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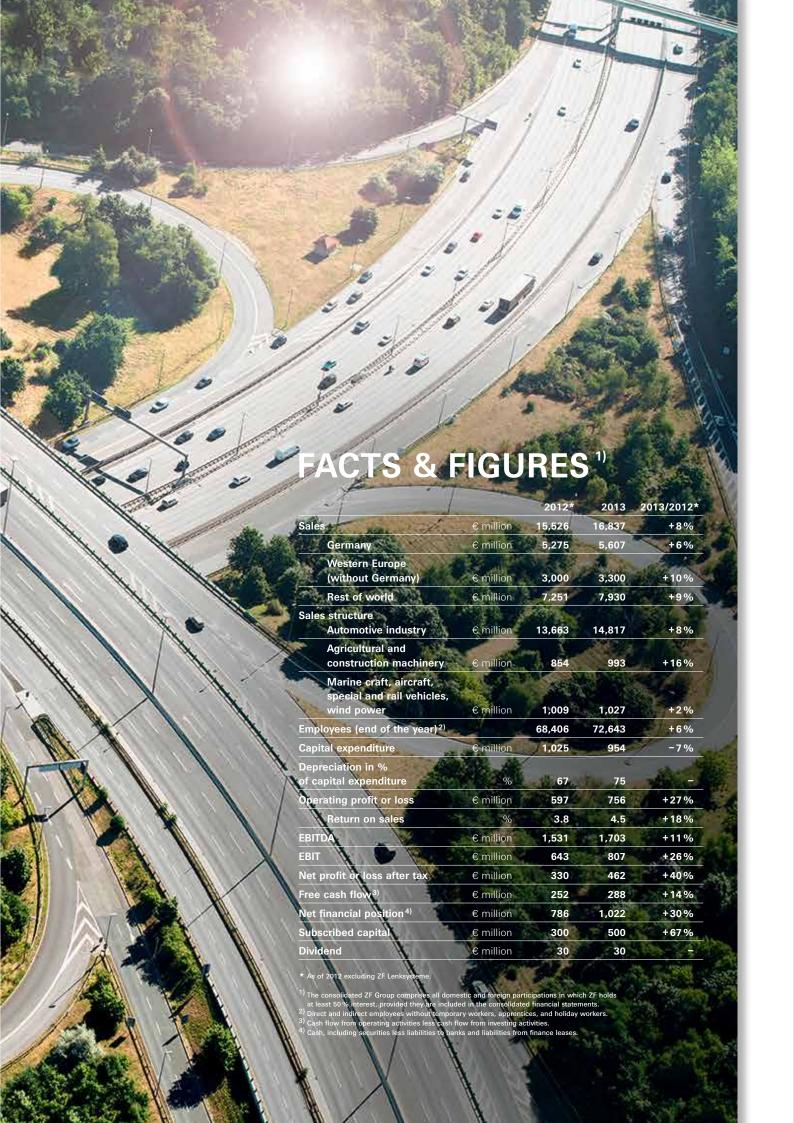
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### **CORPORATE STRUCTURE**

#### Car Powertrain Car Chassis Commercial Vehicle Steering Systems\* Industrial Technology Technology Technology Technology Chassis Systems Truck & Van Driveline Off-Highway Systems Passenger Car Corporate Market Corporate R&D Transmissions Technology Steering Systems Chassis Components Test Systems Commercial Vehicle Manual Transmissions/ Axle & Transmission Corporate Finance, IT, M&A Dual Clutch Rubber & Plastics Systems for Buses & Special Driveline Steering Systems Transmissions Technology Suspension Technology Passenger Car Marine Propulsion Axle Drives CV Chassis Modules Steering Columns Systems Powertrain Modules CV Damper Technology Global Aftermarket Aviation Technology Die Casting Technology CV Powertrain Modules Wind Power Technology **Corporate Production** Corporate Materials Management Corporate Quality Electronic Systems ZF Services

<sup>\*</sup> ZF Lenksysteme GmbH is a joint venture in which ZF Friedrichshafen AG and Robert Bosch GmbH each hold 50 % of the shares.



# € 16.8 billion sales

72,643 employees

122 production companies

650 service partners





Dear Customers and Business Partners, Dear Employees and Readers,

The year under review was a successful one for the ZF Group. On a comparable prior-year level, we were able to increase sales by 8% to € 16,837 million. The number of employees grew by 4,237 to 72,643. German locations accounted for 48% of this increase and international locations for 52%.

The market regions experienced different business trends. While Europe and North America were able to post 8% and 5% growth respectively, sales in South America only increased slightly. The Asia-Pacific region was the growth driver of ZF during the year under review recording an increase of 15%. This worldwide positive development can primarily be attributed to the relentless high demand for automatic passenger car transmissions and axle systems. Although the commercial vehicle business showed a better performance during the second half of 2013, industrial technology sales declined by 9%. This was caused by the downturn in the wind power business which again experienced a weaker development than expected and the weak period in the construction-machinery industry.

At  $\in$  954 million, the ZF Group once again made significant investments in property, plant, and equipment. In North America, volume production of 8-speed and 9-speed automatic transmissions for passenger cars commenced at the new plant in Gray Court, South Carolina (USA). In Mexico, we produce the torque converters as well as the electronic control units for the 9-speed transmission. ZF has established new production locations in China and Malaysia for passenger car axle systems that are testimony to the growth momentum in the region. As a result of the positive global market response to our products, we will continue to make high advance payments also in the upcoming years in order to tap new markets and win new customers for our company.

The increasing volatility in various market segments led to additional costs during 2013 as a result of demand-driven over and underutilization at our locations. In order to address these fluctuations, we are working intensively on new, flexible solutions. This includes working time models as well as utilization of synergies in the Group network at the locations.

An agreement was signed with the Chinese Zhuzhou Times New Material Technology Co., Ltd. company to sell the Rubber & Plastics business unit. As this company is a long-term strategic investor, we consider the takeover to be an opportunity to improve the positioning of these activities in the global market, especially as we are aiming towards a continued close collaboration.

Over the course of the year under review, we intensified the "ZF 2025" strategy process that was launched at the end of 2012. Based upon the analysis of global megatrends, the Board of Management and the Management, in close cooperation with the Supervisory Board, developed joint objectives and guiding principles for the ZF Group's development in the upcoming years. Our strategy is based upon five pillars. For a balanced global market penetration, our company will have to intensify the expansion of our sales and sourcing markets not only in our core European market, but also in the Asia-Pacific, North America, and South America regions. Furthermore, striving for leadership in both technology and costs will play a key role in determining our market success in the future. Profitable diversification includes the establishment and expansion of new competence and market segments, for example in the fields of industrial technology or service. In order to secure our financial independence, we must improve our profitability in all processes. In this manner, we will be able to finance the necessary investments and the future growth from our own income. ZF also needs to position itself as a globally attractive employer in order to take advantage of global market opportunities. We need qualified specialists in all markets, who find optimal working and qualification opportunities at our company.

We see both opportunities and challenges in view of the further development of the ZF Group. The increasing regulatory interventions, especially with regard to  $CO_2$  emissions, are leading to an accelerated technological change towards efficiency and resource conservation. This provides great opportunities to our company with its strong technological position in driveline and chassis technology. At the same time, we will have to face a variety of challenges. In addition to products and services with great benefit and presence on global markets, our customers also expect the highest degree of flexibility and customer focus from ZF. We want to meet these expectations.

I would like to take this opportunity to thank our customers, suppliers, and business partners for placing their trust in our company. We will make every effort to justify this. I would like to thank our employees for their high level of commitment and express my gratitude to the employee representatives for their close cooperation in many areas. I thank all shareholder representatives and the Supervisory Board members who have worked intensively on important corporate issues and actively participated in decision processes in favor of safeguarding ZF's future.

The economic prospects for 2014 are rated as positive in all ZF industries. Against this backdrop, we expect a sales growth for the ZF Group in the high single-digit percentage range for 2014. Investments will reach the same level as in the year under review. In view of the positive business development, we also forecast a slight improvement to the results.

Friedrichshafen, April 2014

Dr. Stefan Sommer Chief Executive Officer





#### REPORT OF THE SUPERVISORY BOARD



The ZF Group can look back at a successful fiscal year 2013. However, development during the course of the year revealed a completely diverse picture. While transactions in the first months of the year constrained business expectations, both sales and results recovered significantly in the fourth quarter in particular, thus leading to positive overall figures for the year.

In the year under review, the Supervisory Board properly and comprehensively conducted the duties assigned to it by law, by-laws, and code of procedure. During the year 2013, the Supervisory Board held four regular meetings and one extraordinary meeting. In addition, it called an advance meeting on April 3, 2013 for a detailed presentation and discussion of the 2012 annual and consolidated financial statements. The constituent meeting of the newly elected Supervisory Board took place on April 23, 2013.

During the regular meetings, the Board of Management informed the members of the Supervisory Board about the situation of the company and all essential, current, and strategically important topics. The focus, among other issues, was on managing the exponential growth of automatic passenger car transmissions with the start-up at the new US plant in Gray Court, South Carolina, and the continuing weakness of the wind power market, which also held down operating results. In addition, the increasingly important topics of corporate protection and information security, especially in the area of IT, were presented in detail.

Discussions continued to focus on the presentation of the "ZF 2025" strategy process initiated by the Board of Management. The Management of the divisions and corporate functions is responsible for further elaborating this strategy. The Supervisory Board supports this process, which has the objective of re-positioning the Group for the long term. It emphasizes the need for close, transparent communication to get the organization up to speed and to promote the necessary understanding across the workforce.

The planned sale of the Rubber & Plastics business unit to the Chinese purchaser took up a large part of numerous meetings. The Supervisory Board attached great importance here to protecting both the interests of the ZF Group as an integral whole and of the employees concerned. After extensive discussions and separate information disclosed at an extraordinary meeting in  $\ddot{U}$   $\dot{U}$   $\dot{U}$ 

The changes initiated during the previous year under review as part of the new Board of Management concept approved by the Supervisory Board – the downscaling of the Board of Management, the merging of the division and corporate function responsibility, and the reduction of the span of control – came to a conclusion with the appointment of the Heads of Division and have already proved their worth. The Supervisory Board agreed to amend the by-laws, code of procedure, and schedule of responsibilities.

In four meetings, the Executive Committee of the Supervisory Board dealt especially with the financial situation of the ZF Group, the process of selling the Rubber & Plastics business unit, the personnel topics of the Board of Management and the Division Management, and the overall HR strategy. The Audit Committee, which held three meetings, focused mainly on the topics of the annual financial statements, the compliance organization, the risk management system, and operational planning. The chairpersons of both committees, Prof. Dr. Behr and Dr. Haase, reported on the activities of their respective committees in the subsequent Supervisory Board meetings.

The strategic and operational planning presented by the Board of Management were discussed intensively. The topics of technology and cost leadership, profitability, and flexibility were singled out as the essential strategic challenges. The volatility of the markets, which increasingly dominates business operations, is forcing the company, for instance, to balance its capacities in order to be able to react flexibly to fluctuations. The Supervisory Board approved the respective planning and will ensure that the measures presented in the noticeably ambitious business plan are rigorously implemented. It will commission the Board of Management to provide regular reports in this regard.

Dr. Peter Ottenbruch resigned from his position on the Board of Management as of March 31, 2013 and became the Chairman of the Board of Directors of ZF Lenksysteme GmbH as of April 1, 2013. Michael Hankel succeeded him as member of the Board of Management as of April 1, 2013. The previous members of the Board of Management Dr. Gerhard Wagner and Reinhard Buhl resigned their positions as of April 30, 2013 as agreed and went into retirement. The Supervisory Board thanks the members who have stepped down for their many years of successful, committed service to the ZF Group. The appointment of Jürgen Holeksa to the Board of Management was extended with a resolution dated July 11, 2013, that of Wilhelm Rehm was extended with a resolution dated December 12, 2013.

New elections for members of the Supervisory Board were held in March and April of 2013. The old composition of the Board met for the last time on April 23, 2013. Prof. Dr. Behr extended his thanks to the seven resigning members and acknowledged their constructive cooperation. The constituent meeting of the newly elected Supervisory Board took place immediately afterwards. Prof. Dr. Giorgio Behr was re-elected Chairman of the Supervisory Board and the Executive Committee, and Dr. Margarete Haase was re-elected Chairwoman of the Audit Committee in the new composition of the respective bodies.

The annual financial statements of ZF Friedrichshafen AG compiled by the Board of Management in accordance with the provisions of the German Commercial Code (HGB) and the consolidated financial statements compiled in accordance with § 315a HGB on the basis of the International Financial Reporting Standards (IFRS), dated December 31, 2013, as well as the associated management reports, were each audited by Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft, Stuttgart (Germany), the auditing firm elected by the annual general meeting and commissioned by the Supervisory Board. The company issued its unqualified audit opinion respectively.

The Supervisory Board is convinced of the independence of the appointed auditor and of those responsible for handling the financial statements. During the consultations regarding the annual and consolidated financial statements, the responsible auditor reported extensively on the key audit results and was available to provide the Supervisory Board and the Audit Committee with additional information. The Supervisory Board dealt intensively with the information presented and with the documentation submitted by the Board of Management and in the end approved the audit results without objections on April 29, 2014 on the basis of its own audit. 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 net profit for the year was accepted.

The Supervisory Board would like to thank the Board of Management, the employee representatives, and all employees of the ZF Group for their very productive work for and dedication to the company in the past fiscal year. In light of the enormous challenges, the Supervisory Board will accompany them intensively as regards their responsibility and commitment to the company.

Friedrichshafen, April 29, 2014

 $On\ behalf\ of\ the\ Supervisory\ Board$ 

Prof. Dr. Giorgio Behr

Chairman

#### **Supervisory Board**

**Prof. Dr. Giorgio Behr,** Buchberg, Switzerland, **Chairman**,

CEO and President of the BBC Group, Villmergen, Switzerland

Johann Kirchgässner\*, Friedrichshafen, Deputy Chairman,

Chairman of the Group Works Council of ZF Friedrichshafen AG, Friedrichshafen

Jörg Ammon\* (as of April 23, 2013), Salem, Head of Gears and Shafts Production at ZF Friedrichshafen AG, Friedrichshafen

**Ernst Baumann,** Münsing, former Member of the Management Board of BMW AG, Munich

#### Dipl.-Kfm. Rupert Baur\*

(until April 23, 2013), Hagnau, Head of External Accounting at the Friedrichshafen location of ZF Friedrichshafen AG, Friedrichshafen

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

#### Josef Büchelmeier

(until April 23, 2013), 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\*

(until April 23, 2013), Neustadt, former First Representative of IG Metall Administration Center Nienburg

#### Willy Dekant\*

(until April 23, 2013), 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

#### Hans-Georg Härter

(as of April 23, 2013), Salzweg, former CEO of ZF Friedrichshafen AG, Friedrichshafen Frank lwer\*, Stuttgart,

Trade Union Secretary of IG Metall District Management Baden-Württemberg

#### Peter Kippes\*

(as of April 23, 2013), Schweinfurt, First Representative of IG Metall Administration Center Schweinfurt

**Dr. Joachim Meinecke,** Freiburg, Lawver

#### Oliver Moll\*

(as of April 23, 2013), Schweinfurt, Chairman of the Schweinfurt Location Works Council of ZF Friedrichshafen AG, Friedrichshafen

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

**Jürgen Otto** (as of April 23, 2013), Coburg, CEO of Brose GmbH, Coburg

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

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

#### Lilo Rademacher\*

(until April 23, 2013), Friedrichshafen, Second Representative of IG Metall Administration Center Friedrichshafen-Upper Swabia

#### Hans Dietmar Sauer

(until April 23, 2013), Ravensburg, former Chairman of the Board of Management of LBBW, Stuttgart

#### Vincenzo Savarino\*

(as of April 23, 2013), Friedrichshafen, First Representative of IG Metall Administration Center Friedrichshafen-Upper Swabia

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

(until April 23, 2013), Braunschweig, former Director of the Institute for Automotive Engineering, Aachen

#### Weidong Xu

(as of April 23, 2013), Castrop-Rauxel, Managing Director of Bilfinger Gerber GmbH, Dortmund

#### **Board of Management**

Dr. Stefan Sommer, Meersburg, Chief Executive Officer,

Corporate Market, Corporate Research and Development, ZF Services, Steering Systems

#### Reinhard Buhl

(until April 30, 2013), Bohmte, Car Chassis Technology

#### Michael Hankel

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

Jürgen Holeksa, Friedrichshafen, Corporate Human Resources, Corporate Governance, Service Companies, Asia-Pacific

Rolf Lutz, Friedrichshafen, Corporate Quality, 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, Industrial Technology

**Dr. Konstantin Sauer,** Überlingen, Corporate Finance, IT, M&A, North America

#### Dr. Gerhard Wagner

(until April 30, 2013), Kressbronn, Car Powertrain Technology

#### **Chief Representative**

Andreas Hartmann, Cologne



ZF opens a **NEW PLANT** for automatic passenger car transmissions in the USA. In South Carolina, ZF Transmissions Gray Court LLC is producing the 8-speed and the world's first 9-speed automatic transmissions.

#### Low-floor technology



On the occasion of the 30<sup>th</sup> production anniversary of low-floor bus axles, ZF unveils the new **AV 133** low-floor bus axle to trade visitors at the Busworld in Kortrijk. It is stronger, yet 45 kilograms lighter than the globally acclaimed predecessor, the AV 132.

IAA
2013

At the IAA, ZF is presenting innovative technologies with the new corporate philosophy "Motion and Mobility". These can make cars, now and in the future, more efficient, safer, and more dynamic. With the ZF innovation prototype, the technology company is combining its expertise in electric drive systems and lightweight construction.

World premiere in the Land Rover Evoque at the Geneva Motor Show

# 9HP

ZF is launching the **world's first 9-speed automatic transmission** for passenger cars with front-transverse drive. It boasts superb efficiency, compact design, an intelligent modular concept, and ultrafast, smooth gear changes.



#### **NEW CORPORATE HEADQUARTERS**



The groundbreaking ceremony for the ZF Forum is being celebrated in Friedrichshafen (Germany), officially paving the way for the construction work of the new headquarters. It has space for 600 employees and provides the public with insights into ZF's past and present.

# AWA RD WIN NING

#### **AWARDS 2013**

GM presents ZF's Dingley location in Melbourne (Australia) with the "Quality Excellence Award".

ZF repeats **top slot** gained over the past few years in the "Auto Bild", "auto motor und sport", and "Auto Zeitung" **readers' polls.** 

ZF again ranks among the **top ten** in German patent statistics.

ZF receives "Automotive INNOVATIONS Award 2013" in the Chassis category.

ZF scoops top spot in two categories in the "Best Brands 2013" readers' poll for commercial vehicles.

ZF wins the "European Transport Award for Sustainability 2014" with the TraXon transmission.

"Agricultural Machine of the Year" 2014, four out of six award-winning tractors fitted with ZF technology.

#### **Shaping the future responsibly**

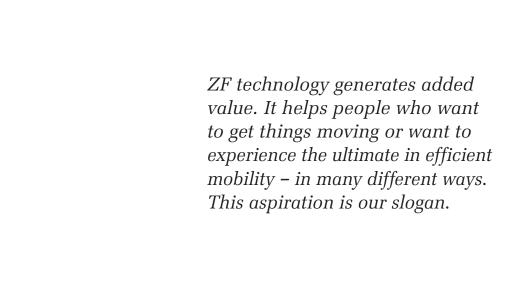
Our enthusiasm for innovative products and processes and our uncompromising pursuit of quality have made us a global leader in driveline and chassis technology. We are contributing towards a sustainable future by producing advanced technology solutions with the goal of improving mobility, increasing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

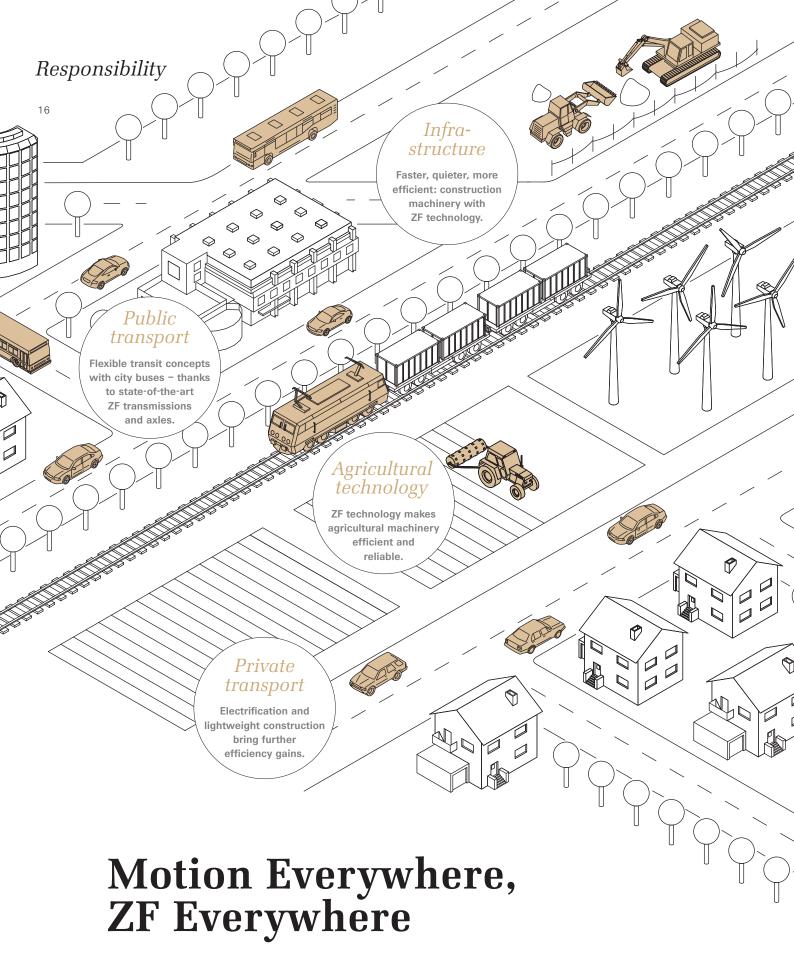
Our tradition and values strengthen our managerial decisions. Together, they are both an obligation and an incentive to maintain a reliable and respectful relationship with customers, market affiliates, and employees. Our worldwide compliance organization ensures that locally applicable laws and regulations 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.

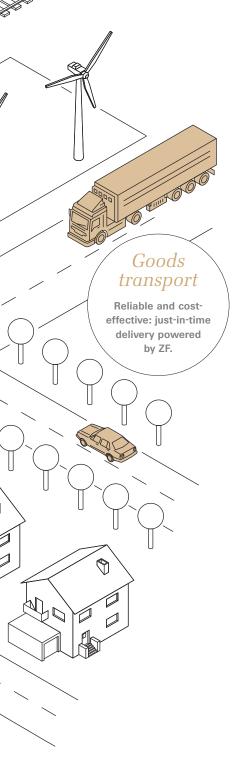


# 





The future is not usually that full of surprises. You can prepare yourself now for many of the social megatrends. That is exactly what we are doing.



To what extent has the world changed over the past 25 years? Not that much judging by the major political events. And yet many things are different nowadays, faster above all: The Internet and smartphones have given rise to real-time communications, more and more goods are being manufactured in increasingly shorter product cycles. The growing global population is part of the reason. Now, over 7 billion people live on the planet; that figure was just 4.5 billion in 1985. Some of them live in cities, which are growing at an unprecedented pace and whose skylines are changing beyond recognition. People move to wherever they see more opportunities for a better life, access to jobs, to education, social interaction, and, not least, a supply of food. People and goods are virtually always on the move nowadays: in urban centers, from country to country, and across continents.

#### Innovations pave the way

This dynamic development is set to continue, with the global population rising to 9 billion in 2050. The usage of resources, first and foremost energy, must therefore be organized more effectively, with virtually no scope for waste. Education is becoming a decisive asset if we are to understand and further optimize increasingly complex processes in almost all areas of life – from industry to logistics, urban planning and IT to agricultural science and medicine.

We are now laying the foundations for this world of tomorrow. And it is not just governments and parliaments that will shape this world. Businesses play an equally important role. The future viability of companies has two aspects: They share responsibility for this world of tomorrow and they safeguard their market opportunities through attractive products. It is an approach that already characterizes ZF. After all, we provide solutions for many trends in business and society. Take the growing global population for instance where efficient agriculture is required to feed these people. This is precisely where agricultural machinery with ZF transmissions and axles comes in. Or with the issue of mobility: In many megacities, we have been helping to realize cost-effective, flexible transit concepts for decades. This is not just about low-floor axles for buses. Telematics also allows relevant traffic information to be provided, networked, and evaluated faster. Private transport also poses its own challenges. Intelligent systems and lightweight construction are the prerequisites for electromobility if, say, the battery range has to be improved. Electromobility is, however, only then really sustainable if the power is generated from renewable energy sources. We are also involved in wind power in a bid to make this form of energy generation more reliable and more economical.

#### Benefit from differences

ZF's future viability is not only reflected in its products. Employees too can rely on a good, collaborative, and family-friendly corporate climate – the kinds of enlightened policies that recent graduates and experienced professionals now expect from an attractive employer. In addition, we are responding to competition for specialist staff and executive managers by introducing demand-driven internal training.





# Value and Sustainability as Twin Goals

Minimum input – maximum output: efficiency in a nutshell. We all have to learn to make our limited natural resources go farther. Vehicles with ZF technology use energy and raw materials economically and deliver exceptional customer value ex factory.

It boils down to the age-old adage "A bird in the hand is worth two in the bush" when you consider what is the best way of implementing sustainable, CO2-friendly mobility. Should you go for the optimum design of zero-emission drives - electric or based on a fuel cell? Or is the solution to make conventional types of drive gradually so efficient too that they consume increasingly less fuel and generate less carbon dioxide? Both approaches allow us to achieve our goals. The benefits of optimizing the combustion engine driveline are greater over the short term. Given the continuing widespread uptake of gasoline and diesel engines alone, even small efficiency gains produce enormous leverage a fact that many legislators worldwide appreciate as they continually tighten permitted CO<sub>2</sub> emissions for new vehicles.

#### Key position for efficiency

Thanks to its product range, ZF is ideally placed to make the driveline more efficient. In this way, we help automakers comply with legal requirements, now and in the future.

Vehicle users are also delighted with the savings that ease the strain on their wallet each time they fill up.

