



Study on business co-operation potential and opportunities
in the sector of car components

GERMANY

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1.-General information of the country and market information. Germany.

Geography

Area: 357,000 sq. km. (137,821 sq. mi.).

Cities: Capital--Berlin (population about 3.4 million). Other cities--Hamburg (1.7 million), Munich (1.2 million), Cologne (964,000), Frankfurt (644,000), Essen (603,000), Dortmund (592,000), Stuttgart (582,000), Dusseldorf (568,000), Bremen (543,000), Hannover (516,000).

Terrain: Low plain in the north; high plains, hills, and basins in the center and east; mountainous alpine region in the south.

People

Population (2001 est.): 83 million.

Ethnic groups: Primarily German; Danish minority in the north, Sorbian (Slavic) minority in the east; 7.3 million foreign residents.

Religions: Protestants (27.9 million) slightly outnumber Roman Catholics (27.3 million); approximately 3.2 million Muslims.

Language: German.

Education: Years compulsory--10; attendance--100%; literacy--99%.

Health: Infant mortality rate (1998 est.) --5.0/1,000; life expectancy (1999 est.)--women 80 years, men 74 years.

Unemployment rate January 2005: 12,1%

Government

Type: Federal republic.

Founded: 1949 (Basic Law, i.e., Constitution, promulgated on May 23, 1949).

On October 3, 1990, the Federal Republic of Germany and the German Democratic Republic unified in accordance with Article 23 of the FRG Basic Law.

Branches: Executive--president (titular chief of state), chancellor (executive head of government);

Legislative--bicameral parliament;

Judicial--independent, Federal Constitutional Court. Administrative divisions: 16 Laender (states).



Major political parties: Social Democratic Party (SPD); Christian Democratic Union (CDU); Christian Social Union (CSU); Alliance 90/Greens; Free Democratic Party (FDP); Party of Democratic Socialism (PDS).

Suffrage: Universal at 18.

Economy

GDP (2004): € bn 218,2.

Annual growth rate (2004): 1,7 (2003): -0,1

Per capita income: €26.400.

Inflation rate (consumer prices, 2004): 1,6%.

Natural resources: Iron, hard coal, lignite, potash, natural gas.

Agriculture (accounts for 1% of GDP): Products--corn, wheat, potatoes, sugar, beets, barley, hops, viticulture, forestry, fisheries.

Industry (34% of GDP): Types--iron and steel, coal, chemicals, electrical products, ships, vehicles, construction.

Trade (2001): Exports--\$628 billion: chemicals, motor vehicles, iron and steel products, manufactured goods, electrical products. Major markets--France, U.S., U.K.

Imports--\$594 billion: food, petroleum products, manufactured goods, electrical products, motor vehicles, apparel. Major suppliers--France, U.S., Netherlands.

Economy

Germany is the world's third-largest economy and the largest in Europe. Recent performance has not been dynamic, however, and the German economy is vulnerable to external shocks, domestic structural problems, and continued difficulties in integrating the formerly communist east.

