White Paper

THE AUTOMOTIVE SECTOR IN POLAND

FROST & SULLIVAN

In Cooperation With

Invest in Poland

POLISH INFORMATION AND FOREIGN INVESTMENT AGENCY

Published by Frost & Sullivan and the Polish Information and Foreign Investment Agency (PAIiIZ)

October 2008

About This Document

The following whitepaper outlines the findings of a study conducted by Frost & Sullivan for The Polish Information and Foreign Investment Agency (PAIiIZ) on the automotive sector in Poland. The paper focuses on analysing recent trends and developments in the supply and demand segments and on the market drivers and restraints that determine the growth of this sector. It also discusses prospects for the future and the potential of Poland as a target destination for foreign direct investment (FDI).

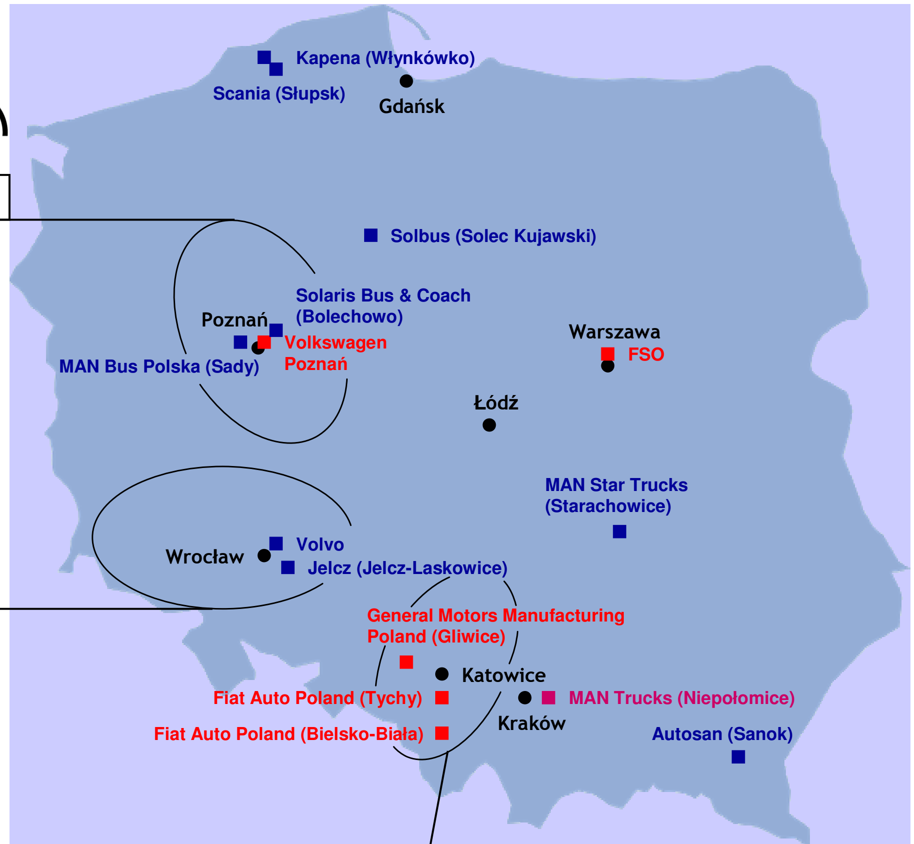
Map of the Polish Automotive Industry

Wielkopolskie cluster

Major suppliers of parts, components and elements related: Inter Groclin, Bridgestone, Delphi Automotive Systems.

Lower Silesia cluster

Major suppliers of auto parts, components and elements related: Toyota, Bosch, GNK, Wabco, Faurecia, Dr Schneider Automotive, Voss Automotive, Sanden Manufacturing Poland, Sitech, TBMeca, Metzeler Automotive, Hoerbiger Automotive, Mahle Polska, Nifco Poland.



Major cities

Passenger car/LCV manufacturing plants

Bus and coach production plants

Truck production plants

(Sanok) City / town where plant is located

Silesia cluster

Major suppliers of auto parts, components and elements related: Isuzu Motors, Eaton, Fiat-GM Powertrain, Valeo, Hutchinson, Lear, Sait-Gobain Glass.

Executive Summary

The automotive sector is one of the pillars of the national economy in Poland. In Q1 2008 it employed 133,900 people, accounting for around 1 per cent of all the people employed in the country. Its contribution to the national economy is even larger, if one takes into account how many work places have been created indirectly owing to the establishment of numerous manufacturing sites.

Poland is among the major manufacturers of motor vehicles, auto parts and components in Central and Eastern Europe (CEE). In 2007, 784,700 vehicles left Polish production plants - supplying not only to key markets in Italy and Germany, but also to customers in distant countries such as the United Arab Emirates[1]. The total export of the Polish automotive industry in 2007 was higher than of any other new EU member state and equalled to €15.7 billion. The largest manufacturers of passenger cars are: Fiat (45.4 per cent of the total output), GM Opel (24.6 per cent), FSO/UkrAVTO (20.1 per cent) and Volkswagen (9.7 per cent). In the light commercial vehicles (LCV) segment, Volkswagen and Fiat account for nearly 100 per cent of the output (85.4 and 15.4 per cent respectively). With more than 95 per cent of all the vehicles being sent abroad, export is the major source of revenues for vehicle manufacturers.

FDI is the major driving force behind the growth of the automotive sector. Owing to the inflow of capital from abroad, the Gross Value Added (GVA) of motor vehicles manufacturing nearly tripled over the period 2000 to 2006, with its share in Poland's GDP doubling during the same period (1.14 per cent in 2006). FDI is also a driving force for the development of the automotive sector in other countries of the CEE region: the Czech Republic, Slovakia, Hungary and Romania. All these countries have a dynamically growing economy and attractive investment opportunities, which constitute strong competition for attracting new investments.

The rankings prepared by international advisory firms demonstrate that Poland is one of the most attractive countries for location of new FDI. Having the largest economy of all the 12 the new EU members, and the largest skilled labour force available, Poland has the potential to play a dominant role in the Central European automotive sector.

[1] The International Organization of Motor Vehicle Manufacturers (OICA), 2007

1. Position of Poland in the CEE Automotive Sector

Traditionally, Poland holds one of the key positions in the automotive sector - not only in the CEE region but also across the entire European continent. Before the collapse of the Soviet Union, locally manufactured cars were exported across the Eastern Bloc countries. In 2007, every fourth car manufactured among the twelve new EU members came from Poland[2].

