



CBI
Ministry of Foreign Affairs

CBI Product Factsheet: Brakes and Brake Parts in Eastern Europe

‘Practical market insights for your product’

Eastern European OEM production continues to rise, due to investment by the leading automotive OEMs. The demand for brake systems follows automobile manufacturing figures of the key OEMs in the region, but the aftermarket sector is more accessible to DC exporters. Driven by economic growth, Eastern European consumers tend to change brake pads and discs more frequently than they used to. Particularly attractive future markets in terms of the aftermarket sector are Poland and Romania, which together will account for two-thirds of GDP growth in the region by the year 2017.

Product definition

Brake systems are grouped under “Brakes and brake linings” (HS codes 87083010; 87083091; 87083099). This Product Factsheet analyses the market for brake calipers, brake mountings, brake discs, brake drums, brake parts and brake shoes for Eastern Europe, including Poland, the Czech Republic, Hungary, Bulgaria, Romania, Slovakia and Slovenia.

Product specifications

Quality: Compliance with international standards and European standards on safety is required, as is conformity with existing EU and national legislation and practices. The ISO/TS 16949 standard is considered to be the highest level of quality. This standard is important for the European automotive industry as it outlines best practices when designing, developing, manufacturing, installing or servicing automotive products.

The quality of materials used in the manufacture of brakes and their parts for European vehicles is very high, so as to ensure their durability and safety, and so the supplied parts must be carefully manufactured and inspected, as defective parts may be returned.

Materials: Traditional braking systems are comprised of the following parts and component materials:

- o Brake Pads: organic fibres, ceramic compounds, copper fibres, cellulose, glass, and steel.
- o Brake Disks: cast iron, grey iron, ceramics,

Considerations for action

- For more information on requirements for exporting casting and forgings to the EU, please refer to the [CBI Buyer Requirements Database for Automotive Parts and Components](#)

- carbon fibre
- o Brake Calipers: aluminium or steel

Packaging & Labelling: In general, packaging is dependent on the buyer: either the OEM or end user (the aftermarket sector). In the aftermarket sector, the packaging is typically disposable, as it is discarded after being used just once. Returnable packaging is most often used by OEM suppliers, so as to reduce cost and to improve the efficiency of packaging operations. Returnable packaging is not discarded after use and the empty packaging is recycled by the OEM or by a designated packaging operator. In order to export to the EU, product packaging must comply with all EU standards. To reduce the harmful impact of packaging on the environment, the EU has instituted legislation concerning the management of packaging and packaging waste.

Considerations for action

- For more information on packaging and packaging waste requirements, please refer to the [European Commission](#).

Figure 1: Brakes and brake parts



Source: Fotolia

Legislative Requirements

Legislative Requirements: The most important requirement for automotive components is that they comply with the technical standards set by EU legislation in order to guarantee vehicle and environmental safety.

Type-approval is a certification for various types of motor vehicles and their components, which includes agricultural and forestry tractors. The type-approval or certification is valid in all EU Member States and is required when selling any products in the EU. Many automotive components are not approved until the final assembly, in which case certification of individual components is not necessary, although these components will still have to comply with type-

Considerations for action

- Check with your buyer, or with [the approval authority of the country you want to export to](#), what the specific standards are for the parts you are manufacturing.
- Read more about type approval at the [EU Export Helpdesk](#).
- To understand the specific requirements for replacement brake lining assemblies, drum

approval requirements.

The End of Life Vehicles (ELV) Directive aims to avoid environmental pollution during the scrapping process through reducing the hazardous materials used in vehicle production. Vehicles must be designed to facilitate proper dismantling and recycling (by coding the components), and the use of heavy metals such as lead, mercury, cadmium and hexavalent chromium is prohibited (with the exception of a few applications).

brake linings and discs and drums, refer to the [regulation number 90 of the Economic Commission for Europe of the United Nations \(UN/ECE\)](#)

- Check if your buyer uses the International Material Data System (IMDS). This is a collective, computer-based data system developed by automotive OEMs to manage environmentally relevant aspects of the different parts used in vehicles. It has been adopted as the global standard for reporting on material content in the automotive industry.

Common buyer requirements: In addition to legislative approval, there are other common buyer requirements. While these are not obligatory in the legal sense, they are implemented by various competitors in the market and are thus necessary in order to compete effectively.

