ANNUAL REPORT 2012



Corporate Statement

Shaping the future responsibly

Our enthusiasm for innovative products and processes and our uncompromising pursuit of quality have made us a global leader in driveline and chassis technology. We are contributing towards a sustainable future by producing advanced technology solutions with the goal of improving mobility, increasing the efficiency of our products and systems, and conserving resources.

Our customers in the automotive and industrial sectors welcome our determined focus on products and services, which provide great customer value. Improvements in energy efficiency, cost-effectiveness, dynamics, safety, and comfort are key to our work. Simultaneously, we are aiming for continuous improvement in our business processes and the services we provide. As a globally active company, we react quickly and flexibly to changing regional market demands with the goal of always providing a competitive price/performance ratio.

Our independence and financial security form the basis of our long-term business success. Our profitability allows us to make the necessary investments in new products, technologies, and markets, thus securing the future of our company on behalf of our customers, market affiliates, employees, and the owners of ZF.

Our tradition and values strengthen our managerial decisions. Together, they are both an obligation and an incentive to maintain a reliable and respectful relationship with customers, market affiliates, and employees. Our worldwide compliance organization ensures that locally applicable laws and regulations are adhered to. We accept our responsibility towards society and will protect the environment at all of our locations.

Our employees worldwide recognize us as a fair employer, focusing on the future and offering attractive career prospects. We value the varied cultural backgrounds of our employees, their competencies, and their diligence and motivation. Their goal-oriented dedication to ZF, beyond the borders of their own field of work and location, shapes our company culture and is the key to our success.

ZF at a Glance

Facts & Figures, Consolidated ZF Group 1)

		2010	2011	2012
Sales	€ million	12,907	15,509	17,366
Germany	€ million	4,365	5,290	5,766
Western Europe				
(without Germany)	€ million	2,749	3,218	3,239
Rest of world	€ million	5,793	7,001	8,361
Sales structure				
Automotive industry	€ million	11,358	13,803	15,282
Agricultural and	0 '11'	775	004	070
construction machinery	€ million	775	931	972
Marine craft, aircraft, special and rail vehicles, wind power	€ million	774	775	1,112
Employees (end of the year) 2)		64,600	71,488	74,775
Capital expenditure	€ million	582	1,058	1,192
Depreciation in %				
of capital expenditure	%	95	58	64
Operating profit or loss	€ million	680	850	687
Return on sales	%	5	5	4
EBITDA	€ million	1,296	1,574	1,667
EBIT	€ million	675	847	692
Net profit or loss after tax	€ million	443	540	346
Free cash flow ³⁾	€ million	-119	-112	218
Net financial position ⁴⁾	€ million	1,321	726	885
Subscribed capital	€ million	300	300	300
Normal dividend	%	7	10	10
Extra dividend	€ million	3	_	_

The Consolidated ZF Group comprises all domestic and foreign participations in which ZF holds at least 50 % interest, provided they are included in the consolidated financial statements.
 Direct and indirect employees without temporary workers, apprentices, and holiday workers.
 Cash flow from operating activities less cash flow from investing activities.
 Cash, including securities less liabilities to banks and liabilities from finance leases.

2012 Annual Review

January

ZF launches the "Year of Energy" Group campaign. The aim of the campaign year is to reduce the Group's energy consumption by 20 % by 2015.

ZF takes over the cabin suspension product segment from ThyssenKrupp Automotive Systems. All employees receive an offer for continued employment.

February

As of the middle of the year, ZF expands its plant in Tuscaloosa, Alabama (USA). In addition to the model ranges currently produced there, ZF also supplies chassis systems for the new C-Class whose production will start in 2014.

The twelve millionth CDC damper for passenger cars comes off the line at the Schweinfurt (Germany) location. This production anniversary emphasizes the electronic damping system's success.

ZF establishes its first plant in the Chinese capital Beijing. In future, passenger car axle sets will be assembled there.

May

On May 1, 2012, Dr. Stefan Sommer takes over the position as Chief Executive Officer of the ZF Group from Hans-Georg Härter

ZF signed the United Nations Global Compact on May 1, 2012. This initiative stands for entrepreneurial operations in accordance with society and the environment.

ZF supplies the world's first 7-speed manual transmission for Porsche's new 911 models. This is the first time a manual transmission with seven gears is available for passenger cars. It is based on the 7-speed dual clutch transmission.

Since the start of production in 2002, four million axle drives

have left the assembly plant in Gotha (Germany). To meet the customers' increased capacity requirements, another assembly line is being built.

"ZF hilft" donates € 415,000 to needy people in Africa. The amount collected will be split between two projects and benefit around 98,000 people in Chad and Kenya.

June

ZF pledges a donation of € 20 million to the Zeppelin University Foundation. With these funds, the foundation can finance the planned new Zeppelin University buildings.

August

ZF commissions the comprehensive study called "ZF Zukunfts-studie FERNFAHRER". It is the first scientific investigation focusing on the status of the truck driving profession in Germany within the context of the logistics industry.

September

Two new major orders with a total volume of 1,400 buses confirm that driveline and chassis technology from ZF is in high demand in Russia and the Ukraine as well.

LiuGong, China's leading construction machinery manufacturer, and the ZF Group found another joint venture. The company produces a wheel loader axle that is specifically designed to meet the requirements of the Chinese market.

Under the headline of "The Future in Transportation", ZF unveils trailblazing innovations at the IAA in Hanover. Apart from the TraXon transmission system for heavy commercial vehicles, the highlights include the new IS 80 TF independent suspension system for trucks, as well as ZF's AVE 130 electric portal axle and the EcoLife 6-speed automatic transmission.

The Association Materials Management, Purchasing and Logistics (AMMPL) has launched an innovative communication platform with ZF as a competence partner: the ZF Supplier Dialogue to intensify communication with suppliers.

October

ZF launches a new generation of dampers. ZF has developed new valve technology for its twintube dampers using modern fluid analyses. The new technology combines optimal handling with great ride comfort and the best possible noise characteristics.

November

Dr. Stefan Sommer, CEO of ZF Friedrichshafen AG, becomes a new member of the Managing Board of the German Association of the Automotive Industry (VDA).

ZF extends its commitment to higher education to include China and provides funding over a period of five years for the Endowed Chair of Passenger Car Chassis Technology and Dynamics at the Chinese-German College for Postgraduate Studies at the Tongji University in Shanghai.

In Rayong (Thailand), ZF opens a new plant for the production of passenger car axle systems.

ZF extends production in China. At the Qingpu location, the capacities for the production of rubber-metal and plastic components for the automotive industry are doubled.

December

In 2012, ZF posts record sales of approximately € 17.4 billion – a 12 % increase compared to 2011. ZF Group employees worldwide currently number approximately 75,000.

Awards

ZF technology on the winners' podium of the 2012 Dakar Rally. The Ecosplit manual transmission proved its reliability in the winning vehicle, the Iveco Powerstar, and in the Iveco Trakker, which were ranked 2nd and 6th.

The three most important German car magazines independently identify ZF as the best brand in the Transmissions category.

In South America, ZF receives the "Qualitas Supplier Award 2012" of the Fiat Group.

In the ETM publisher's readers' choice, ZF comes first in the CV transmission product group for the eighth time running.

At the annual "AUTO TEST Winners" prize-awarding ceremony, ZF wins the first "Innovation of the Year" award that was introduced in 2012 for the 9HP.

ZF wins two awards for automatic passenger car transmissions. Chrysler acknowledges ZF as "Innovation Supplier of the Year" for the 8HP. ZF is among Ford's twelve award winners in the "Gold Category".

The Volkswagen Group presents ZF as one of its best suppliers with the "Volkswagen Group Award 2012".

The Iveco Stralis Hi-Way with driveline and chassis technology from ZF receives the soughtafter "Truck of the Year" award.

The German Forum for Traffic and Logistics grants ZF the "EBUS Award 2012" for its AVE 130 electric portal axle for buses. The environmental prize is given for innovations for electric buses in urban public transport.

The EcoLife 6-speed automatic transmission receives the sustainability award from the AEA, the Brazilian engineers' association.

Contents

2 4 6 9	Preface Board of Management Report of the Supervisory Board Management Bodies
10 11 13	Management Report The Business Environment and Industry Developments Business Developments
26 30 31	Results of Operations, Net Assets, and Financial Position Risk Management Prospects
34	Corporate Structure
36	Divisions and Business Units
38	Powertrain Technology
40	Chassis Technology
42	Commercial Vehicle Technology
44	Industrial Technology
46	ZF Services
46	Die Casting Technology
47	ZF Lenksysteme GmbH
48	ZF Product Portfolio
49	Consolidated Financial Statements
50	Consolidated Income Statement
51	Consolidated Statement of Comprehensive Income
52	Consolidated Balance Sheet
54	Consolidated Cash Flow Statement
56	Consolidated Statement of Changes in Equity
58	Notes to the Consolidated Financial Statements
113	Audit Opinion

5-Year Developments

ZF Worldwide

114 116 Dear Customers and Business Portners, Dear Employees and Readers,

In 2012, the ZF Group developed positively in a weakening economic environment. Sales increased by 12 % to € 17,336 million. The number of employees increased by 3,287 to 74,775. German locations accounted for 60 % of this 5 % growth and international locations for 40 %. Internationally, ZF's growth varied according to market and industry. While very high growth rates were registered in North America and Asia, development was cautiously positive in Europe and regressed in South America due to market conditions. High growth rates in the premium passenger car segment were offset by a stagnating, in some cases downward trend in the volume passenger car segment. The commercial vehicle market declined in the market regions relevant to ZF. In industrial technology, development within the different industries varied widely.

ZF has an attractive product range in all market segments. As a result, demand in many areas developed at an above-average rate. With € 1,192 million, investment in property, plant, and equipment was at a very high level in 2012. High advance payments, extra costs due to demand-driven over or underutilization at ZF locations, financial restructuring of the die casting technology activities acquired in 2011, and the difficult market situation in the US wind power business led to increased pressure on results in 2012.

The realignment of the Group which began in 2011 was organizationally implemented in 2012. Initial positive effects are visible. Customers are pleased with the company's new positioning in the market. In order to realize all future potential, improved cooperation is required, as is a change in values and strategy. To this end, the Board of Management started the "ZF 2025" strategy process in 2012. The fundamental characteristics of the long-term strategy will be defined in 2013. This strategy will provide the objectives and guiding principles for the development of the ZF Group in the next 10 to 15 years.

I would like to thank our customers and business partners for their support and trust. I want to express my gratitude to all the employees of the ZF Group for their commitment in the previous year. Without them, all the successful business developments would not have been possible. The employee representatives, who constructively contributed to many decision-making processes, also deserve my recognition. My special thanks go to the shareholder representatives who brought a forward-thinking approach to the development of the Group.

ZF faces diverse challenges. Global market growth will continue. The customer base, with focal points in North America and Asia, will be strengthened. ZF will continue to provide the necessary advance payments for technology, production capacities, and international locations. In the area of technology, the process of augmenting expertise in steel and mechanics with modern technologies, such as electronics and telematics, is continuously being advanced so that we can offer superior systems. Developing our own expertise in electronics and integrating it into ZF products and systems will be given significantly higher priority in the long term. Furthermore, ZF is also investing in new technologies, such as lightweight design and alternative drive systems.

Ensuring financial independence remains our ultimate goal. To achieve this, profitability must be increased, internal processes further standardized, and value-added processes must be designed more efficiently. Ever greater flexibility will play a key role in offsetting increasing volatility and the associated fluctuations in demand. Customers expect ZF to provide synergies and economies of scale by increasing volumes and productivity; ZF needs to implement this at its own plants and also actively encourage its suppliers to do the same. To do so, ZF needs to stabilize its worldwide supply chains. Simultaneously, ZF has to realize the savings that result mainly from the higher economies of scale available through bundled purchasing volumes and the associated increase in supplier capacity utilization.

The uncertainties and increasing fluctuation intensity in the markets mean that estimates for 2013 are very conservative. Development of the global economy will only be slightly positive; large markets will move sideways. The European debt crisis has not been solved and, in the USA, significant efforts must be made to overcome budget problems. The only slightly positive momentum is coming from Asia. In this rather weak economic environment, the ZF Group will display stronger development than the market. For 2013, ZF is projecting single-digit percentage sales growth. The overseas markets cannot fully offset the weak market development in Europe and in the wind energy industry. Pursuant to a revision of the International Financial Reporting Standards (IFRS), ZF Lenksysteme GmbH, the joint venture with Bosch, can no longer be proportionately consolidated. In future, the equity method will be used to account for the interests in ZF Lenksysteme GmbH. Group sales thus reported according to IFRS will decrease by about € 2 billion in 2013. Investments will reach the same high level as in 2012. After the financial burdens in the year under review, results will improve in the coming year.

Friedrichshafen, April 2013

Dr. Stefan Sommer

Chief Executive Officer

Board of Management

4







Business development of the ZF Group in 2012 was again characterized by strong growth above the industry average. This is even more noteworthy when taking into consideration that growth of the global economy continued to slow down, not least as a result of the European debt crisis; ZF even had to cope with a decline in sales in South America. Our market success can be primarily attributed to technological leadership and attractive products. Hans-Georg Härter made a very significant contribution to ZF's strength of being a driving force of innovation. On April 30, 2012, Mr. Härter retired from his position as member of the Board of Management and Chief Executive Officer of ZF Friedrichshafen AG after 40 years of service to the ZF Group. Thanks to his extensive experience and strong, entrepreneurial mindset, he made a significant contribution to shaping the positive development and strategic alignment of ZF. On May 1, 2012, he handed an extremely well-positioned company over to his successor as Chief Executive Officer, Dr. Stefan Sommer. On behalf of the entire Supervisory Board, the Chairman, Prof. Dr. Behr, thanked Mr. Härter for his contribution and high level of personal dedication to the company and wished him all the best for his personal future.

Over the course of the past fiscal year, the Board of Management regularly informed the Supervisory Board of the business performance and current topics during the Supervisory Board meetings, the meetings of the Executive Committee and the Audit Committee, as well as in individual consultations. Here, emphasis was placed on measures taken for growth reasons and due to significant financial burdens in connection with advance payments for major projects in order to secure liquidity. Examples of this are the successful utilization of the currently favorable interest rates and the attractive refinancing options, as well as the material price reduction program initiated by the Board of Management in procurement. The Supervisory Board fully supports the strategy and measures taken by the Board of Management in order to preserve financial independence and guarantee the liquidity of the ZF Group.

ZF's activities in the field of wind power technology should have been significantly expanded in the previous year by acquiring an important wind turbine gearbox manufacturer. This, however, led to a considerable negative impact on the results due to the current global collapse in the market for renewable energies and particularly in the wind power area. This required financial measures for risk provisioning in connection with the existing market-related overcapacities. Furthermore, the associated, dramatic price decline had a negative impact. The restructuring measures introduced were welcomed by the Supervisory Board and will continue to be closely monitored.

Within the context of the HR strategy 2025, ZF is working on the strategic objectives of "Leadership Excellence" and "Talent Management". In doing so, ZF is responding to the challenges resulting from demographic change and strong international competition. This sets new requirements for all employees and leadership competence on all management levels. The Supervisory Board supports these initiatives. It places particular emphasis on promoting future technical staff and executive managers, as well as consistent and high-quality succession planning. The HR strategy 2025 is creating the right basis for this.

Following an in-depth discussion of the strategic and operational planning presented by the Board of Management, which continue to be characterized by a striking growth strategy, the Supervisory Board supports the intention of the Board of Management to improve the position of the company and the programs set up for this purpose, but not without referring to due caution with regard to possible economic market declines.

The Executive Committee that has now also assumed the function of the former Executive Staff Committee deliberated upon significant strategic topics and organizational and personnel changes in the Board of Management during the constituent meeting on April 24, 2012 and in four other meetings with the Chief Executive Officer. This also included the new Board of Management concept, complete with a reduction in the size of the Board of Management and the merger of divisional and corporate responsibilities that was approved unanimously by the Supervisory Board during its meeting on December 13, 2012.

For reasons of age, Dr. Gerhard Wagner and Reinhard Buhl, both members of the Board of Management, resigned from the Board of Management by mutual agreement with effect from April 30, 2013. As per the decision taken by the Supervisory Board on December 13, 2012, Michael Hankel was appointed a member of the Board of Management as of April 1, 2013 and the appointment of Rolf Lutz as a member of the Board of Management will be extended with effect from January 1, 2014.

Dr. Margarete Haase, who has been a member of the Supervisory Board since the beginning of 2012, took over the position as chairperson of the newly established Audit Committee in the constituent meeting that took place on April 3, 2012. At the subsequent meetings in July, October, and November 2012, the focus was placed on the topics of accounting, annual financial statements, internal controlling system, auditing, risk management, compliance, and corporate governance.

In April 2012, Ernst Baumann joined the ZF Supervisory Board as successor to Prof. Dr. Joachim Milberg, who resigned at the end of 2011.

The Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart (Germany), was commissioned with the audit of the annual financial statements of ZF Friedrichshafen AG and the associated consolidated financial statements, compiled in accordance with § 315 a of the German Commercial Code on the basis of the International Financial Reporting Standards (IFRS), as well as the associated management reports. The company issued its unqualified audit opinion respectively. Based upon comprehensive information from the Board of Management and the appointed auditor in the audit reports and the Supervisory Board meetings, the Supervisory Board worked intensively on these documents, examined them, and finally approved the audit results without objections on April 25, 2012. The annual financial statements of ZF Friedrichshafen AG were approved, the consolidated financial statements were adopted, and the recommendation of the Board of Management for the use of the results was accepted.

The Supervisory Board would like to thank the Board of Management and all employees of the ZF Group for their successful work in 2012. We also express our thanks to the employee representatives for their professional and constructive cooperation. We wish you all the best for the huge challenges that lie ahead.

Friedrichshafen, April 23, 2013

On behalf of the Supervisory Board

Prof. Dr. Giorgio Behr

Chairman

Supervisory Board

Prof. Dr. Giorgio Behr, Buchberg, Switzerland, CEO and President of the BBC Group, Villmergen, Switzerland, **Chairman**

Johann Kirchgässner*, Friedrichshafen, Chairman of the Group Works Council of ZF Friedrichshafen AG, Friedrichshafen, Deputy Chairman

Ernst Baumann (as of April 3, 2012), Münsing, former Member of the Management Board of BMW AG

Dipl.-Kfm. Rupert Baur*, Hagnau, Head of External Accounting at the Friedrichshafen location

Andreas Brand, Friedrichshafen, First Mayor of the City of Friedrichshafen

of ZF Friedrichshafen AG, Friedrichshafen

Josef Büchelmeier, Friedrichshafen, former First Mayor of the City of Friedrichshafen

Jürgen Bunge*, Lemförde, Chairman of the Lemförde Location Works Council of ZF Friedrichshafen AG, Friedrichshafen

Dipl.-Sozialwirt Uwe Christensen*, Neustadt, former First Representative of IG Metall Administration Center Nienburg

Willy Dekant*, Schweinfurt, Chairman of the Schweinfurt Location Works Council of ZF Friedrichshafen AG, Friedrichshafen

Dr. Margarete Haase, Cologne, Member of the Management Board of DEUTZ AG, Cologne

Frank Iwer*, Stuttgart, Trade Union Secretary of IG Metall District Management Baden-Württemberg

Dr. Joachim Meinecke, Freiburg, Lawyer

Martin Ocker*, Schwäbisch Gmünd, Member of the Works Council of ZF Lenksysteme GmbH, Schwäbisch Gmünd

Dr.-Ing. Franz-Josef Paefgen, Ingolstadt, former Chairman and Chief Executive of Bentley Motors Ltd., Crewe,

Helmut Petri, Grafenau, former Member of the Board of Management, Mercedes-Benz Passenger Cars Division of Daimler AG, Stuttgart

Lilo Rademacher*, Friedrichshafen, First Representative of IG Metall Administration Center Friedrichshafen-Upper Swabia

Hans Dietmar Sauer, Ravensburg, former Chairman of the Board of Management of LBBW, Stuttgart

Wolfgang Schuler*, Riegelsberg, Chairman of the Saarbrücken Location Works Council of ZF Friedrichshafen AG, Friedrichshafen

Hermann Sicklinger*, Thyrnau, Chairman of the Passau Location Works Council of ZF Friedrichshafen AG, Friedrichshafen

Univ.-Prof. Dr.-Ing. Henning Wallentowitz, Braunschweig, former Director of the Institute for Automotive Engineering, Aachen

Board of Management

Hans-Georg Härter, Friedrichshafen, Chief Executive Officer (until April 30, 2012) Corporate Market, Corporate Development, Corporate Communications, ZF Services, Steering Systems

Dr. Stefan Sommer, Ebelsbach,
Deputy Chief Executive Officer,
Chief Executive Officer (as of May 1, 2012),
Corporate Market, ZF Services (as of May 1, 2012),
Corporate Materials Management, Die Casting Technology
(until March 31, 2013),
Corporate Research and Development (as of April 1, 2013)

Reinhard Buhl (until April 30, 2013), Bohmte, Chassis Technology

Michael Hankel (as of April 1, 2013), Eschborn, Corporate Production, Powertrain Technology, Chassis Technology, Electronic Systems

Jürgen Holeksa, Friedrichshafen, Corporate Human Resources, Service Companies, Asia-Pacific (as of April 1, 2013)

Rolf Lutz, Friedrichshafen, Corporate Quality (as of April 1, 2013), Commercial Vehicle Technology, South America

Dr. Peter Ottenbruch (until March 31, 2013), Schonungen, Corporate Operations and Technology, Asia-Pacific

Wilhelm Rehm, Höchstädt, Corporate Materials Management (as of April 1, 2013), Industrial Technology

Dr. Konstantin Sauer, Überlingen, Corporate Finance, Controlling, IT, North America

Dr. Gerhard Wagner (until April 30, 2013), Kressbronn, Powertrain Technology

Chief Representative

Andreas Hartmann, Langenargen

Great Britain

MANAGEMENT REPORT

ZF Group sales rose by 12 % to € 17,366 million in 2012. In the year under review, the number of employees increased by 5 % to 74,775. Investments in property, plant, and equipment rose from € 1,058 million to € 1,192 million, an increase of 13 %. € 861 million was spent on R&D, a 14 % increase. The profit after tax dropped by 36 % to € 346 million.

11

The Business Environment and Industry Developments

Further slowdown in global economic growth

After the catch-up effects since the crisis year of 2009 and growth rates of over 4 % in 2010 and 2.6 % in 2011, global economic growth continued to decrease and thus fell to 2.3 % in 2012. At the same time, some national economies were affected by a double-dip recession. In particular, this affected the countries that were also suffering from the European debt crisis. High unemployment rates, decreasing domestic demand combined with extremely high public debt levels, and, as a result, falling financial stability pushed some countries, especially in Southern Europe, into a deep recession. Even the relatively stable development in Germany, where GDP growth of 0.7 % was achieved, was unable to prevent the economic performance across the entire European Union from falling by 0.4 %. The American economy developed positively at a rate of 2.2 %, even though in a historical context this would be considered to be moderate. Despite this, impetus for better development could not be seen. Especially at the end of 2012, the world expected appropriate decisions to be made by the American government in order to avoid falling off the fiscal cliff (automatic spending cuts and tax increases as of January 1, 2013). On short notice, a temporary solution was negotiated and an extension was agreed. If the necessary decisions are not taken, this will have significant negative consequences for the US economy and thus also affect the prospects for the global economy in 2013. Although the Japanese economy experienced growth of 2.0 % during the reconstruction period after 2011, the year in which the country was hit by an earthquake and a tsunami, the high exchange rate of the Yen and structural problems, as well as the extremely high budget deficit combined with respective spending cuts, prohibited a better development and also obscure the outlook for the next few years. The growth difficulties and the falling import demand of the established national economies resulted in a slowdown of economic development in countries in the new markets which previously managed to grow. China and India experienced comparatively moderate growth of less than 8 % in China (2011: 9.2 %) and 4.7 % in

India (2011: 7.0 %). South America was unable to escape the globally weak economic situation. After figures of 7.5 % and 2.7 % in the two preceding years, the largest market, Brazil, only achieved a 0.9 % increase in 2012.

Trends in the industries

2012 was characterized by very heterogeneous market development in the regions and industries. Although the demand in Europe came under noticeable pressure for economic reasons, other markets, such as the North American market, profited from pent-up demand. Catch-up effects could be realized in Japan following the crisis year of 2011, while South America had to cope with some significant losses as a result of weak economic development and regulatory interventions. In China, after reaching record levels, the sectors associated with investment goods in particular came under significant pressure.

Passenger cars and light commercial vehicles

For the first time, more than 80 million passenger cars and light commercial vehicles were manufactured globally in 2012. Compared to roughly 76 million units manufactured in 2011, this is an increase of 6 %. Apart from Japan, the most significant growth drivers of vehicle production were North America and Asia. Growth experienced in North America amounted to 16 %. With 15.3 million vehicles < 6 tons produced, the pre-crisis level was achieved once again. With almost 20 %, the classic passenger car segment posted a disproportionately high increase compared to the light trucks segment that rose by less than 10 %. The further vehicle production growth hotspots were in Asia. After a growth pause in 2011, China posted an increase once again. Following a weak start to the year, the growth rate stabilized at 7 % towards the end of 2012. After a 13 % increase in 2011, 10 % growth meant that India once again achieved double-digit production growth in 2012. Consequently, the country remains one of the global growth markets and offers great potential. Other Asian markets were also able to post positive double-digit development in 2012, particularly Thailand. Here, production was expanded by over 50 %; this was essentially due to Japanese manufacturers relocating work to Thai transplants. The European market showed subdued development as a result of the poor

Worldwide development of the production of cars and light commercial vehicles < 6 t in 1.000 units

2008 2009 2010 2011 2012 2013* Europe 20,600 16,700 19,000 20,340 19,260 19,470 North America 12,600 8 500 11,900 13,130 15,250 15,660 South America 3,940 3,500 3,400 3,800 3,870 4,100 11,200 7,800 9,400 8,130 9,700 8,820 Japan China 8,300 12,300 16,600 16,840 18,080 19,810 Other countries 12,200 13,520 10,100 9,500 14,240 14,980 Total 66,300 58,200 72,900 75,900 80,400 82,840

Worldwide development of the production of commercial vehicles > 6 t in 1,000 units

	2008	2009	2010	2011	2012	2013*
Europe	800	320	470	640	590	560
North America	410	260	290	430	490	470
South America	220	160	240	270	180	210
Japan	340	170	260	260	300	310
China	860	1,040	1,490	1,320	1,070	1,100
Other countries	310	250	390	450	420	450
Total	2,940	2,200	3,140	3,370	3,050	3,100

^{*} Forecast

economic activities and the consequences of the debt crisis. Some manufacturers profited from increasing exports to Asia and North America. However, the domestic demand was so weak, especially in the southern markets, that vehicle production shrank by 8 % in 2012. Vehicle manufacturers with high market shares in Southern Europe, that were not part of the significant increase in export demand for premium vehicles from foreign markets, were forced to drastically cut back production. Eastern Europe was able to disconnect from this negative development and achieved production growth of 4 %. The South American market recorded a decline of 2 % in 2012.

Heavy commercial vehicles

In recent years, development in the commercial vehicle industry was extremely cyclical. During the financial and economic crisis of 2009, production slumped by 26 % to 2.2 million heavy commercial vehicles > 6 tons. In 2010 already, the pre-crisis level had been exceeded thanks to growth of 43 % to 3.1 million. This surge in growth was followed by a year of moderate development of 7 % to 3.4 million commercial vehicles in 2011. In 2012, the three large markets of Europe, South America, and China faced a decline. The markets in Europe eroded over the course of the year. The countries most severely affected by the declines included Italy with almost 30 %, Spain with almost 20 % but also France and Germany, as well as Europe as a whole with approximately 8 %. The South American market had to cope with emission guidelines being tightened in Brazil. The Euro 5 standard was introduced in 2012, which led to significant preemptive

^{*} Forecast

effects towards the end of 2011 due to the price increase of vehicles. In combination with the weak economic situation, this led to a slump in commercial vehicle production of more than 30 % in 2012. China suffered from the overheated growth experienced during 2009 and 2010 amounting to almost 70 %. After initial corrective movement of 12 % in 2011, the production of heavy commercial vehicles declined by 19 % in 2012. Nevertheless, China remained the most important market worldwide in 2012. With approximately 1.1 million commercial vehicles, 35 % of global volume came from China.

There was excellent news from North America. Here, the dynamic growth phase continued in 2012. Production increased by 14 %, following a 48 % rise in 2011. While record values were recorded particularly in the first half of 2012, a noticeable slowdown was experienced in the final months of the year. Growth was also achieved in Japan. Following the year of the earthquake, production was expanded by 13 % to almost 300,000 commercial vehicles. Consequently, global production of heavy commercial vehicles in 2012 was 9 % less than in the prior year.

Off-road machinery

The effects of the 2009 crisis were felt just as strongly in the construction machinery industry as in the commercial vehicle industry. Global construction machinery production fell by almost 40 %. Thanks to growth surges of 53 % and 18 % in the years after the crisis, the absolute pre-crisis level was achieved once again with 520,000 construction machines. 2012 was characterized by a downward correction in China, the world's largest market for construction machinery (almost half of global construction machinery produced in 2011 came from China). The decline of almost 30 % in this market during 2012 caused the global production to decrease by 13 %. Production also had to be cut by 3 % in Western Europe due to the weak economic environment. The situation was similar in South America, although construction machinery production managed to at least remain at the prior year's level. The only positive news for the volume markets came from North America. Following the growth spurt of 37 % in 2011, construction machinery production increased by 7 % in 2012.

After the 9 % decline during the crisis year of 2009, global agricultural machinery production had recovered in 2010 thanks to 14 % growth. This was then followed by a further similar-sized upward trend in 2011. Consequently, production increased to almost 900,000 tractors in the > 30 kW power class. In 2012, the global development of the agricultural machinery industry was characterized by a sideways movement. The significant markets hovered around the zero line. Although Western Europe stagnated, North America experienced slight growth of 3 %. With declines of 2 % respectively, development of tractor production in China and South America tended to be somewhat weaker. The other markets posted no significant changes compared to the previous year.

Business Developments

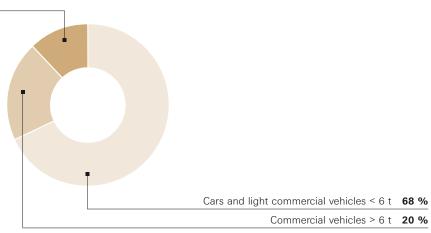
The ZF Group was able to grow dynamically again in the year under review. While business developments in the North America and Asia-Pacific regions were well above average, market development in Europe was only slightly positive. A decline in sales was reported in South America. Developments in the premium passenger car segment were very positive. The trend in volume production passenger car markets and commercial vehicle markets was weaker or declining, respectively.

