The Automotive Industry in Germany

A Century and More of Automotive Excellence

Last year marked the 125th anniversary of the birth of the automobile in Germany. On January 29, 1886, Karl Benz registered his “vehicle powered by a gas engine.” The resulting patent issued is generally considered to be the birth certificate of the automobile as we know it.

Also the home of the world’s first four-stroke internal combustion engine, Germany continues to occupy a unique position in the international automotive industry. German OEMs account for 17 percent of global passenger car production.

Domestically, the automotive industry remains the country’s most important economic sector – and Europe’s single largest auto market. Germany also hosts the largest concentration of OEM plants in Europe. Annual EUR 19.6 billion commitment to automotive research and development [R&D] is reflected in the creation of new environmentally friendly technologies: conventional drive technologies are being optimized and new modes of driving developed. Around ten new patents are registered each day; making Germany the most innovative auto nation in the world.
The Industry in Numbers

- The automotive industry is the largest industry sector in Germany. In 2011, the auto sector recorded turnover of EUR 351 billion – around 20 percent of total German industry revenue.

- German passenger car and light commercial vehicle manufacturers recorded foreign market-generated revenue of EUR 194 billion for the year 2011. For the same period, domestic market-generated revenue of EUR 80 billion was created.

- The automobile industry is one of the largest employers in Germany, with a workforce of around 712,500 in 2011.

- Germany is Europe’s number one automotive market in terms of production and sales; accounting for over 30 percent of all passenger cars manufactured and over 20 percent of all new registrations.

- Germany also hosts the largest concentration of OEM plants in Europe. There are currently 47 OEM sites which are producing for major auto brands.

- German automobile manufacturers produced more than 12.9 million vehicles in 2011 – equivalent to 17 percent of worldwide production.

- Germany is the European car production leader: some 5.9 million passenger cars (and more than 439,000 trucks and buses) were manufactured in German plants in 2011.

- Around 77 percent of cars produced in Germany in 2011 were ultimately destined for foreign shores.

- Germany’s automotive sector is the country’s most innovative industry sector, accounting for 33 percent of total German industry R&D expenditure of EUR 59.2 billion.

- R&D expenditure for 2011 was EUR 19.6 billion – helping Germany consolidate its globally leading position in the world economy.

- R&D personnel within the German automobile industry reached a level of just over 89,000 in 2011.

- In marked contrast to other European countries, Germany’s unit labor costs continue to fall – decreasing by a yearly average of 1.2 and 1.5 percent respectively for the year 2010. In 2011, unit labor costs rose a modest 1.2 percent.

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### European Passenger Car Production and Registration 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Production (in million units)</th>
<th>Registration (in million units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>4.8</td>
<td>4.0</td>
</tr>
<tr>
<td>France</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Spain</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>UK</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Italy</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Belgium</td>
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<td>1.0</td>
</tr>
<tr>
<td>Poland</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.5</td>
<td>0.5</td>
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<tr>
<td>Czech Republic</td>
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<td>0.4</td>
</tr>
<tr>
<td>Romania</td>
<td>0.3</td>
<td>0.3</td>
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<tr>
<td>Slovakia</td>
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<td>0.3</td>
</tr>
<tr>
<td>Slovenia</td>
<td>0.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Source: ACEA 2011
The German Auto Industry – Emerging from the Crisis

In 2009, global economic production fell for the first time in six decades. Global demand for cars fell by four percent, with commercial vehicles hit harder still; recording a nine percent drop in international production.

Germany, like most industrialized nations, did not go untouched by the worst international financial crisis in modern times. The German economy has nevertheless proven particularly robust in the face of the turbulence that has hit demand and trade across the globe.

As Germany’s key industry, the automotive sector in particular has shown the way out of the international recession. Moreover, the recovery has led to solid growth in the aftermath of the global financial crisis. In 2011 the German automotive industry further affirmed its position as the mainspring for the German national economy.

Around one fifth of total sales from the overall manufacturing sector occur in the automotive sector. During the mid-nineties this share was around 13 percent. As such, the automotive sector is the most important economic sector in Germany.