Table 1: Automotive Sector in the CEE Region, 2007

Category	Poland	Czech Republic	Slovakia	Hungary
Passenger cars in use*	13,384,229	4,108,610	1,333,749	3,120,000
Car density/1,000 people*	338	404	243	316
Sales of new passenger cars	293,305	174,456	59,700	171,661
Production of passenger cars	695,000	925,778	571,071	287,982
Total production of vehicles	784,700	938,527	571,071	292,027
Export of motor vehicles (€ Billion)	15.7	15.5	9.6	12.3

**Data from 2006* *Source: ACEA, OICA, PZPM*

Structural changes in the global automotive sector over the last years have had a significant impact on the situation in the entire CEE region, The necessity to relocate production operations to low-cost areas, along with the emergence of lean manufacturing and strategic alliances focusing on single projects, means that automotive manufacturers are looking for places where they can produce cheaper while increasing efficiency at the same time[3]. The CEE region emerged as an alternative allowing to address this need. Low-cost and skilled labour force, proximity to both western markets and Russia and after 2004 the unified EU market with more transparent legal system and no trade barriers created a strong business case for pursuing significant investments. As a result, the CEE region received significant FDI that fuelled the development of not only its automotive sectors but also the entire national economies.

Among the new EU members, Poland remains by far the most attractive consumer market for vehicle sales. Despite facing a temporary decrease in new vehicle sales caused by the large import of second-hand cars, owing to a larger economy and the highest population, Poland holds the greatest growth potential in the long term.

The position of Poland on the automotive map of Europe increases significantly taking into the account its location within a regional automotive cluster. Poland, Czech Republic, Slovakia and sometimes also Hungary are already being referred to as the “new Detroit”[4] or “Detroit East” [5]. The combined vehicle production of Poland, the Czech Republic, Slovakia and Hungary is around 2.6 million, positioning the region as the fourth-largest manufacturer in

[2] European Automobile Manufacturers’ Association (ACEA), 2007
[3] Unicredit Group New Europe Research Network, 2007
[4] Unicredit Group New Europe Research Network, 2007
[5] Business Week, 2005; Birmingham Post, 2007

Europe and ninth, globally[6]. Taking into account production plans for the future, this number could increase significantly.

The large concentration of automotive companies in one area is beneficial for all the countries. When Toyota-PSA established its new plant in the Czech Republic, it faced a problem of labour shortage, but was able to address this challenge with employees from Poland, the Czech Republic and Ukraine. Also Hyundai when deciding to set up a plant in the Czech Republic chose Ostrava because of its location next to the border with Poland and close to Slovakian one, in order to have access to a larger labour market.
Establishment of vehicle production plants in the Czech Republic and Slovakia also attracted a number of smaller investments to Poland. In 2007 and H1 2008, more than ten automotive suppliers have signed contracts to set up their factories in southern Poland, with a view to export products mainly to large vehicle plants across the border[7]. Proximity to delivery destinations and a proper transport infrastructure enable companies to simultaneously benefit from the advantages that all the three countries offer.

2. Automotive Sector by Sub-Segments

2.1. Passenger Cars

Sales and Consumption of Passenger Cars in Poland

The structure of the demand for passenger cars has undergone significant changes since Poland joined the EU in May 2004. After lifting duty on the cars imported from other member countries, the volume of imported, used cars from the EU-15 states grew considerably.

An increase in volume of imported vehicles is a result of two key factors:

- Firstly, there was high demand for cars and used vehicles from abroad were not only available at very attractive prices but often also well maintained. This created a new opportunity for Polish consumers preferring to purchase larger, second-hand cars with better equipment rather than new, but smaller vehicles. Looking at the structure of the new cars sold (Figure 2), around 60 per cent of the purchases are models from the small and lower medium segments. The structure of imported cars reflects preferences of Poles towards larger vehicles as brands such as Mercedes, Audi and BMW are among the top seven most popular second-hand brands.
- Secondly, insufficient legislative means were created to limit importing used vehicles or make it too expensive.

As a result, second-hand cars from Germany or the Netherlands constitute a cheaper alternative available to many people that could not afford to purchase a new vehicle of their own before.

[6] The International Organization of Motor Vehicle Manufacturers (OICA), 2007
[7] Polish Information and Foreign Investment Agency (PAIiIZ)

