



CBI Product Factsheet: Shock Absorbers in Eastern Europe

'Practical market insights for your product'

Eastern Europe is an attractive region for the suppliers of non-branded shock absorbers, due to the continuous strong demand and a non-consolidated OEM market. Poland is the biggest market for shock absorbers, with an import value of €131 million and a Developing Country (DC) import share standing at almost 25%. It is followed by the Czech Republic and Slovakia, both of which are increasing their imports in addition to exhibiting a willingness to import from the DCs.

Product definition

Shock absorbers are grouped under the product category "Automotive parts and components" – "Parts, components and accessories for all kinds of common automotive vehicles" – "Suspension systems" (HS codes 87088010; 87088020; 87088035; 87088090). This Product Factsheet discusses the market for exhaust shock absorbers in Eastern Europe, including Poland, the Czech Republic, Hungary, Bulgaria, Romania, Slovakia and Slovenia.

Product specifications

Quality: Compliance with international standards and the European standards on safety is required, as is as conformity to 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 production of shock absorbers their parts for European vehicles is very high in order to ensure their durability and safety, so the supplied parts have to be carefully produced and checked because faulty parts will be returned.

Materials

European car manufacturers and legislators consider security and comfort to be very important. So shock absorbers are an essential component of the chassis, as they reduce the vibrations of the vehicle and springs. The shock absorbers and springs together form the link between suspension and body, which is beneficial to traction, steering and comfort. Coil springs or leaf springs are commonly used. Vehicles typically employ both hydraulic shock

Considerations for action

- For more information on requirements for exporting casting and forgings to the EU please refer to the CBI Buyer Requirements database [Labels and Standards: Sustainability in Casting and Forging](#)

absorbers and springs or torsion bars.

Shock absorbers are sophisticated piston systems that comprise of a steel shaft mounted to a piston, a cylinder, gaskets, cushions and bushes. In gas-type shock absorbers, there is also a floating piston that separates the gas and the shock absorbing fluid. Shock absorbers are stamped with the brand of the manufacturer and with manufacturing codes and serial numbers.

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 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.

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

Figure 1: Shock absorber



Source: Fotolia

Buyer 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

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.

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-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).

- Read more about type approval at the [EU Export Helpdesk](#).
- 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.

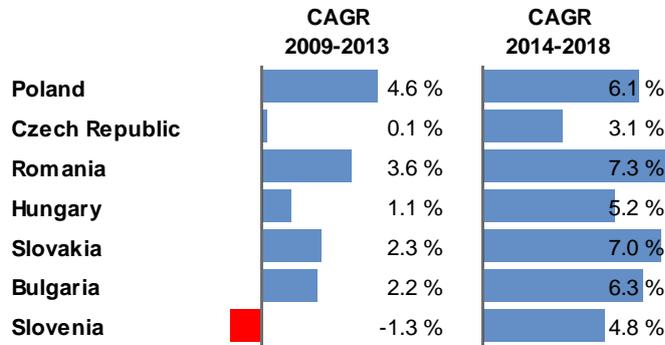
Considerations for action

- 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 common requirement.

Macroeconomic 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.

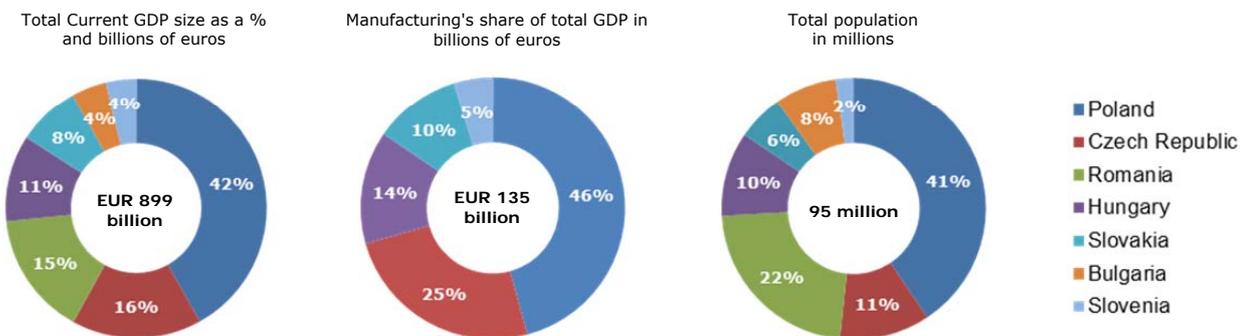
Figure 2: GDP (current prices) Compound Annual Growth Rate (CAGR) for 2009-2013 and estimate for 2014-2018 for selected Eastern European Countries