The domestic passenger car and light commercial vehicle market reached record highs in 2011. Combined export and domestic sales in 2011 reached EUR 274 billion (10 percent increase on the previous year). This is equivalent to an eight percent increase on 2007 levels – further proof that the industry has significantly exceed pre-crisis sales levels.

The sharp decline in foreign business activity experienced directly after the financial crisis of 2008 has been wholly compensated in 2010. This turnaround was further consolidated in 2011 with an increase of 11 percent.

E-Mobility

Renewed Domestic and International Market Demand
Domestic and international market potential for energy efficient passenger cars is huge. The global market is expected to grow by 29 percent annually through 2020. Increased demand in Asian markets in particular has provided an inducement to German automotive export and production levels. In 2011, the German auto industry exported vehicles worth EUR 194 billion.

The German industry has already made the necessary investment decisions for future electromobility development. During the whole pre-market phase, EUR 17 billion will be invested in electromobility R&D.

This represents a significant contribution to achieving the strived-for lead market and provider position within the segment until the year 2020. This goal is achievable as part of a three-stage process:

1. Market preparation phase to 2013 – R&D and showcase project focus
2. Market ramp-up phase to 2017 – energy-efficient vehicle and infrastructure market development focus
3. Mass market phase to 2020 – sustainable business model focus
The Most Attractive Business Location in Europe

According to the A.T. Kearney Foreign Direct Investment Confidence Index 2012, Germany is the most attractive FDI destination in Europe. Internationally participating business executives also conclude that ongoing investment in sustainable business is an absolute imperative for successful market competition and shareholder satisfaction. The UNCTAD World Investment Report 2011 confirms Germany’s reputation as one of the most attractive business locations in continental Europe. Ernst & Young finds Germany to be the most attractive investment location in Europe in 2012 with its Standort Deutschland 2012 - Der Fels in der Brandung? (A pillar of strength in troubled times?) international manager study. American interview partners also singled out German R&D – and partnerships with German universities and research centers – for specific praise. German R&D excellence is held in such high esteem that a number of US companies have established their own research centers here – many of them with global reach.

The World’s Most Competitive Auto Location

Within the context of the international economic downturn, the German automotive industry has done remarkably well. According to Ernst & Young’s European Automotive Survey 2011 of senior automobile manufacturer and supplier decision makers, Germany is the world’s most competitive automobile production location. In European comparison, Germany has used the global downturn to build on its lead as an investment location.

Most Attractive FDI Destinations in Europe According to Corporate Executives

<table>
<thead>
<tr>
<th>Country</th>
<th>European Rank</th>
<th>International Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>France</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>Poland</td>
<td>4</td>
<td>23</td>
</tr>
<tr>
<td>Spain</td>
<td>5</td>
<td>24</td>
</tr>
<tr>
<td>Netherlands</td>
<td>6</td>
<td>25</td>
</tr>
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</table>

Source: A.T. Kearney Foreign Direct Investment Confidence Index 2012

How do you assess the current competitiveness of the following automobile locations regarding productivity?

- very competitive
- rather competitive

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>30</td>
</tr>
<tr>
<td>Japan</td>
<td>19</td>
</tr>
<tr>
<td>China</td>
<td>17</td>
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<tr>
<td>France</td>
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</tr>
<tr>
<td>USA</td>
<td>15</td>
</tr>
<tr>
<td>South Korea</td>
<td>10</td>
</tr>
<tr>
<td>India</td>
<td>10</td>
</tr>
<tr>
<td>UK</td>
<td>7</td>
</tr>
<tr>
<td>Sweden</td>
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<tr>
<td>Spain</td>
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<tr>
<td>Italy</td>
<td>5</td>
</tr>
<tr>
<td>Russia</td>
<td>5</td>
</tr>
<tr>
<td>Poland</td>
<td>5</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>5</td>
</tr>
<tr>
<td>Turkey</td>
<td>4</td>
</tr>
<tr>
<td>Brazil</td>
<td>4</td>
</tr>
<tr>
<td>Hungary</td>
<td>4</td>
</tr>
<tr>
<td>Slovakia</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Ernst & Young European Automotive Survey 2011
Automotive Trends