Our transmissions and axle drives have a major influence on the energy consumption of vehicles, be it in the passenger car or truck, the construction or agricultural vehicle. Automatic transmission systems always maintain an engine speed range that promotes low fuel consumption while generating minimal drag losses. Our light-

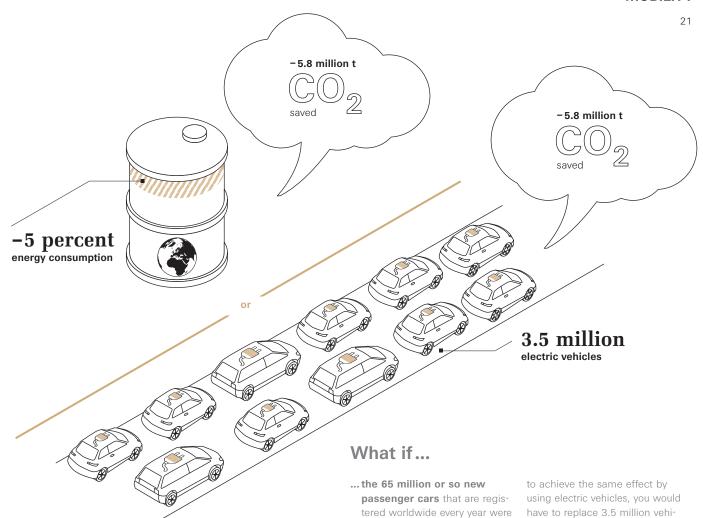
weight construction expertise pays dividends when it comes to chassis technology. Less weight onboard also translates into lower fuel consump-

Automakers require the support of innovative companies like ZF to meet global  $CO_2$  standards.

tion. ZF is driving forward lightweight construction with new designs, as well as with the use of alternative materials such as glass-fiber-reinforced plastics.

#### Millions of tons of CO2 saved

How ZF products are already making motoring, passenger or goods transport more economical and more efficient is evident in many ways: Even the entrylevel version of the 8-speed automatic



5 percent more energy-efficient? Then these cars would produce

over 5.8 million tons of CO<sub>2</sub> less

every year. If you were looking

transmission, for instance, already reduces fuel consumption and, in turn, emissions by 6 percent compared with the predecessor transmission - and by a formidable 11 percent if the optional automatic startstop system is used. As a full hybrid transmission it lowers fuel consumption by a quarter compared with conventional drives. The power-on-demand principle is used in Servolectric, the electric power steering system from ZF Lenksysteme, which is a joint venture between ZF Friedrichshafen AG and Robert Bosch GmbH. As such, the system only consumes energy when the driver is actually steering. There are already 35 million vehicles on the road with this energy-efficient steering system, cutting CO<sub>2</sub> emissions

alone by 3.1 million tons per year. Trucks fitted with the new TraXon automatic transmission system, which bundles the drive power, also make fewer refueling stops. In the entry-level version, the new transmission reduces fuel consumption by 6 to 9 percent compared with manual transmissions, with the figure rising to up to 14 percent in the hybrid version. And when it comes to using construction and agricultural machinery, the upshot is more economical operation thanks to power-split continuously variable technology: The new cPOWER transmission for

construction machines can cut their fuel

consumption by up to 25 percent.

cles powered by a combustion

That is not feasible over the

short term.

engine with pure electric vehicles.

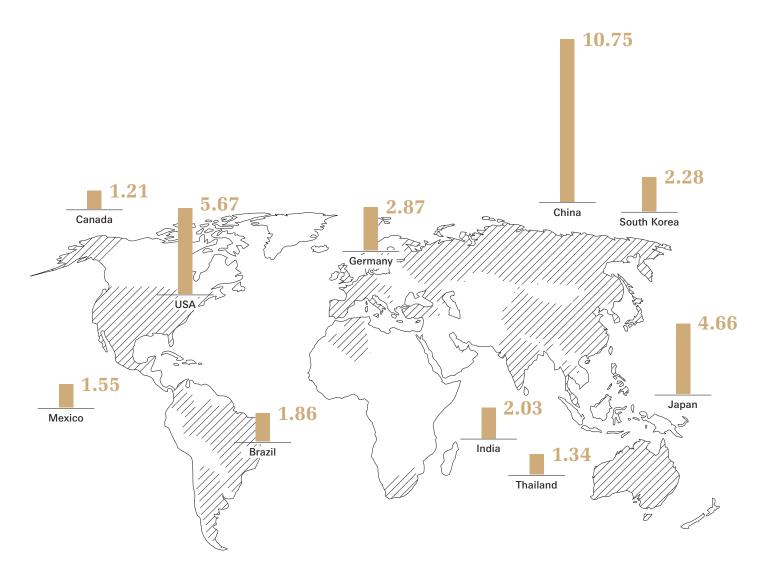
# Opportunities

The global village is still far away for most of the world. Yet products and goods are now available faster right across the globe. New markets are fueling strong dynamic growth. This opens up a great deal of opportunities – particularly for companies like ZF that already have a global presence.



# Close to the Customer Worldwide

ZF already generates 43 percent of Group sales outside its traditional market of Western Europe, with the figure rising all the time. Our global production network is prepared for further growth.

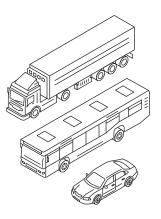


Today, ZF has a presence in the largest automotive markets and also has a strong foothold in the key emerging markets.

#### Top 10



Largest automotive manufacturers 2013 Top 10 automotive manufacturer countries in first half of 2013 based on motor vehicles produced (in millions)



#### **ZF** worldwide



Worldwide, the ZF Group has 122 production companies, 8 main development locations, 33 own service companies, and 650 service partners in 26 countries. As such, ZF can offer international customers on all levels and in all regions a close network of competent contacts right on their doorstep.

In the late 1990s, many passenger car manufacturers decided to outsource their axle system production, handing over responsibility for manufacturing the front and rear axles to competent subcontractors, including ZF. Today, we operate 14 passenger car axle assembly locations on four continents, with none of the production facilities more than 40 kilometers away from the customer's plant. At these production facilities, ZF employees produced just under 4 million complete front and rear axles for passenger cars in 2013. That is just one of many examples. We also operate in a global production network for other fields of application - not just for passenger cars, but also trucks and buses, construction and agricultural machinery, right through to wind turbine gearboxes.

#### Global - from engineering to service

This calls for many competencies that not every company has. Starting with engineering. Most of our products, which are also industrialized outside Europe, must previously be tailored to the local market's particular requirements, be it to meet the country's usual cost structures or to gear the technology to the specific usage on the ground. Our international development network carries out this task. The main development locations in Friedrichshafen, Dielingen, Passau, Schweinfurt, Schwäbisch Gmünd (all in Germany), Northville near Detroit (USA), Pilsen (Czech Republic), and Shanghai (China) are in contact with multiple application locations near to the major in-country ZF plants. Suppliers are also important for the cost and innovation leadership which we retain or strive to achieve in all our production areas. ZF has defined strategic suppliers which the Group contracts worldwide where possible. For local production we, however, also use local suppliers from the particular country. A balanced mix.

This comes along with an outstanding expertise in industrial production processes. With the global ZF Production System, which is directed at all divisions and business units, we have a uniform standard that applies throughout the Group. It ensures that all locations produce the quality with which the name ZF is synonymous. And finally, a service organization spanning the globe supplies ZF customers with spare parts, repair and maintenance work, and does so in virtually every corner of the globe. Our service portfolio benefits from the technical expertise which we have as standard equipment supplier, while at the same time supplementing and making our products and services a more compelling option. The upshot is a symbiotic relationship.

#### Internationality: the Group's DNA

Leveraging opportunities beyond our domestic market as well - this goal has always driven us, long before globalization was on anyone's lips: Back in 1958, ZF built its first production location outside Germany in São Caetano do Sul in the province of São Paulo (Brazil). Today, 7.500 kilometers as the crow flies north-west of this location lies one of the newest ZF production locations: The new automatic transmission plant for passenger cars in Gray Court, South Carolina (USA). Here, we have been producing 8 and 9-speed automatic transmissions since summer 2013 - and are thus making full use of our opportunities in the important US automotive market.

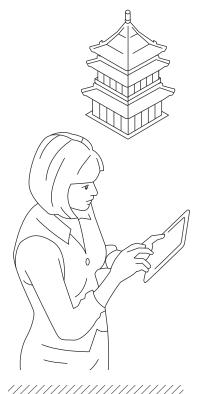




## **Embrace Reliability**

The high quality of ZF products is based on our company's values and culture. The Group sees itself as a reliable partner – for its employees, its suppliers, its customers, and for society.





#### The buddy system

It was ZF's largest single investment – and even staff training made Group history: Before the grand opening of the passenger car transmission plant in Gray Court, South Carolina (USA), employees at the new location were able to draw on the expertise of their colleagues at the Saarbrücken (Germany) transmission plant which was running to capacity.

More information at www.zf.com/magazine

## The trainee perspective

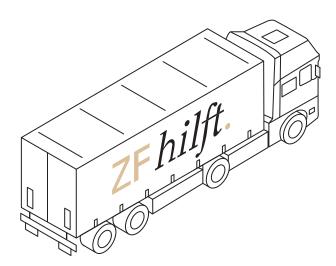
The first meeting with the employees from the "Corporate Headquarters", a product idea for the Kennedy Space Center in Florida (USA), idiosyncrasies of business contacts in Asia: ZF's trainee blog provides a genuine insight into a multinational Group in all its facets.

More information at <a href="http://zftrainee.tumblr.com/">http://zftrainee.tumblr.com/</a>

Millions of people around the globe rely on ZF products every day; some of them do not even know it: from the family going on vacation in the car, the logistics company whose customers are counting on receiving their goods on time, to farms that need to cover huge areas in a very tight time window during the harvesting season. Reliability is crucially important in the mobility sector. Manufacturers of passenger cars, commercial vehicles, offroad machinery, marine, aerospace and industrial applications promise their customers reliable technology. That is why they also take into account high quality standards when selecting their suppliers.

#### A culture based on cooperation

ZF has aligned its processes specifically to this spirit of community. The aspiration of being a reliable partner does not stop with product and service quality though. The technology company that has been operating for almost a century involves its own employees and its suppliers in a corporate culture based on community. After all, the Group's dynamic growth is also down to the people that enrich the



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### Test drive delivers aid

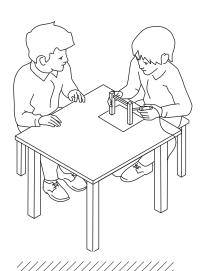
The nonprofit association "ZF hilft" organized an aid convoy to transport school furniture to Moldova. It was not a forwarding company that was responsible for shipping the aid – but ZF. The Group sent a test truck out to Moldova to put it to the acid test.

More information at www.zf.com/magazine

company with their ideas, their commitment, and their diversity. It starts with company codetermination, which boasts a long tradition at the German locations in particular and has helped shape many chapters in ZF's success story. It also includes fair opportunities for junior employees and individual career opportunities, as well as new forms of collaboration which make it easier for ZF's employees to reconcile more effectively the demands of work and family. We are already making preparations for the kind of demographic change that will affect various regions of the world in different ways, with business set to begin to feel the repercussions of this change over the coming decades. Through company pension schemes, the provision of healthy and safe workplaces, and various e-learning seminars, we are creating a positive working environment for older colleagues. In countries where combined degree programs similar to the German model are not yet commonplace, we are nonetheless on the lookout for partnerships with local schools to support training for specialist staff. All of this characterizes an employer who is attractive to its current and prospective employees.

#### Commitment to society

Sustainable corporate management also focuses on environment and resources. Here, ZF products make an important contribution - whenever oil change intervals are extended for sophisticated transmissions for instance. But the Group also operates its business sustainably. We have for example set ourselves the target of reducing CO<sub>2</sub> emissions throughout the Group by 20 percent by 2020. The "ZF Principles of Environmental Protection", which apply at all locations, demonstrate how seriously we take the ecological compatibility of products and production. The future of a company like ZF is closely tied up with the fortunes of the local community at its location. For this reason, the Group is also committed to youth, education, culture, and sports - and thus allows people to benefit from its strength who do not (yet) work for the Group or buy its products. In 2005, ZF established the nonprofit association "ZF hilft" to help victims of natural disasters and accidents, without any bureaucracy. Since then, ZF staff and the company itself have donated more than € 5 million worldwide to "ZF hilft" for aid projects around the globe.



### "Wissenswerkstatt" model

Engineers and technicians are not magicked up out of nowhere. Young boys and girls will want to grow up to be engineers if you can fire their imagination for technology from an early age. ZF provides that initial spark through its "Wissenswerkstatt" (Knowledge Workshop) concept – becoming an ideal partner for parents and schools alike.

More information at www.zf.com/magazine

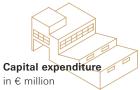
# ABOUT THE COMPANY

The following pages include reports on the development of the ZF Group's divisions and business units. The Car Powertrain Technology, Car Chassis Technology, Commercial Vehicle Technology, and Industrial Technology divisions include the business units that are relevant to the particular industry with the exception of the two independent business units: Electronic Systems and ZF Services.

32 CAR POWERTRAIN TECHNOLOGY 34 CAR CHASSIS TECHNOLOGY 36 COMMERCIAL VEHICLE TECHNOLOGY 38 INDUSTRIAL TECHNOLOGY 40 ELECTRONIC SYSTEMS 41 ZF SERVICES 42 ZF PRODUCT PORTFOLIO



	2013	2013/2012*
Car Powertrain Technology	5,704	+15%
Car Chassis Technology	5,509	+11%
Commercial Vehicle Technology	3,249	+7%
Industrial Technology	1,903	-9%
Electronic Systems	582	+4%
ZF Services	1,456	+6%
Corporate R&D, Corporate Headquarters, and Service Companies	136	+15%
- Internal Sales	-1,702	
Consolidated ZF Group	16,837	+8%



*	2013	2012*
Car Powertrain Technology	541	596
Car Chassis Technology	158	188
Commercial Vehicle Technology	113	100
Industrial Technology	50	77
Electronic Systems	32	14
ZF Services	14	11
Corporate R&D, Corporate Headquarters, and Service Companies	46	39
Consolidated ZF Group	954	1,025



Limployees	2013	2013/2012*
Car Powertrain Technology	20,190	+13%
Car Chassis Technology	20,684	+6%
Commercial Vehicle Technology	14,369	+4%
Industrial Technology	8,509	-2%
Electronic Systems	3,055	+1%
ZF Services	3,070	+7%
Corporate R&D, Corporate Headquarters, and Service Companies	2,766	+10%
Consolidated ZF Group	72,643	+6%

<sup>\*</sup> As of 2012 excluding ZF Lenksysteme.

<sup>1)</sup> Sales stated in the following sections are consolidated values of the divisions and business units.
2) Number of employees by contracts in accordance with the IFRS regulations.

# Car Powertrain Technology $5,704_{\text{emillion sales}}$

20,190 employees



#### The year 2013 at a glance

As in the previous year, the Car Powertrain Technology division profited from the positive development in the premium passenger car segment in 2013 as well. The high demand for transmissions, axle drives, and drive components, especially torque converters, led to a sales increase of 15% in comparison to 2012. The number of employees also rose: 20,190 people were employed for the division at 22 locations worldwide in 2013 – around 13% more than in the prior year.

The Die Casting Technology business unit was integrated into the Car Powertrain Technology division in 2013 as part of restructuring activities within the Group.

#### Market situation and regions

The most important factor influencing the renewed strong sales growth was the positive sales situation in the upper mid-size and luxury vehicles segments. This upturn was mainly attributable to markets in Asia and the USA.

#### Capital expenditure

In order to continue participating in the positive market development and to be well prepared for future growth, the Car Powertrain Technology division invested around € 541 million in 2013. The majority of this investment

flowed into the expansion of capacities at the Saarbrücken (Germany) plant and the new transmission plant in Gray Court, South Carolina (USA). Production of 8 and 9-speed automatic transmissions started here in summer as was originally planned. In addition, machines and systems were modernized and capacities increased in other existing plants.

#### Research and development/Product innovations

The flagship project for 2013 was the start of volume production of the world's first 9-speed automatic transmission in the US plant in Gray Court, South Carolina. Maximum performance in minimum installation space this is the principle of the new product that is the result of ZF's outstanding development work: The transmission features up to 16% lower fuel consumption than 6-speed transmissions currently available on the market. The use of hydraulically controlled constant-mesh elements makes this transmission concept revolutionary. The extremely short response times are below the threshold of perception. In order to be able to connect an additional transfer case for all-wheel drive operation, ZF developed the ECOnnect all-wheel drive system which can be decoupled. For the first time, the power electronics were also developed and produced by ZF itself.

#### From the business units

#### **Automatic Transmissions**

The highlights of this business unit included the opening of the transmission plant in Gray Court, South Carolina (USA), in July 2013. Volume production of the 8 and 9-speed automatic transmissions successfully took off

after intensive preparation work in 2012. It has already been decided to further expand this promising location. The plant in Saarbrücken (Germany) was utilized to its full capacity thanks to the demand for 8-speed automatic transmissions. We were

also able to successfully complete the move of the plant in Shanghai (China); volume production has resumed operation.

Manual Transmissions/Dual Clutch Transmissions

With regard to manual transmissions, the business unit suffered a noticeable drop in sales as a result of falling demand. However, volume production of 6-speed manual transmissions for the Mercedes C-Class was successfully started which will stabilize sales in the coming years. Production of sporty dual clutch transmissions also progressed very positively.

#### Axle Drives

All plants are running at full capacity: The Axle Drives business unit experienced a successful fiscal year 2013 recording strong growth. Clutch assembly for 8-speed automatic transmissions was successfully moved to the Gotha (Germany) plant and is now running at a high level.

#### **Powertrain Modules**

The business unit was able to substantially increase its sales compared to the previous year. However, not all product lines recorded the same levels of capacity utilization: While torque converters profited from strong demand for 8-speed automatic transmissions and the positive order situation from General Motors in North America, the current weak sales in Southern Europe were reflected in product lines such as clutch systems.

#### **Die Casting Technology**

Output in the Die Casting Technology business unit, which has been part of the Car Powertrain Technology division since 2013, saw a further increase. At the Nuremberg (Germany) location, the investment logiam continued to ease and performance figures improved.

The melting capacity was adjusted to meet increased volumes and, among other things, to safeguard supplies to the plant in Gray Court, South Carolina (USA). At the Grosbliederstroff (France) location, the extensive struc-

tural changes and a substantial increase in performance proved to be a basis for the future economic development. In addition, specific employee qualification measures were pursued at both locations.

#### **Special events**

Flagship project for 2013: The

transmission went to volume

Gray Court, South Carolina.

production in the US plant in

world's first 9-speed automatic

Award: The readers of the "auto motor und sport" magazine selected ZF as the "Best Brand" in the Transmission category once again.

#### Prospects for the fiscal year 2014

In light of the figures of the past fiscal year, the prospects for 2014 remain optimistic: The Car Powertrain Technology division is expecting continued strong growth of around 20%. This comes along with a moderate rise in the number of employees. In the current fiscal year, the division will face challenges primarily as a result of the rise in volume planned for all plants - the highest increases are forecast for the US plants in Gray Court, South Carolina (500,000 units) and Marysville, Michigan (300,000 units). In the former General Motors transmission plant in Strasbourg (France), the investor Punch Powerglide will start the licensed production of 8-speed automatic transmissions; preparations are already underway. After a successful start-up, around 200,000 8-speed automatic transmissions are to be produced there to relieve the plant in Saarbrücken (Germany).

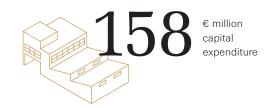
# Car Chassis Technology

5,509





employees



#### The year 2013 at a glance

After a cautious start, the fiscal year 2013 gained impetus in the second half and developed satisfactorily for the Car Chassis Technology division. The final figures showed an increase in sales of 11% compared to the previous year. The number of employees rose by 1,193, bringing the total number of people currently employed in the division worldwide to 20.684.

#### Market situation and regions

A drop in sales as a result of the weak order situation in Western Europe was compensated for by the positive market development particularly in Asia. The division profited from the increased demand for vehicles in Asia, especially in the premium segment. The North American market also continued to grow.

#### Capital expenditure

In the Chassis Components business unit, the division invested in production capacities and new start-ups worldwide in 2013. More than half of these investments were made into European locations. With two new plants in Beijing (China) and Kulim (Malaysia), the Chassis Systems business unit expanded its presence in the Asian market. In addition, capacities were increased in the Shenyang plant in China as well as in the US plant in

Tuscaloosa, Alabama. Capital expenditures in the Rubber & Plastics business unit were focused on doubling production capacity in Qingpu (China) and on the construction of a new production hall in Hebron, Kentucky (USA). In Brazil, production was moved from São Paulo to a new plant in Sorocaba. The Suspension Technology business unit invested in improved assembly technology for the new valve generation of controlled shocks & dampers at the Schweinfurt (Germany) plant and it expanded its production capacity in Shanghai (China).

#### Research and development/Product innovations

At the International Motor Show (IAA) in September 2013, ZF presented innovations in the areas of lightweight components and concept axles. The focus of the show was on alternative materials as well as new designs and production methods.

In terms of weight reduction, the Chassis Components business unit made further refinements to the Sheet Metal integrated Control Arm (SmiCA) concept and the hybrid connecting rod for stabilizer links. The first customer orders for these products were also confirmed in the fiscal year. The start of volume production for AKC (Active Kinematics Control) and technical maturity of the first fully integrated electrically driven axle (eTwistbeam) were the highlights in the Chassis Systems business unit.

Outstanding events in the Rubber & Plastics business unit included the development of the lightweight engine mount with glass-fiber reinforced plastic housing and the volume production start of the world's first brake pedal with fiber-reinforced composite technology.

In the Suspension Technology business unit, the starting signal was given for the production of the new valve generation for semi-active dampers (CDCevo).

#### From the business units

#### **Chassis Components**

The business unit took numerous new orders from all regions in 2013. It expanded capacities in Europe and China and was able to significantly enhance its market position. The expertise in lightweight design of the Chassis Components business unit was strategically positioned on the market with a positive num-

ber of incoming orders.

#### **Chassis Systems**

In the Asian region in particular, 2013 was a strong year: Two new plants started production

in Beijing (China) and Malaysia. The plant in Shenyang (China) celebrated its  $10^{\rm th}$  anniversary and a third location was opened at the same occasion. The production start of the AKC (Active Kinematics Control) represented a milestone.

#### **Rubber & Plastics**

Production of diverse plastic components for the 9-speed automatic transmission was successfully started in Hebron, Kentucky (USA), while the first pedal set volume production project was launched in Sorocaba (Brazil). The Simmern location in Germany produced the 5 millionth switchable engine mount. Production also started for lightweight engine mounts with glass-fiber reinforced plastic housing.

#### **Suspension Technology**

Capital expenditures focused on strong growth in North America and China, as well as on consolidating our competitiveness in the area of controlled damping systems in Germany. Successful acquisitions were not only announced at the Japanese OEMs Honda and Toyota, but also in the motorcycle business at ZF Sachs Italia. Targeted new shock absorber business stimulated the turnaround.

#### **Special events**

After a cautious start, the final

increase in sales of 11 % com-

figures for 2013 showed an

pared to the prior year.

Examples of the many customer awards:

- the "Supplier Quality Excellence Award" from General Motors for the plants in Diepholz (Germany), Kreuztal (Germany), and Lapeer, Michigan (USA),
- the "Volvo VQE Award" for the plants in Kreuztal and Damme (Germany).

#### Prospects for the fiscal year 2014

With a target increase of almost 9%, sales for the Car Chassis Technology division are expected to remain

positive in 2014. The process standardization launched in the plants will continue apace in addition, optimizations to business operations outside of production, such as in administration, will be implemented.

To ensure sustainable growth, resources must be stabilized in all areas.

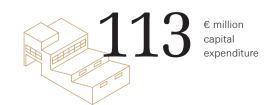
The division's performance heavily depends on successfully implementing and optimizing central projects. This includes the active rear axle kinematics control (AKC) as the driving force for the mechatronic strategy and the production start for suspension technology in the new Shenyang (China) plant in 2015.

The division faces additional complex challenges as a result of the spin-off and sale of the Rubber & Plastics business unit.

As part of the "ZF 2025" strategy, the Car Chassis Technology division will be expected to set and implement targets across the business units.







#### The year 2013 at a glance

Although the fiscal year started slowly, the market for the Commercial Vehicle Technology division experienced an overall positive development compared to the previous year – supported in particular by the pre-buy effect caused by the Euro 6 changeover, which required a high degree of flexibility at the end of the year. In general, however, the markets witnessed an extremely volatile development. The number of employees only increased outside Western Europe.

Market situations, prospects, and most important events are highlighted separately for each business unit due to the heterogeneous product segments.

#### From the business units

Truck & Van Driveline Technology

The business unit managed to increase its sales. In Western Europe and Russia growth was particularly strong. In the Russian joint venture ZF Kama, work continued at full speed on the new production hall that will be opened in 2014. South America also developed positively. The only slight downturn was observed in Asia caused by the

Indian market contracting significantly. The trend is expected to reverse here in 2014 already. In China, the joint venture with the Chinese manufacturer Beiben started at the beginning of the year. The objective is to now become established in the volume market as well as in the premium segment. The roll-out of a 16-speed transmission is planned for 2014.

The new TraXon modular transmission system won the "European Transport Award for Sustainability" in 2013. In the commercial vehicle transmissions and retarders categories, ZF was again selected "Best Brand" in the reader's choice of the EMT publishing house.

Axle & Transmission Systems for Buses & Coaches
The business unit was established in 2013 as a result of
structural modifications. The two business units CV Axle
Systems and Bus Driveline Technology were merged and
now form the Axle & Transmission Systems for Buses &
Coaches business unit. ZF profited in the previous fiscal
year from the recovery of the city bus and coach market.
First and foremost, a good second half year in the core
European market and the ongoing high purchasing activity in Asia and Russia had positive effects. The RL 85 EC
independent suspension, developed and industrialized

for the Chinese market, established itself on the market with high quantities in its first year of volume production. In the area of transmissions, volume production started for the new EcoShift 6-speed transmission model range for modern coaches.

2014 presents opportunities for short-term orders from Asia and Russia. In these areas, the EcoLife 6-speed automatic transmission and the AV 132 low-floor axle in particular continue to establish themselves as the standard in city buses, especially in megacities. The currently unclear support for "new energy vehicles" presents both risks and opportunities. The Axle & Transmission Systems for Buses & Coaches business unit, with its technical solutions, is well prepared for it in any case.

#### **CV Chassis Modules**

The business unit's sales rose slightly. Following the integration of the product segment taken over from Thyssen-Krupp, driver's cabin anti-roll bars are now being produced in volume at the Dielingen (Germany) location. In addition, production of rear-axle suspension systems for the European market also started in Dielingen. This system incorporates both new manufacturing technologies and innovative lightweight design concepts. An additional success of the lightweight design strategy was being nominated for the first time as a supplier for an aluminum torque rod.