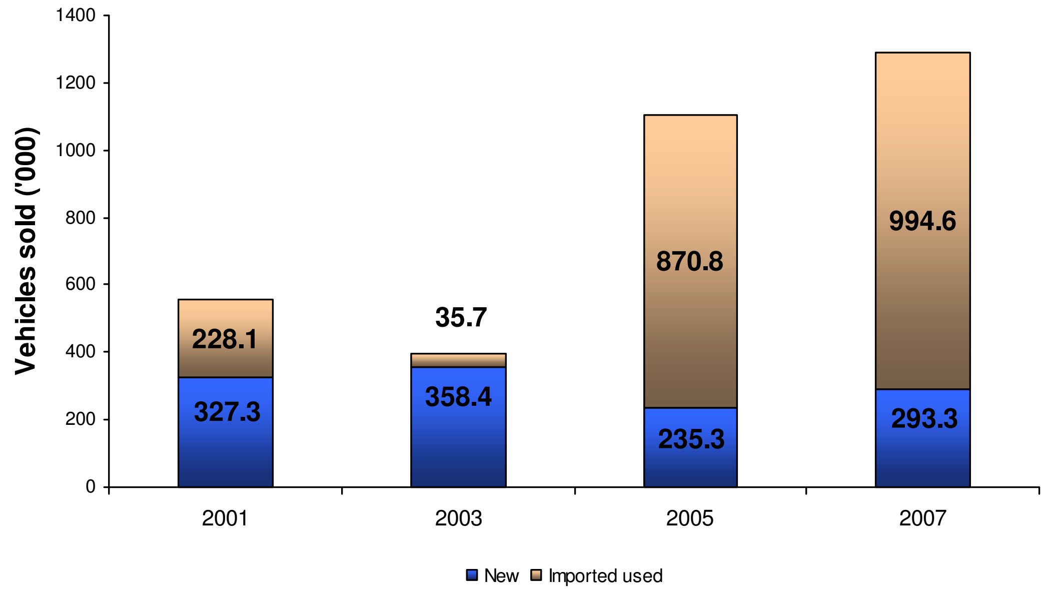


Figure 1: Sales of New versus Imported Second-hand Cars in Poland

Source: Samar and Frost & Sullivan Analysis

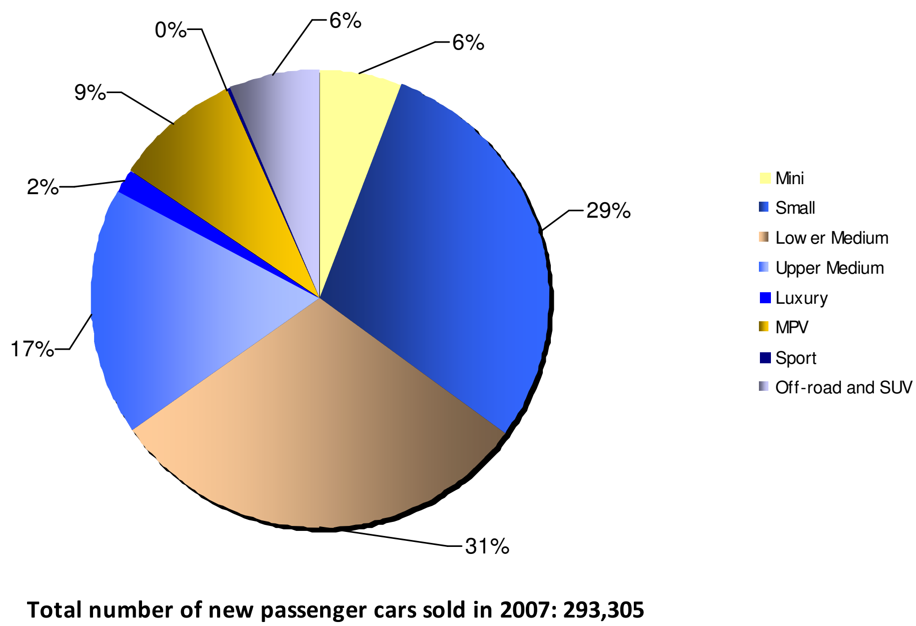


Figure 2: Sales of Passenger Cars by Segment, 2007

Source: Samar

Imported vehicles serve as a temporary response to the growing demand for cars. As the purchasing power of Poles increases in the future, people will gradually switch towards new vehicles and the import volume will decrease accordingly. In a short-term perspective, demand for new cars is likely to grow following substantial price reductions offered by many dealership chains. In the first half of 2008, many dealers, encouraged by the strong PLN exchange rate, started lowering prices, even up to 19 per cent on selected models. If reductions are not just a seasonal occurrence, and the lower price level is maintained, this could considerably improve sales results[8].

Production of Passenger Cars

After the collapse of communism, the first significant production-related investment occurred in 1992, when Fiat acquired the FSM[9] factory in Bielsko-Biała. In the early 1990s, Poland, like many other CEE countries, was often regarded as a location for assembly plants established mainly to avoid paying protective duties. In 1994, General Motors launched assembly of Opel Astra in Warsaw. In 1995, Daewoo acquired a state-owned plant in Lublin, where commercial vehicles Lublin were produced and Daewoo's passenger cars were assembled.

Significant changes appeared at the beginning of the 21st century. Economic growth, infrastructure development and political stability improved the perception of Poland as an investment location. Regulatory drivers had a strong influence on the automotive sector when all trade barriers between Poland and the EU states were lifted in 2002. As a result, many assembly plants disappeared and were replaced by manufacturing facilities. The only period of negative growth was in 2001 and 2002, an implication of the bankruptcy of Daewoo, the owner of the FSO plant in Warsaw.

At present, Poland is the tenth-largest motor vehicle manufacturer and the eighth-largest passenger car producer in Europe, with its output more than doubling since 2003. It is located in the center of Europe, and along with efficient labour force, an improving infrastructure and a stable economic and political climate Poland has become an excellent location for export-oriented manufacturing. In 2007, around 97 per cent of the passenger cars were sold abroad, with EU states such as Italy and Germany being the major targets. The share of export in the total production has increased since 2006, as the models produced in Poland experienced high demand in European countries. Vehicles from Polish plants are also popular in CIS countries such as Ukraine, where a large number of the Lanos models produced by the FSO plant were exported.

[8] MPV = Multipurpose Passenger Vehicle; SUV = Sport Utility Vehicles
[9] FSM=Fabryka Samochodów Małolitrażowych

Table 2: Car Manufacturers in Poland, 2007

Company Name	Total Vehicle Production	Passenger Car Production	Models Produced	Production Started in 2008
Fiat Auto Poland	361,817	346,177	Fiat 500, Fiat 600, Fiat Panda	Ford Ka
Opel Polska	187,265	187,256	Zafira, Agila, Astra Classic, Wagon R+	-
VW Poznań	167,036	75,133	Caddy, Transporter	-
FSO S.A.[10]	153,310	153,310	Lanos, Chevrolet Aveo	Aveo hatchback

Source: Samar, data from companies, Frost & Sullivan analysis, 2008

Taking into account short-term perspectives, existing vehicle manufacturers will continue to increase their output. Production results for the first half of 2008 already show a 33.8 per cent year-on-year growth. In 2007, GM commenced the production of Opel Astra Sedan in Gliwice, and Fiat started the manufacturing of its 500 model in the Tychy plant. At the end of 2008, the manufacturing of the new Ford Ka model will be started in the Fiat plant in Tychy – a result of the agreement between the two automotive corporations. Looking at a long-term perspective, new vehicle manufacturers are expected to establish production plants in Poland. The Jiangling Motors Group Company from China is planning to open the first Chinese motor vehicle factory in Europe, and has chosen Poland as its location. Its output capacity would be around 400,000 vehicles annually, which would position it as the second-largest factory in Poland. Owing to this $1.5 billion investment Poland could once again become the leading car manufacturer among the new EU members[11].

2.2. Commercial Vehicles

Car Park and Sales

With more than 1.7 million delivery vans and over 630,000 trucks[12], Poland has the fifth-largest car park of LCVs and the third-largest car park of trucks in the EU, and is ranked behind Italy and Germany[13].

[10] FSO S.A. is currently owned by UkrAVTO, company also responsible for production and distribution of Chevrolet cars in Ukraine.
[11] Wprost, 2008
[12] Light commercial vehicles (LCV) also called delivery vans are defined as vehicles with admissible total weight up to 3.5 tones , whereas trucks are defined here as vehicles with admissible total weight above 3.5 tones.
[13] Asociación Española de Fabricantes de Automóviles y Camiones (ANFAC), 2006

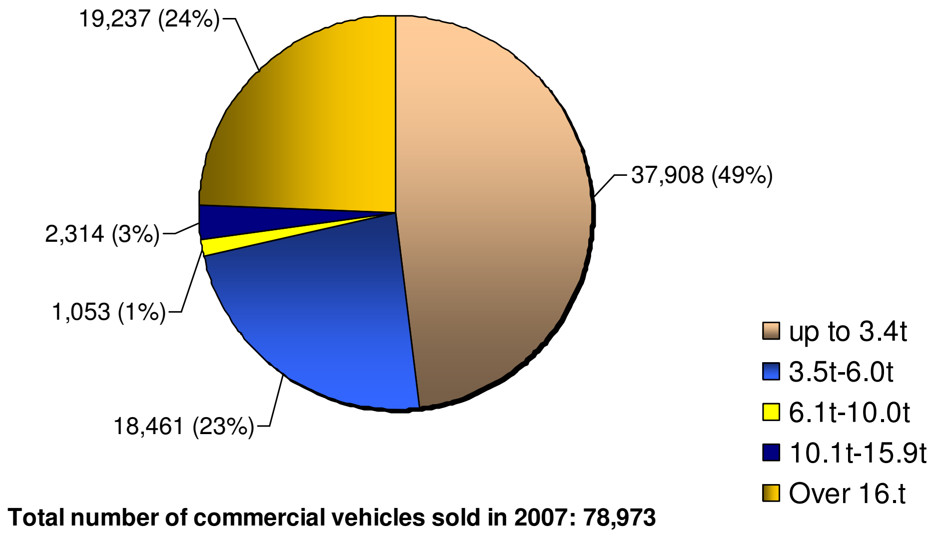


Figure 3: Sales of Commercial Vehicles by Total Admissible Weight (2007)

