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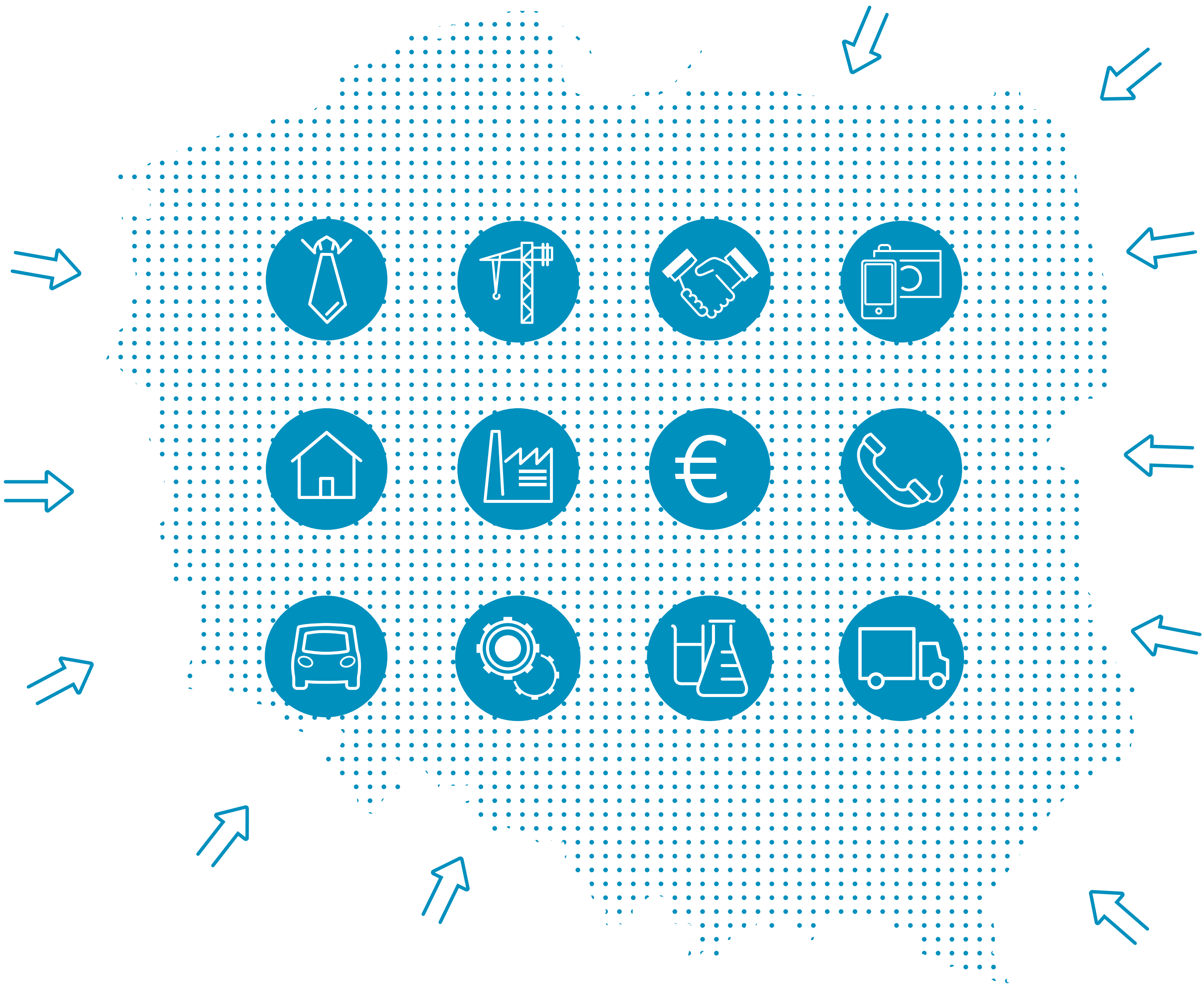

The impact of Foreign Direct Investment

Contribution to the Polish economy in the past quarter century

The following chambers of commerce joined in the International Group of Chambers of Commerce in Poland are partners of that report:

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Key findings

The influx of the foreign direct investment (FDI) is one of the most important triggers that boost economy – it accelerates consumption and investment demand, enhances productivity of companies and their employees as well as raises remunerations and decreases unemployment. Furthermore, FDI are the most effective conveyor of new, more effective technologies and innovations in corporate culture as well as the fastest way to engage national companies into the globalised economy.

The value of FDI in Poland exceeds PLN 712 billion. Over the past 25 years, Poland has attracted an average of PLN 26 billion per year. Capital inflows accelerated at two points: shortly after the fall of the communist regime, when Western companies sought to satisfy consumer demand and help Poles in the privatisation of state-owned enterprises – industry attracted most of the foreign investments. In turn, after Poland's accession to the EU, foreign companies began to invest capital to a much greater extent in the services sector.

In 2016 the influx of FDI to Poland accelerated again. A value of finished investment projects supported by PAIiIZ raised from 800 mln euro in 2015 to 1.7 billion in 2016. 60 per cent of that investments were conducted by the companies already operating in Poland. According to estimations, in the previous year the influx of FDI to Poland exceeded PLN 50 billion. The greatest share of the new investments flowed to Poland from the USA, France and Germany. Thanks to them there will be 16 000 new job openings.

Foreign companies reinvested more of the profits they made in Poland (PLN 30.4 billion in 2015) than distribute them as dividends (PLN 28.9 million). The greatest profits were reinvested by the companies from Germany (PLN 6.2 billion), the Netherlands (PLN 5.7 billion) and France (PLN 2.5 billion). Among others thanks to that reinvestments companies with foreign capital are usually several times bigger than the ones based solely on the national capital – they employ one-third of all workers in the national economy, produce two-fifths of the output and export two-thirds of all goods sold abroad.

Engagement of foreign capital has multiplied by several times the productivity of Polish firms. Companies which passed into the hands of foreign owners increased their value added at a rate of 2.2 percentage points a year faster than the rest. The inflow of FDI also benefitted other businesses in the sector as well as contractors, customers and suppliers. Firms providing services and industrial companies that allocate a significant part of their revenues for innovation benefitted the most.

Without the inflow of FDI into Poland, Polish firms would not have moved forward so rapidly in global value-added chains. According to the OECD during recent 20 years since the collapse of communism Poland has improved its ranking of the countries engaged the most in the global intra-industry commerce by 15 positions to the thirty-second place, between Germany and Japan. What is more, compared to its neighbours in the Visegrad Group, FDI inflow to Poland was evenly distributed between sectors, as a result, the Polish economy is more resilient to shocks affecting particular sectors.

Foreign investments improved Polish economic growth. The increase of demand which is associated with growth reached an average of 3 per cent of GDP per year. The effects associated with increasing the productivity of employees had a more sustainable impact on the economic situation. Average annual productivity in the Polish economy per employer grew by 0.2 per cent thanks to increased capital and adoption of new technologies.

Inflow of the FDI grew economic potential by an average of 0.7 per cent annually. As a result, GDP was 15.6 per cent higher in 2015 due to the investment of capital in Poland and the activity of international corporations than it otherwise would have been.

The inflow of FDI also had a positive effect on the labour market: it has contributed 8.9 per cent to increases in wages, 8.5 per cent to employment – at the same time reducing income inequality by about 5 per cent. Due to the investments, tax revenue increased by an average of 2.7 per cent per year, and the tax base increased over the quarter-century by 10-12 per cent. Multinational corporations also invest in human capital, developing the professional skills of their Polish managers and workers.

Foreign direct investment in Poland – sectors, directions and scale

The value of FDI in Poland at the end of 2015 amounted to PLN 712.1 billion, or 39.6 per cent of GDP[i]. As a result, Poland is in the middle rank of the OECD countries in terms of the share of FDI in the economy – close to such countries as Norway, New Zealand and Spain. Small open economies, such as Luxembourg, Ireland, Switzerland and other countries of the Visegrad Group have much more foreign investment. In turn, larger countries such as Germany, France, the United States and Japan are attracting relatively little investment – they are primarily exporters of capital (see **CHART 1**).

PLN 712.1 billion

the value of foreign direct investments in Poland at the end of 2015

FDI is based on a company creating a subsidiary in a foreign country and exercising long-term control over it. Such investments can have different characteristics – a takeover of a domestic business by a foreign one, mergers of domestic firms with those with foreign capital, expansion of a company which is owned by foreign investors or the establishment of a new Polish company by a foreign investor. According to the OECD methodology, all of the above are considered as foreign direct investment if the foreign investor has more than a 10 per cent share in the Polish company.

Statistics on FDI include not only how much capital was invested at the outset but they take into account all further investments – purchases of bonds, lending within the group, or the reinvestment of profits earned by a Polish company with foreign capital[ii]. Of the PLN 712.1 billion invested in Poland, PLN 177.9 billion represents investments in debt instruments, especially trade credits and loans – the rest is the value of foreign investors' shares in the capitals of Polish firms (see **CHART 2**).

According to the most recent data, Poland had 26,500 companies with foreign capital in 2014, of which 26,000 were companies which belonged, in whole or in part, to the direct investor. More than half of them are companies in which 100 per cent of the share capital came from abroad, while in only 3,000 of them did the foreign investor not have a majority. Two-thirds of the foreign companies were micro-enterprises (with fewer than 10 employees) and 5 per cent were large companies, employing over 250 people.

Companies with foreign capital tend to be much larger than companies based solely on Polish capital, employing on average 195 staff compared to 96 in domestic firms. 7,000 companies with foreign investment were included by the OECD in a list of multi-national enterprises (MNEs).

Companies with foreign capital employed one-third of all those working in the Polish economy in 2014, producing two-fifths of the total revenues and exporting up to two-thirds of all goods sold abroad. A clear majority of employees, production and exports were in multinational companies whose contribution to the added value in Polish economy was 11.4 per cent.

Where do foreign investors in Poland come from

67.1 per cent

the share of Polish export with foreign capital

German investors clearly topped the list at the end of 2015 in terms of the size of FDI in Poland – their total value was PLN 135.9 billion, or 19.1 per cent of all FDI. Germany was followed by the US (10.9 per cent), France (10.8 per cent), the UK (6.2 per cent) and Italy (5.7 per cent). Most of the total FDI came from EU countries (72 per cent), over half of which were from the eurozone.

In the case of investments worth as much as PLN 82 billion (11.5 per cent) it's impossible to establish where the capital came from. That's why most of the published statistics on the source of capital inflow into a country give the direct investor's headquarters rather than the country of origin of the capital. Many companies, especially venture capital funds from outside Europe, invest in EU countries through special purpose vehicles based in countries with friendly tax systems and regulations, such as the Netherlands, Luxembourg or Ireland. As a result, the leader in terms of direct investors' headquarters is the Netherlands. As much as PLN 129.3 billion or 18.2 per cent of FDI (2015 data) can be attributed to companies registered there. The next host-countries are Germany (16.4 per cent), Luxembourg (11.5 per cent) and France (10.7 per cent) (see **CHART 3**).

What do foreign companies invest in

Foreign companies tend to invest especially in industrial, financial and trading firms in Poland. In 2015, almost a third of the FDI went to industry (more than PLN 229 billion) – the majority into automotive and food processing companies (PLN 44 billion each) – followed by producers of machinery and other metal products and the petrochemical industry (PLN 41 billion each).

Foreign investors were less involved in the financial sector, where they invested PLN 134 billion, and the commerce sector (PLN 108 billion). It is commerce, on the other hand, that has the biggest number of entities with foreign capital, which is the result of the sector's considerable fragmentation and the existence of numerous subsidiaries only selling goods produced by foreign companies (they are then categorised as trading companies) (see **CHART 4**).

Companies operating in industry or the financial sector are financed with debt instruments to a very small extent – in 2015, foreign companies invested 92 per cent of their capital in stocks and shares. Debt instruments play a much bigger role in trading companies which are often financed with loans from the parent company.