Market responsibility for independent suspensions for trucks was assumed by the TA business unit, for which the Axle & Transmission Systems for Buses & Coaches business unit

has been responsible since 2013. The start of volume production for chassis components in Pune (India) left another international footprint.

Paccar, the American truck manufacturer, honored ZF for the excellent quality of its commercial vehicle chassis modules. Significant growth is expected in South America, India, and China in 2014. The inauguration of another

location in China is planned for the middle of the year as part of a joint venture. Complete rear-axle suspension systems and cabin suspensions will be produced there for the Chinese market.

#### **CV Damper Technology**

In the rail sector, business activities in Russia were promoted and expanded. With its crash systems, the business unit continues to have a good opportunity to gain a foothold in a new product segment over the medium term.

Overall, a good utilization of production capacities in all regions worldwide could be recorded for the commercial vehicle sector. The business unit profited from the successful start-ups of new truck model ranges in Europe. As a result of new orders in China, market leadership was further expanded and consolidated there.

ZF is confident about the development of the business unit in 2014: The newly developed PCV (Premium Comfort Valve) system sets new standards in an in-demand segment. Furthermore, the regions are witnessing an acceleration in market-specific developments.

#### **CV Powertrain Modules**

Euro 6 changeover led to a

pre-buy effect, thus providing

in the second half of the year.

a positive sales development

A new building was constructed at the Bielefeld (Germany) plant in 2013. Preparations for the volume production start of the X2C dry dual clutch have been completed. The

plant in Gainesville, Georgia (USA), started production in the first quarter of the fiscal year. Clutches for automated transmissions of European design are to be produced there locally in the future. The

Shanghai (China) plant showed a very positive business performance. Major efforts were made to close the price-cost gap. Furthermore, the starting signal was given for the development of the next generation of a dual-clutch module.

# **Industrial Technology**

1,903 € million sales







#### The year 2013 at a glance

In the Industrial Technology division, the ZF Group pools its activities for "off-road" applications. It is active in many markets with its heterogeneous product range. The 9% decline in sales compared to 2012 is essentially due to structural reasons: Since 2013, the Electronic Systems segment has been an independent ZF business unit and, consequently, it is no longer recorded under the Industrial Technology division. Going beyond this factor, the 7.5% decline can also be attributed to the weaker markets in Wind Power Technology and for construction machinery systems.

#### Market situation and regions

In 2013, the global construction machinery market was characterized by weak development. Sales were significantly lower than expected, especially in China and India. In contrast, the global agricultural machinery market experienced a slight upswing with further growth prospects. This can primarily be attributed to the increasing mechanization of agriculture in Asia. The 2013 sales figures in Europe were slightly below those recorded in 2012.

The European wind market did not present a uniform picture in the individual countries. While the offshore

segment gained momentum, the total market for wind turbines declined significantly with corresponding negative impact on the Wind Power Technology business unit.

Positive highlights in the Special Driveline Technology business unit include the increased demand for new rail lines in Asia as well as the awarding of new contracts in the Chinese high-speed market.

The market for the Marine Propulsion Systems business unit is growing in Asia. An upward trend in the generally stable market situation was also witnessed in the USA.

Sales of the Aviation Technology business unit remained at the prior-year level.

#### Capital expenditure

In 2013, a significant share of the capital expenditure was allocated to the Passau (Germany) location: Around  $\in 1.3$  million was spent on the Casting Service Center for restructuring measures, to expand capacities, and to replace old machinery. A total of approximately  $\in 12$  million was invested in the Steel Service Center and  $\in 1$  million was spent on the Assembly department. A new assembly hall was completed and equipped in the Test Systems business unit at a cost of approximately  $\in 2$  million.

#### From the business units

#### **Off-Highway Systems**

Investments in innovative technologies such as continuously variable transmissions as well as the global presence of this business unit offer extremely promising potential in the construction machinery segment. In 2013, ZF and the Chinese manufacturer LiuGong celebrated the 15<sup>th</sup> anniversary of their partnership with the prototype of a new construction-machinery axle for wheel loaders. The mutual success will be continued with a further joint venture for the production of wheel loader axles.

The agricultural machinery business profited from the demand for state-of-the-art equipment in Europe and North America. Numerous new projects will create additional growth for 2014.

#### **Test Systems**

Once again, this business unit increased its sales in 2013 by over 10%. The future challenge will be to sustainably secure this strong growth with new orders. The increasing sales market in China offers excellent preconditions to meet this challenge. The assembly hall in Passau-Patriching (Germany), which started operating in 2012, as well as the newly established service structure in the USA will ensure more efficient processes.

#### **Special Driveline Technology**

The positive development of this business unit was particularly promoted by the all-wheel drive systems and rail sectors. The new transmission

presented in the energy market segment for the North American and Chinese regions will now be launched on the market. Furthermore, the new drive for the escalator in the Industrial Drives and Positioning Systems product line was well-received. In the industrial environment, products such as the hysteresis brake also developed positively.

#### **Marine Propulsion Systems**

This business unit's 2013 sales reached the prior-year level. By successfully implementing restructuring measures, this business unit was in a better position to meet

the requirements of the continuously difficult market environment. This led to a significant improvement in profitability.

#### **Aviation Technology**

Long-term customer relations manage to secure stable sales in this business unit. In order to sustain this development, the high level of expertise in drive and control technology for helicopters will be expanded. This business unit will also focus on the emerging business regarding test benches for universal transmissions and rotors.

#### Wind Power Technology

This business unit was forced to respond to the diverse challenges in the wind power sector with major optimizations and structural changes. For instance, even the new plant in Gainesville, Georgia (USA), had to deal with capacity utilization problems. However, there were clear positive market signals that confidently indicate that ZF will assert itself as a successful transmission supplier in the wind power sector.

#### Prospects for the fiscal year 2014

Innovative technologies and

promising perspectives in the

global presence open up extremely

construction machinery segment.

It is difficult to make a general statement regarding the development forecast for the Industrial Technology division due to the complex product range. While mega-

> trends such as the global population growth or the increasing mechanization in the field of agriculture promise excellent prospects for agriculture, the market forecasts in the Wind Power

Technology business unit continue to paint a somewhat bleaker picture.

As a whole, the extensive portfolio makes the division less dependent upon certain markets. The division has leveraged synergies at many locations especially by pooling the business activities of various business units. A positive development can also be expected in 2014 thanks to the leading technological position of all business units.

## **Electronic Systems**

582 E million sales



Growth in sales thanks to gains

start-up of the 9 HP transmission

in the Asian markets and the

in North America.



#### The year 2013 at a glance

In 2013, the sales of the Electronic Systems business unit rose by 4% to  $\odot$  582 million compared to the previous year. The Human Machine Interface continued to be the strongest-selling product line with a significant gain in

the Asian markets. Despite an otherwise stale development of the automotive markets in Europe, the start-up of the 9 HP transmission in North America caused a growth impulse in the Body/Chassis/Driveline

product line. The initially subdued level of incoming orders in the Industrial Solutions product line significantly rose during the second half of the year. However, sales in North America were slightly below the prior-year level as a result of project discontinuations.

Compared to the previous year's figures, an increase in sales could be achieved thanks to a positive development of demand in all areas of the Computer Input Devices product line.

#### **Prospects**

The Electronic Systems business unit consolidates ZF's expertise with its new mechatronics solutions for e-mobility and increased efficiency in the vehicle. As a result, this segment

will continue to grow in the years ahead. New products in the field of self-powered remote switches and sensor technology are strengthening the Industrial Solutions product portfolio. In Computer Input Devices, the positive trend is also set to continue in 2014.

### **ZF Services**

1,456 E million sales

3,070 employees



#### The year 2013 at a glance

The aftermarket is gaining in importance as the service life of vehicles is increasing and, consequently, the demand for available spare parts and technical information is

growing. ZF Services ensures the performance of vehicles throughout their life cycle. As a result, a remanufacturing center was opened, among others, in Moscow (Russia) in 2013. At ZF Services, the St. Petersburg location was also re-consolidated, thus making

the market development in Russia more efficient. Furthermore, ZF Services also expanded its activities in industrial technology: The Vernon Hills, Chicago (USA), location now offers more comprehensive services for wind turbine gearboxes. In 2013, ZF Services recorded a 6% growth in sales to  $\ensuremath{\epsilon}$  1,456 million.

#### **Prospects**

ZF Services is present world-

wide with complex spare parts

programs and the entire range

of aftersales services from

a single source.

For the future, ZF Services expects a sales growth between 6% and 7%. This forecasted increase is attributed to the introduction of the new ZF Lenksysteme product

brand (steering gears, steering pumps, and steering columns) in 2014. Furthermore, the internationalization of the ProTech workshop concept will be promoted and a further remanufacturing location will be opened

in China. In 2014, the most important aftermarket trade fair, the Automechanika in Frankfurt (Germany), will also add important impetus.

#### **Driveline Technology**

#### **Drive Systems**

Automatic transmissions and dual clutch transmissions for cars • Manual transmissions and automation of manual transmissions for cars - Electric drives and hybrid systems 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 and special vehicles • Generator/Hybrid systems for off-road machinery All-wheel drive and axle drive systems for cars, CVs, and special vehicles Thrusters and shallow draft thrusters for ships - Surface and pod drives for ships Transmissions for ships and aircraft; power units; wind turbine, escalator and elevator gearboxes • Hybridcapable transmissions for ships - Rotor systems for aircraft and helicopters • Drives for mixers, rail vehicles, aircraft, and plant and industrial engineering • Drives for pumps of the oil and gas industry • Test systems for transmissions

#### **Drive Components**

Wet and dry-running clutches, clutch systems, and torque converters for cars, CVs, special vehicles, off-road machinery, and rail vehicles • Dual clutches for CVs • Front and rear axle drives, bevel gearsets, and differentials for cars • Dual-mass flywheels for cars and CVs • PTOs for CVs, special vehicles, and off-road machinery • Retarder systems for CVs, special vehicles, and construction machinery • Control systems for cars, CVs, special vehicles, off-road machinery, 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 ships • Brakes and clutches for plant and industrial engineering • Cargo loading system and rescue hoists for aircraft • Light-

alloy casting control components, transmission housings and inner components • Test systems for transmissions and their components, rotor blades, and oils

#### **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 Active kinematics actuators for car rear axles Test systems for axles

#### **Chassis Components**

Damper modules and damping systems for cars, CVs, rail vehicles, off-road machinery, motorsports, and motorcycles • 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 • 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

#### **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

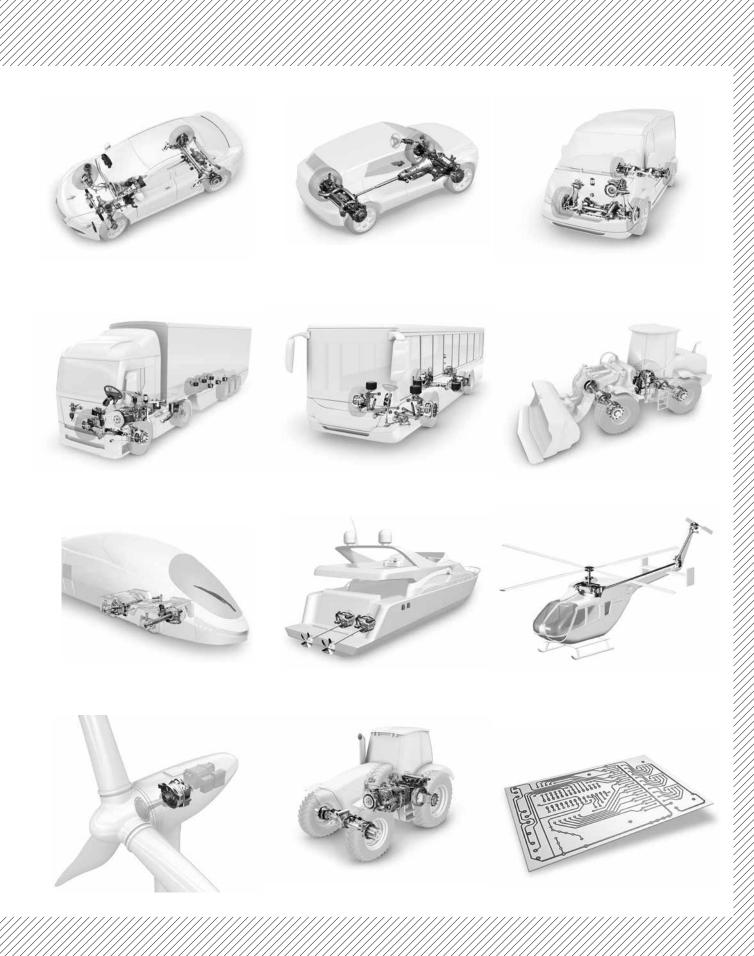
Control systems for cars, CVs, special vehicles, off-road machinery, ships, and rail vehicles

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

Telematics systems for cars and CVs

Software for cars and CVs

Diagnosis tools for CVs





# GROUP MANAGEMENT REPORT

ZF Group sales rose by 8 % to € 16,837 million in 2013. In the year under review, the number of employees increased by 6 % to 72,643. Investments in property, plant, and equipment amounted to € 954 million, a 7 % decrease. € 836 million was spent on R&D, a 9 % increase. The profit after tax rose by 40 % to € 462 million.

#### BASIC PRINCIPLES OF THE ZF GROUP

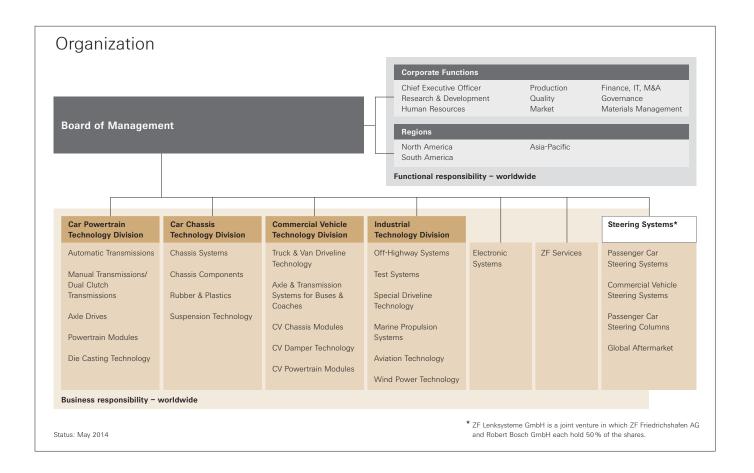
#### **Operating Activities and Corporate Structure**

ZF Friedrichshafen AG is a corporation, of which 93.8% is owned by the Zeppelin Foundation and 6.2% by the Dr. Jürgen and Irmgard Ulderup Foundation. The company is headquartered in Friedrichshafen. As of December 31, 2013, the Group's workforce worldwide comprised 72,643 employees in 26 countries.

As a leading global technology company in driveline and chassis technology, ZF is active in many market segments. These mainly include the passenger car and commercial vehicle industries, as well as the construction and agricultural machinery sectors. In addition, our activities cover other market segments such as electronic systems, wind power, marine propulsion, aviation technology, rail drives,

special drives, and test systems. Alongside transmission systems, units and components, the Group also produces chassis systems and components. We offer a wide range of services that is mainly marketed by the ZF Services organization. These services primarily involve the spareparts business for driveline and chassis technology as well as maintenance and repair services. The main sales markets of the Group are Europe, North and South America, and the Asia-Pacific region, with China as the core market.

ZF is set up along the lines of a matrix organization which links the Group-wide competencies of the corporate functions with the global business responsibility of the divisions and business units. The central departments of the ZF Group are headed by the six members of the Board of Management. The four divisions for business in Car Powertrain Technology, Car Chassis Technology, Commercial Vehicle Technology, and Industrial Technology



are assigned to the members of the Board of Management. The divisions include the business units relevant to the respective industry. The Electronic Systems and ZF Services business units are an exception. They are assigned directly to members of the Board of Management. The same applies to the responsibilities with regard to the North America, South America, and Asia-Pacific regions.

#### Management and Supervision of the Company

ZF Friedrichshafen AG is led by the Board of Management, which manages the company, and by the Supervisory Board, which monitors the Board of Management. A new Board of Management concept was introduced at the beginning of 2013 with the primary objective of giving the Board of Management's work a more strategic focus and intensifying networking and cooperation within the Group. In addition to the reduction of the Board of Management from eight members to six, the previous separation of responsibilities for divisions and corporate functions was abolished. The operational topics of the divisions and business units are mainly processed in the divisions. The supervision of the Board of Management by the Supervisory Board, whose 20 members are appointed with equal representation, is supported by an Executive Committee and an Audit Committee which are both composed of members of the Supervisory Board.

#### **Corporate Strategy**

As a technological leader in driveline and chassis technology, ZF Friedrichshafen AG has the clear objective of providing its customers around the globe with products and services that offer a noticeable added value.

We are facing an enormous challenge in this respect. Diverse global megatrends will continue to have a substantial impact on the development of ZF in the coming years. Progressive globalization, with its effects on sales and sourcing markets, forces us to strengthen the international orientation of our structures and competencies. Furthermore, demographic change and increasing urbanization in many markets are leading to changes in consumer behavior. In light of the volatility and insecurity on the markets, we must be able to adapt and place more emphasis on balancing our business activities.

Increasing demand is countered by finite resources. The result is a technological change into the direction of efficiency and resource conservation. This especially applies to fuel efficiency and the reduction of  $CO_2$  and noise emissions.

Global access to and availability of qualified employees also present a great challenge to the company.

With respect to these general conditions, our "ZF 2025" strategy dictates the focus of the ZF Group for the coming years. In the context of a balanced global market penetration, we want to intensify the expansion of our sales and sourcing markets not only in our core European market, but also in the Asia-Pacific, North America, and South America regions. Furthermore, striving for leadership in both technology and costs will play a key role in determining ZF's market success in the future. We want to significantly strengthen fields of competence such as electronics, its integration into ZF products and systems, as well as lightweight design.

Profitable diversification implies establishing and expanding new competence and market segments, such as in the fields of industrial technology, electronics, or service. To secure our financial independence, we must consider profitability in all processes. In this way, ZF is able to finance the investments and growth necessary for the future from its own income.

We also want to position ourselves as a globally attractive employer in order to take advantage of global market opportunities. ZF needs qualified specialists in all markets, who find optimal working and qualification opportunities at our company. We want to increase the share of women and employ internationally experienced personnel.

#### **ECONOMIC REPORT**

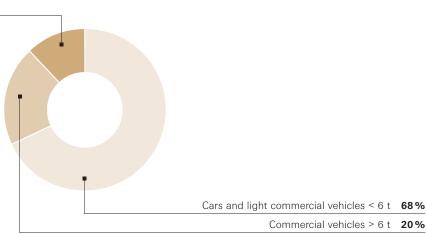
# The Business Environment and Industry Developments

#### Weak economic framework conditions

The global economic development continued to deteriorate further in the business year of 2013. While the global economic performance of 2.7% during 2011 had already slowed down to 2.2% in 2012, there was again a 2.2% increase in 2013. In particular, the first months of the previous year were characterized by great uncertainty. During this period, many large economic regions reported weaker economic indicators than were originally expected. A welcome reversal in trend only became apparent after summer with increasingly positive indicators during the last quarter of 2013 in particular. However, compared to 2012, many large economic regions had to cope with a weaker economic development during 2013.

#### Sales distribution by sectors, consolidated ZF Group

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



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

	2009	2010	2011	2012	2013	2014*
Europe	16,700	19,000	20,300	19,100	19,200	19,600
North America	8,500	11,900	13,100	15,400	16,100	16,800
South America	3,400	3,800	3,900	4,000	4,300	4,300
Japan	7,800	9,400	8,100	9,600	9,300	8,600
China	12,300	16,600	16,800	18,200	20,900	22,900
Other countries	9,600	12,400	13,500	14,400	14,100	14,800
Total	58,300	73,100	75,700	80,700	83,900	87,000

<sup>\*</sup> Forecast

### Worldwide development of the production of commercial vehicles > 6 t in 1.000 units

	2009	2010	2011	2012	2013	2014*
Europe	320	470	640	590	600	570
North America	260	290	430	480	460	500
South America	160	240	270	180	240	250
Japan	170	260	260	320	330	330
China	1,030	1,490	1,320	1,070	1,240	1,280
Other countries	250	400	450	410	320	340
Total	2,190	3,150	3,370	3,050	3,190	3,270

<sup>\*</sup> Forecast

For instance, the US economy only grew by 1.9% last year following 2.2% growth in 2012. A significant reason for this was the unsolved issue of the debt limit (fiscal cliff) which generated great uncertainty in the economic cycle. Furthermore, this led to automatic spending cuts and the "government shutdown" which had noticeable impacts upon the economic situation. After a 0.5% decline in the GDP in the prior year, the European Union remained in recession during 2013 and posted a renewed decline of 0.4%. The key factor for this was the continuing critical situation, especially in the southern countries. Italy, Spain, and also France once again witnessed declining economic growth which, ultimately, could not be compensated for by the slightly growing national economies

in Germany and Great Britain. Other important economic regions also experienced a similarly weak development. Japan experienced a weak trend with an 1.6% growth in 2013 (after 2% in 2012) as did India (3.6% after 4.1%), or Russia (1.3% after 3.4%), and other emerging markets. Only a few markets were able to reverse this declining trend such as Brazil that, following a weak 2012, was able to expand its economic performance by 0.9% to 2.2% or South Korea that achieved a 2% increase to 2.8%. China was unable to completely meet expectations although it achieved an economic growth of 7.7% (after 7.8% in the previous year). Therefore, the last business year was characterized by a globally subdued economic development.

#### Very irregular trends in the industries

Against the background of relatively weak economic conditions, the development of the key ZF industries was also subdued and differed strongly depending on the region.

### Production increase of passenger cars and light commercial vehicles

In 2013, 84 million passenger cars and light commercial vehicles were manufactured worldwide. This is an increase of 4% compared to the previous year. Essentially, three economic regions were responsible for this growth: China was the forerunner with a double-digit growth (15%) in vehicle production to almost 21 million vehicles. Consequently, a quarter of the global volume can be attributed to Chinese production. At 5% and 8%, the regions of North and South America were able to achieve considerable growth in vehicle production. North America once again exceeded the 16-million mark for the first time since 2002. It was not possible for the growth markets of Great Britain or Spain to compensate for the weak demand for vehicles in Europe, particularly on the large Italian, French, and German markets. As a consequence, the overall demand declined by 2% compared to 2012. Thanks to the respective export successes, especially from Germany, it was possible to dampen the respective impacts upon production; a total of 19.2 million vehicles were manufactured in Europe. In contrast, Japan had to restrain vehicle production by 3% in 2013 following strong growth in the previous year (18%).

## Almost 40 % of all heavy commercial vehicles come from China

Approximately 3.2 million heavy commercial vehicles in the > 6 ton segment were manufactured globally in 2013. This represents a 5% volume increase compared to the prior year and, consequently, again reached the 2010

level but still remained 200,000 units behind the peak year of 2011 when almost 3.4 million vehicles were manufactured. The country with the greatest growth was Brazil which recorded an increase of more than 30%, although this is based upon a weak previous year as a result of stricter emission regulations. With a 16% growth to 1.2 million units, China experienced an above-average development. As a result, 39% of the commercial vehicles manufactured worldwide are produced in China. In a relatively weak economic environment, North America recorded a decline by 4% to 460,000 units. The development in Europe was essentially characterized by two completely different halves of the year. Following a 9% decline in the previous year, the demand for heavy commercial vehicles initially collapsed once again by 11% between January and June 2013. However, a massive surge in demand was recorded as of summer and especially in the final quarter which led to an 8% increase in demand in the overall year. This surge in demand was caused by a strong preemptive effect: On January 1, 2014, the Euro 6 standard came into force in the EU with stricter emission limit values and more complex technology, as well as correspondingly higher vehicle prices. This led to a massive rise in demand and production of Euro 5 vehicles towards the end of 2013. The Indian market found itself in a very difficult situation. A weak economic development, a lack of willingness to invest, and inventories caused a massive decline of quantities by almost 30%.

#### Less off-road machinery produced

The year 2013 was characterized by a downward development in the construction machinery segment. Following a 15% slump in the prior year, the global production volumes for construction machinery fell by 2% in 2013. China, with almost a 40% share in the global output, remained stagnant whilst Europe had to cope with a 5% drop. At the same time, production in Germany almost achieved the prior-year level and had a stabilizing effect

### Sales development by divisions and business units, consolidated ZF Group in $\ensuremath{\mathsf{e}}$ million

	2013	2013/2012*
Car Powertrain Technology	5,704	+15%
Car Chassis Technology	5,509	+11%
Commercial Vehicle Technology	3,249	+7%
Industrial Technology	1,903	-9%
Electronic Systems	582	+4%
ZF Services	1,456	+6%
Corporate R&D, Corporate Headquarters, and Service Companies	136	+15%
- Internal Sales	-1,702	
Consolidated ZF Group	16,837	+8%

<sup>\*</sup> As of 2012 excluding ZF Lenksysteme.

whereas Southern Europe still had to tackle sharp declines. However, it is believed that the trough has been reached there. Due to the weak economic development and a persistent export weakness, North America was also unable to fully reach the volumes of the previous year. By contrast, positive results were noted in South America. Additional state infrastructure spending generated growth stimuli particularly in the second half of 2013 which permitted a 7 % growth in the production of construction machinery.

The agricultural technology markets showed weak positive signals in 2013. Overall, the global production of tractors in the performance range > 30 kW grew by 3%. Except for Western Europe that experienced a slight decline of 2%, all other regions followed the growth path: North America achieved growth of 3%, South America stood out with an increase of 9%, and even Asia grew once again by 5% following the decline in the previous year. India, the world's largest market for tractors of the lower performance range, also recorded a pleasing growth with a plus of 6%.

#### **Business Trend**

In the fiscal year 2013, the trend was positive in our essential market regions and industries despite the absence of a sustainable impulse for growth. In particular, the passenger car, commercial vehicle, and premium passenger car segments of the Chinese market developed dynamically. In contrast, the persistently low demand in southern European countries and the continuing weak international development of the wind power market had a negative effect.

Against this background, we managed to increase sales in the year under review on a comparable prior-year level by almost 8% to around € 16,837 million. Growth in the ZF Group thus remained significantly higher than the industry average (3%). The strong international demand for automatic transmissions and axle systems for passenger cars was the primary force behind this growth. New production locations in the regions of North America and Asia-Pacific contributed to this positive development.