Sales

Group sales in 2012 increased by 12 % to € 17,366 million. The divisions and business units active in the passenger car industry developed especially dynamically. As a result, the Group sales share of passenger car business increased from 64 % to 68 %, while the commercial vehicle share dropped from 25 % to 20 %. The share of sales from the other industrial technology sectors, such as construction and agricultural machinery, marine craft, aircraft, special and rail vehicles, and wind power, increased from 11 % to 12 %. ZF achieved a 56 % share of its sales with driveline technology (2011: 54 %), while the sales share of chassis technology products, including the 50 % share of sales in ZF Lenksysteme GmbH, fell from 46 % to 44 %.

Sales distribution by sectors, Consolidated ZF Group

Construction and agricultural machinery, marine craft, aircraft, special and rail vehicles, wind power 12 %



Divisions and business units

The Management Report in the year under review is being drawn up for the first time according to the new structures created in 2011, comprising four divisions and additional business units. Sales at ZF Lenksysteme GmbH will be proportionately consolidated in the 2012 year under review for the last time because International Financial Reporting Standards (IFRS) will only permit accounting as an at-equity consolidated investment.

Divisions

In the Powertrain Technology division, sales increased by 24 % to € 4,902 million, primarily due to the high demand for transmissions and driveline components in the premium passenger car segment. The Chassis Technology division reported growth of 17 % to € 4,969 million. This increase primarily resulted from the high demand for passenger car axle systems. The weak development in the commercial vehicle market resulted in a 7 % drop in sales in the Commercial Vehicle Technology division to € 3,043 million. In the Industrial Technology division, an increase of 23 % to € 2,648 million was reported, which can essentially be attributed to Wind Power Technology which was consolidated for 12 months in the year under review for the first time.

Business units

The ZF Services business unit achieved growth of 13 % to \in 1,375 million. This upswing can be attributed to a large extent to the reorganization in South America. The Die Casting Technology business unit, which was integrated into the ZF Group in 2011 and was fully consolidated for the first time in the year under review, achieved sales of \in 261 million. It will be integrated into the Powertrain Technology division in 2013.

Steering Technology

ZF Lenksysteme GmbH, a joint venture with Robert Bosch GmbH, continued to develop successfully in 2012 and showed a sales increase of 11 % to \in 3,976 million, of which 50 % has been included in the consolidated financial statements of ZF Friedrichshafen AG. The Servolectric electric power steering system, with its different variants for various passenger car segments, was able to increase its market shares worldwide.

Sales development by divisions and business units, Consolidated ZF Group

in € million

	2012	2012/2011
Powertrain Technology	4,902	+24 %
Chassis Technology	4,969	+17 %
Commercial Vehicle Technology	3,043	- 7 %
Industrial Technology	2,648	+23 %
ZF Services	1,375	+13 %
Die Casting Technology ¹⁾	261	_
ZF Lenksysteme GmbH	1,988	+11 %
Corporate R&D, Corporate Headquarters, and Service Companies	118	+31 %
- Internal Sales	-1,938	_
Consolidated ZF Group	17,366	+12 %

^{1) 2012} was the first complete business year of the Die Casting Technology business unit

Sales development by region

The ZF Group has 121 production locations in 26 countries. In addition to that, there are eight main development locations in Europe, North and South America, and Asia. This global list is completed by the international service and supplier network that offers ZF customers an extensive range of services worldwide. In the year under review, markets in the North America and Asia-Pacific regions developed especially dynamically for ZF. In Europe, ZF managed to report solid growth, while weak economic activity in South America led to a drop in sales.

Europe

Growth in the European market did not match the level of prior years. However, with an increase of 5 %, growth above the industry average was achieved. The sales share of the region in Group sales dropped from 61 % to 57 %. The total number of employees was 53,578, an increase of 2,165 employees. Primarily due to the further expansion of the Saarbrücken location and establishing the Neunkirchen location near Saarbrücken, there were 1,966 additional employees in Germany. In Eastern Europe, the production of passenger cars showed a slight increase in comparison to the previous year, whereas the production of commercial vehicles stagnated. Despite the difficult market environment in this region, ZF was able to maintain sales at the prior-year level. The number of employees at ZF's locations in Russia, Hungary, Slovakia, and the

Czech Republic amounted to a total of 4,485 at the end of the year.

North America (NAFTA) and South America

Sales developed very positively in North America in 2012. With sales of € 3,267 million, growth of 41 % was achieved. The region's share in Group sales increased from 15 % to 19 %. The passenger car business in driveline and chassis technology contributed substantially to this growth. In the year under review, ZF pressed ahead with the construction of its plant in Gray Court near Greenville, South Carolina. The plant will launch volume production of 8 and 9-speed automatic transmissions for passenger cars in 2013. As of mid-2012, ZF expanded its plant for axle systems in Tuscaloosa, Alabama. Business with driveline and chassis components as well as electric power steering systems was successful in 2012. In contrast, business in the area of wind power technology developed negatively. Sales figures here remained well below the originally planned figures. ZF employed 6,856 people at its North American locations at the end of 2012, which represents an increase of 12 %.

Due to the economic situation, the South American market developed negatively and ZF sales in the region dropped by 14 % to \in 760 million. With 5,235 employees, the workforce was 8 % below the previous year's level. The commercial vehicle business was especially affected.

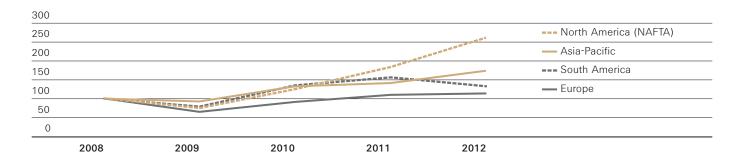
Sales development by regions, Consolidated ZF Group

in € million (consolidated)

	2008	2009	2010	2011	2012
Western Europe	7,982	5,603	7,114	8,508	9,005
Eastern Europe	675	492	778	950	937
North America (NAFTA)	1,255	948	1,583	2,319	3,267
South America	568	450	776	880	760
Asia-Pacific	1,843	1,715	2,448	2,630	3,183
Africa	178	163	208	222	214
Total	12,501	9,371	12,907	15,509	17,366

Sales development by regions, Consolidated ZF Group

2008 = Index 100



The introduction of new emission standards in 2012 caused a preemptive effect in the market, which had resulted in a positive influence in 2011.

Asia-Pacific

The markets in the Asia-Pacific region developed heterogeneously. The region is becoming more and more important for ZF. In the year under review, sales of \in 3,183 million was achieved, an increase of 21 %. The region's share of Group sales increased from 17 % to 18 %. The number of employees rose by 10 % to 7,888. China, as the largest market, was able to achieve production growth in passenger cars and light commercial vehicles once again. After a very dynamic upswing in previous years, heavy commercial vehicles underwent a correction phase that resulted in a severe contraction. Similar developments occurred in the Indian market: The passenger car segment reported growth, but commercial vehicles showed a sharp fall.

Sales with transplants in China also developed very positively. In particular, sales of premium German vehicles increased substantially in the emerging Chinese market. Sales developed positively in India as well. An important contribution was made by ZF's newly acquired wind turbine gearbox business which is already well established in India.

At the Qingpu location in China, the capacities for the production of rubber-metal and plastic components were doubled. In February 2012, ZF began to construct its first plant in the Chinese capital Beijing. Axle sets for passenger cars will be assembled there. ZF also opened a plant in Thailand for manufacturing passenger car axle systems for various customers.

Materials Management

As a result of the Group's growth in 2012, the purchasing volume increased by more than 10 % to over \in 12 billion. This is associated with the following challenges: safeguarding delivery capacity and supplying the internal and external supply chain while meeting cost targets. Here, the material price development was characterized by strongly fluctuating raw material prices. Furthermore, in the second half of the year, payment terms and conditions including supplier payment targets were standardized Group-wide.

In order to meet all these increasing requirements and objectives for the purchasing organization in the long run, a decision was made to reorganize Purchasing within the framework of the APS25 materials management strategy. A stringent, cross-divisional, and global alignment with commodities is a central element of this new organization to realize bundling and synergy potential.

Sustainability was another topic of Materials Management in 2012 which was acknowledged among other things by presenting the first "Energy Efficiency Award". In addition, ZF has specified further details on the sustainability topic in the APS25 materials management strategy and pursues a step-by-step, Group-wide implementation.

In 2012, the annual "ZF Supplier Awards" were presented in the Product Innovation, Production Materials, and Non-Production Materials categories in the context of the Materials Management Symposium. The winning suppliers excelled in quality, technology, and cost and logistics performance.

Three TechDays were also held in 2012 to intensify partnership and cooperation with the strategic suppliers. For the first time, one of these meetings took place with an internationally operating Chinese supplier. Moreover, several supplier days were organized, such as one for energy or one for logistics services at the IAA Commercial Vehicles.

Despite enormous growth, mainly in the regions of Asia-Pacific and North America, supply chain management ensured stable supply. However, a slightly disproportionate increase of the current assets had to be accepted; this will be corrected in 2013. In this context, it is decisive to further enhance delivery reliability of the suppliers. In 2012, this was achieved as planned. An important foundation for this was the introduction of electronic communication via classic EDI and SupplyOn which was implemented in 2012. Especially in the growth regions of North America and China, the corresponding functional areas were established locally.

In order to keep the supply chain flexible in 2013, the implementation of the EU directive for aviation security was pushed forward with the "be secure" project and was successfully concluded with the "known consignor" certificate from the Luftfahrt-Bundesamt, the Federal Aviation Office.

In 2013, the focus will be on optimizing worldwide transport management to control costs and CO_2 emissions. Additional emphasis is being put on the continuously optimized demand and capacity planning, as well as the further development of supply chain risk management.

After the great success of the "SCM Academy" qualification initiative, this concept that was realized in cooperation with Human Resources will be expanded to all areas of Materials Management. As of 2013, all national and international qualification programs will be grouped together into the newly established "Materials Management Academy". Together with the recently introduced program for materials management trainees and systematic succession planning, a comprehensive approach for employee development has been created in this area.

Employees

As of December 31, 2012, ZF employees worldwide numbered 74,775, an increase of 5 %. While the workforce in Germany grew by 5 % or by 1,966 to 43,195 employees, 31,580 people worked abroad (+4 %) in 2012. Development in North America was particularly positive, which can also be attributed to the construction of the new plant in Gray Court, South Carolina. To meet the constant high demand for automatic passenger car transmissions, ZF continued to expand its automatic transmission production and acquired a plant from Bauknecht Hausgeräte GmbH in Neunkirchen near Saarbrücken (Germany) in early 2012, along with approximately 240 employees.

As an attractive employer with a number of international placements, ZF currently employs 1,980 apprentices and dual-education students at 16 German locations in more than 30 different jobs that require vocational training and dual study courses. These figures and the diverse opportunities impressively illustrate the real significance of the dual vocational programs and dual study courses at ZF. This is confirmed, for instance, by ZF Services being awarded the "Certificate for Promoting Young Talent" from the Bremen-Bremerhaven Agentur für Arbeit (Employment Agency) in the fall of 2012.

The new cross-media HR Image Campaign "I'm with ZF" started in 2012. It is primarily directed at future skilled workers and executive managers in engineering, business administration, and IT. Along with additional initiatives, such as Formula Student, the HR Image Campaign contributed to ZF's improvement to $23^{\rm rd}$ place in the 2012 ranking of the Top 100 employers for engineering graduates according to the Graduate Barometer compiled by the trendence research institute in Berlin (Germany).

Principles of social responsibility

In the fall of 2011, the "Principles of Social Responsibility" were worked out together with the Employee Representatives and IG Metall, the German Metalworkers' Union. These principles were published in the spring of 2012, describing for the first time the general principles that apply to all locations and employees. On the one hand, the minimum standards follow the basic principles of the UN organization ILO (International Labour Organization)

and, on the other hand, their content is closely linked to the principles of the United Nations Global Compact initiative. Consequently, ZF Friedrichshafen AG formally joined this strategic policy initiative in May 2012.

Strategy process

The HR strategy was radically revised in 2012 by an international team that defined the four strategic targets of "Talent Management", "Leadership Excellence", "Enable the Organization", and "Value-Added HR". HR managers from 28 different countries then discussed this strategy at the first international HR Convention. The comprehensive international degree of acceptance thus achieved emphatically confirms the approach of the overall HR manager involvement in many countries and locations. Since July 2012, each of the four strategic targets is overseen by two champions from the divisions or corporate functions, whose task is to initiate, accompany, and accelerate the initiatives that have been derived from the strategic targets. Some of the initiatives, such as the "Executive Managers Landscape 2025", have already been put into practice.

Internationalization of HR work

Strategic corporate planning has already shown that the importance and speed of internationalization will continue to increase. In order to respond to this development, the first worldwide HR Convention took place in July 2012 with "Together towards the future" as its motto. The event was attended by 145 HR managers from 28 different countries, with the objective of getting to know each other better, sharing HR-specific information, and working together on the strategic alignment. Within the context of further corporate development, competent and internationally experienced skilled workers and executive managers are in demand more than ever. In this respect, the quality and dimension required are becoming more complex and clash with demographic challenges - together with a shortage of skilled labor and executive managers that is already looming in many countries. ZF is facing the challenge among other things by providing greater variety and mobility in technical and managerial positions worldwide, as well as by intensifying training for international executive managers.

Workforce development, Consolidated ZF Group

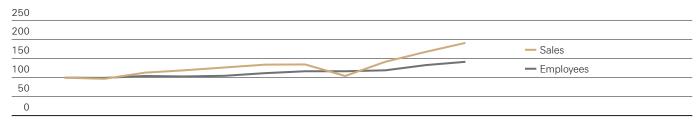
at the end of the year (direct and indirect employees)*

	2008	2009	2009 new	2010	2011	2012
Domestic	37,834	36,490	37,271	38,205	41,229	43,195
Foreign	25,454	23,281	23,674	26,395	30,259	31,580
Total	63,288	59,771	60,945	64,600	71,488	74,775

^{*} Starting from 2009, changed calculation method to count part-time employees

Development of sales and employees, Consolidated ZF Group

2002 = Index 100



2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

University marketing

For many years now, ZF has been involved in a network of regional and national cooperation programs with colleges and universities. In Germany, three professorships or endowed professorships were financed in 2012 at FHWT Diepholz, the University of Stuttgart, and Zeppelin University. Four additional endowed professorships are currently being advertised or appointed, respectively. This form of academic cooperation was expanded internationally for the first time in November, with the dedication of an endowed chair at the renowned Tongji University in China. Initially for a period of five years, ZF Friedrichshafen AG is sponsoring the Professorship for Passenger Car Chassis Technology and Dynamics at the Chinese-German College for Postgraduate Studies (Chinesisch-Deutsches Hochschulkolleg), thus positioning itself as an attractive employer in a growth-oriented market.

MINT sponsoring

ZF is working with municipalities, organizations, and other companies to get children and young people interested in technology and science with its "Wissenswerkstatt" (Knowledge Workshop). The "Wissenswerkstatt" illustrates vocational prospects to young people and contributes towards meeting the local and regional employers' future requirements for skilled workers, certified technicians, and engineers. After four years of successful work in Friedrichshafen, the concept of the "Wissenswerkstatt" is now being transferred to other regions in Germany. For example, new workshops were established in Passau and Schweinfurt in 2012; corresponding projects were started at the Lemförde and Saarbrücken locations.

In Germany, numerous regional school cooperation programs, initiatives such as Girls' Day and Girls' Science Camp in Schweinfurt, or the Women's Technician Program in Lemförde, a six-month internship in cooperation with the Niedersachsen Technikum (Lower Saxony Technical College), are examples of a living sense of responsibility for the development opportunities for young people and thus for the future orientation of ZF.

New products

In the field of driveline technology for passenger cars, ZF presented its innovative future concept for local zeroemission mobility to the public for the first time in 2012: The EVD1 (Electric Vehicle Drive 1) module is an efficient and dynamic drive that is tailor-made for small and compact cars running purely on electricity. With 90 kW power and 1,400 Nm torque, it meets all requirements for vehicles in urban traffic. Thanks to the two-stage singlespeed transmission and the innovative high-speed design, ZF was able to use less material to achieve these performance figures. With a weight of only 45 kilograms, the EVD1 sets standards with regard to the power-to-weight ratio. In addition, the asynchronous motor does not require any rare earth elements, whose raw material prices fluctuate greatly. ZF also presented the new ECOnnect all-wheel-drive system. It is primarily characterized by its demand-based, automatic decoupling or activation function. For all-wheel drive vehicles, this ZF technology minimizes the consumption increase resulting from their all-wheel drive principle. Compared to conventional systems, savings of up to 5 % are possible. At the same time, the individual torque distribution per wheel significantly improves the vehicle dynamics and driving safety. In addition, ECOnnect can be combined with the new 9-speed automatic transmission from ZF. The 8HP, the 8-speed automatic transmission, continued its market penetration in 2012. For example, Chrysler added the Ram 1500 to its list of models as the first US pick-up truck equipped with the 8HP transmission. BMW is now installing the automatic transmission in nearly all vehicle segments, from the 1 Series to the X5 and the 7 Series. Thanks to strong demand, ZF increased the 8HP production in 2012 to 1.6 million units. Volume production started for the ZF brake pedal. Thanks to its lightweight hybrid design, it only weighs 355 grams half as much as a comparable steel brake pedal.

In 2012, commercial vehicle driveline technology focused on TraXon, the new automatic transmission system for heavy trucks. This transmission celebrated its world premiere at the IAA Commercial Vehicles 2012, where it was one of the most important innovations. Based on a completely new basic transmission – available with 12 or 16 gears – and a modular concept, TraXon is

characterized by future compatibility and functional versatility. It thus meets the commercial vehicle market's current and future demand for a versatile, cost-effective solution, covering a broad range of applications. The transmission offers more torque without making any compromises on the power-to-weight ratio. It has a higher spread with better noise quality and, depending on the application, can be driven with a dry clutch, a hybrid module, a dual-clutch module, or a torque converter clutch; it can even be combined with an enginedependent PTO. ZF specially developed the revolutionary PreVision GPS shifting strategy for TraXon. Thanks to a GPS connection and an interface to navigation data, it anticipates the next move, thus greatly improving fuel efficiency. ZF received major orders from numerous transport authorities - among others from China, the Netherlands, Russia, Turkey, and the Ukraine - for the EcoLife 6-speed automatic transmission, low-floor axle systems, and steering systems produced by ZF Lenksysteme GmbH. In addition to energy-efficient, conventional driveline technology, ZF is also promoting electric mobility in the commercial vehicle segment. The AVE 130 electric portal axle, for example, which won the "EBUS Award 2012", celebrated a double premiere: It was used for the first time in Russia and in a trolleybus. The AVE 130 is designed for both hybrid buses and purely electrically driven city buses. In 2012, ZF won the first Asian customer for the Openmatics telematics system.

ZF also demonstrated its power of innovation in 2012 with new products for off-road applications. The powersplit, continuously variable wheel loader transmission is currently attracting high interest at international trade shows. For cPOWER, ZF further developed the CVT technology familiar from agricultural machinery. This means that in the field of construction machinery, significant fuel savings of up to 25 % and up to 20 times greater efficiency can be achieved. The new ZF-TERRASTEER tractor steering axle from the agricultural machinery segment covers almost all 4x4 applications. It is developed and produced in collaboration between ZF's locations in Passau (Germany) and Sorocaba (Brazil) which ensures the global competitiveness of the innovation in the long term. The company's rail drives make rail traffic more economical, safer, and more comfortable. At the InnoTrans trade

show, ZF presented highlights such as the RailFlex fiber composite coupling for partially cushioned electric drives and an innovative cylinder roller bearing concept for electric drives that significantly reduce the life cycle costs for the operator. The industrial drives segment introduced a machine tool drive for high cutting performance and high speeds, and thus for more flexible machines. An efficient new escalator drive achieved the maturity phase. It enables energy regeneration through recuperation and, for the manufacturer, complete assembly in the plant.

Research and Development

Approximately 7,120 employees work for ZF Research and Development worldwide. Of these, about 970 engineers and technicians work at the ZF Group's Corporate Research and Development departments in Friedrichshafen (Germany), and an additional 330 in Pilsen (Czech Republic), Shanghai (China), and Tokyo (Japan). ZF will achieve a large part of its increase in R&D personnel abroad by hiring qualified engineers there to help address future needs. In 2012, \in 861 million was spent on R&D. Thus, the target of 5 % of sales for research and development expenses is reached.

Corporate Research and Development activities

In addition to intensive teamwork on the development projects in the divisions and business units, the Corporate Research and Development departments have continued to pursue their work in the fields of advanced engineering and basic development as well as development process optimization, focusing on the following topics:

Advanced Engineering

Advanced Engineering worked in the following subject areas during the course of the year under review:

The Group's product and technology planning is based on market, product, and competency roadmaps. These roadmaps are continuously being updated. The potential for using fiber-reinforced plastics to reduce the weight of driveline and chassis components was analyzed in several advanced engineering projects. These new materials are not only attractive for passenger cars but also for use in commercial vehicles.

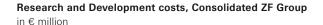
Ideas for advancing automatic and dual clutch transmissions have been further pursued with regard to designing innovative assemblies and new transmission structures. Interesting alternatives to today's solutions can be identified. They give rise to potential improvements in transmission efficiency, weight, and installation space.

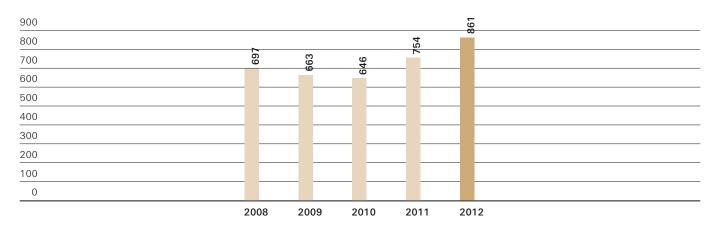
In addition to continued activities for passenger car hybrid drives, approaches for off-road machinery have also been developed. Here, for example, a field test was carried out to examine what advantages result from electrifying the attachments of agricultural machinery.

The electric drive unit for electric vehicles was successfully commissioned in test vehicles and presented to the public. The drive unit has been very well received as it features high efficiency, agility, and comfort, whilst also being light and requiring little space for installation. Alongside this central drive, a concept for a near-wheel electric drive is currently being developed.

In parallel to the growing importance of hybrid and electric vehicles, the demand for suitable automotive power electronics will also increase. In the context of our hybrid and electric drive activities, ZF is working intensively on developing power electronics.

As part of continued efforts to reduce fuel consumption, needs-based actuating systems are gaining in importance. Intelligent control of the power consumption of the different systems is a key factor to reduce the auxiliary power required to control add-on units. ZF is devoting a great deal of work to this topic and is providing vehicle manufacturers with a range of solutions.





Basic development and method development
Work was carried out on the following methods, tools,
and processes during the year under review:

Updating the Group-wide Product Data Management system (PDM) continued in 2012. Additional overseas locations and newly added ZF locations were integrated into the PDM system. The necessary measures to prepare ZF for the requirements of a future-oriented Product Lifecycle Management (PLM) are currently being investigated.

In hybrid vehicles, operating mode changeovers between the combustion engine and the electric motor can cause jolts in the driveline. Thanks to a new simulation method, this phenomenon can be analyzed and remedial actions can be evaluated.

The development of new computational fluid dynamics methods contributed to further optimizing the automatic transmission oil circuit, thus improving efficiency. Furthermore, it was also possible to significantly enhance the performance figures of hydrodynamic retarders through a combination of computational fluid dynamics and test bench runs.

The revision of the material databases for steel melts and lubricants enables a user-friendly and efficient data exchange with both internal and external development and service partners. With this unique material data management, ZF plays a leading role in the market. The tapered thrust washer technology was deployed on gears for rail drives for the first time. It supports axial forces in the transmission and improves both efficiency and performance. This technology was among the 104 world innovations at the InnoTrans 2012 trade show that took place in Berlin.

The development of acoustically optimized products is supported by consistent involvement of acoustic teams in the development process. The most recent example is the TraXon transmission for heavy commercial vehicles that sets new standards in terms of low external noise.

A new commercial vehicle acoustic test bench was put into operation. With a rated test output of 800 kW, input torques of up to 6,000 Nm, and speeds of up to 5,000 revolutions per minute, it covers the entire commercial vehicle transmission range and facilitates the new test cycles for the acoustic approval tests of future Euro 6 vehicles as defined by the legislator.

As in previous years, ZF was able to maintain its position among the top patent applicants in Germany in 2012. At almost 900, the number of internal invention disclosures remained at the same high level as in the previous year. Inventions focused on transmission system technology. New, up-and-coming areas are electronic control systems for transmissions, electric drives, and axle systems. With regard to brand and domain rights, ZF has reinforced the defense of its valuable assets worldwide. The range of brands and domains is constantly expanded to accommodate ZF's growth and the penetration of new markets.

It consists of more than 3,000 individual brands and over 880 domains.

Quality

ZF pursues a holistic quality approach that not only covers product reliability, but also the quality of all the services we provide to our customers. The Group-wide ZF Quality Management System defines the framework for the quality management system of all locations, including Corporate Headquarters. The ZF Quality Management Manual contains the description of the process and guideline structure.

Working with our suppliers as partners plays an important role. After all, we will only be able to jointly achieve our quality targets if the entire supply chain is optimally coordinated.

The Group is therefore increasingly focusing on electronic processing of supplier transactions. In addition to classic EDI for direct data exchange, ZF is using the SupplyOn supplier portal for web-based supplier communication. In 2012, the ZF-internal interfaces for SupplyOn were optimized to process complaints via electronic 8Ds (e8D), so that we can push ahead with connecting the suppliers in 2013.

ZF motivates all employees to remain constantly involved in the continuous improvement process. The "Total Quality Management" contest took place for the 18th time in 2012. Overall, more than 1,000 employees worldwide entered the competition with around 220 projects, which not only contributed to quality improvement, but also included product innovations and ideas to optimize energy efficiency.

Production

The ZF Production System (ZF PS) was further harmonized in the year under review. This process will be completed in 2013. Joint targets were initially agreed across the Group in 2012 and the optimization projects have been stored in a roadmap. The harmonized methods for process optimization show a significant increase in efficiency. Activities in the indirect area continue to progress. It is important for

us to communicate internally that every executive manager and every employee, whether working in the direct or indirect area, can make a contribution to the ZF PS.

To increase our expertise in lightweight design, we started setting up a technical center for basic development of fiber-reinforced plastics (FRP) in Schweinfurt (Germany) early in 2012. The facility will start operations in the second quarter of 2013. This will create the basis for future volume production of innovative lightweight components in close collaboration with Product Development and Advanced Product Engineering. Various procedures for processing thermosetting as well as thermoplastic FRP materials can be analyzed and qualified at the technical center.

2012 was the "Year of Energy" at ZF. In addition to various energy-saving projects at all locations, it is important that all employees use energy resources responsibly and contribute towards achieving this target. A web-based training concept was developed to draw the employees' attention to the economical use of energy in addition to the information provided via Group media and at events. An additional focus was placed on the arrangements for introducing a standardized energy management system across the Group.

Compliance and sustainability

For ZF, good corporate management means acting in a value-based, law-abiding, and sustainable manner all at the same time - within the company, towards employees, customers, suppliers, and business partners. This is stipulated in both the Corporate Principles and the ZF Code of Conduct and was affirmed by joining the UN Global Compact in May 2012. Thus, ZF commits itself to ten fundamental, globally accepted principles for the protection of human and labor rights, the promotion of environmental protection, and the prevention of corruption and bribery. Every single executive manager and employee at all ZF locations worldwide is responsible for putting these principles and guidelines into practice. The Group Directives convert the compliance principles into specific instructions that provide all employees with orientation for their daily actions. The Compliance department also

provides support in training courses and e-Learning programs. Employees who need advice and support in a specific situation can consult the Compliance department or the Compliance Officers in the regions. Risk analyses and audits indicate where laws and rules are at risk of being violated and assist in promptly finding a remedy.

In 2012, ZF arranged for a review to be carried out in order to systemize what has been put into practice within the company for many years and transparently illustrate this to society and the business partners. This review is based upon the internationally recognized guidelines of the Global Reporting Initiative and includes all topics relevant to sustainability - from corporate management to economic matters, from environmental protection to responsibility towards the stakeholders. A steering committee, that meets on a regular basis and consists of responsible persons from Compliance, Communications, Human Resources, Environmental Protection, Occupational Safety and Health, Materials Management, as well as Research and Development, accompanies the review together with the Compliance department that is also responsible for sustainability.

Interim results illustrated numerous advantages. This includes the global environmental management system, the HR strategy adopted in 2012 with its core areas of demography, diversity, and international talent management, the Corporate Materials Management plan also initiated in 2012 for the integration of sustainability into supplier management, as well as the activities linked to the "Year of Energy". Each location was called upon to define energy saving projects. At the same time, the Board of Management decided, as a Group-wide target, to reduce the specific energy consumption by 20 % by 2015 compared to 2010 and to bring down CO_2 emissions by 20 % by 2020. ZF's environmental and energy policy that was also adopted in 2012 is binding for all locations worldwide and forms the basis for this. In order to further develop sustainability, ZF participates in events and workshops with the aim of sharing experience with other companies, as is the case with the German Global Compact Network for instance.

Environmental protection

By updating the environmental policy, the Board of Management has once again emphatically affirmed its commitment to environmental protection. The decision to publish a sustainability report in accordance with the internationally recognized GRI standard for the first time in 2012 demands a broader environmental protection strategy. In the upcoming years, we will therefore successively expand our previous focus on the core topics of environmental protection in the company. Group-wide implementation will take place by introducing appropriate control factors and targets into the existing environmental management system according to the multisite procedure.

A certified environmental management system is the Group standard for all production and main development locations. Consistent implementation of this standard at all production locations was a particular focus in the year under review. For example, the independent auditing company DNV certified 100 production companies and organizational units worldwide according to the international ISO 14001 standard. This corresponds to a certification rate of 89 % relating to production. The compliance of all participating locations was verified with the external audit in accordance with the multisite procedure.

To promote the topic of energy and climate protection even further, the foundations were laid for introducing an energy management system. This began with integrating the standard requirements according to ISO 50001 into the existing environmental management system. The ZF Environmental Award was presented for the 17th time in 2012. The prize for special achievements in environmental protection was awarded to the São Bernardo do Campo location in Brazil for the environmental protection concept of its new canteen. Within the context of introducing Group software for environmental protection and occupational safety and health, various fundamental processes were initially harmonized at the German locations. Harmonization of all other processes should be completed in 2013, and a global rollout is scheduled to start in 2014.

Numerous measures to improve company-internal environmental protection were implemented at the ZF locations. Essential core areas included energy savings and emissions reduction supported by the "Year of Energy" campaign year.