How did FDI grow in Poland

Since its economic transformation in 1989, Poland has been a very attractive country for foreign direct investors. Over the past 25 years or so, PLN 666 billion has been invested in the country – PLN 27.7 billion a year on average. After the correction by the changes of prices, the inflow was even greater – PLN 782.7 billion (in constant prices from 2010)[iii]. As a result, the value of FDI capital in Poland increased practically non-stop and only saw a drop of 4.6 per cent in 2015 (according to preliminary data). This was probably the result of a slump on the Warsaw Stock Exchange (share prices dropped by about 20 per cent), which led to the reduction of the valuation of the biggest companies with foreign capital (see **CHART 5**).

In the past quarter of a century, foreign investment in Poland accelerated twice: in 1995-2000 and in 2004-2007. Immediately after the collapse of communism, companies from Western Europe and the US started investing in the country, mainly with the intention of satisfying consumer demand at a time when entry barriers

CHART 2 ASSETS IN POLISH FIRMS HELD BY FOREIGN DIRECT INVESTORS IN 2015

Source: NBP

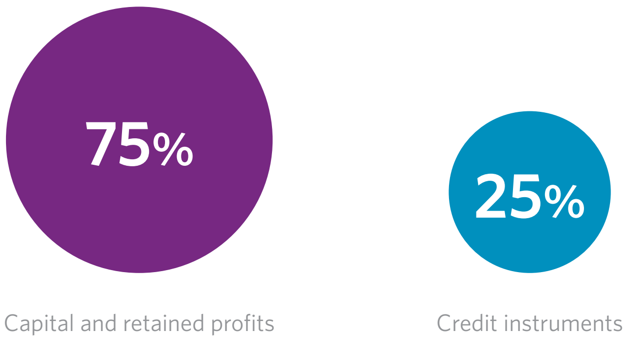


CHART 1
FOREIGN DIRECT INVESTMENTS IN THE OECD COUNTRIES IN 2015 (AS PERCENTAGE OF GDP)

Source: OECD, UNCTAD

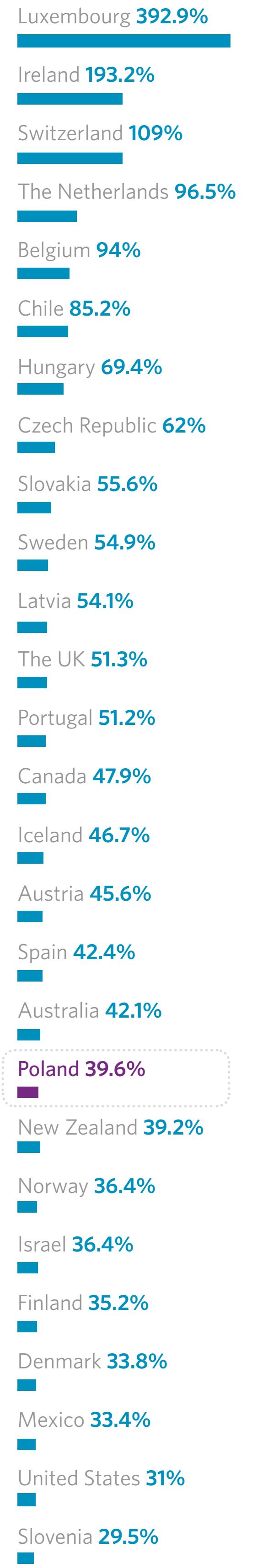
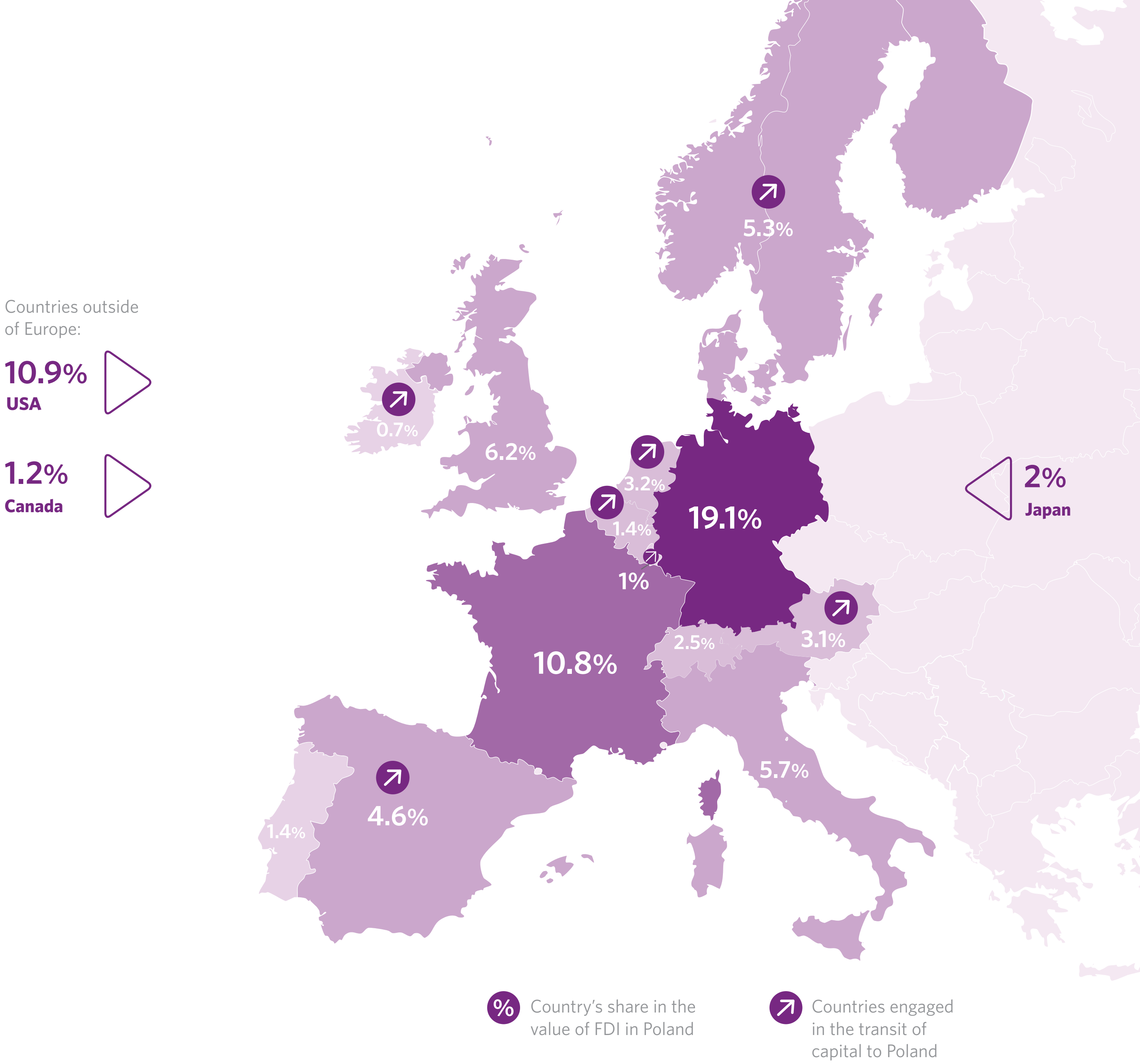
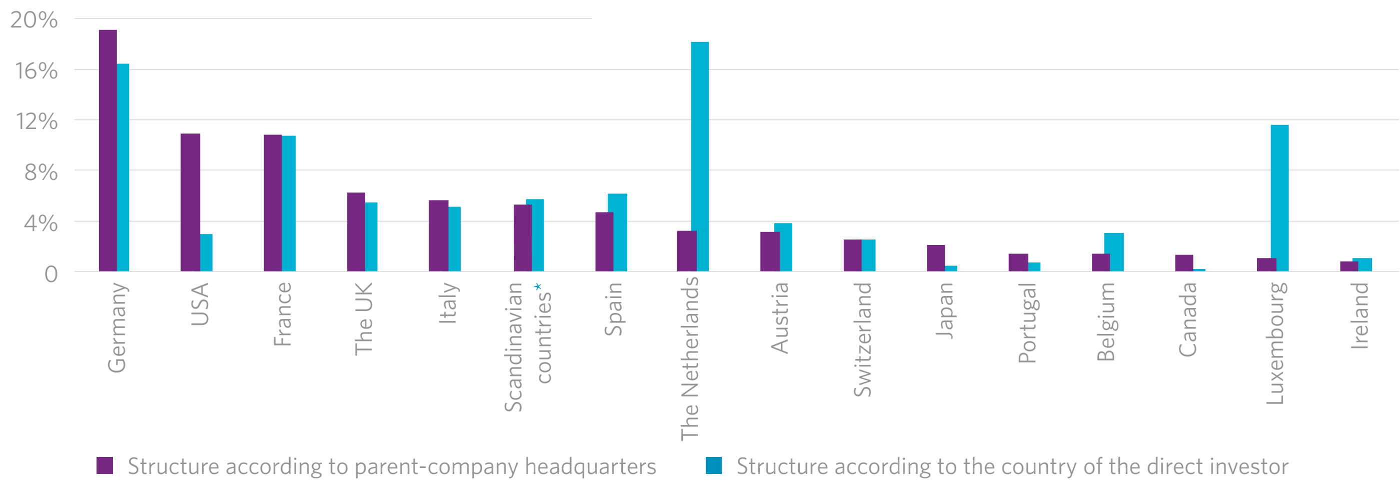


CHART 3 WHERE DID THE CAPITAL INVESTED IN POLAND IN 2015 COME FROM

Source: OECD, NBP





*Denmark, Finland, Norway, Sweden

were very high. This was because Poland had high import duties and limitations in capital flow, while at the same time consumer demand was starved as supply was low. As a result, it was mostly companies from the trading and food industries, and from the consumer goods industry that invested in Poland. The investment boom only began with the legislative changes at the beginning of the 1990s and the start of the offshoring process, with production moving east from western countries. This was when the highest amount of capital was invested in Poland (up to PLN 200 billion at constant prices from 2010).

The 2001 crisis slowed down the influx of capital to Poland, but only for a short time. As the country joined the EU, it saw another wave of acquisitions, mergers and greenfield investments. It was also when foreign investors started to put more capital into the services sector, especially telecoms, financial companies and producers of machinery and other goods used by business.

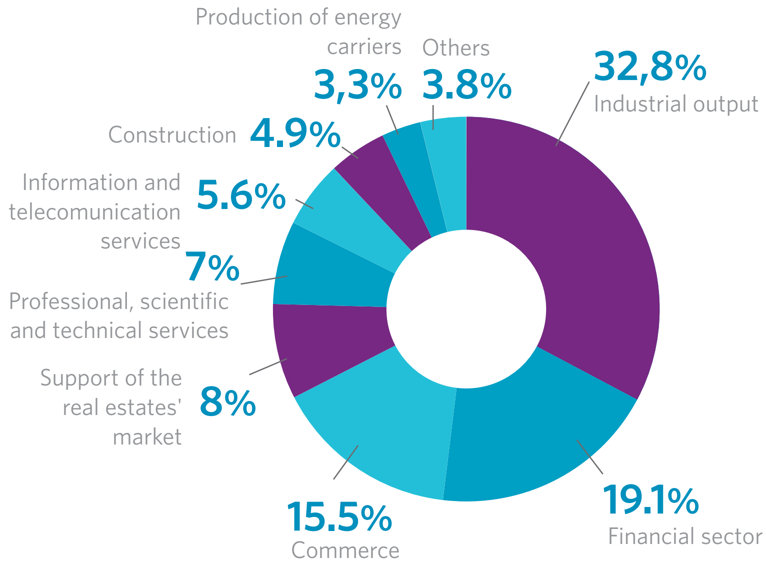
The investment boom finished as the financial crisis began – not only in Poland, but throughout Europe. The influx of foreign investments into the EU dropped by 62 per cent in 2008, while the subsequent debt crisis meant that FDI in Europe until 2015 did not even come close to over PLN 2 trillion recorded in 2007. For the sake of comparison, the foreign capital coming into European economies in 2005 accounted for 46.5 per cent of the capital invested worldwide, and just ten years later, the proportion dropped to 26 per cent. During this time, China in particular gained significance, as did other developing economies, such as Brazil and India.