The Changing Market – OEMs in Transformation

Conventional notions of the role of the traditional OEM within the automotive industry value chain are slowly but surely being consigned to the past. The classic OEM business model – with its dependence on turnover generated from new vehicle sales – is undergoing a major paradigm shift as value creation returns continue to fall. Not only is the modern driver more discerning in his or her auto-purchasing behavior, but heightened buyer expectations have created a market in which there is a car for every consumer. As a result, OEMs have found themselves caught up in a “crowding-out” cycle where ever more and better technological features are required to stay ahead of a congested international market.

Moreover, technological advances, historically the sole preserve of the auto manufacturer, are increasingly taking place on the side of the supplier. OEMs are accordingly differentiating themselves in terms of brand reputation and service. The Zukunft in Bewegung (The Future in Movement) study conducted by PricewaterhouseCoopers concludes that strengthened focus on brand management and market leadership are vital to market differentiation and a way to bind car buyers to meaningful long-term brand relationships.

New business models which encompass everything from enhanced services to leasing and mobility service provision are taking root and providing new market opportunities as OEMs seek to reinvent themselves in a changing mobile market. Significant potential exists for OEMs and suppliers to engage with the following auto market trends.

Smaller Vehicles Make the Running

Demand for smaller and more energy-efficient small and mid-range passenger vehicles is growing. In Germany alone, demand in the small car segment has grown significantly. Increased demand for smaller vehicles helped Germany maintain its western European passenger car market leader position.

The environment subsidy introduced in the year 2009 has facilitated a shift toward small and compact vehicles. In a recent survey of German drivers conducted by PricewaterhouseCoopers, 15 percent and 22 percent of German luxury class and SUV drivers respectively indicate a preference to buy a smaller vehicle when next purchasing a vehicle. A further decisive factor driving demand for small vehicles is energy efficiency. Fuel consumption and greenhouse gas emission levels play a pivotal role in auto purchasing behavior.

Changing Premium Segment

In the past, the type of car owned spoke volumes about its owner and his or her position in society. Today, cars are no longer the simple indicator of wealth and status that they once were. Societal trends in western societies including “downshifting” and increased environmental awareness are being reflected in new car ownership patterns. In the premium segment, “exclusivity” and “high performance” are giving way to sustainable and urban mobility as selling points.

However, according to PricewaterhouseCoopers, the market prognosis for the premium segment remains buoyant: European premium auto production is forecast to rise from the 2010 level of 3.6 to 4.8 million autos by 2015. However, the type of premium car being manufactured is changing, with a move away from the midmarket premium segment to luxury and small-premium segments. Conversely, in countries like India, Russia, and most predominantly, China, Pricewaterhouse Coopers confirms that rising affluence is creating new sales opportunities for upper and luxury class vehicles.
Efficiency and Alternative Drive Systems
In Germany, automotive engineers are hard at work improving internal combustion engine energy efficiency, developing alternative drive technologies (including electric, hybrid, and fuel cell cars), and adapting lightweight materials and electronics. Carbon emission reduction targets, smart traffic management, and the government’s electric mobility initiative (see “Electromobility – The National Electromobility Development Plan”) are major drivers for future mobility growth. According to McKinsey, the overall market value for new vehicles with optimized combustion engines is set to reach between EUR 280 and EUR 330 billion by 2020. Impressive developments have already been made in developing smaller, highly charged “homogenous combustion” engines and dual clutch transmissions (DCTs). Driven in part by a customer base purchasing according to new criteria, demand for alternative drive systems is the result of increased environmental awareness, rising gas prices, and more rigorous CO₂ limits for new vehicles. Overall market potential for efficient drive systems is worth between EUR 325 and EUR 500 billion.

CO₂ Emissions – The Changing Regulatory Framework
Increased awareness of the need to reduce harmful emissions into the environment is seeing government’s worldwide act to regulate permissible vehicle pollution levels. Within Europe, the European Union (EU) has submitted far-reaching proposals to significantly reduce passenger vehicle CO₂ emission levels by 2020.