In the context of construction projects, inherited pollution was cleaned up at two locations. Within the framework of corporate development projects, the environmental risk as well as occupational safety and health risks were assessed for two projects by carrying out an environmental due diligence audit. In total, \in 20.6 million was spent on new environmental protection facilities and \in 38.5 million on operation and maintenance at German and international ZF locations. Further information on environmental protection at ZF is available online at www.zf.com.

Market organization and market processes

With the Group's realignment in 2011, the course was set for a market-oriented organizational structure. Our previous, historically evolved, heterogeneous divisional structure was reorganized to introduce market-focused divisions: Powertrain Technology, Chassis Technology, Commercial Vehicle Technology, and Industrial Technology. In addition to that, aftermarket and service activities were merged into the ZF Services business unit.

The primary focus of the newly-created divisions during the year under review was placed on market and customer management. Related activities were grouped together in the market-oriented divisions and now form the basis for improved cooperation and the development of customer-oriented solutions. Most of the business processes affected by the change in the legal structure were adapted smoothly. The long-standing, constructive, and partnership-based cooperation between ZF and its customers has proven its worth.

In 2012, we continued to harmonize and optimize our process landscape in the Corporate Market function. The corporate function cooperated closely with the divisions to define joint process standards in order to avoid redundancies, especially for the supporting processes. Examples of processes introduced or further developed during 2012 include managing customer documentation (CUDO), managing business processes on customer portals, or the introduction of Group-wide customer reporting. The market master data that was merged, harmonized, and incorporated in a coordinated hierarchy across the Group formed the basis for the harmonization of the process landscape.

Market structures that are still changing very dynamically, coupled with an increasingly important Asian market, also characterize ZF's business development. The successes of traditional ZF customers, especially in the Chinese market, and the development of growth potential with new customers are leading to a significant growth of business volume in Asia. Regional heterogeneous market developments, customers operating on an increasingly global scale, and ever more cyclical markets pose further challenges to ZF. As planning security declines, greater flexibility, tailored planning processes, and faster response times are becoming ever more important for the organization. Systems that will enable automated reporting and Groupwide rolling distribution and sales planning are being developed and implemented, based on globally standardized master data and hierarchies.

IT

In January 2012, Information Technology launched a two-year IT innovation campaign with the aim of increasing investments in future technologies. First results were among others achieved with the Mobility4ZF project. As a result of the sharp increase in demand for smartphones and media tablets at ZF, Information Technology set up a mobile device management platform. For IT security reasons, a solution was introduced that safely integrates smart devices into the ZF network and guarantees security of ZF-internal data on these devices. Furthermore, Sourcing and Vendor Management activities were reorganized as

part of the IT innovation campaign to support ZF's global growth. The main focus is placed on increasing the amount of externally performed services for IT business applications. Supplier consolidation has been initiated in cooperation with Purchasing.

The global introduction of Microsoft Office 2010 was successfully completed in the third quarter. For more than 35,000 employees, this provides the basis for a future-oriented office workplace. This approach will be extended in order to meet growing requirements, especially in the area of virtual cooperation. The introduction of the Microsoft SharePoint platform in 2013 is a further milestone towards the workplace of the future. As a result, ZF employees will have the opportunity to organize their everyday working routine much more efficiently in future.

Information Technology contributed to the "Year of Energy" with numerous energy-efficient and environmentally-friendly measures. These measures ranged from procuring energy-efficient client, server, and storage hardware, from climate optimization by using cold aisle containment in various data centers, to providing a new data center at the Passau (Germany) location, for which state-of-the-art climate optimization and heat recovery techniques have been considered.

Results of Operations, Net Assets, and Financial Position

Results of operations

Thanks to attractive products and a stable order situation, the ZF Group was able to continue registering growth for the third year in a row. Sales of \in 17,366 million in the fiscal year 2012 represent an increase of 12 % and thus a new record high. The development of the ZF Group is even more remarkable when considering the weakness of the South American commercial vehicle market and the uncertainties caused by the European debt crisis, which also had a negative effect on the industries and markets that ZF is active in. As in the previous year, growth was especially strong in North America, where sales of \in 3,267 million (2011: \in 2,319 million) were

achieved. In the Asia-Pacific region as well, revenue increased by 21 %. Contrary to these growth figures, there is a 14 % drop in sales in South America and an overall decline in the commercial vehicle business.

The margin was depressed by high ramp-up costs for new products and property, plant, and equipment i.a. in North America with the construction of the new plant for automatic passenger car transmissions in Gray Court, South Carolina (USA). It was also affected by changes in the product mix associated with significant growth in the systems business. In addition to the 17 % rise in material costs, the 29 % increase in depreciation to € 829 million also contributed decisively to the above-average 14 % rise in the cost of sales. However, this is not just a consequence of the investments in property, plant, and equipment, which in the last two fiscal years alone reached € 2,250 million. The huge slump in the future market of wind energy, which ZF entered in the previous year with its own activities in the new plant in Gainesville, Georgia (USA), as well as with the acquisition of Hansen, a wind turbine gearbox manufacturer, led to substantial underutilization of capacities. This was addressed with an impairment on intangible assets and on property, plant, and equipment.

Expenditure in the form of investments and the continuingly high R&D expenses that amounted to \in 861 million are necessary to ensure that ZF remains at the technological forefront as it is today. The requirements are thus met for improving the operating profit to the level of previous years, which, due to the aforementioned influences, had decreased from \in 850 million to \in 687 million, thus corresponding to a return on sales of barely 4 %. EBITDA, which is adjusted by depreciations and which is important for cash flow development, was much more positive, increasing by \in 93 million to \in 1,667 million.

Structure of Income Statement, Consolidated ZF Group

in € million

	2012	%	2011	%
Sales	17,366	100	15,509	100
Cost of sales	14,432	83	12,667	82
Gross profit on sales	2,934	17	2,842	18
Research and development costs	861	5	754	5
Selling expenses	703	4	698	4
General administration expenses	692	4	597	4
Other income	140	1	182	1
Other expenses	131	1	125	1
Operating profit or loss	687	4	850	5
Net result from participations	5		-3	
Net interest result and other financial results	-123		-132	
Net financial result	-118		-135	
Net profit or loss before income tax	569		715	
Income taxes	223		175	
Net profit or loss after tax	346		540	

Cash Flow Statement, Consolidated ZF Group

in € million

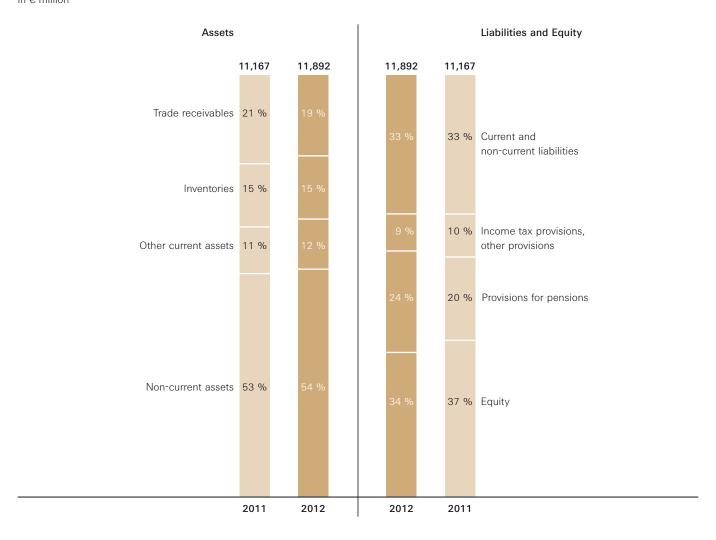
	2012	2011
Cash flow from operating activities	1,548	1,161
Cash flow from investing activities	-1,330	-1,273
Cash flow from financing activities	16	-31
Change in cash position	234	-143
Cash position at the beginning of the fiscal year	826	967
Changes in cash position from changes in the Consolidated Group and exchange rate effects	-3	2
Cash position at the end of the fiscal year	1,057	826

The pleasing development of securities funds had a positive impact on the net financial result which is dominated by interest expense from pension provisions amounting to \in 121 million (2011: \in 114 million). In addition to the lower operating profit, higher income taxes in comparison to 2011 also contributed to the fact that the net profit after tax fell by \in 194 million to \in 346 million.

Net assets position

The balance sheet depicts a completely different development of the liabilities structure in comparison to the assets side, the structure of which remained almost unchanged. There was satisfactory development in trade receivables, which were even slightly reduced, despite the significant increase in sales. This development, along with the level of inventories held constant and the increase in trade payables thus contributes to the improvement in cash flow and the $\[mathbb{c}\]$ 231 million increase in cash. In addition, inflows from borrowings, which are intended to secure

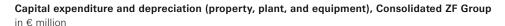
Balance Sheet structure, Consolidated ZF Group in € million

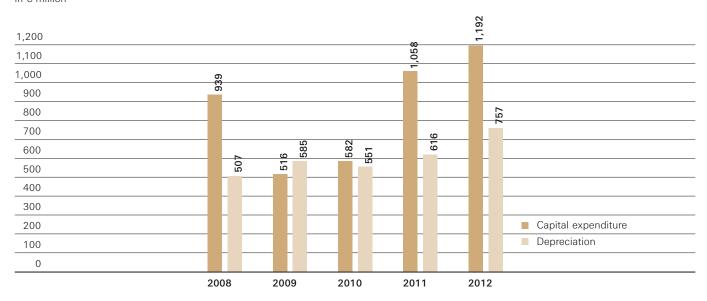


growth and fund continuously high investments, also had an effect here. Property, plant, and equipment increased by \in 386 million to \in 4,081 million and thus contributed significantly to the increase in the total assets.

On the liabilities side, the significant development in provisions for pensions stands out. These provisions increased from $\[mathbb{e}\]$ 2,211 million to $\[mathbb{e}\]$ 2,822 million and thus account for 24 % of the balance sheet total, as opposed to 20 % in the previous year. This resulted almost exclusively from the effect of the substantial reduction in the discount rate at year end. The actuarial losses that result mainly from this effect and have no effect on profit or loss, amount to $\[mathbb{e}\]$ 539 million and,

after netting with the deferred taxes, which also have no effect on profit or loss, reduce the retained earnings in equity by \in 384 million net. The current financial liabilities were reduced by \in 247 million to \in 186 million. By taking on additional non-current liabilities to make use of favorable interest rates, this item increased by \in 384 million to \in 982 million. The maturities here are primarily between three and seven years.





Equity fell to \in 4,002 million at the end of the fiscal year, \in 98 million less than in the prior year. In consideration of the increased balance sheet total, the equity ratio amounted to 34 %, a reduction of three percentage points; however, this still represents a solid capital basis.

Financial position

Despite business developments which continue to be lively and despite increased sales, it was possible to maintain inventories at last year's level and even reduce trade receivables, which led to cash flow amounting to € 58 million. ZF was able to completely finance its € 1,507 million expenditures for investments from its cash flow from operating activities, which increased to € 1,548 million. Additionally, we took on financial liabilities totaling € 130 million net for financing. After consideration of dividends and interest payments, a positive cash flow from financing activities of € 16 million remained. The positive development in the change in cash position to € 234 million was affected among other things by the strict measures to optimize working capital. At the end of the year, the ZF Group had a net financial position of € 885 million compared to € 726 million in the previous year. ZF thus has a very solid financial foundation and is well prepared for the upcoming challenges.

Capital expenditure

In the year under review, investments in property, plant, and equipment of the ZF Group totaled \in 1,192 million, thus exceeding the previous peak investment value of \in 1,058 million from the previous year. This resulted in an investment rate of 6.9 % of sales.

All divisions and business units, as well as the ZF Lenk-systeme GmbH joint venture, used their investments in property, plant, and equipment for launching new products, product localizations, and capacity expansions according to plan. In addition, the construction of several new production and administrative buildings was carried out or completed. Rationalization and replacement investments were implemented where there was a return on investment or as required. An amount of $\mathfrak E$ 910 million was spent on technical equipment and machines including advance payments and construction in progress, while $\mathfrak E$ 192 million was spent on other equipment, factory and office equipment, and $\mathfrak E$ 90 million on land and buildings.

The depreciation on property, plant, and equipment (not including impairment depreciation) also rose to € 713 million (2011: € 599 million) as a result of high investments. The annual comparison indicated in the diagram on page 29 shows the depreciations including impairment depreciations.

The largest investments were again made in the Powertrain Technology division due to the expansion of the capacity for 8-speed automatic transmissions to over 2 million units per year at the Saarbrücken (Germany) location. Simultaneously, the construction of the plant for 8 and 9-speed automatic transmissions at the Gray Court, South Carolina (USA) location continued and thus, volume production can begin in the middle of 2013. The Chassis Technology division, with Chassis Components, Chassis Systems, and Rubber & Plastics, had the second highest investment share with a focal point at locations in China and Germany. In the Commercial Vehicle Technology division, the largest share was allotted to Truck and Bus Driveline Technology at the following locations: Friedrichshafen (Germany), Sorocaba (Brazil), Eger (Hungary), and Bouthéon (France). The Industrial Technology division required significant investments for Off-Highway Systems in Passau (Germany). Additional major investments were required among other things for the expansion of Electronic Systems in Germany and the USA.

For 2013, all divisions and business units require investments in property, plant, and equipment amounting to over € 1,100 million to be able to implement product, customer, and localization projects.

Occurrences after the end of the fiscal year

After the fiscal year 2012 was over, no events occurred that impacted the annual financial statements of the Consolidated ZF Group.

Risk Management

Entrepreneurial activities include reaching decisions under uncertainty. Consequently, risk is a significant element of business. ZF has a Group-wide risk reporting system in order to protect the Group against risks that may threaten the existence of the company. All risks that may threaten the existence of the company and could lead to a loss of more than 50 % of the nominal capital and/or all risks that exceed a reporting limit must be reported.

All elements of risk management are summarized in a risk management system. This system is not just aimed at fulfilling legal requirements but should also contribute to increasing the company's value by reducing risk potential and its probability of occurrence. In this context, the existing Group Directive was also revised in 2012.

The recently implemented Audit Committee examined and released the process and risk reporting in 2012.

Risks are reported to the Board of Management and the Supervisory Board according to standard Group-wide directives. All risks that exceed the threshold values with regard to scope of damage and probability of occurrence are reported by the corporate departments and decentralized reporting units. 2012 was mainly dominated by risks from the Wind Power Technology business unit due to the weakening market and the resulting pressure on the sales prices. Further operational risks arise from the Die Casting Technology business unit. This is also reflected in the impairments recognized.

As part of risk management, market value, foreign exchange, credit, interest rate, and liquidity risks as well as other essential risks are centrally monitored and controlled. Financial instruments and derivative financial instruments are used exclusively to hedge existing underlying or planned transactions. Hedging is concluded based on uniform Group directives and is subject to strict monitoring that is ensured particularly through a strict functional separation in trade, processing, and control. Furthermore, there are market value and interest rate risks for non-current securities which are managed by means of a risk limit fixed annually by the Investment

Committee. For more detailed explanations, see the notes to the consolidated financial statements. There are no significant risks from ongoing or imminent legal disputes. The same applies to IT risks.

As in previous years, centrally controlled insurance policies are in place for specific cases of damage and liability risks to the extent available and economically viable. These include liability and property insurance policies commonly used in the industry. The scope and amount of the insurance coverage is continuously verified in terms of adequateness. The public auditor regularly examines and assesses the correctness of ZF Friedrichshafen AG's early risk detection system. Moreover, our internal auditors regularly monitor the efficiency of the work and process workflows with regard to risk and prepare suggestions for improving the risk management system.

The risks which occurred in the last quarter of 2012 will remain present in 2013 and will be handled in revised operational planning and the ongoing follow-up of measures. Risks that might endanger the continued existence of the ZF Group in the period under review or in the future have not been identified.

Prospects

A difficult year lies ahead of the global economy again. Although we seem to have overcome the period of economic weakness in 2013, prospects continue to be dampened by the ongoing risks arising from both the European debt crisis and the future fiscal policy of the USA.

After the slackening economic development of 2012, a sideways movement is expected for the European economy in 2013. Here, development of the large national economies continues to diverge. After the distinct slump in 2012, negative economic developments are expected to continue in Italy and Spain. In other Southern European countries, the mood is also being depressed due to unemployment rates, some of which have increased drastically over the course of the economic crisis. In France, economic performance is stagnant at last year's

weak level. No drastically positive dynamism can yet be felt here either. The German economy, which is expected to grow by about 1 %, is having a stabilizing effect on Europe as a whole. This forecast is supported by export levels that continue to be favorable and by the Ifo Business Climate Index. A reversal of the economic trend can be expected in Great Britain. After a 0.4 % decrease in GDP in 2012, the economy is expected to slowly grow again at a rate of 1 %. However, there is a lack of dynamism from the European single market. The sovereign debt crisis is causing further uncertainties. Many European governments are thus pursuing a policy of consolidation.

In the United States, politicians reached appropriate, last-minute agreements to avoid falling off the fiscal cliff at the beginning of the year. Due to concern about the possible consequences, GDP was very weak in the fourth quarter of 2012. Many companies reduced inventories. Government spending was even cut by as much as 6 % in comparison to the previous year. This bad news is having a negative effect on consumer confidence. With an expected increase in GDP of 1.8 %, the growth prospects for 2013 are cautious, despite the billion dollar bond purchases made by the Federal Reserve.

In Asia, however, and in China in particular, strong economic performance is expected again after a weaker phase. The measures taken by the Chinese government, such as a reduction in interest rates, expansive fiscal policy, and infrastructure projects, are having an impact and should allow the economy to grow by over 8 %. With an increase of more than 2 %, the global economy should thus develop at a rate similar to that in 2012. In this economic environment, only limited positive dynamism can be expected for development in the ZF industries. European consumers in particular continue to worry. Industrial demand is also cautious. This means that ZF is facing another difficult year in 2013 as far as market expectations are concerned.

The passenger car and light commercial vehicle markets are expected to display a slight upturn. After worldwide production increased by 6 % in 2012 to exceed the 80 million mark, the growth rate is expected to halve in 2013. China will develop at an above-average rate. After weak development in previous years of 1 % and 7 %, doubledigit growth could be possible in 2013 again. This would allow China to almost reach the 20 million mark. Around a quarter of all cars produced worldwide will then come from Chinese manufacturing sites. In Europe, markets continue to be under pressure. The countries in Southern Europe in particular continue to suffer from the recession, high unemployment, and, as a result, consumer restraint. In 2012, the number of new vehicle registrations in Western Europe was lower than in the previous year for the fifth time in a row. The trough should thus have been reached and an increasing trend fueled by pent-up demand for replacements may have a stimulating effect. This also applies to exports to America and Asia that remain at a high level and which are mainly comprised of attractive luxury vehicles supplied by European manufacturers. Against this background, ZF is expecting European vehicle production to stagnate. North and South America, in contrast, are expected to develop positively in 2013 as well. After many years of double-digit growth, North America will develop more slowly and manufacturing will increase by 3 %. After the decline in 2012, South America should grow more strongly again by 6 %.

With heavy commercial vehicles, no significant improvement is expected in 2013. After another decrease of 10 % in 2012, worldwide production is not fully recovering. The commercial vehicle market in Europe is under extreme pressure. Manufacturers' incoming orders are weak. Almost all European markets are still shrinking, and production cutbacks of up to 8 % cannot be ruled out for 2013. In addition, no double-digit growth rates have been achieved in North America since the summer of 2012. In fact, a slight decrease of 3 % in commercial vehicle production is expected for 2013. South America, on the other hand, will have a good chance of achieving doubledigit growth in 2013. However, comparisons are made difficult by distorting extraordinary items. In 2012, production fell by 32 %. The new emissions regulations that came into effect in January 2012 influenced the weak

economic development by causing large preemptive effects in the fourth quarter of 2011, followed by consumer restraint in 2012. The largest market, China, which accounts for over one-third of the global market, is stabilizing after declines of almost 20 % in 2012 and 12 % in 2011, and is growing moderately again.

The markets for off-road machinery are developing in a similarly weak fashion. The tractor market will continue to move sideways in 2013. Europe is suffering from the weak economic environment, so the market will drop slightly. In particular Asia, and here especially China and India, has the potential to achieve above-average growth in the single-digit percentage range. Attention must be drawn to South America, as a double-digit percentage growth could be achieved there after two years of decline. The worldwide demand for construction machinery in 2013 is expected to be almost identical. The regional characteristics are also comparable. For Europe, decreases of up to 5 % are forecast, while the Asian market should grow slightly. South America has greater potential, particularly thanks to the attractive investment activities in infrastructure projects for large upcoming events.

Thus, ZF is operating in an unstable market environment in 2013 once again. Most of the markets are lacking dynamism. At best, the markets outside of Europe may display potential for economic growth. This means it is all the more important for the ZF Group to continue building on its strengths in 2013 in order to achieve above-average growth.

To preserve its financial independence in the long term, ZF will make use of global growth opportunities and continue to pursue its course of technological leadership and innovation. In doing so, it will place just as much importance on securing business with established ZF customers as on acquiring new customers in global market regions. To maintain its attractive position in international markets in the future as well, ZF not only has to pursue technological leadership, but also cost leadership in all development, production, procurement, and other business processes. To do so, ZF's product strategy in particular must expand even further into the new growth segments, while incorporating market and customer requirements that vary from region to region. In addition to further

standardization and process harmonization, great importance is placed on establishing a stable global supplier structure. For this, ZF needs suppliers who are in a position to meet the requirements arising from the Group's international growth in the areas of quality, costs, technology, logistics, and global market presence. In order to be successful throughout the supply chain, efforts must be made here by both ZF and ZF's suppliers. However, manufacturers will also be interested in putting their partners in the supply chain into a position to be innovative and invest in viable technologies with adequate profit margins. ZF's goal is to be equitable to both parties using models based on partnership and transparency.

Due to the revised International Financial Reporting Standards (IFRS), ZF's share in the joint venture with Robert Bosch GmbH will be reported as at-equity investment from 2013. As a result, the proportional share of the approximately € 2 billion in sales generated by ZF Lenksysteme GmbH will no longer be reported in the Group sales figures. The Group will be able to compensate for a large part of this effect with growth in the other divisions and business units. An improved operating profit is expected here. In the upcoming years, this positive trend will continue, subject to general economic development. Business will continue to develop very dynamically, above all in the areas of automatic passenger car transmissions and car chassis technology. For the time being, the Wind Power Technology business unit is still expecting a tough market situation. In 2013, investments in property, plant, and equipment will remain roughly at the very high level of the year under review. The number of employees will continue to rise thanks to the increase in business volume.

Corporate Structure

34

In 2011, ZF had set the course for a new Group structure that is more strongly aligned with the market and customers.

As further development, the former separation of responsibilities for divisions and corporate functions will be eliminated as of May 1, 2013.

As before, the business units are assigned to the following four divisions: Powertrain Technology, Chassis Technology, Commercial Vehicle Technology, and Industrial Technology.

The Electronic Systems and ZF Services business units are independent business units. Moreover, there is ZF Lenksysteme GmbH, the joint venture in which Robert Bosch GmbH and ZF Friedrichshafen AG each hold half of the shares.

CEO, Corporate Market, and Development Corporate Finance, **Process Management** Corporate Human Resources. Governance Corporate Production Corporate Materials Management Corporate Quality **Electronic Systems ZF Services**

ZF Friedrichshafen AG Shareholders: 93.8% Zeppelin Foundation and 6.2% Dr. Jürgen and Irmgard Ulderup Foundation

Powertrain	Chassis	Commercial Vehicle	Industrial	Steering Systems*
Technology	Technology	Technology	Technology	
Automatic Transmissions Manual Transmissions/ Dual Clutch Transmissions Axle Drives Powertrain Modules Die Casting Technology	Chassis Systems Chassis Components Rubber & Plastics Suspension Technology	Truck & Van Driveline Technology Bus Driveline Technology CV Axle Systems CV Chassis Modules CV Damper Technology CV Powertrain Modules	Off-Highway Systems Test Systems Special Driveline Technology Marine Propulsion Systems Aviation Technology Wind Power Technology	Passenger Car Steering Systems Commercial Vehicle Steering Systems Passenger Car Steering Columns Global Aftermarket

^{*}ZF Lenksysteme GmbH is a joint venture in which ZF Friedrichshafen AG and Robert Bosch GmbH each hold 50% of the shares.

DIVISIONS AND BUSINESS UNITS

in € million

	2012	2012/2011
Powertrain Technology	4,902	+24 %
Chassis Technology	4,969	+17 %
Commercial Vehicle Technology	3,043	- 7 %
Industrial Technology	2,648	+23 %
ZF Services	1,375	+13 %
Die Casting Technology ²⁾	261	_
Steering Systems	1,988	+11 %
Corporate R&D, Corporate Headquarters, and Service Companies	118	+31 %
- Internal Sales	-1,938	
Consolidated ZF Group	17,366	+12 %

Capital expenditure

in € million

	2012	2011
Powertrain Technology	536	428
Chassis Technology	188	203
Commercial Vehicle Technology	101	84
Industrial Technology	92	120
ZF Services	11	17
Die Casting Technology	61	38
Steering Systems	168	144
Corporate R&D, Corporate Headquarters, and Service Companies	35	24
Consolidated ZF Group	1,192	1,058

Employees 3)

	2012	2012/2011
Powertrain Technology	16,724	+13 %
Chassis Technology	19,491	+ 4 %
Commercial Vehicle Technology	13,883	- 1 %
Industrial Technology	11,699	- 1 %
ZF Services	2,880	+10 %
Die Casting Technology	1,220	+ 7 %
Steering Systems	6,369	+ 3 %
Corporate R&D, Corporate Headquarters, and Service Companies	2,509	+21 %
Consolidated ZF Group	74,775	+ 5 %

Sales stated in the following sections are consolidated values of the divisions and business units.
 2) 2012 was the first complete business year of the Die Casting Technology business unit.
 3) Number of employees by contracts in accordance with the IFRS regulations.

37

Powertrain Technology

2012 Facts & Figures

Sales	€ million	4,902	+24 %
Capital expenditure	€ million	536	
Employees		16,724	+13 %

Manual transmissions, automation of manual transmissions, automatic transmissions, dual clutch transmissions, electric drives, clutch systems, converters and dual clutches, active starting systems, front and rear axle drives, all-wheel drive systems, electric axle drives, bevel gearsets, differentials

In the year under review, 20 production and development locations worldwide belonged to the three business units: Transmissions, Axle Drives, and Powertrain Modules. Total sales amounted to $\[mathbb{c}\]$ 4,902 million. This is a 24 % increase compared to the previous year. The workforce also grew by 13 % to 16,724 employees.

The Transmissions business unit develops, produces, and sells automatic transmissions, manual transmissions, and dual clutch transmissions at seven locations. At the Saarbrücken (Germany) parent plant, 1.9 million automatic transmissions were manufactured in the year under review – 500,000 transmissions more than in the prior year. At the Brandenburg (Germany) location, roughly 166,000 manual and dual clutch transmissions were produced, which represents a 10 % drop compared to the previous year. The primary reason for this is the increasing demand for automatic transmissions which had a negative effect on orders for manual transmissions.

The Axle Drives business unit is responsible for front and rear axle drives, all-wheel drive systems, electric axle drives, differentials, and bevel gearsets. It produces at five locations worldwide, with the parent plant in Thyrnau (Germany). Business developments showed a production increase of up to 20 % for axle drives and bevel gearsets for the North American market and were thus very positive.

The Powertrain Modules business unit is responsible for active starting systems, such as torque converters and dual clutches, clutch systems, dual-mass flywheels, automation of manual transmissions, and electric drives. These products are developed and produced at eight locations worldwide. The business unit is headquartered

in Schweinfurt (Germany). In 2012, among other things, over 2 million torque converters for automatic transmissions were produced here, primarily for the plant in Saarbrücken (Germany).

Strong growth continues

The good sales situation for upper mid-size and full-size luxury cars, as well as the market development in Asia and the USA, again led to strong sales growth in 2012. The 8-speed automatic transmissions that have been successful since 2009 were installed in additional vehicles and have now penetrated vehicle manufacturers' product portfolios from full-size luxury cars to the volume segment. This is also associated with a significant increase in torque converter production of the Powertrain Modules business unit. In the Axle Drives business unit, customer demand also increased strongly; thus, investments were made to expand capacity there as well. Overall, around € 536 million was invested in the division. These investments flowed into both the expansion of existing plants as well as the construction of the new transmission plant in Gray Court, South Carolina (USA). At the end of the year, the former Bauknecht plant in Neunkirchen near Saarbrücken (Germany), which was acquired along with 240 employees at the beginning of 2012, was producing parts for 8-speed automatic transmissions with 750 employees working in three shifts.

Construction at the Gray Court plant proceeding as planned

At the newly built transmission plant in Gray Court (USA), most machines are in operation and intensive preparation is underway to start producing 8 and 9-speed automatic transmissions in the summer of 2013. The first production run was successfully completed at the end of 2012.

Awards for ZF's Powertrain Technology

In 2012, the Powertrain Technology division received numerous awards. Ford presented the division with the "World Excellence Award" for supplying 6-speed automatic transmissions to Ford of Australia. Chrysler acknowledged ZF as "Supplier of the Year" in the Innovation category for the 8-speed automatic transmission. The Auto Test trade journal awarded ZF the "Innovation of the Year" prize for developing the 9-speed automatic transmission. ZF was honored as "Best Brand" in the Transmissions category by the readers of the 'auto motor und sport' trade journal.

Intensive further development of new technologies

The Powertrain Technology division is intensively working on new and further product developments. In the Transmissions business unit, various concepts are being analyzed to find the successors to the current 8-speed transmission generation. In the Powertrain Modules business unit, intensive work is being carried out on the further development of starting systems and electrification. The electric final drive of the Axle Drives business unit which saw its volume production start at the end of 2011 has now been successfully installed in two electric vehicles from Renault: Kangoo ZE and Fluence ZE. In this business unit, considerable sums are also invested in the development of new products. This includes the development of electric axles within the framework of driveline electrification and innovative, consumptionoptimized all-wheel drive systems with a shut-off function. To display the functionality of the new products, demonstration vehicles were also constructed in each case.

Prospects

Despite the general downward economic trend in the automotive industry, the Powertrain Technology division is projecting further growth of approximately 19 % for 2013. This is mainly based on additional applications of the successfully launched 8-speed automatic transmissions and the volume production start of the 9-speed automatic transmissions for front-wheel drive vehicles.

Chassis Technology

2012 Facts & Figures

Sales	€ million	4,969	+17 %
Capital expenditure	€ million	188	
Employees		19,491	+ 4 %

Front and rear axle systems, powertrain suspension systems, chassis subframes, corner modules, damper modules and damping systems, tie rods, stabilizers and stabilizer links, control arms, suspension joints, cross-axis joints, wheel carriers and hubs, leveling systems, crash-absorption elements, chassis mounts, precision plastics parts

Continued strong market demand

The Chassis Technology division achieved sales of € 4,969 million in 2012. At the end of the year, the number of employees totaled 19,491. Market development for passenger cars in Asia and North America was positive and partially compensated for the declines in Western Europe. Furthermore, the division benefitted from the high proportion of deliveries of mid and full-size luxury cars. There was also a positive development in the acquisition of new projects, especially in Asia. Here, the challenge is to profitably meet demand in the long run.