In 2016 the influx of FDI to Poland accelerated again. According to PAIiIZ the value of completed investment projects raised from 800 mln euro in 2015 to 1.7 billion in 2016. 60 per cent of that amount was invested by the companies already operating in Poland. Taking this into account, in the previous year the influx of FDI to Poland exceeded PLN 50 billion. The biggest share of the new investments flowed from the USA, France and Germany. The FDI of 2016 will create 16,000 new jobs.

When analysing the inflow of foreign capital into Poland, one should take into account

CHART 4 STRUCTURE OF INDUSTRIES ACCORDING TO THE VALUE OF FDI AT THE END OF 2015

Source: NBP

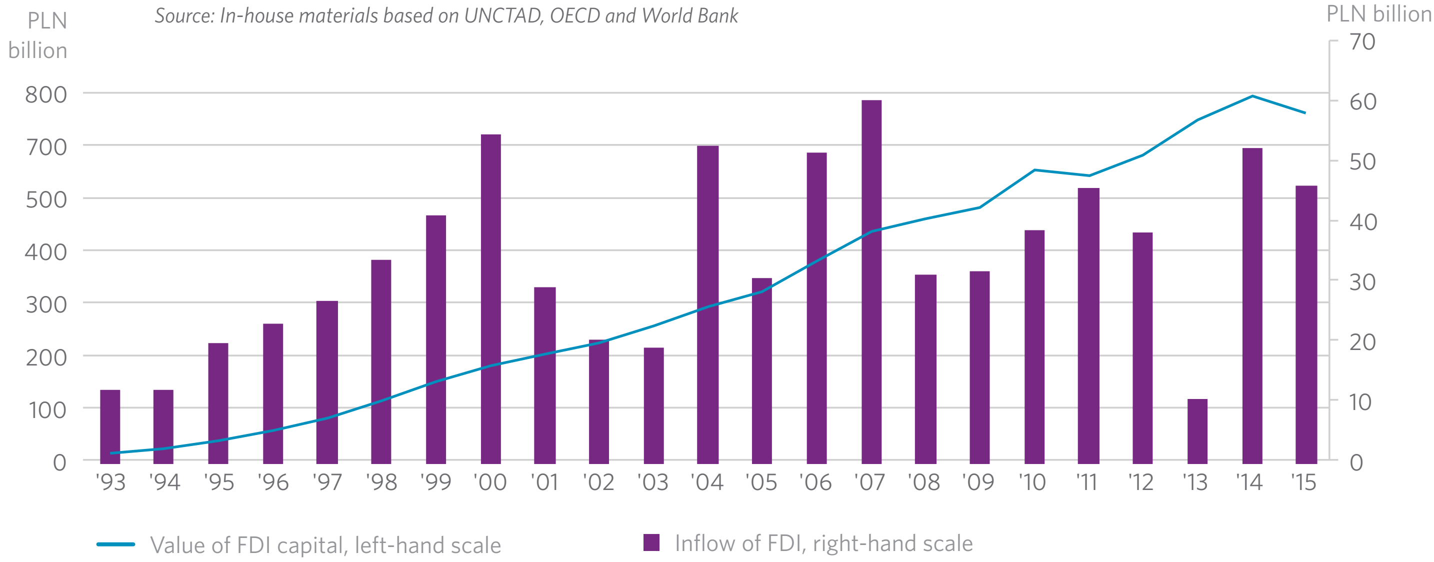


PLN 26 billion

average annual amount of FDI in Poland in the past

CHART 5 HOW DID THE INFLOW OF DIRECT INVESTMENT COME TO POLAND (CONSTANT PRICES AS OF 2010)

Source: In-house materials based on UNCTAD, OECD and World Bank



so-called transit capital, which can significantly distort statistical data on FDI. This is based on investments into special purpose vehicles which are used mainly for tax optimisation and do not actually conduct business as such in Poland. Unlike countries such as Luxembourg, Cyprus, the Netherlands or Ireland, Poland does not offer significant tax preferences to investors and for this reason has not registered a big rise in the inflow of this type of capital in the last 25 years or so (see **CHART 6**).

PLN 200 billion

amount of direct investment in Poland in 1995-2000

The biggest number of special purpose vehicles was registered just after the global financial crisis and their share in Polish FDI has increased steadily since 2004. The record year in this respect was 2011, when special purpose vehicles made up just over 5 per cent of the total FDI in Poland. Later – because of changes in domestic and EU legislation – transit capital started to gradually withdraw from Poland and in 2015 made up 0.7 per cent of all FDI.

Where do revenues from direct investment go

Foreign companies' income from direct investment can be divided into three categories:

- dividends, or the part of a foreign company's income collected by the investor,
- reinvested profits, or the part which remains in the company to stimulate its development and
- interest, or income from investment in debt instruments, such as loans and bonds (see **CHART 7**).

In 2015, investors decided to leave more money in companies (PLN 30.4 billion) than to claim in dividend payments (PLN 28.9 billion). This contradicts the commonly held opinion that foreign investors drain domestic companies of capital and that most of the profits end up in the investor's country of origin instead of remaining in Poland.

Investors' income from loans and bonds, on the other hand, have remained stable for several years – in 2015, they amounted to PLN 8.1 billion, which equals an average yield on securities of 6.9 per cent gross.

CHART 6 HOW DID THE CAPITAL IN TRANSIT FLOW THROUGH POLAND

Source: OECD

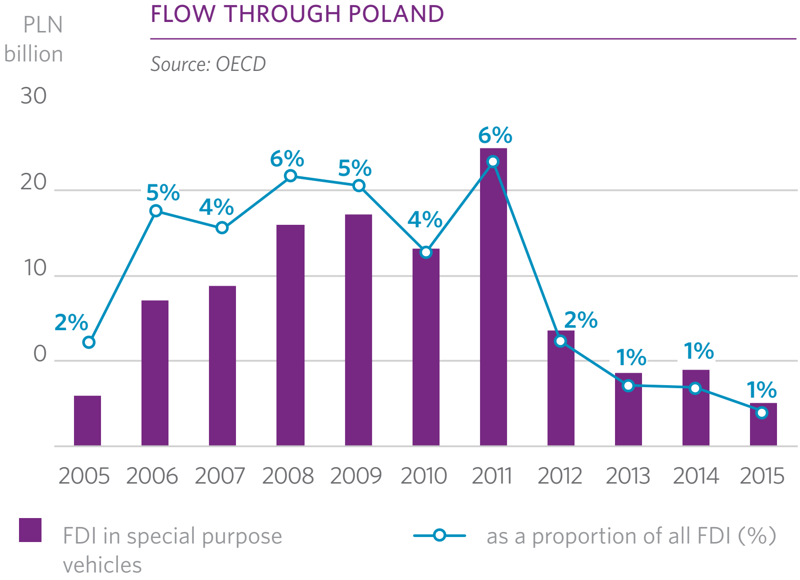
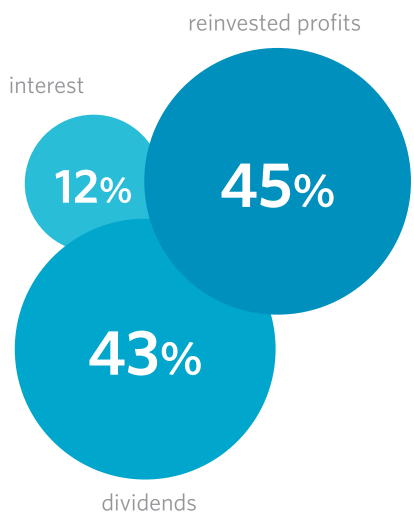


CHART 7 STRUCTURE OF REVENUES OF FOREIGN INVESTORS IN 2015

Source: NBP



To what extent have Polish companies benefitted from inflow of foreign investments

2.2 per cent

average additional increase in production of Polish companies with a majority of foreign capital

Growth of the effectiveness of the Polish economy is one of the main economic effects of FDI flows into Poland. In the past 25 years, Poland has imported modern technologies, innovative ideas to improve production processes, efficient methods of work organisation, along with foreign capital, and has also brought in new corporate cultures which are more effective, more just and protect workers better. The increase in the participation of Polish companies with foreign capital in the market has, moreover, expanded export opportunities, building demand pressure on suppliers to increase production and has as a result moved Polish companies forward in the global supply chain.

The effect has been to increase the efficiency of Polish enterprises. **Firms which passed into foreign ownership** began to grow faster – they increased added value at an annual rate of 2.2 percentage points greater than other companies[1]. In most cases, multinational corporations were buying Polish companies to develop and integrate them into their own global supply chains.

FDI inflow benefitted not only the firms taken over, but also **other businesses within the industry sector as well as contractors, customers and suppliers**[2] – the so-called intra-industry effects – as many Polish companies patterned the innovations (in product, technology, management and marketing) used by multinational corporations. Corporations spend more on R&D (see **CHART 16**) and also have a greater tendency to bear the risks of testing innovation. That is why it's often the foreign companies which are the first to introduce new products to the Polish market, and once they become popular among consumers, domestic entrepreneurs also start production.

New technologies spread among Polish companies through FDI also as a result of staff interchange. Managers of Polish enterprises buy up people working with the international competition, and then use their knowledge to increase the effectiveness of their own businesses. This process is much easier if the international manufacturers use the same human resources as the domestic entrepreneurs – for example, recruiting employees from a single region. The intra-industry effect of FDI also means increased competition. If a company taken over from abroad begins to implement modern technology, becoming more efficient, this in turn forces an increase in the productivity of domestic competitors so as not to lose their market shares.

The infra-industry effects of the inflow of foreign direct investments were statically significant in Poland[1] but weaker than in other countries of Central and Eastern Europe[3]. An increase of 1 percentage point in the share of companies with majority foreign shareholding in the production of an industry translates into an average productivity growth of domestic enterprises in the same industry of 0.04 per cent. The inflow of FDI mainly benefitted service companies and those industrial companies which allocate a significant portion of their revenue to create innovation. In their case, an increase in the share of foreign companies in the industry of 1 percentage point translated into an increase in production of up to 2-3 per cent. This is because they had the technological capability and the right personnel to adapt and imitate the innovation deployed by multinational companies.

The reasons behind the smaller benefits from the influx of foreign investment in other groups of companies in Polish industry were twofold. Some industrial businesses were so inefficient and focused on local production that they would not have gained anything by imitating the innovations of foreign competitors[1], even losing market share in favour of multinational companies if they tried to compete with the quality instead of price[3]. Some, on the other hand, produced goods for international markets and had already applied the most recent technology, even before foreign entities started to invest in the industry and as a result were high performers from the outset[4] (see **TABLE**).

TABLE EXTERNAL EFFECTS OF 1 PERCENTAGE POINT GROWTH IN THE SHARE OF FIRMS WITH FOREIGN CAPITAL

	in total	industrial firms	innovative firms	innovative industrial firms
Impact on productivity of other firms in the industry	0.04%	no effect	0.57%	1.3%
Impact on productivity of suppliers	0.20%	0.27%	0.31%	0.44%

Investor: **3M Poland**
Name of the parent-company: **3M**
Country of origin: **USA**
Entry to Poland: **1991**
Number of employees in Poland at the end of 2015: **2,900**
Revenues in 2015: **USD 510 mln**

3M Poland supports companies associated with it in a global supply chain including national contractors and suppliers. Thanks to the co-operation with 3M they gather know-how and are able to adopt contemporary business models, corporate culture and ethical standards of conducting business. This support was especially important in the 90s when the Western standards were not so common among Polish entrepreneurs.