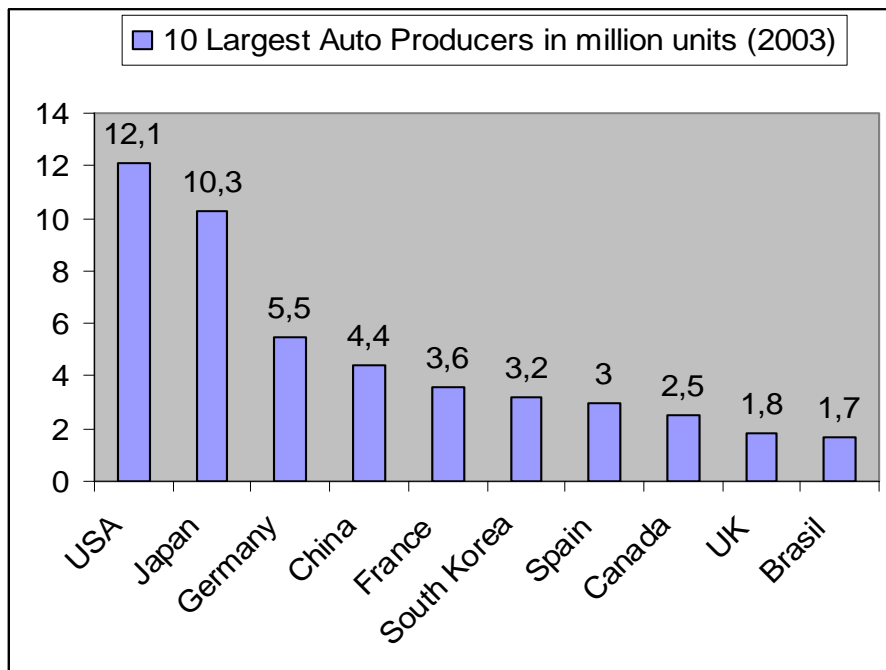
Since unification, Germany has seen annual average real growth of only about 1.5% and stubbornly high unemployment. The best performance since unification was in 2000, when real growth reached 3.0%. The provisional growth rate in 2004 has been 1,7%, while unemployment during January 2005 has been of 12,1%.

The German economy is heavily export-oriented, with exports accounting for over one-third of national output. As a result, exports traditionally have been a key element in German macroeconomic expansion.

Despite persistence of structural rigidities in the labor market and extensive government regulation, the **economy remains strong and internationally competitive. Although production costs are very high, Germany is still an export powerhouse.** Additionally, Germany is strategically placed to take advantage of the rapidly growing central European countries. The current government has addressed some of the country's structural problems, with important tax, social security, and financial sector reforms.

2.- Overview of the Automotive industry in Germany

With 50 million vehicles, Germany is the world's third largest automotive market, after the USA and Japan. Over 5.1 million passenger cars and 395,000 commercial vehicles are manufactured annually in the country. The opportunities offered for parts and components supply by one of Europe's largest auto industries, which controls **40% of European production**, should be exploited. The total number of people employed in the automotive industry is 770,000. This figure includes 309,000 jobs in the automotive parts and components sector.



Source: VDA 2004 Annual Report

Characteristics of the German Market

Germany's Vehicle Production

In 2001, Germany's domestic vehicle industry manufactured a total of over 5.7 million motor vehicles. This figure includes 5.3 million passenger cars (+3.3%) and 390,500 commercial vehicles (-1.1%). The real total output of the German vehicle industry in 2001 was in fact much higher, over 10.1 million units, since many German vehicle manufacturers operate production plants abroad. Thus almost half of German passenger car production took place abroad. For cost reasons, the practice of producing abroad has steadily increased. Total sales amounted to EUR 138 bn last year.

Exports of vehicles play an important role. 3.6 million passenger cars (+5.3%) and 276,000 commercial vehicles (+3.1%) were exported in 2001. Total exports amounted to EUR 95 bn.

Imports of passenger cars to Germany decreased, in particular from Japan (-11%) and Italy, whereas imports from France increased by 10.7%. The market share of foreign makes is now 32.6% per cent.

Vehicle Parts, Components And Accessories

The overall turnover of vehicle parts, components and accessories in Germany in 2001 exceeded EUR 57 bn. Domestic sales rose by 11.4% totalling EUR 33.3 bn. Exports also increased by 11.7% totalling EUR 23.6 bn. The share of exports in this sector went up from 39 to over 41 per cent last year. The most favoured distribution channels available, as regards OEM products, include direct sales or sales through commission agents to either sub-assembly or vehicle manufacturers. For the after market a vast network of distributors, dealers and agents is available.

