shows clear prevalence over age groups 25-29 and 30-34 (for both males and females) (Iglicka, 2001). This seems to reflect the fact that the sectoral composition of the economy has changed drastically due to the system change and the transition to a market economy, and therefore unemployed people have had to move abroad to earn a living.

Figure 2 Emigrants for Permanent Residence from Poland and Immigrants for Permanent Residence into Poland 2000-2019

Source: Prepared by the author based on data from GUS (2020), International Migration of Population in 2000-2019, p. 214 and p. 222.

Note: This data figure is not complete because strangely enough GUS (2020) lacks data on 2015. Therefore, for emigration and immigration in 2015 I was obliged to substitute the average of data of 2014 and 2015 following a Polish specialist.

As Iglicka (2001) points out, unlike in the 1980s, political reasons have not played a major role in emigration since the 1990s. The economic gap between Central and Eastern European countries and developed EU member states is still large. Let us look at the median of gross hourly wages, although it is a nominal value which does not reflect differences in prices across countries. It was \in 4.30 in Poland, \in 15.70 in Germany and \in 14.80 in the UK (European Parliament, 2020). The economic gap between Poland and advanced EU member states narrowed remarkably in the past 30 years, but still there is about 3.5 times gap between Poland and advanced EU member states (if compared with Denmark, where the median of gross hourly wages is \in 25.5, the gap is 5.9 times). It is certain that this factor acts to pull workers from Poland.

We notice that characteristic features of developments of migration varied significantly²⁵ depending on periods with the first period being 2000-2008, the second period 2009-2013, and the third period from 2014 onward (see Figure 2).

The first period: From the beginning emigration from Poland was at a high level (about 25 thousand). Then emigration slightly decreased, but with EU accession in 2004 it increased sharply and peaked in 2006 at about 47 thousand and remained at a high level although decreasing somewhat. I would like to add that the EU accession on May 2004 should have enabled Polish workers to participate directly in labor markets of other (especially old) EU member states. However, prior to the accession of the new EU member states from Central and Eastern Europe (NES), for fear of flood of workers from NES the old member states decided to adopt transient measures aimed to limit the inflow of workers from NES for 7 years. Germany, France and the Netherlands, in particular, introduced transient measures to limit inflows of workers from NES. In contrast, however, the UK, Ireland and Sweden did not introduce such measures because they felt a shortage of labor force at that time. Consequently, workers from NES including Poland headed mainly to the UK and Ireland. Immigration was at a low level for a while, but it tended upward since 2004.

The second period: Damaged by the global financial crisis arising from the Lehman shock in September 2008 the European economy fell into depression (Poland managed to maintain positive economic growth²⁶). Although the European economy showed an upward turn for a while in 2010, it stagnated again due to the Greek crisis which surfaced in April 2010. Reflecting this, emigration decreased sharply. With 2009 as a peak, also immigration decreased somewhat. Emigration to Germany, France, the Netherlands, etc. was restrained to a certain extent by the above-mentioned transient measures, but since 2011 when the measures were lifted emigration to these countries became active again until 2013.

The third period: Immigration increased slowly, and it exceeded emigration in 2016. It continues increasing at faster pace than emigration. However, these points do not match with what table 9 shows. Moreover, Figure 2 does not reflect the fact that after the Ukrainian crisis in 2014 Ukrainian people flowed out of the country on a massive scale (This point is to be discussed later). As a result of the referendum of June 13, 2016, it was decided for the UK to withdraw from the EU (Brexit). Afterward, negotiations between the UK government and the European Commission were made on the relationship between both sides after the Brexit. Although it took time, the UK withdrew officially from the EU on January 1, 2021. Due to Brexit, citizens from other EU member states including

_

²⁵ Salamonska (2021) discusses multiple migrants from Poland.

One of reasons for why Poland was able to maintain positive economic growth is that a depreciation of domestic currency enhanced competitiveness and absorbed the shock to a certain extent. This point is shared with some other NMS which have not adopted the euro yet. What makes Poland different from the other NMS? the following points can be mentioned: (i) the country's size; (ii) its relatively low levels of exports and imports; (iii) a production structure more diversified than in other NMS; (iv) Poland's domestic financial system appears to be in good shape with debt levels (of households, the government and corporate sectors) significantly lower than elsewhere; and (v) The country has had a relatively high share of people engaged in agriculture (19% of all employed people in 2004) and enjoyed higher prices of agricultural products after EU accession as well as support from the Common Agricultural Policy (CAP) of the EU. Koyama (2015), pp. 80-81.

Poland have become unable to enjoy their rights as EU citizens any more in the UK. Polish immigrants who already live in the UK are able to continue living there, but inflow of new immigrants to the UK will decrease greatly²⁷.

Table 8 Net Migration from Poland to								
Main EU Member States in 2000-2015								
Denmark	21,472							
Ireland	86,857							
Sweden	43,419							
UK	644,354							
Italy	75,481							
Spain	55,253							
Austria	23,461							
Belgium	61,806							
France	-32,145							
Germany	1,259,480							
Netherlands	82,246							
Others	7,451							
EU-15	2,329,135							
Source: Mara and Landesmann (2016), p. 36								

Brain Drain

Immediately after EU accession, shortages of labor force occurred in several sectors including medical care, and shortages, especially of anesthesiologists, surgeons and nurses became a social problem²⁸. As early as that time brain drain occurred²⁹. As early as this point of time brain drain occurred. According to a material (European Commission, 2014) which revealed the number of medical doctors that have moved from NES to advanced EU member states (the time of the survey differs from 2005 to 2007 depending on host countries), the number of medical doctors who left their own countries was greatest in Poland at 4,267. In the case of Romania, whose population is about half of Poland, it was 2,506. In the case of Hungary, whose population is about a quarter of Poland, it was 1,503. If we look at the number of medical doctors who left their own countries per 100 thousand inhabitants, the outflow of medical doctors from Poland, Romania and Hungary was 11.1, 13.2 and 15 respectively. We cannot say that compared with the case of Romania and Hungary the outflow of medical doctors from Poland was especially numerous. However, in the case of Slovenia, whose population is about one twentieth,

-

²⁷ Agnieszka Radziwinowiczowna, et al. (2020) discuss the impact of Brexit on Polish migrants who have brought their old parent over to the UK where more generous elderly care services are provided than in Poland. Other studies discussing the impact of Brexit on Polish immigrants include Fannin, B., et al. (2021) and Jancewicz, B. et al. (2020).