Since 1993 3M Poland has been instrumental in developing PSP company ('Profesjonalne Systemy Przemysłowe') which eventually became a distributor of its products. It provided financial, technical and sales support. Furthermore, 3M facilitated creating management standards in the PSP – its directors together with their Polish counterparts travelled around Poland to explain the application of innovative products at the time, such as self-adhesive tapes.

Positive externalities in the supply chain can be felt by **suppliers to firms with international capital** and by their contractors. In the statistical data for Polish companies, however, only the former effect can be detected – an increase of 1 percentage point share of foreign enterprises in a given sector's output translates into an average increase in the productivity of companies in the sector supplying the parts, materials or raw materials by 0.2 per cent[1]. This happened for several reasons:

- international corporations often trained their Polish subcontractors and passed on to them some of the know-how needed to produce the goods and services they bought. Beyond this, they provided support to subcontractors in many areas of business, from providing guarantees for bank investment loans, logistics support, creating purchasing cooperatives, providing business support services (such as veterinary care for farming businesses);
- firms with foreign capital applied high-quality requirements for purchased goods. This forced their Polish suppliers to implement new technologies and innovative processes increasing the value-added manufactured goods, and thus the efficiency of the production process;
- the inflow of foreign capital opened international markets to Polish suppliers, which resulted in tenfold increases in production in sectors such as automotive, enabling the suppliers to benefit from economies of scale as larger companies have, in principle, lower unit costs;
- the increased involvement of foreign capital meant that Polish companies began to compete directly with entities from other countries. International corporations were looking for suppliers around the world, which – as in the case of intra-industry effects – increased the competitive pressure on domestic companies and forced an increase in their productivity;
- the presence of multinational corporations in the economy and the subsequently greater involvement of Polish companies in the global supply chain increased the availability of materials, parts and raw materials of high quality. As a result, domestic enterprises gained access to better quality goods, which increased the efficiency of their production.

As in the case of intra-industry effects, the impact of FDI on suppliers depended greatly on the adaptive capacity of domestic firms. Businesses which independently invested in research and development (R&D) or had better-educated staff, benefitted up to five times more from the input of international corporations than other companies. External effects were on average about twice as strong in the case of industrial companies, where different levels of global value chain (GVC) were

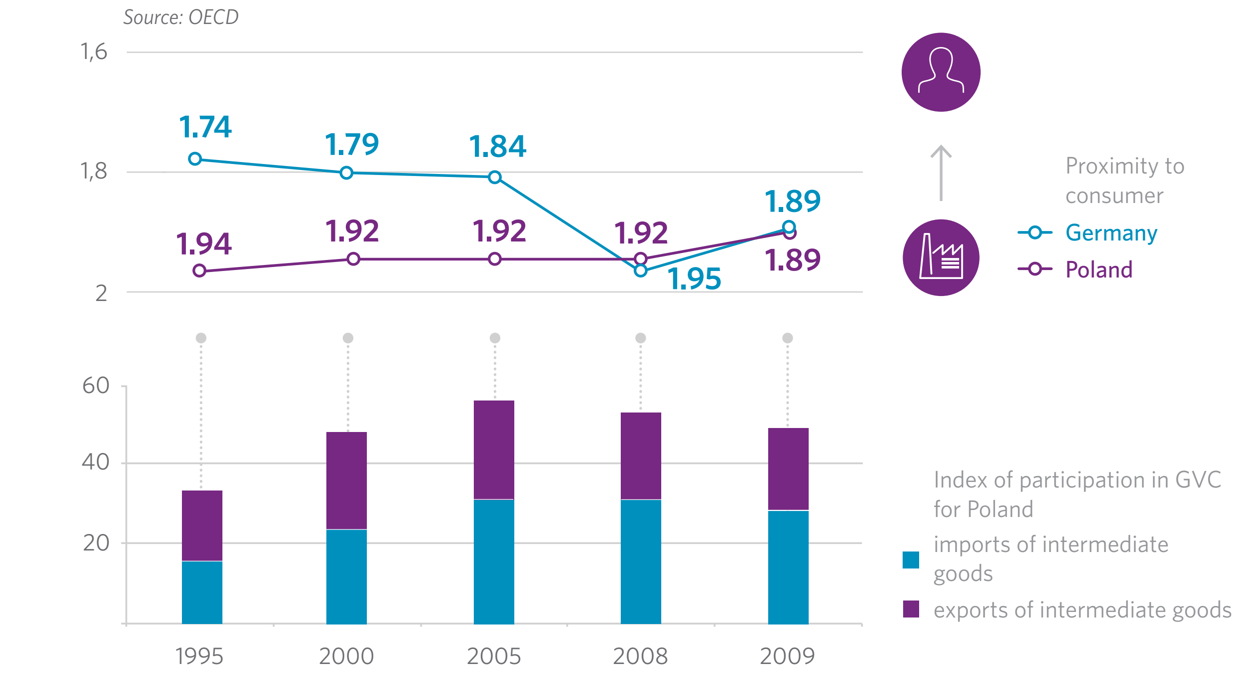
CHART 8 INDEX OF PARTICIPATION IN GVC IN 2009

Source: OECD

71.6	Luxembourg
65	Korea
62.4	Czech Republic
62.2	Slovakia
61.1	Ireland
57.6	Belgium
56.8	The Netherlands
56.6	Hungary
56.3	Finland
55.8	Austria
55.7	Sweden
52.8	Thailand
52.6	Slovenia
52.5	Switzerland
51.4	Portugal
51	Denmark
50.8	Israel
50.2	Lithuania
49.5	Latvia
49.5	Germany
48.3	Poland
47.7	Japan
46.1	China
45.9	France
43.8	Australia
42.4	The UK
41.9	Spain
41.8	Italy

CHART 9 INDICATOR OF THE PROXIMITY TO THE CONSUMER AND INDEX OF THE PARTICIPATION IN GVC FOR POLAND

Source: OECD



more strongly integrated than in services. For example, industrial companies spending 1 per cent of the value of sales on R&D benefitted from the inflow of FDI to the economy more than twice as much as other companies[1].

In 2008, Polish companies **were** higher in the global value chain than German companies

Taking all the external effects of the FDI inflow to Poland together, and taking into account the scale of the inflow, especially into such sectors as automotive, electronics or furniture we can state that **many domestic companies, over the last 25 years experienced a several-fold increase in productivity purely through the involvement of foreign firms in the Polish economy**. The effect was particularly strong in the second half of the 1990s, when most Polish companies quickly made up for the technological gap accrued under communism[5], while the structure of the inflow of foreign investment changed from being oriented to meet domestic consumer demand, to meeting the needs of production – relocating eastwards from Western to Eastern Europe[6].

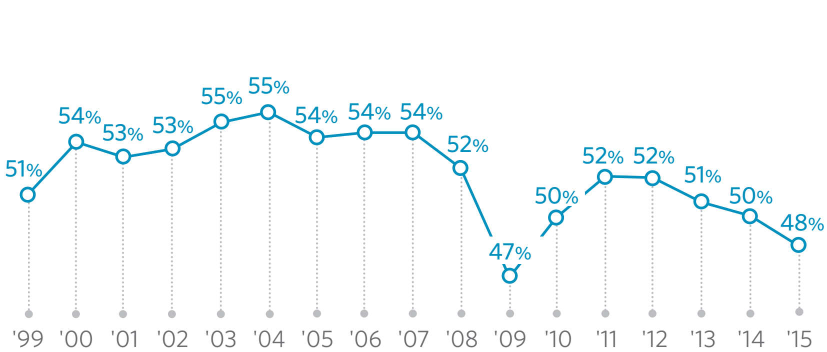
This was reflected not only in increased productivity of Polish firms but also in a significant improvement in the quality of manufactured goods. For example, in the dairy industry competition from foreign businesses forced an improvement of the quality of products – in 1995, the percentage of highest-quality milk produced for the needs of domestic firms had been about one-third lower than for foreign companies, but by 2000 it was already at a similar level in both groups[7].

The influx of multinational corporations over the past 25 years combined with the increasing opening up of the Polish economy and Polish companies – first foreign-owned and then national – in the intra-industry globalisation processes. Businesses and the economy as a whole benefitted, the latter increasing its participation in the international division of labour. As a result, foreign demand for goods manufactured in Poland grew rapidly, as did wages, investments and government revenue.

The growing importance of Poland in the global value chain can be seen in the OECD research which shows the participation rate in the GVC increasing from 32.9 points in 1995 to 48.3 points in 2009. This corresponds to Poland moving up from 47th to 32nd position – between Germany and Japan – in the ranking of countries most involved in the global network of intra-industry trade. This position was not affected even by the global financial crisis, which led to a global reduction of intra-industry trade, particularly in sectors such as automotive, consumer electronics and domestic appliances (see **CHARTS 8-9**).

CHART 10 SHARE OF INTERMEDIATE GOODS IN POLISH EXPORTS

Source: Eurostat



The period when Poland was gaining in importance on the map of global value added chains can be divided into four stages. The first stage took place around the years 1995-2000, a period of rapid inflow of direct investment, associated with the moving of factories, especially those producing labour-intensive goods, from the EU to the countries of Central and Eastern Europe. At the same time, exports of intermediate goods (parts, components, semi-finished products and raw materials) grew very quickly, especially to the European countries which had provided the investment capital. The import of such goods also increased since the acquired and newly created plants were incorporated into global supply chains. This process was initially intensified by the lack of adequate facilities among domestic suppliers expected to provide an adequate quality of goods and materials. The process of incorporating small- and medium-sized local enterprises into the GVC was just beginning.

The second stage of Poland's move forward came in the years just before and just after accession to the EU. There was a sharp increase in the inflow of investments from the old members of the EU. More and more was shipped from Poland to other countries in the region – production of semi-finished components and parts, and also finished goods sold directly by Polish factories to customers all over the world. As a result, growth in the share of intermediate goods in exports gradually began to ease off, but the import of raw materials and components kept accelerating. This process, however, ended together with the investment boom associated with Poland's accession to the EU (see **CHART 10**).

The next phase lasted until the outbreak of the financial crisis. During this period, the external effects on subcontractors of foreign firms, which came to Poland attracted by the greater security offered to their investments after EU enlargement, began to appear. The increase in imports of intermediate goods slowed; Polish factories increasingly started to sell final goods abroad, not only under foreign brands, but also under their own names – thanks to the good reputation they enjoyed among EU consumers[8].