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

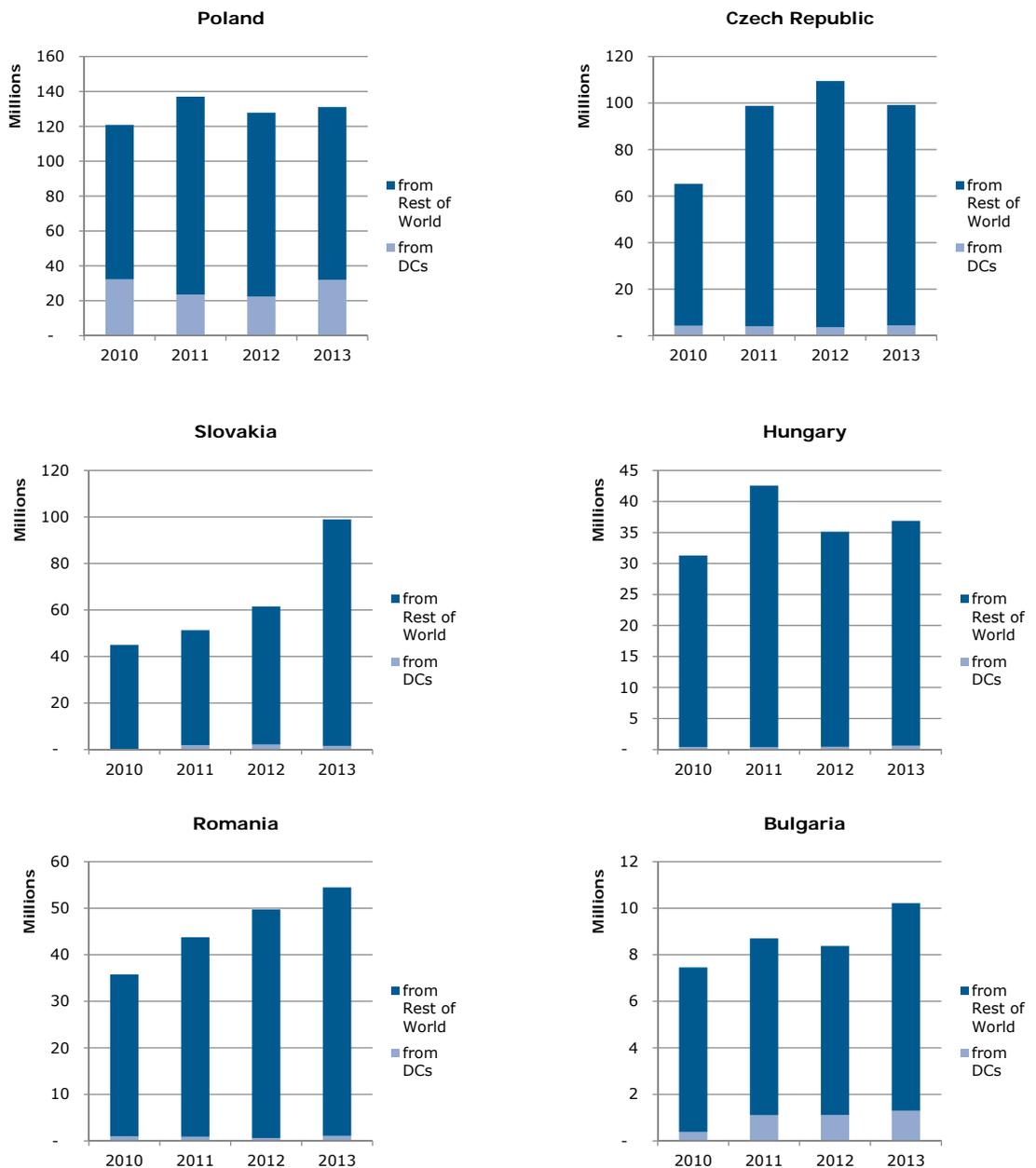
Trade Statistics

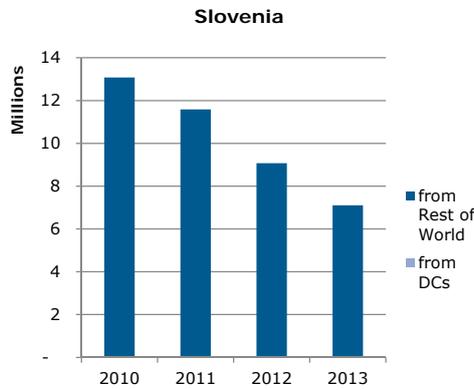
Imports and exports:

Eastern Europe imports roughly €438 million worth of shock absorbers a year. Poland, the Czech Republic and Slovakia together represent over 75% of the total imports of shock absorbers to Eastern Europe. The imported shock absorbers are shipped mainly from Eastern and Western Europe as well as from other developed countries such as Korea.

The value of shock absorber imports from the Developing Countries (DCs) to Eastern Europe was estimated at €41 million (9.2% of total shock absorber imports) in 2013, and has grown at a 5.2% CAGR between 2010 and 2013. Poland imports by far the most from the DCs in absolute terms (€32 million), followed by the Czech Republic (€4.4 million). The value of shock absorber imports from the DCs to these two countries has remained relatively unchanged since 2010. The countries experiencing the biggest increase in DC imports are Slovakia and Bulgaria.

Figure 4: Import of shock absorbers, in millions of (the range of the y-axes varies by country due to different import levels)

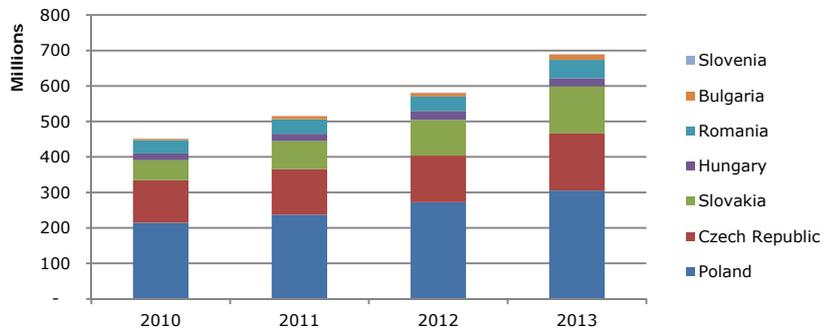




Data source: Eurostat 2014

Eastern Europe is a net exporter of shock absorbers, having exported approximately €689 million worth in 2013. Poland is the largest exporter with €305 million (or over 44% of total Eastern Europe shock absorber exports), followed by the Czech Republic with €161 million and Slovakia with €133 million. Together these countries account for approximately 87% of Eastern Europe’s shock absorber exports. The shock absorbers are mainly exported within the EU countries as well as to other developed countries. Roughly €44 million worth of shock absorbers is exported to the DCs (approximately 6.4% of all exports).

Figure 5: Export of shock absorbers from Eastern Europe, in millions of euros



Data source: Eurostat (Prodcom) 2014

Market trends and opportunities

Eastern Europe is in a prime position to capitalise 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 may move labour intensive operations to lower-cost regions.

Eastern Europe has certain features that make it attractive to the suppliers of non-branded shock absorbers, since the region’s vehicles are approximately two years older than that of the EU5 and the level of road infrastructure causes additional wear to shock absorbers. In addition, vehicle manufacturing networks have smaller market shares than in the EU5, providing more opportunities for

the suppliers of non-OEM products. The OEM market also has potential: the combined OEM production in these countries is catching up with German car manufacturing levels, while the levels are falling in other European countries.

Poland is the biggest import market for shock absorbers in Eastern Europe, with estimated imports of €131 million in 2013. It is followed by the Czech Republic at €99 million (compounded 3-year growth of 14.9% per year) and Slovakia at €99 million and a strong annual average compound growth of 30% since 2010. Romania is also emerging as an appealing import market, with imports currently standing at €54 million (up from €36 million in 2010). Poland has the highest share of shock absorber imports originating from developing countries (roughly 24.4%), which indicates that they are willing to source components from this part of the world.

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 shock absorber 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 automotive trade fairs in Eastern Europe are: the [Sofia Motor Show](#) (site in Bulgarian) – Bulgarian automotive trade fair; [Motor Show Poznań](#) – Polish automotive trade fair; [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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