²⁸ Kaczmarczyk (2021) says that the outflow is most significant in specialisations receiving the lowest average incomes within Poland's medical labor market (anesthesiologists, radiologists) and I those for which there is high demand within foreign labor market (e.g. plastic surgeons). However, he considers that the scale of the outflow is not so large as posing a threat to Poland's medical system in short term, but that there are some serious sectoral imbalances are possible and already visible (p. 101).

²⁹ Beaumont,,et al (2017) discuss women's brain drain.

the number was 50, meaning it was 2.4 per 100 thousand inhabitants. We have to say that compared with Slovenia the outflow of medical doctors was by far numerous.

In the case of people who work in the medical service like medical doctors, nurses, etc., they are engaged in essential works which are concerned to health of all working people, their families and other people, changes in sectoral composition of the economy seem to have nothing to do with the medical service. Rather it is presumed that medical doctors were treated coldly by the ruling elites prior to 1990 due to ideological reasons including egalitarian ideas which prevailed in the socialist period and that the disadvantageous salary system and working conditions at that time were not sufficiently improved even in the period of market economy, having a great influence on their outflow³⁰. They are relatively free to change places of work. In doing so, salary levels, working conditions, training opportunities and occupational stability seem to be important³¹. According to Orgnisciak-Krzykowska and Kowalewska (2021), the average salary of a nurse is 95% of the average salary in Poland (p. 58).

As mentioned above, it is not necessary to view all emigration of highly educated people as drain brain. I would like to know the type of jobs at the destination, but it is difficult to find such a data so far. Materials showing the status of immigrants in the UK labor market (Migration Observatory, 2021) show approximate numbers by regions of origins and four categories: highly-skilled, medium-high-skilled, medium-low-skilled and low-skilled. According to this report, the highest percentage of highly-skilled occupations is held by immigrants from India (45%) and from developed EU countries (42%), In contrast, in the case of immigrants from NES (EU-8), only 13% of the hold high-skilled occupations. 23% of them are engaged in medium-high skilled occupations, 38% in medium-low skilled 26% low-skilled occupations. occupations, and According to Ewa Balcerowicz (2006), Polish migrants are relatively well-educated but in their destination countries they are generally engaged in types of job lower than their qualifications. This can be called 'brain waste'.

There is data by age groups. The most common age group is 35-39 (21.0 %), followed by 30-34 (14.9%), 40-44 (13.6%), 0-14 (12.8 %) and 25-29 (7.6%), 45-49 years old (7.4%). It is presumed that the reason why the age group of 0-14 years is quite large is that they moved with their

_

³⁰ The reason why I guess so is that I learned the fact that in the first half of the 1980s price increase compensation allowances were paid in order to compensate acute increase in prices and that in 1983 basic wages accounted for less than half of total wages. Yoshino (1987, p. 161) reports that "cases in which the wages of hospital cleaners with many dependents are higher than the wages of medical doctors appeared everywhere". Perhaps in Slovenia, the influence of such egalitarian ideas might be relatively small.

³¹ The results of a questionnaire survey, which was targeted at 1,214 medical students (5th year and 6th year students) at Universities in Poland and conducted by Krajewski-Siuda, Krzysztof (2012) et al. from October through November 2008, are interesting. According to the report, 62.1% of the respondents planned to seek employment abroad after their graduation. Popular destinations were the UK, Germany and Norway. Regarding major pull factors, 78% of the respondents mentioned higher salaries, 75% better working conditions, 66% opportunities to get new experiences, and 58% higher occupational stability (no risk of unemployment, no need to change their employer often). Regarding main push factors, almost half of the respondents mentioned "no occupational prospects in Poland". 44% of the respondents who stated that they had probability of emigration of at least 5% thought long-term or permanent emigration. Other respondents expressed their intentions to return home after working abroad for a few years or even shorter.

parents' foreign migration (GUS, 2020a, p. 92). Poland's accession to the EU has increased opportunities for young people to study abroad. In 2019, the number of Polish students studying abroad in OECD countries was 25,087. The destination country with the largest number of Polish students was the UK (7,520), followed by Germany (5,379), the Netherlands (1,476), Denmark (1,431), and the United States (1,404) (GUS, 2020a, p. 102). It seems that young people studying abroad should also be considered independently of changes in the sectoral composition of the economy (of course, such changes will be reflected in their future career choices).

6. Actual Situation of Immigration

Immigrants from East

There are statistical data showing the number of foreigners with a valid residence permit in Poland³². According to it, 422,838 foreigners in total have a valid residence permit. Of which the largest number is possessed by Ukrainians (214,719), followed by Belarusians (25,567 people), Germans (21,336, Russians (12,531), Vietnamese (12,077), Indians (9,979), Italians (8,535), and Chinese (8,485) (GUS, 2020a, p.132). Massive emigration from Poland, coupled with booming domestic economy and aging population, has gradually caused labor shortages in some areas (especially agriculture and construction). The Polish government does not consider that workforce from anywhere is acceptable even if it is cheap. In 2009 the Inter-Ministry Committee on Migration, the Prime Minister's advisory body, began preparing comprehensive migration policy guidelines, which were approved in 2012. The document paid special attention to Polish descendants and individuals who were considered to be close to Poland in terms of culture and language. Specifically, the eastern neighbors of Poland (Ukraine and Belarus) are prioritized³³ (Kepinska and Kindler, 2013, p. 502).

As for situations until around 2000, Iglicka (2001, pp. 9-10) states that Ukrainian migrants have come to Poland, based on a "survival strategy", further saying: They are not homogeneous and it is possible to distinguish some "types". First, those who are in Poland illegally as seasonal workers or petty traders with the aim of earning quick money and returning home. There is likely to be a decrease in numbers of petty traders, and increase in seasonal workers. Second, those who perceive Poland as a country of opportunities, want to settle legally and will try to integrate with the majority group. Third, those who treat Poland only as a transit place on the way to the West and have a strategy to obtain Polish citizenship (through the application or marriage) in order to emigrate to the West.