#### Sales development by regions, consolidated ZF Group

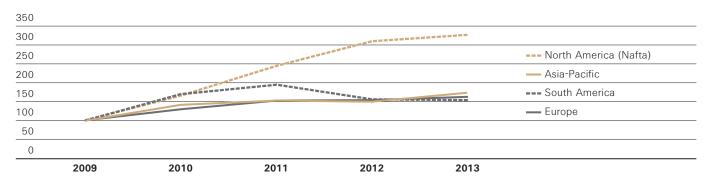
in € million (consolidated)

	2009	2010	2011	2012*	2013
Western Europe	5,603	7,114	8,508	8,275	8,907
Eastern Europe	492	778	950	806	920
North America (Nafta)	948	1,583	2,319	2,935	3,095
South America	450	776	880	692	704
Asia-Pacific	1,715	2,448	2,630	2,604	2,998
Africa	163	208	222	214	213
Total	9,371	12,907	15,509	15,526	16,837

<sup>\*</sup> As of 2012 excluding ZF Lenksysteme.

#### Sales development by regions, consolidated ZF Group

2009 = Index 100



<sup>\*</sup> As of 2012 excluding ZF Lenksysteme.

In the year under review, we concluded an agreement to sell the Rubber & Plastics business unit to Zhuzhou Times New Material Technology Co., Ltd. (TMT). The Rubber & Plastics business unit, with sales of around € 700 million and approximately 3,300 employees, is spun off from the ZF Group and transferred to a new company. The acquisition will be completed during the first half of 2014 as soon as the required approvals have been obtained.

Despite renewed high start-up costs and the ongoing difficult situation in the wind power market segment, ZF managed to improve its operating profit to  $\mathfrak E$  756 million in the year under review. At  $\mathfrak E$  954 million, investments in property, plant, and equipment decreased by 7% compared to the prior year's level. However, we were still able to achieve a positive free cash flow of  $\mathfrak E$  288 million primarily as a result of our rigorous management of the working capital area.

### Results of Operations, Net Assets, and Financial Position

#### **Preliminary remark**

Previously, the joint venture ZF Lenksysteme GmbH and its subsidiaries followed proportionate consolidation and were included in the consolidated financial statements of ZF Friedrichshafen AG. As of January 1, 2013, ZF has recognized the subgroup at equity which has significantly changed the presentation of the results of operations, net assets, and financial position of the consolidated ZF Group. The profit share of ZF Lenksysteme GmbH is now included in the net financial result. As the method change was implemented retrospectively, the comparative values are based upon adjusted prior-year figures for the purpose of submitting comments in the management report.

The planned sales of the Rubber & Plastics business unit and the AIBC Group in South Africa are reported separately as so-called disposal groups in the consolidated statement of financial position. However, for the subsequent reporting, their assets and liabilities are assigned to the individual financial line items.

#### **Results of operations**

In 2013, the ZF Group once again achieved an 8% increase in sales to € 16,837 million, a figure that is above the industry average. This growth can be primarily attributed to the positive sales development in the divisions and business units that are active in the passenger car industry. For instance, the Car Powertrain Technology division managed to significantly increase sales by 15% to € 5,704 million which was mainly due to an upturn in demand for automatic passenger car transmissions. The sales of the Car Chassis Technology division increased by 11% to € 5,509 million which mainly resulted from the large demand for passenger car axle systems that ZF produces at 15 locations worldwide.

There was a lack of growth impetus in the Commercial Vehicle Technology division due to the mainly subdued development of the industry. Nevertheless, sales increased by 7% to € 3,249 million which not least resulted from the so-called preemptive effect in Europe, especially during the second half of the year, caused by the Euro 6 standard which came into force in 2014. The Industrial Technology division was forced to accept a 9% decline in sales to € 1,903 million. The primary causes for this downturn are the sales slump in the wind power business by 46% to € 216 million as well as a sales growth for off-road machinery and marine applications that only increased slightly or stagnated. The Electronic Systems business unit, which still belonged to the Industrial Technology division in the previous year, has been controlled separately as an independent business unit since 2013. With various developments in the individual product lines, sales rose by 4% in total. Ultimately, the ZF Services business unit, in which the St. Petersburg (Russia) location was consolidated for the first time and in which the non-automotive activities were expanded, recorded a sales growth of 6% to € 1,456 million. ZF was able to record significant growth in all important regions despite a further weakened global economic development in the fiscal year. During the year under review, growth in Europe was positive with an increase of 8% to  $\upolesize{0.05em}$  9,827 million and was essentially led by the high global demand for vehicles from German and English manufacturers from the premium segment. Germany also saw a sales increase of 6% to € 5,607 million.

Investments in the plant for the production of 8 and 9-speed automatic passenger car transmissions in Gray Court, South Carolina (USA), inaugurated in July 2013, amounted to approximately  $\[mathbb{\in}\]$  350 million in recent years. This new plant constituted an important step for the future market development of ZF in the region of North America. Here, sales increased by 5% to  $\[mathbb{\in}\]$  3,095 million.

### Structure of the consolidated statement of profit or loss, consolidated ZF Group

in € million

	2013	%	2012*	%
Sales	16,837	100	15,526	100
Cost of sales	13,912	83	12,881	83
Gross profit on sales	2,925	17	2,645	17
Research and development costs	836	5	770	5
Selling expenses	667	4	659	4
General administrative expenses	675	4	623	4
Other income	130	1	123	1
Other expenses	121	1	119	1
Operating profit or loss	756	4	597	4
Result from at-equity participations	43		41	
Net result from participations	8		5	
Net interest result and other financial results	-124		-113	
Net financial result	-73		-67	
Net profit or loss before income tax	683		530	
Income taxes	221		200	
Net profit or loss after tax	462		330	

<sup>\*</sup> As of 2012 excluding ZF Lenksysteme.

#### Consolidated statement of cash flows, consolidated ZF Group

in € million

	2013	2012*
Cash flow from operating activities	1,440	1,416
Cash flow from investing activities	-1,152	-1,164
Cash flow from financing activities	-13	-54
Change in cash position	275	198
Cash position at the beginning of the fiscal year	888	693
Changes in cash position from changes in the consolidated group and exchange rate effects	-20	-3
Cash position at the end of the fiscal year	1,143	888

 $<sup>\</sup>ensuremath{^{\bigstar}}$  As of 2012 excluding ZF Lenksysteme.

The start of volume production in Mexico for electronic control units that will be installed in the 9-speed automatic transmissions as well as the torque converters that are also produced there contributed to this growth. Further growth impetus was experienced in the passenger car axle systems and passenger car axle drives business. Sales growth in South America of 2% to € 704 million was primarily attributable to the popularity of commercial vehicles there.

As in the previous year, the Asia-Pacific region recorded the largest percentage growth with an increase of 15% to € 2,998 million. Within this region, the Chinese market experienced the greatest growth momentum, especially in the automobile sector. The ZF Group invested in new production locations for passenger car axle systems in Beijing (China) and the expansion for passenger car axle assembly in Shenyang (China).

The operating profit experienced a positive development with an improvement of return on sales from 3.8% to 4.5%. This was essentially based on the slightly disproportionate rise in cost of sales with a gross margin increase of 17.4% (2012: 17.0%) that does not yet meet expectations. It was possible to overcompensate for start-up costs for new plants that continue to remain high in China and the USA as well as negative impacts from underutilization and restructuring in the wind turbine gearbox sector thanks to further process improvements in production and positive effects from materials management. With the constantly high expenses for research and development, ZF is laying the foundation for its objective of technology leadership and future market success.

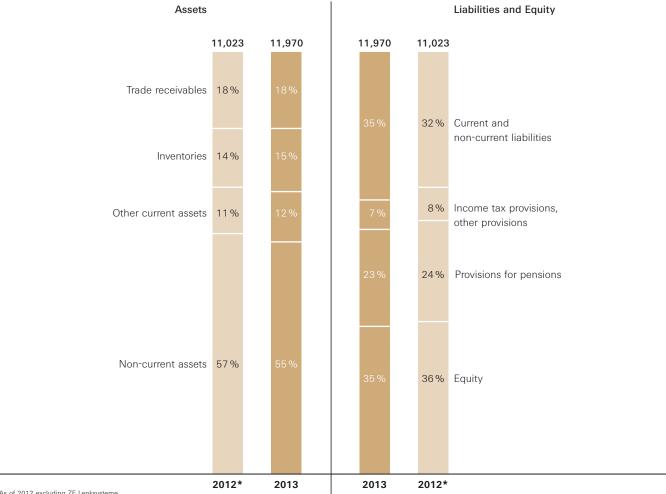
At  $\in$  51 million, the net result from participations made a higher positive contribution to the net financial result compared to earlier years. As of the previous year, the profit share of the joint venture ZF Lenksysteme GmbH is now included in this figure. The lower interest expenses thanks to the less expensive loan conditions were overcompensated by costs associated with exchange rate effects

listed under other financial expenses, which is why the loss from the net financial result has increased by a total of  $\in$  6 million to  $\in$  73 million. Income tax expenses in the amount of  $\in$  221 million include  $\in$  207 million effective taxes and deferred taxes amounting to  $\in$  14 million. After their deduction from the net profit before income tax ( $\in$  683 million), a net profit or loss after tax of  $\in$  462 million remains.

#### **Financial position**

In the year under review, there was a very positive development of the ZF Group's liquidity. The increase in the cash position by € 255 million to € 1,143 million largely results from the cash flow from operating activities which amounted to € 1,440 million. The increase in inventories and trade receivables amounting altogether to € 453 million as well as higher income tax payments had a clearly negative impact on the cash flow. However, the fact that the net profit before tax improved by € 153 million compared to the prior year and trade payables increased by € 505 million particularly due to a change in the terms of payment resulted in a corresponding improvement of the operating cash flow. Positive effects were also gained from the slightly lower sum of the expenditures for investments in property, plant, and equipment. This allowed to improve the free cash flow consisting of cash inflow from the cash flow from operating activities and the cash flow from investing activities from € 252 million to € 288 million. The cash flow from financing activities had no significant effect on cash. Inflows from borrowings in the amount of € 243 million contrasted repayments for borrowings of € 161 million and dividend payments amounting to € 50 million to shareholders of ZF Friedrichshafen AG and holders of non-controlling interests. The positive net liquidity and a net financial position totaling € 1,022 million, which includes cash as well as current and non-current securities, provide a solid financial footing.

#### Structure of the consolidated statement of financial position, consolidated ZF Group<sup>1)</sup> in € million



<sup>\*</sup> As of 2012 excluding ZF Lenksysteme.

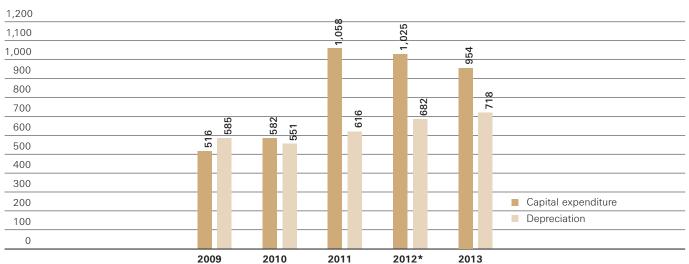
#### **Capital structure**

Following a resolution passed at the Annual General Meeting of ZF Friedrichshafen AG on April 23, 2013, the subscribed capital was increased by € 200 million to € 500 million through conversion of capital reserves. As of December 31, 2013, the Group equity amounted to € 4,165 million including non-controlling interests compared to € 3,950 million in the prior year. The retained earnings accounted for the major equity share with € 3,153 million. This increase resulting from the

net profit or loss after tax of € 462 million is contrasted with negative impacts from actuarial losses from the valuation of obligations from pension commitments (€ 76 million). Moreover, the change in the difference from foreign currency translation also led to a reduction in equity by € 134 million along with the dividends paid to the shareholders and holders of non-controlling interests in the total amount of € 50 million in the year under review. Overall, this constituted a virtually unchanged equity ratio of a solid 35% at the end of the year.

<sup>1)</sup> Individual values including disposal groups.

Capital expenditure and depreciation (property, plant, and equipment), consolidated ZF Group in € million



\* As of 2012 excluding ZF Lenksysteme.

The financial liabilities in the amount of € 1,156 million (2012: € 1,083 million) are largely due in 2015 to 2019 and nominated in euro. The variable interest-bearing loans and borrowings comply with the EURIBOR (Euro InterBank Offered Rate) plus a surcharge. The interest rates of the fixed interest-bearing loans which account for more than half of the long-term loans, are between 1.25% and 3.10%.

As of the balance sheet date,  $\in$  400 million have been utilized of the syndicated loan amounting to  $\in$  1,000 million which was concluded in 2011. The residual amount is available as revolving credit line that can always be called up.

#### Net assets position

The increase in the ZF Group balance sheet total by  $\[ \in 947 \]$  million essentially results from the increase in the current assets that, together, amount to a 45% share of the balance sheet total. Thus, the welcome increase in cash by  $\[ \in 255 \]$  million is all the more remarkable when the funds tied up in working capital on the assets side as

a result of, amongst other things, the sales increase by € 462 million rose at the same time. The negative effect from this is overcompensated by the achieved increase in trade payables by  $\odot$  505 million which is, not least, caused by a change in the terms of payment. The investing activities which still remain high contribute to the further development of property, plant, and equipment that expanded on the assets side from € 3,670 million to € 3,804 million. In total, financial liabilities only increased by € 82 million to € 1,165 million. Alongside the vesting of further claims, the reduction of the discount rate from 4.0% to 3.8% contributed to the increase in pension provisions by € 173 million to € 2,785 million which corresponds to a 23% share of the balance sheet total. In order to finance obligations from pension commitments, ZF provided additional funds to the non-current securities allocated for this purpose that, together with the plan assets of € 129 million, now amount to € 1,137 million. Partly thanks to the equity of € 4,165 million (35% of the balance sheet total), the structure of the consolidated statement of financial position can continue to be deemed solid overall.

#### Capital expenditure

In the year under review, investments in property, plant, and equipment of the ZF Group amounted to € 954 million and were thus 7% lower than the comparable prior-year figure. Consequently, the 6% investment ratio of sales was below the exceptionally high level of the previous year (7%). In 2013, the investments were below plan. This was attributable to adjustments due to the later supply of machines and systems as well as the rescheduling and new scheduling due to several changes in volume.

In the divisions and business units, it was possible to undertake the significant investments for the ramp-up of new products and expansions of capacities (73% investment share) in all regions and in Germany. This includes larger projects in Germany, the USA, Russia, and China. Machines and systems, production buildings, and equipment were required for this purpose. A 13% share was allocated to infrastructure, IT, and administration building investments. All necessary replacement and rationalization investments were made.

78% of the investments was spent on technical equipment and machines including advance payments and construction in progress, while 18% was spent on other equipment, factory and office equipment, and 4% on land and buildings.

The depreciation on property, plant, and equipment (excluding impairment depreciations) amounted to  $\in$  713 million (2012:  $\in$  647 million). The annual comparison indicated in the diagram on page 57 shows the depreciations including impairment depreciations.

Investments particularly focused on:

At the Saarbrücken (Germany) location, investments were made in product projects for the 8-speed automatic transmissions in order to increase capacity to 2.2 million units per year. For this purpose, respective investments in the torque converter production in Schweinfurt (Germany) and for die casting technology in Nuremberg (Germany) were also required. The implementation of further capacity increases has started.

Large-scale investments were once again required at the new location in Gray Court, South Carolina (USA), for the ramp-up of the 8-speed and 9-speed automatic transmissions in the second half of 2013. Since 2011, approximately € 350 million has been invested in the establishment of this new production location. Expansions of capacities of a similar magnitude are intended. The investments for the torque converters required in Gray Court, South Carolina (USA), were made in Saltillo (Mexico).

In the Car Chassis Technology division, major investments were made for axle systems in the new plants in Beijing (China) and Kulim (Malaysia), for expansions in Shenyang (China), and for damping modules in Guadalajara (Mexico) and Shanghai (China).

In the Commercial Vehicle Technology division, emphasis was put on the expansion of the location for heavy commercial vehicle transmissions at ZF Kama in Naberezhnye Chelny (Russia).

In the Electronic Systems business unit, focus was placed upon volume production preparations for new products, especially electronic control units for applications in passenger cars, commercial vehicles, and off-road machinery. This also includes the electronic control units for the 8 and 9-speed automatic transmissions in Juárez (Mexico) for delivery to Gray Court, South Carolina (USA).

#### **Further Performance Indicators**

#### **Employees**

As of December 31, 2013, ZF employees worldwide numbered 72,643. Based upon the comparable prior-year level, this corresponds to a 6% growth. Whilst the number of employees rose by 2,018 to 41,900 in Germany during 2013, 30,743 persons were employed abroad which corresponds to 2,219 more compared to the previous year.

ZF Friedrichshafen AG was once again among the major training companies in Germany in 2013: 530 young people began their professional life at ZF throughout Germany. The training offer ranges from technical jobs such as electronic technicians for automation technology and mechatronics engineers, as well as merchants to catering professions. Altogether, ZF employed 2,085 apprentices

at 15 locations at the end of 2013. About 200 thereof complete vocational training in collaboration with the Cooperative State University (DH). A total of 36 different vocational training programs and DH courses are available.

Successful positioning of the ZF employer brand ZF positions itself as a globally attractive employer using the employer brand. The effectiveness of HR marketing is confirmed by the continuous improvement of our position in the established rankings such as the trendence Young Professional Barometer (2013: 39<sup>th</sup> place), trendence Graduate Barometer – Engineers (22<sup>nd</sup> place), and the "Universum" Ranking – Engineers (29<sup>th</sup> place).

The number of applications for the international postgraduate trainee program more than doubled in comparison to the previous year which also reflects our successful HR work.

#### Workforce development, consolidated ZF Group

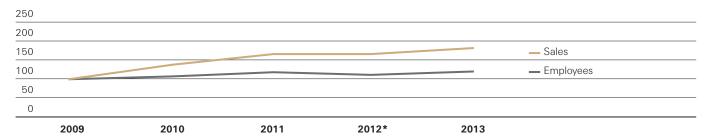
at the end of the year (direct and indirect employees) 1)

	2009	2009 new	2010	2011	2012*	2013
Domestic	36,490	37,271	38,205	41,229	39,882	41,900
Foreign	23,281	23,674	26,395	30,259	28,524	30,743
Total	59,771	60,945	64,600	71,488	68,406	72,643

<sup>\*</sup> As of 2012 excluding ZF Lenksysteme.

#### Development of sales and employees, consolidated ZF Group

2009 = Index 100



<sup>\*</sup> As of 2012 excluding ZF Lenksysteme

<sup>1)</sup> Starting from 2009, changed calculation method to count part-time employees.

#### Further expansion of social commitment

In 2005, the nonprofit association ZF hilft e.V. was launched with the purpose of coordinating the overwhelming amount of donations made in the context of the employee donation campaign on behalf of the victims of the tsunami in December 2004. Ever since, ZF hilft e.V. has supported donation projects all around the globe for victims of natural disasters, epidemics, accidents, famine, and armed conflicts. The association also attaches great importance to sustainable, effective projects to promote the education and professional training of underprivileged children and young people in developing regions. In 2013, employee donations were used to establish private school initiatives in Ghana, Uganda, Rwanda, and the Dominican Republic.

ZF Friedrichshafen AG also provided support to those affected by the extreme flooding in Passau (Germany) at the beginning of June 2013 with an immediate donation of  $\mathfrak{E}$  1 million.

#### MINT program expanded

The "Wissenswerkstatt" (Knowledge Workshop) project that was launched in Friedrichshafen in 2009 in order to promote interest in MINT subjects (mathematics, information technology, natural sciences, and technology) is based upon the collaboration between municipalities, trade associations, and companies. As part of the "Wissenswerkstatt" project, students and young people can test their skills in the mechanical workshop or use the laboratories to develop an understanding for the basics of physics, electrical engineering, and control electronics.

In 2013, we also established "Wissenswerkstatt" schemes at both our Passau and Schweinfurt locations. The inauguration of the "Wissenswerkstatt" in Saarbrücken and Schwäbisch Gmünd (Germany) is planned for 2014. Approximately half of all visits are organized via local and regional schools. Furthermore, children and young people can take their own initiative to register for courses. Amongst other benefits, the great success of the scheme is reflected in the fact that some of the attendance figures are twice as high as originally expected.

#### Materials management

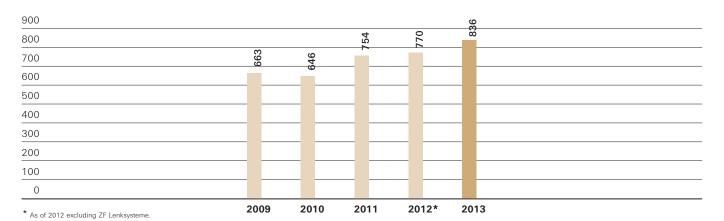
In 2013, the purchasing volume of the ZF Group rose consistently. Thanks to new orders in the USA and the Asia-Pacific region, volumes significantly grew, especially in the ZF Regions.

The objectives are to secure the global supply chain, to increase its efficiency, and to reduce its complexity. The consistent and sustainable implementation of APS25 – ZF Advanced Procurement Strategy and the integration of the materials management strategy into the "ZF 2025" Group strategy assist in attaining these objectives. ZF has successfully restructured its Production Materials Purchasing with a global commodity organization in order to achieve its primary targets. By strictly pursuing the "One face to the supplier" strategy, the price-cost gap is closed, the supplier base is globally consolidated, and the purchasing processes are standardized. New processes such as the Sourcing Decision Board and the introduction of global Cost Engineering support us in achieving our objectives.

Our suppliers are always at the center of attention – for instance, we honored the "best of the best" again in 2013. ZF awarded a total of seven suppliers in the categories of production materials, non-production materials, global, energy efficiency, and innovation. Furthermore, we launched the Innovation Award amongst selected suppliers. These suppliers had the opportunity to showcase their new, innovative concepts in front of a jury of experts.

During 2013, we also concentrated on our inventory turnover rate. It improved by approximately 6.5% which can partly be attributed to a further increase in the delivery reliability of our suppliers. The global transport management will also be further optimized in the future. For instance, we have reduced the number of service providers to three strategic partners in the field of international sea freight. Processes have also been standardized and the establishment of regional consolidation centers for sea freight such as the center in Charleston, South Carolina (USA), for imports to North America has been accelerated.

### Research and development costs, consolidated ZF Group in € million



#### Research and development

Approximately 6,244 employees work for ZF Research and Development worldwide. Of these, about 960 engineers and technicians work at the ZF Group's Corporate Research and Development departments in Friedrichshafen (Germany), and an additional 290 in Pilsen (Czech Republic), Shanghai (China), and Tokyo (Japan). In 2013, we invested € 836 million in R&D. Thus, the target of 5% of sales for research and development costs has been reached.

#### Wide range of tasks

The Group's product and technology planning is based on market, product, and competence roadmaps that are continuously updated. In the year under review, Corporate Research and Development collaborated on development projects of the business units. Furthermore, it continued its work in the areas of advanced engineering, basic development, and the optimization of development processes while focusing on the following subject areas.

#### Solutions for future mobility

During the course of the year under review, Advanced Engineering designed a concept for a passenger car rear axle composed entirely of fiber-reinforced plastics material. In terms of methods applied, we managed to create the conditions required to develop components made from these new materials in order to satisfy load requirements while taking production engineering concerns into consideration.

Within the context of target fleet values for  $\mathrm{CO}_2$  emissions, conventional drives and hybrid drives are continuously further developed. Based on the central electric drive, we implemented a model whereby the electric drive is integrated into the chassis near the wheel on the right and left side. In addition, several projects promoted by the German Federal Government's National Electric Mobility Platform were launched to further advance developments to the electric drive. We built an innovation prototype in a Group-wide project to present ZF's

approaches to finding solutions in the areas of electromobility and lightweight design. The compact, all-electric city vehicle features high driving dynamics and energy efficiency. Since the demand for power electronics suited for cars is rising along with the increased importance of hybrid and electric vehicles, ZF is working intensively on their development.

Intelligent control of the power consumption of different systems is a key factor in further reducing the auxiliary power required to control the units (power-on-demand). ZF is devoting a great deal of its efforts to this topic and offers vehicle manufacturers a corresponding range of solutions.

#### Safeguarding legal requirements

Updating the Group-wide Product Data Management (PDM) system continued in 2013. International locations and newly added ZF locations were integrated into the PDM system. Within the framework of the new Product Lifecycle Management (PLM) strategy, several projects were launched with the objective of optimizing the product evolution process. The quality of master data, systems engineering, and the redesign of the CAD strategy based on new and adjusted standards, methods, and active chains will make a significant contribution in future.

The stricter legal stipulations on fuel efficiency require simulations that provide early and accurate efficiency data. The calculation bases were therefore expanded and a simulation tool was programmed for use in the Development departments. For the development of hydrodynamic hydraulic brakes (retarders), we put a new 800-kW test bench into operation. In this configuration, the test bench also covers future testing procedures with the increased performance requirements of our customers.

For several years, Corporate Materials Technology has been responsible for the supplier management regarding raw materials such as transmission oil and case hardening steels. These activities were expanded in 2013 to include additional steel groups and the plastics and fibers of new lightweight materials.

In gearing technology, new bevel gear geometries were developed and the leveraged performance potential was confirmed in test bench runs. Furthermore, new design procedures provide a significant reduction in gear excitation.

The example of the TraXon transmission shows how interdisciplinary acoustics teams can set new standards for reduced outside noise levels. Today's TraXon transmission is thus already well prepared for tomorrow's outside noise legislation.

The technology on the commercial vehicle acoustics test bench was enhanced with a large microphone array (acoustic camera). This visualizes the location of the noise emissions and supports targeted acoustic optimizations.

Patent applications exceed high value of prior year Industrial property is high on ZF's list of priorities. As in previous years, ZF was able to maintain its position among the top patent applicants in Germany in 2013. We managed to exceed the high level set in the previous year with approximately 1,000 internal invention disclosures. Our 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 protection of its valuable assets worldwide. The brand and domain inventory consists of more than 3,300 individual brands and more than 1,000 domains.

#### **New products**

ZF again launched numerous innovative products on the market in the fiscal year 2013.

In the Car Powertrain Technology division, for instance, we laid important groundwork for future growth by starting volume production of the 9-speed automatic transmission (9HP) for vehicles with front-transverse engine. For the 9HP, which is manufactured in the new US plant in Gray Court, South Carolina, ZF also produces the electronic control unit itself for the first time. With the 8-speed automatic transmission, we launched a technical modification on the market in 2013 which enables additional fuel savings of approximately 3%.

Volume production of an innovative product started in the Car Chassis Technology division: the AKC (Active Kinematics Control) active rear axle steering. The system was used in the new Porsche 911 for the first time and has already earned ZF numerous prizes for innovation.

