

# Foreign Direct Investments in the Automotive Industry in Poland

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The automotive industry is one of the branches with the highest degree of internationalization of production. The beginnings of the investment activities of automobile concerns, including Western Europe, in the new Member States date back to the early 1960s. The inflow of foreign direct investment to the automotive sector was widespread in the 1990s. The transition to a market economy was accompanied by growing demand for foreign capital with the change in ownership of industrial enterprises. The main form of inflow of FDI to Poland to the automotive sector, since the beginnings of the 90s was the takeover of existing industrial plants by foreign investors for their restructuring and joint ventures.

**Keywords:** Foreign Direct Investment, automotive industry, restructuring.

The automotive industry is one of the branches with the highest level of internationalization of production. The origins of the investment activity of automotive companies coming from Western Europe, in the new EU-Member States begin back in the early 1960s. The inflow of foreign direct investments to the automotive sector was widespread in the 1990s. The transition to a market economy was accompanied by a growing demand for foreign capital connected with the change in ownership of industrial enterprises. The main forms of inflow of FDIs to Poland to the automotive sector, since the beginning of the 90s, have been the takeovers of existing industrial plants by foreign investors for their restructuring (e.g. Jelczanskie Zakłady Samochodowe) and joint venture investments.

Factors conducive to the flow of investments of these two forms were different. Increasing competition among car manufacturers in the 1980s became an extremely important impulse for reorganizing the production process of motor vehicles and seeking new and better locations. The main automotive centre in Poland was established in the south-western part of the country, especially in the Silesian and Lower Silesian voivodships. German companies such as Volkswagen, Bosch, Leoni Kabel, Grossmann, Lisa Draexlmaier and

Metzler Automotive Profile Systems Europe invested in these regions. As the directors of these companies point out, the great advantage of these regions is the large number of sub-suppliers. The choice of Poland as a location for the relocation of German companies investments was influenced by many factors, among others: a long-standing tradition of car production (FSO), skilled labour force, low labour costs.

Inflows of FDIs into the automotive sector favoured changes in vehicle manufacturing technology in the 1980s and 1990s. They influenced the progressive specialization of suppliers of parts and accessories for the automotive industry, and they were referred to as modularization. The essence of these changes was the fact that suppliers delivered to the car assembly plant the so-called modular systems that were ready for assembly. As a result of technological progress, the current economy of scale is not so much related to the high volume production of finished goods, but to the possibility of producing on the same platform different models of the same brand.

The process of fragmentation of production (relocation) in the automotive industry is inseparably linked to two phenomena: the increase of import intensity of export and related decrease

of added value of manufactured products. The main source of added value of the product moves systematically down the chain, i.e. towards parts and accessories. In recent years, more and more attention has been paid to the extension of the production of parts and components for the automotive industry in Poland. One form of such activity is the creation of automotive clusters, focusing on a relatively small area, not of companies involved in the production of parts and components, but also of research centres responsible for innovation. An example of this is the Greater Poland Automotive Cluster, which has been operating since February 2007 in connection with Nikel Technology Park Poznań (cluster coordinator), Greater Poland Agency for Enterprise Development, Poznan University of Technology, University of Economics. In recent years, Poland has become the location of many smaller investments in parts manufacturing and motor vehicle manufacturing plants. In 2009 several investments were finished that had been started before the crisis, for example: The Nidec Motors & Actuators plant in Niepołomice (production of sunroofs and sunroof drives), Hoerbiger Automotive factory in Boleslawiec (automatic roof folding and decomposing systems) and the Keiper-Polska complex in Skarbimierz (production of car frames and seats). In turn, the decision to stop investment activity in Poland in 2009 was taken by Autoliv (security systems manufacturing - Oleśnica), ISE Industries Poland (production of spare parts - Chocianów).

The Polish automotive industry is strongly connected to the economies of the euro area countries - primarily through exports and direct foreign investments. Poland is constantly competing in the automotive industry with countries such as the Czech Republic, Slovakia, Hungary and Romania. For a few years, cars have been number one on the list of Polish exports. Volkswagen in 1993 took over the nearly-bankrupt Tarpan factory in Poznań, where for a number of years, cars were mainly assembled, but VW pursue a more ambitious business. Currently the site of the former Tarpan plant has been replaced by a modern factory, which is the only one where German manufacturer produces Caddy van. Moreover, production in Gliwice of the older variant of Astra Classic was mainly for export, and later the production of the latest variant of the Zafira minivan has started also there. This vehicle is simultaneously assembled in German Bochum. It is a challenge to prove that Zafira from Gliwice