The automotive industry in figures (* partially interim or estimated figures)

1. Manufacture of vehicles

	2002	2003*)	Change in %
Sales (in Euro millions)	140,566	141,476	0.6
Domestic Sales (without tax)	44,001	46,155	4.9
Foreign sales	96,565	95,320	-1.3
Employees (yearly average)	410,867	409,578	-0.3

2. Production of trailers and bodies

	2002	2003*)	Change in %
Sales (in Euro millions)	6,778	6,865	1.3
Domestic Sales (without tax)	3,787	3,638	-3.9
Foreign sales	2,991	3,228	7.9
Employees (yearly average)	37,738	36,378	-3.6

3. Production of parts and accessories

	2002	2003*)	Change in %
Sales (in Euro millions)	56,699	59,951	5.7
Domestic Sales (without tax)	33,465	35,358	5.7
Foreign sales	23,235	24,593	5.8
Employees (yearly average)	314,917	326,717	3.7

4. Entire automotive industry

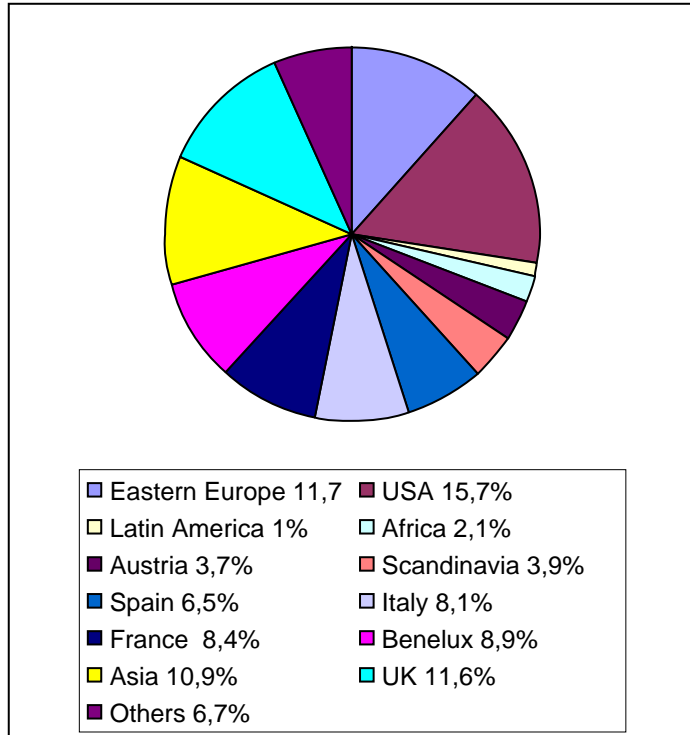
	2002	2003*)	Change in %
Sales (in Euro millions)	204,043	208,292	2.1
Domestic Sales (without tax)	81,252	85,151	4.8
Foreign sales	122,791	123,141	0.3
Employees (yearly average)	763,522	772,673	1.2

5. Gross capital investment of automotive industry (Euro millions)

	2002	2003*)	Change in %
	12,300	13,000	5.7

Destination of German Auto Exports (2003)

German vehicle production ranks nr. 1 in Europe and nr. 3 in the world.



Source: VDA 2004 Annual Report

Main players on the German Market

Major players on the **passenger car** side are: DaimlerChrysler in Stuttgart, Bayerische Motoren Werke (BMW) in Munich, Volkswagen (VW) in Wolfsburg, FORD in Cologne, AUDI in Ingolstadt and GM OPEL in Rüsselheim.

On the **commercial vehicle** side there is DaimlerChrysler in Stuttgart, MAN in Munich, Faun in Neunkirchen/Bavaria and Auwärter in Ehrenhain (coaches).

On the **OEM and after market** side there are firms like Zahnradfabrik Friedrichshafen (ZF) AG in Friedrichshafen (drives, transmissions, etc), Robert Bosch GmbH in Mannheim (wide range of electrical components), Behr GmbH in Stuttgart (radiators, heat exchangers) and firm J Eberspächer in Esslingen (exhaust/catalyst systems, silencers).



Future Trends in the German Motor Industry

A Deutsche Shell AG study suggests that **the number of passenger cars in Germany will increase from today's level of 42 million units to 48 – 51 million units by 2020**. In the same period, the study expects that **the average fuel consumption per car will decrease from 8 to 4 litres per 100 kms** – overall fuel consumption is expected to drop by 30% due to alternative power technologies. **20% of all registered passenger cars will be equipped with alternative power technologies by the year 2020**.