Innovation prototype illustrates ZF's superior technological expertise

For ZF to strengthen the market position and maintain its technological leadership, the company has to focus on demonstrating its concepts and competencies in practice. To this end, we presented an innovation prototype in 2013. ZF started with a vehicle modeled on a subcompact car and enhanced the electric drive and energy management system with innovative lightweight design elements.

In the Commercial Vehicle Technology division, the AVE 130 electric portal axle continues to prevail in city buses. The system is suitable for both hybrid and allelectric city buses, and is attracting the interest of an increasing number of city transport authorities. In addition, we have further developed the modularly designed TraXon automatic transmission system for heavy trucks to be ready for production. ZF has optimized numerous products in preparation for the introduction of the new Euro 6 emission standard for commercial vehicles. These include, for example, an innovative rear axle construction which allows truck manufacturers to reduce weights by up to 110 kg. Volume production started in 2013 with delivery to a first customer from the truck industry.

ZF rounded off its extensive service portfolio for agricultural machinery technology last year by adding two new variants to the TERRAMATIC continuously variable transmission range. The power-split continuously variable technology is also attractive for construction machinery: The new cPOWER transmission provides significant fuel consumption advantages and boosts in productivity.

#### 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 ZF Quality Management System forms the framework for the quality management system at all locations. It is based on the ZF process map with the associated organizations and their processes. The continuous improvement process, the ZF Production System, is the basic philosophy behind the entire management system. The process and guideline structure is described in the ZF Quality Management Manual.

Working in partnership with our suppliers plays an important role for us. After all, we will only be able to jointly achieve our quality targets if the entire supply chain is optimally coordinated. ZF is therefore increasingly focusing on the electronic processing of supplier transactions. In addition to classic EDI for direct data exchange, we use the SupplyOn supplier portal for our web-based supplier communication.

ZF motivates all employees to remain constantly involved in the continuous improvement process. Our "Total Quality Management" contest was held for the 19<sup>th</sup> time in 2013. Overall, more than 1,100 employees worldwide entered the competition with around 240 projects, which not only contributed to quality improvement, but also included product innovations and ideas to optimize energy efficiency.

#### **Production**

We completed the project to harmonize basic methods and tools of the ZF Production System (ZF PS) in 2013. The uniformly agreed objectives and projects included in the roadmaps are analyzed. Approaches to optimization are derived from this, thus supporting the continuous improvement process. We intensified efforts to launch the ZF PS in the Development departments. Furthermore, we communicate internally that every executive manager and every employee, whether working directly or indirectly for the department, must make a contribution to the ZF PS.

To consolidate our competence in the area of lightweight design, we inaugurated the ZF Composites Tech Center in Schweinfurt (Germany) for the advanced engineering of production technologies for fiber-reinforced plastics (FRP). This will create the basis for the future volume production of innovative lightweight components in close collaboration with Product Development. Various procedures for processing thermosetting as well as thermoplastic FRP materials can be analyzed and qualified at the ZF Composites Tech Center.

IT security was also improved in Production in 2013, as the ZF locations are now effectively protected from malware.

In order to support the development of capable and efficient production processes and operations, the methods of DFMA (Design for Manufacture and Assembly) and material flow simulation were used for a variety of applications worldwide. Suppliers were also involved in the process. In addition, we began establishing a worldwide network of experts.

Based on the "Year of Energy" 2012, a Group-wide standardized energy management system (EMS) was developed and introduced in 2013. The system was successfully certified at the major German locations.

#### Compliance

Conducting business responsibly and with integrity is the foundation for gaining and maintaining the customers' trust in ZF and, as a result, guarantees the long-term success of our Group. Management, employees, and business partners adhere to all laws applicable to ZF and its internal regulations (compliance) - this is an integral part of our corporate culture. It is defined in our Corporate Principles as well as in the Code of Conduct or Business Partner Principles. The Board of Management expressly commits itself to these principles. With the newly established Corporate Governance function and the global presence of our Compliance organization, our Compliance Management System is to ensure compliant behavior on a sustained basis. Employees who require advice and support in a specific situation can find a Compliance contact at every ZF location worldwide. The ZF Compliance Management System consists of the following three fields of activity: prevent, detect, and respond. In 2013, they were also represented in organizational terms in the Corporate Compliance organization. The risk analysis forms the basis for all of the implemented measures such as communication, training, or business partner screening. The purpose of the notification system that was established in 2013 is to also provide us with extra knowledge regarding risks and infringements. Internal Auditing performs an examination in order to ensure that the measures suggested by the Compliance organization effectively and sustainably promote compliant behavior.

#### Sustainability

Sustainable and responsible business practices are part of ZF's basic values. The triad of financial success, social commitment, and environmental protection forms the basis for our company's future viability. In 2012, we reinforced this understanding of good corporate management by joining the UN Global Compact. ZF thus committed itself to principles that have long been a part of our corporate culture. These principles include protecting human rights and the rights of employees, promoting environmental protection, and combating corruption and bribery.

Sustainability Report in accordance with the GRI standard published for the first time
In the year under review, ZF created a Sustainability Report in accordance with the international Global Reporting Initiative (GRI) standard for the first time and published it on the Internet. We thus established substantial transparency and illustrated the efforts we make within our sustainability management program. The Compliance departments were expanded to include the Sustainability department, which is responsible for further developing external reporting and for coordinating the Group's multifaceted sustainability activities.

#### **Environmental protection**

By extending environmental policy to cover environmental and energy policy, the Board of Management emphatically strengthened the Group's commitment to environmental protection. All ZF Group activities relevant to energy and the environment can be quantified using standardized key figures. They are introduced into the worldwide organization through environmental and energy targets that have to be specified by the locations. To be able to comply with the extended reporting requirements of the internationally recognized GRI reporting standards, the existing reporting system (ERIS) was significantly expanded and reprogrammed.

A certified environmental management system is the Group standard for all production and main development locations. In the year under review, 93 production companies and organizational units worldwide were certified according to the international ISO 14001 standard by DNV, the independent auditing company. This corresponds to a certification rate of 89% relating to production. Compliance of the participating locations was verified by the external audit in accordance with the multisite procedure.

To further promote the issues of energy and climate protection, the requirements of an energy management system in accordance with ISO 50001 were initially integrated into the existing environmental management system for our German locations. The locations were successfully certified according to ISO 50001 and a corresponding auditor's certificate was obtained.

This is one of the essential requirements for energy tax refunds based on the Tax Cap and Efficiency System Ordinance (SpaEfV).

Together with the occupational safety and health requirements set out in the OHSAS standard, we established a centrally managed integrated management system for environmental protection, energy, and occupational safety and health.

Numerous measures to enhance the company-internal environmental protection were implemented at the ZF locations. The year under review focused particularly on aligning the operating standards of systems especially relevant to the environment to the requirements of the Industrial Emissions Directive (IED), which are mandatory throughout Europe.

During a series of building projects, clean-up of inherited pollution was completed at six locations. In the context of Corporate Development projects, we assessed the environmental risk as well as occupational safety and health risks for four projects by carrying out an environmental due diligence audit. In total, we spent  $\in$  22 million on new environmental protection facilities and  $\in$  38 million on operation and maintenance at German and international locations.

#### Market organization and market processes

The more market-oriented organizational structure introduced two years ago has proven its worth at ZF: The new divisions – Car Powertrain Technology, Car Chassis Technology, Commercial Vehicle Technology, and Industrial Technology – as well as the new Electronic Systems and ZF Services business units have been successfully established in their markets. By grouping activities in the market-oriented divisions, we improve cooperation and develop customer-oriented solutions.

ZF is facing major challenges: Market developments differ greatly by region, customers are continuously operating on an ever more global scale, and markets are increasingly subject to cyclical fluctuations. Given the growing lack of planning security, our organization must become more flexible if we want to respond faster. Moreover, we must adapt our planning processes. It also remains vital that we optimize the process landscape in the Corporate Market function based on Group-wide standardized master data and hierarchies.

The increasingly important Asian market also has considerable influence on ZF's business development. Our traditional customers are very successful in the Chinese market in particular. In addition, we can leverage more growth with new customers there. As a result, our business volume in Asia is expanding significantly.

Furthermore, the concept of market intelligence is taking on greater significance at ZF: Our management decisions are more and more based on identifying and analyzing significant trends in advance and assessing their relevance for ZF industries. Other vital factors include the correct valuation of competitors' activities and the transparency of customer-specific, regional, and technological topics, trends, and correlations. A global, cross-divisional and cross-regional team collects all important information in this respect, valuates that information, and then derives appropriate recommendations and courses of action.

#### IT

Satisfaction and loyalty of our internal customers are key to the success of ZF IT. Customer satisfaction surveys are performed regularly at ZF with the objective of identifying strengths and weaknesses as well as receiving impetus in order to optimize IT services. The results of the global survey conducted at the end of 2012 have been available

since the beginning of the year. The following fields of action were identified and appropriate measures were derived: improvement of the IT workplace, the training program, the customer focus, as well as the innovative capacity of ZF IT.

Over the course of a two-year IT Innovation Initiative, we have already intensified investments in future technologies. As one of the results, ZF Search, a companywide search application for our employees, went live. Via a simple access, it is possible to search through information and documents in multidisciplinary systems and quickly find data. The subject of unified communications was also examined. This term refers to the integration of all communication media (audio, video, and web conferences, instant messaging, and presence management) into the PC work environment. The objective of this technology is to make the collaboration, communication, and implementation of virtual meetings with internal and external participants significantly more efficient.

We reorganized our Sourcing and Vendor Management activities to support our company's global growth. This involves the extended use of external services for IT business applications. Future projects will be based on a contract with a strategic IT provider.

The global roll-out of the Windows 7 operating system is close to completion. For approximately 40,000 employees, this is a further important step towards a future-oriented PC working environment.

As is the case with many other companies, ZF is also confronted with a growing number of cyber attacks. They are becoming increasingly professional and aim at accessing our know-how. A new and comprehensive security program ensures the highest possible protection.

#### **Process management**

Within the context of our long-term "ZF 2025" strategy, the requirements placed upon the process landscape of the Group continue to increase. A cross-functional collaboration in the form of a pooled purchasing organization, shared services, or business parks for instance increase the demand for company-wide process standards.

Process strategies are developed based on the corporate strategy or functional strategies. For each process, it is determined whether it contributes to consolidating the individual business model in terms of its specific characteristic or whether it is standardized as a result of crossfunctional collaboration. The process architecture rigorously pursues the logic of a modular construction kit.

In order to be able to consistently implement this strategy, we started describing all processes globally and transparently in one documentary language in a Business Process Network (BPN) as well as within a regulatory framework. This regulatory framework was integrated into the management system as mandatory for the first time in 2013.

# Group Management Overall Statement on Business Performance

With an 8% sales increase to € 16,837 million and an improvement of the net profit or loss after tax from € 330 million to € 462 million, the fiscal year 2013 was a positive year for the ZF Group. New plants in the USA and China, a high demand for car driveline and chassis technology products, and a healthy upswing in commercial vehicles in the second half of the year have boosted the business of ZF. The industrial technology segment had to deal with declines in sales due to market weaknesses in the wind power business and the construction-machinery industry. Overall, the market regions experienced extremely different business trends.

A strongly increasing volatility can be seen in the various market segments. This led to additional costs during 2013 as a result of demand-related over or under-capacity at the ZF locations. In order to tackle these fluctuations, we are intensively working on new, flexible solutions through new working time models as well as the utilization of synergies in the Group network.

With investments of € 954 million in property, plant, and equipment alone as well as a high level of upfront expenditures, the company responded to the positive global market response to ZF products by further expanding production capacities. To achieve further market success, it is crucial for ZF to aim towards technology and cost leadership and, by improving profitability in all processes, securing financial independence which is indispensable.

The conservative accounting and financing policy of the ZF Group is reflected in the solid key figures of the statement of financial position, not least in the equity ratio of 35%. Against the backdrop of a stable liquidity and financial basis as well as the good business performance recorded in the result, the economic situation is considered to be positive on the whole.

# OCCURRENCES AFTER THE END OF THE FISCAL YEAR

After the fiscal year 2013 was over, no events occurred that impacted the annual financial statements of the ZF Group.

#### **RISK MANAGEMENT**

As an international Group, ZF is confronted with a multitude of risks that arise on account of the continuous complexity of the global sales and sourcing markets. ZF's risk management system enables a systematic and transparent handling of risks and contributes to the value increase of the company by ensuring that risk potential is uncovered and that countermeasures can be initiated.

The Board of Management or Senior Management Teams of all legally independent corporate units within the ZF Group have established a risk management system according to Group-wide uniform provisions. The objective is to promote a value-oriented risk culture and to promptly identify the dangers of value losses from corporate activities. Consequently, risks with impacts upon the net assets, financial position, and results of operations can be kept economically justifiable.

The Board of Management and the Supervisory Board are informed of the current risk situation in a prompt and structured manner.

The individual, legally independent corporate units and divisions are responsible for the risk management process. Reporting is performed according to the internal ZF Group Directive regarding quality risks, procurement risks, sales risks, restructuring/location risks, and other risks. Risks threatening the existence of the Group that can lead to insolvency or a loss > 50 % of the nominal capital as well as risks with an amount of loss of at least  $\in$  1 million based upon the operating profit and with a probability of occurrence greater than 25 % must be reported. Risks having an impact on the cash flow and that are above this notification threshold are also part of this risk report. These risks are immediately integrated into the planning process.

Opportunities in the ZF risk management system must be included if they have a direct material link to a risk.

Thereupon, suitable measures to avoid, reduce, or move the determined risks are initiated. However, this does not rule out individual risks from occurring.

Risks are reported to the Group once per quarter. The top risks and top opportunities are centrally evaluated by Corporate Controlling and are included in the quarterly risk report. The Group-wide materiality limit for this is € 10 million. Risks with a probability of occurrence greater than 75% are incorporated into the monthly forecast.

#### **Financial risks**

A central task is the coordination of the financial requirements within the Group in order to ensure the financial independence of the Group. For this purpose, the Group's financing is optimized and financial risks are limited. 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.

Derivative financial instruments are used exclusively to hedge existing underlying or planned transactions. Hedging is concluded in accordance with uniform Group guidelines and is subject to strict monitoring that is ensured particularly through a strict functional separation in trade, processing, and control.

#### Credit risk

The 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. For this purpose, contractual partners as well as receivables and credit risks are continuously monitored. Trade credit insurances are concluded on a case-by-case basis.

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

#### Liquidity risk

In order to ensure the solvency as well as the financial flexibility of the Group at all times, the Group has sufficient cash as well as credit lines available based upon multi-year financial plans and short-term liquidity planning. Within the context of the Group-wide cash pooling, cash is centrally coordinated and forwarded to the companies of the Group as needed. The risk that the Group itself is unable to meet its obligations from financial liabilities is considered minimal.

#### • Foreign currency risk

A Group-wide directive for foreign exchange rate management was developed in order to limit the risk arising from payment flows, especially in terms of the US dollar.

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. Individual hedging is carried out for project business.

As of December 31, 2013, there are derivative financial instruments in the amount of  $\epsilon$  20 million with a nominal volume of  $\epsilon$  731 million; there is a hedging relationship for all of them.

Translation risks that occur during the valuation of the financial line items from the conversion of foreign currency items are not hedged.

#### Interest rate risk

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

Interest analyses are created for monitoring purposes. The interest rate risk is hedged by fixed interest agreements on a case-by-case basis.

# Market price risk from securities The price risk is the risk that the fair value

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

Securities investments are essentially investments in interest-bearing securities, shares, and alternative investments. Diversification will fundamentally reduce risk which constitutes the prerequisite for the best possible continuous increase in value resistant to fluctuation.

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 risks and prepare suggestions for improving the risk management system.

# FORECAST, OPPORTUNITIES, AND RISK REPORT

#### The business environment

Following recessions in 2012 and 2013, the eurozone has a good chance of experiencing positive development next year. Once again, this growth will most likely be driven by Germany and Great Britain. Following difficult times, France, Italy, and Spain are becoming more stable and are expected to generate slight growth. For the German economy, the fourth quarter of 2013 evidently marked the start of a slight upturn which should persist until the end of 2014 at the very least. Private consumption, paired with an increasing export demand triggered by the recovery of the global economy, continues to remain a substantial growth driver. Consequently, growth in investing activities can also be expected. With regard to the USA, it is not to be expected that the 2013 upheavals caused by spending cuts and the government shutdown will significantly slow down the moderately upward economic trend. Furthermore, there are indications of a recovery of the real estate market and an increased amount of positive signals is emanating from the labor market. Although the US Federal Reserve (FED) sent first signals for a slightly less expansive monetary policy, it can be assumed that the USA will be able to continue its current encouraging development. The economic upturn that has been observed in China since mid-2013 has continued, although the increase in overall economic activity is not expected to be as dynamic as was the case with previous upturns. The Chinese government is increasingly focusing on more sustainable growth rates. The government is consciously avoiding stimulus measures and, instead, is tackling structural reforms in order to gear the Chinese national economy towards more consumption and services. In Japan, the further improvement of the industrial climate prompted the government to announce that the longplanned VAT increase will be implemented as of April 1, 2014. Until then, this could cause preemptive effects and stimulate consumption but will subsequently contribute to

a curb in demand. As it is also anticipated that the devaluation of the yen will not continue, growth impetus from exports is only expected through the general global increase in demand.

Generally speaking, the economic climate indicators are showing improvement. Consequently, there will be better signs for the global economy in 2014 than during the past fiscal year.

#### **Industries**

Passenger cars and light commercial vehicles Following the cautious development of vehicle production in 2013, demand and production of passenger cars and light commercial vehicles are expected to pick up during the current fiscal year. The current forecasts indicate a 4% global production growth to 87 million vehicles. All regions are developing positively except for Japan where, with a stable domestic market and an anticipated reduction in exports (primarily growth in transplants), a decline in production is expected. China is once again well above the average with a 10% increase and a similar-sized production growth is also expected from India. In a once-again more positive economic environment, North America should be able to draw upon the positive trend that has lasted for several years and achieve a 4% growth. An increasing localization of vehicle manufacturers supports the production volume here. With a demand that is again on the rise and stable exports, a 4% growth in vehicle production to over 14 million vehicles is to be expected in Western Europe after two years of declining production figures.

#### Heavy commercial vehicles

The commercial vehicle segment should also profit from the recovering economic environment; a 3% increase in global commercial vehicle production is expected. In doing so, there are signs of a disproportionate growth in North America following the decline in the previous year and, considering the positive economic data, the output should increase by 8% to 500,000 units. South America is demonstrating potential for renewed growth. A 6%

increase is anticipated and is consequently once again on a stable growth path following the previous years that were influenced by the emission regulation and preemptive effects. A further expansion of commercial vehicle production amounting to 3% is expected for China. Thus, the increase is lower than the development of the gross domestic product. The anticipated productivity increases in the transport sector are the cause here. After a two-year crisis and an accumulated decline of 36%, India is also expected to experience a noticeable growth, albeit on a low level. The situation in Europe is problematic. Here, the consequences of the Euro 6 preemptive purchase effect need to be absorbed. In an economic environment that is actually more positive compared to 2013 thanks to increasing indicators and rising transport demands, there is a lack of vehicles in production, especially in the first months of the year due to the vehicles that were brought forward to 2013. A decline in production of between 5% and 6% is expected, which represents a conservative estimate.

#### Off-road machinery

Over the course of the more dynamic economic development, a positive economic environment is expected for the off-road machinery segment, i.e. construction machinery and agricultural technology. On a global scale, both sectors should achieve a growth perspective of around 4%. In this context, the current estimate for construction machinery production is on the up in all regions. Thanks to the major events, the greatest growth potential can be seen in South America with an 8% rise and is followed by China with a 6% growth in construction machinery production. Following the weak development in the previous year, it is believed that Europe and North America have hit their low and can return to a growth path of 3%. A similar picture is emerging in the agricultural technology sector. Here, a production increase of between 2% and 3% is anticipated for all regions. Only South America and India are deviating from this general trend. A 2% decline is expected in South America following the strong 9% increase last year. A major recovery and a 9% growth is expected in India, the largest agricultural machinery market on the planet.

#### Opportunities and risks

There are both opportunities and risks in terms of the further development of the ZF Group. Increasing regulatory interventions, especially political requirements for the reduction of CO2 emissions, are leading to an accelerated technological change towards efficiency and resource conservation. This will result in great opportunities for ZF with the strong technological position in driveline and chassis technology. Consequently, the high demand for efficient transmissions, axle drives, and drive components, especially in the mid-size luxury car and full-size luxury car segments will translate into a further sales increase in the Car Powertrain Technology division. The leading drivers here will be the Asian and US American markets. The implementation or further development of central projects in the Car Chassis Technology division such as the active rear axle kinematics (AKC) in collaboration with the mechatronics strategy will contribute to the good performance of this division.

During 2014, opportunities will arise in the Commercial Vehicle Technology division from new orders from Asia and Russia where our products are increasingly becoming a standard, especially in the megacities, e.g. in the city bus sector. The presence, especially in China, will be expanded and consolidated, not least by increased activities in both the premium segment as well as in the volume market. With its heterogeneous product range, the Industrial Technology division is active in many markets. Numerous new projects in the field of the agricultural machinery business and investments in innovative technologies such as CVTs for construction machinery as well as the global presence offer promising potential and will create additional growth for 2014. Highly positive market signals are now evident in the Wind Power Technology business unit, in which a response was made to massive sales slumps in recent years with comprehensive optimizations and structural changes. ZF stands a good chance of establishing itself as a successful transmission supplier here.

The Electronic Systems business unit will strengthen and further advance ZF's expertise with new mechatronics solutions for conventional products such as e-mobility and increased efficiency in the vehicle.

In light of the intended spin-off and sale of the Rubber & Plastics business unit, opportunities might arise for the ZF Group that have not yet been considered in the planning.

An overall positive development can be expected in 2014 thanks to the technologically-leading position of the ZF Group in many areas.

In comparison to 2013, it is anticipated that the risks in the Wind Power Technology business unit will decline due to a slight market recovery.

Sales risks constitute the highest risk for deviations from planning. In this context, price negotiations with customers that have not yet been completed and reductions of the planned volumes must be mentioned. Furthermore, there are procurement risks, for example due to unexpected logistics costs and material price control. As in the previous year, these particularly affect the Car Powertrain Technology division due to the start-up of the plant in Gray Court, South Carolina (USA). Risks might result from the new warranties for the ZF Group that are not covered by the provisions for warranties recognized in the consolidated statement of financial position.

Moreover, there are the fiscal risks already mentioned in the section on risk management.

Possible consequences of risk occurrence are analyzed and evaluated. The risks are assessed in the quarterly risk report. The risks named pose no threat to the existence of the ZF Group. Furthermore, the risk management system guarantees early identification and on-time introduction of countermeasures.

#### **Forecast**

In 2014, the ZF Group will benefit from the positive market development in the majority of market regions and industries. Furthermore, the locations that were put into operation during 2013 will significantly increase their production. As a consequence, Group sales will grow at a high single-digit percentage rate and, at a level of 5%, the expenses for research and development will remain at the constantly high level. The anticipated job growth amounts to approximately 2,000 employees, of which around 500 will be hired in Germany. The planned capital expenditures for property, plant, and equipment will be slightly above  $\in$  1,000 million in 2014. Once again, the company is expecting a slightly improved operating profit in relation to sales.

ZF is well prepared for future challenges. The Group boasts a successful product portfolio, an excellent technological position, and a global development, production, procurement, and service network. The medium-term market perspectives are positive. Highly-skilled personnel and partners from the supply industry ensure the quality of ZF products and services. The company is on a healthy financial footing.

In order to ensure that this success continues in the future, the ZF Group has established clear objectives and guiding principles in its corporate strategy. With a balanced global market penetration, the combination of innovation and cost leadership, a profitable diversification, the safeguarding of financial independence, and the positioning as a globally attractive employer, ZF will be successful in tackling the challenges. The Board of Management as well as the Management are convinced that the company is responding appropriately to the megatrends.

# STATEMENTS

## **CONSOLIDATED STATEMENT OF PROFIT OR LOSS**

ZF Friedrichshafen AG for the period dating January 1 to December 31, 2013

in € million	Notes	2013	2012 adjusted*
Sales	1	16,837	15,526
Cost of sales	2	13,912	12,881
Gross profit on sales		2,925	2,645
Research and development costs	7	836	770
Selling expenses		667	659
General administrative expenses		675	623
Other income	3	130	123
Other expenses	4	121	119
Operating profit or loss		756	597
Result from at-equity participations	5	43	41
Net result from participations	5	8	5
Interest income	5	36	36
Interest expenses	5	154	168
Other financial income	5	86	88
Other financial expenses	5	92	69
Net financial result		-73	-67
Net profit or loss before income tax		683	530
Income taxes	6	221	200
Net profit or loss after tax		462	330
thereof shareholders of ZF Friedrichshafen AG		437	305
thereof non-controlling interests		25	25

<sup>\*</sup> Prior-year figures adjusted. Further explanations in the Notes to the Consolidated Financial Statements, "Changes in accounting policies".

### CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

ZF Friedrichshafen AG for the period dating January 1 to December 31, 2013

in € million Note:	2013	2012 adjusted*
Net profit or loss after tax	462	330
Line items that will be reclassified into the consolidated statement of profit or loss		
Foreign currency translation differences	-124	-47
Market valuation of securities		
Losses arising during the year (2012: gains)	-2	25
Amounts reclassified through profit or loss	3	2
Market valuation of cash flow hedges		
Gains arising during the year	6	16
Amounts reclassified through profit or loss	-4	7
Income taxes	1	-7
Other comprehensive income from at-equity participations	-11	5
	-131	1
Line items that will not be reclassified into the consolidated statement of profit or loss		
Actuarial losses from pension obligation	-100	-497
Income taxes	28	143
Other comprehensive income from at-equity participations	-4	-30
	-76	-384
Other comprehensive income after tax	-207	-383
Total comprehensive income	255	-53
<u> </u>		
thereof shareholders of ZF Friedrichshafen AG	234	-74
thereof non-controlling interests	21	21

<sup>\*</sup> Prior-year figures adjusted. Further explanations in the Notes to the Consolidated Financial Statements, "Changes in accounting policies".