Quality Management: In order to apply for type-approval, production processes need to meet quality management criteria. ISO TS/16949 and ISO 9001 are accepted as standard requirements and EU buyers and manufacturers often insist on them.

Corporate social responsibility (CSR) and the extent to which buyers expect a certain level of social and environmental performance is becoming increasingly important. Bigger EU companies have developed their own CSR policies and require their suppliers (and their sub-suppliers) to conform to these. Signing a supplier code of conduct is often a prerequisite. These codes of conduct generally cover compliance with local laws, protection regarding workers' health and safety, respecting basic labour rights and also business ethics. The implementation of an environmental management system is often a requirement for core suppliers.

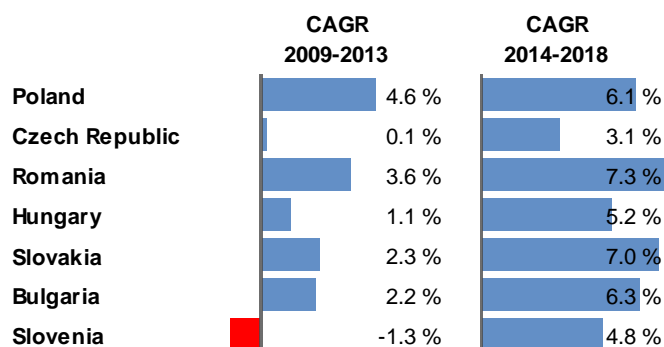
Considerations for action

- Implement ISO 9001 and ISO TS/16949, as it is a standard requirement of EU buyers. Click [here](#) for more information on ISO TS/16949 at the ISO website
- Most big car brands publish their CSR policies and supplier code of conduct on their websites. An internet search for these may give valuable insight into assessing your company's performance by comparison.
- Implement an environmental management system, such as [ISO 14001](#), as it is a common requirement.

Macro-economic statistics

In 2013 Eastern Europe saw an average growth of 5.5% after the previous year's 6.8% contraction. Forecasts for 2014 and 2015 growth are estimated at 4.1% and 5.7% respectively. Poland, one of Eastern Europe's largest markets, as well as Romania and Slovakia are all forecast to experience an average growth of more than 6% through 2018.

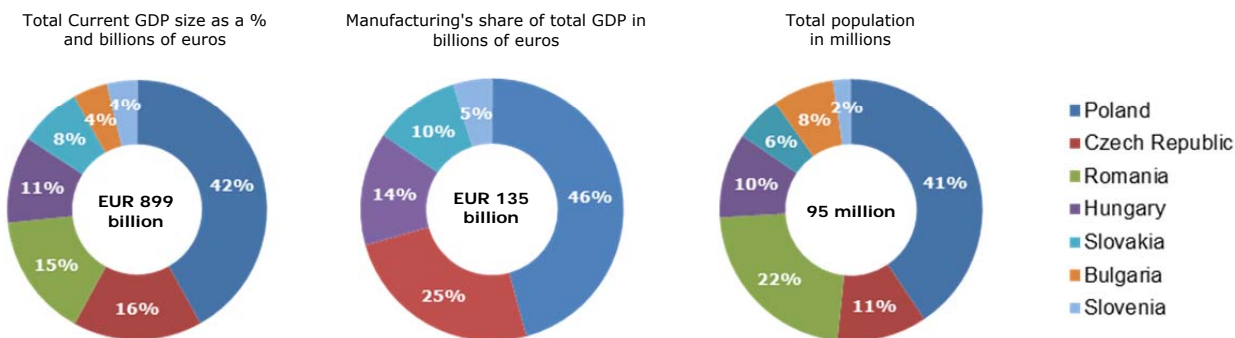
Figure 2: GDP (current prices) Compound Annual Growth Rate (CAGR) for 2009-2013 and estimate for 2014-2018 for selected Eastern European Countries



Data source: IMF 2014, World Economic Outlook Database

The value of the GDP for the seven Eastern European countries covered by this document was estimated at €899 billion (or roughly one-tenth of the GDP value for the EU5 countries i.e. the biggest Western European economies: Germany, France, the UK, Italy and Spain) in 2013. Poland is the largest market in Eastern Europe, with a GDP of approximately €377 billion and a production value of €62 billion, accounting for more than 40% of the total GDP and production values for the seven Eastern European nations in question. The Czech Republic is the second largest Eastern European economy, with a strong manufacturing base, followed by Romania and Hungary. Bulgaria and Slovenia are relatively small economies, together accounting for less than 10% of the total Eastern European GDP.

