



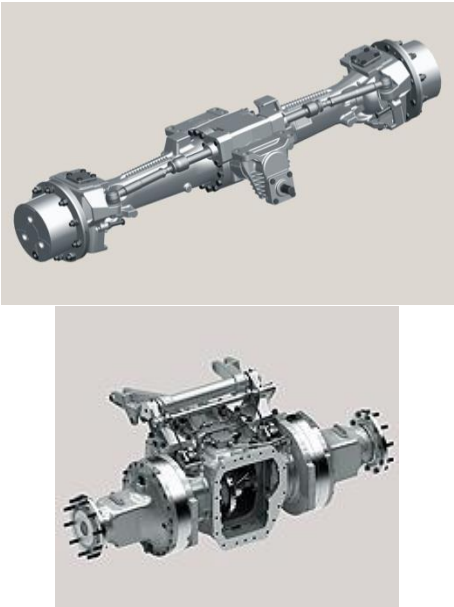
CBI Product Fact Sheet for Agricultural Axles in Germany, France, Italy and Poland

'Practical Market Insights concerning your Product'

Agricultural axles are, and will likely continue to be, a growing market in Germany and Poland; and are likely to stagnate or further decline in France and Italy. The greatest opportunities lie in brake drums, suspension parts, drive shafts, yokes and axle rims. The best way of accessing the market would be through OEM/OES subcontracting or selling through pan-European or national wholesaler networks.

Product

Product specifications	
Type	In Western Europe, most tractors and other relevant agricultural machinery have a front and a rear axle, although there are also single and multiple-axle tractors/trailers. The most typical axle configurations include 4x4, 4x2, 6x4 and 6x6 (the first number indicating the quantity of axle ends and the second indicating how many of them are driven by the engine). Axles are rated according to the weight they can carry; front axles will typically range from 4.5 to 10.5 tonnes while rear axles may range from 9.5 to 21 tonnes and can be differentiated by the engine power (HP/torque) usage: light class – 20-75 kW, middle class 75-150 kW, and heavy class >150 kW.
Quality and design	<p>The quality and expected durability of axles used in agricultural machinery in Europe is very high because the machines are used for extended periods of time daily and do not always have extensive maintenance schedules. When purchasing agricultural machines and parts, consumers attach the highest importance to reliability and durability.</p> <p>Axles are typically made of forged steel, although in extremely heavy load applications, tempered seamless steel or modular cast iron may be used. The quality of materials used in production of axles needs to be high to assure their durability and safety. In addition, agricultural axles need to comply with the relevant EU regulations. Although there is a differentiation between A, B and C brands (high, mid and low-end) in the agricultural machinery parts field, the main issue is whether particular products are branded by a 1st, 2nd or 3rd tier producer rather than reflecting decreasing product quality.</p> <p>The design of axles depends on the make and the model of the machine they need to fit and will also depend on their expected load rating and necessary dimensions. The manufacturers should anticipate that there is an increasing trend towards greater speed capability in agricultural machinery (up to 65 km/hour), which may affect the axle construction.</p>
Packaging and labelling	Axles are typically packaged in cardboard and/or wooden boxes to protect them from being damaged. The packages would typically be labelled with a description of the contents, including axles' technical parameters, such as model type, basic load capacity (in kilograms or pounds), gearing size or series, manufacturing

	location, housing wall and brake type.
Illustration	<p>Example of agricultural axles:</p> 

Legal requirements and standards	Description	More information
<i>Framework Regulation of the European Parliament and of the Council for Agricultural Vehicles</i>	Proposed regulation aimed at updating and simplifying legislation for all aspects of agricultural and forestry vehicles and at completing the current approval system for these vehicles. The regulation plans to incorporate existing international regulations and standards, such as those developed by UNECE, OECD, CEN/CENELEC and ISO.	In progress
<i>Amended regulation of type-approval of agricultural and forestry tractors</i> Directive 2010/62/EU	The directive amends five previous directives on the regulation of type-approval of agricultural and forestry tractors, their trailers and interchangeable towed machinery, together with their systems, components and separate technical units, for the purpose of adapting to technical progress. It repeals the Directive 74/150/EEC.	Amends: Directive 80/720/EEC Directive 86/297/EEC Directive 2003/37/EC Directive 2009/60/EC Directive 2009/144/EC
<i>Approval for agricultural or forestry tractors</i> Directive 2003/37/EC	Outlines a European-wide system of approval for agricultural or forestry tractors, their trailers and interchangeable towed machinery together with their systems, components or separate technical units. Type-approval is the confirmation that production samples of a design will meet specified performance standards.	Repeals: Directive 74/150/EEC
Non-legal requirements		
<i>ISO (International Organisation for Standardisation)</i> http://www.iso.org	ISO standards relating to agricultural engines can be accessed under the following link	Other agricultural machinery standards can be accessed here
SA 8000	Certification standard by Social Accountability International (SAI) for the improvement of working conditions.	http://www.sa-intl.org

For full breakdown of directives and regulations on wheeled agricultural and forestry tractors, refer to the relevant [European Commission website](#); for more information on other legal and non-legal requirements, please refer to CBI's database on Market Access Requirements.