Source: Samar

The demand for new LCVs in Poland is fuelled by several factors, with the general condition of the national economy being the most important one. Strong economic growth in 2006 and 2007 (with very high GDP growth rates of 6.2 per cent and 6.6 per cent, respectively), and optimism among entrepreneurs encouraged investments, including investments in vehicle fleets. In addition, the demand for delivery vans is also driven by several factors such as the following:

- **EU funds:** Entrepreneurs can benefit from the financial support from several EU funds, for instance, for the modernisation of vehicle fleets. However, this does not apply to transportation companies; thus, it has a higher influence on the sales of LCVs rather than heavy trucks.
- **Financing options:** Within the last years vehicle financing options such as leasing became more affordable and easily obtainable, which had a positive impact on the availability of vehicles and contributed to an increase in sales volumes
- **Tax deductions:** In 2007, an allowance scheme came into force, allowing entrepreneurs a one-year accelerated depreciation of value up to €50,000. Companies leveraging this scheme were able to deduct the cost of the fixed assets of the purchase in the same year they made it, thus decreasing the revenue subject to taxation. Purchasing vehicles, especially LCVs, became one of the most common ways of leveraging the benefits resulting from this regulation.

Assuming that no sudden economic downturn occurs in Poland over the next few years, the same factors will continue to propel the demand for LCVs.

The demand for new trucks has been growing quite steadily, with a compound annual growth rate (CAGR) of 8 per cent from 2001 to 2006. In 2007, new truck purchases reached a record of a 35 per cent year-on-year growth. Such a high growth in sales is a reflection of how fluctuant sales can be, depending on the influence of external factors.

The Polish market for heavy vehicles is largely propelled by the transportation sector, as well as by construction companies, to a lesser extent. Both sectors grew dynamically in 2006 and 2007, and vehicle sales far exceeded expectations. As a result, companies were often forced to wait for more than ten months for their orders to be realized[14]. However, in the first half of 2008, truck sales decreased significantly, and annual sales is likely to reach the level from 2006. Such a reverse trend was largely triggered by the downturn in the transportation sector, mainly caused by two factors:

- **High PLN-Euro exchange rate.** Strong Polish Złoty led to a decrease in profitability of transportation companies. Many of the trucks purchased in Poland are used for international transport, where payments are made in Euro. When the value of the Euro fell below PLN 3.5 in 2008, which is regarded as a profitability limit for carriers, many companies were unable to maintain profitability.
- **Further increases of fuel prices**. High prices of fuel, constituting 60 per cent of all the costs borne by transportation companies, caused many Polish carriers to loose their financial liquidity[15].

As a result, many enterprises ordering trucks in 2007 were forced to make cancellations, and the number of new orders reduced, thus negatively affecting sales in the first half of 2008. Unless these trends reverse, further decreases in the sale of new trucks are likely to continue.

Production

According to the International Organization of Motor Vehicle Manufacturers (OICA), Poland was the eighth-largest manufacturer of commercial vehicles in Europe with 89,700 units produced in 2007. Within this segment, volume-wise, LCVs accounted for 95 per cent of the output. The largest participant in this segment is Volkswagen, producing the Caddy and the Transporter models in Poznań, with an 85 per cent share in the production of vehicles in 2007[16]. The remaining 25 per cent of the share was held by Fiat Auto Poland. Around 95 per cent of the output was exported.

Although the internal demand for commercial vehicles grew by around 30 per cent in 2007, it was still lesser than the combined production of the two commercial models of Volkswagen in Poland. This is another indication that Poland is still being seen as a manufacturing centre for its western European neighbours.

[14] www.money.pl, 2008
[15] Gazeta Prawna, 2008
[16] Samar, 2008

The importance of Poland as a manufacturer of trucks (with the total capacity exceeding 3.5 tonnes) increased when MAN launched its assembly plant in Niepołomice near Kraków. In the fourth quarter of 2007, MAN produced 2,430 vehicles, and this number is expected to grow significantly as the production target is 30,000 vehicles annually. Reaching such an output would position Poland among the top ten producers in Europe.

MAN Star Trucks, as the company is called in Poland, also owns a production plant in Starachowice, acquired from Polish truck company Star in 1999. Initially producing and assembling trucks, this Star now focuses on busses, manufacturing only a small number of vehicles for the army. Similarly, a small number of trucks for the use of the army and fire brigades (100-200 vehicles annually) is being produced by Polish company Jelcz, which has a plant near Wrocław.

In Poland, the production of trailers and bodies also plays a significant role in the automotive sector. The growth of this market is fuelled both by local demand and export, and is dependent on situation in the transportation sector. The major national manufacturers of trailers, Wielton, Zasław and PrimBox Zremb, experienced a significant increase in production in 2007, with Wielton witnessing the highest rates, having sold one-third of its production abroad. Similarly, the major producers of bodies, KH Kipper, Skibicki and Wawrzaszek, experienced a profitable period since 2005. The total value of the export of bodies increased three times in 2005/07, equating €148 million in 2007[17].

2.3. Busses and Coaches[18]

Sales of Busses and Coaches

Over the last decade, the local demand for busses has remained stagnant. Whereas the fleet of passenger cars nearly doubled between 1995 and 2007, and the growth rate of the car parks for busses was flat or negative. As more people can afford to purchase their own cars, the need for public transport and busses has decreased.

The car park of busses is very old with 58% of all units in 2006 aged 15 years and more[19]. Due to significant cost cuts, carriers often preferred to import second-hand vehicles from EU-15 countries instead of purchasing new vehicles. On the other hand, large number of old units indicates that a significant potential for replacement purchases exists, as carriers will need to renew their vessel fleets soon. Hence, in short to mid-term period one can expect an increase in local demand for new busses and coaches.

In 2007, around 50 per cent of the sales of new busses was generated by city busses bought by municipal authorities. This segment is likely to experience growth in the near future, as local authorities can leverage the EU funds available for the modernisation of bus fleets. Around 30

[17] PZPM, 2008
[18] Busses and coaches analyzed in this chapter include vehicles with weight over 8 tones. Lighter vehicles, often referred to as micro or mini-busses are not being included.
[19] Central Statistical Office of Poland (GUS), 2006

per cent of the demand is generated by inter-city carriers. In 2007, sales of new vehicles in this segment decreased by 18 per cent. Increasing salary pressures and fierce competition refrain many companies from proceeding with new investments in bus fleets. The remaining part of the market belongs to operators of coaches and school busses, usually purchased by the Ministry of National Education[20].