Fuel consumption and CO₂ emission levels of all European-manufactured passenger vehicles are to be reduced to 130g/km of CO₂ through drive train-related measures.

An additional reduction of 10g/km of CO₂ has to be achieved through biofuels and “complementary measures”– including micro-hybrid implementation in the vehicle architecture; gear change timing gauges, efficient air-conditioning systems, and tire inflation control systems – so that a set target of 120g/km of CO₂ is realized by 2012. By 2020, vehicles must comply with a value of 95g/km of CO₂.¹ Suppliers of CO₂ emission-reducing technologies – which help manufacturers keep vehicles both affordable and appealing to the end customer – are finding unique business opportunities in Germany.

Meeting the Environmental Challenge
Germany has set itself the ambitious target of achieving a 34 million-ton reduction in CO₂ emissions by 2020. German-based car manufacturers have been quick to respond to the challenge. According to the German Association of the Automotive Industry (VDA), more than 260 passenger car models produced in Germany already meet or are below the 130g/km of CO₂ target. Moreover, in six out of ten segments, passenger vehicles manufactured in Germany have the lowest CO₂ emission and fuel consumption levels. In the remaining four segments, German vehicles performed above average in comparison. The proposed economic sanctions leveled by the EU Commission for failure to comply with the 120g/km of CO₂ target are equivalent to EUR 0.95 per g/km of CO₂. To that end, increased demand for better-performing passenger vehicles is as much of an imperative for the industry as it is a wish of the modern driver.

¹ The modalities for reaching this target and the aspects of its implementation including the excess emissions premium will have to be defined in an EU Commission review to be completed no later than the beginning of 2013. (source: www.ec.europa.eu)
Electromobility – The National Electromobility Development Plan

Germany’s federal government has made more than EUR 500 million in funding available as part of its initiative to put one million electric vehicles (EV) on Germany’s roads by 2020. The federal government is striving to increase the effort significantly during the current legislative period and has made an additional EUR 1 billion in funds available. The National Electromobility Development Plan has been drawn up to promote all aspects of electric driving including the development of battery technology, grid integration, and market acceptance for electric vehicles.

Major focal points of the development plan include boosting R&D funding as well as implementing market preparation strategies to facilitate the future implementation of electric vehicles. The essential technologies required for electric drives, energy storage and grid infrastructure have already been developed. Although very much still a nascent market, sufficient demand exists for serial European EV production to be a reality soon. In Germany alone, one in five potential car buyers is currently delaying the purchase of a new car in order to wait for the market introduction of EVs.

Biofuels

Biofuels allow CO₂ emission levels to be dramatically cut and simultaneously reduce the auto industry’s traditional dependency on crude oil. The German government introduced mandatory blending quotas for biofuels with fossil fuels in 2007. Beyond these quotas, the German government has set a biofuels share by energy content target of 12 percent by 2020 – seven percent above the stated EU target.

Thanks to higher energy efficiency compared with first generation biofuels, second generation biofuels – like cellulosic ethanol [biomass to liquid - BtL] – provide a convincing business argument for investors. Standardization measures being taken within the industry mean that second generation biofuels meet the highest quality and compatibility standards.
Auto Industry Value Chain

No other country in Europe can boast a comparable concentration of auto-related R&D, design, supply, manufacturing, and assembly facilities. Accordingly, no other country in Europe provides the same market opportunities as those offered by the German auto industry.

The auto industry in Germany thrives as a result of the diversity of companies active in the sector: large and medium-sized auto manufacturers alike are to be found in Germany, as are system and module suppliers, not to mention numerous small and medium-sized tier 2 and 3 suppliers. In fact, around 85 percent of auto industry suppliers are medium-sized companies. All of these suppliers provide up to 70 percent of value added within the domestic auto sector – ensuring that the German auto industry remains at the forefront of the competition.

Value added is moving to the supplier side, and increasingly also to non-auto industry sectors (e.g. the chemical industry in electromobility). Not unsurprisingly, international suppliers are increasingly attracted to Germany as a business location. To date, the world’s ten largest non-German auto industry suppliers have successfully established operations in Germany.