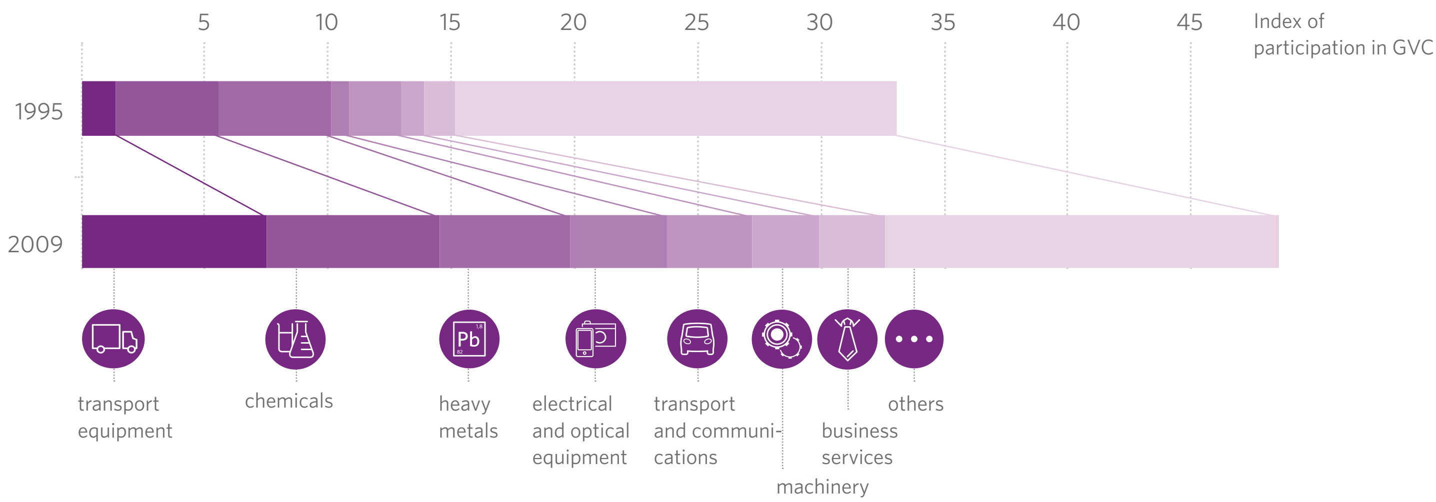
This is illustrated by the OECD index of proximity to the consumer, which shows how many stages of production goods exported from a country must pass through, to be able to be put on sale. In the case of Poland the index decreased from 1.94 points in 1995 to 1.89 points. 2009, which was all the more successful, given that the average length of the production process in the world at that time became greater. Therefore, whereas this rate was 0.2 points higher for Polish companies than for German firms in 1995, in 2005 it was only 0.08 points, and in 2008, Polish firms stood above their German competitors in the global value chain (0.03 points) (see **CHART 9**).

The final stage of the growing importance of Poland in global trade, and one which still continues, is the post-crisis period. After the collapse of trade within the GVC in 2009 and the prolonged economic slowdown in the eurozone in the subsequent years, Polish companies have begun to increase sales of final goods, mainly to countries outside the EU. They drew upon the experience acquired through the influx of FDI, especially their long-standing presence in the supply chain. As a result, the share of intermediate goods in exports fell to levels not seen since the 1990s, translating into an improvement in Poland's trade balance – the trade surplus achieved thanks to this was the highest since the transition from communism.

The inflow of FDI to Poland was not essential for the advancement in global value chains, **but without the increased involvement of international corporations, this process would have**

CHART 11 WHICH SECTORS WERE RESPONSIBLE FOR THE PROMOTION OF POLAND IN THE GVC RANKING

Source: OECD

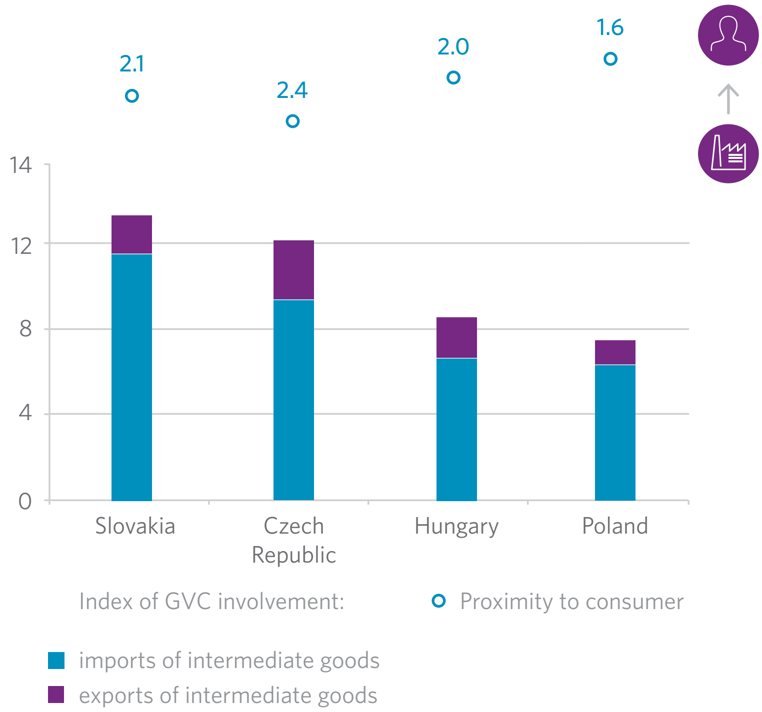


been much slower, and the scale of benefits for Polish companies much smaller. This is clearly shown by the comparison of the structure of FDI inflows and the analysis of the sectoral structure of participation rate in the GVC. In those industries in which foreign capital invested most, the GVC index recorded the highest increases in the years 1995-2009. For example, for manufacturers of electrical and optical equipment it increased by 482 per cent and in the automotive industry - about 450 per cent (see **CHART 11**).

Industries such as chemicals, metallurgy, machinery or logistics were of great importance for Poland's entry into the structure of global value chains. Importantly, the metallurgical industry maintained its position in the GVC over the past 20 years, which can be considered a success of the transformation. The only industry that has lost its importance in the global supply chain, and this despite significant foreign investment, was the financial sector – the GVC indicator for the industry fell by as much as 68 per cent between 1995 and 2009, which shows a high degree of independence of Polish banks and insurers from the global financial sector.

CHART 12 SIGNIFICANCE OF VISEGRAD COUNTRIES IN THE GLOBAL TRANSPORT INDUSTRY

Source: OECD



The biggest economic success for Poland and the Visegrad countries has been the movement of the automotive industry in the global value chain. Thanks to the large foreign investments from the early 1990s until now, the V4 countries occupy the first four places in the world GVC rankings for car manufacturers – in the first place is Slovakia, then the Czech Republic, with Hungary and Poland just behind among the leaders.

Despite the weakest position in the V4 region, Poland ranks first in terms of proximity to the consumer – Polish firms make the most complex automobile components and the number of finished vehicles included in exports is relatively greater than in Hungary or the Czech Republic. This is not only the success of foreign companies, but also of many domestic enterprises, which provide between one-third and a half of the parts and components for Polish assembly of cars and trucks (see **CHART 12**).

Poland also takes first place among the Visegrad countries in the ranking of the most diversified hosts for foreign investment in the industrial sector (the concentration ratio for Poland is 7 percentage points as against 8.9 points in Hungary, 10.2 in the Czech Republic and as many as 15.6 points in Slovakia). That's because FDI inflow to Poland was evenly distributed among various sectors, while in the others it was concentrated mainly in the automotive industry and the manufacture and processing of metals. As a result, the Polish economy is more resistant than other countries in the region to sectoral shocks in international trade, or falls in foreign demand for a certain type of goods such as cars.

Finally, firms controlled by foreign capital have a significant effect on the trade of the country in which they are located. According to one study[9], FDI inflow to Poland has translated into a more rapid growth of exports. This is because firms owned by foreign capital are focused to a greater extent than domestic companies on export activities (see **PAGE 8**). In addition, they're concentrated in the sectors of skilled labour and high capital investment. International corporations use foreign investment to transfer technology and managerial solutions, taking advantage of the economies of scale that allow them to reduce costs. Thanks to this, they improve their competitiveness on international markets and become partially independent of the business cycles of a particular economy. This stabilises the country's vulnerability to internal shocks, such as changes in fiscal policy.

What was the contribution of foreign investments to Polish economic growth

The inflow of FDI is one of the most important factors stimulating demand in the economy. If the investor intends to build a factory he will need to acquire building materials, pay local companies for its construction and buy proper machinery. Altogether, it generates increase in demand which results in growth of production and value added of the companies that conduct investment. Furthermore, thanks to the inflow of FDI the increase in demand spills over into other branches of the economy as the companies that execute investment spur demand on goods and services.

According to our estimates, the direct and indirect effects of FDI on demand in Poland amounted **on average to 2 per cent of GDP per year over the past quarter-century**, or three-quarters of the value of all FDI. The remaining 25 per cent was spent on imported goods, affecting the increased value added in other countries, especially the countries where the capital invested in Poland came from. In this respect, the most beneficial foreign investments for the Polish economy were made in the 1990s, as well as investments in service industries in 2004-2008 (see **CHART 13**).

The inflow of FDI also entails strong secondary demand effects (the so-called 'Keynesian effects'). Growth in demand translates into an increase in income which results in greater consumption and investment. These lead to a further increase in value added of Polish companies stimulating their growth.

According to our calculations, these secondary effects of FDI inflows were half the value of direct and indirect effects, amounting to an average of 1 per cent of GDP annually between 1991 and 2015. They were relatively strongest in the 1990s, when the Polish economy was much more closed than it is at present. At that time, more income from labour and capital went to the Polish people, who in turn bought more goods that were made in Poland. In the first half of the present decade, the secondary effects of FDI inflows were one-fifth lower than 20 years earlier.

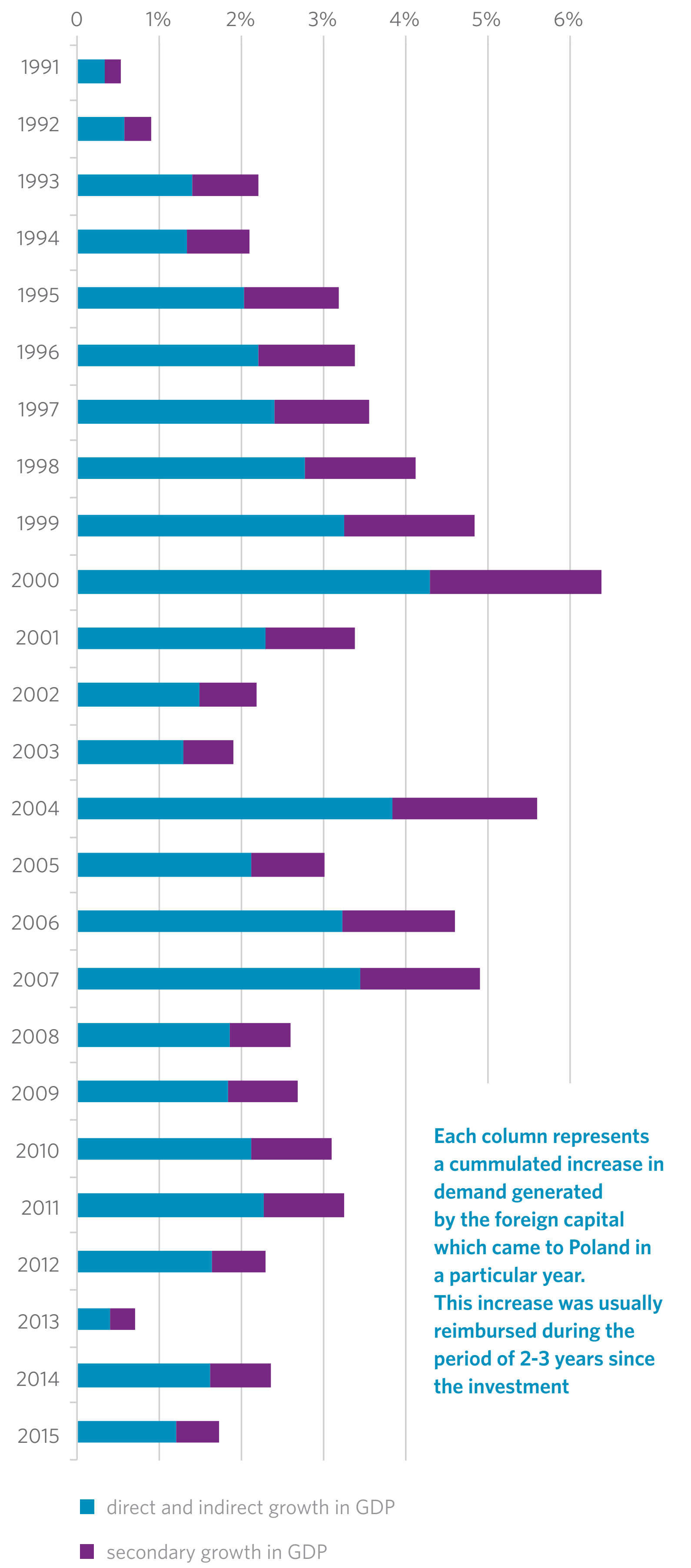
Taking all the effects of stimulation of demand due to the inflow of FDI together, the Polish economy benefitted most from the investments of the 1990s. At that time the 'demand multiplier' – the ratio of the total growth in value added to the amount of the foreign investment – averaged as much as 1:1.27. This means that every PLN 1.00 which flowed into Poland from abroad raised the value-added of Polish firms by about PLN 1.27. In subsequent years, with the increasing openness of the Polish economy, and the influx of more import-intensive investments, the investment multiplier decreased to an average of 1:1.11 at the end of the first decade of the 21st Century.