## **CONSOLIDATED STATEMENT OF FINANCIAL POSITION**

ZF Friedrichshafen AG as of December 31, 2013

Assets in € million	Notes	Dec. 31, 2013	Dec. 31, 2012 adjusted*
Current assets			
Cash		1,143	888
Financial assets	8	35	69
Trade receivables	9	2,132	1,963
Other assets	10	205	210
Income tax receivables		11	20
Inventories	11	1,735	1,596
		5,261	4,746
Assets of disposal groups	21	267	0
		5,528	4,746
Non-current assets			
Financial assets	12	1,199	1,132
Trade receivables	9	50	0
At-equity participations	13	347	339
Intangible assets	14	856	814
Property, plant, and equipment	15	3,670	3,670
Deferred taxes	6	320	322
		6,442	6,277
		11,970	11,023

<sup>\*</sup> Prior-year figures adjusted. Further explanations in the Notes to the Consolidated Financial Statements, "Changes in accounting policies".

Liabilities and equity in € million	Notes	Dec. 31, 2013	Dec. 31, 2012 adjusted*
Current liabilities			
Financial liabilities	17	185	175
Trade payables		1,975	1,513
Other liabilities	18	779	776
Income tax provisions		28	17
Other provisions	19	413	456
		3,380	2,937
Liabilities of disposal groups	21	167	0
		3,547	2,937
Non-current liabilities			
Financial liabilities	17	971	908
Other liabilities	18	185	183
Provisions for pensions	20	2,729	2,612
Other provisions	19	335	385
Deferred taxes	6	38	48
		4,258	4,136
Equity			
Subscribed capital	22	500	300
Capital reserve	22	386	586
Retained earnings <sup>1)</sup>	22	3,153	2,949
Equity attributable to shareholders of ZF Friedrichshafen AG		4,039	3,835
Non-controlling interests		126	115
	23	4,165	3,950
		11,970	11,023

<sup>\*</sup> Prior-year figures adjusted. Further explanations in the Notes to the Consolidated Financial Statements, "Changes in accounting policies".

 $<sup>^{1)}</sup>$  Thereof,  $\in$  2 million attributable to disposal groups.

# CONSOLIDATED STATEMENT OF CASH FLOWS

# ZF Friedrichshafen AG for the period dating January 1 to December 31, 2013

in € million Notes	2013	2012 adjusted*
Net profit or loss before income tax	683	530
Depreciation/Reversal of impairments for intangible assets and property, plant, and equipment	894	883
Changes in non-current provisions made through profit or loss	-81	-78
Income taxes paid	-187	-132
Results from the disposal of intangible assets and property, plant, and equipment	1	-4
Net interest result and net result from participations	67	86
Increase (2012: decrease) in inventories	-195	30
Increase (2012: decrease) in trade receivables	-258	65
Decrease in other assets	3	5
Increase in other liabilities	513	31
Cash flow from operating activities	1,440	1,416
Expenditures for investments in		
intangible assets	-232	-207
property, plant, and equipment	-954	-1,025
participations	-2	-6
securities	-50	-8
financial receivables	-10	-75
Proceeds from the disposal of		
intangible assets	8	8
property, plant, and equipment	28	39
participations	2	4
securities	1	8
financial receivables	0	39
Proceeds from the sale of consolidated companies	0	17
Dividends received	25	7
Interest received	32	35
Cash flow from investing activities	-1,152	-1,164

in € million Notes	2013	2012 adjusted*
Dividends paid to ZF Friedrichshafen AG shareholders	-30	-30
Dividends paid to holders of non-controlling interests	-20	-25
Repayments of borrowings	-161	-611
Proceeds from borrowings	243	667
Proceeds from capital increases through holders of non-controlling interests	3	0
Interest paid	-48	-55
Cash flow from financing activities	-13	-54
Net change in cash	275	198
Cash position at the beginning of the fiscal year	888	693
Effects of changes in consolidated group on cash	13	3
Effects of exchange rate changes on cash	-33	-6
Cash position at the end of the fiscal year	1,143	888

<sup>\*</sup> Prior-year figures adjusted. Further explanations in the Notes to the Consolidated Financial Statements, "Changes in accounting policies".

## **CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**

ZF Friedrichshafen AG for the period dating January 1, 2012 to December 31, 2013

in € million Subscribed Capital capital reserve

	Notes			
Jan. 1, 2012		300	586	
Changes in accounting policies*				
Jan. 1, 2012 (adjusted*)		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	
Net profit or loss after tax				
Other comprehensive income after tax				
Total comprehensive income				
Dividends paid				
Capital increase from reserves		200	-200	
Changes in the consolidated group				
Dec. 31, 2013		500	386	

<sup>\*</sup> Prior-year figures adjusted. Further explanations in the Notes to the Consolidated Financial Statements, "Changes in accounting policies".

	Retained earnings					0	
Other retained earnings	Foreign currency translation differences	Market valuation of securities	Market valuation of cash flow hedges	Actuarial gains and losses	Equity attributable to shareholders of ZF Fried- richshafen AG	Non-con- trolling interests	Group equity
							22
2,875	132	19	-12	45	3,945	155	4,100
					0	-36	-36
2,875	132	19	-12	45	3,945	119	4,064
305					305	25	330
	-38	23	20	-384	-379	-4	-383
305	-38	23	20	-384	-74	21	-53
-30					-30	-25	-55
-5	-1				-6		-6
3,145	93	42	8	-339	3,835	115	3,950
437					437	25	462
	-130	1	2	-76	-203	-4	-207
437	-130	1	2	-76	234	21	255
-30					-30	-20	-50
					0	3	3
					0	7	7
3,552	-37	43	10	-415	4,039	126	4,165

#### NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

of ZF Friedrichshafen AG

#### **Fundamental Principles**

#### Corporate structure

ZF Friedrichshafen AG is a corporation, of which 93.8% is owned by the Zeppelin Foundation and 6.2% by the Dr. Jürgen and Irmgard Ulderup Foundation. The company is headquartered in 88046 Friedrichshafen, Germany, Graf-von-Soden-Platz 1.

Further explanations on the corporate structure can be found in the management report.

#### General

The consolidated statement of profit or loss, consolidated statement of comprehensive income, consolidated statement of financial position, consolidated statement of cash flows, and the consolidated statement of changes in equity items 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, 2014, and forwarded them to the Supervisory Board.

The consolidated financial statements which were prepared as of December 31, 2013, as well as the Group management report will be announced in the Electronic Federal Gazette.

The consolidated statement of financial position is broken down by maturities. Financial line 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. Assets and liabilities included in a disposal group classified as held for sale are presented separately from other assets and liabilities in the consolidated statement of financial position.

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 (Great Britain), as adopted by the EU, and the additional requirements of German commercial law pursuant to § 315a HGB.

In the fiscal year 2013, the following amended and new standards and interpretations had to be taken into consideration for the first time:

- Amendment to IFRS 7 "Financial Instruments: Disclosures"
- IFRS 10 "Consolidated Financial Statements" (early adoption)
- IFRS 11 "Joint Arrangements" (early adoption)
- IFRS 12 "Disclosure of Interests in Other Entities" (early adoption)
- Amendments to IFRS 10, IFRS 12, and IAS 27 "Investment Entities" (early adoption)

- Amendment to IFRS 10-12 "Transition Guidance" (early adoption)
- IFRS 13 "Fair Value Measurement"
- Amendment to IAS 1 "Presentation of Financial Statements"
- Amendment to IAS 12 "Income Taxes"
- Amendment to IAS 19 "Employee Benefits"
- IAS 27 "Separate Financial Statements" (early adoption)
- IAS 28 "Investments in Associates and Joint Ventures" (early adoption)
- IAS 36 "Impairment of Assets" (early adoption)
- IFRIC 20 "Stripping Costs in the Production Phase of a Surface Mine"
- Improvements to IFRS 2009 2011

The amendment to IFRS 7 results in new disclosure requirements regarding offsetting financial assets and liabilities. 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.

IFRS 10 replaces 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 has no effect on the definition of ZF's consolidated group.

IFRS 11 is based on the "Joint Ventures" project and supersedes IAS 31. With the replacement of IAS 31, proportionate consolidation was 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 using the equity method.

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 followed proportionate consolidation and were 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 took place retrospectively. The impact on the consolidated ZF Group is presented in the "Changes in accounting policies" section. Due to reasons of materiality, the presentation of the adjusted financial line items was waived as of January 1, 2012. The adjustments effective January 1, 2012 can be compared with those effective December 31, 2012.

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 disclosures on the companies included in the consolidated financial statements were introduced.

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 had no effect on the accounting for the shares in special funds held by the consolidated ZF Group in the consolidated financial statements since ZF Friedrichshafen AG is not an investment company.

With the transition guidance of IFRS 10–12, 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 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, and 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 first-time adoption of IFRS 13 did not have any material effects on the measurement of assets and liabilities of the consolidated ZF Group.

The amendments to IAS 1 change the grouping of line items presented in other comprehensive income. Line 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 consolidated 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 this revision does 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 had an effect on the determination of the expected return on plan assets and its presentation in the consolidated statement of profit or loss as well as on the accounting for top-up benefits from semi-retirement obligations. While top-up benefits previously had been accrued on a pro-rata basis, a provision is now recognized for the full amount of such top-up benefits when the obligation arises, with a corresponding effect on profit or loss. The amendments did not considerably influence the presentation of the net assets, financial position, and results of operations of the consolidated ZF Group. In this respect, the presentation of the adjusted financial line items as of January 1, 2012 was waived.

The purpose of the amendment to IAS 36 is to eliminate undesired implications on the disclosure requirements resulting from the introduction of IFRS 13. In addition, disclosures are required for the recoverable amount of assets or cash-generating units for which an impairment loss was recognized or reversed in the reporting period. This amendment only leads to additional disclosures and will have no effect on the consolidated statement of financial position of the consolidated ZF Group.

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.

The IASB has passed the following standards and interpretations that the European Union has already endorsed into European law but are not yet mandatory. There was no early adoption.

- Amendment to IAS 32 "Financial Instruments: Presentation" (mandatory adoption for fiscal years beginning on or after January 1, 2014)
- IFRS 39 "Financial Instruments" (mandatory adoption for fiscal years beginning on or after January 1, 2014)

The amendment to IAS 32 specifies the provisions for offsetting financial assets and liabilities. The IASB does not plan to change the existing principle for offsetting. 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. The clarification does not lead to any change in the ZF Group accounting.

The amendment to IAS 39 allows for a continuation of hedge accounting in cases where the derivatives designated as hedging instruments are transferred to a central counterparty (novation) due to the introduction of a new law or regulation, provided that certain criteria are met.

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 10–12, 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)
- Amendment to IAS 19 "Employee Benefits" (mandatory adoption for fiscal years beginning on or after July 1, 2014)
- IFRIC 21 "Levies" (mandatory adoption for fiscal years beginning on or after January 1, 2014)
- Improvements of IFRS 2010 2012 (mandatory adoption for fiscal years beginning on or after July 1, 2014)
- Improvements of IFRS 2011 2013 (mandatory adoption for fiscal years beginning on or after July 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 statement of profit or loss. 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 statement of profit or loss. The implementation of the new accounting principles can lead to a higher volatility of the profit or loss after tax.

In addition, IFRS 9 comprises new rules for hedge accounting. Changes to the previous accounting principles mainly refer to new provisions regarding the designation of instruments and risks, requirements for hedge effectiveness, the adjustment and discontinuation of hedging relationships, and some rules for the recognition of hedging relationships. IFRS 9 supersedes IFRIC 9 "Reassessment of Embedded Derivatives" and also changes a number of existing standards, including IFRS 7, which governs the disclosure requirements for financial instruments, and the provisions of IFRS 9 in the versions published in 2009 and 2010. The Group will quantify the effect in conjunction with the other phases, when issued, to present a comprehensive picture.

The amendments to IAS 19 relate to the recognition of contributions to pension plans made by employees or third parties as a reduction of service costs to the extent that these reflect services rendered in the reporting period.

IFRIC 21 prescribes that a company that is active in a specific market has to recognize a liability for the levies required to be paid to the competent authorities in such market as of the date in which the transaction (obligating event) occurs that gives rise to such levy. The interpretation clarifies that, in case of a levy that is triggered when a minimum volume is reached for example, a liability may only be recognized when such minimum volume is actually reached.

The improvements of IFRS 2010–2012 and IFRS 2011–2013 describe collective standards which were published in December 2013 and deal with amendments to various IFRS. Below, the amendments are listed that have an effect on the consolidated ZF Group:

• IFRS 3 and follow-up amendment to IFRS 9: Clarification that a company has to apply IAS 32 when it classifies contingent considerations in a business combination either as financial liabilities or equity. Subsequent changes to contingent considerations not classified as equity have to be measured at fair value. It is planned to introduce corresponding changes to IFRS 9 to ensure that contingent considerations cannot be measured at amortized cost. The disclosure requirements of IFRS 7 for contingent consideration have to be complied with, along with those set out in IFRS 3;

- IFRS 13: Clarification of the possibility to measure short-term receivables and liabilities without discounting, despite the follow-up amendments to IFRS 9 and IAS 39:
- IFRS 3: Clarification that all types of joint arrangements within the meaning of IFRS 11 are excluded from the scope of IFRS 3, and that this exclusion from the scope of IFRS 3 only applies to the financial statements of the joint venture or the joint operation itself;
- IFRS 13: Clarification that the portfolio exception set out in IFRS 13.52 has to be applied to all contracts that are within the scope of IAS 39 and IFRS 9, respectively, irrespective of whether or not these contracts meet the definitions of "financial assets" or "financial liabilities" in IAS 32.

#### **Consolidated group**

In addition to ZF Friedrichshafen AG, 4 domestic and 119 foreign subsidiaries, in which ZF Friedrichshafen AG holds the majority of the voting rights are included in the consolidated financial statements.

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

	Jan. 1, 2013	First-time consoli- dations	Legal changes	Deconsoli- dations	Dec. 31, 2013
Subsidiaries	121	3	0	1	123
of which domestic	4	0	0	0	4
of which foreign	117	3	0	1	119
Joint ventures	2	1	0	0	3
Associates	1	0	0	0	1

A complete list of the companies that are included in the consolidated group can be found under Note (34) in the notes to the consolidated financial statements. It is noted there, which 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.

Provided that minority shareholders hold non-controlling interests in subsidiaries of the Group, they have veto rights and approval requirements limited to fundamental changes to the assets of the subsidiary or the subsidiary's business (e.g. sale of the business or large capital expenditures).

In addition, there are restrictions with regard to the transfer of cash of the respective Chinese subsidiaries which are not part of the ZF cash pool. These restrictions amounted to € 21 million as of December 31, 2013.

#### Changes in the consolidated group

In the fiscal year 2013, the following companies have been included in the consolidated financial statements of ZF Friedrichshafen AG for the first time:

in %	Share in capital
OOO ZF Russia, St. Petersburg, Russia	100
Openmatics s.r.o., Pilsen, Czech Republic	100
ZF Beiben Drivetech (Chongqing) Co., Ltd., Chongqing, China	51

At the end of the fiscal year, ZF Trading UK Ltd., Crick (Great Britain), which had been fully consolidated previously, was dissolved.

The joint venture ZF Liuzhou Axle Co., Ltd., Liuzhou (China), has been included for the first time according to the equity method in the consolidated financial statements in the fiscal year 2013.

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

#### in € million

Current assets	9
Non-current assets	0
Current liabilities	2
Non-current liabilities	0

#### **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 adjustments of contingent purchase price payments are recognized in profit or loss. Acquisitionrelated 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 statement of profit or loss 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, 2013, 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 additional 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.

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The deconsolidation of subsidiaries is carried out on the date of the loss of control or the date of liquidation. 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 statement of profit or loss 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 recognized within 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, 2013	Dec. 31, 2012	2013	2012
US dollar	1.3791	1.3194	1.3283	1.2850
British pound	0.8337	0.8161	0.8493	0.8110
Chinese renminbi	8.3491	8.2207	8.1662	8.1065
Brazilian real	3.2576	2.7036	2.8701	2.5079
Mexican peso	18.0731	17.1845	16.9682	16.8934
South African rand	14.5660	11.1727	12.8325	10.5480
Australian dollar	1.5423	1.2712	1.3779	1.2402

#### 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 recorded 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 financial line 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 unrealized 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 statement of profit or loss 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 statement of profit or loss.

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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
- Financial assets held for trading

The "Loans and receivables" category comprises cash, financial receivables, as well as trade receivables. Loans as well as earmarked time deposit investments and bank deposits 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. In case they are expected to be uncollectible, a direct impairment is performed.

The "Available-for-sale financial assets" category 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 within the retained earnings. Reclassification to the consolidated statement of profit or loss is effected as soon as an impairment is recognized, but no later than the date of disposal of financial assets.

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 recognized 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 which contain embedded derivatives are assigned to the "Financial assets at fair value through profit or loss" category, 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.

"Financial assets held for trading" affect derivative financial instruments used to hedge risks related to securities. Since criteria for hedge accounting have not been met, changes in fair value of derivative financial instruments are recognized within other financial income and expenses.

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.

Financial assets and liabilities are offset and the resulting net amount is reported in the consolidated statement of financial position when the entity currently has a legally enforceable right to set off the recognized amounts and it intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

#### 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 administrative expenses, and prorated social expenses.

#### Investments in associates and joint ventures

Investments in associates and joint ventures are generally recognized in accordance with the equity method with the proportionate equity. If, on the balance sheet date, there is objective evidence for the impairment of an investment, an impairment test is performed. The share of the ZF Group in the profit for the period of the associate or joint venture, respectively, is recognized separately in the consolidated statement of profit or loss as part of the financial result. Income and expenses that are directly recognized in equity of the associate or joint venture are recognized in the ZF Group without effect on profit or loss as well and presented separately in the consolidated statement of comprehensive income.

#### 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 statement of profit or loss 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.

#### Non-current assets held for sale, disposal groups

Assets and liabilities are reported as disposal groups when these are to be disposed of by sale together as a group in a single transaction which is highly probable. The affected assets and liabilities are presented separately in the consolidated statement of financial position in the current assets and liabilities as "Assets of disposal groups" and "Liabilities of disposal groups", respectively. Income and expenses attributable to a disposal group are included in the profit or loss from continued operations.

The disposal group is measured upon initial recognition in accordance with the relevant IFRS standards. Subsequently, the disposal group is measured at the lower of its carrying amount or fair value less costs to sell.

#### Impairment tests

For investments in at-equity participations, 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. In the context of restructuring the Group's planning process, the planning horizon was shortened from five to three 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 countryspecific 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 8% to 12% (2012: 9% to 12%). At the end of the three-year planning horizon, the expected cash flows are extrapolated using weighted averages based on the cash flows from the planning period.

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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 that are generally not based on parameters observable on the market.

An impairment loss is recognized if the recoverable amount falls below the carrying amount of the asset or the cash-generating 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 statement of profit or loss.

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. Expenses resulting from compounding and expected returns from plan assets are offset and recognized in interest expenses. All other expenses resulting from the addition to pension provisions are assigned to the affected functional areas within the consolidated statement of profit or loss.

#### 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 for pension insurance as well as the wages and salaries to be paid during the release phase. They are accrued on a pro rata basis when the obligation arises.

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. Unrecognized 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 line items that are directly recognized in equity are also recognized in equity and not in the consolidated statement of profit or loss.

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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 financial line items are explained below.

Management estimates as to technical and economic feasibility of development projects influence the decision to **capitalize development costs** (Note 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** (Note 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** (Note 28 of 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** (Note 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** (Note 20 of the notes to the consolidated financial statements) is particularly based on assumptions as to discount rates, future wage, salary, and pension developments as well as fluctuation rates.

Determination of warranty provisions (Note 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 statement of financial position are expected during the subsequent fiscal year.

#### Changes in accounting policies

With the first-time adoption of IFRS 11, the method for including the joint venture ZF Lenksysteme GmbH in the consolidated financial statements changed. The subgroup had been previously included by way of proportionate consolidation, but has been included in accordance with the equity method since January 1, 2013.

In addition, based on the change in IAS 19, the expected returns on plan assets were offset with the interest costs on defined benefit obligations.

The comparative figures, including the disclosures in the notes to the consolidated financial statements, were adjusted retrospectively.

The consequences of the changes in the accounting policies for the individual line items in the consolidated statement of profit or loss are detailed below:

Selling expenses       703       -44       669         General administrative expenses       692       -69       623         Other income       140       -17       123         Other expenses       131       -12       119         Operating profit or loss       687       -90       597         Result from at-equity participations       0       41       41         Net result from participations       5       0       5         Interest income       43       -7       36         Interest expenses       185       -17       168         Other financial income       92       -4       88         Other financial expenses       73       -4       69         Net financial result       -118       51       -67         Net profit or loss before income tax       569       -39       530         Income taxes       223       -23       200         Net profit or loss after tax       346       -16       330         thereof ZF Friedrichshafen AG shareholders       305       0       305	in € million	2012 published	Adjust- ments	2012 adjusted
Gross profit on sales         2,934         -289         2,645           Research and development costs         861         -91         770           Selling expenses         703         -44         659           General administrative expenses         692         -69         623           Other income         140         -17         123           Other expenses         131         -12         119           Operating profit or loss         687         -90         597           Result from at-equity participations         0         41         41           Net result from participations         5         0         5           Interest income         43         -7         36           Interest expenses         185         -17         168           Other financial income         92         -4         88           Other financial result         -118         51         -67           Net profit or loss before income tax         569         -39         530           Income taxes         223         -23         200           Net profit or loss after tax         36         -16         330	Sales	17,366	-1,840	15,526
Research and development costs         861         -91         770           Selling expenses         703         -44         659           General administrative expenses         692         -69         623           Other income         140         -17         123           Other expenses         131         -12         119           Operating profit or loss         687         -90         597           Result from at-equity participations         0         41         41           Net result from participations         5         0         5           Interest income         43         -7         36           Interest expenses         185         -17         168           Other financial income         92         -4         88           Other financial expenses         73         -4         69           Net financial result         -118         51         -67           Net profit or loss before income tax         569         -39         530           Income taxes         223         -23         200           Net profit or loss after tax         346         -16         330	Cost of sales	14,432	-1,551	12,881
Selling expenses       703       -44       669         General administrative expenses       692       -69       623         Other income       140       -17       123         Other expenses       131       -12       119         Operating profit or loss       687       -90       597         Result from at-equity participations       0       41       41         Net result from participations       5       0       5         Interest income       43       -7       36         Interest expenses       185       -17       168         Other financial income       92       -4       88         Other financial expenses       73       -4       69         Net financial result       -118       51       -67         Net profit or loss before income tax       569       -39       530         Income taxes       223       -23       200         Net profit or loss after tax       346       -16       330         thereof ZF Friedrichshafen AG shareholders       305       0       305	Gross profit on sales	2,934	-289	2,645
General administrative expenses         692         -69         623           Other income         140         -17         123           Other expenses         131         -12         119           Operating profit or loss         687         -90         597           Result from at-equity participations         0         41         41           Net result from participations         5         0         5           Interest income         43         -7         36           Interest expenses         185         -17         168           Other financial income         92         -4         88           Other financial expenses         73         -4         69           Net financial result         -118         51         -67           Net profit or loss before income tax         569         -39         530           Income taxes         223         -23         200           Net profit or loss after tax         346         -16         330           thereof ZF Friedrichshafen AG shareholders         305         0         305	Research and development costs	861	-91	770
Other income         140         -17         123           Other expenses         131         -12         119           Operating profit or loss         687         -90         597           Result from at-equity participations         0         41         41           Net result from participations         5         0         5           Interest income         43         -7         36           Interest expenses         185         -17         168           Other financial income         92         -4         88           Other financial expenses         73         -4         69           Net financial result         -118         51         -67           Net profit or loss before income tax         569         -39         530           Income taxes         223         -23         200           Net profit or loss after tax         346         -16         330           thereof ZF Friedrichshafen AG shareholders         305         0         305	Selling expenses	703	-44	659
Other expenses         131         -12         119           Operating profit or loss         687         -90         597           Result from at-equity participations         0         41         41           Net result from participations         5         0         5           Interest income         43         -7         36           Interest expenses         185         -17         168           Other financial income         92         -4         88           Other financial expenses         73         -4         69           Net financial result         -118         51         -67           Net profit or loss before income tax         569         -39         530           Income taxes         223         -23         200           Net profit or loss after tax         346         -16         330           thereof ZF Friedrichshafen AG shareholders         305         0         305	General administrative expenses	692	-69	623
Operating profit or loss         687         -90         597           Result from at-equity participations         0         41         41           Net result from participations         5         0         5           Interest income         43         -7         36           Interest expenses         185         -17         168           Other financial income         92         -4         88           Other financial expenses         73         -4         69           Net financial result         -118         51         -67           Net profit or loss before income tax         569         -39         530           Income taxes         223         -23         200           Net profit or loss after tax         346         -16         330           thereof ZF Friedrichshafen AG shareholders         305         0         305	Other income	140	-17	123
Result from at-equity participations       0       41       41         Net result from participations       5       0       5         Interest income       43       -7       36         Interest expenses       185       -17       168         Other financial income       92       -4       88         Other financial expenses       73       -4       69         Net financial result       -118       51       -67         Net profit or loss before income tax       569       -39       530         Income taxes       223       -23       200         Net profit or loss after tax       346       -16       330         thereof ZF Friedrichshafen AG shareholders       305       0       305	Other expenses	131	-12	119
Net result from participations         5         0         5           Interest income         43         -7         36           Interest expenses         185         -17         168           Other financial income         92         -4         88           Other financial expenses         73         -4         69           Net financial result         -118         51         -67           Net profit or loss before income tax         569         -39         530           Income taxes         223         -23         200           Net profit or loss after tax         346         -16         330           thereof ZF Friedrichshafen AG shareholders         305         0         305	Operating profit or loss	687	-90	597
Interest income         43         -7         36           Interest expenses         185         -17         168           Other financial income         92         -4         88           Other financial expenses         73         -4         69           Net financial result         -118         51         -67           Net profit or loss before income tax         569         -39         530           Income taxes         223         -23         200           Net profit or loss after tax         346         -16         330           thereof ZF Friedrichshafen AG shareholders         305         0         305	Result from at-equity participations	0	41	41
Interest expenses         185         -17         168           Other financial income         92         -4         88           Other financial expenses         73         -4         69           Net financial result         -118         51         -67           Net profit or loss before income tax         569         -39         530           Income taxes         223         -23         200           Net profit or loss after tax         346         -16         330           thereof ZF Friedrichshafen AG shareholders         305         0         305	Net result from participations	5	0	5
Other financial income         92         -4         88           Other financial expenses         73         -4         69           Net financial result         -118         51         -67           Net profit or loss before income tax         569         -39         530           Income taxes         223         -23         200           Net profit or loss after tax         346         -16         330           thereof ZF Friedrichshafen AG shareholders         305         0         305	Interest income	43	-7	36
Other financial expenses         73         -4         69           Net financial result         -118         51         -67           Net profit or loss before income tax         569         -39         530           Income taxes         223         -23         200           Net profit or loss after tax         346         -16         330           thereof ZF Friedrichshafen AG shareholders         305         0         305	Interest expenses	185	-17	168
Net financial result         -118         51         -67           Net profit or loss before income tax         569         -39         530           Income taxes         223         -23         200           Net profit or loss after tax         346         -16         330           thereof ZF Friedrichshafen AG shareholders         305         0         305	Other financial income	92	-4	88
Net profit or loss before income tax         569         -39         530           Income taxes         223         -23         200           Net profit or loss after tax         346         -16         330           thereof ZF Friedrichshafen AG shareholders         305         0         305	Other financial expenses	73	-4	69
Income taxes         223         -23         200           Net profit or loss after tax         346         -16         330           thereof ZF Friedrichshafen AG shareholders         305         0         305	Net financial result	-118	51	-67
Net profit or loss after tax  346 -16 330  thereof ZF Friedrichshafen AG shareholders  305 0 305	Net profit or loss before income tax	569	-39	530
thereof ZF Friedrichshafen AG shareholders 305 0 305	Income taxes	223	-23	200
	Net profit or loss after tax	346	-16	330
thereof non-controlling interests 41 -16 25	thereof ZF Friedrichshafen AG shareholders	305	0	305
	thereof non-controlling interests	41	-16	25