World Innovation Leader
Complete industry value chain presence ensures that new and innovative products are made to the highest possible technological standards.

The facts speak for themselves:

- With an average of 10 patents registered per day, Germany is the world leader in auto industry patents. Around half of these patents are related to environmentally friendly technologies.

- Companies based in Germany registered the most patents at the European Patent Office for the period 2007-2010.

- With around 13,000 patents granted at the European Patent Office in 2010, Germany’s share is about twice as large as that of France and the UK combined.

- Germany is also the leading European nation in triadic patents (patents registered at the three major global patent offices: the European Patent Office, the United States Patent and Trademark Office, and the Japan Patent Office).

### The Largest Auto Industry Suppliers

<table>
<thead>
<tr>
<th>Rank 2011</th>
<th>Company</th>
<th>Country</th>
<th>Turnover in USD billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bosch</td>
<td>Germany</td>
<td>37.2</td>
</tr>
<tr>
<td>2</td>
<td>Denso</td>
<td>Japan</td>
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<tr>
<td>3</td>
<td>Continental</td>
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<td>Bridgestone</td>
<td>Japan</td>
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<td>Aisin Seiki</td>
<td>Japan</td>
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<td>Canada</td>
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<td>Michelin</td>
<td>France</td>
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<td>ZF Group</td>
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<td>12</td>
<td>TRW Automotive</td>
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<td>USA</td>
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<td>14</td>
<td>ThyssenKrupp</td>
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<tr>
<td>15</td>
<td>Valeo</td>
<td>France</td>
<td>12.7</td>
</tr>
</tbody>
</table>

Source: Automobilproduktion, July 2011
R&D Infrastructure

Germany has the highest concentration of all European automotive OEM and tier 0.5 supplier R&D centers. This makes the country the most important automotive development activity location in Europe. German-based suppliers and service providers profit from close client interaction starting from the pre-development stage. They can take advantage of joint research activities with some of the world’s leading automotive technology research institutes and universities.

Numerous innovation clusters integrate industry, science and education in automotive-related areas including mechatronics, microelectronics, mechanical engineering, manufacturing processes, and material sciences.

The World’s Leading Auto R&D Nation

No other industry invests as much in R&D – around EUR 19.6 billion in 2011 alone. As such, the auto industry in Germany accounts for more than one third of the country’s total R&D expenditure.

Moreover, auto manufacturers and suppliers located in Germany are among the world’s leading patent applicants. Around 3,650 patents per year make the German auto industry the world patent champion – no other country registers as many auto industry patents.

Public-Private Partnership – Germany’s High-Tech Strategy

As R&D is considered to be among the most important areas for the development of the German economy, industry and the public sector have made a commitment to spend around three percent of national GDP per year on R&D activities. This amounts to approximately EUR 70 billion R&D spending each year. In addition, an unprecedented campaign to foster the advancement of new technologies has been launched by the German government.
Location Factors

World Class People
Germany’s world-class education system ensures that the highest standards are always met. Eighty-four percent of the German population have been trained to university entrance level or possess a recognized vocational qualification – above the OECD average of 67 percent. Over 30 percent of German university graduates have a natural sciences or engineering degree background.

The mechatronics and automotive engineering disciplines have recorded remarkable growth levels, witnessing a 121 percent leap in student numbers in the past decade alone. The comparatively new mechatronics interdisciplinary program can also boast more than 11,000 students. The auto industry is the most popular career path among engineers, with manufacturers and component suppliers among the preferred employers. The steady flow of mechanical engineers graduating from approximately 100 universities and colleges helps to ensure the continuity of German engineering excellence – a guarantor for the sector’s enduring success.

Competitive Labor Market
High productivity rates and steady wage levels make Germany an attractive investment location. Labor cost increases have been the lowest in Europe in recent years, with a modest annual increase rate of 1.6 percent. German productivity rates are almost ten percent greater than the average of the EU’s 15 core national economies and almost one quarter higher than the OECD average.