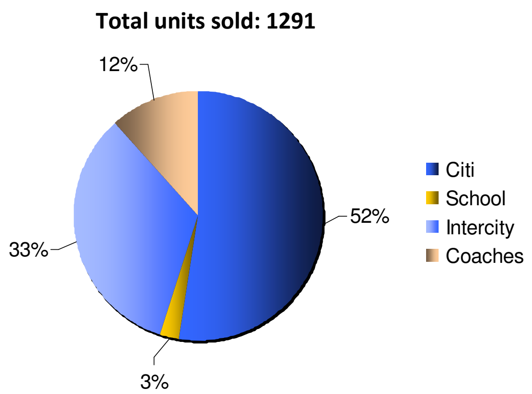


Figure 4: Sales of Busses and Coaches by Category, 2007

Source: Infobus JMK

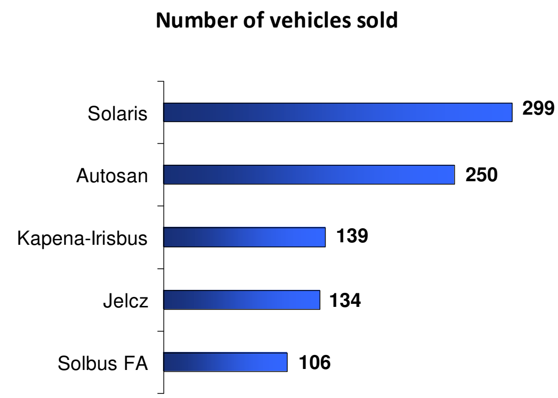


Figure: 5 Top 5 best selling Bus Companies, 2007

Source: Infobus JMK

Taking into account the lack of strong drivers that could fuel the demand for busses and coaches in the Polish market, local sales is not expected to increase dynamically in the future.

Production of Busses and Coaches

According to ACEA, Poland is one of the major manufacturers of busses and coaches in the EU, with the fourth-largest output in 2007. Over the last few years, production has been export-oriented, and orders from abroad have been the strongest growth driver for expanding manufacturing capacities. While the local demand for busses and coaches remained nearly constant between 2003 and 2007, export volumes increased by 174 per cent - from 949 to 2599 units.

Table 3: Top Five Manufacturers of Busses and Coaches in Poland by Volume, 2007

Company	MAN	Volvo	Solaris	Scania	Autosan
Volume	958	794	666	455	321

Source: Infobus JMK

[20] PZPM, 2008

This was because large international bus manufacturers such as MAN, Volvo and Scania moved their production to Poland. Since the manufacturing process of busses is very time- and labour-consuming, Poland with its very competitive labour efficiency-to-cost ratio is regarded as a highly attractive destination for bus production plants. In 2007, MAN decided to relocate its production site from Saltzgitter in Germany to Sady near Poznań. Additionally, Volvo moved the manufacturing of its premium model 9900 from Heilbronn in Germany to Wrocław. Furthermore, the company has decided to fully relocate the production of its 8700 model from Finland to Wrocław in 2008 (till date, production was divided between these two plants).

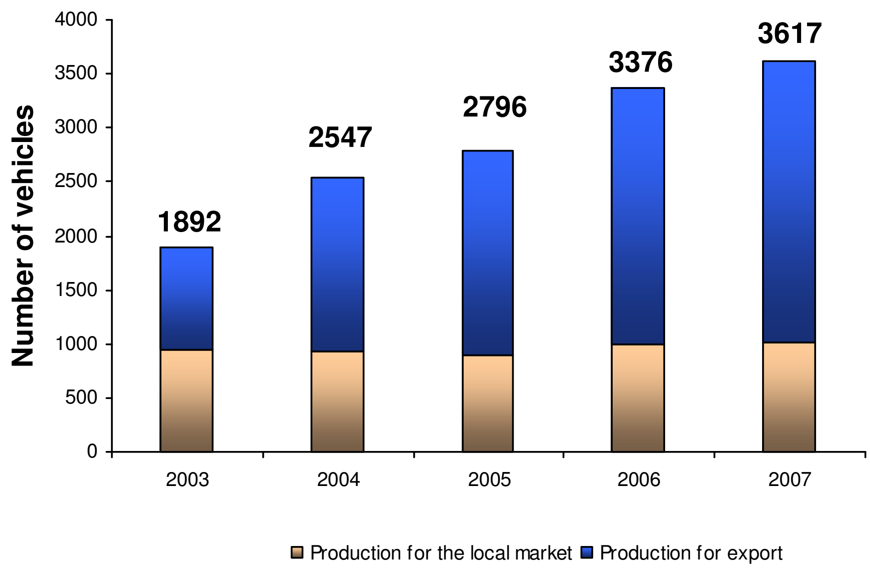


Figure 6: Production and Export of Busses and Coaches, 2007

Source: Infobus JMK and Frost & Sullivan Analysis

Scania has been manufacturing busses in Słupsk since 2002, and expanded its output in 2007 by launching the production of two of its ethanol-fuelled models. 2007 also closed with optimistic perspectives for the largest Polish manufacturer of busses and coaches – Solaris. The company won a contract worth €112 million for delivering 225 busses to Dubai.

The prospects for the production of busses and coaches in Poland are optimistic. Despite the poor conditions of the local market, export will continue to propel growth in the future, especially since international companies have decided to expand their production capacities in Poland. The first half of 2008 closed with a 19.3 per cent increase in manufacturing volume, similar to previous years, and was fuelled mainly by the largest exporters, MAN, Volvo and Scania.

3. Overview of the Automotive Parts Industry

The parts and components segment is playing an increasingly important role in the Polish automotive industry. Automotive suppliers employ more than 108,500 people accounting for as much as 81 per cent of the total employment within the motor vehicle industry[21]. In 2007, more than half of the export of the local automotive manufacturing was covered by parts and components and equalled to €8.2 billion. This positions Poland as the leader among the new EU member states[22]. The major recipients of export production are Germany and Italy, together accounting for as much as 45 per cent of the total volume of the parts and components sent abroad. This is largely the case because three out of the four largest car manufacturers in Poland originate from these two countries.

Already nine out of the top ten global automotive suppliers have their manufacturing plants in Poland. The business case behind establishing their presence in the country is a combination of at least three major factors:

- Geographical proximity to key customers and target markets
- Cost-quality advantage and favourable investment conditions
- EU membership

Initially, many automotive suppliers entered Poland following earlier investments of vehicle manufacturers (VMs). The large manufacturing plants of Opel, Fiat and Volkswagen attracted a number of their subcontractors to Poland. Further inflow of new contracts came in 2007 and in the first half of 2008 following Kia and Hyundai's investments in the Czech Republic and Slovakia. The regions of southern Poland, the Czech Republic, Slovakia and Hungary are evolving into a large automotive cluster, and are already being referred to as the "new Detroit". Thus, establishing manufacturing operations in Poland means prospective growth opportunities, as the importance of this CEE region is likely to increase in the future.

Parts and components from Poland gained international recognition as quality products, and between 2002 and 2007 their export grew at a CAGR of more than 27 per cent. Local manufacturing largely concentrates on key and complex systems, and not merely on basic subcomponent and accessories. The parts being manufactured and exported include bodies, shock absorbers, steering systems, safety systems, transmission systems, electrical equipment and axles. The major area of focus in Poland are engines, which accounted for 13 per cent of the automotive export in 2007. With Toyota, Volkswagen and Fiat engine plants, Poland is the largest regional participant in this field, and the fifth-largest global exporter of diesel engines[23].