In the period up to **2010 major alliances and mergers within the motor industry will take place**. The vehicle manufacturers will be looking increasingly for suppliers of ready-to-build-in assemblies, which will mean **further delegation of responsibilities to their suppliers in terms of certification, product innovation, research and the production of ready-to-build-in assemblies**. Assemblies will have to be delivered from the supplier straight to the motor vehicle manufacturer's assembly line. This is not only a question of logistics but also one of **close co-operation between first-, second-tier suppliers, systems suppliers and vehicle manufacturers**. Hence **modern vehicle production plants will often have no more than 50 suppliers**.

The value added element of assembling vehicles is expected to grow by only 14%. In comparison the value added element of the supply chain as a whole is likely to grow by as much as 35%. This applies in particular to manufacturers of **automotive electronic components - 25 per cent of a car's production costs fall into this category**.

As a result of the high production costs in Germany, many vehicle and sub-assembly manufacturers are turning to competitive sources of supply to improve their economic viability. A considerable portion of the additional supplies to the German vehicle industry will thus fall to foreign manufacturers. Some major manufacturers such as DaimlerChrysler, VW and BMW have expanded their purchasing offices in the UK.

Strategies

In view of forthcoming alliances and mergers in the automotive industry, the automotive supply chain will also be marked by fierce competition and strict cost reductions on all levels. Automotive suppliers will have to offer a wider range of solutions and activities which include **expertise in the vehicle building, electronic, chemical, tool making, automation, measuring and control sectors**. This means that potential automotive suppliers will have to co-operate with competent partners and invest significant amounts of money in the above-mentioned areas, which also include training of staff and advising the motor manufacturer on best assembly methods.

Focussing on and specialising in niche market sectors is vital. The number of electronic parts and components incorporated in a modern vehicle will increase rapidly. It is therefore necessary to liaise with suitable partners in the hard- and software sectors. Entering into limited or unlimited partnerships with other tiers and establishing an efficient communication and information system is just as important as flexibility.

3.- The EU and Enlargement. Co-operation potential. Business opportunities.

Germany a partner of the new member states

With ten new members, the EU has grown by some 75 million inhabitants to an economic zone of some 450 million. This makes the EU the most significant single market in the world. By way of comparison, the population of the United States is far below 300,000 million.



The potential of the new members is vast. Already in the years immediately preceding their accession, the former eastern bloc countries had gone a long way to closing the gap with the West. With these countries, the EU has incorporated fast-growth markets – especially in the automotive sector. The fact of having common regulations in this new and larger economic zone makes it easier for large, internationally operating companies, as well as small and medium-sized businesses, to build up business commitments there.

Even before accession, Germany's foreign trade with the Central and Eastern European countries was already growing fast. Trade between the old and new member states more than tripled during the 1990s, benefiting companies and employees in Germany and the applicant countries. Economic relations with the countries of Central, Eastern and South-Eastern Europe and the CIS countries reached a new highpoint in 2003, despite a subdued economy in Germany. With sales of around 160 billion euros, Germany's trade with these states was above average compared with overall foreign trade.

In 2003, Germany's foreign trade with the former eastern bloc states grew by 7.4 per cent, while its foreign trade overall grew by only 2 percent. Despite a strong euro, German exports to Eastern Europe grew by 6.4 per cent, to 81.3 billion euros. Imports rose 8.4 per cent to 78.1 billion euros. The proportion of Germany's trade with Eastern Europe in relation to overall foreign trade thus continued to rise, attaining 13.3 per cent (against 12.7 per cent in 2002). The proportion of Germany's trade with the Eastern European applicant states in relation to its overall trade with Eastern Europe rose steadily in recent years, accounting for more than three-quarters (76 per cent) in 2003. A major part of this trade was done in the car and automotive parts sector.

Germany's automotive industry well prepared for EU enlargement

The German automotive industry anticipated the enlargement of the European Union many years ago and much progress has already been made on integrating Eastern European locations economically with locations in the "old" EU. The political implementation of the EU enlargement on May 1, 2004 will bring greater security and prepare the way for a sound position in global markets for the new economic zone.