Highly flexible working practices such as fixed-term contracts, shift systems, and 24/7 operating permits contribute to enhance Germany’s international competitiveness as a suitable investment location for internationally active businesses.

Competitive Infrastructure and Logistics Edge
Germany’s infrastructure excellence is confirmed by international studies. For example, the 2011-2012 Global Competitiveness Report of the WEF ranked Germany second in global comparison for infrastructure; singling out the country’s extensive and efficient infrastructure for highly efficient transportation of goods for special praise.

Competitive Tax System
Germany offers a competitive tax system providing attractive tax rates for companies. In recent years, the German government has implemented root and branch reforms of the tax system to make the country a more attractive business location. The German tax system allows for differing tax rates in German municipalities. On average, corporate companies face an overall tax burden of less than 30 percent. Significantly lower tax rates are available in certain German municipalities – up to eight percent less. The overall tax burden can therefore be as low as 22.83 percent. This makes Germany’s corporate tax system one of the most competitive tax systems among the major industrialized countries.

Growth of Labor Costs in Total Economy 2002-2011
(annual average growth in percent)

<table>
<thead>
<tr>
<th>Country</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>1.6%</td>
</tr>
<tr>
<td>France</td>
<td>2.4%</td>
</tr>
<tr>
<td>Austria</td>
<td>3.0%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3.1%</td>
</tr>
<tr>
<td>Spain</td>
<td>3.3%</td>
</tr>
<tr>
<td>UK</td>
<td>3.7%</td>
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<tr>
<td>Czech Rep.</td>
<td>5.7%</td>
</tr>
<tr>
<td>Poland</td>
<td>5.8%</td>
</tr>
<tr>
<td>Hungary</td>
<td>7.2%</td>
</tr>
<tr>
<td>Slovak Rep.</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

Sources: Eurostat 2012
Financing & Incentives in Germany

In Germany, investment projects can receive financial assistance through a number of different instruments. These instruments may come from private sources or consist of public incentives programs available to all companies – regardless of country of origin. They fit the needs of diverse economic activities at different stages of the investment process.

Early Stage Investment Project Financing

Technologically innovative start-ups in particular have to rely solely on financing through equity such as venture capital (VC). In Germany, appropriate VC partners can be found through the Bundesverband Deutscher Kapitalbeteiligungsgesellschaften BVK (German Private Equity and Venture Capital Association). Special conferences and events like the Deutsches Eigenkapitalforum (German Equity Forum) provide another opportunity for young enterprises to come into direct contact with potential VC partners. Public institutions such as development banks (publicly owned and organized banks which exist at the national and state level) and public VC companies may also offer partnership programs at this development stage.

Later Stage Investment Project Financing

Debt financing is a central financing resource and the classic supplement to equity financing in Germany. It is available to established companies with a continuous cash flow. Loans can be borrowed for day-to-day business (working capital loans), can help bridge temporary financial gaps (bridge loans) or finance long-term investments (investment loans). Besides offers from commercial banks, investors can access publicly subsidized loan programs in Germany. These programs usually offer loans at attractive interest rates in combination with repayment-free start-up years, in particular for small and medium-sized companies. These loans are provided by the state-owned KfW development bank and also by regional development banks.

Cash Incentives for Investment Projects

When it comes to setting up production or service facilities, investors can count on a number of different public funding programs. These programs complement the financing of an investment project. Most important are cash incentives provided in the form of non-repayable grants applicable to co-finance investment-related expenditures such as new buildings, equipment or machinery. In Eastern Germany, investment grants are complemented by an investment allowance, which is usually assigned in the form of a tax credit but which can also be provided in the form of a tax-free cash payment.