Figure 3: Key 2013 macroeconomic indicators for Eastern Europe, in billions of euros (population in millions)



*No data available for Bulgaria and Romania
Data source: IMF and OECD 2014

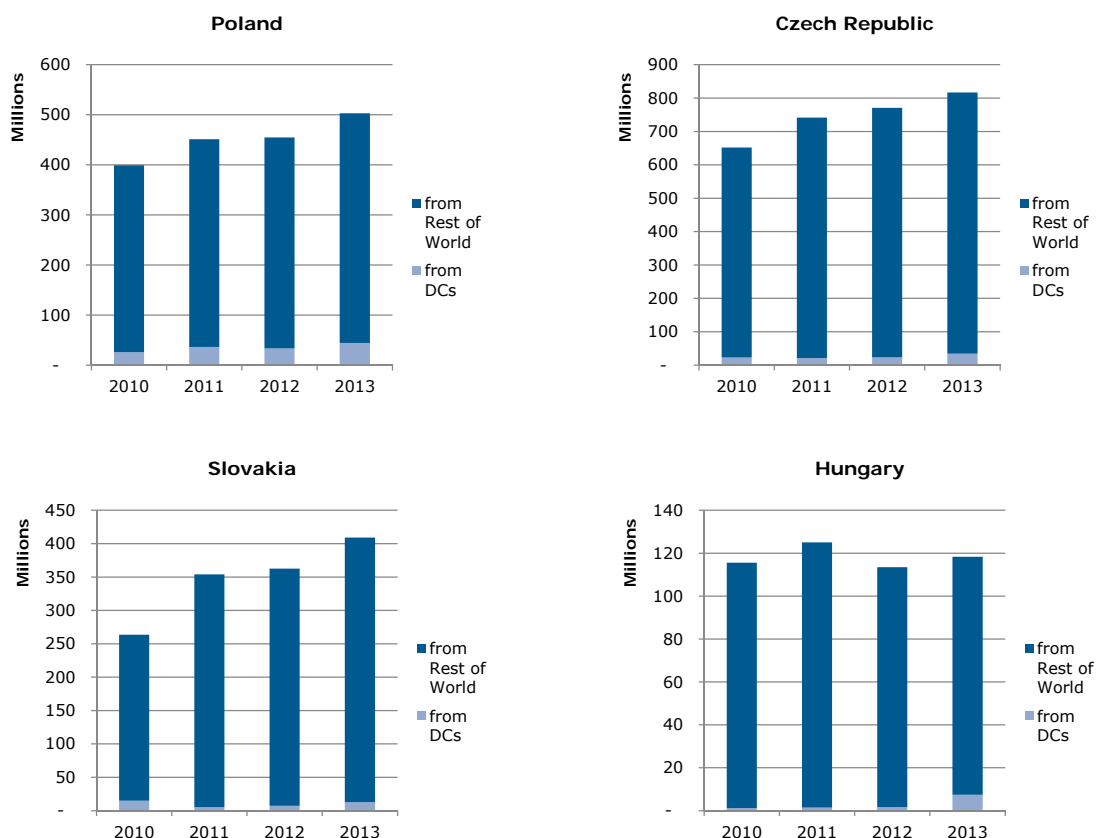
Trade Statistics

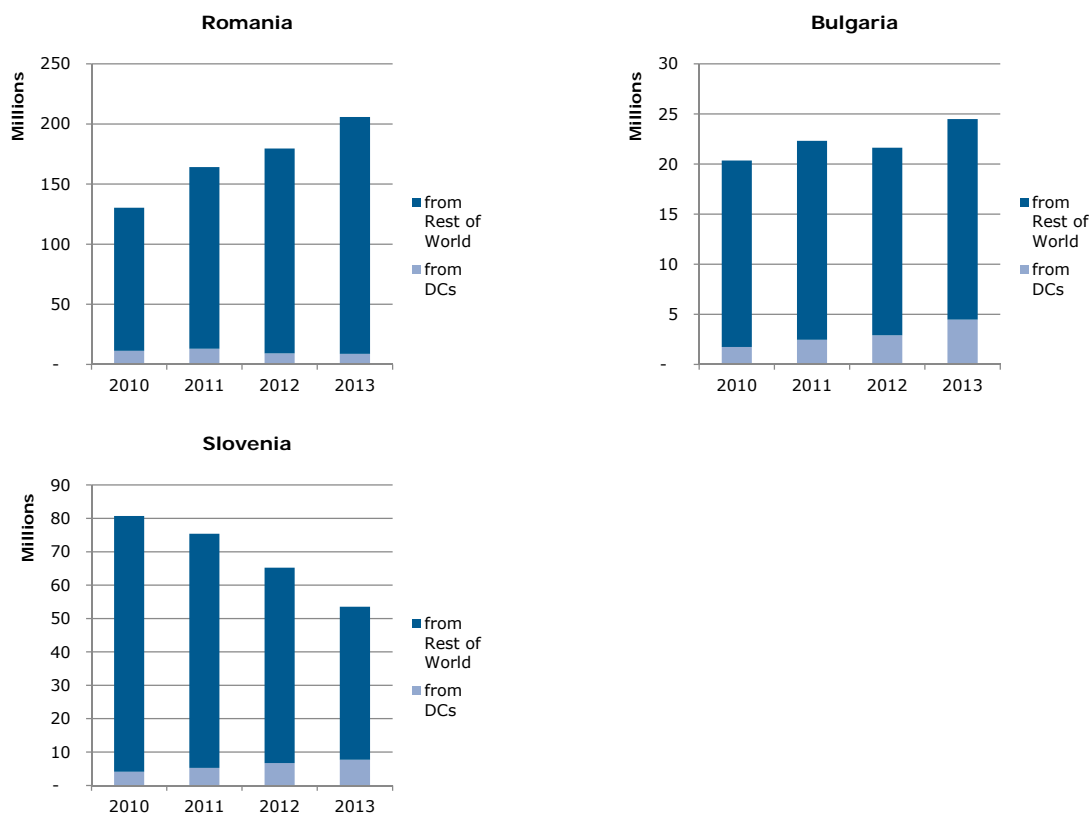
Imports and exports:

Eastern Europe imports roughly €2.13 billion a year worth of brakes and brake parts. Taken together, Poland, the Czech Republic and Slovakia represent over 81% of the total imports of brakes and brake parts to Eastern Europe. The imported brakes and brake parts are shipped mainly from Eastern and Western Europe as well as from other developed countries such as Korea.

The value of brake and brake parts imports from the Developing Countries (DCs) to Eastern Europe was estimated at €120 million (5.6% of total brakes and brake parts imports) in 2013 and grew at a 13.3% CAGR between 2010 and 2013. Poland imported by far the most from the DCs in absolute terms (€44.4 million), followed by the Czech Republic (€34.2 million) and Slovakia (€13 million). The value of brake and brake part imports from the DCs to Hungary grew almost six-fold between 2010 and 2013. The biggest DC exporters of brakes and brake parts to Eastern Europe are China, Turkey and India. If the current trends continue, DC imports will continue to grow at the same or a higher rate than the overall growth rate of imports (8.7%).

Figure 4: Imports of brakes and brake parts, in millions of euros (the range of the y-axes varies by country due to different import levels)





Data source: Eurostat 2014

Eastern Europe is a net exporter of brakes and brake parts, having exported approximately €2.9 billion worth of these in 2013. The Czech Republic is the largest exporter with €1.2 billion in exports (or over 57% of total Eastern Europe brakes and brake parts exports), followed by Poland at €804 million and Slovakia at €367 million. Together, these countries account for nearly 84% of Eastern Europe's brakes and brake parts exports. The brakes are mainly exported to other EU nations as well as to other developed countries. Roughly €188 million worth of brakes and brake parts is exported to the DCs (approximately 6.6% of all exports).