Chassis Systems business expands globally

The Chassis Systems business unit was also able to report considerable sales increases in 2012. The plants in Shenyang (China), Rayong (Thailand), Tuscaloosa, Alabama (USA), Chicago, Illinois (USA), and Rosslyn (South Africa) considerably exceeded sales and volume forecasts. At the locations in Rosslyn and Rayong as well as at the Chinese locations of Changchun and Shenyang, new start-ups were successfully carried out. These plants were burdened with considerable start-up costs in 2011. In Rayong, a new production facility was opened because the old location no longer had enough capacity to handle the exceptionally good business development in Thailand. In addition, the plant was presented with the "Hall of Fame" quality award by General Motors. As a result of continuously increasing customer demand, the main challenge for the business unit is to secure supplies globally. As a result of constant optimization of core competencies, we were able to secure further future-oriented orders in 2012 as well. New locations, for example in Beijing (China) and Penang (Malaysia), will start operation in 2013. With their contribution, over 50 % of the business unit's sales will come from the Asia-Pacific region. Furthermore, preparations are being made to start production of active kinematics control systems at the Lebring (Austria) location in the summer of 2013.

Chassis Components with a continued positive trend

A large number of new and follow-up orders - both from existing business relationships and from new customers as well as the sustained healthy order situation led to high capacity utilization at our own and our suppliers' locations. Above-average growth was realized, especially at the locations in Slovakia, China, and Korea. High advance payments for new projects and isolated cases of drastically increasing prices for purchased parts, which could only be transferred to customers to a limited extent, had a negative impact on the results. In order to strengthen and expand the position of the business unit, the structure and process organizations were further adjusted to the requirements of the existing product line organization. This will optimize the existing processes and boost our technical strengths and customer relations. Customers are still placing increasing importance on product prices. Despite this, as an innovation-driven technological leader, the business unit managed to secure many future-oriented orders. Product innovations in lightweight design and downsizing open up new possibilities for a successful future.

Successful Rubber & Plastics innovations

In the year under review, the business unit succeeded in improving its market position thanks to sales growth. ZF addressed the above-average growth in Brazil, China, Slovakia, and the USA and the globalization of plastics production with appropriate investments in expansions. Thus, for example, the production area was doubled in the second half of 2012 in Qingpu (China). To further improve market presence, a product line organization (NVH passenger car chassis, NVH driveline and commercial vehicles, and plastics) was introduced. Innovative products, such as adjustable suspension mounts or plastic pedal modules, contribute to reducing fuel consumption of modern vehicles and were very well received by the market. In the standard spectrum of rubber-to-metal components, price pressure shows no sign of abating and thus burdens the result trend of the business unit.

Suspension Technology sets the course with innovations

The business unit's focus on competitive and customeroriented structures, as well as the continuing standardization of existing processes led to numerous new orders.
In particular the Japanese customer Honda commissioned
numerous projects, which also contributes to balancing
the customer portfolio. In China, positive market development requires a new location that will begin operation in
2015. In the year under review, the volume of innovative
products for comfortable, selective damping was significantly expanded. Likewise, new valve technologies with
significantly better values in performance and robustness
were introduced in all product families. The lightweight
design efforts of recent years were further strengthened by
grouping technologies together, increasing the products'
attractiveness.

Prospects

2013 is characterized by many product start-ups and the construction of new manufacturing sites. The division expects sales growth of about 16 %. The challenges for 2013 will again be the difficult conditions with regard to market, technology, raw material, and competition while simultaneously taking quality requirements into consideration.

41

Commercial Vehicle Technology

2012 Facts & Figures

Sales	€ million	3,043	-7 %
Capital expenditure	€ million	101	
Employees		13,883	-1 %

Manual transmissions, automatic and automated transmissions, gearshift, control, and clutch systems, dual-mass flywheels, PTOs, retarder systems, front and rear axle systems, tag axle systems, rear axle suspension systems, damper modules and damping systems, electric drive units, suspension modules, 4-point links, v-links, control arms, stabilizer links, torque rods, tie rods, drag links, stabilizer supports, suspension joints, cabin suspension systems, cabin stabilizer, software, diagnosis tools, services

Repeated market downturn in the commercial vehicle industry

The division was faced with a difficult environment, predominately in the European and South American markets but also in China. Sales totaled \in 3,043 million and, at the end of the year, the number of employees fell slightly to 13,833.

Drop in sales after two years of strong growth

After two years of strong sales, the Truck & Van Driveline Technology business unit reported a drop in sales. The declining developments in economic activities in Western Europe and especially in Southern Europe had been expected. In South America, the market slump was more drastic than expected, which had a significant negative impact on sales and results. The new TraXon modular transmission system was successfully presented at the IAA Commercial Vehicles. A letter of intent to introduce TraXon was signed with Iveco and negotiations are being conducted with other vehicle manufacturers. The product launches at the Sorocaba (Brazil), Eger (Hungary), and Hangzhou (China) locations were managed successfully and strengthen the internationalization path embarked upon. The development of the ZF Kama joint venture in Russia is going well. The most important quantity and sales targets were achieved. For 2013, additional localization activities are planned for the new markets.

Market conditions lead to drop in sales

In the Bus Driveline Technology business unit, the Ecomat automatic transmission generation has been largely replaced by EcoLife. The 6-speed philosophy for automatic transmissions as "standard" in city buses has thus continued unabatedly. Significant market successes were recorded

in Turkey and with special orders from Russia. In Asia, market developments were stable and even exceeded planning in some cases. One highlight is the major order for manual transmissions for Korean coaches. In China, important steps were taken to tap the new market for the HyTronic hybrid transmission. New orders were received in the declining South American bus market. In this context, an important success factor was the manual transmission localized for school buses in Sorocaba (Brazil). Market recovery is projected for this region in 2013. Furthermore, the business unit expects additional positive momentum from Europe and Asia.

International success continues

The CV Axle Systems business unit increased its sales once again and thus, the sales figures were significantly higher than projected. The positive development of the business situation in the markets of China and Russia more than compensated for the weak business in Europe and ensured a successful year. At the end of 2012, the stronger upward trend of the markets outside Europe confirmed the positive prospects for 2013. Sales of driven truck front axles matched expectations. At the IAA, the new IS 80 TF independent suspension system which is primarily designed for truck applications was received with great interest. The RL 85 EC independent suspension developed for the Chinese market was industrialized in the first half of the year. A major short-term order from the Beijing transport authorities has already ensured the target volume production numbers beyond 2013. The state-aided activities for electromobility in Asia allowed the business unit to participate in the first prototype and preproduction vehicles with the AVE 130 electric portal axle.

Product portfolio expansion and internationalization

The CV Chassis Modules business unit was able to maintain steady sales despite the difficult economic environment. The cabin suspensions product segment acquired from ThyssenKrupp Automotive Systems was relocated from Werdohl (Germany) to Dielingen (Germany). This allowed the business unit to become the market leader in Europe for this product line as well. The rear axle suspension system acquired from a major European customer in 2011 was further developed to reach the maturity phase; volume production will start at the beginning of 2013. New manufacturing technologies and innovative lightweight design concepts are taken into consideration here. The Dielingen (Germany) location was expanded to accommodate the aforementioned projects. To systematically advance internationalization, commercial vehicle manufacturers in India were won as customers and preparations are being made for volume production in Pune as of 2013. With regard to the lightweight construction megatrend, a tandem-axle unit with a leading axle and a study on the 4-point link made of fiber-reinforced plastics were presented at the IAA Commercial Vehicles.

Strong presence despite expected market decline

The sales of the CV Damper Technology business unit followed the expected market developments, which were especially negative in South America. The Chinese market showed only weak signs of recovery. Additional growth was realized in North America. Europe developed as expected. The business unit was able to win additional market shares in the worldwide commercial vehicle and rail vehicle markets, in particular with new vehicle generations. Additional customers were won over for the CALM air-spring damper module with integrated leveling system for the driver's cabin. Business developments in the conventional rail vehicle markets varied. China was subject to the general situation of the commercial vehicle market; in India and especially in Russia, supplementary orders and new acquisitions were transacted. Customers for the new crash systems product for rail vehicles were acquired sooner than expected.

Successful product launches

The CV Powertrain Modules business unit reported the same sales as in the prior year. Integration and modernization of the South African subsidiary in Johannesburg were completed. The locations in China reported a welcome increase in sales. Brazil did not achieve the sales figures of the previous year. Extensive modernization began at our remanufacturing plant in Bielefeld (Germany). The business unit pressed ahead with the construction of a much-needed production plant in Gainesville (USA). Development activities focused on the start of volume production of a dual-clutch module for new vehicle generations. Furthermore, we are developing new clutch models for the coming Euro 6 legislation and products that help reduce fuel consumption. An example of this is our air compressor clutch (ACC), a wet-running multidisk clutch that is pneumatically actuated and can decouple the compressor from the engine. The products' high quality standard also contributed to increased market shares.

Prospects

For 2013, the division plans to achieve sales growth of roughly 6 %. However, it will be challenging to actually realize this growth due to the market environment in Western Europe looming at the end of 2012. However, the signals coming from the markets of China and South America for 2013 are positive compared to 2012. An important cornerstone for additional market penetration in China is the foundation of a joint venture with a Chinese manufacturer for heavy commercial vehicles. In general, we expect increased volatility in the commercial vehicle industry, which will require greater flexibility in our own structures and capacities.

Industrial Technology

2012 Facts & Figures

Sales	€ million	2,648	+23 %
Capital expenditure	€ million	92	
Employees		11,699	- 1 %

Manual transmissions, automatic transmissions, powershift transmissions, continuously variable transmissions, synchromesh transmissions, generator/hybrid systems, electric drive units, drives, control systems, gearshift systems, electronic components, PTOs, differentials, retarder systems, clutches, axles and axle components, corner modules, damper modules and damping systems, torque converters, transfer cases, input devices, thrusters, shallow draft thrusters, propellers, surface drives, pod drives, transmissions, test systems, rotor sytems, brakes, telematics systems, cargo loading system, rescue hoists

Off-Highway Systems

Since the beginning of the year under review, the former Construction Machinery Systems, Agricultural Machinery Systems, and Materials Handling Systems business units have been combined and now form the Off-Highway Systems business unit. Sales of construction machinery rose slightly in comparison to 2011. The stable American market compensated for the weak demand in China and India. In addition, new businesses that started up in 2012 provided a significant contribution to the success achieved in a difficult market environment. For example, a new axle product range brought in additional orders. Investments in innovative technologies, such as continuously variable transmissions, as well as the global presence of the business unit, offer additional potential for the future. The agreement to found the ZF Liuzhou Axle Co. Ltd. joint venture with LiuGong, one of China's largest construction machinery manufacturers, is an additional milestone in tapping the domestic Chinese market. The agricultural machinery segment displayed cautious growth in sales in 2012. The positive trend in the first half of the year could not be continued in the second half of the year, with economic developments in Southern Europe weakening considerably. However, important new projects indicate that this segment can continue its long-term growth trend in 2013. The market for material handling systems cooled off as expected after the record year of 2011.

Test Systems

As in 2011, the business unit's sales growth clearly exceeded expectations. One of the factors supporting good development was the consistently strong demand for high-quality test systems in the segment of transmission

production test benches. Conditions in the summer of 2012 already pointed towards a continued high degree of capacity utilization for 2013, which was confirmed at the end of the year under review. The new assembly hall in Passau (Germany) which started operating in October and the strategic realignment of the segment enable significant additional growth, both in existing markets and in new growth markets.

Special Driveline Technology

Despite declines in the markets, the business unit was able to conclude the fiscal year of 2012 with sales at the prior year's level. The cooled-off economy affected the individual product lines in a very heterogeneous manner. While Special Vehicle Systems was able to increase its sales in sub-segments, the reluctance to invest, especially in Asia, was particularly felt with industrial drives and actuating systems. The Rail Drive Systems product line also matched prior-year sales in this difficult environment. In the year under review, two world innovations were presented, thus sending a clear signal to the market about the product line's innovative power. Establishing the Telematics product line continued with winning over first key accounts and a focus is now also being placed on the truck market. With a total of six planned market introductions, the Special Driveline Technology business unit enters 2013 with a positive outlook despite the difficult environment.

Marine Propulsion Systems

The marine market has only managed to recover slowly from the slump in 2009. The financial and economic crisis and its consequences are particularly influencing the demand for pleasure craft in Europe. The North American pleasure craft market displayed a slight upward trend in 2012. Brazil and Asia show growth potential. Demand for mega-yachts, government vessels, fast ferries, and supply ships for coastal regions was stable worldwide. The market for work boats is characterized by overcapacities and financial constraints. The business unit reacted to continuing poor demand and repositioned itself. In addition to consolidating its worldwide production locations, the business unit focused on its core business of transmissions and rudder propellers in 2012.

Aviation Technology

This business unit is responsible for the development, production, maintenance, and sale of drive and control unit components that are suitable for operating aircraft. Once again in 2012, the market for civilian helicopters reported a decline in sales. In the field of civilian helicopter services, the high volume of the preceding years was confirmed, whereas cost-cutting measures in the public sector could be clearly felt in the military sector. For the further positive development of the business unit, the high levels of expertise in drive and control technology for helicopters will be expanded. This will also be applied to fixed-wing aircraft applications in national and international development programs.

Wind Power Technology

In 2012, the business unit completed its first full year under review, including the newly acquired companies in Belgium, India, and China. While the short-term market forecasts tend to paint a rather negative picture due to the overall economic environment and regional political influences, the long-term growth factors continue to remain intact. The European market for wind power technology is currently developing in a varied manner. While the Northern European area continues to grow, reductions can be seen in Southern Europe. For a number of reasons, such as project complexity, financing, connection to the electrical power grid, or total costs, the Offshore segment is not taking off properly. The phase-out of a tax credit program in the USA and the uncertainties with regard to the future alignment of China and India increase the degree of anxiety in the wind energy markets which is already high.

Electronic Systems

Compared to the previous year, the business unit reports an increase in sales. At the same time, Human Machine Interface remains the product line with the strongest sales. As a result of its balanced customer and product portfolio, the Body/Chassis/Driveline product line was able to report an increase in sales despite the weak development in the automobile markets in Europe. Volume production start-ups, such as the launch of the 9-speed automatic transmission, and their associated deliveries have had a positive effect on sales expectations for 2013. As of the middle of 2012, the economic slowdown had led to a slight reduction in orders received for the Industrial Solutions product line; however, the product line has since recovered and it concluded the year with a slight increase in sales. Positive impetus for 2013 results from the project for energy self-sufficient remote switches and from the expansion of distribution activities. A decline in the distribution business had a negative effect on the sales of the Computer Input Devices product line. Thanks to new projects, such as hardware solutions to protect personal data, and the expected start of the online phase in the context of the telematics infrastructure expansion in the German health care system, a significant increase in sales can be expected for the coming year.

Prospects

The signs for the development of the global economy in 2013 are not ideal. In both the public and private sectors, consumption will fall quite substantially in some areas. The division, which is active in many, sometimes very diverse sectors, will enter the new year with a good sense of proportion and possibly achieve a slight increase in sales. However, the technological position of all business units provides justification for maintaining positive expectations; this position ensures that the business units can offer the right products for the right markets on a highly efficient and thus cost-effective basis in future as well.

ZF Services

2012 Facts & Figures

Sales	€ million	1,375	+13 %
Capital expenditure	€ million	11	
Employees		2,880	+10 %

Spare parts business (product brands SACHS, LEMFÖRDER, BOGE, and ZF Parts), original equipment business, repair/servicing, remanufacturing, services for fleet operators, workshop concepts, technical information, consulting and training

ZF Services is consistently maintaining ZF's systems expertise in the aftersales market. With integrated solutions and the complete ZF product portfolio, the business unit makes sure that vehicles perform well and remain efficient throughout their entire service life. In the spring of 2012, the new detail concept "ZF Services ProTech" was successfully launched in Germany. 2,600 workshops have already decided to benefit from this service offer. The Shanghai (China) and Pune (India) locations were newly consolidated within ZF Services in 2012. Aftersales activities can now be promoted more effectively there. Thanks to the efficiency and demand-orientation of its products for the free spare-parts market, ZF Services registered a sales growth of 13 % to € 1,375 million in 2012.

Prospects

ZF Services is participating in Bosch's "CoremanNet". In various European countries, used ZF parts will also be recycled and managed via this system. ZF Services expects a sales growth of between 4 % and 5 % for the coming years, driven both by new products such as oil change kits for automatic ZF transmissions, and the expansion of the established product range, e.g. for electric power steering systems. The business unit is currently the only provider on the aftersales market offering remanufactured electric power steering systems.

Die Casting Technology

2012 Facts & Figures

Sales (first complete business year 2012)	€ million	261	<u> </u>
Capital expenditure	€ million	61	
Employees		1,220	+7 %

Light-alloy casting control components, transmission housings and inner components

In the year under review, the locations in Nuremberg (Germany) and Grosbliederstroff (France) achieved sales of $\[mathbb{e}\]$ 261 million with 1,220 employees. The business unit supplies both ZF and external customers with aluminum and magnesium die-cast components.

Safeguarding the ramp-up of the 8-speed automatic transmission

The focal point of 2012 was safeguarding the production increase of the transmission housings and inner compo-

nents for the 8-speed automatic transmission by more than 150 %, while simultaneously improving quality. At the same time, the necessary infrastructure was created, the respectively required human resources base was established, and employees were trained.

Prospects

Activities are focused on improving the cost and quality situation while mastering the ambitious sales increases.

ZF Lenksysteme GmbH

2012 Facts & Figures (50 % ZF share)

Sales	€ million	1,988	+11 %
Capital expenditure	€ million	168	
Employees		6,369	+ 3 %

Hydraulic power steering systems, electric power steering systems, rear axle steering systems, steering pumps, steering columns, steering accessories

New sales record

The company's strong growth continued in 2012. ZF Lenksysteme GmbH was once again able to increase its market share and boost sales by 11 % to € 3,976 million. Sales grew at a rate higher than the market average. The joint venture of Bosch and ZF thus broke its sales record from 2011 and achieved the highest sales in its history in 2012.

Broken down according to business units, sales shares were 72 % for Passenger Car Steering Systems, 19 % for Commercial Vehicle Steering Systems, and 9 % for Passenger Car Steering Columns and Shafts. The Passenger Car Steering Systems business unit made the largest contribution to the growth in sales. Here, the increase was driven by electric power steering systems, which again recorded enormous growth. Sales of hydraulic steering systems, on the other hand, dropped as expected. The Commercial Vehicle Steering Systems business unit suffered from the market declines in China and South America. Sales of CV steering systems, CV steering columns, and steering pumps weakened. Business with passenger car steering columns and shafts also declined.

In 2012, ZF Lenksysteme GmbH was able to dramatically increase sales in the regions of North America and Asia. In contrast to that, business in Europe fell slightly. Compared to the previous year, the weakness of the South American market led to a drop in sales for this region. Operating profit for 2012 fell slightly in comparison with the prior year. This was caused by substantial increases in advance payments for future growth, delayed new launches, and more difficult conditions in the purchasing market.

ZF Lenksysteme GmbH is represented with 17 locations in eight countries. In 2012, extensive investments went into the construction and expansion of factories worldwide. Other examples include the inauguration of new plants in Pune (India) and Minhang (China), as well as building extensions at the headquarters in Schwäbisch Gmünd (Germany).

The number of employees worldwide continued to increase in 2012. New employees were hired in Germany and abroad. The workforce numbered 12,738 employees, which is an increase of 3 % compared to the previous year.

The joint venture stepped up its international presence in the year under review. Additional product lines were localized and purchasing volumes in the regional markets increased. Furthermore, development capacity was expanded in all regions. The initial successes of these measures can already be seen. A Chinese automobile manufacturer was won over as a customer with the local production of the electric power steering system in the steering column variant.

Prospects

For 2013, ZF Lenksysteme GmbH expects additional sales growth despite the tough economic situation. Such expectations are solidly based on orders already booked. Price pressure in the automotive industry remains high. Volatile markets as well as risks from public debt and the financial crisis continue to demand the highest degree of flexibility. The company's target remains: Generating profitable growth while safeguarding liquidity, so that we can solidly finance high investments and the expansion of plants in all regions.

Driveline Technology

Drive Systems

Automatic transmissions and dual clutch transmissions for cars

Manual transmissions and automation of manual transmissions for cars

Electric drives for cars, CVs, and lift trucks

Manual transmissions for CVs, special vehicles, and off-road machinery

Automatic transmissions for CVs, special vehicles, and off-road machinery

Powershift transmissions, continuously variable transmissions, and synchromesh transmissions for off-road machinery

Generator/Hybrid systems for off-road machinery

All-wheel drive systems for cars

Thrusters and shallow draft thrusters for ships

Surface and pod drives for boats

Transmissions for boats, ships, aircraft; wind turbine and elevator gearboxes

Rotor systems for aircraft and helicopters

Drives for mixers, rail vehicles, aircraft, and industrial engineering

Drive Components

Clutches, clutch systems, and torque converters for cars, CVs, special vehicles, and off-road machinery

Active starting systems and dual clutches for cars

Front and rear axle drives, bevel gearsets, and differentials for cars

Dual-mass flywheels for CVs

PTOs for CVs, special vehicles, and off-road machinery

Retarder systems for CVs, special vehicles, and construction machinery Control systems for CVs, special vehicles, off-road machinery, boats, and ships

Gearshift systems and electronic components for cars, CVs, and off-road machinery

Differentials for off-road machinery

Transfer cases for special vehicles and off-road machinery

Propellers for boats and ships

Brakes for industrial engineering

Cargo loading system and rescue hoists for aircraft

Light-alloy casting control components, transmission housings and inner components

Chassis Technology

Chassis Systems

Front and rear axle systems for cars and CVs

Adaptive damping systems for cars, CVs, off-road machinery, and motorcycles

Tag axle systems for CVs

Cabin suspension systems and rear axle suspension systems for CVs

Corner modules for cars, CVs, and agricultural machinery

Axles and axle components for off-road machinery

Chassis Components

Damper modules and damping systems for cars, CVs, rail vehicles,

off-road machinery, motorsports, and motorcycles

Powertrain suspension systems and chassis subframes for cars

Tie rods, stabilizers, and stabilizer links for cars

Links, control arms, suspension joints, and cross-axis joints for cars

Wheel carriers and hubs for cars

Leveling systems for cars

Crash-absorption elements for cars

Chassis mounts and precision plastics parts for cars

Cabin suspensions and cabin anti-roll bars for CVs Suspension modules, 4-point links, v-links, control arms, and stabilizer links for CVs

Torque rods, tie rods, and drag links for CVs

Stabilizer supports and suspension joints for CVs

Steering Systems

Hydraulic and electric power steering systems for cars, CVs, and special vehicles Steering pumps, steering columns, and steering accessories for cars and CVs Rear axle steering systems for CVs and special vehicles

Electronics and Software

Gearshift systems for cars, CVs, and off-road machinery

Control systems for CVs, special vehicles, off-road machinery, boats, and ships

Electronic components for cars, CVs, and off-road machinery

Telematics systems for cars and CVs

Software for cars and CVs

Diagnosis tools for CVs

Test systems for wind turbines and industrial engineering

CONSOLIDATED FINANCIAL STATEMENTS

50 Consolidated Income Statement 51 Consolidated Statement of Comprehensive Income

52 Consolidated Balance Sheet 54 Consolidated Cash Flow Statement

56 Consolidated Statement of Changes in Equity 58 Notes to the Consolidated Financial Statements

Consolidated Income Statement

ZF Friedrichshafen AG for the period dating January 1 to December 31, 2012

in € million	Notes	2012	2011
Sales	1	17,366	15,509
Cost of sales	2	14,432	12,667
Gross profit on sales		2,934	2,842
Research and development costs	7	861	754
Selling expenses		703	698
General administration expenses		692	597
Other income	3	140	182
Other expenses	4	131	125
Operating profit or loss		687	850
Result from associates	5	0	-1
Net result from participations	5	5	-2
Interest income	5	43	65
Interest expenses	5	185	188
Other financial income	5	92	118
Other financial expenses	5	73	127
Net financial result		-118	-135
Net profit or loss before income tax		569	715
•			
Income taxes	6	223	175
Net profit or loss after tax		346	540
thereof ZF Friedrichshafen AG shareholders' share		305	502
thereof minority interests' share		41	38

Consolidated Statement of Comprehensive Income

ZF Friedrichshafen AG for the period dating January 1 to December 31, 2012

in € million Notes	2012	2011
Net profit or loss after tax	346	540
Foreign currency translation differences	-42	28
Market valuation of securities		
Gains/Losses arising during the year	25	-39
Reclassification adjustments for gains/losses included in profit or loss	2	14
Market valuation of cash flow hedges		
Gains/Losses arising during the year	16	-14
Reclassification adjustments for gains/losses included in profit or loss	7	-5
Actuarial gains/losses from pension obligations	-539	-70
Other comprehensive income before income tax	-531	-86
Income taxes	148	21
Other comprehensive income after tax	-383	-65
Total comprehensive income	-37	475
thereof ZF Friedrichshafen AG shareholders' share	-74	425
thereof minority interests' share	37	50

Consolidated Balance Sheet

ZF Friedrichshafen AG as of December 31, 2012

Assets in € million	Notes	Dec. 31, 2012	Dec. 31, 2011
Current assets			
Cash		1,057	826
Financial assets	8	72	120
Trade receivables	9	2,274	2,307
Other assets	10	243	234
Income tax receivables		28	48
Inventories	11	1,747	1,745
		5,421	5,280
Non-current assets			
Financial assets	12	1,138	1,102
Investments in associates	13	15	0
Intangible assets	14	862	843
Property, plant, and equipment	15	4,081	3,695
Deferred taxes	6	375	247
		6,471	5,887
		11,892	11,167

iabilities and equity n € million	Notes	Dec. 31, 2012	Dec. 31 201
Current liabilities			
Financial liabilities	17	186	433
Trade payables		1,747	1,62
Other liabilities	18	875	830
Income tax provisions		22	2
Other provisions	19	532	642
		3,362	3,547
Non-current liabilities			
Financial liabilities	17	982	598
Other liabilities	18	231	23:
Provisions for pensions	20	2,822	2,21
Other provisions	19	443	448
Deferred taxes	6	50	30
		4,528	3,52
Equity			
Subscribed capital	21	300	30
Capital reserve	21	586	58
Retained earnings	21	2,949	3,05
Equity share of ZF Friedrichshafen AG shareholders		3,835	3,94
Equity share of minority interests		167	15
	22	4,002	4,10
		11,892	11,16

Consolidated Cash Flow Statement

ZF Friedrichshafen AG for the period dating January 1 to December 31, 2012

in € million Notes	2012	2011
Title in the state of the state	2012	2011
Net profit or loss before income tax	569	715
Depreciation/Reversal of impairments for intangible assets and property, plant, and equipment	969	727
Changes in non-current provisions made through profit or loss	-64	-120
Income taxes paid	-165	-145
Results from the disposal of intangible assets and property, plant, and equipment	-3	-5
Net interest result and net result from participations	137	126
Decrease (2011: increase) in inventories	21	-194
Decrease (2011: increase) in trade receivables	37	-278
Decrease in other assets	1	27
Increase in other liabilities	46	308
Cash flow from operating activities	1,548	1,161
Expenditures for investments in		
intangible assets	-236	-220
property, plant, and equipment	-1,192	-1,058
participations	-6	-27
securities	-8	-1
financial receivables	-65	-35
Proceeds from the disposal of		
intangible assets	11	6
property, plant, and equipment	51	47
participations	5	11
securities	8	382
financial receivables	39	21
Acquisition of shares in consolidated companies	0	-446
Proceeds from the sale of consolidated companies	17	0
Dividends received	8	5
Interest received	38	42
Cash flow from investing activities	-1,330	-1,273

in € million Notes	2012	2011
Dividends paid to ZF Friedrichshafen AG shareholders	-30	-24
Dividends paid to minority interests	-26	-22
Repayments of borrowings	-620	-410
Proceeds from borrowings	750	484
Interest paid	-58	-59
Cash flow from financing activities	16	-31
Change in cash position	234	-143
Cash position at the beginning of the fiscal year	826	967
Changes in cash position from changes in the Consolidated Group	3	3
Exchange rate-related changes in cash position	-6	-1
Cash position at the end of the fiscal year	1,057	826

Consolidated Statement of Changes in Equity

ZF Friedrichshafen AG for the period dating January 1, 2011 to December 31, 2012

in € million	Subscribed capital	Capital reserve
	Notes	
Jan. 1, 2011	300	586
Net profit or loss after tax		
Other comprehensive income after tax		
Total comprehensive income		
Dividends paid		
Capital increase at subsidiaries		
Changes in the Consolidated Group		
Acquisition of minority interests		
Dec. 31, 2011	300	586
Net profit or loss after tax		
Other comprehensive income after tax		
Total comprehensive income		
Dividends paid		
Changes in the Consolidated Group		
Dec. 31, 2012	300	586

	Retained earnings				Equity share of	Equity share	Group equity
Revenue reserves	Foreign currency translation differences	Market valuation of securities	Market valuation of cash flow hedges	Actuarial gains and losses	ZF Friedrichs- hafen AG shareholders	of minority interests	,
							21
2,397	117	45	5	95	3,545	127	3,672
502					502	38	540
	16	-26	-17	-50	-77	12	-65
502	16	-26	-17	-50	425	50	475
-24					-24	-22	-46
					0		0
	-1				-1		-1
					0		0
2,875	132	19	-12	45	3,945	155	4,100
305					305	41	346
	-38	23	20	-384	-379	-4	-383
305	-38	23	20	-384	-74	37	-37
-30					-30	-26	-56
-5	-1				-6	1	-5
3,145	93	42	8	-339	3,835	167	4,002

Notes to the Consolidated Financial Statements

of ZF Friedrichshafen AG

Fundamental principles

General

The consolidated income statement, consolidated statement of comprehensive income, consolidated balance sheet, consolidated cash flow statement, and the consolidated statement of changes in equity captions are broken down and explained in the notes to the consolidated financial statements.

The Group currency is the euro. Unless otherwise stated, all amounts are reported in millions of euros (€ million).

The Board of Management of ZF Friedrichshafen AG approved these consolidated financial statements on February 25, 2013, and forwarded them to the Supervisory Board.

The consolidated financial statements which were prepared as of December 31, 2012, as well as the Group management report will be announced in the Electronic Federal Gazette.