[21] www.bankier.pl, 2008
[22] PZPM, 2008
[23] Unicredit Group New Europe Research Network, 2007.

Table 4: Chosen Tier 1 Suppliers of Parts and Components in Poland, 2007

Company	MAN	Volvo
Bosch	1	Chassis system brakes
Denso	1	HVAC, heaters, heater cores and cockpit modules
Delphi	6	Wide variety of components including electrical/electronic architecture and power steering systems
Johnson Controls	2	Seating systems
Faurecia	9	Seating systems, cockpits and door panels
Lear	7	Seating systems
TRW	7	Safety systems, steering systems and brake systems
Magna	4	Seating systems
Valeo	5	Various automotive components including lighting systems
Visteon	1	Instrument panels and door panels

Source: Frost & Sullivan Analysis based on Data from Companies

Next to large foreign manufacturers present Poland, there is a number firmly established local players. Inter Groclin Auto is an example of a successful company that produces the automotive furniture supplied to Renault, Mitsubishi and many highly quality-oriented German manufacturers such as Volkswagen, Mercedes and Audi. In 2006, Groclin signed a contract worth 445 million PLN for the delivery of furniture for Volvo cars[24].

Finally, companies indirectly related to the automotive industry also established their manufacturing sites in Poland. Leading international tyre manufacturers such as Goodyear, Michelin and Bridgestone have plants in Poland, and exported products worth €1.2 billion in 2007[25]. Moreover, major glass producers such as Pilkington Automotive and Saint-Gobain Glass invested in manufacturing in Poland.

The presence of a large number of companies from the automotive and related sectors is a significant indicator of the attractiveness of Poland as a manufacturing destination. The parts, components and accessories produced locally are being supplied to most of the global car manufacturers, including Mercedes, Nissan, Opel, Toyota, Volkswagen, Isuzu, Fiat, Citroen, Honda, Peugeot, Volvo and BMW, as well as to the top luxury brands such as Rolls-Royce, Lamborghini, Ferrari and Porsche[26].

[24] Inter Groclin Auto website
[25] PZPM, 2008
[26] www.bankier.pl, 2008

4. Market Drivers and Restraints[27]

Major Drivers

The development of the Polish automotive sector is driven by a combination of factors, both internal and external. The key factors likely to have the largest influence on future growth are as follows:

- **FDI:** FDI has been a driving force of the Polish automotive sector for over a decade. Between 2002 and 2006 the automotive industry accounted for 6.2 per cent of the total value of all FDIs in Poland and equalled to €2,619 million. As a result, the output of vehicle manufacturing plants doubled during that period, also contributing to a significant increase in employment and the share of this industry in the total GDP of Poland. FDI is likely to remain one of the key sector drivers in the future.
- **Growing economy and purchasing power:** A strong and stable economy translating into improved living conditions will strengthen the purchasing power of the Polish. This trend has been observed over the last five years, as the share of mini and small urban cars dropped from 47.5 per cent in 2002 to 35.1 per cent in 2007[28]. Although a part of this change was due to the vast import of used cars, there is an indication of a trend towards purchasing more expensive cars. In the long term, this trend is likely to intensify and lead to higher average revenues from car purchases.
- **EU funds available for the automotive and transportation sectors:** Having recently acceded to the EU, Poland was granted with considerable financial support aimed at diminishing disparities between the EU-15 and new EU. Between 2004 and 2007, Poland was granted €12.8 billion, of which 35 per cent was spent on projects related to transportation infrastructure. Between 2007 and 2013, as much as €67 billion of EU funds will be made available to Poland, of which ca €10 billion can be allocated for the road transportation infrastructure within the scope of such programmes as “Infrastructure and Environment Operational Programme”, “Development of Eastern Poland” and Regional Programmes[29]. Also, additional funds are available from other EU funds for non infrastructural undertakings such as R&D-related projects or employee training. This means improvements both at the macro-scale affecting the overall attractiveness of Poland and the micro-scale impacting the development of many companies.
- **The European Football Championship (Euro2012):** Euro2012 will impact the modernisation of Poland’s transportation infrastructure. Being motivated by tight deadlines, the country is forced to proceed with infrastructural investments and ensure that the transport infrastructure is in place on time. Progress in this regard is likely to have a positive influence on the overall attractiveness of Poland as a location for potential investments.
- **Increasing availability of financing options:** Credit and leasing are becoming an increasingly popular means of financing car purchases. The value of the new car loan

[27] This chapter refers to major drivers and restraints having an influence over the whole automotive market. Certain sector specific ones have already been discussed when analyzing sales trends within each vehicle segment.
[28] PZPM, 2008
[29] Ministry of Regional Development, 2008

market doubled over the last few years, mainly fuelled by the passenger car segment. In 2007, around half of the newly purchased passenger cars were bought by companies. Intensified competition in the car loan market has lowered the costs of financing and led to the greater availability of external forms of financing. Making purchase financing more accessible will continue to drive the sales of new vehicles.

Market Restraints and Risks

The automotive sector in Poland also faces certain restraints that could have a negative impact on future growth. The major ones that need to be taken into the account are as follows:

- **Unfavourable labour market conditions:** Increasing labour costs along with workforce shortages and difficulties with employee retention constitute a significant impediment for companies already present in Poland and for potential new investors. The relative impact of this factor might be lower as in the neighbouring Slovakia and Czech Republic employers are experiencing similar problems.
- **High fuel prices:** Continuous increases in the costs of petrol in the first half of 2008 caused many transport companies to cancel their orders for new vehicles, and even? led some to bankruptcy. This means a temporary decrease in new truck sales, which are mostly purchased by carriers. Till date, the passenger cars segment seems to be less affected by this restraint, as its sales grew by more than 16 per cent during the same period[30]. If petroleum prices continue to increase, the impact of this restraint will be most visible in the sales side of commercial vehicles.
- **Strong Polish Złoty:** The appreciation of the PLN to the Euro is affecting the overall profitability of companies whose production is oriented with exporting goods to the Euro area. If the PLN-Euro exchange rate remains high, it could adversely influence the choice of Poland as a cost-effective manufacturing location.
- **Import of second-hand cars:** Large volumes of imported used vehicles led to a significant decrease in the sales of new cars, and lowered the profitability of car dealers. The impact of this restraint is likely to decrease gradually over time, and signs of the same were noticed in 2007 and in the first half of 2008, when sales increased again after a significant downturn in 2005 and 2006.

[30] Samar, 2008

5. Investment Opportunities in the Polish Automotive Sector

Poland is one of the most attractive countries globally, for foreign direct investments. With a combination of advantages such as an efficient labour force, government and EU incentives, geographical proximity to key western markets with transport routes in place, a booming economy and a rapidly developing market, Poland can offer a strong value proposition to make a business case happen.