On the demand side, the effects of the inflow of FDI benefited mainly firms in the wholesale and retail trade, industrial companies and the financial sector. The share of industrial companies or the financial sector in the growth of value added as a result of FDI inflow was much lower than their share in the structure of foreign investment. This is because the capital invested in these industries was spent on buying goods and services from other sectors of the economy, and the secondary effects generated by this phenomenon pushed up demand proportionately in all sectors. As a result, industries benefitting the most from the demand effects were the ones to which direct foreign capital inflow was very modest – including those providing specialised business services, construction, education, and transport (see **CHART 14**).

The supply effects of the inflow of foreign investment have had a much more lasting impact on the economic situation of the country. The positive

CHART 13 HOW DID THE INFLOW OF FDI STIMULATE DEMAND IN POLAND

Source: In-house materials



impulse of demand expires over time; if there is no inflow of new investments, the economy returns to its former state. Similarly, the effects associated with increasing workers' productivity move the development path to a higher level. FDI operates in two ways to affect the economic potential:

- firstly, by increasing the value of capital available in the economy;
- secondly, by increasing the productivity of the factors of production by implementing productivity-enhancing innovations and beneficial external effects which was described in chapter 2.

In macroeconomic terms, capital growth means that there's an increase in the quantity and quality of fixed assets accumulated in the economy such as machines, production lines, transport or industrial infrastructure. The greater the growth is, the higher workers' productivity becomes, as they have newer and better tools to do the job. As a result, there's an improvement in the performance of firms that can quickly produce higher quality goods and services.

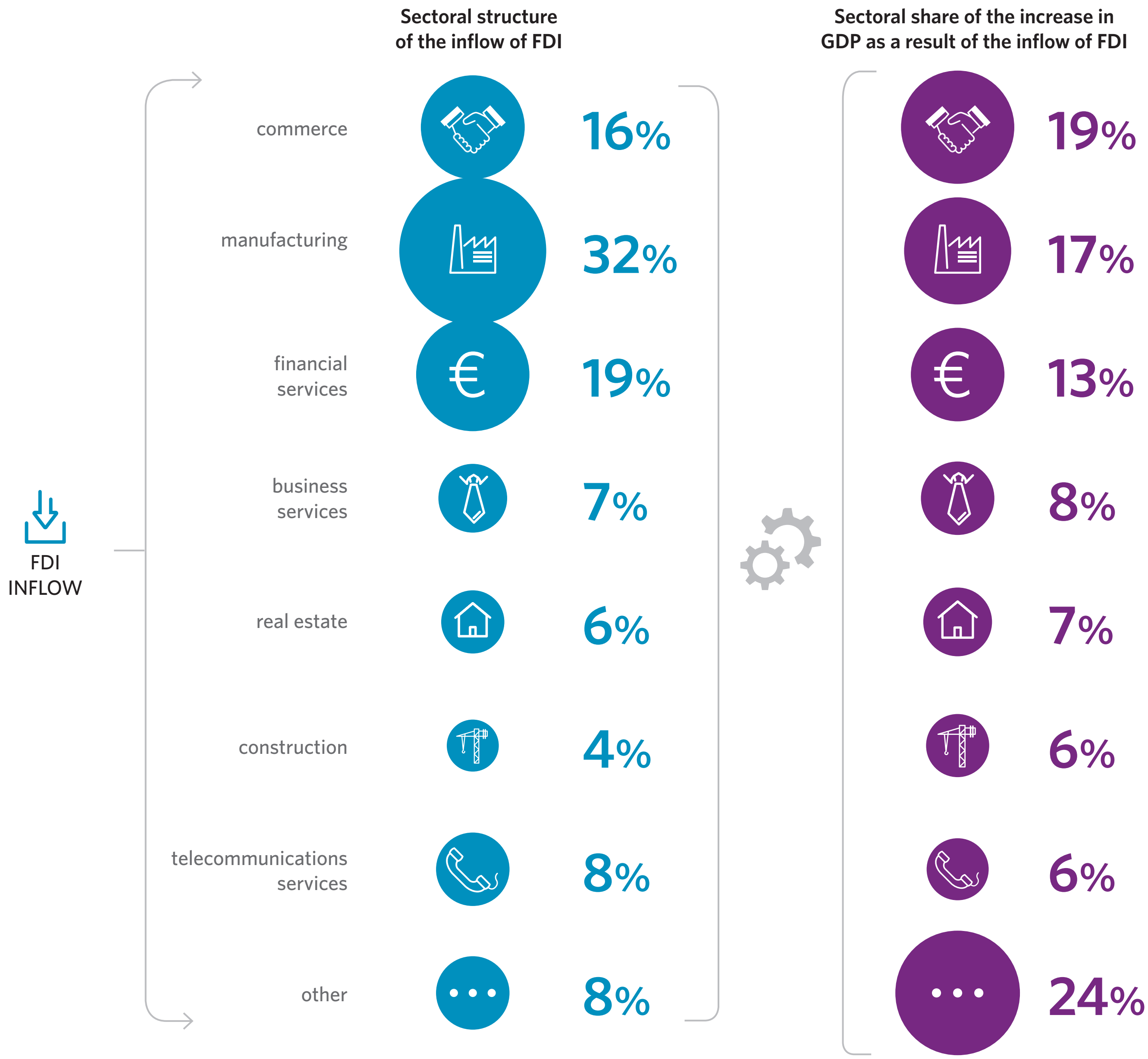
In 2014, the value of fixed assets in Poland amounted to PLN 3.2 trillion and was nearly twice the annual GDP. If we assume that all the foreign capital invested in Poland was used for the purchase and construction of fixed assets – from factories to cars – then 24 per cent of the accumulated Polish capital could be derived from FDI. This is not an exaggerated assumption, because according to GUS (Poland's central statistical office) data, the share of companies with foreign capital in the fixed assets of enterprises employing 10 or more people amounted to 34 per cent at the time. **On this basis, we conclude that the inflow of foreign capital accounted for just under half of the total increase in fixed assets in the last 25 years** (see **CHART 15**).

This does not mean that without FDI the value of fixed assets in Poland would now be about one-fifth lower. Polish companies would probably have got the capital necessary to develop from an inflow of foreign portfolio investments or indirect investments in securities. But this type of building up foreign capital is more risky. The experience of Asian countries in 1997-1998 showed that during an economic slowdown, a sudden outflow of the portfolio capital financing the accumulation of domestic capital generates a high risk of recession and financial crisis.

The inflow of foreign direct investment is often accompanied by a transfer of technology (compare: **CHAPTER 2**). When international firms enter a new market, whether through the creation of a new subsidiary or by taking over existing companies, they introduce their technologies to it, which usually are among the best in the world. And companies with foreign capital are generally more innovative than typical companies operating in an industry. According to data for 2014, international firms employ twice as many staff members in R&D as the average for the economy. They also allocate one-third more capital to internal investments in R&D projects (see **CHART 16**).

CHART 14 BRANCHES WHICH BENEFITTED MOST FROM THE INFLOW OF FDI

Source: In-house materials



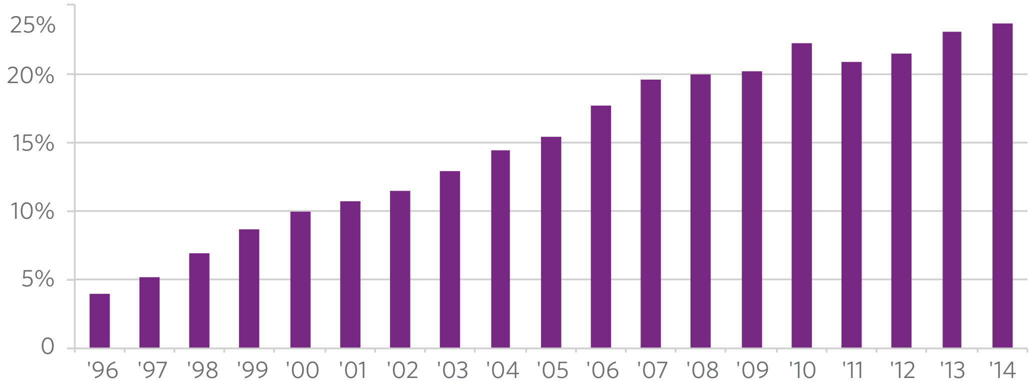
Investor: **Ericsson Sp. z o.o.**
Name of the parent-company: **Ericsson**
Country of origin: **Sweden**
Entry to Poland: **1904**
Number of employees in Poland at the end of 2015: **1,000**
Revenues in 2015: **PLN 300 mln (net)**

In 2016 Ericsson increased its footprint in Poland thanks to the takeover of the Ericpol company. As a result two thousands engineers joined Ericsson specialising in research, development and innovation(RD&I) – their work in Łódź and Katowice is focused on the development of IT products (including Ericsson Radio System), IP solutions and optimisation of cloud-based activities. Merging the companies made the Polish branch of Ericsson one of the biggest R&D centres in the world. Global expenditures of Ericsson on research and development in the last three years amounted to USD 12 billions. The company registered 39,000 patents.

Ericsson also co-operates with universities (including Warsaw University of Technology) and companies in supporting Polish and foreign firms in their entering the so-called 4.0 industrial revolution. This process includes i.a. the implementation of IT solutions for industry that are based on the network society which combines 5G technology, cloud-based solutions and the internet of things. Their successful implementation will significantly improve labour productivity in industry several times.

CHART 15 THE RATIO OF FDI TO FIXED ASSETS IN POLAND

Source: In-house materials based on OECD and GUS



0.2 per cent

average increase in productivity per employee due to the inflow of FDI

Not all developing countries find positive supply effects of the inflows of FDI. The extent to which an economy will benefit in the long term from FDI depends on the ability of domestic firms to adapt to the innovations international corporations can bring, as well as on their ability to compete with foreign businesses for their position in the global supply chains.

It's not a given that an FDI inflow always has a positive impact on the GDP of the country in which it's invested. On the contrary, if domestic firms are very weak, multinational corporations may bring about their closure and thereby the erosion of the potential of the economy[10]. The countries of Central and Eastern Europe were, however, spared this scenario. According to a study[5], between 1995 and 2005, an FDI inflow of 1 per cent of value added translated into an increase in labour productivity of 0.11 per cent. On this basis, it can be estimated that the average productivity of a worker in the Polish economy increased by 0.2 per cent due to increased capital and the adaptation of new technologies.

The positive impact of FDI on Poland's economic potential was also due to the large-scale involvement of foreign firms in the privatisation process and subsequent restructuring of large enterprises. Foreign investors helped improve the performance of the former state-owned enterprises and retained their fixed assets, thus protecting national capital against depreciation. FDI played a significant role, especially in the restructuring of industry, particularly for the more technologically advanced firms[11, 12].