The consolidated balance sheet is broken down by maturities. Balance sheet items are divided into non-current and current assets and/or liabilities if they have a residual term of more than one year or up to one year, respectively.

The recognition of assets and liabilities is carried out according to the historical cost principle. This does not include derivative financial instruments, securities, and investments in participations that are recognized at fair value, as far as it can be determined reliably.

Adoption of IFRS

As a company without capital market orientation, ZF Friedrichshafen AG has chosen the option to draw up its consolidated financial statements on the basis of IFRS pursuant to § 315a Section 3 HGB (German Commercial Code).

The consolidated financial statements are in accordance with the standards and interpretations valid on the balance sheet date and issued by the International Accounting Standards Board (IASB), London, as adopted by the EU, and the additional requirements of German commercial law pursuant to § 315a HGB.

In the fiscal year 2012, the following amended standard had to be taken into consideration for the first time:

 Amendment to IFRS 7 "Financial Instruments: Disclosures"

The amendment to IFRS 7 stipulates additional requirements regarding notes on transactions involving transfers of financial assets. Here, particular focus is placed on the remaining residual risks for the transferor. In addition, more extensive disclosure requirements arise for reporting periods which end with a disproportionately large amount of transfers. The first-time adoption of these amendments had no impact on the information in the notes to the consolidated financial statements.

The IASB has passed the following standards and interpretations that the European Union has already endorsed into European law but are not yet mandatory:

- Amendment to IFRS 7 "Financial Instruments: Disclosures" (mandatory adoption for fiscal years beginning on or after January 1, 2013)
- IFRS 10 "Consolidated Financial Statements" (mandatory adoption for fiscal years beginning on or after January 1, 2014)
- IFRS 11 "Joint Arrangements" (mandatory adoption for fiscal years beginning on or after January 1, 2014)
- IFRS 12 "Disclosure of Interests in Other Entities" (mandatory adoption for fiscal years beginning on or after January 1, 2014)
- IFRS 13 "Fair Value Measurement" (mandatory adoption for fiscal years beginning on or after January 1, 2013)
- Amendment to IAS 1 "Presentation of Financial Statements" (mandatory adoption for fiscal years beginning on or after July 1, 2012)
- IAS 12 "Income Taxes" (mandatory adoption for fiscal years beginning on or after January 1, 2013)
- Amendment to IAS 19 "Employee Benefits" (mandatory adoption for fiscal years beginning on or after January 1, 2013)
- IAS 27 "Separate Financial Statements" (mandatory adoption for fiscal years beginning on or after January 1, 2014)
- IAS 28 "Investments in Associates and Joint Ventures" (mandatory adoption for fiscal years beginning on or after January 1, 2014)
- Amendment to IAS 32 "Financial Instruments: Presentation" (mandatory adoption for fiscal years beginning on or after January 1, 2014)
- IFRIC 20 "Stripping Costs in the Production Phase of a Surface Mine" (mandatory adoption for fiscal years beginning on or after January 1, 2013)

With the exception of IFRS 10, IFRS 11, IFRS 12 as well as IAS 27 and IAS 28, ZF Friedrichshafen AG has waived the option to adopt the above-mentioned standards and interpretations before they become effective. IFRS 10 to 12 as well as IAS 27 and IAS 28 will be adopted for the fiscal year 2013.

IFRS 10 will replace the consolidation requirements in IAS 27 and SIC-12 and is to be adopted retrospectively. The requirements relating to separate financial statements remain unchanged in IAS 27. IFRS 10 is to establish a uniform consolidation model applicable to all entities that is based on a concept of control of the subsidiary by the parent company. The control concept applies to parent-subsidiary relations based on voting rights as well as to parent-subsidiary relations that are based on other contractual agreements. Thus, this control concept shall also apply to special purpose entities whose consolidation is currently based on the risks and rewards approach. The amendment currently has no effect on the definition of ZF's Consolidated Group.

IFRS 11 is based on the "Joint Ventures" project; it supersedes IAS 31. With the replacement of IAS 31, proportionate consolidation is eliminated. Parallel changes in terminology and classification must be considered to make sure that the jointly controlled entities currently using proportionate consolidation are not necessarily all accounted at equity. The application of the equity method follows the requirements of IAS 28 which has been amended with subsequent modifications. Previously, the joint venture ZF Lenksysteme GmbH and its subsidiaries follow proportionate consolidation and are included in the consolidated financial statements of ZF Friedrichshafen AG. As of January 1, 2013, ZF Friedrichshafen AG will recognize the subgroup at equity which means that the presentation of net assets, financial position, and results of operations of the Consolidated ZF Group will change considerably. This change in the accounting method has to take place retrospectively.

According to present judgments, current assets and liabilities from 2012 will decline by approximately € 700 million and € 450 million, respectively, and non-current assets and liabilities will decrease by approximately € 145 million and € 395 million, respectively. Sales of the Consolidated ZF Group will decline by approximately € 2,000 million and operating profit by € 90 million because the proportional share in the profit of the joint venture ZF Lenksysteme GmbH will be recognized outside of the operating profit in the future.

IFRS 12 combines the disclosures on IAS 27 and IFRS 10, respectively, IAS 31 and IFRS 11, respectively, and IAS 28 in a single standard. In addition, new disclosure requirements have been introduced, e.g. disclosures on major subsidiaries included in the consolidated financial statements.

The project of creating a consistent, comprehensive accounting standard was concluded with IFRS 13. The standard regulates how to carry out fair value measurements, as long as another IFRS stipulates the fair value measurement (or fair value disclosure). A new fair value definition applies, which characterizes the fair value as the current exit value of an actual or hypothetical transaction between any independent market participants under arm's length conditions. The standard applies almost comprehensively; the only exceptions are IAS 17 and IFRS 2. While the scope of these regulations remains nearly unchanged for financial instruments, this is now regulated more comprehensively and precisely for other circumstances (e.g. investment in real estate, intangible assets, property, plant, and equipment). With regard to financial instruments, it is now possible to include market and credit risk effects in the fair value at a balanced level of a portfolio at a net risk basis if there is evidence that they correlate. The three-level fair value hierarchy known from IFRS 7 shall be applied comprehensively. In the case of "declining market activities" (previously "inactive markets"), two test steps shall be performed, that is, whether (a) trading activities have declined and (b) actual transactions thereupon did not reflect current market conditions - it is only possible to deviate from the market price if both conditions apply. The impacts on the Consolidated ZF Group are currently being analyzed.

The amendments to IAS 1 change the grouping of items presented in other comprehensive income. Items that could be reclassified to profit or loss at a future point in time shall be presented separately from items that will never be reclassified. This amendment affects the presentation of the statement of comprehensive income only and therefore has no impact on the Consolidated ZF Group's net assets, financial position, and results of operations.

The amendment to IAS 12 primarily relates to the calculation of deferred taxes on investment property which are measured at fair value according to IAS 40. As none of these types of assets are recognized in the consolidated financial statements, the first-time adoption of these revisions will not have any impact on the calculation of the deferred taxes in the Consolidated ZF Group.

The IASB has issued numerous amendments to IAS 19. These range from fundamental changes such as removing the corridor mechanism and the concept of expected returns on plan assets to simple clarifications and rewording. The Consolidated ZF Group already records the actuarial gains and losses in equity with no effect on profit or loss. This will have an impact on the determination of expected returns on plan assets and the valuation of semi-retirement obligations. However, the amendments will not considerably change net assets, financial position, and results of operations of the Consolidated ZF Group.

The IASB has published further amendments to IAS 32 and IFRS 7. With these amendments, the IASB clarifies details regarding the netting of financial assets with liabilities and requires supplementary information. The IASB does not plan to change the existing netting principle in IAS 32. The clarification of the criteria "simultaneous settlement" and "legally enforceable right to settlement" can only result in a change of the accounting practice if IAS 32 has previously been interpreted differently. As supplementary mandatory information, gross and net sums from offsetting as well as amounts for existing offsetting rights that do not correspond to the balance sheet offsetting criteria, though, will be stated in table form. The clarification does not lead to any change in the ZF Group accounting.

The first-time application of other standards and interpretations did not affect the presentation of net assets, financial position, and results of operations of the Consolidated ZF Group because there were no such circumstances in the fiscal year.

Furthermore, the following standards and interpretations have already been passed by the IASB, but have not yet been endorsed by the European Union. With the exception of amendments to IFRS 10 to 12, ZF Friedrichshafen AG will not adopt any of these standards earlier:

- IFRS 9 "Financial Instruments" (mandatory adoption for fiscal years beginning on or after January 1, 2015)
- Improvements of IFRS 2009-2011 (mandatory adoption for fiscal years beginning on or after January 1, 2013)
- Amendment to IFRS 10 to 12 "Transition Guidance" (mandatory adoption for fiscal years beginning on or after January 1, 2013)
- Amendments to IFRS 10, IFRS 12, and IAS 27 "Investment Entities" (mandatory adoption for fiscal years beginning on or after January 1, 2014)

IFRS 9 contains new provisions for the classification and measurement of financial assets and financial liabilities and is intended to replace IAS 39. According to this, financial assets are to be recognized depending on their respective characteristics and considering the business model or business models, either at amortized cost or at fair value through profit or loss. Contrary to the currently valid provisions, equity instruments are generally to be measured at fair value. Volatility in value of the equity instruments may also be recorded in equity without affecting profit or loss. In this case, only certain income from participations would be recognized through profit or loss for equity instruments. The previous provisions of IAS 39 are adopted to a large extent with regard to the classification and measurement of financial liabilities. One change affects the accounting of financial liabilities which are designated as at fair value through profit or loss. In the future, the part of the fair value change resulting from the change of one's own credit risk is

to be recorded in other comprehensive income and not in the consolidated income statement. Another change relates to liabilities from derivative financial instruments which are linked to equity instruments not listed on the stock exchange. In the future, these liabilities are always to be recognized at fair value, while the currently applicable provisions allow a recognition at amortized cost. The initial adoption of IFRS 9 could have effects on the measurement of investments in participations. Until now, these have predominantly been recognized at cost because their fair values cannot be determined reliably. In addition, starting from the date of the first-time adoption, the unrealized fair value gains and losses from interest-bearing securities that were previously recorded in equity are to be recognized in the consolidated income statement. The implementation of the new accounting principles can lead to a higher volatility of the profit or loss after tax.

The improvements of IFRS 2009-2011 describe a collective standard which was published in May 2012 and deals with amendments to various IFRS. Below, the amendments are listed that have an effect on the Consolidated ZF Group:

- IAS 1: Clarification of the difference between voluntary additional comparative information and the minimum required comparative information, which usually comprises the previous reporting period;
- IAS 16: Clarification that essential spare parts and servicing equipment that meet the definition of property, plant, and equipment are not considered under the application terms for inventories;
- IAS 32: Clarification that income taxes arising from distributions to the holders of equity instruments are accounted for in accordance with IAS 12 Income Taxes.

With the transition guidance of IFRS 10 to 12, the limitation of adjusted comparative figures to be reported was adapted to the comparative period immediately preceding the first-time adoption. In addition, the disclosure requirement for comparative information on unconsolidated structured companies in the case of first-time adoption of IFRS 12 has been canceled.

The new provisions on IFRS 10, IFRS 12, and IAS 27 determine that investment companies are exempt from the application of the consolidation requirements of IFRS 10, and that all participations controlled by them must be recognized at fair value through profit or loss. Exceptions from this are participations in subsidiaries that provide services for the investment company; these shall be consolidated unchanged according to the provisions of IFRS 10. If the parent company of an investment company is not an investment company itself, it must consolidate all companies controlled by the investment company in its consolidated financial statements.

This amendment has no effect on the future accounting for the shares in special funds held by the Consolidated ZF Group in the consolidated financial statements.

Consolidated Group

In addition to ZF Friedrichshafen AG, 4 domestic and 117 foreign subsidiaries, in which ZF Friedrichshafen AG directly or indirectly holds the majority of the voting rights, are included in the consolidated financial statements.

A joint venture was included in the consolidated financial statements of the Consolidated ZF Group with the subgroup's consolidated financial statements in line with the proportionate consolidation method.

The following table shows the composition of the Consolidated ZF Group (without ZF Friedrichshafen AG):

	Jan. 1, 2012	First-time consoli- dations	Legal changes	Deconsoli- dations	Dec. 31, 2012
Consolidated subsidiaries	117	9	-4	1	121
of which domestic	4	1	-1	0	4
of which foreign	113	8	-3	1	117
Proportionately consolidated subgroup	1	0	0	0	1
Company consolidated at equity	1	1	0	0	2

Legal changes refer to mergers within the Consolidated ZF Group.

A complete list of the companies that are included in the Consolidated Group can be found under figure 36 in the notes to the consolidated financial statements. It is noted there, which consolidated domestic subsidiaries, pursuant to § 264 Section 3 HGB (German Commercial Code), are exempt from disclosing their annual financial statements through their inclusion in the consolidated financial statements.

Changes in the Consolidated Group

In the fiscal year 2012, the following companies have been included in the consolidated financial statements of ZF Friedrichshafen AG for the first time:

in %	Share in capital
ZF India Pvt. Ltd., Pune, India	100
ZF Services (China) Co. Ltd., Shanghai, China	100
ZF Marine Eurasia Makina Ticaret Limited Şirketi, Istanbul, Turkey	100
ZF Engineering s.r.o., Pilsen, Czech Republic	100
ZF Stankov s.r.o., Pilsen, Czech Republic	100
ZF Chassistech Commercial Vehicles (Shanghai) Co. Ltd., Shanghai, China	100
ZF Chassis Systems (Beijing) Co. Ltd., Beijing, China	100
ZF Chassis Systems Sdn. Bhd., Penang, Malaysia	100
GAT – Gesellschaft für Antriebstechnik mbH, Alsdorf, Germany	100

At the beginning of the fiscal year, 100 % of the shares in the previously fully consolidated ZF Trading Austria Ges.m.b.H., Vienna, Austria, was sold.

Shanghai Sachs Powertrain Component Systems Co. Ltd., Shanghai, China, has been included for the first time according to the equity method in the consolidated financial statements in the fiscal year 2012.

The impact of the changes in the Consolidated Group on the Group's assets and liabilities was as follows:

in € million	
Current assets	38
Non-current assets	-33
Current liabilities	9
Non-current liabilities	2

Consolidation principles

The consolidation of investments in subsidiaries is carried out according to the purchase method. When control was reached, the revaluated assets and liabilities of the subsidiary and contingent liabilities, if they do not depend on a future event, are offset against the fair value of the consideration paid for the shares. Contingent purchase price payments are recognized with the amount expected. Subsequent adaptations of contingent purchase price payments are recognized in profit or loss. Acquisition-related expenses are recognized in profit or loss when they are incurred.

Any difference remaining on the assets side after capital consolidation is recognized as goodwill and recorded under intangible assets. The goodwill is tested for impairment as of the balance sheet date in conjunction with an impairment test. An impairment test is performed during the year if there are any triggering events. Negative differences arising on the consolidation of investments in subsidiaries are recognized in profit or loss in the consolidated income statement under other income. If not all interests are acquired during an acquisition, the non-controlling interests can be recognized to the amount of the proportionally revaluated net assets or with their proportional total company value including the applicable goodwill. This right of choice is applicable to every company acquisition. As of December 31, 2012, all non-controlling interests are reported with the proportional net assets.

In the case of a step acquisition, the already existing interests in the company to be consolidated are revaluated at the fair value at the point in time of reaching control. The difference to the carrying amount of the investment is recognized in profit or loss.

The acquisition of minority interests of already consolidated subsidiaries is recognized as an equity transaction. In this method, the difference between the cost of the investment acquired and the carrying amount of the noncontrolling interest is recognized in the retained earnings. The effects of a sale of interests, which does not lead to a loss of control over a subsidiary, are to be recognized in equity with no effect on profit or loss by offsetting the capital gain or loss against the retained earnings and by increasing the non-controlling interests to the amount of the proportional net assets.

The deconsolidation of subsidiaries is carried out on the date of the loss of control and is recognized in profit or loss. The deconsolidation result is recognized in other income or expenses, respectively. Remaining interests are recognized at fair value under investments in participations.

Consolidation of receivables, liabilities, provisions, income, and expenses, as well as gains or losses is effected for the companies included in the Consolidated Group. Guarantees and warranties between consolidated companies are eliminated.

Foreign currency translation

The financial statements of Consolidated Group companies prepared in foreign currencies are translated on the basis of the concept of functional currency by the modified

closing rate method. Since the subsidiaries operate independently from a financial, economic, and organizational point of view, the functional currency is generally identical with the company's local currency. Accordingly, the income and expenses in the financial statements of subsidiaries drawn up in foreign currencies are translated in the consolidated financial statements applying average rates, and assets and liabilities at the closing rate. The exchange difference resulting from the translation of equity at historical rates and the exchange differences resulting from the translation of the income statement at the average exchange rate are recognized in the retained earnings without effect on profit or loss.

Upon initial recognition, foreign currency receivables and liabilities are measured at the rate valid on the day of transaction in the individual financial statements of ZF Friedrichshafen AG and its subsidiaries. The balance sheet date rate will be used for subsequent measurements. Foreign exchange gains and losses from the revaluation of trade receivables and trade payables on the balance sheet date are recognized in other income and expenses. Foreign exchange gains and losses from financial assets and liabilities are registered with other financial income and financial expenses.

The exchange rates used for foreign currency translation with a significant influence on the consolidated financial statements changed as follows in relation to one euro:

	Closing rate		Average rate	
	Dec. 31, 2012	Dec. 31, 2011	2012	2011
US dollar	1.3194	1.2939	1.2850	1.3921
British pound	0.8161	0.8353	0.8110	0.8679
Chinese renminbi	8.2207	8.1588	8.1065	8.9971
Brazilian real	2.7036	2.4159	2.5079	2.3265
Mexican peso	17.1845	18.0512	16.8934	17.2868
South African rand	11.1727	10.4830	10.5480	10.0988
Australian dollar	1.2712	1.2723	1.2402	1.3484

65

Accounting and measurement principles

The financial statements of ZF Friedrichshafen AG and the companies included in the consolidated financial statements are drawn up on December 31 of each fiscal year, applying uniform Group accounting principles.

Recognition of expenses and income

Revenues from sales of products are recognized at the time of transfer of ownership or the risk to the customer, when a price is agreed or can be determined and when payment is probable. Sales revenues are reported net of cash discounts, price reductions, customer bonuses, and rebates. Revenues from services are recognized according to the stage of completion, if the amount of revenues can be reliably measured and an economic benefit from the business can be reasonably expected. Royalties are recognized on an accrual basis in accordance with the terms of the underlying contract.

Cost of sales comprises the cost of conversion of products sold as well as the purchase costs of sold merchandise. In addition to the directly attributable material and production costs, it also includes indirect production-related overheads, including depreciation on property, plant, and equipment used and amortization of intangible assets. Cost of sales also includes write-downs of inventories to the lower net realizable value.

Research costs and non-capitalizable development costs are recognized in profit or loss when incurred.

Borrowing costs that are directly attributable to the acquisition or production of an asset, which requires a considerable amount of time in order to be brought into the intended usable or sellable state, are recognized as part of the cost of that asset. All other borrowing costs are recognized immediately as expenses.

Interest income is recognized in profit or loss when it is incurred.

Dividend income is registered at the time the payout entitlement arises.

Hedging transactions

Derivative financial instruments are used at the Consolidated ZF Group for hedging in order to reduce foreign currency and raw material price risks as well as interest rate and market price risks. In accordance with IAS 39, all derivative financial instruments are recognized at market value.

If the strict criteria for hedge accounting are met, they are accounted for as fair value hedge or cash flow hedge. If hedge accounting is not applicable, the derivative financial instruments will be measured at their fair values, and changes in fair value are reflected in profit or loss.

Fair value hedges are used to hedge risks of changes in the value of balance sheet items. If the criteria are met, the results from the market valuation of derivative financial instruments and the underlying hedged items are reflected in profit or loss.

Cash flow hedges are used to hedge exposure to variability in future cash flows. If the market value of derivative financial instruments – used for cash flow hedges – changes, the non-realized gains and losses in the amount of the effective part are initially recognized in the retained earnings without affecting profit or loss. Reclassification to the consolidated income statement is effected in the same period during which the hedged transaction affects profit or loss. The ineffective part of market value changes is reflected directly in the consolidated income statement.

Impacts on profit or loss resulting from hedging transactions that have been concluded in order to hedge risks relating to raw material price changes are shown under cost of sales. The profit and loss derived from foreign currency hedging transactions is recognized under other income and expenses or as part of acquisition cost. Gains and losses from derivative financial instruments used to hedge interest rate risks and market price risks related to securities are shown under other financial results.

Cash

Cash comprises cash on hand, bank deposits available any time, and short-term overnight money.

Financial assets

Current and non-current financial assets are divided into the following categories:

- Loans and receivables
- Available-for-sale financial assets
- Financial assets at fair value through profit or loss

The category "Loans and receivables" comprises financial receivables as well as trade receivables. Loans as well as earmarked time deposit investments and bank deposits of the special funds are shown under financial receivables. They are recognized at amortized cost using the effective interest method. Trade receivables are recognized at the original invoice amount.

If there are objective indications for an impairment of the loans and receivables, the impairment losses are calculated as the difference between the present value of the expected future cash flows and the carrying amount and recognized in profit or loss using a separate allowance account.

The category "Available-for-sale financial assets" includes current or non-current securities, as well as investments in participations. Following their initial recognition, available-for-sale financial assets are generally measured at fair value. Investments in participations for which there is no active market and fair values cannot be reliably determined due to a lack of planning data, are recognized at cost. Sale of these shares is currently not planned.

Gains and losses resulting from changes in the fair value of available-for-sale financial assets are recognized directly in equity, until the financial asset is either disposed of or an impairment is recognized.

In the case of objective evidence for sustainable impairment, such as a continuous decrease of the financial assets' fair values or a considerable decline of the issuer's credit rating, the accumulated net loss is removed from equity and shown under the net financial result. The accumulated net loss is the difference between the acquisition cost and the current fair value, less any impairment loss on the financial asset previously recognized in profit or loss. Subsequent reversals of impairments for equity instruments are registered without affecting profit or loss. In the case of debt instruments, reversals of impairments made through profit or loss are at maximum effected at the level of previously recorded impairments. If there are indications for impairment of investments in participations which are valued at amortized cost, the impairment loss is recognized in profit or loss. There is no reversal of such impairment losses.

Securities of the special fund which contain embedded derivatives are assigned to the category "Financial assets at fair value through profit or loss", since the fair value of the embedded derivatives cannot be reliably determined. The unrealized fair value gains and losses are recorded in other financial results.

As a rule, financial assets are capitalized as of the settlement date.

A financial asset is derecognized as of the settlement date when the contractual rights to receive cash flows from the asset have expired or basically all risks and rewards have been transferred. A derecognition is performed ahead of the settlement date, once it is established that the trade receivables as well as financial receivables are uncollectible.

Inventories

As a general rule, raw materials and supplies as well as merchandise are measured at the lower of average cost and net realizable value. Work in progress and finished goods are recognized at cost of conversion, taking into account the lower net realizable value. The cost of conversion includes all costs directly attributable to the manufacturing process and appropriate portions of the production-related overheads. This includes production-related depreciation, prorated general administration expenses, and prorated social expenses.

Investments in associates

Associates are generally recognized in accordance with the equity method with their proportionate equity. If, on the balance sheet date, there is objective evidence for the impairment of an investment, an impairment test is performed.

Intangible assets

Purchased or internally generated intangible assets are capitalized if a future economic benefit can be expected from the use of the asset and the costs of the assets can be reliably determined.

For recognition and measurement of **goodwill**, please refer to the explanations on the consolidation principles.

Tooling subsidies to suppliers are capitalized when they represent a right granted by the supplier or a fee for a service still to be rendered by the supplier. Tooling subsidies paid are amortized over a period of one to six years.

Development costs are capitalized at cost if both technical feasibility and marketability are ensured. It must furthermore be sufficiently probable that the development activity will generate future economic benefits. Capitalized development costs comprise all costs directly attributable to the development process. Capitalized development costs are amortized systematically from the start of production over the expected product life cycle of five years.

Other intangible assets are recognized at cost and amortized systematically with the following terms of useful life:

	in years
Software	3 to 5
Patents, trademarks, and licenses	5
Customer relations	3 to 30

Intangible assets with indefinite useful lives affect trademarks and will not be amortized systematically.

Property, plant, and equipment

The entire **property, plant, and equipment** is used for business purposes and is measured at cost less systematic depreciation for wear and tear. Depreciation on property, plant, and equipment is recorded straight-line in accordance with its utilization. Throughout the Consolidated Group, systematic depreciation is based on the following useful lives:

	in years
Buildings	10 to 33
Technical equipment and machines	2 to 14
Other equipment, factory and office equipment	2 to 13

The depreciation on machines used in multi-shift operations is increased accordingly by shift allowances.

The residual values, depreciation methods, and useful lives of assets are reviewed annually and adapted, if necessary.

In accordance with the provisions on accounting for leases, economic ownership is attributed to the lessee if he bears substantially all of the risks and rewards associated with ownership. Lease agreements which meet these requirements are classified as **finance leases**. Leased assets are recognized at the commencement of the lease term at fair value or the lower present value of the minimum lease payments. The assets are depreciated systematically on a straight-line basis over the expected useful life or the shorter term of the lease.

The discounted payment obligations resulting from the future leasing installments are recognized under financial liabilities.

In subsequent periods, leasing payments are divided into principal and interest payments. The interest portion is recognized in the net financial result. The principal payments reduce financial liabilities.

Lease and rent payments resulting from **operating lease** contracts are recognized as expenses in the consolidated income statement on a straight-line basis over the duration of the lease term. The future burdens under operating lease relationships are disclosed under other financial obligations.

Government grants

Government grants are recognized only if there is reliable evidence that the related conditions are met and the subsidies are likely to be granted. Investment subsidies are deducted from property, plant, and equipment during the period they were received. Expense subsidies are recognized as income during the same period in which the expenses, for which compensation was granted, are incurred.

Current market interest rates are used for the valuation of non-interest-bearing or low-interest-bearing government loans. The difference between the discounted value and the repayment value is deferred and recognized under other liabilities. The deferred amount is broken down across the duration of the loan contract and recognized in the interest expenses.

Impairment tests

For investments in associates, intangible assets already in use, and property, plant, and equipment, it is verified as of the balance sheet date whether there are indications of potential impairment. If there are any indications, recoverability must be tested (impairment test). Intangible assets that are not yet ready to be used and intangible assets with indefinite useful lives are subject to an annual impairment test.

To perform the impairment test, the recoverable amount is determined. This is the higher amount of the asset's or the smallest cash-generating unit's fair value less costs to sell and their value in use. The recoverable amount is determined for the individual asset or a cash-generating unit, if no cash flows can be allocated to the individual asset. The smallest units for which cash flows are forecast within the context of the ZF corporate planning, are considered cash-generating units. These are either individual companies or parts of individual companies.

The value in use is the net present value of future cash flows, which are expected from the continued use of the asset or the cash-generating unit and its disposal at the end of its useful life. The value in use is determined by the discounted cash flow method on the basis of the current corporate planning data. The planning horizon in this case is five years. The capital cost rate of the ZF Group, which is determined on the basis of the WACC (Weighted Average Cost of Capital) method, is used to discount the cash flows.

The forecast for cash flows is based on the current operational planning of the Consolidated ZF Group, in which general economic data from external macroeconomic research as well as financial surveys is also taken into consideration. The assumptions made consider the country-specific rates of inflation for the period investigated. Cost of materials is forecast based on the individual premises at the level of each cash-generating unit. The development of personnel expenses is also forecast individually on the basis of the collective agreements in effect. Based on these cash flow predictions, the value in use of the cash-generating units is determined assuming a discount factor before tax of 9 % to 12 % (2011: 8 % to 12 %). At the end of the five-year planning horizon, the expected cash flows are extrapolated using weighted averages based on the cash flows from the planning period.

Fair values less costs to sell for property, plant, and equipment are estimated on the basis of discounted cash flows as well as a cost-based approach for comparable assets.

An impairment loss is recognized if the recoverable amount falls below the carrying amount of the asset or the cashgenerating unit.

If the reason for an impairment loss recognized in an earlier period ceases to exist, the impairment loss is reversed, however up to a maximum of the carrying amount that would have been determined (net of depreciation or amortization) if no impairment loss had been recognized. Impairment losses and reversals of impairment losses for intangible assets and property, plant, and equipment are assigned to the functional areas as of the consolidated income statement.

Goodwill from business combinations is allocated to those groups of cash-generating units that derive benefit from the business combinations. In the Consolidated ZF Group, these are the respective divisions and business units. An impairment test for goodwill is performed annually using the impairment test in accordance with the above-described methods. An impairment of goodwill is recognized if the recoverable amount of the corresponding cash-generating unit is below its carrying amount. Impairment losses for goodwill are reported under other expenses. Impairment losses recognized on goodwill are not reversed.

Financial liabilities and other liabilities

Financial liabilities and other liabilities are recognized initially at cost, which represents the fair value of the consideration received. The transaction costs are also taken into account here. In subsequent periods, the liabilities are measured at amortized cost. The derecognition of financial liabilities and other liabilities will take place as soon as the obligations they are based on have been fulfilled or terminated.

The Consolidated ZF Group basically dispenses with applying the fair value option that is to register financial liabilities upon first-time valuation under the category of "Financial liabilities at fair value through profit or loss".

Tooling subsidies received

Tooling subsidies received represent a consideration in exchange for services to be rendered or rights granted to the payer of the subsidy. The subsidies are deferred as tooling subsidies received under other liabilities. The reversal takes place during the project duration.

Provisions for pensions

Provisions for pensions are recognized in accordance with the projected unit credit method. Under this method, not only pensions and vested interests recognized as of the balance sheet date are taken into account, but also increases in pensions and current salaries and wages that are expected in the future. The calculation is based on actuarial reports, taking into account biometric calculation bases. Actuarial gains and losses are recognized in full in the retained earnings in the period they arise with no effect on profit or loss. Interest expenses and expected returns from plan assets are recognized in the net financial result. All other expenses resulting from the addition to pension provisions are assigned to the affected functional areas within the consolidated income statement.

Other provisions

Other provisions are recognized if an obligation to third parties exists, which will probably result in the outflow of resources, and if a reliable estimate can be made of the amount required.

As a general rule, all cost elements that are relevant to determine the value of the inventories flow into the measurement of provisions from sales, in particular those for warranties and potential losses on pending transactions. The measurement takes place at the value of the best possible estimate of expenses which are necessary to fulfill the obligation on the balance sheet date. The measurement of provisions for warranty costs takes place on the basis of current warranty expenses under consideration of warranty and goodwill periods as well as sales development over several years.