Promotion

- The agricultural machinery market has a similar structure, similar players and requires approaches similar to the automotive segments.
- DC producers interested in exporting into the EU must first decide on their sales strategy and, in particular, whether they want to supply parts directly to tier 1-3 suppliers, wholesalers, distributors or retailers. They may also decide on what types of axles they will specialise in.
- In order to enter the European market, DC producers must have the necessary international certifications (e.g. ISO) and comply with the EU standards as well as offering reliable product quality.
- Additional advantage is given to exporters who are capable of on-time delivery and short lead times.

Marketing:

- One way of marketing agricultural machinery parts is to approach international and local wholesalers/traders specialising in such parts, who in turn will sell the products to their retail customers. The advantage of this option is that large wholesalers take care of the merchandising and sometimes branding, which makes market access considerably easier for small and medium size exporters. Examples of such international wholesalers in the agricultural machinery parts include Sparex (www.sparex.com) and Kramp (www.kramp.com). One may also research and approach wholesalers in each of the targeted countries.
- Another way of selling agricultural parts would be through retailers such as tractor and implement dealers, agricultural engineers, country stores, repair shops, etc. Approaching smaller dealers would be much more time and capital intensive than approaching the wholesalers and generally more difficult to navigate for a new exporter. This option should be explored once the exporter is relatively well established in a local market.
- Trade fairs are very important for the promotion of your products and for establishing business contacts with potential European clients. In addition, they help you to review what the competition has on offer and what the latest trends are. The upcoming agricultural machinery fairs are listed below; for additional agricultural trade fairs, please consult [TradeFairDates](#).
 - Agraria, Wels, Austria (29 August-2 September 2012) www.agraria.at
 - Agra, Leipzig, Germany (25-28 April 2013) www.agra2011.de
 - EIMA, Bologna, Italy (7-11 November 2012) www.eima.it
 - Agritechnica, Hannover, Germany (12-16 November 2013) www.agritechnica.com
 - Polagra-Premiery, Poznan, Poland (13-16 February 2014) www.polagra-premiery.pl/en

Doing business in Germany, France, Italy and Poland

- It is important to be able to lead business discussions in English although the use of local language is always a plus. In France and in Italy it may be particularly advantageous to be able to speak the local language in order to conduct business. One has to keep in mind that the buying audience in each country can be completely different.

- It is important to have a person as a dedicated point of contact for potential clients so there is some continuity during subsequent interactions.
- Client inquiries should always be acknowledged and replied to promptly (ideally within 2 business days) with adequate follow-up if necessary.
- Agreements with the client in regard to delivery times, quantities, product specifications and quality should always be closely observed.

For more information on entering the European market, please refer to CBI’s Buyer’s Black Box.

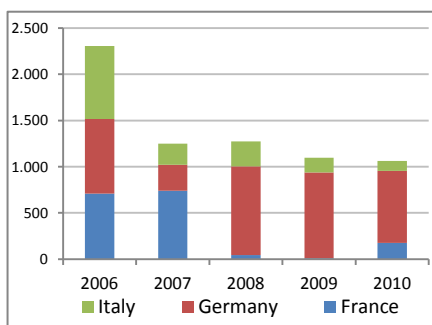
Price

Apart from the distribution of new parts, the aftermarket for agricultural parts also encompasses a lively distribution of used or overhauled parts and components. Pricing depends on the supply chain positioning. The aftermarket, in particular, is very discount-driven and has varied mark-ups at each distribution step, and for different parts and components. Due to large variation in types and models of parts, it is difficult to provide a general overview of agricultural axle prices, but it is possible to provide some insight into margins imposed by different players in the supply chain. Based on the margin ranges, DC suppliers selling to the 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, one may search the internet to determine the appropriate range, or talk directly to wholesalers and/or retailers. The differences in price of branded spare parts will not be great among the various countries. Those players who are present in several European countries have largely harmonised their prices; any differences in pricing may occur because of different logistics and local costs.

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 its approved service chain	30-40%

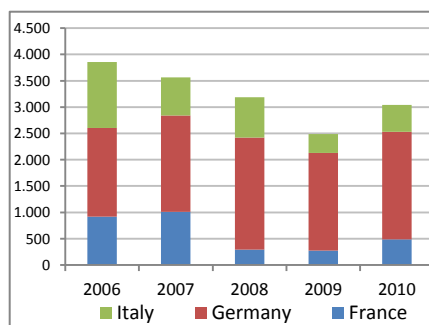
Place

Figure 1: Apparent consumption of axles in Germany, France and Italy in € million