_

³² There are statistical data on immigrants by previous place of residence. According to them, in 2000 the largest number of immigrants came from Germany (2,494), followed by the United States (1,185), Kazakhstan (408), Canada (331), and Ukraine (291). Of these, presumably most of the immigrants coming from Germany, the United States, and Canada are Poles, who returned from emigration (long-term or short-term) (GUS, 2020a, p. 113). Looking at the data for 2019, the largest number of immigrants came from the UK (4,015), followed by Germany (2,507), Ukraine (2,209), Ireland (747), Belarus (745), the United States (733) and the Netherlands (633). Of these, immigrants from the UK, Germany, Ireland, the United States, and the Netherlands are also presumed to be Poles who have returned from their emigration (GUS, 2020a, p. 115).

³³ Makosa (2020) argues that Poland has not been so passive as generally considered but rather positive toward the acceptance of migrants and refugees following the spirit of Roman Catholic Church.

According to Iglicka (2001. p. 13), it seems that there are more positive than negative aspects relating to the influx of people from the East. Foreigners applying for permanent residence permits in Poland are quite highly educated. Each year the majority had either a secondary education (41%) or university education (31.7%). Mentioning this, she positively evaluates their contribution to the economic development of Poland³⁴.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Czech Republic											
Emigrants	61,782	61,069	55,918	46,606	25,894	28,468	25,684	38,864	27,316	26,742	437,207
Immigrants	75,629	48,317	27,114	34,337	30,124	29,897	29,002	64,083	51,847	65,910	508,107
Net migration	13,847	-12,752	-78,804	-12,269	4,230	1,429	3,318	25,219	24,531	39,168	70,900
Hungary											
Emigrants	10,483	13,365	15,100	22,880	34,691	42,213	43,225	39,889	39,829	48,178	261,675
Immigrants	27,894	25,519	28,018	33,702	38,968	54,581	58,344	53,618	68,070	82,937	471,651
Net migration	17,414	12,154	12,918	10,822	4,277	12,368	15,119	13,729	28,241	34,759	209,976
Poland											
Emigrants	220,320	218,126	265,798	275,603	276,446	268,299	258,837	236,441	218,492	189,794	2,428,156
Immigrants	32,307	27,575	19,667	14,606	17,554	19,516	29,896	29,925	36,639	43,178	270,863
Net migration	-188,013	-190,551	-246,131	-260,997	-258,892	-248,783	-228,941	-206,516	-181,853	-146,616	-2,157,293
Slovakia											
Emigrants	1,979	1,889	1,863	2,003	2,770	3,644	3,870	3,801	3,466	3,298	28,583
Immigrants	6,346	5,272	4,829	5,419	5,149	5,357	6,997	7,686	7,188	7,253	61,496
Net migration	4,357	3,383	2,966	3,416	2,379	1,713	3,127	3,885	3,722	3,955	32,913

Among the Visegrad 4 group the countries where the number of immigrants consistently exceeded the number of emigrants for 10 years from 2009 through 2018 are only Hungary and Slovakia (see table). In the case of the Czech Republic, emigration exceeded immigration for three years from 2010 through 2012, in other years immigration exceeded emigration, and the net migration was about 70 thousand for the whole period. In the case of Poland, emigration exceeded immigration in the whole period, and net emigration was large with about 2.16 million.

Table 9 based on Eurostat data deals with migrants who migrated to destination countries for more than a year³⁵. In reality short-term immigrants have been so numerous that there is a possibility that part of them could not be grasped by authorities sufficiently. The number of immigrants might exceed the number of emigrants from around 2014 (see also Figure 2). The official statistics have been based on 'residence permit' and 'work permit'. Dr. Barbara Jancevic advised me to consider not only 'work permit' issued by authorities but also special types of 'permit' (for example, 'declaration of intent to

³⁴ According to Professor Masahiro Taguchi (Okayama University), a Japanese research expert on Poland, the Ukrainian labor force makes up for the labor shortage in Poland and contributes to strengthening the competitiveness of export products (cheap labor costs). However, vocational training and long-term employment are difficult in fields that require skilled workers because stable long-term stays are not possible, and there is also the ironic side of this, i.e., since they work seriously at low wages, they "contribute" to the reduction of wages in Poland as a whole. His e-mail in July 2021.

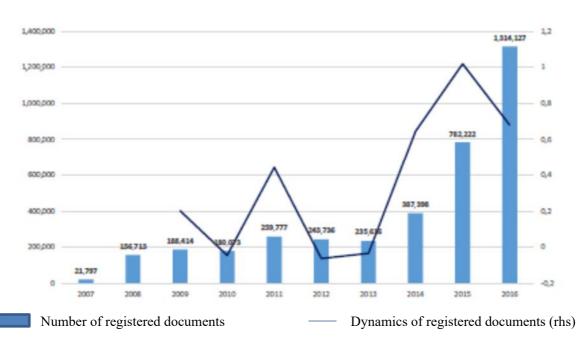
³⁵ Several Polish researchers who saw this table in my draft paper say in one voice that the numbers of immigrants to Poland were underestimated.

grant employment to foreigners' issued by employers)³⁶. Anyway, it seems very difficult to grasp the actual conditions of immigrants.

Simplified Procedure

According to Kaczmarczyk and Gorny (2017), following examples of procedures initiated in Western Europe and the USA which faced labor shortages in the 1950s and the 1960s, Poland introduced 'simplified procedures'. Poland also faced a shortage of agricultural workers particularly in orchards. Every year the agricultural sector employed foreign workers seasonally, but the acquisition of work permit needed time-consuming process. In 2006 an exceptionally simple procedure was initiated, allowing the employment of immigrant workers without the need to go through the arduous and costly process to acquiring a work permit. This 'simplified procedure' is as follows: An employer interested in hiring a given person registers at the labor office a declaration of intent to grant work (with the required personal data and a description of the contract), which in turn serves as the basis to apply for visa.

Figure 3 Scale and Growth of a Registered Declarations of intent to grant Employment to Foreigners, 2007-2016



Source: Kaczmarczyk and Gorny (2017), p. 35.