will be better and cheaper in production than the one from Germany. For Poland, this rivalry should also mean a further increase in the value of exports, after the newly expanded Gliwice factory will be able to produce up to 180 thousand cars every year. Thanks to the new investment, employment in Gliwice has increased by 1,000 people, to the total of over 3,000 employees. Modern diesel engines have become a Polish specialty for passenger cars. Currently, this is the trendiest drive in the West EU, in some countries vehicles with these engines have a 70% share of new car sales. More than 1 million diesels are exported each year from Poland and the production capacity exceeds 1.5 million units. One of the main centres of bus production in Poland is the German MAN group. Solaris Bus & Coach is competing with them. MAN-STAR Trucks Sp. z o.o. decided to launch the construction of a factory in Niepołomice, in which it will be possible to manufacture 15 thousand trucks annually. This will be the first new truck factory to be established in the former Eastern Block since the fall of the Berlin Wall. This is also a preview of a serious increase in exports of trucks from Poland. Jointly with car manufacturers coming to Poland, manufacturers of car parts and subassemblies come to Poland too. By the late 1990s, the import of car parts to Poland was larger than their exports. Now these proportions turned around. There are many companies around the world that produce in Poland for foreign buyers in the automotive industry.

The influx of car parts manufacturers, subcomponents and car accessories has boosted exports. Already in 2004 the export of car parts from Poland was worth over \$ 3 billion, ten times more than in 1997. Automotive companies say they are investing in Poland due to skilled workers and stabilized law after entering the European Union. It certainly counts that wages in the Polish automotive industry are lower than in Western Europe, but this is a passing advantage. In Germany, car companies today give workers the option of either making a salary deduction or laying off thousands of workers. This can reduce our attractiveness for those automotive marketers who appreciate low wages. The future of the automotive industry in Poland is shattered by the crash of our automotive market. In the 1990s we attracted big investments, because the sales of new cars in Poland grew very fast. However, since the beginning of XX century, our automotive market has plunged into a crisis, and in recent years has

been completely disrupted by constantly changing tax laws and the influx of used cars from the European Union. However, the fact that about 90% of cars from Polish factories go to foreign customers also means that Polish automotive industry is very dependent on fluctuations outside our borders. Maintaining the development of the Polish automotive industry requires a change in these proportions, and this will not be possible without increasing the sales of new cars in Poland. To reduce production costs, western car producers will probably consider relocating their factories from the EU to Russia, Ukraine or Turkey. However, this seems unlikely for several reasons. Firstly, although in these countries labour costs are relatively low, the risk of running a productive business in a situation of economic crisis and political instability is much higher. Secondly, in

time, although they were undoubtedly inhibited. The negative balance of foreign direct investment in the automotive sector was primarily due to the balance sheet losses suffered by foreign automotive companies operating in Poland. As a result, reinvested net profits, one of the components of capital inflows into Poland, was negative at € -212.7 million. The scale of turnover in the automotive industry in 2008 is shown by a decrease in the cumulative value of direct investments from € 6.5 billion in 2007 to € 4.8 billion in 2008. The year 2009 was in terms of investment value considerably better for the automotive industry. Capital inflows amounted to € 431.7 million, contributed by 129.9 million contributed capital and up to 473.2 million reinvested foreign profits of companies already present in our country.

Table 1. FDI inflow to Poland in the automotive industry (in EUR million).

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Automotive Industry	262.7	303.5	61.6	411.1	684.2	757.9	325.1	466.6	680.8	-346.7	431.7

Source: Own study based on NBP data.

favour of Poland, there is a good communication link with Germany and an extensive network of suppliers of components for the automotive industry. In addition to investments that improve the current profitability of automobile companies, the long-term priorities of investment activities in this industry are undoubtedly changing. The need for adopting measures in the form of introducing new technologies and products will increase the demand for R & D centres.

Among the foreign investments that were transferred into Poland after 1989, the investments of automotive manufacturers played an important role. The influx of foreign capital in the automotive industry was until 2008 relatively stable and was in the range of € 300-700 million a year. In the top years of 2003 and 2004, when Volkswagen and Fiat started investing on the Polish market, foreign capital inflows amounted to € 684.2 and € 757.9 million respectively. Moreover, the years 2005-2007 belonged to the successful ones in terms of total investment. In 2006 Polish automotive industry was invested € 466.6 million, whereas in 2007 this sum increased to € 680.8 million. The positive trend collapsed sharply in 2008 when the inflow of foreign investment in the automotive industry was negative and amounted to € -346.7 million. This does not mean that no new investments were made at that

Table 2. FDI inflow in selected manufacturing sectors (In EUR million).