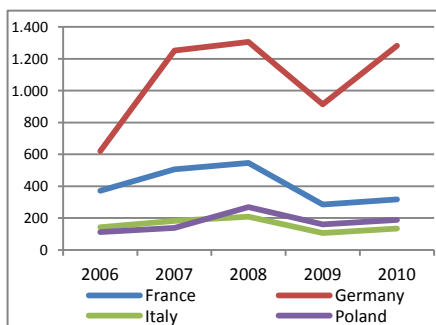
Data source: Prodcum, 2012

Figure 2: Production of axles in Germany, France and Italy in € million



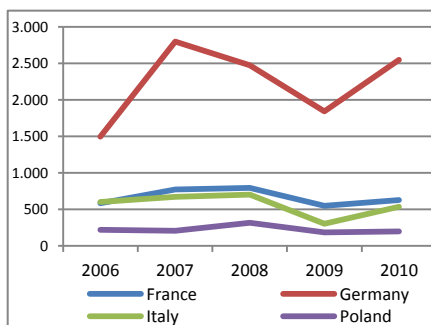
Data source: Prodcum, 2012

Figure 3: Imports of axles in Germany, France, Italy and Poland in € million



Data source: Prodcum, 2012

Figure 4: Exports of axles in Germany, France, Italy and Poland in € million



Data source: Prodcum, 2012

For the past two years, agricultural markets have been in a boom phase, mainly due to the megatrends of population growth, migration to urban agglomerations, changing eating habits and additional demand for agricultural products for the generation of energy. In 2011, the EU agricultural machinery market was estimated at €24 billion. It is predicted that the market will grow by 5% in 2012 and that for the majority of companies the year will close with an increase in turnover.

Germany and Poland

- Germany is the main growth market and the economic pillar of the agricultural machinery market in Europe; it comprises some 20% of approximately €4.8 billion of the European market volume and is a net exporter of agricultural machinery.
- Agricultural equipment manufacturers are expanding their production capacity in the country, as opposed to outsourcing their capacity to lower-cost countries, meaning that they are planning on continuing to serve the region, and possibly other countries from local factories.
- Germany is the largest European producer of axles. In 2010, it produced axles worth €2 billion and had exports worth €2.5 billion. The apparent consumption of axles in Germany (approximated as Production + Imports - Exports) decreased from €808 million in 2006 to €780 million in 2010. Although the axle consumption in Germany has decreased between 2006 and 2008, the decrease is relatively minor in comparison to the consumption decrease noted in other European countries;
- Poland comprises some 5% of the EU agricultural machinery market (or approx.

Opportunities

- Germany offers the greatest opportunity for agricultural axle and axle parts exporters due to its size, agricultural machinery market growth, investments in local production, and stable business environment.
- There are major opportunities in the OEM market as well as in the aftermarket (both in new spare parts and used or overhauled components).
- The greatest opportunities lie in subcontracting production of axle parts such as brake drums, suspension parts, drive shafts, yokes for drive shafts and rims for axles.
- The easiest way to market would be by approaching the local agricultural parts wholesalers or by approaching the OEMs and/or the component/systems suppliers with a subcontracting offer.
- Poland is one of the most dynamically growing countries in relation to agricultural machinery;

€1.2 billion). Poland has managed to expand its volume considerably during recent years. Poland is a net importer of agricultural machinery.

- Since EU accession, Poland has benefitted from subsidies for purchases of agricultural machinery, which has helped modernise the local machinery park. However, the country also has more aged/used machines than its Western counterparts.
- Poland is the largest market in East and Central Europe, with 2010 axle imports of €189 million and exports of €201 million.

its need for modern machinery, coupled with a relatively strong economy, unsaturated market and inflow of EU subsidies makes it an attractive target for a DC exporter.

- The Polish aftermarket is also well developed because of the preference for using the machinery as long as possible, and also because the agricultural machinery park in Poland is older than in Western Europe.

France and Italy

- France is the second largest agricultural machinery market in Europe, comprising some 18% (or approx. €4.3 billion) of the EU market volume. France is a net importer of agricultural machinery.
- France is the 6th largest axle producer in Europe, with production value of €485 million and exports of €316 million. The apparent consumption of axles in France (approximated as Production + Imports - Exports) decreased from €709 million in 2006 to €174 million in 2010.
- Italy comprises some 9% of the EU agricultural machinery market (or approx. €2.2 billion). Italy is a net exporter of agricultural machinery.
- Italy is the 5th largest axle producer in Europe, with production value of €500 million and exports of €534 million. The apparent consumption of axles in Italy (approximated as Production + Imports - Exports) decreased from €790 million in 2006 to €110 million in 2010.

Opportunities

- Though France and Italy are significant European producers of agricultural machinery and axles, both of them have experienced a steep fall in axle consumption between 2006 and 2010, making both less desirable for DC exporters.
- The decrease in the local production might mean that the agricultural axles' aftermarket may become much more significant in those countries, as would the demand for cheaper components.
- A good way of accessing the French and Italian markets would be through pan-European wholesalers/importers.

This survey was compiled for CBI by Global Intelligence Alliance
in collaboration with CBI sector expert Jan Oude Elferink

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