According to an Ernst & Young survey from 2008, Poland is considered to be the best location in Europe for new foreign investments and expansion[31]. The ranking is not only based on hard criteria, but also on perspectives and expectations regarding future development. Additionally, according to an A.T. Kearney FDI Confidence Index, Poland is ranked among the top 25 countries (globally) with the highest position in the CEE region[32]. Below Frost & Sullivan presents a list of the major opportunities and benefits that investors can leverage in Poland:

- **Geographical proximity to western European and CIS markets with good infrastructural connection:** Poland is located next to Germany – Europe's largest car manufacturer and consumer market for cars. Most of the existing plants and facilities are located in the Western (voivodship Wielkopolskie), Southern (Silesia) and South-Western (Lower Silesia) regions of the country – all with good road, highway, railway and air connections in place.
- **Efficient labour force:** Poland has one of the most efficient labour forces in the CEE region, with the productivity-adjusted labour cost almost twice as low as the EU-25 average. According to a rating of the Federation of European Employers (FedEE), in 2007, Poland was ranked as the most attractive country for investment from a human resource perspective. Each country's assessment included a combination of criterion such as labour supply, human capital, employee relations, labour cost, labour flexibility and inflationary pressures. Poland was able to move up six positions in comparison to 2006, outperforming all the other EU countries[33].
- **Incentives for foreign investors:** Foreign investors can enjoy a number of incentives in Poland, including CIT exemption, real-estate tax exemption, cash grants and technological loans. Companies can simultaneously benefit from several incentives when establishing their operations in one of the 14 Special Economic Zones (SEZ) located all over the country.
- **Favourable tax regime:** Poland offers an attractive tax system for investors from the automotive industry. CIT is at 19 per cent, so significantly below the EU-15 average (29 per cent), with lower or competitive level to the majority of the countries in its region.
- **Development of regional clusters:** Poland is actively developing regional clusters where enterprises can effectively leverage the effect of synergy. Automotive production sites are grouped around the four major agglomerations of Warszawa, Wrocław, Katowice and Poznań. Additionally**,** Poland is mentioned in the context of regional automotive cluster comprising the Czech Republic, Slovakia and Hungary. Many suppliers have already

[31] Ernst & Young, 2008
[32] A.T. Kearney, 2007
[33] The Federation of European Employers (FedEE), 2007

leveraged this opportunity by establishing production sites? in Poland, with the target recipients being factories in Slovakia.

- **Large human potential:** Of all the new EU countries, Poland has the largest pool of human resources available, with world-class engineers. In 2007, there were 1.94 million students in Poland, and the ratio of people studying to the total population (5.1 per cent) was higher than that of Hungary, the Czech Republic and Slovakia (4.2 per cent, 3.1 per cent and 3.2 per cent, respectively). Investors also have the largest academic base at their disposal, with more than 315,000 students in technical faculties alone, 39 schools with a Mechanics and Machine Building faculty and 22 schools with a Transportation faculty[34].
- **Availability of EU funds:** The availability of EU funds not only means subsidizing infrastructure modernisation or vast regional development plans, but also financial assistance for smaller initiatives and single companies. Within the framework of various programmes, enterprises can also apply for R&D support grants, environmental support grants as well as several educational and training funds. After joining the EU in 2004, all new member countries received significant financial support in the form of structural and cohesion funds. Many smaller states including Hungary, Slovakia and the Czech Republic, which also acceded to the EU in 2004, benefited, and were able to increase their GDP and income per capita levels. As a result, their available portion of cohesion funds to be used as FDI incentives from 2007 to 2013 decreased. However, Poland will continue to obtain considerable subsidies, and will be able to offer more to potential investors than neighbouring countries[35].
- **Presence of large vehicle manufacturers and leading suppliers:** Poland is one of the leading manufacturing sites in the CEE region, with Fiat, Opel and Volkswagen having their production plants in place. Further, a number of international suppliers are producing their components in Poland, including Bosch, Delphi, Denso, Faurecia, Johnson Controls, Lear, Magna, VDO, ThyssenKrupp Automotive, Toyota Boshoku, TRW, Valeo and Visteon[36]. At present, there are more than 700 sub-contractors in the automotive space, of which over 45 per cent hold the highest quality certificates such as ISO/TS 16949[37].
- **Booming economy and rapidly developing consumer market:** Poland has experienced dynamic economic growth over the 2006-2007 period with its GDP increasing by more than 6 per cent annually, and average salaries in the enterprise sector growing by 12.8 per cent from February 2007 to February 2008[38]. The sale of new passenger cars reached 300,000. According to the Polish Automotive Industry Association (PZPM), the number of units sold is far below the level of market saturation assessing the potential of the Polish passenger car market as being at least three times as large.

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[34] Studentnews.pl; Eurostat, 2007; GUS, 2007
[35] Enrst & Young, 2007
[36] PZPM, 2008; Ernst & Young, 2007
[37] PAIiIZ, 2008
[38] www.gazeta.pl, 2008

6. FDI Trends

After the collapse of the Eastern Block the inflow of FDI has been the driving force of the automotive industry in the CEE region, and Poland has been one of its major beneficiaries. Large foreign investments in the production plants of Fiat, Daewoo Motors and Opel, in the 1990s, enabled Poland to become a regional automotive leader.

FDI is crucial for the automotive sector in Poland, as it accounts for more than 5 per cent of the industry's Gross Value Added. From a foreign investor perspective, the automotive sector is among the most attractive ones to focus on in Poland. Until the end of 2006, liabilities resulting from FDIs in the manufacturing of motor vehicles, parts and components were the highest across the entire manufacturing industry and among the highest across all the sectors of the national economy [39]. Only the top ten largest foreign investors in the automotive sector spend already over 5.1 billion euro in Poland employing nearly 27,000 people.

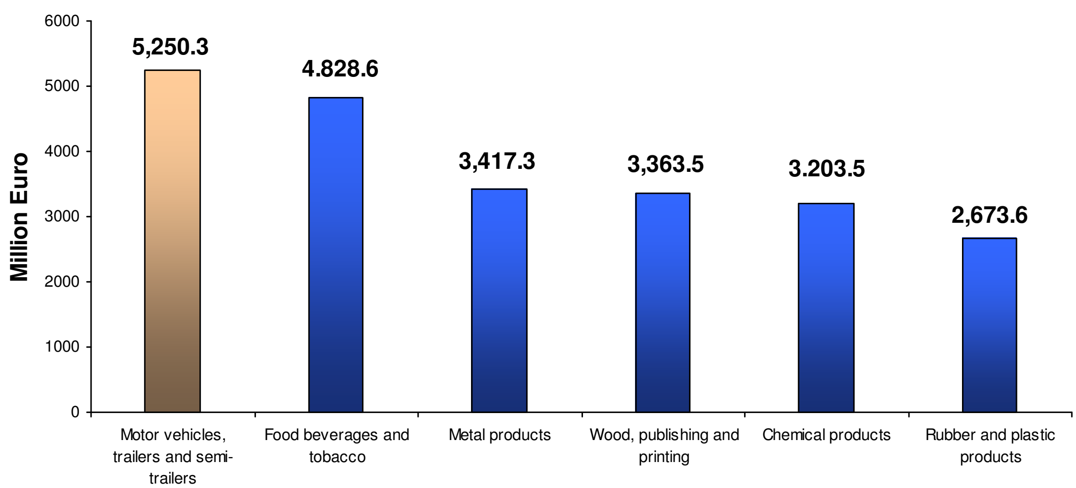

Figure 7: Net Liabilities from FDI at the end of 2006 in the Major Manufacturing Sectors