Sector	2008	2009
Chemical	377.7	223.7
Wood, publishing and printing	-122.4	485.3
Rubber and plastics	211.0	159.7
Metal	370.1	-108.8
Automotive	-346.7	431.7
Food and tobacco	303.8	1,711.3
Sum up	1,570.0	3,359.5

Source: KPMG in Poland based on NBP data.

Total investment reduced the negative balance of credit turnover of € -171.4 million. In total, the value of foreign investment in the automotive industry in Poland amounted to the end of 2009 - € 5.8 billion, 22.1% more than a year earlier. In the whole manufacturing industry, the value of investments increased by 13.6% at the time and amounted to € 40.9 billion. It is worth noting that the total value of foreign investment in automotive sector was still lower than in the pre-crisis in 2007. Other manufacturing industries in Poland in the initial stage of the economic crisis were not affected as much as the automotive sector. Although the cumulative value of foreign investment in 2008 declined in almost all sectors of

industry, the negative impact of foreign capital inflows was recorded only in the woodworking, publishing and printing industries, the manufacture of RTV and telecommunication equipment and other transport equipment. In turn, good results in 2009 have made motorization again among the leading industries in terms of capital inflows and cumulative value of foreign direct investment. Overall, at the end of 2009 automotive investment accounted for 14.2% of the total value of foreign direct investment in manufacturing and 4.5% of the total economy.

Table 3. Value of FDI in selected sectors of the manufacturing industry (In EUR million).

Sector	2008	2009	Change 2008/2009
Chemical	3,686.8	3,951.8	7.2%
Wood, publishing and printing	3,571.7	4,059.6	13.7%
Rubber and plastics	2,678.1	2,864.2	6.9%
Metal	5,253.4	5,220.7	-0.6%
Automotive	4,766.2	5,817.8	22.1%
Food and tobacco	5,491.6	7,655.7	39.4%
Sum up	36,016.0	40,905.8	13.6%

Source: KPMG in Poland based on NBP data.

The Polish automotive industry is almost entirely export-oriented, its condition is very strongly dependent on the economic situation in foreign markets, especially in Western Europe. In 2006 and 2007, the value of sales of the automotive industry in Poland increased dynamically. Growth in constant prices was 22.2%, and a year later - 13.8%. The global crisis, however, slowed down the dynamics of sales of Polish factories. Particularly heavy were the last months of 2008, when sold output began to plummet as compared to previous years, moving back level of 2005. However, on a yearly scale, we managed to achieve a 7.7% increase. In 2009, extremely difficult for the world automotive industry, the situation deteriorated. Throughout the first half of the year, the monthly sales of the

automotive industry remained at a much lower level than a year before, and the end of the year brought some improvement. In total, in 2009 the value of sold production of the automotive industry in Poland amounted to PLN 83.2 billion, i.e. remaining nominal at similar level until 2008. However, this value, calculated in constant prices, decreased by 11.8% compared to 2008.

2010 is a time of rebound in the automotive industry after years of crisis. The value of sold production exceeded PLN 91 billion. This is a level that was not even reached before the economic slowdown. The dynamics of sold production expressed in fixed prices amounted to 15.9%. Over the previous six years, growth was only noted in 2006.

In recent years, Poland has been the largest exporter of automotive products among Central and Eastern European countries, but its dominance over its main competitor - the Czech Republic - has decreased significantly in the last two years.

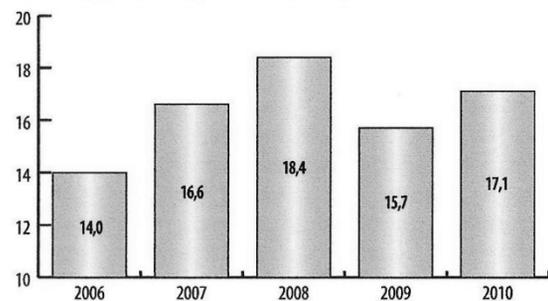


Fig. 1. Export of the Polish automotive industry (in EUR billion).

Source: AutomotiveSuppliers.com/Eurostat.

In 2010 the automotive industry exported every month the production of (on average) nearly one and a half billion Euros. Throughout the year, exports exceeded € 17 billion, 7.8 percent more than in 2009. Despite strong growth, the record-breaking 2008 result of € 18.44 billion is still far behind, noticed by “Automotive Suppliers”, a company that has developed export data.

The vast majority of Polish automotive exports

Table 4. Value of sold output of automotive industry in Poland In the years 2005-2010.