Consolidated statement of comprehensive income in € million	2012	Adjust- ments	2012 adjusted
Net profit or loss after tax	346	-16	330
Line items that will be reclassified in the consolidated statement of profit or loss			
Foreign currency translation differences	-42	-5	-47
Market valuation of securities			
Gains arising during the year	25	0	25
Amounts reclassified through profit or loss	2	0	2
Market valuation of cash flow hedges			
Gains arising during the year	16	0	16
Amounts reclassified through profit or loss	7	0	7
Income taxes	-7	0	-7
Other comprehensive income from at-equity participations	0	5	5
	1	0	1
Line items that will not be reclassified in the consolidated statement of profit or loss			
Actuarial losses from pension obligations	-539	42	-497
Income taxes	155	-12	143
Other comprehensive income from at-equity participations	0	-30	-30
	-384	0	384
Other comprehensive income after tax	-383	0	-383
Total comprehensive income	-37	-16	-53
thereof ZF Friedrichshafen AG shareholders	-74	0	-74
thereof non-controlling interests	37	-16	21

The change in the accounting method has an impact on the following items of the consolidated statement of financial position:

Assets in € million	2012 published	Adjust- ments	2012 adjusted
Current assets			
Cash	1,057	-169	888
Financial assets	72	-3	69
Trade receivables	2,274	-311	1,963
Other assets	243	-33	210
Income tax receivables	28	-8	20
Inventories	1,747	-151	1,596
	5,421	-675	4,746
Non-current assets			
Financial assets	1,138	-6	1,132
At-equity participations	15	324	339
Intangible assets	862	-48	814
Property, plant, and equipment	4,081	-411	3,670
Deferred taxes	375	-53	322
	6,471	-194	6,277
	11,892	-869	11,023

Liabilities and equity in € million	2012 published	Adjust- ments	2012 adjusted
Current liabilities			
Financial liabilities	186	-11	175
Trade payables	1,747	-234	1,513
Other liabilities	875	-99	776
Income tax provisions	22	-5	17
Other provisions	532	-76	456
	3,362	-425	2,937
Non-current liabilities			
Financial liabilities	982	-74	908
Other liabilities	231	-48	183
Provisions for pensions	2,822	-210	2,612
Other provisions	443	-58	385
Deferred taxes	50	-2	48
	4,528	-392	4,136
Equity			
Equity share attributable to shareholders of ZF Friedrichshafen AG	3,835	0	3,835
Non-controlling interests	167	-52	115
	4,002	-52	3,950
	11,892	-869	11,023

The change has the following impact on the consolidated statement of cash flows:

in € million	2012 published	Adjust- ments	2012 adjusted
Net profit or loss before income tax	569	-39	530
Depreciation/Reversal of impairments for intangible assets and property, plant, and equipment	969	-86	883
Changes in non-current provisions made through profit or loss	-64	-14	-78
Income taxes paid	-165	33	-132
Results from the disposal of intangible assets and property, plant, and equipment	-3	-1	-4
Net interest result and net result from participations	137	-51	86
Decrease in inventories	21	9	30
Decrease in trade receivables	37	28	65
Decrease in other assets	1	4	5
Increase in other liabilities	46	-15	31
Cash flow from operating activities	1,548	-132	1,416
Expenditures for investments in			
intangible assets	-236	29	-207
property, plant, and equipment	-1,192	167	-1,025
participations	-6	0	-6
securities	-8	0	-8
financial receivables	-65	-10	-75
Proceeds from the disposal of			
intangible assets	11	-3	8
property, plant, and equipment	51	-12	39
participations	5	-1	4
securities	8	0	8
financial receivables	39	0	39
Proceeds from the sale of consolidated companies	17	0	17
Dividends received	8	-1	7
Interest received	38	-3	35
Cash flow from investing activities	-1,330	166	-1,164

in € million	2012 published	Adjust- ments	2012 adjusted
Dividends paid to ZF Friedrichshafen AG shareholders	-30	0	-30
Dividends paid to holders of non-controlling interests	-26	1	-25
Repayments of borrowings	-620	9	-611
Proceeds from borrowings	750	-83	667
Interest paid	-58	3	-55
Cash flow from financing activities	16	-70	-54
Net change in cash	234	-36	198
Cash position at the beginning of the fiscal year	826	-133	693
Effects of changes in consolidated group on cash	3	0	3
Effects of exchange rate changes on cash	-6	0	-6
Cash position at the end of the fiscal year	1,057	-169	888

# NOTES TO THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS

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

#### 1 Sales

in € million	2013	2012
Domestic	5,607	5,275
Western Europe	3,300	3,000
Eastern Europe	920	806
North America	3,095	2,935
South America	704	692
Asia-Pacific	2,998	2,604
Africa	213	214
	16,837	15,526

Sales include € 16,421 million (2012: € 15,143 million) from the sale of goods and € 374 million (2012: € 362 million) for the rendering of services as well as € 42 million (2012: € 21 million) for royalties.

#### 2 Cost of sales

in € million	2013	2012
Cost of materials	9,857	9,161
Personnel expenses	2,686	2,513
Depreciation and amortization	807	748
Other	562	459
	13,912	12,881

Depreciation and amortization include impairment losses for property, plant, and equipment of  $\in$  4 million (2012:  $\in$  35 million) as well as reversals of impairment losses of  $\in$  3 million (2012:  $\in$  5 million).

#### 3 Other income

in € million	2013	2012
Foreign exchange gains	61	57
Income from hedging	7	4
Compensation payment and reimbursement of costs	29	11
Income from the disposal of intangible assets and property, plant, and equipment	7	6
Income from rentals and lease payments	2	3
Income from deconsolidations	1	10
Other income	23	32
	130	123

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.

#### 4 Other expenses

in € million	2013	2012
Foreign exchange losses	60	68
Expenses from hedging	4	10
Impairment of goodwill	0	15
Changes of allowances for receivables	3	15
Losses on the disposal of intangible assets and property, plant, and equipment	8	2
Expenses from additions to provisions	22	0
Other expenses	24	9
	121	119

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	2013	2012
Result from at-equity participations	43	41
Income from participations	5	8
Write-downs of participations	-2	-6
Income from the disposal of participations	0	3
Reversal of provisions for risks in participations	5	0
Net result from participations	8	5
Interest from current financial investments	25	21
Interest from non-current financial investments	11	15
Interest income	36	36
Interest on financial liabilities	46	50
Interest from pension provisions	101	108
Compounding of other non-current items	7	10
Interest expenses	154	168
Foreign exchange gains	41	53
Income from hedging	18	3
Income from the disposal of securities	18	24
Unrealized fair value gains from securities	8	8
Reversal of impairments for financial receivables	1	0
Other financial income	86	88
Foreign exchange losses	70	57
Expenses from hedging	10	8
Losses on disposal of securities	2	2
Unrealized fair value losses from securities	3	1
Write-downs of financial receivables	1	0
Incidental expenses	6	1
Other financial expenses	92	69
Net financial result	-73	-67

#### Income taxes

in € million	2013	2012
Current tax expenses	206	154
Tax refunds from prior years	-2	-4
Payment of taxes from prior years	3	1
Deferred taxes on temporary differences	19	16
Deferred taxes on tax loss carryforwards and tax credits	-5	33
	221	200

A corporate tax rate of 15% applies in Germany. Taking into account an average business tax multiplier of 386% and the solidarity surcharge of 5.5%, an income tax rate of 29% (2012: 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, 2013, result from the following line items in the consolidated statement of financial position:

in € million	Dec. 3	Dec. 31, 2013		Dec. 31, 2012	
	Assets	Liabilities	Assets	Liabilities	
Financial assets	8	22	9	25	
Trade receivables	7	2	7	4	
Other current assets	2	3	2	2	
Inventories	48	9	46	7	
Intangible assets	4	17	2	20	
Property, plant, and equipment	37	131	50	128	
Current financial liabilities	1	0	1	0	
Trade payables	3	0	2	0	
Other liabilities	10	0	12	1	
Provisions for pensions	226	5	201	5	
Other provisions	67	9	78	10	
Others	32	6	34	4	
	445	204	444	206	
Tax loss carryforwards and tax credits	41		36		
Netting	-166	-166	-158	-158	
	320	38	322	48	

Based on the market valuation of securities and cash flow hedges, deferred tax liabilities are recognized in equity in the amount of  $\in$  6 million (2012:  $\in$  7 million). 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  $\in$  151 million (2012:  $\in$  123 million). As a result, equity is increased by  $\in$  29 million

(2012: € 136 million). Another change of the deferred taxes of € 5 million (2012: € 2 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 consolidated statement of financial position, is  $\in$  957 million (2012:  $\in$  731 million). Of these,  $\in$  764 million (2012:  $\in$  628 million) account for tax loss carryforwards, from which the expiration period for  $\in$  513 million (2012:  $\in$  377 million) is limited (up to 20 years) and remains unlimited for  $\in$  251 million (2012:

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.

€ 251 million).

The reduction 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  $\in$  2 million (2012: increase of  $\in$  1 million). The increase 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 (2012: reduction of  $\in$  2 million).

The expenses resulting from non-recognition and the impairment 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  $\in$  71 million (2012: tax expenses of  $\in$  90 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 unrecognized deferred tax liabilities would be linked to disproportionately high cost.

Reconciliation between expected and reported income tax expenses:

in € million	2013	2012
Net profit before income tax	683	530
Expected income tax expenses	198	154
Tax effects due to different national tax rates and group		
taxation systems	-21	-46
Effects of changes in tax laws	-7	-5
Tax effects due to non-recognition and write-down of deferred tax		
assets and their reversal	71	90
Tax effects due to permanent differences	-6	0
Tax effects due to prior-period items	-14	9
Other tax effects	0	-2
Reported income tax expenses	221	200

# Other disclosures on the consolidated statement of profit or loss

The consolidated statement of profit or loss includes the following cost of materials:

in € million	2013	2012
Expenses for raw materials, supplies, and merchandise	9,720	9,017
Expenses for purchased services	279	285
Other cost of materials	12	11
	10,011	9,313

The expenses for raw materials, supplies, and merchandise comprise expense amounting to  $\in$  1 million (2012:  $\in$  0 million) resulting from hedging against raw material price changes.

The breakdown of personnel expenses is as follows:

in € million	2013	2012
Wages and salaries	3,201	2,981
Social security and benefits expenses	648	614
Pension expenses	130	107
	3,979	3,702

Personnel expenses include expenses for defined contribution plans in the amount of  $\in$  258 million (2012:  $\in$  241 million). The contained expenses for the state plans amounting to  $\in$  205 million (2012:  $\in$  196 million) primarily comprise the employer's contribution to the state pension scheme, which is included in the social security expenses.

Termination benefits and other long-term employee benefits of  $\in$  3 million (2012:  $\in$  13 million) were recorded in the consolidated statement of profit or loss. They affect severance pay as well as expenses from additions to restructuring provisions.

Impairment loss on intangible assets is included in the following consolidated statement of profit or loss items:

in € million	2013	2012
Research and development costs	0	17
Selling expenses	0	12
Other expenses	0	15
	0	44

Impairment loss on property, plant, and equipment in the amount of  $\in$  4 million (2012:  $\in$  35 million) is included under cost of sales as well as in the amount of  $\in$  1 million (2012:  $\in$  0 million) under general administrative expenses in the consolidated statement of profit or loss.

Reversals of impairment losses for property, plant, and equipment are included in the cost of sales and amount to  $\in$  3 million (2012:  $\in$  5 million) and amounting to  $\in$  4 million (2012:  $\in$  0 million) in general administrative expenses.

Explanations on the impairments and the reversals of impairment losses are given under Note (16).

Amortization on intangible assets is included in the following consolidated statement of profit or loss items:

in € million	2013	2012
Cost of sales	163	138
Research and development costs	3	3
Selling expenses	7	12
General administrative expenses	10	8
	183	161

Systematic depreciation on property, plant, and equipment is included in the following consolidated statement of profit or loss items:

in € million	2013	2012
Cost of sales	643	581
Research and development costs	24	22
Selling expenses	9	8
General administrative expenses	37	36
	713	647

Expenses for research and development recorded in the fiscal year reached  $\in$  836 million (2012:  $\in$  770 million). This figure includes amortization for capitalized development costs of  $\in$  1 million (2012:  $\in$  1 million).

In the fiscal year, payments from operating leases or rental agreements in the amount of  $\in$  103 million (2012:  $\in$  97 million) were recognized in the consolidated statement of profit or loss.

# NOTES TO THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

## 8 Current financial assets

in € million	Dec. 31, 2013	Dec. 31, 2012
Securities	2	3
Financial receivables	33	66
	35	69

The financial receivables do not include any overdue amounts that are not impaired. The financial receivables contain earmarked bank deposits of  $\in$  1 million (2012:  $\in$  22 million).

The allowances for the financial receivables have developed as follows:

in € million	2013	2012
Carrying amount as of Jan. 1	11	13
Additions	1	0
Utilization	7	2
Reversals	1	0
Carrying amount as of Dec. 31	4	11

The gross value of the impaired financial receivables is  $\notin$  4 million (2012:  $\notin$  11 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.

## 9 Trade receivables

The trade receivables have the following age distribution:

in € million	, ,		Carrying neither amount impaired		ot impaired an	d overdue for	
	<u></u>	nor overdue	1 to 30 days	31 to 60 days	61 to 360 days	more than 360 days	
Dec. 31, 2013	2,182	1,983	135	22	37	1	
Dec. 31, 2012	1,963	1,686	129	34	41	68	

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

With trade receivables that are not impaired and overdue for more than 360 days, customer receivables were reclassified as non-current trade receivables due to newly agreed payment plans.

The allowances for trade receivables have developed as follows:

in € million	2013	2012
Carrying amount as of Jan. 1	29	29
Net exchange differences	0	-1
Additions	10	19
Utilization	6	13
Reversals	7	5
Carrying amount as of Dec. 31	26	29

The gross value of the impaired trade receivables is  $\in$  30 million (2012:  $\in$  34 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, 2013	Dec. 31, 2012
Other tax receivables	138	121
Prepaid expenses	18	20
Derivative financial instruments	10	9
Receivables from employees	9	8
Other financial assets	2	4
Other non-financial assets	28	48
	205	210

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

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	2013	2012	
Carrying amount as of Jan. 1	1	0	
Additions	0	1	
Utilization	1	0	
Carrying amount as of Dec. 31	0	1	

The gross value of the impaired receivables was  $\in$  2 million in 2012.

## 11 Inventories

in € million	Dec. 31, 2013	Dec. 31, 2012	
Raw materials and supplies	752	658	
Work in progress	367	375	
Finished goods and merchandise	604	547	
Payments in advance	12	16	
	1,735	1,596	

Write-downs of inventories decreased by  $\in$  15 million (2012: increase by  $\in$  13 million) in the fiscal year 2013 to  $\in$  120 million (2012:  $\in$  135 million).

#### 12 Non-current financial assets

in € million	Dec. 31, 2013	Dec. 31, 2012
Investments in participations	69	73
Securities	948	814
Financial receivables	161	226
Derivative financial instruments	10	6
Prepaid expenses	11	13
	1,199	1,132

Investments in participations have developed as follows:

in € million	2013	2012
Carrying amount as of Jan. 1	73	137
Changes in consolidated group	0	-61
Net exchange differences	-2	-2
Additions	2	6
Disposals	2	1
Write-downs	2	6
Carrying amount as of Dec. 31	69	73

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  $\in$  65 million (2012:  $\in$  118 million). Of these,  $\in$  59 million is apportioned to special funds (2012:  $\in$  111 million).

The financial receivables also include granted loans and direct insurance claims against life insurances of  $\in$  39 million (2012:  $\in$  51 million).

The financial receivables do not include any overdue amounts that are not impaired. No allowances on financial receivables are recorded as of the balance sheet date.

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

## 13 At-equity participations

in € million	Dec. 31, 2013	Dec. 31, 2012
Investments in joint ventures	347	339
Investments in associates	0	0
	347	339

## Disclosures on investments in joint ventures

The joint venture ZF Lenksysteme GmbH, Schwäbisch Gmünd (Germany), including its subsidiaries is recognized in accordance with the equity method in the consolidated statement of financial position of ZF Friedrichshafen AG. The investment rate of ZF is 50%. On December 31, 2013, the joint venture reports the following figures in the statement of financial position and the statement of profit or loss:

in € million	Dec. 31, 2013	Dec. 31, 2012
Statement of profit or loss		
Sales	4,114	3,977
Depreciation and amortization	244	175
thereof amortization	217	157
Interest income	5	5
Interest expenses	7	8
Income tax expenses	45	47
Net profit or loss after tax	121	112
Other comprehensive income	-34	-65
Total comprehensive income	87	47

Statement of financial position		
Current assets	1,308	1,401
thereof cash and cash equivalents	208	339
Non-current assets	1,204	1,035
Current liabilities	890	896
thereof current financial liabilities	4	20
Non-current liabilities	836	787
thereof non-current financial liabilities	150	150
Other disclosures		
Dividends received	20	0

The following describes a reconciliation statement of the financial information summarized above for the equity value:

in € million	2013
Current assets	1,308
Non-current assets	1,204
Current liabilities	-890
Non-current liabilities	-836
Equity	-786
Non-controlling interests	-124
Equity attributable to shareholders of ZF Lenksysteme GmbH	-662
50% thereof are attributable to the ZF Group = at-equity value	-331

In addition, the shares in Shanghai Sachs Powertrain Component Systems Co., Ltd., Shanghai (China), as well as the ZF Liuzhou Axle Co., Ltd., Liuzhou (China), are included in ZF's consolidated financial statements as joint ventures. In both companies, ZF holds a 50 % share each. Their shares in the overall result are as follows:

in € million	2013	2012
Net profit or loss after tax	1	0
Other comprehensive income	0	0
Total comprehensive income	1	0

#### Disclosures on investments in associates

ZF PWK Mécacentre S.A.S., St. Etienne (France), is classified as associate despite the participation quota of 50%, as the company is not jointly controlled.

The Group's share of net income of ZF PWK Mécacentre S.A.S. of  $\in$  1 million (2012:  $\in$  0 million) was not included in the consolidated financial statements. The proportionately unrecognized negative equity amounts to  $\in$  0 million (2012:  $\in$  1 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, 2012	455	565	34	26	1,080
Changes in consolidated group	0	2	0	0	2
Net exchange differences	0	-3	0	0	-3
Additions	0	184	9	14	207
Reclassifications	0	31	0	-23	8
Disposals	3	72	0	0	75
Cost as of Dec. 31, 2012	452	707	43	17	1,219
Accumulated amortization as of Jan. 1, 2012	32	220	17	0	269
Changes in consolidated group	0	1	0	0	1
Net exchange differences	0	-3	0	0	-3
Additions (amortization)	0	160	1	0	161
Additions (impairment)	15	12	17	0	44
Disposals	0	67	0	0	67
Accumulated amortization as of Dec. 31, 2012	47	323	35	0	405
Carrying amount as of Dec. 31, 2012	405	384	8	17	814
Cost as of Jan. 1, 2013	452	707	43	17	1,219
Changes in consolidated group	0	12	0	0	12
Net exchange differences	0	-11	0	-1	-12
Additions	0	201	7	24	232
Reclassifications	0	22	0	-12	10
Disposals	0	100	11	0	111
Reclassification of disposal groups	0	-14	0	-1	-15
Cost as of Dec. 31, 2013	452	817	39	27	1,335
Accumulated amortization as of Jan. 1, 2013	47	323	35	0	405
Changes in consolidated group	0	12	0	0	12
Net exchange differences	0	-9	0	0	-9
Additions (amortization)	0	182	1	0	183
Disposals	0	94	11	0	105
Reclassifications	0	1	0	0	1
Reclassification of disposal groups	0	-8	0	0	-8
Accumulated amortization as of Dec. 31, 2013	47	407	25	0	479
Carrying amount as of Dec. 31, 2013	405	410	14	27	856
Julying amount as of Dec. 31, 2013	400	410	14	21	000

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 (2012:  $\in$  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, 2013	Dec. 31, 2012
Car Powertrain Technology	57	57
Car Chassis Technology	65	65
Commercial Vehicle Technology	139	139
Industrial Technology	12	12
ZF Services	132	132
	405	405

# 15 Property, plant, and equipment

in € million	Land and buildings	Technical equipment and machines	Other equipment, factory and office equipment	Payments in advance and con- struction in progress	Total
Cost as of Jan. 1, 2012	1,721	5,087	1,847	578	9,233
Changes in consolidated group	10	18	6	1	35
Net exchange differences	-5	-26	-11	-6	-48
Additions	89	350	171	415	1,025
Reclassifications	85	299	65	-457	-8
Disposals	2	126	83	4	215
Cost as of Dec. 31, 2012	1,898	5,602	1,995	527	10,022
Accumulated amortization as of Jan. 1, 2012	765	3,714	1,393	0	5,872
Changes in consolidated group	-2	9	3	0	10
Net exchange differences	-2	-17	-8	0	-27
Additions (depreciation)	 51	445	151	0	647
Additions (impairment)	0	33	2	0	35
Disposals	2	116	62	0	180
Reversals of impairments	0	4	1	0	5
Accumulated amortization as of Dec. 31, 2012	810	4,064	1,478	0	6,352
Carrying amount as of Dec. 31, 2012	1,088	1,538	517	527	3,670
Cost as of Jan. 1, 2013	1,898	5,602	1,995	527	10,022
Net exchange differences	-25	-99	-29	-15	-168
Additions	40	339	171	404	954
Reclassifications	42	289	64	-405	-10
Disposals	10	133	62	4	209
Reclassification of disposal groups	-127	-289	-105	-12	-533
Cost as of Dec. 31, 2013	1,818	5,709	2,034	495	10,056
Accumulated amortization as of Jan. 1, 2013	810	4,064	1,478	0	6,352
Net exchange differences	-8	-66	-23	0	-97
Additions (depreciation)	55	489	169	0	713
Additions (impairment)	0	3	2	0	5
Reclassifications	0	-7	6	0	-1
Disposals	3	127	50	0	180
Reversals of impairments	4	3	0	0	7
Reclassification of disposal groups	-71	-244	-84	0	-399
Accumulated amortization as of Dec. 31, 2013	779	4,109	1,498	0	6,386
Carrying amount as of Dec. 31, 2013	1,039	1,600	536	495	3,670
Carrying amount as of Dec. 31, 2013	1,038	1,000	550	430	3,070

Property, plant, and equipment includes rented buildings in the amount of  $\in$  6 million (2012:  $\in$  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 adjusting 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, 2013	Dec. 31, 2012
Total future minimum lease payments		
due within a year	1	2
due between one and five years	2	5
due after more than five years	2	16
	5	23
Interest portion included in the future minimum lease payments		
due within a year	0	1
due between one and five years	0	2
due after more than five years	0	7
	0	10
Present value of the future minimum lease payments		
due within a year	1	1
due between one and five years	2	3
due after more than five years	2	9
	5	13

## 16 Impairment tests

In the fourth quarter of 2013, 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 underutilization.

For technical equipment and machines as well as for factory and office equipment, impairment losses were recorded in the following divisions:

in € million	2013	2012
Car Chassis Technology	2	2
Industrial Technology	3	33
	5	35

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	2013	2012
North America	1	35
Asia-Pacific	4	0
	5	35

The Car Chassis Technology division recorded reversals of impairments for property, plant, and equipment amounting to  $\in$  3 million (2012:  $\in$  3 million), the Industrial Technology division recorded reversals of impairments amounting to  $\in$  0 million (2012:  $\in$  1 million), and the ZF Services business unit recorded reversals of impairments amounting to  $\in$  0 million (2012:  $\in$  1 million).

For non-operational units, the reversal of impairments for buildings was  $\in$  4 million (2012:  $\in$  0 million).

For intangible assets, an impairment loss of  $\in$  0 million (2012:  $\in$  12 million) was recorded for capitalized customer relations and  $\in$  0 million (2012:  $\in$  17 million) for capitalized development costs. The impairments in the previous year exclusively applied to the Industrial Technology division.

The annual goodwill impairment tests led to no impairments, whereas in 2012, impairments of  $\in$  12 million were made to the goodwill of the Die Casting Technology business unit and  $\in$  3 million to the goodwill of the Industrial Technology division. An increase of the discount rate by 10% would not have led to 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 three-year planning period are as follows:

in %	2013	2012
Car Driveline Technology	15	12
Car Chassis Technology	6	9
Commercial Vehicle Technology	3	6
Industrial Technology	6 to 12	6 to 10
Electronic Systems	8	_
ZF Services	12	8

#### 17 Financial liabilities

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

in € million	Carrying am Dec. 31,	Cash outflow			
	Total	Thereof current	2014	2015 to 2019	2020 and after
Liabilities to banks	1,123	158	173	885	142
Liabilities from finance leases	5	1	1	2	2
Other financial liabilities	28	26	33	1	1
	1,156	185	207	888	145

n € million Carrying amount as of Dec. 31, 2012		(	Cash outflow		
	Total	Thereof current	2013	2014 to 2018	2019 and after
Liabilities to banks	1,038	147	162	866	105
Liabilities from finance leases	14	1	2	5	16
Other financial liabilities	31	27	34	3	1
	1,083	175	198	874	122

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 line item. The country-specific interest rates on these short-term loans fluctuate between 0.4% (2012: 1.4%) and 6.4% (2012: 7.3%).

The country-specific interest rate on the loans reported in non-current financial liabilities is between 0.9% (2012: 0.9%) and 9.0% (2012: 8.7%). Just over half of these loans has a fixed interest rate. Most of the loans are due at the end of the period.