Personnel-related obligations affect jubilee payments and semi-retirement obligations in particular. Provisions for employee jubilee bonuses are calculated on an actuarial basis. The provisions for semi-retirement obligations comprise individual or pay-scale-related top-up benefits which are recognized in full, as well as the wages and salaries to be paid during the release phase, which are accrued over a specific period of time.

Non-current provisions with a residual term of more than a year are recognized at the balance sheet date with their discounted settlement amount. A discount occurs when the impact on the interest is material.

Income taxes

The actual income tax receivables and provisions for current and previous periods are measured using the amount for which reimbursement from or payment to tax authorities is expected. The amount is calculated using the tax rates and the tax laws that are in effect on the balance sheet date.

Deferred tax assets and liabilities are recognized via temporary differences between the tax basis and the IFRS carrying amounts. Deferred tax assets also include tax reductions that will result from the expected utilization of existing tax loss carryforwards and tax credits in the subsequent years. Deferred taxes are computed on the basis of the tax rates that will or are expected to apply on the realization date with sufficient probability in accordance with the current legal situation in the individual countries.

Deferred tax assets on temporary differences and on tax loss carryforwards are only recognized if there is sufficient probability that the tax reductions resulting from them will actually occur in future.

The carrying amount of deferred tax assets is reviewed on the balance sheet date and written down accordingly, if it is anticipated that there will not be enough taxable profit to offset the tax assets at least in part. Non-recognized deferred tax assets are reviewed on each balance sheet date and recognized to the extent that a future taxable income allows the utilization of deferred tax assets.

In addition, no deferred tax assets and liabilities are recognized if these are resulting from the initial recognition of goodwill, an asset, or a liability as part of a business transaction which is not a business combination, and if, through this initial recognition, neither the balance sheet-related net profit or loss before income tax nor the taxable profit is influenced.

Deferred taxes that refer to items that are directly recognized in equity are also recognized in equity and not in the consolidated income statement.

Deferred tax receivables and deferred tax liabilities are offset against each other, if the Consolidated Group has a recoverable right to offsetting the actual tax refunds against actual tax liabilities and if they apply to the income taxes of the same tax subject levied by the same tax authority.

Judgments and uncertainties in connection with estimates

Preparation of the consolidated financial statements requires assumptions to be made and estimates to be applied, which affect the reported amounts and disclosure of assets and liabilities, income and expenses, and contingent liabilities.

Essential assumptions and estimates as used in the recognition and measurement of the balance sheet items are explained below.

Management estimates as to technical and economic feasibility of development projects influence the decision to **capitalize development costs** (figure 14 of the notes to the consolidated financial statements). The valuation of the capitalized development costs depends on the assumptions about amount and timing of expected future cash flows, as well as on the discount rates to be applied.

For the accounting of other **intangible assets** and **property**, **plant**, **and equipment**, the assumptions and estimates essentially relate to the definition of useful lives.

In the context of the **impairment tests** (figure 16 of the notes to the consolidated financial statements), assumptions and estimates are used in determining the future cash flows to be expected as well as for defining discount rates.

The fair values of the **securities** (figure 28 in the notes to the consolidated financial statements) which correspond to level 3 of the fair value hierarchy are determined on the basis of underlying data that is not observable on the market. The calculation according to the discounted cash flow method is based on estimates regarding the expected cash flow and used discounting rates.

In accounting the **deferred tax assets** (figure 6 of the notes to the consolidated financial statements), the assumptions and estimates essentially relate to the likelihood of expected tax reductions actually occurring in the future.

The actuarial valuation of provisions for pensions (figure 20 of the notes to the consolidated financial statements) is based on assumptions as to discount rates, future wage, salary, and pension developments, expected return on plan assets, as well as fluctuation rates. The discount rate used has the strongest impact on the valuation of pension provisions. An increase (reduction) of the interest rate by 0.1 percentage points results in provisions for pensions being \in 40 million lower (higher) as of December 31, 2012.

Determination of warranty provisions (figure 19 of the notes to the consolidated financial statements) is subject to assumptions and estimates which refer to the time period between delivery date and the occurrence of the warranty event, warranty and goodwill periods, as well as future warranty burdens.

The amount of impairment losses for the **available-for-sale financial assets** is impacted by the judgments relating to the estimate whether fair value losses are considered significant or continuous, and in terms of the credit rating of the issuers.

No other major judgments were made.

In individual cases, actual amounts could differ from these assumptions and estimates. Changes are recognized in profit or loss as soon as better information is available.

When preparing the consolidated financial statements, the underlying estimates were not subject to any major risks; therefore, no major adjustments to the assets and liabilities recognized in the consolidated balance sheet are expected during the subsequent fiscal year.

Notes to the Consolidated Income Statement

The consolidated income statement has been drawn up in accordance with the cost of sales method.

Sales

in € million	2012	2011
Domestic	5,766	5,290
Western Europe	3,239	3,218
Eastern Europe	937	950
North America	3,267	2,319
South America	760	880
Asia-Pacific	3,183	2,630
Africa	214	222
	17,366	15,509

Sales include € 16,969 million (2011: € 15,178 million) from the sale of goods and € 376 million (2011: € 297 million) for the rendering of services as well as € 21 million (2011: € 34 million) for royalties.

Cost of sales

in € million	2012	2011
Cost of materials	10,287	8,814
Personnel expenses	2,762	2,512
Depreciation and amortization	829	643
Other	554	698
	14,432	12,667

Depreciation and amortization include impairment losses for property, plant, and equipment of \in 44 million (2011: \in 17 million) as well as reversals of impairment losses of \in 5 million (2011: \in 17 million).

3 Other income

in € million	2012	2011
Foreign exchange gains	66	86
Income from hedging	5	14
Income from compensation payment and reimbursement of costs	11	8
Income from the disposal of intangible assets and property, plant, and equipment	6	11
Income from rentals and lease payments	3	3
Income from the reversal of provisions	0	21
Income from deconsolidations	10	0
Other income	39	39
	140	182

Other income includes i.a. income from derecognized receivables obtained and revenue from the sale of scrap material. Furthermore, this item includes revenue from government grants, income from tax refunds, as well as other income that is not related to the accounting period.

Other expenses

in € million	2012	2011
Foreign exchange losses	77	70
Expenses from hedging	10	12
Impairment of goodwill	15	0
Changes of allowances for receivables	16	8
Losses on the disposal of intangible assets and property, plant, and equipment	3	6
Other expenses	10	29
	131	125

Other expenses include i.a. expenses from the derecognition of receivables, donations, expenses for claims, penalties, and lawsuits, as well as other expenses not related to the accounting period.

5 Net financial result

in € million	2012	2011
Result from associates	0	-1
Income from participations	8	5
Write-downs of participations	-6	0
Income from the disposal of participations	3	1
Expenses from the disposal of participations	0	-8
Net result from participations	5	-2
Interest from current financial investments	23	34
Interest from non-current financial investments	15	18
Expected return on pension plan assets	5	13
Interest income	43	65
Interest on financial liabilities	53	53
Compounding of pension provisions	121	114
Compounding of other non-current items	11	21
Interest expenses	185	188
Foreign exchange gains	53	64
Income from hedging	6	21
Income from the disposal of securities	25	18
Unrealized fair value gains from securities	8	3
Reversal of impairments for financial receivables	0	12
Other financial income	92	118
Foreign exchange losses	61	63
Expenses from hedging	8	24
Losses on disposal of securities	2	22
Unrealized fair value losses from securities	1	11
Write-downs of financial receivables	0	4
Incidental expenses	1	3
Other financial expenses	73	127
Net financial result	-118	-135

6 Income taxes

in € million	2012	2011
Current tax expenses	181	120
Tax refunds from prior years	-4	-11
Payment of taxes from prior years	8	3
Deferred taxes on temporary differences	20	68
Deferred taxes on tax loss carryforwards and tax credits	18	-5
	223	175

A corporate tax rate of 15 % applies in Germany. Taking into account an average business tax multiplier of 385 % and the solidarity surcharge of 5.5 %, an income tax rate of 29 % (2011: 29 %) applies to the domestic companies. This income tax rate is used as the tax rate for the tax reconciliation statement.

The tax rates that apply abroad during the fiscal year are between 0 % and 40 %, and thus remain unchanged compared to the prior year.

The deferred taxes as of December 31, 2012, result from the following balance sheet items:

in € million	Dec. 31	, 2012	Dec. 31	, 2011
	Assets	Liabilities	Assets	Liabilities
Financial assets	9	25	14	4
Trade receivables	9	5	6	3
Other current assets	2	3	1	4
Inventories	48	7	42	8
Intangible assets	7	20	4	58
Property, plant, and equipment	61	167	74	142
Current financial liabilities	1	0	1	0
Trade payables	6	0	2	0
Other liabilities	12	1	14	1
Provisions for pensions	223	5	106	35
Other provisions	93	10	105	9
Other	42	4	34	7
	513	247	403	271
Tax loss carryforwards and tax credits	59		85	
Netting	-197	-197	-241	-241
	375	50	247	30

Based on the market valuation of securities and cash flow hedges, deferred tax liabilities are recognized in equity in the amount of $\mathfrak E$ 7 million (2011: no deferred taxes). The recognition of actuarial gains and losses for pension provisions in equity without affecting profit or loss leads to deferred tax assets in the amount of $\mathfrak E$ 136 million (2011: deferred tax liabilities of $\mathfrak E$ 19 million) as of December 31, 2012. As a result, equity is increased by $\mathfrak E$ 148 million (2011: $\mathfrak E$ 21 million).

Another change of the deferred taxes of \in 2 million (2011: \in 3 million), recognized without effect on profit or loss, is the result of closing-date exchange rate differences. Beyond that, all other changes, except changes due to first-time consolidations, have been recognized in profit or loss.

The amount of deductible temporary differences as well as unused tax losses and tax credits, for which no deferred tax assets were recognized in the balance sheet, is € 855 million (2011: € 633 million). Of these, € 692 million (2011: € 469 million) account for tax loss carryforwards, from which the expiration period for € 430 million (2011: € 377 million) is limited (up to 20 years) and remains unlimited for € 262 million (2011: € 92 million).

As a basic principle, the measurement of deferred tax assets is based on anticipated future business developments at the time of the consolidated financial statements' preparation based on the corporate planning for the following three fiscal years.

The increase in current tax expenses due to use of losses not yet taken into consideration, tax credits, or as a result of a temporary difference from prior periods not yet recognized, amounts to \in 1 million (2011: reduction of \in 8 million). The reduction in deferred tax expenses due to use of losses not yet taken into consideration, tax credits, or as a result of a temporary difference from prior periods not yet recognized, amounts to \in 2 million (2011: \in 1 million).

The expenses resulting from non-recognition and the write-down of deferred taxes (or their reversal) in cases where it is no longer likely (or likely again) that sufficient taxable profit will be available to use the deferred tax claim, either in part or in full, amount to \in 92 million (2011: tax income of \in 18 million).

No deferred tax was calculated for temporary differences in relation to shares in subsidiaries. The earned reserves are normally not subject to any considerable further taxation or are to be reinvested for an indefinite period of time. The determination of these non-recognized deferred tax liabilities would be linked to disproportionately high cost.

Reconciliation between expected and reported income tax expenses:

in € million	2012	2011
Net profit or loss before income tax	569	715
Expected income tax expenses	165	207
Tax effects due to different national tax rates and group taxation systems	-51	-19
Effects of changes in tax laws	-5	4
Tax effects due to non-recognition and write-down of deferred tax assets and their reversal	92	-18
Tax effects due to permanent differences	14	8
Tax effects due to prior-period items	10	-9
Other tax effects	-2	2
Reported income tax expenses	223	175

77

Other disclosures on the consolidated income statement

The consolidated income statement includes the following cost of materials:

in € million	2012	2011
Expenses for raw materials, supplies, and merchandise	10,130	8,630
Expenses for purchased services	308	309
Other cost of materials	12	9
	10,450	8,948

The expenses for raw materials, supplies, and merchandise comprise income amounting to \in 0 million (2011: \in 3 million) resulting from hedging risks relating to raw material price changes.

The breakdown of personnel expenses is as follows:

in € million	2012	2011
Wages and salaries	3,249	2,965
Social security and benefits expenses	671	622
Pension expenses	119	95
	4,039	3,682

Personnel expenses include expenses for defined contribution plans in the amount of \in 51 million (2011: \in 40 million) as well as \in 218 million (2011: \in 208 million) for state plans. Expenses for the state plans primarily comprise the employer's contribution to the state pension scheme, which is included in the social security expenses.

Termination benefits of \in 13 million (2011: \in 20 million) were recorded in the consolidated income statement. They affect severance pay as well as expenses from additions to semi-retirement and restructuring provisions.

Impairment loss on intangible assets is included in the following consolidated income statement items:

in € million	2012	2011
Research and development costs	17	2
Selling expenses	12	4
Other expenses	15	0
	44	6

Impairment loss on property, plant, and equipment in the amount of € 44 million (2011: € 17 million) is included under cost of sales in the consolidated income statement.

Reversals of impairment losses for property, plant, and equipment are included in the cost of sales and amount to \in 5 million (2011: \in 17 million).

Explanations on the impairments and the reversals of impairment losses are given under figure 16.

Systematic amortization on intangible assets is included in the following consolidated income statement items:

in € million	2012	2011
Cost of sales	147	105
Research and development costs	6	7
Selling expenses	12	5
General administration expenses	8	5
	173	122

Systematic depreciation on property, plant, and equipment is included in the following consolidated income statement items:

in € million	2012	2011
Cost of sales	643	538
Research and development costs	24	22
Selling expenses	8	7
General administration expenses	38	32
	713	599

Expenses for research and development recorded in the fiscal year reached \in 861 million (2011: \in 754 million). This figure includes systematic amortization for capitalized development costs of \in 2 million (2011: \in 4 million).

In the fiscal year, payments from operating leases or rental agreements in the amount of \in 107 million (2011: \in 82 million) were recognized in the consolidated income statement.

Notes to the Consolidated Balance Sheet

8 Current financial assets

in € million	Dec. 31, 2012	Dec. 31, 2011
Securities	6	13
Financial receivables	66	107
	72	120

The financial receivables do not include any overdue amounts that are not impaired. The financial receivables contain earmarked bank deposits of \in 22 million (2011: \in 29 million).

The allowances for the financial receivables have developed as follows:

in € million	2012	2011
Carrying amount as of Jan. 1	20	31
Additions	0	4
Utilization	9	3
Reversals	0	12
Carrying amount as of Dec. 31	11	20

The gross value of the impaired financial receivables is \in 11 million (2011: \in 20 million).

As far as the financial receivables are concerned which are neither impaired nor overdue there have, as of the closing date, been no indications that the debtors would not meet their payment obligations.

Trade receivables

The trade receivables have the following age distribution:

in € million Ca	Carrying	neither	ı	not impaired ar	d overdue for	
	amount	impaired nor overdue	1 to 30 days	31 to 60 days	61 to 360 days	more than 360 days
Dec. 31, 2012	2,274	1,956	144	39	51	68
Dec. 31, 2011	2,307	2,069	140	34	43	5

If payment plans have been agreed with customers, and provided that these are adhered to, these receivables are recognized as neither impaired nor overdue.

The allowances for trade receivables have developed as follows:

in € million	2012	2011
Carrying amount as of Jan. 1	35	29
Additions	21	15
Utilization	16	2
Reversals	6	7
Carrying amount as of Dec. 31	34	35

The gross value of the impaired trade receivables is \in 50 million (2011: \in 51 million).

As far as the trade receivables are concerned which are neither impaired nor overdue there have, as of the closing date, been no indications that the debtors would not meet their payment obligations.

10 Other current assets

in € million	Dec. 31, 2012	Dec. 31, 2011
Other tax receivables	145	138
Accruals and deferrals	28	22
Derivative financial instruments	12	6
Receivables from employees	8	8
Other assets	50	60
	243	234

Other tax receivables are, for the most part, sales tax refund entitlements. Other assets comprise, among others, security deposits, payments in advance, receivables from insurance companies, and reimbursement claims.

The other assets do not include any overdue amounts that are not impaired.

The allowances for other current assets have developed as follows:

in € million	2012	2011
Carrying amount as of Jan. 1	1	2
Additions	1	0
Utilization	0	1
Carrying amount as of Dec. 31	2	1

The gross value of the impaired receivables is \in 2 million (2011: \in 1 million).

11 Inventories

in € million	Dec. 31, 2012	Dec. 31, 2011
Raw materials and supplies	738	706
Work in progress	405	466
Finished goods and merchandise	588	558
Payments in advance	16	15
	1,747	1,745

Write-downs of inventories increased by \in 6 million in the fiscal year 2012 (2011: \in 23 million) to \in 128 million (2011: \in 122 million).

12 Non-current financial assets

in € million	Dec. 31, 2012	Dec. 31, 2011
Investments in participations	78	146
Securities	814	779
Financial receivables	226	164
Derivative financial instruments	6	1
Accruals and deferrals	14	12
	1,138	1,102

Investments in participations have developed as follows:

in € million	2012	2011
Carrying amount as of Jan. 1	146	187
Changes in Consolidated Group	-65	-57
Net exchange differences	-2	0
Changes not made through profit or loss	0	-3
Additions	6	37
Disposals	1	18
Write-downs	6	0
Carrying amount as of Dec. 31	78	146

The changes not made through profit or loss arise from the market valuation of stock exchange listed participations.

The additions concern the following countries:

in € million	2012	2011
India	1	20
Germany	2	14
The Netherlands	0	3
Czech Republic	3	0
	6	37

Non-current financial assets include the assets of special funds which serve to secure pension obligations to some extent. The assets of these special funds are shown under non-current securities and financial receivables.

The financial receivables contain non-current earmarked bank deposits and time deposit investments of \in 118 million (2011: \in 45 million). Of these, \in 111 million is apportioned to special funds (2011: \in 37 million).

The financial receivables also include granted loans and direct insurance claims against life insurances of \in 51 million (2011: \in 52 million).

The financial receivables do not include any overdue amounts that are not impaired. No allowances on financial receivables were recorded as of the balance sheet date. The prior year's allowance amounting to $\[mathbb{c}\]$ 11 million was utilized.

Concerning the non-current financial receivables, there are no indications that the debtors would not meet their payment obligations.

13 Investments in associates

Investments in associates include the 50 % share in ZF PWK Mécacentre S.A.S., St. Etienne (France) and the 50 % share in Shanghai Sachs Powertrain Component Systems Co. Ltd., Shanghai (China). Both are recognized according to the equity method.

The investments in associates recognized in the ZF Group amount to $\ensuremath{\mathfrak{e}}$ 15 million.

The Group's share of losses of ZF PWK Mécacentre S.A.S. of \in 0 million (2011: \in 1 million) for the fiscal year 2012 was not included in the consolidated financial statements because the investments in associates have already been fully impaired. The proportionately unrecognized negative equity amounts to \in 1 million (2011: \in 1 million).

Furthermore, the proportional profit of Shanghai Sachs Powertrain Component Systems Co. Ltd. of \in 0 million was included in the consolidated financial statements.

The associates have current assets in the amount of € 43 million (2011: € 16 million) and non-current assets of € 21 million (2011: € 5 million). Total liabilities amount to € 35 million (2011: € 19 million). In the fiscal year 2012, the companies generated an income of € 108 million (2011: € 29 million) and expenses of € 107 million (2011: € 30 million).

14 Intangible assets

in € million	Goodwill	Patents, licenses, software, and similar rights and assets	Development costs	Payments in advance	Total
Cost as of Jan. 1, 2011	440	391	42	15	888
Company acquisition	15	66	0	0	81
Changes in Consolidated Group	0	0	0	0	0
Net exchange differences	0	2	0	0	2
Additions	0	189	9	22	220
Reclassifications	0	11	0	-8	3
Disposals	0	58	11	2	71
Cost as of Dec. 31, 2011	455	601	40	27	1,123
Accumulated amortization as of Jan. 1, 2011	32	161	23	0	216
Net exchange differences	0	1	0	0	1
Systematic additions	0	118	4	0	122
Additions from impairments	0	4	2	0	6
Reclassifications	0	0	0	0	0
Disposals	0	54	11	0	65
Accumulated amortization as of Dec. 31, 2011	32	230	18	0	280
Carrying amount as of Dec. 31, 2011	423	371	22	27	843
Cost as of Jan. 1, 2012	455	601	40	27	1,123
Changes in Consolidated Group	0	2	0	0	2
Net exchange differences	0	-3	1	-1	-3
Additions	0	212	10	14	236
Reclassifications	0	33	0	-23	10
Disposals	3	75	2	0	80
Cost as of Dec. 31, 2012	452	770	49	17	1,288
Accumulated amortization as of Jan. 1, 2012	32	230	18	0	280
Changes in Consolidated Group	0	1	0	0	1
Net exchange differences	0	-3	0	0	-3
Systematic additions	0	171	2	0	173
Additions from impairments	15	12	17	0	44
Disposals	0	68	1	0	69
Accumulated amortization as of Dec. 31, 2012	47	343	36	0	426
Accumulated amortization as of Dec. 31, 2012	47	343		•	720

In addition to EDP software acquired in return for payment, tooling subsidies paid to suppliers, and capitalized development costs, intangible assets primarily comprise goodwill from the acquisition of companies.

Trademarks included at \in 8 million (2011: \in 8 million) are classified as intangible assets with indefinite useful lives since there is no foreseeable delimitation of the period during which the trademarks will presumably generate cash inflows. They are completely allocated to the Industrial Technology division.

Goodwill

Goodwill from the consolidation of investments in subsidiaries and from the individual financial statements is shown below:

in € million	Dec. 31, 2012	Dec. 31, 2011
Powertrain and Suspension Components	0	261
Powertrain Technology	57	0
Chassis Technology	65	0
Commercial Vehicle Technology	139	0
Industrial Technology	12	15
Die Casting Technology	0	12
ZF Services	132	135
	405	423

In the context of the divisional realignment of ZF, the goodwill which was before assigned to the Powertrain and Suspension Components division was newly allocated to the Powertrain Technology, Chassis Technology, and Commercial Vehicle Technology divisions. The relative value of these divisions which was determined using the discounted cashflow method on the basis of the planning data available at the time of the new allocation formed the foundation of the new allocation.

15 Property, plant, and equipment

		equipment and machinery	equipment, factory and office equipment	in advance and con- struction in progress	
Cost as of Jan. 1, 2011	1,694	5,139	1,950	287	9,070
Company acquisition	117	240	6	31	394
Changes in Consolidated Group	-1	-37	-6	30	-14
Net exchange differences	0	-10	-3	2	-11
Additions	39	291	157	571	1,058
Reclassifications	35	229	7	-274	-3
Disposals	15	170	84	1	270
Cost as of Dec. 31, 2011	1,869	5,682	2,027	646	10,224
Accumulated depreciation as of Jan. 1, 2011	807	3,945	1,458	0	6,210
Changes in Consolidated Group	-1	-37	-6	0	-44
Net exchange differences	0	-5	-3	0	-8
Systematic additions	48	410	141	0	599
Additions from impairments	0	12	5	0	17
Reclassifications	0	14	-14	0	0
Disposals	8	161	59	0	228
Reversals of impairments	2	11	4	0	17
Accumulated depreciation as of Dec. 31, 2011	844	4,167	1,518	0	6,529
Carrying amount as of Dec. 31, 2011	1,025	1,515	509	646	3,695
Cost as of Jan. 1, 2012	1,869	5,682	2,027	646	10,224
Changes in Consolidated Group	10	18	6	1	35
Net exchange differences	-6	-31	-11	-6	-54
Additions	90	436	192	474	1,192
Reclassifications	92	345	70	-517	-10
Disposals	2	148	94	1	245
Cost as of Dec. 31, 2012	2,053	6,302	2,190	597	11,142
Accumulated depreciation as of Jan. 1, 2012	844	4,167	1,518	0	6,529
Changes in Consolidated Group	-2	9	3	0	10
Net exchange differences	-3	-20	-9	0	-32
Systematic additions	54	494	165	0	713
Additions from impairments	0	41	3	0	44
Disposals	1	132	65	0	198
Reversals of impairments	0	4	1	0	5
Accumulated depreciation as of Dec. 31, 2012	892	4,555	1,614	0	7,061
Carrying amount as of Dec. 31, 2012	1,161	1,747	576	597	4,081

Property, plant, and equipment includes rented buildings in the amount of \in 8 million (2011: \in 8 million) that, due to the content of the leasing contracts (finance lease), are considered the economic property of the Consolidated Group. The leasing contracts for plant and office buildings include purchase options and pre-emption rights at the

end of the term of the contracts. Two contracts provide for the possibility of adapting or correcting the leasing rates on the basis of the current calculation parameters.

The details on the minimum lease payments under the respective leasing contracts are as follows:

in € million	Dec. 31, 2012	Dec. 31, 2011
Total future minimum lease payments		
due within a year	2	2
due between one and five years	5	5
due after more than five years	16	17
	23	24
Interest portion included in the future minimum lease payments		
due within a year	1	1
due between one and five years	2	1
due after more than five years	6	7
	9	9
Present value of the future minimum lease payments		
due within a year	1	1
due between one and five years	3	4
due after more than five years	10	10
	14	15

16 Impairment tests

In the fourth quarter of 2012, the Consolidated ZF Group performed impairment tests to assess the impairment of its assets. The reason for these impairment tests was a negative profit development in individual reporting units. The causes in this context were e.g. unfavorable prices as well as reduced quantity growth in individual operating segments, as well as in particular the massive slump in the future market of wind energy that led to significant under-utilization.

For technical equipment and machinery as well as for factory and office equipment, impairment losses were recorded in the following divisions or business units, respectively:

in € million	2012	2011
Chassis Technology	2	5
Industrial Technology	33	1
ZF Services	0	1
Steering Technology	9	10
	44	17

As part of the process, the assets of individual cashgenerating units were measured at fair value less costs to sell.

The impairment depreciations are distributed by regions as follows:

in € million	2012	2011
Europe	5	11
North America	35	4
South America	1	1
Asia-Pacific	3	1
	44	17

The Car Chassis Technology division recorded reversals of impairments for property, plant, and equipment amounting to \in 3 million (2011: \in 14 million), the Industrial Technology division recorded reversals of impairments amounting to \in 1 million (2011: \in 3 million), and the ZF Services business unit recorded reversals of impairments amounting to \in 1 million (2011: \in 0 million).

For intangible assets, an impairment loss of \in 12 million (2011: \in 4 million) was recorded for capitalized customer relations and \in 17 million (2011: \in 2 million) for capitalized development costs. The impairments exclusively apply to the Industrial Technology division.

The annual goodwill impairment tests led to impairments of \in 12 million for the goodwill of the Die Casting Technology business unit and of \in 3 million for the goodwill of the Industrial Technology division. No impairments had been required in the prior year. The basis for impairment was the value in use. Furthermore, an increase of the discount rate by 10 % would not have led to further goodwill impairments.

Inter alia, assumptions were made with regard to the development of sales in order to calculate the impairment tests. The assumptions made for the average sales increase in the five-year planning period are as follows:

in %	
Powertrain Technology	12
Chassis Technology	9
Commercial Vehicle Technology	6
Industrial Technology	6 to 10
Die Casting Technology	3
ZF Services	8

No reference values are available due to the divisional realignment.

17 Financial liabilities

The following table lists the maturity structure of principal and interest payments for the financial liabilities:

in € million	· -	Carrying amount as of Dec. 31, 2012		Cash outflow	
	Total	Thereof current	2013	2014 to 2018	2019 and after
Liabilities to banks	1,122	155	170	940	105
Liabilities from finance leases	14	1	2	5	16
Other financial liabilities	32	30	34	7	1
	1,168	186	206	952	122

in € million	Carrying amount as of Dec. 31, 2011			Cash outflow	
	Total	Thereof current	2012	2013 to 2017	2018 and after
Liabilities to banks	967	384	417	623	16
Liabilities from finance leases	15	1	2	5	17
Other financial liabilities	49	48	49	0	1
	1,031	433	468	628	34

Under current financial liabilities, non-current loans are recognized with their amortization installments due throughout one year. Moreover, current liabilities which serve short-term financing purposes are included under this item. The country-specific interest rates on these short-term loans fluctuate between 1.4 % (2011: 1.5 %) and 7.3 % (2011: 6.9 %).

The country-specific interest rate on the loans reported in non-current financial liabilities is between 0.9 % (2011: 1.5 %) and 8.7 % (2011: 7.5 %). Approximately half of these loans has a fixed interest rate. Most of the loans are due at the end of the period. In the fiscal year, the last tranches of the loans taken up in 2009/2010 to bridge the financial crisis were paid back and replaced with lower-interest financing. Apart from the scheduled repayment, a total of another € 108 million was paid back prematurely.

Own cash and cash equivalents and external funds were used to finance growth. In the fiscal year, bonded loans of € 475 million in total were issued in addition to existing credit lines at banks. This kind of financing enabled the Consolidated ZF Group to make use of the very favorable interest level also for longer maturity periods and replace more expensive loans from previous years. In addition, the external financing structure was diversified and the investor base was expanded by issuing bonded loans with various maturity periods.

The loan contracts partly contain an obligation to fulfill a specific financial key figure (financial covenant); nonfulfillment represents an infringement with the loan agreements. This debt-equity ratio is defined as the ratio between the net financial position and the EBITDA. For some of the loans, a change in the debt-equity ratio has an effect on the risk premium which is determined annually. The agreed condition was met in the 2012 fiscal year.

Assets from property, plant, and equipment in the amount of \in 56 million (2011: \in 40 million) are negotiated as collateral for financial liabilities as well as for possible obligations from finance court cases. In addition, \in 60 million had been agreed as collateral for financial liabilities in 2011, which were able to be served from the property, plant, and equipment and from inventories.

18 Other liabilities

in € million	Dec. 31, 2012		Dec. 31, 2011	
	Total	Thereof current	Total	Thereof current
Liabilities to employees	386	384	397	394
Social contributions	23	23	26	26
Other tax liabilities	95	91	84	79
Tooling subsidies received	286	106	244	70
Prepayments received	41	41	33	33
Professional association	8	8	10	10
Accruals and deferrals	54	21	35	20
Derivative financial instruments	7	5	27	21
Other liabilities	206	196	207	177
	1,106	875	1,063	830

Other tax liabilities are mainly sales tax liabilities. Other liabilities include, among others, outstanding charges, deferred liabilities for legal costs and costs of litigation, as well as liabilities to the pension insurance association.

89

19 Other provisions

in € million	Dec. 31, 2012		Dec. 31, 2011	
	Total	Thereof current	Total	Thereof current
Obligations from sales	593	383	665	468
Obligations from personnel	312	87	356	112
Other obligations	70	62	69	62
	975	532	1,090	642

in € million	Jan. 1, 2011	Net exchange differences	Addition	Com- pounding	Utilization	Reversal	Dec. 31, 2011
Obligations from sales	665	-3	266	1	206	130	593
Obligations from personnel	356	-2	66	10	86	32	312
Other obligations	69	-2	21	0	11	7	70
	1,090	-7	353	11	303	169	975

The provisions for obligations from sales primarily include provisions for warranty, product liability, and punitive damages, as well as for potential losses from delivery obligations.