When this procedure was first introduced in 2006 it was addressed to individuals who wanted to hire citizens of the Russian Federation, Belarus and Ukraine for up to three months during a six-month period. In 2007 short-term employment was allowed without sectoral restrictions, and the need to

25

³⁶ Comments by Professor Barbara Jancevicz at the Warsaw School of Economics (E-mail in July 2021).

officially register a written declaration of intent to employ foreigners was introduced. In 2008 the maximum allowable period of work was extended to six months during 12-month period, and the list of beneficiary countries was lengthened to include Moldova, Georgia and Armenia. However, this procedure has some problems. The declaration document is simply a declaration of intent. Therefore, there are no sanctions, either for the employer's failure to actually employ the foreigner, or for the workers to fail to take up the employment. Regardless of the actual conditions, numbers of registered declarations appear in the official statistics (pp. 36-37). Even if the share of agriculture in total registered declarations is steadily decreasing year after year (from more than 65% in the end of the 2000s to less than 30% in 2016), the number of documents concerning employment in agriculture is clearly increasing (Kaczmarczyk and Górny, 2017, pp. 36-43).

Destinations for Immigrants

In 2019 the largest number of immigrants (2,714) was recorded in Mazowieckie province prefecture where the capital city Warsaw is located (GUS, 2020a, p. 117). Looking at the statistical data showing the percentage of top three countries of origin (previous place of residence), the UK ranked first in 11 prefectures and Germany ranked first in 4 prefectures while Ukraine ranked the first place in Mazowieckie province prefecture. Immigrants from Ukraine ranked second in 4 prefectures and ranked third in 7 prefectures (GUS, 2020a, p. 119). Indeed, foreign workers concentrate in Mazowieckie province, but Kaczmarczyk and Górny (2017) say that in the past two years the process has begun of Ukrainian immigration "spilling over" across the territory of Poland (p. 37).

Contribution of Immigrants from Ukraine to Economic Growth in Poland

According to Strzelecki, et al (2020), as emigration from Poland to advanced EU member states was very active since 2004 when the country joined the EU Poland remained an emigration country until 2013. But this situation reversed abruptly in 2014. The annexation of Crimea by Russia in that year gave rise to opposition of Ukraine, and soon armed conflicts began between both countries, resulting in exodus of many Ukrainians. The authors say "From that year onward Poland admitted probably between one and two million immigrants from Ukraine". Especially "in 2018, one out of five first residence permits was issued in Poland. Strzelecki, et al (2020) say that in spite of the fact that immigrants from Ukraine contributed greatly to the economic growth in Poland, their contribution has not been evaluated sufficiently. They made a quantitative analysis. The essence of the result of analysis is as follows: In the peak of immigrant inflow (2016-17) economic growth in Poland was increased by additional 0.7-0.8 pp. in each year due to immigration. More broadly, in the period 2013-2018 immigration contributed on average about 0.5 pp. per annum, or 13% of total GDP growth in the Polish economy.

7. Problems of Labor Shortages

With outflow of young and working generations and continuing aging population, it will become very difficult to maintain the pension finances for the elderly in the future. Some scholars call it demographic crisis (Karbowski, 2017). Moreover, the reduction of retirement age by the PiS (Law and Justice) government is also problematic. The retirement age (= pensionable age) for both men and women were made 67 by the pension reform in 2012, but the populist political party PiS, which regained power in 2015, decided to return the retirement age for women to 60 and for men to 65 after October 2017. Many people concerned that such measures will not only give negative impacts on labor market in mid-term but also impose great burden on pension finances (SGH, 2018, p. 109).

According to Joanna Tyrowicz (2017), a specialist on labor economics, the supply of labor will decline by 100,000–150,000 people every year. With current demographic trends, even a significant improvement in labor force participation will result in a loss of about 6 million working people by 2050. Her paper tells us that behind the drop in the supply of labor lies the unavoidable decline in Poland's population. According to demographic simulations, even if fertility rate in Poland suddenly rose sustainably from about 1.4 to 2.1, the earlier two decades of low fertility rate would still have a negative effect on the population, inexorably reducing the level to less than 32 million over the coming decades. A natural solution could be to increase immigration to Poland. As mentioned above, currently the problem of labor shortage is mitigated by a massive inflow of immigrants from Ukraine, However, inflow on the order of 100,000-200,000 people a year do not appear to be possible at all. So, she turns her eyes to 'underutilized labor force'. The scale of unemployment and the scale of immigration of labor are relatively similar, but they are not in a causal relationship. Immigrants typically work in occupations and professions different from those to which Polish job-seekers aspire.

Then she analyzes a group of people who do not participate in the labor market. This group is consisted firstly of young people in formal education, who in the future will most likely enter the workforce in significant proportion but today mostly remain outside it. A certain percent of college students can do part-time jobs, but the percentage of them who have at least part-time employment amounts to a half of the EU average. She ascribes such low workforce participation by high-school and college students in Poland to the functioning of the labor market, in particular the relatively low number of part-time jobs and the poor functioning of job brokering. Secondly, about 1.8 million people are inactive solely because they are caring children or other dependents. Due to a lack of access to care services (or their excessive costs), many women are bound to home. Thirdly, about 1.9 million people refer to poor health status as a reason for non-participation. A lack of flexibility in working time, insufficient medical service, poor prevention of many health problems, and employers' lower willingness to offer jobs made it difficult for them to participate in the labor market. Fourthly, more than 7 million people are said to be inactive because of retirement. A large proportion of them left work relatively recently and are in good health. Even though the average age for leaving the workforce in Poland has steadily grown since 2007 the average retiree in Poland remains significantly younger than their counterpart in economies with a similar sectoral structure, e.g. Germany. The average retiree is significantly less often professionally active, even part-time. It is institutional barriers that may prevent them from returning to the labor market. Although currently there are no caps on earned income, over the past decades the law has changed frequently, often suddenly, introducing caps or banning working while receiving pension. Retirees who remember such experiences do not easily participate in the labor market. Fifthly, there are so many young people who are NEETs (not in employment, education or training). Almost 30% of vocational school graduates become NEET. Overall, in order to increase the participation in the labor market effectively the Polish economy needs a diverse range of labor-market instruments and flexible working hours. Moreover, very long job search duration on workers side as well as very long duration of filling up a vacancy on companies side are problematic. These can be ascribed to the poor job brokering function. This should be improved as soon as possible. The essence of Tyrowicz's argument can be summarized in the following sentence: "Reducing the scale of non-participation could increase Poland's labor supply by about 2 million people, or about 9%" (Tyrowicz, 2017, p. 21).