Market trends and opportunities

Eastern Europe is in a prime position to capitalize on the decline in the European automotive market, with lower labour costs, a solid infrastructure and locations close to major Western European markets. Before the economic crisis started in 2008, many European OEMs invested in production sites across Eastern Europe. Few of these plants have been closed and production volumes have remained stable. Eastern Europe looks set to remain a strong hub of automotive manufacturing for the near future, although the risk does exist that OEMs could move labour intensive operations to lower-cost regions, such as North Africa.

The Czech Republic is the biggest import market for brakes and brake parts in Eastern Europe, with estimated imports of €817 million in 2013 (up from €651 million in 2010). It is followed by Poland at €503 million and Slovakia at €409 million and a strong average compound growth of 16% annually since 2010. Romania is also emerging as an attractive import market with €206 million in imports at present (up from €165 million in 2010). Bulgaria has the highest share of brakes and brake parts originating from developing countries (roughly 18%), which indicates a willingness to

source components from this part of the world. The share of DC imports has increased in the past five years in all other Eastern European countries, with the exception of Slovakia and Romania, which means that there is an overall growth in demand for the more competitively-priced parts from the developing countries.

For more information on automotive market trends, please refer to [CBI Market Trends](#)

Price

Apart from the distribution of new parts, the aftermarket for automotive parts also encompasses the vigorous distribution of used or overhauled parts and components. Pricing depends on supply chain positioning. The aftermarket sector, in particular, is very discount-driven and has varied mark-ups at each distribution step for different parts and components. Due to the large variation in parts types and models, it is difficult to provide a general overview of brakes and brake parts prices, but it is possible to provide some insight into the margins imposed by different players in the supply chain. Based on the margin ranges, DC suppliers selling to a tier 3 supplier in the OEM supply chain could price their products at between 64% and 81% of the OEM delivery price. In order to better ascertain prices of specific products and models, check the internet to determine the appropriate range, or talk directly to wholesalers and/or retailers. The price of branded spare parts will not differ greatly among the various countries. Those players who are active in several European countries have largely harmonised their prices, and any differences in pricing may be because of different logistical and local costs. In the Original Equipment sector, the price is set by contracts of four years or more, which usually include a 3-5% price reduction each year after the first year. In the aftermarket sector, the prices are negotiated every year.

OEM supply chain	Margin
Tier 1 supplier delivering to OEM	6-8%
Tier 2 supplier delivering to tier 1	6-15%
Tier 3 supplier delivering to tier 2	10-25%
Aftermarket OES supply chain	Margin
Tier 1 delivering to OEM for OES sales through approved service chain	10-30%
Tier 1 delivering to OEM for OES sales through independent outlets	10-25%
OEM delivering OES parts through its approved service chain	25-65%
OEM delivering OES parts through independent outlets	30-50%

Main sources

- [European Commission's macroeconomic publications](#)
- [IMF](#) – a good source for macroeconomic information
- [OECD](#) – a good source for macroeconomic and industry-specific information
- [European Commission's Directives and Regulations pertaining to motor vehicles, their trailers, systems and components](#)
- [CLEPA](#) - the European Association of Automotive Suppliers
- [ACEA](#) - the European Automobile Manufacturers Association
- [Ernst & Young](#)'s Automotive information - Automotive information – a good source of automotive information
- [Ernst & Young's European Automotive Survey 2013](#) – interviews mostly with automotive suppliers
- [Inovev](#) - Worldwide automotive knowledge platform that offers free-of-charge and fee-based content
- Trade fairs are a good place to network, to meet buyers and to promote your company. The most prominent agricultural machinery trade fairs in Eastern Europe are: the [Sofia Motor Show](#) (site in Bulgarian) – Bulgarian automotive trade fair; [Motor Show Poznań](#) – Polish automotive trade fair; the [Bucharest Auto Show and Accessories](#) - Romanian automotive trade fair; [AUTOSALON Brno](#) - Czech automotive trade fair; [Autosalon Bratislava](#) (annual) - Slovak automotive trade fair

More information

CBI market information:

- [CBI Buyer Requirements: Automotive Parts and Components](#)
- [CBI Buyers' Black Box: Automotive Parts and Components](#)
- [CBI Market Channels and Segments Automotive Parts and Components](#)
- [CBI Market Competitiveness Automotive Parts and Components](#)

This survey was compiled for CBI by Global Intelligence Alliance

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