Sold production of the automotive industry	2005	2006	2007	2008	2009	2010
Manufacture of motor vehicles, trailers and semi-trailers (PLN million, current prices)	60,775.8	71,545.8	80,041.8	83,320.6	83,165.2	91,272.4
Automotive sector (y / y change, fixed prices)	2.8%	22.2%	13.8%	7.7%	-11.8%	15.9%

Source: AutomotiveSuppliers.com/Eurostat.

in 2010 hit the European Union (86.7%, or € 15.4 billion). Definitely the largest recipient was Germany, to which in 2010 commodities valued at € 5 billion (28.8% of total exports of Polish motor vehicles). Other key recipients include Italy (€ 2.6 billion, 15.2%), France (€ 1.4 billion, 7.7%), Great Britain (€ 1.2 billion, 7.7%) and the Czech Republic, € 1 billion, 6%).

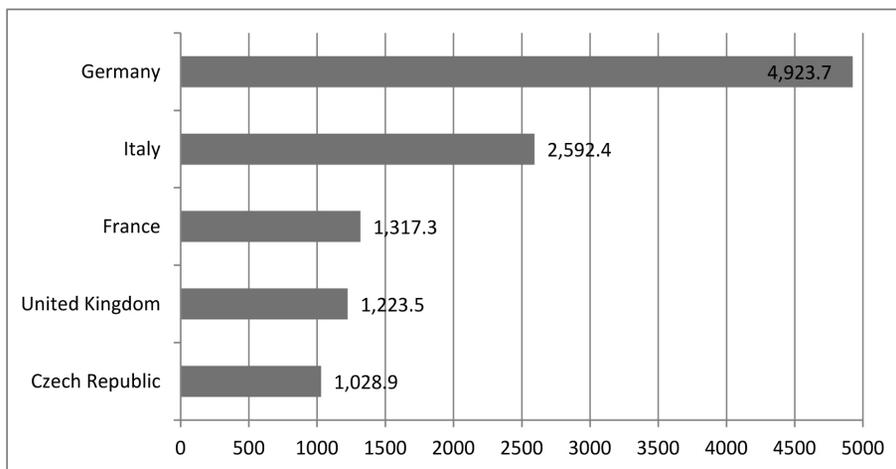


Fig. 2. Export directions of the Polish automotive industry in 2010r. (in billion Euros).

Source: AutomotiveSuppliers.pl/Eurostat

Polish auto exports comprise of three main groups: passenger cars and freight cars, parts and accessories and diesel engines, which accounted for almost 84% of exports, by 0.7% less than in 2009. Exports of passenger cars and freight cars totalled to € 6.64 billion, down 4.1% from 2009. The share of this product group reaches 38.8% in exports. Vehicles, parts, accessories and other automotive products also have a significant share in the structure of Polish imports. Its value in recent years has, however, been subject to considerable fluctuations. After years of extremely dynamic growth (by 98.6% in the years 2004-2008), Polish automotive imports in 2008 reached a record high of € 14.4 billion. In 2009 the nominal value of import decreased 37.2% to € 9.1 billion. Reflection in 2010 was relatively weak - the value of imports increased by 18.5% to € 10.8 billion, so it was still lower than in the pre-crisis years. In 2010 imports of automotive products accounted for 8.2% of total imports of goods to Poland (10.2% in 2008). Thanks to the large domestic market and numerous production and assembly plants, Poland is the largest importer of automotive goods in Central and Eastern Europe. The second largest - the Czech Republic - in 2010 imported products worth € 8.2 billion, while Slovakia - € 6.3 billion. It is worth noting that among these three countries, Poland has experienced the greatest fluctuations in

the value of automotive imports recently, as a result of which its advantage over the Czech Republic and Slovakia in the last two years was much lower than before the crisis. For the automotive industry in Poland 170 thousand of employees are hired. It is mainly in the automotive industry, where the process of relocation of production from the EU member states to Poland

takes place, including primarily from Germany, such as Volkswagen, Leoni Kabel, Phoenix Contact, Eto Magnetic, Funke.

The automotive industry contributes to the maintenance of 762 thousand work positions in the Polish economy. In addition, in the automotive-related sectors, there are another 600 thousand employees. A comprehensive analysis of direct and indirect effects indicates that the automotive industry in general contributes to a total of 362.2 thousand jobs in the Polish economy and provides the population of 16.4 billion annual gross income. According to CSO data, in the sector of manufacturers of motor vehicles, parts and subassemblies of motor vehicles, trailers and semitrailers (PKD 29) over 156 thousand employees worked in 2012. Another 14 thousand employees worked in companies that produce tires, windshields and car accumulators.