Tyrowicz' argument seems to echo with an opinion of Iglicka (2016, p. 5). Having mentioned that advanced countries like the UK and Germany, which have accepted young foreign workers, have greatly benefited from them in the economic development³⁷, she says "We should do everything possible to create such model of economic and social policy that it will stop the emigration of young people to the West and provide them with incentives to come back".

8. Present Situation and Challenges

First, let us confirm the achievements of Polish society's development. Since 1993 the economic growth has continued until 2019, although Poland experienced negative growth in 2020 due to the corona virus pandemic. The impact of the 2008-2010 global financial crisis was not so serious. Polish GDP per capita at purchasing power parity was 38% of the EU-15 average in 1989. It increased to 70% in 2020 reducing the economic gap between Poland and advanced EU member states³⁸ (SGH, 2021, p.34).

However, the gap is still big. As already mentioned, Norkus (2012), views the world capitalism and distinguishes core, semi-core, semi-periphery and periphery. He classifies Estonia as well as Central European countries including Poland into semi-core of the world capitalism on the grounds that these countries have capabilities to manufacture products developed in the core, but which are still unable to autonomously develop and organize commodity chains to produce high-tech or branded products or provide related services³⁹.

-

³⁷ Also Pachocka (2016) views Poland' demographic problem in the context of the European integration.

³⁸ As for 2020, the information provided by Professor Ryszard Rapacki. His e-mail in July 2021.

³⁹ What is a subtle issue is the positioning of Slovenia. Slovenia, along with Central European countries and Estonia, specializes in the manufacture of products of type (3) and (4) and is classified as semi core. But Norkus has given it a higher rating in other part of the same book. While mentioning that as its GDP per capita at purchasing power parity is still below the EU average it might be questionable to classify the country into a core of the world capitalism, he says that Slovenia cannot be classified as a Dependent Market Economy, as the country's industry and financial sector are not dominated by foreign capital, at least not yet. There are many companies with unique brands that are accepted in the world. In 2010 Slovenia was only one post-communist country classified by the World Economic Forum (WEF) as an innovation-driven state and so considered as a

The EU's social and economic development strategy, "Europe 2020," adopted in 2010, aims to enable the construction of a foundation for sustainable development of the EU. The following three priorities are the cornerstones of its development: a) smart development through economic development based on knowledge and innovation; b) sustainable growth based on a more green, more resource-efficient and more competitive economy; c) comprehensive growth that guarantees high level employment, and social and regional unity. In order to realize these priorities "Europe 2020" deemed it necessary to achieve 5 strategic objectives by 2020.

Table 10 Gross Deomestic Expenditure on R&D (GDRD) as a percentage of GDP in 2019								
New EU Member States from CEE	GDRD	Old EU Member States	GDRD					
Bulgaria	0.84	Austria	3.19					
Czech Republic	1.94	Belgium	2.89					
Estonia	1.61	Denmark	2.91					
Croatia	1.11	Finland	2.79					
Latvia	0.64	France	2.19					
Lithuania	1.00	Germany	3.18					
Hungary	1.43	Greece	1.27					
Poland	1.32	Italy	1.45					
Romania	0.48	Ireland	0.78					
Slovakia	0.83	Luxembourg	1.19					
Slovenia	2.04	Netherlands	2.16					
		Portugal	1.40					
Reference values in 2018		Spain	1.25					
USA	2.82	Sweden	3.40					
Japan	3.28	UK	1.76					
South Korea	4.52							
Source: Eurostat								

Let me mention first two out of 5 strategic objectives⁴⁰: 1) at least 75% of the population aged 30-64 is employed; 2) 3% of GDP should be invested in R&D. The employment rate in Poland is currently around 67%, which has not reached that target. As for R & D, Poland's own target was 1.7%, which was lower than the EU average, but in 2019 it was actually 1.32%, even below its own target. If NES from Central and Eastern Europe and old EU member states are compared in terms of R&D expenditure, it is lower in NES by 1 percentage point. In Poland it is 1.32, which is moderate among NES, but compared with 2.04% in Slovenia it is much lower. Compared with the old member countries like Sweden (3.40%), Austria (3.19%) and Germany (3.18%), it is by far lower. In the case of South Korea, which has recovered after being devastated by the Korean War and has achieved high growth since the 1970s, the ratio of R & D expenditure to GDP in 2018 was 4.52%, the Polish

world capitalist system core country (pp. 245-246).

⁴⁰ The remaining three are for the EU member states as a whole, achieving the "20/2020" climate and energy targets, reducing school dropout rates to less than 10 %, and among the 30-34 year olds. Increase the percentage of college graduates to 40 % and reduce the number of people threatened by poverty or social exclusion by 20 million. SGH (2019), p. 254.

value is far short of this. Even if not necessary to attain such a high value, Poland needs to make efforts to sustainably increase R & D expenditure as a percentage of GDP.

Since the system change that took place in Central and Eastern Europe and the Soviet Union from 1989 to 1991, social changes have been drastic and even accelerating. In recent years, the term Industry 4.0 has been frequently heard. *Poland Competitiveness Report 2019*, which features "Industry 4.0", emphasizes the importance of digitization and makes an international comparison. According to it, Poland puts emphasis on this area, but it lags behind the EU average, and in NES from Central and Eastern Europe it is one of late comers.

Finally, I would like to introduce the argument of Piatkowski (2018). According to him, Poland has done very well over the last 30 years. However, continued growth in the future is not guaranteed. The easy path to convergence based on low labor costs is ending. The pace of convergence will slow down in the future. It is necessary to keep its growth inclusive. Qualitative economic development is necessary. Poland, unlike in the past, needs to be a creator rather than an absorber of economic, social, political and cultural ideas. Having said so, he proposes "the Warsaw Consensus" replacing "the Washington Consensus"

9. Conclusion

Let us summarize our findings. The impact of system change in 1989 and the subsequent transition to a market economy on the whole society was significant. Around 1990, the sectoral composition of the economy remained old-fashioned and was significantly behind Western European countries. In the market economy, many companies turned out to be unprofitable and unemployment was increasing. A change in the sectoral composition of the economy was inevitable. Poland's government and business were craving for fresh capital and modern technology. Western European companies, especially German companies, have gradually strengthened their economic cooperation with Poland, starting with outward processing traffic and then in the form of foreign direct investment. As a result, the sectoral composition of the economy in the country has changed significantly and has become more sophisticated.