The provisions for obligations from personnel mainly include obligations for semi-retirement, profit sharing, restructuring measures, jubilee expenses, as well as expenses for the collective bargaining agreement (German abbreviation: ERA). Provisions for restructuring measures, above all, contain expenses for severance pay which will arise within the context of plant closures and relocations.

Other obligations include, among other things, provisions for litigation risks and risks of participation, environmental protection measures, other punitive damages, as well as other tax risks. Utilization of all current provisions is expected for the following fiscal year.

Non-current obligations from sales are expected to be utilized within the next five years. Also, about 69 % of the provisions contained in the non-current obligations from personnel and about 83 % of other non-current obligations will presumably be exhausted in the next five years.

Expected reimbursements as of December 31, 2012, amount to \in 21 million (2011: \in 13 million), of which \in 16 million (2011: \in 11 million) was capitalized as assets.

20 Provisions for pensions

Provisions for pensions are set up for obligations from vested benefits and current pensions for entitled current and former employees of the Consolidated ZF Group and their surviving dependents. Various retirement pension fund systems exist that depend on the legal, economic, and tax situation in the respective country, which – as a regular rule – are based on the length of service and emoluments of the employees.

A distinction has to be made in connection with company pension schemes between defined contribution plans and defined benefit plans.

Under defined contribution plans, the Consolidated ZF Group does not enter into any obligations apart from the payment of contributions into earmarked funds and pension insurance carriers.

Under defined benefit plans, the obligation of the Consolidated ZF Group consists of fulfilling promised benefits to current and former employees, whereby a distinction is made between unfunded and funded pension systems.

The company pension scheme is rounded off by direct insurances, deferred compensation agreements, as well as modules financed by the employees.

As related to the net obligation, the percentage of domestic pension plans is 98 %.

The amount of the pension obligations (defined benefit obligation) was calculated in accordance with actuarial methods for which estimates are unavoidable. In addition to assumptions on life expectancy, the following further assumptions are important:

in %	2012	2011
Discount rate	4.0	5.4
Expected increase in salaries and wages	2.7	2.7
Pension increases	1.3	1.3
Expected return on plan assets	4.0	3.0 or 4.3, respectively
Fluctuation	2.0	2.0

The expected increases in salaries and wages are determined among other things depending on inflation, pay scale developments, and the company's economic situation.

Assumptions on the expected return on plan assets are based on estimates that are aligned with the attained returns of the past, the portfolio structure, and future long-term returns to be expected.

The pension obligations resulting under the projected unit credit method are netted in the case of a funded pension system with the plan assets measured at fair value. As soon as the pension obligations exceed the plan assets, a liability is created, which is recognized in the provisions for pensions.

Changes in the present value of the defined benefit obligation and the fair value of the plan assets can be based on actuarial gains and losses, which can be caused, among other things, by changes in the calculation parameters, changes in estimates with regard to the risk trend of the pension obligations, and differences between the actual and the expected return on plan assets.

The funding status of the pension obligations is as follows:

in € million	2012	2011	2010	2009	2008
Present value of unfunded defined benefit obligations	2,778	2,130	1,651	1,619	1,582
Present value of funded defined benefit obligations	170	198	532	497	474
Present value of the defined benefit obligations	2,948	2,328	2,183	2,116	2,056
Plan assets at fair values	126	117	294	279	240
Consolidated balance sheet value on Dec. 31	2,822	2,211	1,889	1,837	1,816

To finance direct pension obligations, there are special funds in Germany of \in 929 million (2011: \in 823 million) that are reported in the non-current securities and financial receivables.

The experience adjustments that result from the differences between the previous actuarial assumptions as to future events and what actually occurred have the following effect on the defined benefit obligations and the plan assets:

in %	2012	2011	2010	2009	2008
Defined benefit obligations	1.6	0.0	-0.9	1.0	0.9
Plan assets	4.3	0.3	2.2	2.9	-12.9

The plan assets consist of the following items:

in € million	Dec. 31, 2012	Dec. 31, 2011
Cash	1	0
Securities	128	124
Other assets	12	9
Plan liabilities	-15	-16
	126	117

Securities are measured at market values.

The defined benefit plans result in expenses made through profit or loss from pension obligations of \in 173 million (2011: \in 155 million), which are made up of the following components:

in € million	2012	2011
Current service costs in the fiscal year	44	44
Interest costs on defined benefit obligations	121	114
Expected return on plan assets	-5	-13
Past service costs	14	13
Curtailments and settlements	-1	-3
	173	155

All components of the pension expenses recognized in profit or loss, with the exception of the interest portion and the expected return on plan assets, are reported in the functional areas.

The actuarial losses amounting to \in 539 million (2011: \in 70 million) are considered in retained earnings with no effect on profit or loss.

The actual returns on plan assets amount to \in 12 million (2011: losses of \in 4 million). The difference between the actual and the expected return on external pension funds is recognized in retained earnings with no effect on profit or loss within the framework of the actuarial gains and losses.

The development of the present value of the defined benefit obligations and the plan assets at fair value is presented as follows:

in € million	2012	2011
Present value of the defined benefit obligations as of Jan. 1	2,328	2,183
Net exchange differences from plans abroad	1	3
Current service costs in the fiscal year	44	44
Interest costs on defined benefit obligations	121	114
Contributions by plan participants	11	35
Actuarial gains (-) and losses (+)	546	53
Past service costs	14	13
Curtailments	0	-1
Settlements	-1	-2
Pension payments	116	114
Present value of the defined benefit obligations as of Dec. 31	2,948	2,328
Plan assets at fair value as of Jan. 1	117	294
Net exchange differences from plans abroad	2	2
Expected return on plan assets	5	13
Actuarial gains (+) and losses (-)	7	-17
Employer contributions to the plan assets	4	10
Pension payments	9	17
Transfer of plan assets	0	-168
Plan assets at fair value as of Dec. 31	126	117
Provisions for pensions as of Jan. 1	2,211	1,889
Provisions for pensions as of Dec. 31	2,822	2,211

According to the best possible estimate, contributions to external pension funds will amount to $\mathfrak E$ 3 million for the next year. The 2011 estimate for the fiscal year 2012 was $\mathfrak E$ 2 million.

21 Equity

Subscribed capital

The subscribed capital amounts to \in 300 million. Since January 1, 2007, it remains unchanged and is divided into 300,000,000 recognized shares. All shares are fully deposited.

Capital reserve

The capital reserve comprises the premium on the issuance of shares. It is subject to the restrictions of § 150 AktG (German Stock Corporation Law), as well as the legal reserve.

Revenue reserves

Revenue reserves contain the legal reserve of ZF Friedrichshafen AG and the accumulated earnings of the companies included in the consolidated financial statements to the extent not distributed. Asset and liability differences resulting from the capital consolidation in accordance with the book value method and the previously used accounting principles are also accounted for in this item. Other components include the reserves from the first-time adoption of the IFRS and the cumulative currency translation adjustments, which were reclassified when changing over to the IFRS.

Foreign currency translation differences

Foreign currency translation differences contain amounts not affecting profit or loss that result from the currency translation of the financial statements from foreign subsidiaries (non-euro area) recognized starting from the date of the first-time adoption of IFRS.

The change in equity resulting from foreign currency translation differences amounting to ℓ -42 million (2011: ℓ 28 million) is attributed to minority interests with ℓ -4 million (2011: ℓ 12 million).

Market valuation of securities and cash flow hedges

This item includes the post-tax effects of the financial instruments valuation that do not affect profit or loss.

Actuarial gains and losses

This item contains the actuarial gains and losses from employer pension plans after tax, with no effect on profit or loss.

Deferred taxes on equity items not affecting profit or loss

in € million		2012			2011	
	Before income tax	Income tax	After tax	Before income tax	Income tax	After tax
Foreign currency translation differences	-42	0	-42	28	0	28
Market valuation of securities	27	-4	23	-25	-1	-26
Market valuation of cash flow hedges	23	-3	20	-19	2	-17
Actuarial gains and losses	-539	155	-384	-70	20	-50
Other comprehensive income	-531	148	-383	-86	21	-65

Dividends

ZF Friedrichshafen AG has proposed a dividend payout of \in 30 million for the fiscal year 2012 (\in 0.10 per share). In the fiscal year 2012, a dividend of \in 30 million was paid.

22 Disclosures on capital management

The primary objective of capital management at the Consolidated ZF Group is to ensure a stable equity ratio in order to support the continued business activities and to protect shareholder interests. In order to determine the equity ratio, the equity disclosed on the balance sheet is used.

	Dec. 31, 2012	Dec. 31, 2011
Equity in € million	4,002	4,100
Equity ratio in %	34	37

ZF Friedrichshafen AG is not subject to bylaws-based capital requirements.

Notes to the Consolidated Cash Flow Statement

23 General

The consolidated cash flow statement shows how the cash position of the Consolidated ZF Group changed during the fiscal year due to the inflow and outflow of funds. A distinction is drawn between cash flows from operating, investing, and financing activities.

The cash position presented in the consolidated cash flow statement covers all cash reported in the consolidated balance sheet, i.e. cash on hand and cash at banks, available at any time for use by the Consolidated ZF Group. The cash flows from investing and financing activities are determined on the basis of payments. The cash flow from operating activities, on the other hand, is indirectly derived from the net profit or loss before income tax.

As part of the indirect calculation, the changes in balance sheet items taken into account in conjunction with the operating activities are adjusted for effects from the translation of foreign currencies and changes in the Consolidated Group. Changes in the respective balance sheet items can therefore not be reconciled to the corresponding values on the basis of the published consolidated balance sheet.

24 Acquisition and sale of companies

In the prior year, the acquisition of shares in consolidated companies, which is recognized in the cash flow from investing activities, was composed as follows:

in € million	
Current assets	384
thereof cash and cash equivalents	110
Non-current assets	462
Current liabilities	157
Non-current liabilities	148

The proceeds of disposal from the sale of shares in 2012 amounted to € 19 million which was recorded completely as cash inflow. The outgoing assets and liabilities from the sale of shares relate to the following:

in € million	
Current assets	9
thereof cash and cash equivalents	2
Non-current assets	4
Current liabilities	3
Non-current liabilities	1

Other Disclosures

25 Contingent liabilities

No provisions were set up for the following contingent liabilities, which are recognized at nominal values, because the probability of a claim is deemed to be low:

in € million	Dec. 31, 2012	Dec. 31, 2011
Guarantees	21	41
Other	37	50
	58	91

The other contingent liabilities essentially refer to potential liabilities from procurement and personnel as well as from litigation and other taxes. There are collaterals for contingent liabilities amounting to \in 8 million (2011: \in 7 million).

26 Other financial obligations

In addition to liabilities, provisions, and contingent liabilities, other financial obligations result in particular from rental and leasing agreements, investment projects launched, and procurement agreements initiated.

in € million	Dec. 31, 2012	Dec. 31, 2011
Rental and leasing payments	305	255
Purchase commitments	618	678
Payment obligations on participations	5	4
	928	937

The purchase commitments account for € 111 million (2011: € 118 million) for intangible assets and € 507 million (2011: € 560 million) for property, plant, and equipment.

The total future minimum lease payments from noncancelable rental agreements and operating leases by maturities are as follows:

in € million	Dec. 31, 2012	Dec. 31, 2011
Nominal total future minimum lease payments		
due within a year	86	69
due between one and five years	143	123
due after more than five years	76	54
	305	246

The major rental agreements refer to production, warehousing, and office buildings with terms of up to 31 years. Besides price adjustment clauses that provide for an annual fixed percentage increase, some contracts also contain agreements that are aligned with a change in the defined consumer price indexes. Most agreements include extension options or automatic contract extensions. For some leased objects, the option to acquire them is part of the agreement. Additional leasing contracts refer to fleet, machines, computer hardware, and software as well as other factory and office equipment with terms of up to ten years.

For some of these contracts, extension options or automatic contract extensions are available, as well as options to acquire the object leased at the end of the contractual period at market value.

27 Litigation

Neither ZF Friedrichshafen AG nor one of its Group companies is engaged in current or foreseeable court or arbitration proceedings, which have had in the past or could have a significant impact on the economic situation of the Consolidated ZF Group. Adequate provisions have been set up by the respective Group companies for probable financial exposure from other court or arbitration proceedings.

28 Financial instruments

Risk management

As a general rule, the companies of the Consolidated ZF Group hedge their interest rate, foreign currency, and raw material price risks at prevailing market conditions through ZF Cash Management at ZF Friedrichshafen AG. Primary and derivative financial instruments are used. Derivative financial instruments are used exclusively to hedge existing underlying or projected transactions.

The risk items of ZF Cash Management are hedged externally at banks taking into account prescribed risk limits. Hedging transactions are concluded in accordance with uniform Group guidelines and in line with the bank regulations on the operating of trading business. They are subject to stringent monitoring, which is ensured in particular by the strict separation of duties between trading, settlement, and control.

Reports on the essential risk positions of the Consolidated ZF Group are presented to the Board of Management and the Supervisory Board on a regular basis. Compliance with the guidelines is audited by the internal auditors. The market price risk from securities as well as the foreign currency risk is measured based on a value-at-risk analysis. The value-at-risk indicates only the potential risk of loss, which with defined probability will not be exceeded within a specifically determined time frame (holding period). However, the method does not provide any information as to the time such a threshold might be crossed or the amount of the expected loss in case the value-at-risk is exceeded. As a result, the actual development may deviate from the result of the value-at-risk analysis.

Credit risk

Credit risk is the risk that contractual partners in the areas of financial investments, financial receivables, and trade receivables will not meet their payment obligations.

In order to reduce the credit risk for financial investments, all financial transactions are carried out only with banks with a first-class credit rating within the framework of defined limits.

The financial assets of the Consolidated Group, including cash and cash equivalents, financial receivables, trade receivables, securities, investments in participations, and derivative financial instruments, lead to a maximum credit risk if one contracting party drops out, amounting to the carrying amount of the respective balance sheet item without considering collaterals received.

The amount of outstanding trade receivables mainly concerns passenger car, commercial vehicle, and off-road machinery manufacturers.

With regard to one customer, who conducted a debt restructuring in the year 2012 in order to ensure its solvency in the long term, there are overdue receivables in the amount of \in 65 million as of December 31, 2012. The restructuring process was successfully concluded in 2013. It is more likely than not that there is full recoverability of the receivables. However, the receivables are still subject to credit risk.

In order to reduce the credit risk, the credit worthiness of customers with whom business is conducted on a credit basis as well as the receivables are subject to continuous monitoring. In some instances, credit risks are reduced by appropriate hedging measures such as trade credit insurances. The carrying amount of trade receivables covered by trade credit insurances is & 253 million (2011: & 285 million).

Part of the financial receivables is collateralized with pledged machines and equipment in the amount of \in 8 million (2011: \in 10 million), mortgages in the amount of \in 7 million (2011: \in 0 million), and guarantees.

97

Liquidity risk

The risk that the Consolidated Group itself might be unable to meet its obligations from financial liabilities is considered minimal. The last tranches of the credit lines included and drawn in previous years for securing liquidity were completely paid back in the year under review. As replacement funding and making use of favorable interest rates, an additional credit facility of $\[mathbb{e}$ 1,000 million was contractually agreed with a bank consortium in 2011. As of the balance sheet date, an amount of $\[mathbb{e}$ 400 million was drawn. Payment on the bonded loans of $\[mathbb{e}$ 475 million obtained in the fiscal year 2012 was completely received as of the balance sheet date.

The expected future outflow of funds due to principal and interest payments for liabilities to banks, liabilities from finance leases, and other financial liabilities is contained in the medium-term liquidity planning and is listed under figure 17.

Market price risk from securities

The market price risk is the risk that the fair value of securities decreases.

Securities investments are basically investments in interestbearing securities, shares, and alternative investments. The alternative investments comprise shares in raw material and open real estate funds as well as private equity and relevant investment funds. Diversification will reduce risk, which constitutes the prerequisite for the best possible continuous increase in value.

A sound optimization procedure was used for the generation of the strategic asset allocation to reliably achieve the strategic return targets even if the forecast is incorrect. In this context, besides the investment risk which is measured via the portfolio volatility, the forecasting risk with regard to expected returns is included in modeling the asset allocation. This procedure results in a significantly more diversified portfolio which, even in the case of an overestimation of the long term return potential of the considered asset classes, can achieve the strategic return target.

A body (investment committee) created especially for this purpose is responsible for the final decision on the strategic asset allocation and for monitoring all investment results and risk budgets. The basis for investment decisions by external portfolio managers are the investment guidelines specified by the investor. In formulating these guidelines, the main focus was i.a. on a reliable credit rating of the issuer (rating minimum requirements), an appropriate funds benchmark, high marketability of the securities, a wide spread among industries, as well as a selection of suitable segment currencies to achieve further risk reduction.

The investment committee is informed monthly about trends in current market values and about the performance of the individual asset classes. Performance is evaluated i.a. based on absolute and relative benchmark values, risk indicators, and on-site visits by the portfolio managers.

In addition to qualitative management and controlling instruments for risk minimization, like diversification of investments in different asset classes, systematic selection process of the portfolio managers, risk-based arrangement of investment guidelines, analysis of investment results, and evaluation of changes at the capital markets, mathematical-statistical models are used as quantitative management and controlling instruments, in particular, for reporting. The data validity is ensured by an independent, external data provider. Stress tests and defined risk limits are further management and controlling instruments.

The non-current securities for hedging pension obligations contained in the special fund are classified in three risk categories depending on their volatility. In case of an assumed reduction in the fair values of the securities due to negative financial market data by 20 % for high, 10 % for medium, and 2.5 % for low volatility, the equity of the Consolidated ZF Group would be reduced by € 73 million (2011: € 77 million) without accounting for income taxes. Thereof, € 72 million (2011: € 66 million) would be recognized under equity of the Consolidated ZF Group with no effect on profit or loss, and € 1 million (2011: € 11 million) under other financial results with effect on profit or loss.

Based on the value-at-risk calculation for the special fund, however, it can be assumed that in 95.0 % of the cases with a holding time of twelve months and an average market price volatility of 3.9 % (2011: 4.4 %), the market value reduction will not exceed ϵ 17 million (2011: ϵ 18 million). The calculations were drawn up under the assumption that asset allocation will not change and no additions are made during the fiscal year that would then have to be reallocated. Bilateral market price developments have not been considered for the individual asset classes. The maximum loss limit approved for 2012 was ϵ 29 million (2011: ϵ 33 million).

Foreign currency risk

The foreign currency risk is the risk that the fair values or future cash flows of monetary items are negatively influenced due to exchange rate changes.

Hedging measures for planned foreign currency sales from the volume production business are carried out in the Consolidated ZF Group within the framework of prescribed hedging ranges and within defined maximum limits. The net principle applies to foreign currency hedging, i.e. hedging takes place for the net items from bilateral cash flows.

Individual hedging is carried out for the project business (gross principle).

External foreign currency hedging is carried out mainly via forward exchange options. At the end of the fiscal year 2012, 90 % of the hedging volume was allocated to the US dollar.

As a result of its international orientation, the Consolidated ZF Group does transactions in different currencies. From the viewpoint of the Consolidated Group, the exchange rate fluctuations of the US dollar represent a substantial currency risk, which is being monitored using a value-at-risk analysis.

With no change in relation to the prior year, the valueat-risk in the Consolidated ZF Group is calculated based on a variance-covariance method under the assumption of a confidence level of 84.1 % with a holding period of twelve months.

The maximum risk of loss is calculated taking into account the average exchange rate volatility of the past twelve months in relation to the open US dollar position. The open US dollar position is calculated based on the amount of cash and loans in US dollars at the closing date that are administered by ZF Cash Management and net incoming payments expected to be received in the following twelve months based on current corporate planning, taking into account the hedged amounts. To limit the risk of loss, an upper limit of $\mathfrak E$ 32 million (2011: $\mathfrak E$ 32 million) was agreed upon with the Board of Management. As soon as that limit is exceeded, additional exchange rate hedging measures are taken.

As of the balance sheet date and with a unilateral confidence level of 84.1 %, a potential risk of loss of \in 16 million (2011: \in 20 million) over the subsequent twelve months is not exceeded. The calculation was based on an average exchange rate volatility of 9.2 % (2011: 15.6 %). The method applied does not account for effects from favorable exchange rate changes and assumes a uniform open US dollar position.

Raw material price risk

The raw material price risk is the risk that the acquisition cost from the purchase of production equipment will change.

Derivative financial instruments are used to a minor extent at the Consolidated ZF Group to reduce raw material price risks. The risk from these hedging transactions can be rated as insignificant for the fiscal year. Therefore, a sensitivity analysis for such derivative financial instruments is dispensed with.

Interest rate risk

The interest rate risk is the risk that the fair values or future cash flows of financial instruments will fluctuate due to changes in the market interest rate.

The interest rate risk is hedged on a case-by-case basis.

An increase by 50 (2011: 50) base points in the average interest rate for financial liabilities on a floating rate basis, which are not supported by interest hedging transactions, would influence the net profit or loss before income tax in the amount of ℓ – 2 million (2011: ℓ – 1 million). A decrease by 50 (2011: 50) base points would raise the net profit or loss before income tax by ℓ 2 million (2011: ℓ 1 million).

An increase by 50 (2011: 50) base points of the average interest rate on financial investments would raise the net profit or loss before income tax by $\mathfrak E$ 5 million

(2011: € 5 million). A decrease by 50 (2011: 50) base points would have an effect on the net profit or loss before income tax of € -5 million (2011: € -5 million).

The sensitivity analysis was drawn up under the assumption that the amount of loans from banks and of financial investments as well as the ratio of fixed and variable interest rates will remain at the same level.

Derivative financial instruments

The nominal amounts of the derivative financial instruments used to hedge against foreign currency risk, the interest rate risk, and the raw material price risk correspond to the purchase or sales amounts, or the contract amounts of the hedged items. The nominal amounts, the market values corresponding to the carrying amounts, and their breakdown by maturities are as follows:

in € million	Market values	Cash outflow		
		Total	within a year	1 to 5 years
Dec. 31, 2012				
Foreign currency hedging contracts				
Assets	18	540	278	262
Liabilities	-4	25	25	0
Interest rate swaps				
Assets	0	0	0	0
Liabilities	-2	-2	0	-2
Raw material price hedging				
Assets	0	6	2	4
Liabilities	-1	14	14	0
Dec. 31, 2011				
Foreign currency hedging contracts				
Assets	7	81	69	12
Liabilities	-21	318	190	128
Interest rate swaps				
Assets	0	0	0	0
Liabilities	-2	-2	0	-2
Raw material price hedging				
Assets	0	0	0	0
Liabilities	-4	32	18	14

The market values of the derivative financial instruments based on the nominal amounts do not take into account any contrary value developments on hedged items. Furthermore, they do not necessarily represent the amounts that would be generated in the future under the current market terms.

The hedged cash flows will come into effect between 2013 and 2018. If the prerequisites of hedge accounting are met, market value changes previously recognized with no effect on profit or loss are reclassified in such a way that they affect profit or loss during the same period.

Cash flow hedges are ineffective in the amount of \in 0 million (2011: \in 3 million).

For fair value hedges, changes in value from hedging transactions amount to \in 4 million (2011: \in 4 million) as well as changes in value from underlying transactions of \in 4 million (2011: \in 4 million).

Carrying amounts of the financial instruments by categories

in € million	Dec. 31, 2012	Dec. 31, 2011
Assets		
Cash	1,057	826
Loans and receivables	2,567	2,578
Available-for-sale financial assets	835	829
Financial assets at fair value through profit or loss	62	109
Derivative financial instruments (hedge accounting) *	18	7
	4,539	4,349
Liabilities		
Financial liabilities at amortized cost	2,901	2,637
Liabilities from finance leases *	14	15
Derivative financial instruments (hedge accounting) *	7	27
	2,922	2,679

^{*} No IAS 39 measurement categories

Fair values

The following table shows the carrying amounts and the fair values of the financial instruments recognized at amortized cost:

in € million	Dec. 31, 2012		Dec. 31, 2011	
	Carrying amount	Fair value	Carrying amount	Fair value
Assets				
Cash	1,057	1,057	826	826
Loans and receivables				
Financial receivables	293	293	271	271
Trade receivables	2,274	2,274	2,307	2,307
Available-for-sale financial assets				
Investments in participations	72	72	139	139
	3,696	3,696	3,543	3,543
Liabilities				
Financial liabilities at amortized cost				
Liabilities to banks	1,122	1,122	967	967
Other financial liabilities	32	32	49	49
Trade payables	1,747	1,747	1,621	1,621
Liabilities from finance leases *	14	13	15	14
	2,915	2,914	2,652	2,651

^{*} No IAS 39 measurement categories

Due to short maturities, the carrying amounts of the current financial instruments recognized at cost approximate the fair values.

Investments in participations for which fair values cannot be reliably determined are recognized at cost.

Non-current financial assets and liabilities are recognized at the settlement amount which corresponds to the fair value based on the market-oriented interest rates.

Financial liabilities from finance lease contracts are recognized considering the contractually agreed interest rate. The fair value is determined according to the standard market interest rate.

The following table shows the financial instruments recognized at fair value:

in € million	Dec. 31, 2012	Dec. 31, 2011
Assets		
Available-for-sale financial assets		
Securities	757	683
Investments in participations	6	7
Financial assets at fair value through profit or loss		
Securities	62	109
Derivative financial instruments (hedge accounting) *	18	7
	843	806
Liabilities		
Derivative financial instruments (hedge accounting) *	7	27

^{*} No IAS 39 measurement categories

Based on the input parameters drawn on for the valuation, the financial instruments recognized at fair value are allocated to the three levels of the fair value hierarchy in accordance with IFRS 7.27A. Level 1 covers those financial instruments for which prices for identical assets and liabilities quoted on active markets are available. Allocation to level 2 occurs if input parameters are drawn on for valuating the financial instruments that are directly (e.g. prices) or indirectly (e.g. derived from prices) observable on the market. In level 3, financial instruments are accounted for whose valuation is based on information that is not observable on the market.

The following table shows the allocation of the financial instruments recognized at fair value to the three levels of the fair value hierarchy:

in € million	Dec. 31, 2012			
	Level 1	Level 2	Level 3	Total
Assets				
Securities	526	279	14	819
Investments in participations	6	0	0	6
Derivative financial instruments	0	18	0	18
	532	297	14	843
Liabilities				
Derivative financial instruments	0	7	0	7

in € million	Dec. 31, 2011			
	Level 1	Level 2	Level 3	Total
Assets				
Securities	656	86	50	792
Investments in participations	7	0	0	7
Derivative financial instruments	0	7	0	7
	663	93	50	806
Liabilities				
Derivative financial instruments	0	27	0	27

For level 1 securities, the fair value is recognized as the quoted price on an active market. Level 2 securities involve non-listed investment funds that have invested in publicly listed securities. For real estate funds, the continued ability for redemption on an active market is contractually ensured. To this end, the already made sales verified the market share prices that had been evaluated by an external expert. This confirmed the reclassification from level 3 to level 2 compared to the previous year. These securities are valuated based on the values of the fund shares, determined via the funds' net asset values, that are called up via price service agencies. The level 3 securities involve interests in private equity funds. These investment umbrella funds hold shares in non-listed companies whose market values are determined on the basis of current available information from the funds' managers.

Investments in participations which are traded in an active market are recognized at market values.

Fair values for the "plain vanilla products" registered in the derivative financial instruments that hedge against foreign currency rate, interest rate, and raw material price risks are determined on the basis of fixed prices quoted on approved stock exchanges (foreign currency exchange rates, interest rates, and raw material price indexes) discounted for the remaining term. The following table illustrates the development of securities assigned to level 3 of the fair value hierarchy:

in € million	2012	2011
Date: Jan. 1	50	32
Fair value changes – recognized without effect on profit or loss	-1	4
Dividends	0	-2
Other gains/losses	1	0
Purchases	1	16
Sales	-8	0
Reclassification from level 3 to level 2	-29	0
Date: Dec. 31	14	50

Other gains and losses are recorded in other financial income and financial expenses.

A significant change of the underlying future cash flows and the interest rate, which implies a change of the discount factor, would influence the market values of these securities.

Net gains and losses by measurement categories

in € million	Interest	Impairments	Other net gains and losses	Total net gains and losses
2012				
Cash	18	0	0	18
Loans and receivables	5	-20	1	-14
Available-for-sale financial assets				
recognized at fair value	12	0	51	63
recognized at cost	0	-6	10	4
Financial assets at fair value through profit or loss	1	0	6	7
Financial liabilities at amortized cost	-52	0	-11	-63
2011				
Cash	25	0	0	25
Loans and receivables	12	-19	39	32
Available-for-sale financial assets				
recognized at fair value	11	0	-20	-9
recognized at cost	0	0	-3	-3
Financial assets at fair value through profit or loss	1	0	-5	-4
Financial liabilities at amortized costs	-53	0	-3	-56

Other net gains and losses related to "loans and receivables" primarily contain exchange rate gains and losses from foreign currency receivables as well as income derived from reversals of impairments on trade receivables.

The other net gains and losses from the "available-forsale financial assets (recognized at fair value)" measurement category are the balance of the realized gains and losses from the disposal of such assets, reduced by the unrealized changes recognized in the equity in the prior year and by the unrealized gains or losses of existing assets, which were recognized in equity during the ongoing fiscal year. Furthermore, this also contains exchange rate gains and losses.

The other net gains and losses in the "available-for-sale financial assets (recognized at cost)" measurement category essentially include the income and losses from the disposal of participations as well as dividend income from participations.

The other net gains and losses of the "financial assets recognized at fair value through profit or loss" measurement category include, in particular, the unrealized fair value gains from securities in this category as well as exchange rate gains and losses.

The other net gains and losses from the "financial liabilities at amortized cost" measurement category primarily contain all exchange rate gains and losses from foreign currency liabilities as well as income from derecognized liabilities.

29 Government grants

In the fiscal year 2012, \in 42 million (2011: \in 35 million) in government grants was received. They were divided as follows:

in € million	2012	2011
Investment grants	25	14
Expense subsidies	17	18
Reversal of accrued interest	0	3

Investment grants were basically received for investments at various locations in China, Germany, Hungary, as well as North America and Australia.

Expense subsidies mainly comprise reimbursements from pre-retirement part-time work and research subsidies.

The interest advantage from received non-interest-bearing or low-interest loans from the government is deferred and broken down over the duration of the loan contract.