Before the fall of the Iron Curtain and German reunification, German manufacturers' sole activity in the East was in Yugoslavia, where they assembled trucks and buses. In the early 1990s, they began producing cars and trucks in the Czech Republic. In 1992, over 200,000 German-brand vehicles were produced there, a figure which had more than doubled ten years later. If we compare Eastern Europe with Mercosur, production in Eastern Europe exceeded that of Mercosur for the first time in 2000 – and by 65,000 vehicles, attaining 685,000 units. In 2003, production in Eastern Europe was some 200,000 vehicles ahead of production by the Mercosur states.

The German suppliers were also quick to spot the trend and build up their activities in Eastern Europe. Back in 1996, when VDA (Verband der Automobilindustrie) conducted a survey on foreign production facilities and licensed companies, its supplier members named 46 locations in the Czech Republic. In Hungary too, the number of locations was over 20. By 2000, this figure had risen to well above 30, and today stands at well over 40. In 1996, the total number of production facilities and licensed companies in the countries of Central and Eastern Europe stood at 96; by 2000, this figure had doubled to 191. These figures show that Europe's enlargement eastward was initiated shortly after the fall of the Iron Curtain by the major automotive manufacturers and by the small and medium-sized supplier businesses. They invested trust and commitment in the development of the Eastern European economy, which is today paying off in the established market position the German automotive industry enjoys today. With



average market share at more than 40 per cent in the five largest new member states and at more than 60 per cent in the Czech Republic and Slovakia, the German automotive industry today has an excellent starting position in the enlarged EU.

Prospects of the new member states as a production location for manufacturers and suppliers

The production facilities in the Eastern European countries have taken on an increasingly significant role in recent years, especially for the German automotive industry. With 750,000 vehicles produced there in 2003, **nearly one in every five German-brand vehicles produced abroad came from these countries**. The principal locations are **Slovakia, Poland, Hungary and the Czech Republic**, this latter country now being the third largest foreign location of the German automotive industry after Spain and China. Although China overtook the Czech Republic in 2003, the Czech Republic closed the gap with Brazil and Belgium.

Even given the "considerations" pledged in return by the new member states, conditions still do not bear comparison in all domains (such as infrastructure and education) with those in the "old" EU states. Nevertheless, lower taxes do provide a greater incentive for companies and employees to commit themselves, thus contributing to overall economic development.

Actual corporate taxation is below 17 per cent in Slovakia, just over 18 per cent in Hungary and just 15.5 per cent in the Czech Republic. The level of income tax is also much lower in many of the new member states than in Germany. For example, the nominal rate in Slovakia is just 19 per cent, and in the Czech Republic between 15 and 32 per cent.

German economic and tax policymakers should bear this in mind and keep careful watch on Germany's competitiveness. Perhaps the increasingly tough competition for investment will change their way of thinking and pave the way for renewed growth in Germany.

In economic terms, the gap between the "new" and "old" member states is relatively wide. While average GDP in the 15 old member states of the EU stood at some 24,000 euros per head of population, this has sunk to an average 21,200 euros since the accession of the new members. Average GDP in the ten new member states themselves stands at around 6,000 euros per head of population – this means that per-capita income is on average four times lower than in Western Europe.

The market for cars has grown substantially in many Eastern European states. **In the five countries with the largest automotive sectors (Poland, Slovakia, Slovenia, the Czech Republic and Hungary), the number of registrations of new vehicles rose by 50 per cent between 1993 and 2003. Poland alone posted a growth rate of 68 per cent.**

The main reason for the steep growth in the number of new registrations of recent years is the low level of car ownership in this region. In Poland, Slovakia and Hungary, car density was less than 300 cars per 1,000 inhabitants, compared with 545 in Germany.

Slovenia is the smallest of these countries and also has the highest car density. We can therefore assume that the number of new car registrations will not grow as dynamically in the future as, say, in **Hungary**, as demand for cars there is not determined by low numbers but exclusively by the **need for replacement**. **In contrast, Poland, Hungary and Slovakia all have high potential for growth.**