After the system change, the movement of people across borders has become basically free. EU accession has allowed Poles as well as other people in the Central and Eastern Europe to directly participate in the labor markets of EU member states. However, some countries such as Germany, France, Italy and the Netherlands have taken transient measures to limit immigration from these countries for seven years. Therefore, during that time, emigration was mainly concentrated in the UK and Ireland.

Agriculture has also changed. By Western standards, labor force in the Polish agriculture is in

⁴¹ The pillars are as follows: 1. Strengthen the system; 2. Increase domestic savings, 3. Promote education and innovation; 4. Boost employment rate; 5. Open up to immigration; 6. Keep exchange rate competitive; 7. Sustain strong financial supervision; 8. Urbanize; 9. Keep growth inclusive; 10. Focus on well-being. Piatkowski (2018), p. 290.

excess. Farmers at subsistence farming will have to work concurrently with other sectors. Such farmers will have to either move domestically or move abroad to engage in other sectors. In the country there are some rural areas where the population has decreased significantly (i.e., depopulated rural areas). Rural areas will exist even if the number of farmers decreased. It will be necessary to promote ecotourism and some other industries in order to take advantage of the tourist attractiveness of rural areas and to conserve national land.

Workers working in sunset industries had to acquire new skills to work in other areas, but it seems that it was not an easy task. Many workers retired early. It is presumed that some workers were presumably forced to retire earlier than they originally planned. Some workers moved to advanced EU member states where higher wages were available in order to utilize their qualifications or to maintain their livelihood.

There are large wage and other gaps with advanced EU states. These act as a pull factor. As people have their attachment to places where they were born and grew up, economic gaps alone cannot explain people's mobility in 100 %. In the medium and long term, I think, a change in the sectoral composition of the economy is affecting people's mobility, but at the same time such economic gaps give an influence on people's decisions on emigration. It is considered that in the area of medical services problems of wage structure and working conditions give a significant influence on people's emigration.

In Poland, areas appeared in which a labor shortage is felt. Such sectors are accepting labor force from poorer Eastern neighbors, namely Ukraine and Belarus. There is no guarantee that immigration of workers from East will continue at a high level. Therefore, some policy measures will be necessary in order to activate unutilized labor force.

Population decline cannot be neglected on account of cultural sustainability and inheritance as well as maintenance of pension finances. Therefore, it will be necessary to promote return migration of Poles who have acquired new skills and gained precious experiences abroad.

Acknowledgement

While writing this paper I was supported by Dr. Hiroichi Iemoto (Professor at Nagoya Gakuin University), Dr. Masahiro Taguchi (Professor at Okayama University), Dr. Kunihiko Aoki (Professor Emeritus at Tohoku University), Dr. Yu Hasumi (Rikkyo University), Dr. Hiroshi Tanaka (Professor at Ritsumeikan University), Dr. Ryszard Rapacki (Warsaw School of Economics), Dr. Benon Gazinski (Professor Warmi and Mazuri University), Dr. Barbara Jancevic (Warsaw School of Economics), Dr. AgnieszkaWojevodzka-Wiewiorska (Professor at Warsaw University of Life Sciences), Professor Marian Turek (Professor at University of Gdansk), Dr. Witold Morawski (Professor at Kozminski University), Dr. Justyna Salamoska (Associate Professor at Warsaw University), Dr. Pawel Strzelecki (Professor at Warsaw School of Economics), Dr. Adam Karbowski (Associate Professor at Warsaw School of Economics) and Dr. Magdalena Jerzemowska (Professor at University of Gdansk). I would like to express my gratitude for their support including comments on my draft paper and provision of information.

Bibliography

Foreign Literature

- Balcerowicz, Ewa (2006), The Impact of Poland's EU Accession on Its Economy, a paper presented at the EUIJ workshop in Tokyo on December 11, 2006.
- Beaumont, Karolina, Matthias Kullas, Matthias Douner, Izabela Styczyńska and Paul Lirette (2017), Female brain drain in Poland and Germany: new perspectives for research, *CASE Repor*ts No. 486.
- Brunarska, Zuzanna and Magdalena Lesińska (2014), Poland as a(n) (un) attractive destination for Belarusian labor migrants, CARIM-East Research Report. *CMR Working Papers* No 70 (128). Warsaw: Centre of Migration Research, University of Warsaw.
- Brus, Wlodzimerz (1983), *Economic History of Communist Eastern Europe*. Its Japanese edition, translated by Shigenari Tsuruoka, was published by Iwanami Shoten (Tokyo) in 1984.
- Collier, Paul (2013), *Exodus: Immigration and Multiculturalism in the 21st Century*, Allen Lane. Its Japanese edition, translated by Yu Matsumoto, was published by Misuzu Shoboh (Tokyo) in 2019.
- Czerniak, Adam and Ryszard Rapacki (2019), Directions and Key Challenges of Economic Policy in Poland in the Context of the Fourth Industrial Revolution, *Poland Competitiveness Report*, SGH.
- European Parliament (2020), Briefing: Minimum Wage in the EU.
- Fanning, Bryan, Weronikca Kloc-Nowak and Magdalena Lesińska (2021), Polish migrant settlement without political integration in the United Kingdom and Ireland: a comparative analysis in the context of Brexit and thin European citizenship, *International Migration*, Vol. 59 (1) 2021, ISSN 0020-7985, doi:10.1111/imig.12758
- Fejto, Francois (1972), *Histore des Democraties Populaire Apres Staline*, 1953-1975. Its Japanese edition, translated by Tohru Kumada, was published by Iwanami Shoten (Tokyo) in 1978.
- Gaidzik, B. (2021), Steel Industry in Poland Trends in Production, Employment and Productivity in the Period from 2004 to 2019, *Metalurgija* 60 (2021) 1-2, 165-168. ISSN 0543-5846
- Gaziński, Benon (2016), Poland Recast: Agriculture and Rural Development during period of the Transformation and European Integration: An Overview, *AgroLife Scientific Journal*, Vol. 5, No.1, ISSN ONLINE 2286-0126.
- Glowny Urzad Statystyczny [GUS] (2010), Employment in National Economy. in 2009.
- Glowny Urzad Statystyczny [GUS] (2019), Employment in National Economy in 2018.
- Glowny Urzad Statystyczny [GUS] (2020a), Demographic Situation in Poland up to 2019; International Migration of Population in 2000-2019.
- Glowny Urzad Statystyczny [GUS] (2020b), Socio-economic Situation of the Country in January 2021.
- Gomulka, Stanislaw (2016), Poland's Economic and Social Transformation 1989 2014 and Contemporary Challenges, *Central Bank Review*, 16 (2016), 19-23
 - http://www.journals.elsevier.com/central-bank-review/
- Gorynia, Marian (2002), Internationalization of a Post-Communist Economy Opportunities and Threats: The Case of Poland, Marin Alexandrov Marinov (2002) (ed.), *Internationalization in Central and Eastern Europe*, Aldershot: Ashgate.