30 Related party transactions

In accordance with IAS 24, persons or companies that control or are controlled by the Consolidated ZF Group have to be disclosed to the extent that they are not already included in the consolidated financial statements of ZF Friedrichshafen AG as a consolidated company. Here, control is exercised if a shareholder holds more than half of the voting rights or is able, by virtue of terms in the by-laws or contractual agreements, to govern management's financial and operating policies. In addition, the disclosure obligations under IAS 24 extend to transactions with associates and transactions with persons who exercise a significant influence over the financial and operating policies, including close members of the family or interposed companies. A significant influence on the financial and operating policies of the Consolidated ZF Group can be based on a shareholding of 20 % or more in ZF Friedrichshafen AG, a seat on ZF Friedrichshafen AG's Board of Management or Supervisory Board, or another key position in management.

Accordingly, the related parties of ZF Friedrichshafen AG include enterprises in which ZF Friedrichshafen AG holds at least 20 % of the shares, the Zeppelin Foundation as a special fund of the City of Friedrichshafen, the Dr. Jürgen and Irmgard Ulderup Foundation, as well as the Luftschiffbau Zeppelin GmbH, and its subsidiaries.

The transactions of the Consolidated Group companies with related companies are without exception attributable to the ordinary business activities of the respective participating companies. Moreover, the companies of the Consolidated ZF Group have not carried out any reportable transactions whatsoever with members of the Board of Management or the Supervisory Board of ZF Friedrichshafen AG and other members of management in key positions, or with companies in whose management or supervisory bodies these persons are represented. This also applies to close family members of this group of persons.

Joint ventures

The joint venture ZF Lenksysteme GmbH, Schwäbisch Gmünd (Germany), and its subsidiaries are included in the consolidated financial statements of ZF Friedrichshafen AG with an investment rate of 50 %. Consequently, the below figures resulting from the joint venture are included in the consolidated financial statements of ZF Friedrichshafen AG as follows:

in € million	Dec. 31, 2012	Dec. 31, 2011
Consolidated income statement		
Income	2,011	1,809
Expenses	1,955	1,736
Consolidated balance sheet		
Current assets	701	632
Non-current assets	507	398
Current liabilities	449	412
Non-current liabilities	395	277

As of December 31, 2012, the receivables from the joint venture are \in 13 million (2011: \in 12 million) and liabilities are \in 10 million (2011: \in 10 million). Deliveries and services generated by the Consolidated ZF Group for the current fiscal year come to \in 70 million (2011: \in 69 million). The value of the purchased goods and other services by the Consolidated ZF Group for the current fiscal year is \in 25 million (2011: \in 25 million).

Associates

Deliveries and services generated by the Consolidated Group to associates:

in € million	2012	2011
Sale of goods	3	0
Services	1	0
	4	0

Deliveries and services purchased by the Consolidated Group from associates:

in € million	2012	2011
Purchase of goods	1	8

As of December 31, 2012, the receivables from the associates are \in 11 million (2011: \in 10 million) and liabilities are \in 2 million (2011: \in 3 million).

Participations

Deliveries and services generated by the Consolidated Group to participations:

in € million	2012	2011
Sale of goods	134	163
Services	7	8
Interest	0	1
Other services	1	1
	142	173

Deliveries and services purchased by the Consolidated Group from participations:

in € million	2012	2011
Purchase of goods	11	26
Services	33	38
Other services	1	1
	45	65

As of December 31, 2012, receivables from participations are \in 42 million (2011: \in 93 million) and liabilities are \in 58 million (2011: \in 47 million).

ZF Friedrichshafen AG has assumed guarantees for liabilities from participations amounting to \in 34 million (2011: \in 15 million).

Other related companies

Transactions exceeding the bounds of ordinary business activities as of the balance sheet date include a loan of € 10 million (2011: € 11 million) by ZF Friedrichshafen AG to Internationale Bodensee-Messe Friedrichshafen GmbH, Friedrichshafen (Germany). An interest rate of 4.0 % p.a. (2011: 4.0 %) is incurred for this loan.

Board of Management and Supervisory Board compensation

The total emoluments of the active members of the Board of Management for the fiscal year 2012 amount to \in 10.2 million (2011: \in 11.7 million). Payments for pensions rights acquired in the ongoing fiscal year for the active members of the Board of Management total \in 1.2 million (2011: \in 0.7 million). The claim to contingent other long-term benefits amounts to \in 5.3 million (2011: \in 0 million).

The emoluments of former members of the Board of Management and their surviving dependents amount to \in 3.5 million (2011: \in 2.8 million). The pension provisions for former members of the Board of Management and their surviving dependents amount to \in 36.7 million (2011: \in 28.1 million).

The emoluments of the Supervisory Board for the fiscal year 2012 amount to \in 1.3 million (2011: \in 0.9 million).

32 Personnel

The average number of employees was 73,867 (2011: 68,164), of whom 37,201 were direct employees (2011: 35,315) and 36,666 were indirect employees (2011: 32,849). These figures include the 6,306 (2011: 5,893) employees of ZF Lenksysteme GmbH and its subsidiaries, which corresponds to the ZF share of 50 %. Of those, 3,263 are direct employees (2011: 3,161) and 3,043 are indirect employees (2011: 2,732). At the end of the year, the Consolidated ZF Group had 74,775 employees (2011: 71,488). Direct employees are employees whose activities depend on the production volume and can be allocated directly to the products.

33 Appointed auditor fees

Fees of the Consolidated Group's auditing firm, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, recorded in the consolidated income statement amount to \in 2 million for auditing services. The total Consolidated Groupwide fees of Ernst & Young amount to \in 6 million for auditing services, \in 1 million for tax consulting services, and \in 1 million for other consulting services. Apart from Ernst & Young, other auditing companies work for the Consolidated Group.

34 Shareholders

93.8 % of the shares of ZF Friedrichshafen AG are held by Zeppelin Foundation, Friedrichshafen (Germany) and 6.2 % by Dr. Jürgen and Irmgard Ulderup Foundation, Lemförde (Germany).

35 Corporate Headquarters

ZF Friedrichshafen AG is headquartered in 88046 Friedrichshafen (Germany), Graf-von-Soden-Platz 1.

36 Listing of the shares held as of Dec. 31, 2012

Consolidated subsidiaries

Domestic	Share in capital
GAT – Gesellschaft für Antriebstechnik mbH, Alsdorf	100.0 %
ZF Gusstechnologie GmbH, Munich	100.0 % 1) 2)
ZF Luftfahrttechnik GmbH, Kassel	100.0 % 1) 2)
ZF Sachs Race Engineering GmbH, Schweinfurt	100.0 % 1) 2)

Foreign	Share in capital
Compagnie Financière de ZF S.A.S., Andrézieux-Bouthéon, France	100.0 %
Hansen Drives Ltd., Hong Kong, China	100.0 % ³⁾
Hansen Drives Pte. Ltd., Singapore, Singapore	100.0 % 3)
Liuzhou ZF Machinery Co. Ltd., Liuzhou, China	51.0 % 4)
Midwest Lemförder Ltd., Darlaston, Great Britain	100.0 %
000 ZF Kama, Naberezhnye Chelny, Russia	51.0 % ⁵⁾
Pt. ZF Marine, Batam, Indonesia	100.0 % 6)
Sachs Automotive Components & Systems (Shanghai) Co. Ltd., Shanghai, China	100.0 % 4)
Shanghai Sachs Huizhong Shock Absorber Co. Ltd., Shanghai, China	60.0 % 4)
ZF Ansa Lemförder S.L.U., Burgos, Spain	100.0 % 7)
ZF Asia Pacific Pte. Ltd., Singapore, Singapore	100.0 %
ZF Auto Industrial (Pty.) Ltd., Kempton Park, South Africa	100.0 % 8)
ZF Auto Industrial Brake and Chassis Investment Holdings (Pty.) Ltd., Kempton Park, South Africa	100.0 % 9)
ZF Boge Elastmetall (Shanghai) Co. Ltd., Shanghai, China	100.0 % 4)
ZF Boge Elastmetall Australia Pty. Ltd., Dingley, Australia	100.0 % 10)
ZF Boge Elastmetall España S.A.U., Barcelona, Spain	100.0 % 7)
ZF Boge Elastmetall France S.A., Fontenay-Trésigny, France	99.99 % 11)
ZF Boge Elastmetall LLC, Hebron, Kentucky, USA	100.0 % 12)
ZF Boge Elastmetall Slovakia a.s., Trnava, Slovakia	100.0 %
ZF Bouthéon S.A., Andrézieux-Bouthéon, France	100.0 % 11)
ZF (China) Investment Co. Ltd., Shanghai, China	100.0 %
ZF Chassis Components Toluca S.A. de C.V., Toluca, Mexico	100.0 % 13) 14)
ZF Chassis Systems (Beijing) Co. Ltd., Beijing, China	100.0 % 4)
ZF Chassis Systems Sdn. Bhd., Penang, Malaysia	100.0 % 15)
ZF Chassistech Commercial Vehicles (Shanghai) Co. Ltd., Shanghai, China	100.0 % 4)
ZF do Brasil Ltda., Sorocaba-SP, Brazil	100.0 % 16)
ZF Dongfeng Shock Absorber Shiyan Co. Ltd., Shiyan, China	51.0 % ⁴⁾
ZF Drivetech (Hangzhou) Co. Ltd., Hangzhou, China	100.0 % 4)
ZF Drivetech (Suzhou) Co. Ltd., Suzhou, China	100.0 % 4)
ZF Electronic Systems Juarez S.A. de. C.V., Juárez, Mexiko	100.0 % 17)
ZF Electronics Asia Ltd., Hong Kong, China	100.0 % 15)
ZF Electronics Corporation, Pleasant Prairie, Wisconsin, USA	100.0 % 12)
ZF Electronics Klášterec s.r.o., Klášterec, Czech Republic	100.0 %
ZF Electronics (Zhuhai) Co. Ltd., Zhuhai, China	100.0 % 4)

Foreign	Share in capital
ZF Engineering s.r.o., Pilsen, Czech Republic	100.0 % 5)
ZF Faster Propulsion Systems Co. Ltd., Kaohsiung Hsien, Taiwan	100.0 % 18)
ZF FAWER Chassis Technology (Changchun) Co. Ltd., Changchun, China	51.0 % 4) 19)
ZF Fonderie Lorraine S.A.S., Grosbliederstroff, France	100.0 % 11)
ZF Friedrichshafen Holding España S.L., Sant Quirze del Vallès, Spain	100.0 %
ZF Holding Austria Ges.m.b.H., Steyr, Austria	100.0 %
ZF Holdings Australia Pty. Ltd., Melbourne, Australia	100.0 % 15)
ZF Hubco Forgings South Africa (Pty.) Ltd., Kempton Park, South Africa	100.0 % 8)
ZF Hungária Kft., Eger, Hungary	100.0 %
ZF India Pvt. Ltd., Pune, India	100.0 %
ZF Industries LLC, Gainesville, Georgia, USA	100.0 % 12)
ZF Inmobilaria S.A. de C.V., Ramos Arizpe, Mexico	100.0 % 20)
ZF International B.V., Delfgauw, Netherlands	100.0 %
ZF Italia Holding S.p.A., Caselle di Selvazzano, Italy	100.0 %
ZF Italia S.r.I., Assago, Italy	100.0 % 21)
ZF Japan Co. Ltd., Tokyo, Japan	100.0 % 15)
ZF Lemförder Achssysteme Ges.m.b.H, Graz, Austria	100.0 % 5) 19)
ZF Lemförder AKS Modülleri Sanayi ve Ticaret A.S., Izmir, Turkey	100.0 %
ZF Lemforder Australia Pty. Ltd., Edinburgh, Australia	100.0 % 10) 19)
ZF Lemförder Automotive Systems (Shenyang) Co. Ltd., Shenyang, China	100.0 % 4) 19)
ZF Lemförder Chassis Technology Korea Co. Ltd., Seoul, South Korea	60.19 % ¹⁹⁾
ZF Lemforder Chicago LLC, Chicago, Illinois, USA	100.0 % 19) 22)
ZF Lemforder LLC, Newton, North Carolina, USA	100.0 % 12)
ZF Lemförder Métal France S.A., Florange, France	100.0 % 11)
ZF Lemförder Shanghai Chassistech Co. Ltd., Shanghai, China	76.0 % 4)
ZF Lemförder South Africa (Pty.) Ltd., Rosslyn, South Africa	100.0 % 19)
ZF Lemförder Sverige AB, Trollhättan, Sweden	100.0 %

¹⁾ The company lays claim to exemption from disclosing the annual financial statements according to § 264, section 3, HGB.

²⁾ There is a profit and loss transfer agreement.

³⁾ held by ZF Wind Power Antwerpen N.V.

⁴⁾ held by ZF (China) Investment Co., Ltd.

⁵⁾ held by ZF Holding Austria Ges.m.b.H.

^{6) 99 %} interest held by ZF Asia Pacific Pte. Ltd. and 1 % held by ZF Marine Singapore Pte. Ltd.

⁷⁾ held by ZF Friedrichshafen Holding España S.L.

⁸⁾ held by ZF Auto Industrial Brake and Chassis Investment Holdings (Pty.) Ltd.

⁹⁾ held by ZF Lemförder South Africa (Pty.) Ltd.

¹⁰⁾ held by ZF Holdings Australia Pty. Ltd.

¹¹⁾ held by Compagnie Financière de ZF S.A.S.

¹²⁾ held by ZF North America Inc.

¹³⁾ consolidated statements with a subsidiary (Servicios ZF Lemförder Sistemas Automotrices S.A. de C.V.)

¹⁴⁾ held by ZF Mexico S.A. de C.V.

¹⁵⁾ held by ZF Asia Pacific Pte. Ltd.

¹⁶⁾ consolidated statements with a subsidiary (Mercant Comercio e Servicos Ltda.)

^{17) 99.98 %} interest held by ZF Mexico S.A. de C.V. and 0.02 % held by ZF International B.V.

¹⁸⁾ held by ZF Padova S.r.l.

¹⁹⁾ Exemption claimed in accordance with § 286 section 3, HGB.

^{20) 99.9985 %} interest held by ZF Mexico S.A. de C.V. and 0.0015 % held by ZF International B.V.

²¹⁾ held by ZF Italia Holding S.p.A.

²²⁾ held by ZF Lemförder LLC

Foreign	Share in capital
ZF Lemforder (Thailand) Co. Ltd., Rayong, Thailand	100.0 % 15)
ZF Lemförder TLM Dis Ticaret L.S., Izmir, Turkey	100.0 % 23)
ZF Lemförder TVA S.A., Ermua, Spain	100.0 % 7)
ZF Lemförder UK Ltd., Darlaston, Great Britain	100.0 % 24)
ZF Levice s.r.o., Levice, Slovakia	100.0 % 5)
ZF Marine Eurasia Makina Ticaret Limited Şirketi, Istanbul, Turkey	100.0 % ²⁵⁾
ZF Marine Krimpen B.V., Krimpen aan de Lek, Netherlands	100.0 % ²⁶⁾
ZF Marine LLC, Miramar, Florida, USA	100.0 % 12)
ZF Marine Middle East LLC, Sharjah, United Arab Emirates	100.0 % 18)
ZF Marine Singapore Pte. Ltd., Singapore, Singapore	100.0 % 15)
ZF Marine (Zhuhai) Co. Ltd., Zhuhai, China	100.0 % 4)
ZF Marysville LLC, Marysville, Michigan, USA	100.0 % 12)
ZF Mexico S.A. de C.V., El Salto, Mexico	100.0 % ²⁷⁾
ZF North America Inc., Northville, Michigan, USA	100.0 %
ZF Österreich Ges.m.b.H., Vienna, Austria	100.0 % 5)
ZF Padova S.r.I., Caselle di Selvazzano, Italy	100.0 % 21)
ZF Philippines Inc., Taguig City, Philippines	100.0 % 15)
ZF Powertrain Modules Saltillo S.A. de C.V., Ramos Arizpe, Mexico	100.0 % ²⁸⁾
ZF Sachs Argentina S.A., San Francisco, Argentina	100.0 %
ZF Sachs Automotive of America Inc., Northville, Michigan, USA	100.0 % 12) 29)
ZF Sachs España S.A., Bilbao, Spain	100.0 % 7)
ZF Sachs Italia S.p.A., Villar Perosa, Italy	100.0 % 21)
ZF Sachs Korea Co. Ltd., Changwon, South Korea	91.45 %
ZF Sachs Slovakia a.s., Trnava, Slovakia	100.0 %
ZF Sachs South Africa (Pty.) Ltd., Alberton, South Africa	100.0 %
ZF Sachs Süspansiyon Sistemleri Sanayi ve Ticaret A.S., Gebze, Turkey	100.0 %
ZF Sachs Suspension France S.A.S., Mouy, France	100.0 % 11)
ZF Suspension Technology Guadalajara S.A. de C.V., El Salto, Mexico	100.0 % 30)
ZF Sales & Service (Malaysia) Sdn. Bhd., Kuala Lumpur, Malaysia	100.0 % 15)
ZF Services Australia Pty. Ltd., Sydney, Australia	100.0 % 10)
ZF Services (China) Co. Ltd., Shanghai, China	100.0 % 4)
ZF Services España S.A.U., Sant Cugat del Vallés, Spain	100.0 % 7)
ZF Services France S.A.S., Antony (Paris), France	100.0 % 11)
ZF Services Korea Co. Ltd., Seoul, South Korea	100.0 %
ZF Services Nederland B.V., Delfgauw, Netherlands	100.0 %
ZF Services North America LLC, Chicago, Illinois, USA	100.0 % 12)
ZF Services S.A. de C.V., Guadalajara, Mexico	100.0 % 31)
ZF Services Schweiz AG, Volketswil, Switzerland	100.0 %
ZF Services South Africa (Pty.) Ltd., Johannesburg, South Africa	100.0 %
ZF Services Türk Sanayi ve Ticaret A.S., Istanbul, Turkey	100.0 %
ZF Services UK Ltd., Lenton-Nottingham, Great Britain	100.0 %
ZF Stankov s.r.o., Pilsen, Czech Republic	100.0 % 32)
ZF Steyr Ges.m.b.H., Steyr, Austria	100.0 % 5)
ZF Steyr Präzisionstechnik Ges.m.b.H, Steyr, Austria	100.0 % 5)
ZF Technologies LLC, Northville, Michigan, USA	100.0 % 12)

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Foreign	Share in capital
ZF Thailand Ltd., Bangkok, Thailand	100.0 % 15)
ZF Trading UK Ltd., Crick, Great Britain	100.0 %
ZF Transmissions Gray Court LLC, Gray Court, South Carolina, USA	100.0 % 12)
ZF Transmissions Shanghai Co. Ltd., Shanghai, China	51.0 % 4) 19)
ZF Wind Power Antwerpen N.V., Kontich, Belgium	100.0 % ²⁶⁾
ZF Wind Power Coimbatore Ltd., Coimbatore, India	100.0 % 34)
ZF Wind Power LLC, Gainesville, Georgia, USA	100.0 % 12)
ZF Wind Power (Tianjin) Co. Ltd., Tianjin, China	100.0 % 33)

Proportionately consolidated joint ventures

Domestic	Share in capital
ZF Lenksysteme GmbH, Schwäbisch Gmünd	50.0 %
ZF Lenksysteme Nacam GmbH, Bremen	100.0 % 1) 35)

Foreign	Share in capital
ZF Commercial Vehicle Steering (Shandong) Co. Ltd., Jinan, China	100.0 % 35)
ZF Lenksysteme Hungária Kft., Eger, Hungary	100.0 % 35)
ZF Lenksysteme India Pvt. Ltd., Pune, India	100.0 % 35)
ZF Lenksysteme (Shanghai) Co. Ltd., Minhang, China	100.0 % 35)
ZF Shanghai Steering Systems Co. Ltd., Shanghai, China	51.0 % ³⁵⁾
ZF Shanghai Steering Systems (Yantai) Co. Ltd., Yantai, China	100.0 % 36)
ZF Sistemas de Direção Ltda., Sorocaba-SP, Brazil	100.0 % 35)
ZF Steering Jincheng (Nanjing) Co. Ltd., Nanjing, China	70.0 % 35)
ZF Steering Systems LLC, Florence, Kentucky, USA	100.0 % 35)
ZF Steering (Malaysia) Sdn. Bhd., Penang, Malaysia	100.0 % 35)
ZF Systèmes de Direction France S.A.S., Marignier, France	100.0 % 35)
ZF Systèmes de Direction Nacam S.A.S., Vendôme, France	100.0 % 35)

At-equity consolidated companies

Foreign	Share in capital
Shanghai Sachs Powertrain Component Systems Co. Ltd., Shanghai, China	50.0 % ⁴⁾
ZF PWK Mécacentre S.A.S., St. Etienne, France	50.0 % ¹¹⁾

^{23) 99 %} interest held by ZF Lemförder AKS Modülleri Sanayi ve Ticaret A.S. and 1 % held by ZF Friedrichshafen AG

²⁴⁾ held by Midwest Lemförder Ltd.

 $^{^{25)}}$ 74 % held by ZF International B.V. and 26 % held by ZF Marine Krimpen B.V.

²⁶⁾ held by ZF International B.V.

^{27) 99.99994 %} interest held by ZF International B.V. and 0.00006 % by ZF Friedrichshafen AG

^{28) 99.9998 %} interest held by ZF Mexico S.A. de C.V. and 0.0002 % held by ZF International B.V.

²⁹⁾ consolidated statements with a subsidiary (Sachs Automotive Corp.)

^{30) 99.99951 %} interest held by ZF Mexico S.A. de C.V. and 0.00049 % held by ZF International B.V.

^{31) 99.9987 %} interest held by ZF Mexico S.A. de C.V. and 0.0013 % held by ZF International B.V.
32) 99 % interest held by ZF Holding Austria Ges.m.b.H. and 1% held by ZF Steyr Präzisionstechnik Ges.m.b.H.

³³⁾ held by Hansen Drives Ltd., Hong Kong

³⁴⁾ held by Hansen Drives Pte.Ltd.

³⁵⁾ held by ZF Lenksysteme GmbH 36) held by ZF Shanghai Steering Systems Co. Ltd.

Company bodies

The members of the Supervisory Board and the Board of Management are listed on page 9.

Friedrichshafen, February 25, 2013

ZF Friedrichshafen AG The Board of Management

Dr. Stefan Sommer

Rolf Lutz

Dr. Konstantin Sauer

. Reinhard Buhl

Dr. Peter Ottenbruch

Dr. Gerhard Wagner

Wilhelm Rehm

Audit Opinion*

We have audited the consolidated financial statements prepared by ZF Friedrichshafen AG, Friedrichshafen, comprising the income statement, the statement of comprehensive income, the statement of financial position, the statement of cash flows, the statement of changes in equity, and the notes to the consolidated financial statements, together with the group management report for the fiscal year from January 1 to December 31, 2012. The preparation of the consolidated financial statements and the group management report in accordance with IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to Sec. 315a (1) HGB ("Handelsgesetzbuch": "German Commercial Code") are the responsibility of the parent company's management. Our responsibility is to express an opinion on the consolidated financial statements and on the group management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with Sec. 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer e.V. (IDW)(Institute of Public Auditors in Germany). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements and the group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements comply with IFRSs as adopted by the EU, the additional requirements of German commercial law pursuant to Sec. 315a (1) HGB and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The group management report is consistent with the consolidated financial statements and as a whole provides a suitable view of the Group's position and suitably presents the opportunities and risks of future development.

Stuttgart, March 8, 2013

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft

Graf Waldersee Bürkle

Wirtschaftsprüfer Wirtschaftsprüfer

Translation of Audit Opinion issued on the consolidated financial statements in German language.

5-Year Developments

Result structure, Consolidated ZF Group

114

in € million	2008	2009	2010	2011	2012
Sales development	12,501	9,371	12,907	15,509	17,366
Change from prior year in %	- 1.2	-25.0	37.7	20.2	12.0
Employees at year's end 1)	63,288	60,945	64,600	71,488	74,775
Employees (annual average) 1)	61,156	61,709	62,558	68,164	73,867
Cost of materials	7,042	5,302	7,183	8,948	10,450
in % of sales	56.3	56.6	55.7	57.7	60.2
Personnel expenses	3,081	2,875	3,279	3,682	4,040
in % of sales	24.6	30.7	25.4	23.7	23.3
R&D expenses in % of sales	5.6	7.1	5.0	4.9	5.0
Capital expenditure	939	516	582	1,058	1,192
in % of sales	7.5	5.5	4.5	6.8	6.9
Depreciation on property, plant, and equipment	507	585	551	616	757
in % of sales	4.1	6.2	4.3	4.0	4.4
in % of capital expenditure	54.0	113.4	94.7	58.2	63.5
Free cash flow 2)	-351	-178	-174	-112	218
in % of sales	-2.8	-1.9	-1.3	-0.7	1.3
Operating profit or loss	768	-361	680	850	687
in % of sales	6.1	-3.9	5.3	5.5	4.0
Net profit or loss before income tax	654	-467	548	715	569
in % of sales	5.2	-5.0	4.2	4.6	3.3
Net profit or loss after tax	434	-421	443	540	346
in % of sales	3.5	-4.5	3.4	3.5	2.0
Dividends paid					
Normal dividend	21.0	21.0	21.0	30.0	30.0
in % of subscribed capital	7.0	7.0	7.0	10.0	10.0
Extra dividend	3.0	_	3.0	_	_

Direct and indirect employees without temporary workers, apprentices, and holiday workers; starting from 2009, changed calculation method to determine number of part-time employees.
 Cash flow from operating activities less cash flow from investing activities.

Balance sheet structure, Consolidated ZF Group

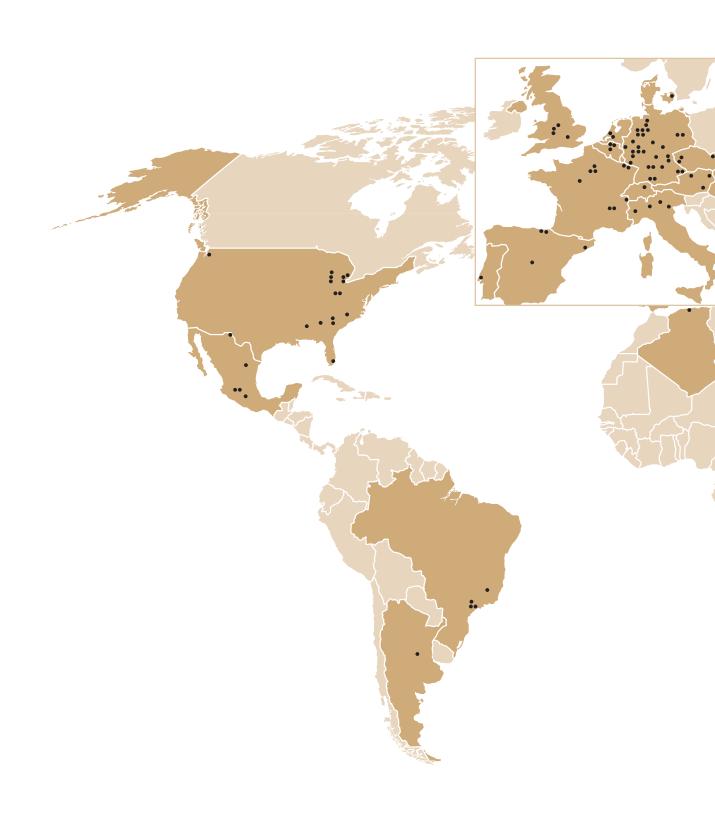
in € million	2008	2009	2010	2011	2012
Cash	914	972	974	826	1,057
Trade receivables	1,442	1,433	1,909	2,307	2,274
Inventories	1,426	1,170	1,430	1,745	1,747
Other current assets	253	254	712	402	343
Non-current assets	4,202	4,361	4,770	5,887	6,471
Liabilities to banks	248	507	681	967	1,122
Trade payables	964	862	1,358	1,621	1,747
Provisions for pensions	1,816	1,837	1,889	2,211	2,822
Other liabilities	1,734	1,863	2,195	2,268	2,199
Subscribed capital	300	300	300	300	300
Reserves	2,896	2,700	3,045	3,582	3,395
Minority interests	83	100	127	155	167
Net profit for the year	196	21	200	63	140
Equity	3,475	3,121	3,672	4,100	4,002
in % of balance sheet total	42	38	37	37	34
Balance sheet total	8,237	8,190	9,795	11,167	11,892

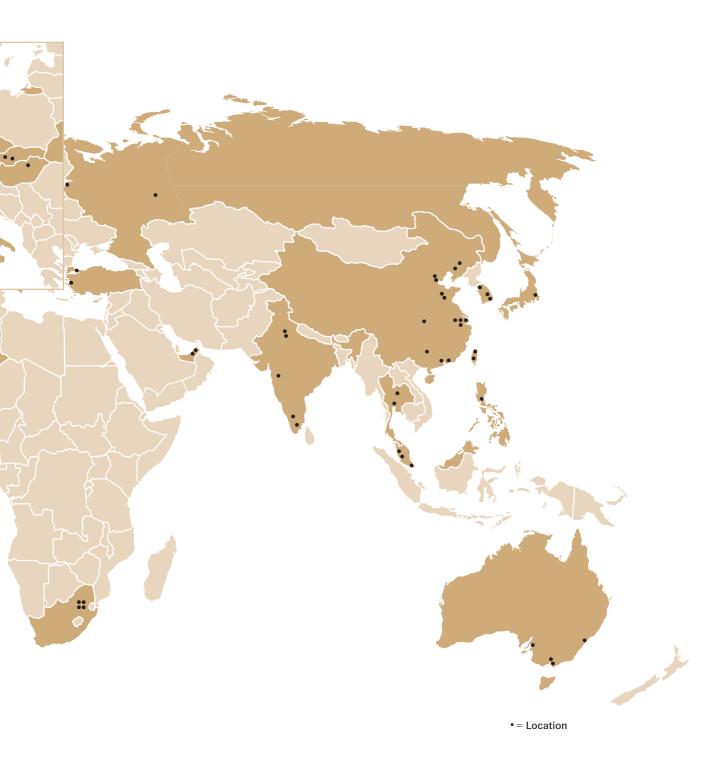
ZF Worldwide

116

Worldwide, the ZF Group has 121 production companies and 8 main development locations in 26 countries. In addition, we have 32 service companies and representative offices as well as more than 650 service partners. This enables ZF to provide a tight network of highly qualified contacts close to international customers at all levels and in all regions.

ZF is consistently expanding its global market presence. Here, established market regions and new markets play very important roles. Particularly activities outside Europe will gain more importance in the future. This applies not only to the established markets in North and South America, but especially to the Asia-Pacific region and the new markets in Eastern Europe and India. In this context, key aspects are market development through adapting products to specific market requirements, and best-cost-country considerations which play a decisive role in production and procurement. ZF supports international expansion activities of established customers while also adding partners from new market regions to its customer portfolio.





The Annual Report is available in English and German; both versions can also be downloaded from the ZF Group website: www.zf.com. On request, we would be delighted to provide further ZF Group information material and additional copies of the Annual Report.

E-mail: infodienst@zf.com

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