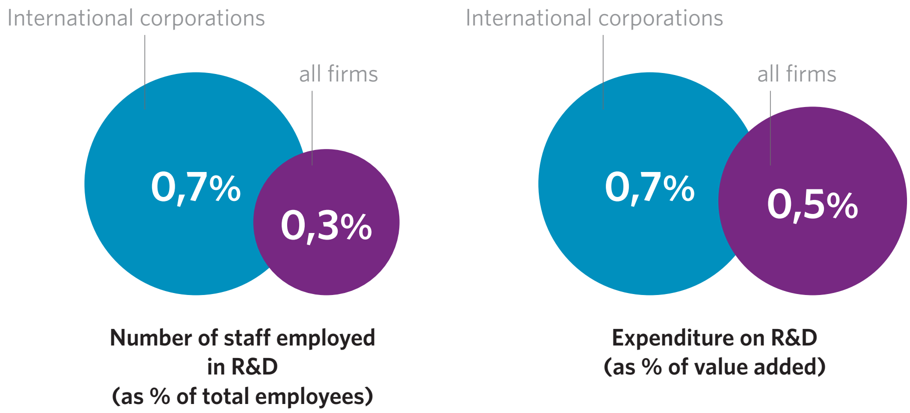
Taking together all the above factors, within the framework of our model of economic growth for Poland, we estimate that potential GDP increased by an annual average of 0.7 per cent over the years 1991-2015 thanks to the inflow of FDI. As a result, **thanks to the capital invested in Poland and the activity of international corporations, GDP in 2015 was 15.6 per cent higher** than in a scenario where the value of FDI had remained at 1991 levels.

0.7 per cent

average growth of potential of Polish economy due to inflow of FDI

CHART 16 EXPENDITURES OF INTERNATIONAL CORPORATIONS ON INNOVATION IN RELATION TO ALL FIRMS IN POLAND IN 2014

Source: OECD



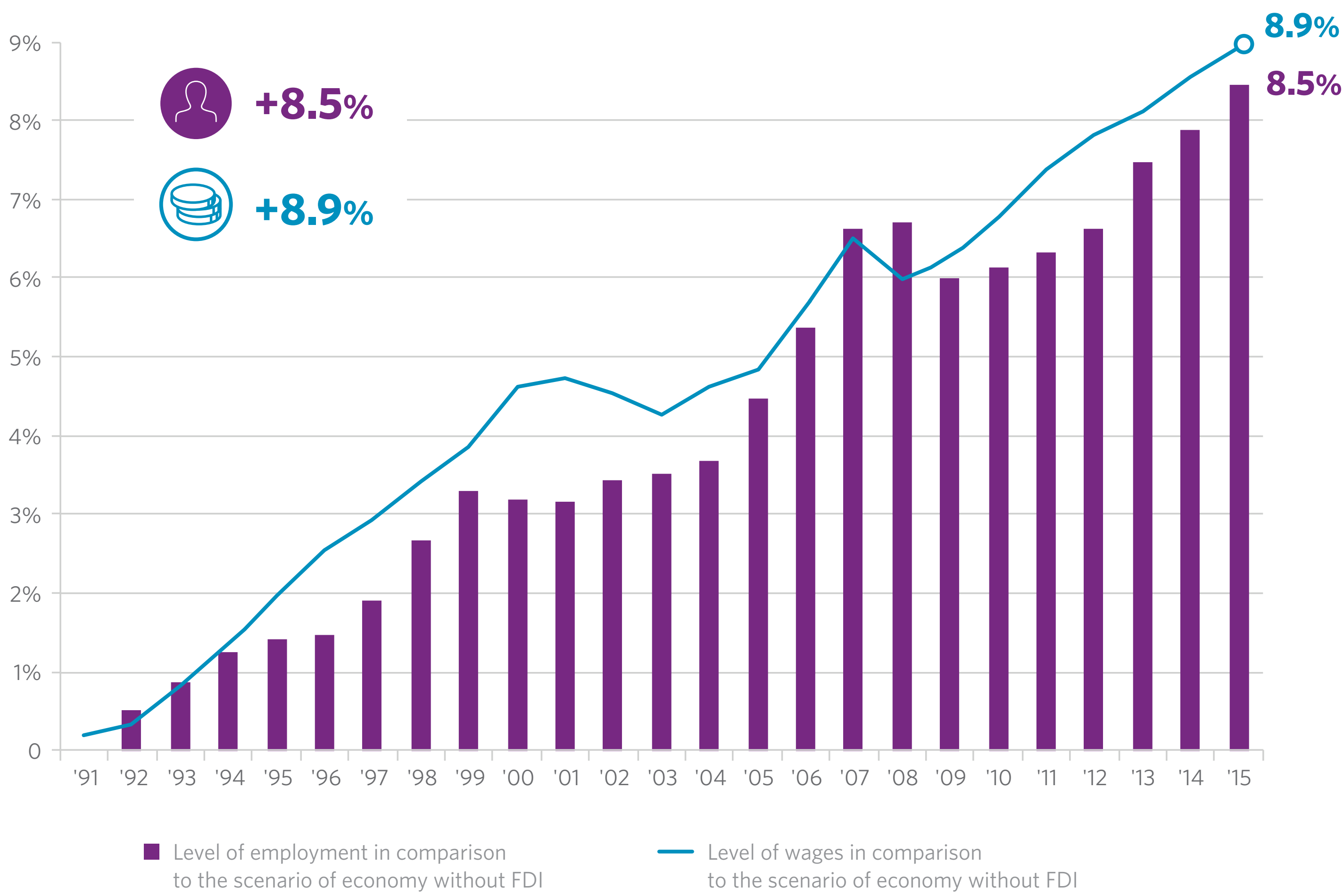
What has Polish society gained from the presence of foreign firms

Apart from the strictly economic benefits, the inflow of FDI also produces socio-economic effects. The most important positive impact is on the labour market, including wage level, and the level of employment and the impact on state revenues from indirect taxation and income tax.

The increased participation of foreign capital and the associated increase in labour productivity translates into long-term increases in wages and also indirectly increases employment. Wages increase not only in the industries which receive the capital inflow. In countries with flexible labour markets, the increased demand for labour resulting from foreign investment translates into a decrease in unemployment and, as a result, also in to an increase in wages in the economy as a whole (see **CHART 17**).

CHART 17 HOW MUCH DID POLES EARN DUE TO THE INFLOW OF FDI

Source: In-house materials



Estimating the scale of the impact of FDI on the labour market is difficult because of the simultaneous application of demand effects – a transitional increase in demand for goods raises the demand for labour and, as a result, wages – and supply effects – higher productivity of workers leads to an increase in their salaries while the accumulation of the capital in an economy increases the demand for labour – a virtuous circle.

Adopting robust assumptions[iv] about the structure of the growth of the wage fund in the economy, we can determine that **wages are now about 8.9 per cent and employment approximately 8.5 per cent** – higher than they would have been if the value of FDI remained at the 1990 level. In the initial period of the inflow of foreign capital, wages were the first to grow, with employment growth following. That's because the employment levels depend more on the supply effects of the growth in FDI, which materialise fully only several years after the investment inflow.

The inflow of FDI has a positive effect on one more dimension of the labour market – in highly developed countries, and those such as Poland which are catching up with them, FDI translates into a decline in income inequality. This is because investments generally go to those sectors where labour is relatively cheap, which in turn boosts labour demand and wages in these industries. And the increase in demand for workers reduces unemployment, leading to the growth of wages in service industries, where salaries are also low. Based on international studies of this phenomenon[13] we estimate that in 2015 **the Gini coefficient of income inequality in Poland was about 5 per cent lower because of the inflow of foreign capital** than in a scenario without FDI.

The state benefits from the presence of foreign capital in two ways – it derives tax revenues because of the demand effects generated by an inflow of FDI and it collects annual taxes on multinational corporations operating in Poland. Both of these effects are fairly easy to measure. According to our estimates based on effective tax rates, the inflow of foreign investments **raised tax revenue in the period 1991-2014 by an annual average of 2.7 per cent**. The biggest income was due to an increase in turnover, which translated into an increase in VAT revenues by an average of 7.3 per cent. An increase in revenues from corporate income tax (4.7 per cent), personal income tax (1.7 per cent) and social security contributions paid by employees and employers (1.6 per cent), followed (see **CHART 18**).

Based on the available data, we estimate that tax revenues from the activities of international corporations in Poland have been falling gradually since the start of the financial crisis. In 2008, they amounted to PLN 13 billion, which was 38 per cent of all direct taxes paid by companies, this dropped to only PLN 9 billion (31 per cent) in 2013. This is a result, on the one hand, of a decline in profitability of multinationals in the wake of the global crisis,

CHART 18 ADDITIONAL STATE INCOME FROM INFLOW OF FDI

Source: In-house materials

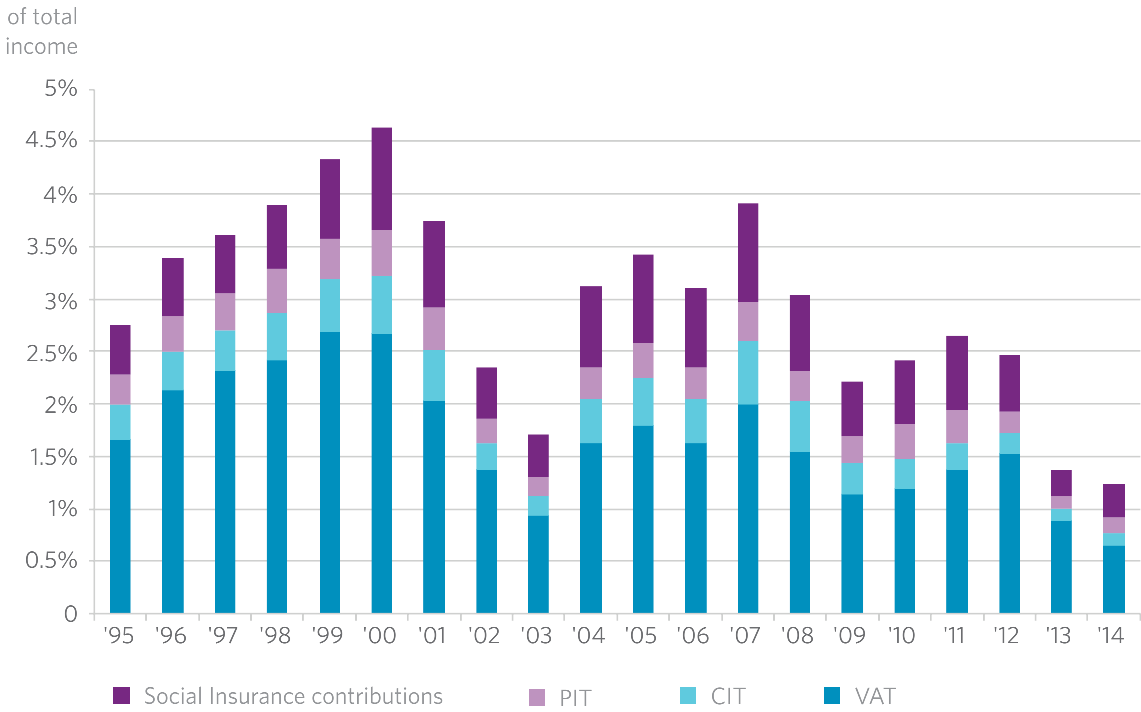
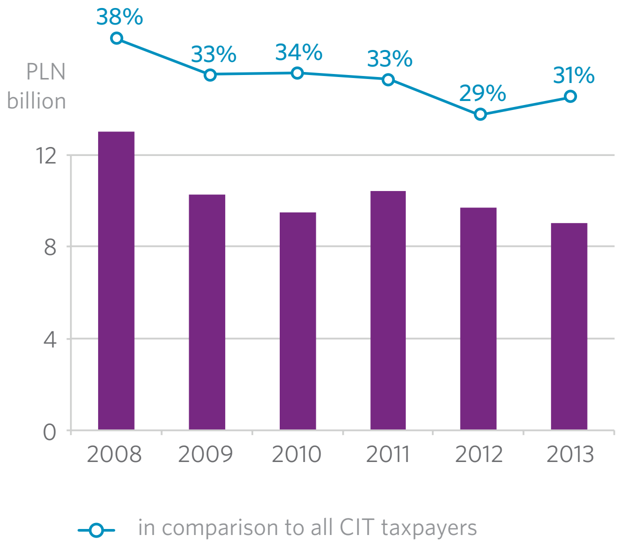


CHART 19 INCOME TAX PAID BY INTERNATIONAL CORPORATIONS IN POLAND

Source: In-house materials



and on the other, of a reduction in the effective rates of corporate tax paid by firms operating in Poland (see **CHART 19**).