Source: National Bank of Poland, 2007

Besides large foreign manufacturing projects, Poland has experienced an inflow of BPO (Business Process Outsourcing) investments in the automotive sector. Since such investments are never based on pure economic calculation and predominantly require the existence of a highly qualified local workforce, they are a good reflection of the recognition that Poland receives for being an attractive FDI target. In 2007, there were 19 automotive R&D facilities in Poland, operated by firm such as Bosch-Denzo, Delphi, TRW Automotive, Wabco, Remy

[39] National Bank of Poland (NBP), 2006

Automotive, Volvo, Faurecia, Visteon, Volkswagen and Valeo [40]. Following previous manufacturing investments, automotive companies also locate their finance and accounting centres in Poland, with Fiat, Volvo and MAN being the most recent examples.

Table 5: Top 10 Automotive Investors in Poland

Company	Capital Invested (€ Million)	Headcount
Fiat Auto Poland S.A.	1,800	4,173
Toyota	740	2,000
Volkswagen Poznań Sp. z o.o.	729	5,889
General Motors Manufacturing Poland	650	2,700
Fiat-GM Powertrain	400	1,416
Delphi Automotive Systems*	303	6,898
Faurecia	200	1,314
Ispol-IMG Holdings*	154	430
Eaton Corporation (Eaton Truck Components S.A.)*	100	613
Lear Corporation	65	1,500
Total:	**5,141**	**26,933**

Note: Values represent investments until the end of 2007. Companies marked with ""are shown with values from 2006. Some values have been converted from USD to Euro.*

Source: PAIiIZ, Company Information

Investments in the automotive industry in Poland mainly revolve around four regional clusters: Śląskie voivodship (Silesia), Dolnośląskie voivodship (Lower Silesia), Wielkopolskie voivodship and capital city Warsaw. The regional concentration of automotive companies was primarily enhanced by the establishment of large vehicle manufacturing plants (Fiat, GM, FSO and Volkswagen). The first three clusters are located relatively close to either the western or the southern borders of the country, so as to be within a short distance from target export markets like Germany, or large manufacturing plants in the Czech Republic and Slovakia, where many suppliers from Poland send their products. With a favourable transport infrastructure in place (both motorways and railways), these regions offer the fast transit of goods.

[40] B. Domanski, Competence development and relocation dangers in the automotive industry in Poland, Berlin Workshop, 29-30 November 2007.

7. Future Prospects for the Sector

The Polish automotive sector seems to offer promising prospects for future development. Growth opportunities lie in the supply as well as the demand side of the sector.

Poland will continue to attract FDI in the automotive sector. In the first half of 2008, PAIiIZ finalised new investments in the automotive manufacturing space, with a total value of €279 million, of which the largest is a joint venture of Bosh and Denso named Advanced Diesel Particulate Filters (ADPF), which will result in the building of a new filter factory for diesel particulate filters near Wrocław.

A further increase in the volumes of motor vehicles manufactured is expected. This will be fuelled by launching the production of new models and expanding the production of existing ones. New foreign investors will establish their production plants in Poland, significantly contributing to the overall vehicle output. The country will not only continue to export vehicles to traditional markets such as Germany, but will also be an exporter to the fast-developing car markets of Russia and CIS.

Poland holds considerable potential as an end market for vehicle sales. Taking into the account the relatively low level of market saturation it is clear that there still is vast potential to increase the sales of new cars. In the long term, as Poland will become more affluent and increase its purchasing power, at least some of the demand currently covered by second-hand cars will be replaced by new sales.

Having the largest labour force in the CEE region, Poland has immense potential to become a regional BPO hub in the future. This is especially significant, as along with the growing economy, the gap between labour costs in Poland and western Europe will decrease, thus forcing international vehicle manufacturers to relocate their production further east. The ability to offer advantages other than cost will be a crucial determinant of competitiveness in the region.

Growth potential also lies within automotive clusters. The existence of local clusters in voivodships Wielkopolskie, Śląskie and Dolnośląskie will attract more companies to invest in the region. Poland is already benefiting from the development of regional clusters. Major investments by vehicle manufacturers in Slovakia and the Czech Republic have already attracted a number of suppliers.

Market growth over the period 2009-2013 will not only be driven by strong economic growth and the inflow of FDI, but also by mid-term drivers that are to likely to generate an additional push namely the Euro2012 and the financial aid from EU funds. Strict deadlines related to the organization of Euro2012 and large financial endorsements will result in Poland modernising and expanding its transportation infrastructure and airports, and even building new hotels. This in turn will have a direct influence on the overall attractiveness of Poland, and will translate into new FDI.

About Frost & Sullivan

Frost & Sullivan, a global growth consulting company, has been partnering with clients to support the development of innovative strategies for more than 40 years. The company's industry expertise integrates growth consulting, growth partnership services and corporate management training to identify and develop opportunities. Frost & Sullivan serves an extensive clientele that includes Global 1000 companies, emerging companies and the investment community by providing comprehensive industry coverage that reflects a unique global perspective and combines ongoing analysis of markets, technologies, econometrics and demographics. For more information, visit http://www.frost.com.

About PAIiIZ

The Polish information and Foreign Investment Agency (PAIiIZ) has been serving investors for 15 years. Its mission is to increase Foreign Direct Investment (FDI) by encouraging international companies to invest in Poland. It guides investors through all the necessary administrative and legal procedures along the way to setting up their business in Poland.

PAIiIZ offers investors:
quick access to comprehensive information about the economic and legal environment, assistance in finding appropriate partners and investment locations and support at every phase of the investment process.

Another one of **PAIiIZ's** roles is the creation of positive image of Poland and the promotion of Polish products and services abroad by organizing conferences, visits for foreign journalists and trade missions. **PAIiIZ** also promotes Poland's regions. It has established a network of *Regional Investor Assistance Centres* throughout Poland. Their goal is to improve the quality of regional services for investors and to provide access to the most up-to-date information, such as the latest investment offers and regional microeconomic data. These specialized offices are staffed by **PAIiIZ** trained employees and financed from local funds.

In order to help support and encourage FDI, the Polish government has passed many new resolutions this year. 90 billion Euro of EU funds has been allocated to Poland for the years 2007-2013. There has never been a better time to invest in Poland.

Come and see for yourselves. We are here to help you!

Contact us to learn more about how your company can profit from the unique business potential of Poland.

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