- Grondys, Katarzyna and Beata Slusarczyk (2010), Steel Sector in Poland and its Condition after Accession to the European Union, *Annals Universitatis Apulensis Oeconomica*, 12 (2).
- Hunya, Gabor (2018), FDI in Central, East and Southeast Europe: Declines due to Disinvestment, Vienna: wiiw.
- Iglicka, Krystyna (2001), Migration Movements from and into Poland in the Light of East-West European Migration, *International Migration*, Vol. 39 (1), 2001, ISSN 0020-7985
- Iglicka, Krystyna (2016), How to Stop the Emigration of the Young, *Aspen Review*, Issue 04/2016 https://www.aspen.review/article/2017/how-to-stop-the-emigration-of-the-youn/g/
- Jancewicz, Barbara, Weronika Kloc-Nowak and Dominika Pszczolkowska (2020), Push, Pull and Brexit: Polish Migrants' Perceptions of Factors Discouraging them from Staying in the UK, *Central and East European Migration Review*, Vol. 9, No. 1, pp. 101-123. doi: 10.17467/ceemr.2020.09
- Jastrzębska, Ewa (2018), Enterprises' Initiatives intended for Persons aged 50 and Over in the Opole Special Demographic Zone, *Research Papers of Wroclaw University of Economics*, No. 520, eISSN 2392-0041.
- Kaczmarczyk, Paweł (2021), Post-accession migration and the Polish labour market: Expected and unexpected effects, Anne While, et al. (eds.) (2021), *The Impact of Migration on Poland: EU Mobility and Social Change*, UCL Press.
- Kaczmarczyk, Paweł and Agata Górny (2017), A Temporary Solution with Structural Consequences?: Ukrainian Workers on the Polish Labor Market, mBank CASE Seminar Proceedings, No. 149/2017.
- Karbowski, Adam (2017), Changes in Human Resources in Poland and Migration Trends from 2010 to 2016, *Poland Competitiveness Report 2017*, World Economy Research Institute, Warsaw School of Economics (SGH).
- Kępińska, Ewa and Marta Kindler (2013), "Poland" in Anna Triandafyllidou and Ruby Gropas (eds.), European Immigration: A Sourcebook second, new and expanded edition, 2014. ed. by Aldershot: Ashgate.
- Klein, Naomi (2007), *The Shock Doctrine: The Rise of Disaster Capitalism*, Metropolitan Books, Its Japanese Edition, translated by Sachiko Ikushima and Yumiko Murakami, was published in 2011 by Iwanami Shoten (Tokyo).
- Kolodko, Grzegorz W. (2000), From Shock To Therapy: The Political Economy of Postsocialist Transformation, Oxford University Press, Its Japanese translation by Iemoto, Taguchi and Yoshii.
- Koyama, Yoji (2015), The EU's Eastward Enlargement: Central and Eastern Europe's Strategies for Development, Singapore: World Scientific.
- Koyama, Yoji (2021), Germany: Core of EU-Visegrad Economic Relations, *Historical Studies of Socialism*, No. 17.
- Krajewski-Siuda, Krzysztof, Adam Szromek, Piotr Romaniuk, Christian A. Gericke, Andrezj Szpak and Krzysztof Kaczmarek (2012), Emigration Preferences and Plans among Medical Students in Poland, *Human Resources for Health*. Published online on April 30, 2012. doi: 10.1186/1478-4491-10-8
- Legutko-Kobus, Paulina (2017), Municiapal Initiatives intended for Persons aged 50 and Over in the Opole Special Demographic Zone, *Studia Regionalia*, Vol. 52, doi: 10.12657/studreg-52-04