Labor-related Incentives and R&D Project Grants

After the location-based investment has been initiated, companies can receive further subsidies for building up a workforce or the implementation of R&D projects. Labor-related incentives play a significant role in reducing the operational costs incurred by new businesses. The range of programs offered can be classified into three main groups: programs focusing on recruitment support, training support, and wage subsidies respectively. R&D project funding is made available through a number of different incentives programs targeted at reducing the operating costs of R&D projects. Programs operate at the regional, national, and European level and are wholly independent from investment incentives. At the national level, all R&D project funding has been concentrated in the so-called High-Tech-Strategy to push the development of cutting-edge technologies. Substantial annual funding budgets are available for diverse R&D projects.
Success Story

Best Practice Example

BorgWarner

Leading international vehicle powertrain components and systems manufacturer BorgWarner has become a firm fixture of the business landscape in the state of Thuringia in Eastern Germany. Dual-clutch transmission modules and all-wheel drive systems have been in production at the company’s Arnstadt site since 2003.

In 2006, the international market leader invested EUR 26 million in a new assembly hall, creating 150 new jobs. The investment allowed overall production space to be expanded to over 10,000 m², and represented a doubling of the production volume to date. The assembly hall investment allows the company – whose international clients read like a who’s who of the global auto industry – to respond to the forecast demand increase of 500 percent for dual transmission systems by the year 2013.

The expanded complex also houses a lab and test track on which new technologies and modifications are being evaluated. In August 2010, the Arnstadt production site reached a significant landmark – over 2 million transmission systems have been produced to date.

BorgWarner is a long-established presence in Germany. In 1997, the company acquired the turbocharger division of Kühnle, Kopp & Kausch AG. Capacity at the firm’s Kirchheimbolanden, Rheinland-Pfalz, site was increased to more than one million turbochargers in the same year. Two years later, the company bought Schwitzer, which was integrated into BorgWarner Turbo Systems division.

In 2000, the company moved to the main headquarters of the turbo systems division in Kirchheimbolanden. The same year, around 85 employees moved into the EUR 2.4 million development center extension, created to stay apace of growing turbocharger demand.

Moreover, being based at several sites in Germany also allows the company to efficiently service demand in established and developing markets in western, central, and eastern Europe respectively.

The company’s decision to sustainably invest in Germany over a prolonged period of time is predicated on the country’s excellent credentials as a highly advanced technology location and extant auto industry supplier infrastructure. The ready availability of a highly trained and qualified workforce also proved critical to the industry giant’s decision to locate in Germany.
Germany Trade & Invest Helps You

Germany Trade & Invest’s teams of industry experts will assist you in setting up your operations in Germany. We support your project management activities from the earliest stages of your expansion strategy.

We provide you with all of the industry information you need – covering everything from key markets and related supply and application sectors to the R&D landscape. Foreign companies profit from our rich experience in identifying the business locations which best meet their specific investment criteria. We help turn your requirements into concrete investment site proposals; providing consulting services to ensure you make the right location decision. We coordinate site visits, meetings with potential partners, universities, and other institutes active in the industry.

Our team of consultants is at hand to provide you with the relevant background information on Germany’s tax and legal system, industry regulations, and the domestic labor market. Germany Trade & Invest’s experts help you create the appropriate financial package for your investment and put you in contact with suitable financial partners. Incentives specialists provide you with detailed information about available incentives, support you with the application process, and arrange contacts with local economic development corporations.

All of our investor-related services are treated with the utmost confidentiality and provided free of charge.

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**Strategy**  
**Evaluation**  
**Decision & Investment**

**Project Management Assistance**

- Business opportunity analysis and market research  
- Market entry strategy support  
- Project partner identification and contact  
- Joint project management with regional development agency  
- Coordination and support of negotiations with local authorities

**Location Consulting/Site Evaluation**

- Identification of project-specific location factors  
- Cost factor analysis  
- Site preselection  
- Site visit organization  
- Final site decision support

**Support Services**

- Identification of relevant tax and legal issues  
- Project-related financing and incentives consultancy  
- Organization of meetings with legal advisors and financial partners  
- Administrative affairs support  
- Accompanying incentives application and establishment formalities
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*Germany Trade & Invest* is the foreign trade and inward investment agency of the Federal Republic of Germany. The organization advises and supports foreign companies seeking to expand into the German market, and assists companies established in Germany looking to enter foreign markets.

All inquiries relating to Germany as a business location are treated confidentially. All investment services and related publications are free of charge.


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