Automotive industry plays the key role in Polish foreign trade, but the importance of the industry in this respect systematically decreases. In 2012 there was a decline in the value of both imports and exports of wide-ranging automotive goods. The import of automotive goods into Poland is driven by the automotive trade and services and manufacturing plants. Its value reached in 2012 about PLN 54.7 billion (€ 13.1 billion) and was 3.9% less than a year earlier. Cars

accounted for PLN 16.3 billion and parts and accessories (PLN 22.1 billion). Exports of automotive products from Poland in 2012 decreased by 5% and amounted to PLN 86 billion (€ 20.5 billion). The most important category of exported products were passenger cars (PLN 22.3 billion) and parts and accessories (PLN 37.1 billion). The export of commercial vehicles (PLN 12.6 billion) and engines (PLN 10.4 billion) are also of great economic importance.

In 2015, over PLN 229 billion of foreign direct investment was located in the industry, of which the largest part went to the automotive and food processing industry (PLN 44 billion). In the production of machines, other metal products and in the petrochemical industry, investors spent PLN 41 billion. The majority of foreign-owned entities operate in trade.

have had the best result in manufacturing for several years. This situation is fuelled by the growing demand for cars in Europe - from January to March, 4.1 million vehicles were registered in the European Union, an increase of 8 percent, relative to the previous year. It is worth emphasizing that the first quarter of this year was the best first quarter since 2011.

The report noted that, referring to Eurostat data, total automotive products worth € 30.4 billion were exported throughout Poland in 2016. The value of exports of vehicles, trailers and semi-trailers amounted to € 10.9 billion (+11.4% year on year). The share of motor vehicles, parts and accessories is the largest, with exports up to € 19.5 billion (7.5% year on year).

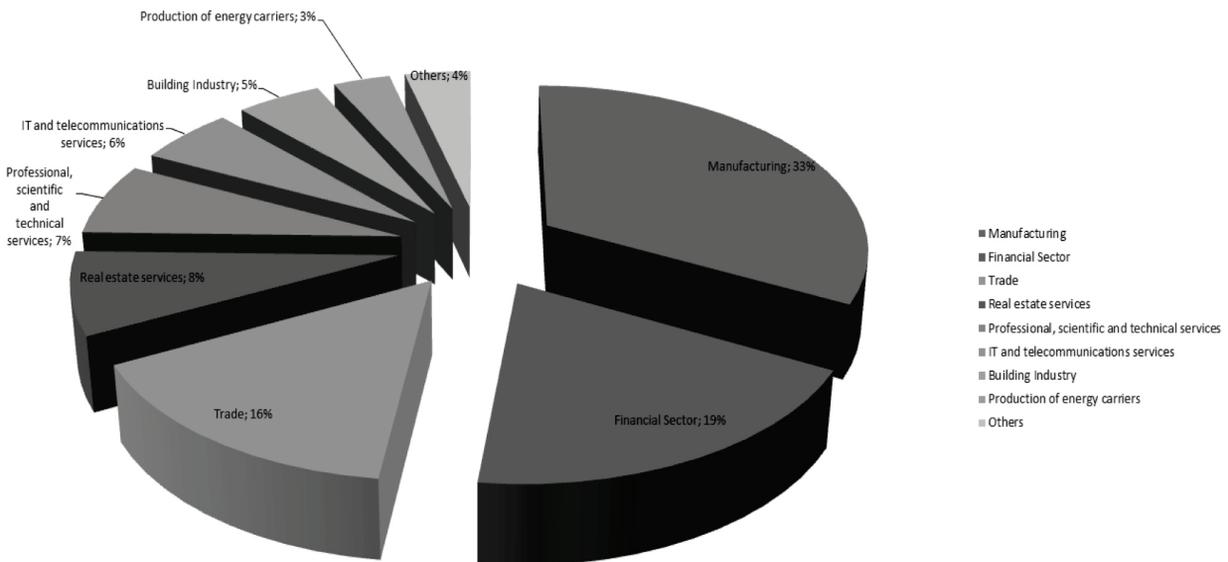


Fig. 3. FDI invested in the industry at the end of 2015.

Source: Own study based on NBP data.

The research shows that the automotive industry is the key sector for the whole economic system in Poland, which has a strong influence on most sectors of the Polish industry, trade and services. The automotive industry is responsible (directly and indirectly) for 8.6% of total gross value added in the Polish economy. In addition to the broadly understood automotive industry, there are numerous sectors related to it: financial and business services related to vehicle sales and maintenance, road transport, the production and sale of automotive fuels and the construction of road infrastructure.

Data for the first quarter of 2017 are very optimistic and show that throughout the year we

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