- Mąkosa, Pawel (2020), Poland between emigration and immigration in an ecclesial context.
- Malina, Anna and Piotr Malina (2007), Changes of Employment Structure in Poland and EU Countries, *Statistics in Transition-new series*, August 2007, Vol. 8, No. 2, pp. 369-382.
- Mara, Isilda and Michael Landesmann (2016), Free Movement of Persons to the UK and Its Implications for the Mobility of the EU-CEE Countries, *Forecast Report Autumn 2016*, wiiw.
- Migration Observatory (2021), Briefing: Migrants in the UK Labour Market: An Overview (21 Jan 2021). www/migration observatory.ox.ac.uk
- Mokrogulski, Mateuz (2015), Development of Human Resources in Poland in 2007-2014, Marzenna Anna Weresa (ed.) (2015), *Poland Competitiveness Report 2015*, World Economy Research Institute, Warsaw School of Economics (SGH).
- Norkus, Zenonas (2012), On BalticSlovenia and Adriatic Lithuania: A Qualitative Comparative Analysis of Patterns in Post-Communist Transformation. Vilnius: Apostrofa.
- Organisciak-Krzykowska, Anna and Grazyna Kowalewska (2021), Factors Determining Migration Decisions of Nursing Students from Eastern Poland, *Problemy Polityki Spolecznej* 2021, 52 (1)
- Pachocka, Marta (2016a), Population Matters?: European Integration Process During a Demographic Change, SGH.
- Pachocka, Marta (2016b), Looking beyond the Current Migration and Refugee Crises in Europe: A Common Policy of the EU and the Outlook for the Future in Search of Solutions, a paper presented at the European Commission Jean Monnet Seminar "Migrations", held in Tunis on February 22-23, 2016.
- Pachocka, Marta (2016c), The OECD and the twin migration and refugee crises in Europe, *Commentary* (published by Institute of East-Central Europe), No 20/2016.
- Radziwinowiczowna, Agnieszka, Weronika Kloc-Nowak and Anna Rosinska (2020), Envisaging post-Brexit immobility: Polish migrants' care intentions concerning their elderly parents, *Journal of Family Research*, Early View, 1-22. doi:10.20377/jfr.352
- Rapacki, Ryszard (ed.) (2019), Diversity of Patchwork Capitalism in Central and Eastern Europe, London and NY: Routledge.
- Rokicki, Tomasz and Joanna Baran (2015), Situation of the Steel Industry in Poland, Conference Paper presented at Metal 2015 held at Bruno (Czech Republic) on June 3 June 5, 2015.
- Sachs, Jeffrey (1993), Poland's Jump to the Market Economy, Cambridge: MIT Press.
- Salamonska, Justyna (2021), New Horizons? Comparisons and Frames of References of Polish Multiple Migrants Worldwide, *Social Inclusion*, 2021, Vol. 9, Issue 1, pp 152-162.
- Spórna, Tomasz, Iwona Kantor-Pietraga and Robert Krzysztofic (2015), Trajectories of Depopulation and Urban Shrinkage in the Katowice Conurbation, Poland, *Espace Populations Societes*. https://doi.org/10.4000/eps.6102
- Stawarska, Renata (2005), Short and Long-Term Financial Implications of Eastern Enlargement for Poland and the European Union, Dupont, Bernard (2005), *La Pologne dans L'Europe: Une integration achevee?*, Cahiers liollois d'economie de sociologie, L'Harmattan.
- Strzelecki, Growiec and Wyszynski (2020), The Contribution of Immigration from Ukraine to Economic Growth in Poland, *NBP Working Paper* No. 322

- Szuleck, Monika, Marta Pachocka and Karolina Sobczack-Szelc (2018), Poland Country Report: Legal & Policy Framework of Migration Governance, *Working Papers, Globalization: Consequences and Responses*, http://www.crs.uu.se/respond/
- Szymańska, Daniela, Jadwiga Bieganska and Anna Gil (2009), *Bulletin of Geography Socio-Economic Series* No. 12/2009. DOI: 10.2478/v10089-009-0006-1
- Tyrowicz, Joanna (2017), Can Immigration to Poland be a Significant Labor Market Driver?, *mBank CASE Seminar Proceedings* No. 149/2017.
- Wilczek, Maria (2020), Poland's Coal Industry Finally Burns Out, Warsaw *BIRN*, October 12, 2020, https://balkaninsight.com/2020/10/12/polands-industry-finally-burns-out/
- Wojewodzka-Wiewiorska, Agnieszka (2019), Depopulation in Rural Areas in Poland Socio-Economic Local Perspective, *Research for Rural Development* 2019, Volume 2

DOI: 10.22616.25.2019.059

World Economic Research Institute (1990), Poland: International Economic Report 1989/90, SGH.

Japanese Literature

- Hosoya, Hiroshi (2011), Developing Automobile Industry in Central and Eastern Europe, *Report from the Institute of Eurasian Studies*.
- Iemoto, Hakuichi (1994), Poland's Way to "Post-Socialism": From Reforms within the System to System Change, Nagoya University Press.
- Iemoto Hakuichi (2004), System Transition in Central Europe and the EU Accession, Nagoya: Sankeisha.
- Iemoto, Hakuichi (2008), Reality of Polish Labor Market after the EU Accession: Its Characteristics and Problems, *Russian and Eurasian Economy: Research and Materials*, No. 907.
- Iemoto, Hakuichi (2009), Changes in Polish Labor Market and Its Actual Conditions: A Clue to Solve Problems Inherent in Poland, *Russian and Eurasian Economy: Research and Materials*, No. 919.
- Iemoto, Hakuichi (2010), Trends of Migration in Poland and Domestic Labor Market: What are Changes in Domestic Labor Market, *Research and Materials*, No. 930.
- Iemoto, Hakuichi (2021), Characteristic Features and Character of the European Battery Alliance and Its Future Challenges: Based on Results of "Survey on Movements of Participating Companies", *Doshisha Commercial Science*, Vol. 72, No. 6.
- JETRO (2002), Automobile Industry in Central Europe (Poland), JETRO Eurotrend.
- Okazaki, Taku (2016a), Development Path of Automobile Industry in Poland, *Comparative Economic Studies*, Vol. 53, No. 2.
- Okazaki, Taku (2016b), Multinational Enterprises in Polish Automobile Industry, *Bulletin of Shitennoji University*, No. 62.
- Momozumi, Isamu (1999), EU's "Eastward Enlargement and German Economic Area: Focusing on "a Scenario" of Germany's Eastward Enlargement, Tokyo: Nihon Hyoronsha.
- Taguchi, Masahiro (2005a), Mechanism of Accumulation of Its External Debt in Poland in the 1970s, Journal of Okayama University Economic Society, Vol. 36, No. 4.
- Taguchi, Masahiro (2005b), System Change in Poland: Political Economy of System Collapse and

Formation, Faculty of Economics of the Okayama University.

Taguchi, Masahiro (2021), Poland's System Change, Ikemoto, Shuichi (ed.), *Conflict between State and Market in System Change: Russia, China and Central Europe*, Tokyo: Nihon Hyoronsha.

Yoshino, Etsuo (1987), Arguments on Reforms of Socialist Economy: A Study of Reports on Economic Reform in Poland, Tokyo: Bokutakusha.

Watanabe Katsuyoshi (ed.) (2001), 60 Chapters to Understand Poland, Tokyo: Akashi Shoten.

Periodicals

Poland Competitiveness Report, World Economy Research Institute at Warsaw School of Economics (SGH).

Current Analyses and Forecasts, Vienna Institute for International Economic Studies (wiiw).