It's more difficult, however, to measure an increase in the tax base, which corresponds to higher national budget revenues associated with greater economic potential of Poland. It can't be assumed that the increase in the tax base is equal to the raise of value added because, as we pointed out earlier, an increase in the share of foreign capital leads to a greater openness of the economy, and thus to a higher ratio of exports to GDP. Such a change in the structure of value added results in a partial reduction of potential tax revenue, since the sale of goods abroad is not subjected to VAT. Based on the proportions of the structure of revenues deriving from export sales of domestic firms with foreign capital, it can be estimated as a rough approximation, that **there's been a 10-12 per cent increase in the tax base in the long term thanks to the inflow of FDI.**

Besides measurable socio-economic effects, FDI has also brought benefits which are difficult to measure, but often even more important for social welfare. Multinational corporations have invested more in human capital than domestic firms. In addition to spending on R&D, they invest directly in the workforce, during and even before their employment in the company. Larger businesses, especially industrial ones, cooperate with Polish schools and universities, helping to create educational pathways, providing school pupils and university students with practical knowledge, and offering them internships.

People working in multinational corporations have also had an opportunity to learn their business from foreign supervisors and staff, as well as gaining experience through postings in different countries. In the initial stage, the proportion of foreigners among the board members was very high, and only with time, when the Poles gained experience, did it fall to its current level – in most firms Poles comprise at least two-thirds of the board. Moreover, after working in multinational corporations, Poles often chose to set up their own businesses making use of the experience gained.

Beyond this, international firms brought a new corporate culture with them and allowed the transfer of new solutions to improve the relationship between the employee and the employer or between a business and its customers. International firms tend to have flatter hierarchies and a more informal tone of internal communication, placing stress on teamwork. One popular trend that reached Poland along with foreign capital, was the development of corporate

Investor: **Steico Sp. z o.o.**
Name of the parent-company: **STEICO SE**
Country of origin: **Germany**
Entry to Poland: **2005**
Number of employees in Poland at the end of 2015: **1,055**
Revenue in 2015: **PLN 531 mln**

STEICO group is the biggest European supplier of insulating materials made of wood fibre and wood construction elements. The company hires over one thousand employees in Poland in its factories in Czarnków and Czarna Woda. As Steico is dynamically developing its production in Poland, it has decided to train their employees-to-be in a brand new and so far unregistered in Poland profession of a wood processing machine mechanic-operator.

The syllabus was developed in 2015 on the basis of the German 'Holzmechaniker' profession by the Polish-German Chamber of Industry and Commerce together with schools from Czarnków and Czarna Woda. The training consists of a practical section organised in a factory where pupils have access to the most advanced technologies and a theoretical one held at the local high school. In June 2016 the new profession was successfully registered with the Polish Ministry of Education and at the same time the first two classes totalling 35 students were created. One of these classes was created at a school in Czarna Woda the construction of which was co-financed by Steico.

social responsibility (CSR). In this framework, the companies increasingly cared for the well-being of customers and the country, spending money on things such as social promotional campaigns, charitable activities, reducing the harmful impact of their actions on the environment, or engaging in patronage of the arts and culture.

Transfer of the foreign corporate culture was followed by the growing standardisation of processes and products. International companies brought to Poland objective tools to assess quality of goods, services and employees. Because of them, approach towards labelling products with international quality standards such as ISO and sectoral certificates, spread in Poland even prior to its joining the EU. Foreign companies also initiated standardising description of products to enable the customers comparing different products. International corporations were the first to standardise the evaluation of employees' quality and their remuneration and implemented – tools such as KPIs, manager contracts or payments in options and stocks.

Investor: **Carrefour Poland**
Name of the parent-company: **Carrefour**
Country of origin: **France**
Entry to Poland: **1997**
Number of employees in Poland at the end of 2015: **16,000**
Sales including VAT in 2015: **PLN 8.9 billion**

Carrefour group conducts various activities in the area of corporate social responsibility (CSR). They include financial support, proper retail policy as well as direct engagement of Carrefour's employees. All the measures are based on three pillars: combating food waste, supporting the development of the company's partners and preservation of biodiversity.

Carrefour Poland cooperates with food banks by donating groceries. Carrefour's Foundation also provided food banks with financial support amounting to 280,000 euro which was spent on 16 refrigeration trucks. Furthermore, Carrefour is active in local and national collections of groceries as well as in the promotion of healthy lifestyles by offering healthy, diet products and undertaking educational initiatives such as "ABC of Healthy Nutrition".

Carrefour actively promotes biodiversity by equipping roofs of its markets with so-called bee hotels to accommodate solitary bees that support sustainable development of urban ecosystems.

Investor: **RICS in Poland**
Name of the parent-company: **RICS International Ltd**
Country of origin: **Great Britain**
Entry to Poland: **1996**
Number of members in Poland: **320**
Revenue: **non-profit Institution**

The Royal Institution of Chartered Surveyors founded in London in 1868 accredits professionals within the real estate and construction sector globally. RICS has 120,000 accredited members in 140 countries.

RICS has been in Poland since 1996, promoting unified standards for measuring and valuing real estate, advocating arbitration and mediation as an alternative way of settling disputes, and popularising the use of BIM. RICS also develops and implements ethical standards for the sector.

In an economy based on international investment, professional standards are crucial. Clients demand certainty and seek professionals who work to the highest standards. RICS, with its 320 members in Poland, promotes continuous education, best practice, self-regulation and global standards.

RICS is one of British chartered institutions raising professional standards in Poland. Many thousands of Polish professionals benefit from membership of such bodies. And so employers – Polish and foreign firms find it so much easier to hire staff who can offer the highest standards, contributing to Poland's development.

Bibliography

[1] Marcin Kolasa, „How does FDI inflow affect productivity of domestic firms? The role of horizontal and vertical spillovers, absorptive capacity and competition," NBP Working Paper, no. 42, 2007.

[2] Nuno Crespo and Maria Paula Fontoura, „Determinant Factors of FDI Spillovers – What Do We Really Know?," World Development, vol. 35, no. 3, pp. 410-425, 2007.

[3] Joze P. Damijan, MatijaRojec, Boris Majcen, and Mark Knell, „Impact of firm heterogeneity on direct and spillover effects of FDI: Micro-evidence from ten transition countries," Journal of Comparative Economics, vol. 41, pp. 895-922, 2013.

[4] Marcella Nicolini and Laura Resmini, „FDI spillovers in new EU member states," Economics of Transition, vol. 18, no. 3, pp. 487-511, 2010.

[5] Martin Bijsterbosch and Marcin Kolasa, „FDI and productivity convergence in Central and Eastern Europe: an industry-level investigation," Review of World Economics, vol. 145, no. 4, pp. 689-712, 2010.

[6] Bartłomiej Kamiński and Beata K. Smarzyńska, „Integration into Global Production and Distribution Networks through FDI: The Case of Poland," Post-Communist Economies, vol. 13, no. 3, pp. 265-288, 2001.

[7] Liesbeth Dries and Johan Swinnen, „Foreign Direct Investment, Vertical Integration, and Local Suppliers: Evidence form the Polish Dairy Sector," World Development, vol. 32, no. 9, pp. 1525-1544, 2004.

[8] Bolesław Domański and Krzysztof Gwosdz [sp.?], „Toward a More Embedded Production System? Automotive Supply Networks and Localized Capabilities in Poland," Growth and Change, vol. 40, no. 3, pp. 452-482, 2009.

[9] Ali Acaravaci and Ilhan Ozturk, „Foreign Direct Investment, Export and Economic Growth: Empirical Evidence from New EU Countries," Romanian Journal of Economic Forecasting, vol. 2, pp. 52-67, 2012.

[10] Joze Mencinger, „Does Foreign Direct Investment Always Enhance Economic Growth?," KYKLOS, vol. 56, no. 4, pp. 491-508, 2003.

[11] Stanisław Umiński, „Foreign capital in the privatization process of Poland," Transnational Corporations, vol. 10, no. 3, pp. 77-94, 2001.

[12] Bolesław Domański, „Industrial Change and Foreign Direct Investment in the Postsocialist Economy. The Case of Poland," European Urban and Regional Studies, vol. 10, no. 2, pp. 99-118, 2002.

[13] Paolo Figini and Holger Görg, „Does Foreign Direct Investment Affect Wage Inequality? AnEmpiricalInvestigation," IZADiscussion Paper, no. 2336, 2006.

[14] Koen D. Becker and Sebastien Miroudot, „Mapping Global Value Chains," OECD Trade Policy Papers, no. 159, 2013.

[15] Teresa Kamińska and Elżbieta Babula, „The Hicksian effects and FDI after Poland's accession to the European Union," Journal of International Studies, vol. 7, no. 3, pp. 20-31, 2014.

[16] Simona Gentile-Lüdecke and Giroud Axèle, „Knowledge Transfer from TNCs and Upgrading of Domestic Firms: The Polish Automotive Sector," World Development, vol. 40, no. 4, pp. 796-807, 2012.

[17] Jordan I. Siegel, Amir N. Licht, and Shalom H. Schwartz, „Egalitarianism, Cultural Distance, and Foreign Direct Investment: A New Approach," Organization Science, vol. 24, no. 4, pp. 1174 – 1194, 2012.

[18] Sandra L. Reiter and H. Kevin Steensma, „Human Development and Foreign Direct Investment in

Developing Countries: The Influence of FDI Policy and Corruption," World Development, vol. 38, no. 12, pp. 1678-1691, 2010.

[19] Maura Sheenan, „Exploring the Link between Management Development and Perceived Performance in Multinational Corporations (MNCs): An Analysis of Polish and UK Subsidiaries," Zarządzanie Zasobami Ludzkimi, vol. 84, no. 1, pp. 117-134, 2012.

[20] Jozsef Poor et al., „HR Management at Subsidiaries of Multinational Companies in CEE in Light of Two Surveys of Empirical Research in 2008 and 2013," Acta Polytechnica Hungarica, vol. 12, no. 3, pp. 229--249, 2015.

Endnotes:

[i] If not stated differently all the data on FDI are showed as net value and without investments in the Polish Special Purpose Entities (SPE). They are used in accordance with the BDM4 inward principle method.

[ii] We applied the following division of companies: Polish firms are all those registered on the Polish territory, state firms are all those with the majority shares of the Polish capital and foreign firms are those with the majority shares of the foreign capital from abroad. International corporations are companies which operate on several markets: directly, indirectly by their subsidiary, by the entities that belongs to the network or by firms where they have controlling interestthe .

[iii] Depicting values in the constant prices enables for easier comparison of benefits from investment in various periods of time. E. g. PLN 2 billion invested in Poland in the 90s. is more than the same amount of money invested nowadays. This correction is particularly important when we analyse data from the economic transformation due to the high inflation during that period. This is why in several paragraphs of this report we use a benchmark of constant prices from 2010 which means that value of investments or benefits from them are presented as if they occurred in 2010.

[iv] (1) increased demand for goods and services, which is the result of the inflow of FDI reflected only in the growth of wages; (2) increase of employment was the addition to the difference between a growth of the potential remuneration fund and a actual increase of salaries.

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