The loan contracts partly contain an obligation to fulfill a specific financial key figure (financial covenant); non-fulfillment 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 2013 fiscal year.

Assets from property, plant, and equipment in the amount of  $\in$  27 million (2012:  $\in$  56 million) are negotiated as collateral for financial liabilities as well as for possible obligations from finance court cases.

#### 18 Other liabilities

in € million	De	c. 31, 2013	Dec. 3	Dec. 31, 2012	
	Tot	al Thereof current		Thereof current	
Liabilities to employees	39	97 397	358	356	
Social contributions		19 19	20	20	
Other tax liabilities	-	77 74	78	75	
Tooling subsidies received	2	15 94	237	104	
Prepayments received		35 35	33	33	
Professional association		6 6	8	8	
Deferred income	(	35 15	47	14	
Derivative financial instruments		0 0	6	4	
Other liabilities	18	30 139	172	162	
	90	64 779	959	776	

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 for licenses and commissions.

## 19 Other provisions

in € million	Dec. 31, 2013		Dec. 31, 2012	
	Total	Thereof current	Total	Thereof current
Obligations from sales	459	315	493	325
Obligations from personnel	234	53	286	77
Other obligations	55	45	62	54
	748	413	841	456

in € million	Jan. 1, 2013	Net exchange differences	Addition	Com- pounding	Reclassi- fications	Utilization	Reversal	Dec. 31, 2013
Obligations from sales	493	-5	185	1	-14	150	51	459
Obligations from personnel	286	-4	52	6	-5	64	37	234
Other obligations	62	-1	20	0	0	12	14	55
	841	-10	257	7	-19	226	102	748

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 60% of the provisions contained in the non-current obligations from personnel and about 53% of other non-current obligations will presumably be exhausted in the next five years.

Expected reimbursements as of December 31, 2013, amount to € 13 million (2012: € 21 million), of which € 8 million (2012: € 16 million) was capitalized as assets.

## 20 Provisions for pensions

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 private pension insurance carriers.

Pension provisions are set up for obligations from vested benefits and current pensions for entitled current and former employees of the ZF Group and their surviving dependents. This refers to defined benefit plans, for which the obligation of the consolidated ZF Group consists of fulfilling promised benefits to current and former employees (defined benefit plans). Various retirement pension fund systems exist that depend on the legal, economic, and tax situation in the respective country, which are primarily based on annually determined pension modules and, in part, on the length of service and last emoluments of the employees.

The largest part of the obligation is based on the contribution plans for active and former employees at the German locations (98% related to the net obligation). Until December 31, 1993, defined benefit obligations depending on time of service and salary were granted. These were frozen and since then, they have been further developed according to the cost of living index. As of January 1, 1997, so-called pension modules were promised to pay-scale employees; the amount depends on the pensionable income in relation to the social security contribution ceiling of the statutory pension insurance. Since January 1, 2005, the annual pension modules have been decoupled from the social security contribution ceiling and now only depend on salary and an age-dependent table of factors. Employees of the management levels receive pension modules whose amount is determined by the company hierarchy and the individual salary.

The essential risks for the company lie with the development of the cost of living as well as the actuarial risks, in particular interest rate and pension trend, but also longevity risk.

In Germany, there are no legal or regulatory minimum funding requirements.

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 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, fluctuation, and expected salary increases, the following premises have a material effect on the amount of the obligation:

in %	2013	2012
Discount rate	3.8	4.0
Pension increases	1.3	1.3

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.

The funding status of the pension obligations is as follows:

in € million	2013	2012
Present value of unfunded defined benefit obligations	2,686	2,568
Present value of funded defined benefit obligations	172	170
Present value of the		
defined benefit obligations	2,858	2,738
Plan assets	129	126
Net liabilities	2,729	2,612

The plan assets consist of the following items:

in € million	Dec. 31, 2013	Dec. 31, 2012
Cash	34	31
Securities		
Equity instruments	26	21
Debt instruments	34	35
Fund shares	46	42
Land and buildings	0	3
Other	-11	-6
	129	126

Securities are measured at prices quoted on active markets.

In Germany, non-funded defined benefit obligations are financed in part via special funds. The fair value amounts to  $\in$  1,008 million (2012:  $\in$  929 million). The assets are shown under non-current securities and financial receivables in the consolidated statement of financial position.

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

in € million	2013	2012	
Present value of the defined benefit obligations as of Jan. 1	2,738	2,169	
Net exchange differences			
from plans abroad	-2	1	
Current service costs	62	40	
Past service costs	13	13	
Settlements	0	-1	
Interest expenses	106	113	
Contributions by plan participants	10	11	
Actuarial gains (-) and losses (+) from the change in financial			
assumptions	101	504	
Pension payments	114	112	
Reclassification as liabilities of disposal groups	-56	0	
Present value of the defined benefit obligations as of Dec. 31	2,858	2,738	
Plan assets at fair value as of Jan. 1	126	117	
Net exchange differences from plans abroad	-2	2	
Expected return on plan assets	5	5	
Actuarial gains (+) and losses (-) from the change in financial assumptions	1	7	
Employer contributions to the plan assets	7	4	
Pension payments	8	9	
Transfer of plan assets	0	0	
Plan assets at fair value as of Dec. 31	129	126	
Provisions for pensions as of Jan. 1	2,612	2,052	
Provisions for pensions as of Dec. 31	2,729	2,612	

The pension obligations result in expenses made through profit or loss from pension obligations of  $\in$  176 million (2012:  $\in$  160 million), which are made up of the following components:

in € million	2013	2012
Current service costs	62	40
Past service costs	13	13
Curtailments and settlements	0	-1
Compounding of net liabilities	101	108
	176	160

All components of the pension expenses recognized in profit or loss, with the exception of the interest portion, are reported in the functional areas.

The actuarial losses amounting to € 100 million (2012: € 497 million) are considered in retained earnings with no effect on profit or loss.

The actual returns on plan assets amount to  $\in$  6 million (2012:  $\in$  12 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.

According to the best possible estimate, contributions to external pension funds will amount to  $\mathfrak E$  3 million for the next year. The 2012 estimate for the fiscal year 2013 was  $\mathfrak E$  3 million.

Pension payments until 2060 are as follows:

in € million	2013
within the upcoming fiscal year	110
between 2 and 5 years	470
between 5 and 10 years	664
due in 10 years	5,824

For the calculation it was assumed that the number of entitled persons does not change. In addition, the same assumptions were used as for the determination of the defined benefit obligations.

The average maturity period of the defined benefit obligations is 16 years.

The effect of a change in significant assumptions on the defined benefit obligations is shown in the following:

Dec. 31, 2013 in € million	Changes of the present value
Discount rate	
-0.25%	+109
0.25 %	-102
Pension increases	
-0.25%	-68
0.25%	+71

For the sensitivity analysis, pension obligations were re-measured. It was assumed that all other factors remain unchanged.

### 21 Disposal groups

On December 11, 2013, an agreement was concluded to sell the Rubber & Plastics business unit to Zhuzhou Times New Material Technology Co., Ltd. (TMT). The acquisition will be completed during the first half of 2014 and is still subject to approval by the regulatory authorities in China and Europe and the TMT shareholders. Currently, the Rubber & Plastics business unit is part of ZF's Car Chassis Technology division and develops and produces vibration control and suspension systems for chassis and driveline. In addition, plastic components, plastic pedal modules, and crash absorption systems for vehicle and pedestrian safety are also part of the product range. The industry is currently in a stage of consolidation. Against this backdrop and after close examination, ZF came to the conclusion that the rubber and plastics business is in a considerably better position with a longterm strategic investor. The business unit has approximately 3,300 employees at nine locations in Europe, North and South America, Asia, and Australia. The business to be sold affects the complete Rubber & Plastics business unit, excluding the activities relating to oil pans and their components as well as organic sheet technology. In Germany, the business unit will be sold via asset deals and abroad via share deals.

On November 13, 2013, an agreement was made with a foreign investor on the disposal of the shares in ZF Auto Industrial Brake and Chassis Investment Holdings (Pty) Ltd. including its subsidiaries headquartered in South Africa. The group of companies belongs to the Car Chassis Technology division and contains a forge and a foundry, among other things, and produces components for the automotive industry. In the context of the strategic realignment, the group of companies will be sold, as its activities

are not part of ZF's core business and it works autonomously in the global ZF production network. The acquisition was dependent on the approval by the South African cartel authorities. After the approval, the group of companies was sold at the beginning of February 2014.

### **Disposal groups**

in € million	Dec. 31, 2013
Current assets	
Trade receivables	38
Other current assets	6
Inventories	66
	110
Non-current assets	
Financial assets	13
Property, plant, and equipment	134
Intangible assets	7
Deferred taxes	3
	157
Assets of disposal groups	267
Current liabilities	
Trade payables	43
Other current liabilities	25
Other current provisions	12
	80
Non-current liabilities	
Financial liabilities	9
Other non-current liabilities	12
Provisions for pensions	56
Other non-current provisions	7
Deferred taxes	3
	87
Liabilities of disposal groups	167

## 22 Equity

#### Subscribed capital

During the fiscal year, the subscribed capital was increased from € 300 million to € 500 million from own company funds. The capital increase came along with an increase in the number of shares. As of December 31, 2013, the subscribed capital has been divided into 500,000,000 (300,000,000 before capital increase) registered shares. All shares are fully deposited.

#### Capital reserve

In 2013, the capital reserve decreased from  $\in$  586 million to  $\in$  386 million due to the capital increase from reserves. The capital reserve comprises the premium on the issuance of shares. It is subject to the restrictions of  $\S$  150 AktG (German Stock Corporation Law).

#### Other retained earnings

Other retained earnings 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 line 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

The line item contains 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  $\epsilon$  -134 million (2012:  $\epsilon$  -42 million) is attributed to non-controlling interests with  $\epsilon$  -4 million (2012:  $\epsilon$  -4 million).

#### Market valuation of securities and cash flow hedges

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

## Actuarial gains and losses

This line 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		2013			2012	
	Before income tax	Income tax	After tax	Before income tax	Income tax	After tax
Foreign currency translation differences	-124	0	-124	-47	0	-47
Market valuation of securities	1	1	2	27	-4	23
Market valuation of cash flow hedges	2	0	2	23	-3	20
Actuarial gains and losses	-100	28	-72	-497	143	-354
Other comprehensive income from at-equity participations	-17	2	-15	-37	12	-25
Other comprehensive income	-238	31	-207	-531	148	-383

## Dividends

ZF Friedrichshafen AG has proposed a dividend payout of & 30 million for the fiscal year 2013 (& 0.06 per share). In the fiscal year, a dividend of & 30 million (& 0.10 per share) for 2012 was paid.

#### 23 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 in the consolidated statement of financial position is used.

	Dec. 31, 2013	Dec. 31, 2012
Equity in € million	4,165	3,950
Equity ratio in %	35	36

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

# NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

### 24 General

The consolidated statement of cash flows 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 statement of cash flows covers all cash reported in the consolidated statement of financial position, 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 financial line 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 financial line items can therefore not be reconciled to the corresponding values on the basis of the published consolidated statement of financial position.

## **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, 2013	Dec. 31, 2012
Guarantees	71	21
thereof for participations	8	0
Other	51	37
	122	58

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 & 6 million (2012: & 8 million) which, when fully utilized, are due within a year.

## 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, 2013	Dec. 31, 2012
Rental and leasing payments	268	289
Purchase commitments	581	590
Payment obligations on participations	8	5
	857	884

The purchase commitments account for € 134 million (2012: € 111 million) for intangible assets and € 447 million (2012: € 479 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, 2013	Dec. 31, 2012
Nominal total future minimum lease payments		
due within a year	73	80
due between one and five years	131	133
due after more than five years	64	76
	268	289

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, 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

The companies of the consolidated ZF Group hedge their interest rate, foreign currency, and raw material price risks at prevailing market conditions either through ZF Cash Management at ZF Friedrichshafen AG or directly with banks. Derivative financial instruments are used. These 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 lead to a maximum credit risk if one counterparty defaults, amounting to the carrying amount of the respective financial line item without considering collaterals received (plus the maximum utilization for financial guarantees as well as loan commitments to third parties).

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

With regard to one group of companies, which conducted a debt restructuring in the year 2012 in order to ensure its solvency in the long term, there are receivables in the amount of € 69 million as of December 31, 2013. The restructuring process was successfully concluded in 2013. Moreover, an agreement (term sheet) was signed including a payment plan which has been complied with to date on the one hand and the monthly or quarterly provision of information (e.g. cash flows, orders, and projects) on the other hand. 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  $\in$  262 million (2012:  $\in$  253 million).

Part of the financial receivables is collateralized with pledged machines and equipment in the amount of  $\notin$  9 million (2012:  $\notin$  8 million), mortgages in the amount of  $\notin$  7 million (2012:  $\notin$  7 million), and guarantees.

## Liquidity risk

The risk that the consolidated group itself might be unable to meet its obligations from financial liabilities is considered minimal. External financing in general consists of two types of core funding: The syndicated loan in the amount of  $\in$  1 billion taken out in 2011 had been drawn down with  $\in$  400 million on the balance sheet date. The residual amount is available as revolving credit line that can be called up at any time and constitutes an essential instrument for liquidity risk management. Payment on the bonded loan of  $\in$  400 million obtained in 2012 was completely received as of the balance sheet date. In order to minimize the risk, the total amount was divided into three maturity period tranches and is thus due to repayment over a period of four years in graded amounts.

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 Note (17).

With non-current and non-interest-bearing trade payables, the cash outflow corresponds to the carrying amount.

In the context of a project, ZF assumed contingent financial commitments in the amount of  $\in$  55 million to the benefit of a business partner which in case of utilization would lead to an immediate cash outflow. We rate the probability that this results in financial receivables, that must be recognized in the consolidated statement of financial position, as very low.

#### 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, relevant investment funds, and a direct lending fund. Diversification will reduce risk, which constitutes the prerequisite for the best possible continuous increase in value resistant to fluctuation.

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 bases 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  $\in$  97 million (2012:  $\in$  83 million) without accounting for income taxes.

Thereof,  $\in$  89 million (2012:  $\in$  76 million) would be recognized under equity of the consolidated ZF Group with no effect on profit or loss, and  $\in$  8 million (2012:  $\in$  7 million) under other financial results with effect on profit or loss.

Based on a value-at-risk calculation, 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 3.7% (2012: 3.9%), the market value reduction will not exceed € 18 million (2012: € 17 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. The historic correlations of the corresponding funds and securities were considered. The maximum loss limit approved for 2013 was € 36 million (2012: € 29 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 2013, more than 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  $\in$  32 million (2012:  $\in$  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 € 24 million (2012: € 16 million) over the subsequent twelve months is not exceeded. The calculation was based on an average exchange rate volatility of 8.1% (2012: 9.2%). 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 30 (2012: 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  $\ell$  –1 million (2012:  $\ell$  –2 million). A decrease by 30 (2012: 50) base points would raise the net profit or loss before income tax by  $\ell$  1 million (2012:  $\ell$  2 million).

An increase by 30 (2012: 50) base points of the average interest rate on financial investments would raise the net profit or loss before income tax by  $\in$  3 million (2012:  $\in$  5 million). A decrease by 30 (2012: 50) base points would have an effect on the net profit or loss before income tax of  $\in$  -3 million (2012:  $\in$  -5 million).

Compared to the previous year, the interest rate was changed for the purpose of the sensitivity analysis due to lower volatility. 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 expected cash outflow from derivative financial instruments results from the following presentation:

in € million	Market values		Cash outflow		
		Total	Within a year	1 to 5 years	
Dec. 31, 2013					
Foreign currency hedging contracts					
Assets	20	731	249	482	
Liabilities	0	0	0	0	
Dec. 31, 2012					
Foreign currency hedging contracts					
Assets	15	460	198	262	
Liabilities	-4	15	15	0	
Interest rate swaps					
Assets	0	0	0	0	
Liabilities	-2	-2	0	-2	

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 2014 and 2017. If the prerequisites of hedge accounting are met, market value changes recognized with no effect on profit or loss are reclassified in such a way that they affect profit or loss during the same period.

For fair value hedges, changes in value from hedging transactions amount to  $\in$  5 million (2012:  $\in$  4 million) as well as changes in value from underlying transactions of  $\in$  5 million (2012:  $\in$  4 million).

# Carrying amounts of the financial instruments by categories

in € million	Dec. 31, 2013	Dec. 31, 2012
Assets		
Loans and receivables	3,521	3,147
Available-for-sale financial assets	937	828
Financial assets at fair value through profit or loss	82	62
Financial assets held for trading	3	2
Derivative financial instruments (hedge accounting) *	17	13
	4,560	4,052
Liabilities		
Financial liabilities at amortized cost	3,126	2,582
Liabilities from finance leases*	5	14
Derivative financial instruments (hedge accounting) *	0	6
	3,131	2,602

<sup>\*</sup> No IAS 39 measurement categories.

#### Fair values

The following table shows the carrying amounts and the fair values of the financial assets and liabilities recognized at amortized cost. Due to short maturities, the carrying amounts of the current financial instruments recognized at cost approximate the fair values and are thus not recorded. The fair value of the investments in participations cannot be determined reliably.

in € million	Dec.	Dec. 31, 2013		Dec. 31, 2012	
	Carrying amount	Fair value	Carrying amount	Fair value	
Assets					
Loans and receivables					
Financial receivables	161	161	226	226	
Trade receivables	50	50	0	0	
	211	211	226	226	
Liabilities					
Financial liabilities at amortized cost					
Liabilities to banks	965	997	891	891	
Other financial liabilities	2	2	4	4	
Liabilities from finance leases*	4	4	13	13	
	971	1,003	908	908	

<sup>\*</sup> No IAS 39 measurement categories

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

in € million	Dec. 31, 2013	Dec. 31, 2012
Assets		
Available-for-sale financial assets		
Securities	868	755
Investments in participations	1	1
Financial assets at fair value through profit or loss		
Securities	82	62
Financial assets held for trading		
Derivative financial instruments	3	2
Derivative financial instruments (hedge accounting) *	17	13
	971	833
Liabilities		
Derivative financial instruments (hedge accounting) *	0	6

<sup>\*</sup> 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. The classification as well as the need to perform reclassifications will be reviewed respectively on the balance sheet date. 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:

	Level 1	Level 2	Level 3	Total
Assets				
Securities				
Shares	62	1	0	63
Fixed-interest securities	106	297	11	414
Fund shares	331	0	0	331
Alternative investments	92	37	13	142
Investments in participations	1	0	0	1
Derivative financial instruments	2	18	0	20
	594	353	24	971
Liabilities				
Derivative financial instruments	0	0	0	0

in € million Dec. 31, 2012

	Level 1	Level 2	Level 3	Total
Assets				
Securities	524	279	14	817
Investments in participations	1	0	0	1
Derivative financial instruments	0	15	0	15
	525	294	14	833
Liabilities				
Derivative financial instruments	0	6	0	6

For level 1 securities, the fair value is recognized directly as the quoted price on an always active market. Level 2 includes classes whose prices can be derived or modeled from parameters which can be observed on the market. Some examples are observable interest rates, exchange rates, or comparable instruments. Interest-bearing securities with slightly delayed direct quotation are also included in level 2. For real estate funds contained in level 2, the continued ability for redemption on an active market is contractually ensured. The level 3 securities involve interests in private equity funds and direct lending funds. The private equity umbrella funds hold shares in non-listed companies. The direct lending fund contains financial receivables towards mid-size companies from Germanspeaking countries or Great Britain. The market values of level 3 securities are determined on the basis of currently

available information from the funds' managers. 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.

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

Fair values for the "plain vanilla products" recognized 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	2013	2012
Date: Jan. 1	14	50
Fair value changes – recognized through other comprehensive income	-2	-1
Other gains/losses	0	1
Purchases	12	1
Sales	0	-8
Reclassifications from level 3 to level 2	0	-29
Date: Dec. 31	24	14

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

The following table shows the assignment of the fair values of the financial instruments recognized at amortized cost to the three levels of the fair value hierarchy:

in € million Dec. 31, 2013

	Level 1	Level 2	Level 3	Total
Assets				
Financial receivables	0	161	0	161
Trade receivables	0	50	0	50
Liabilities				
Liabilities to banks	0	997	0	997
Other financial liabilities	0	2	0	2
Liabilities from finance leases	0	4	0	4

The market values of financial receivables, trade receivables, liabilities to banks, and other financial liabilities are calculated using the net present value method. Here, the future cash flows were discounted with the current risk-free interest rates matching the maturities plus a credit risk markup common in the industry.

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.

## Net gains and losses by measurement categories

in € million	Interest	Impairments	Other net gains and losses	Total net gains and losses
2013				
Loans and receivables	25	-11	20	34
Available-for-sale financial assets				
recognized at fair value	8	0	9	17
recognized at cost	0	-2	5	3
Financial assets at fair value through profit or loss	1	0	2	3
Financial assets held for trading	0	0	1	1
Financial liabilities at amortized cost	-46	0	-39	-85
2012				
Loans and receivables	22	-20	4	6
Available-for-sale financial assets				
recognized at fair value	12	0	47	59
recognized at cost	0	-6	11	5
Financial assets at fair value through profit or loss	1	0	6	7
Financial assets held for trading	0	0	2	2
Financial liabilities at amortized cost	-50	0	-11	-61

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-for-sale 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 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.

### Offsetting financial assets and financial liabilities

Financial assets and liabilities which are subject to settlement agreements, enforceable master netting arrangements, and similar agreements:

Dec. 31, 2013

in € million	Gross amount	Offsetting	Net amount
Trade receivables			
(current)	2,184	52	2,132
Trade payables	2,027	52	1,975

### 29 Government grants

In the fiscal year 2013,  $\in$  21 million (2012:  $\in$  41 million) in government grants was received. They were divided as follows:

in € million	2013	2012
Investment grants	4	25
Expense subsidies	17	16

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.

## 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 joint ventures, associates, and 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.

Transactions with related companies and the receivables and liabilities existing on the balance sheet date result without exception from the ordinary business activities and are displayed as follows:

in € million	Joint ventures	Associates	Other participa- tions
2013			
Supplies and services rendered			
Sale of goods	63	1	44
Services	16	2	2
Other services	0	0	1
Supplies and services received			
Sale of goods	28	30	15
Services	1	0	36
Other services	0	0	0
Receivables	19	9	22
Liabilities	30	2	45
2012			
Supplies and services rendered			
Sale of goods	56	3	132
Services	14	1	7
Other services	0	0	1
Supplies and services received			
Sale of goods	25	3	11
Services	0	0	33
Other services	0	0	1
Receivables	16	8	54
Liabilities	10	2	68

A transaction exceeding the bounds of ordinary business activities as of the balance sheet date includes a loan of  $\in$  9 million (2012:  $\in$  10 million) by ZF Friedrichshafen AG

to Internationale Bodensee-Messe Friedrichshafen GmbH, Friedrichshafen (Germany). An interest rate of 4.0% p.a. (2012: 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 2013 amount to  $\in$  8.3 million (2012:  $\in$  10.2 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 (2012:  $\in$  1.2 million). The claim to contingent other long-term benefits attributable to the fiscal year amounts to  $\in$  4.8 million (2012:  $\in$  5.3 million).

The emoluments of former members of the Board of Management and their surviving dependents amount to € 7.8 million (2012: € 3.5 million). The pension provisions for former members of the Board of Management and their surviving dependents amount to € 51.9 million (2012: € 36.7 million).

The emoluments of the Supervisory Board for the fiscal year 2013 amount to  $\in$  1.3 million (2012:  $\in$  1.3 million).

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.

## 32 Personnel

The annual average number of employees was 71,091 (2012: 67,561), of whom 35,382 were direct employees (2012: 33,938) and 35,709 were indirect employees (2012: 33,623).

At the end of the year, the consolidated ZF Group had 72,643 (2012: 68,406) employees. 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 statement of profit or loss amount to  $\in$  2 million for auditing services. The total consolidated Group-wide fees of Ernst & Young amount to  $\in$  6 million for auditing services,  $\in$  1 million for tax consulting services, and  $\in$  2 million for other consulting services. Apart from Ernst & Young, other auditing companies work for the consolidated group.

# 34 Listing of the shares held as of Dec. 31, 2013

## **Consolidated subsidiaries**

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

Foreign	Share in capital in %
Compagnie Financière de ZF S.A.S., Andrézieux-Bouthéon, France	100.0
Hansen Drives Ltd., Hong Kong, China	100.03)
Hansen Drives Pte. Ltd., Singapore, Singapore	100.03)
Liuzhou ZF Machinery Co., Ltd., Liuzhou, China	51.0 <sup>4)</sup>
Midwest Lemförder Ltd., Darlaston, Great Britain	100.0
000 ZF Kama, Naberezhnye Chelny, Russia	51.0 <sup>5)</sup>
OOO ZF Russia, St. Petersburg, Russia	100.0 5)
Openmatics s.r.o., Pilsen, Czech Republic	100.0 6)
Pt. ZF Marine, Batam, Indonesia	100.0 7)
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 (China) Investment Co., Ltd., Shanghai, China	100.0
ZF Ansa Lemförder S.L.U., Burgos, Spain	100.08)
ZF Asia Pacific Pte. Ltd., Singapore, Singapore	100.0
ZF Auto Industrial (Pty.) Ltd., Kempton Park, South Africa	100.0 9)
ZF Auto Industrial Brake and Chassis Investment Holdings (Pty.) Ltd., Kempton Park, South Africa	100.0 10)
ZF Axle Drives Marysville LLC, Marysville, Michigan, USA	100.0 11)
ZF Beiben Drivetech (Chongqing) Co., Ltd., Chongqing, China	51.0 <sup>4)</sup>
ZF Boge Elastmetall (Shanghai) Co., Ltd., Shanghai, China	100.04)
ZF Boge Elastmetall Australia Pty. Ltd., Dingley, Australia	100.0 12)
ZF Boge Elastmetall España S.A.U., Barcelona, Spain	100.08)
ZF Boge Elastmetall France S.A.S., Fontenay-Trésigny, France	99.99 13)
ZF Boge Elastmetall Slovakia a.s., Trnava, Slovakia	100.0 5)
ZF Bouthéon S.A., Andrézieux-Bouthéon, France	100.0 13)

Foreign	Share in capital in %
ZF Chassis Components LLC, Newton, North Carolina, USA	100.0 11)
ZF Chassis Components Toluca S.A. de C.V., Toluca, Mexico	100.0 14)
ZF Chassis Systems (Beijing) Co., Ltd., Beijing, China	100.0 4)
ZF Chassis Systems Chicago LLC, Chicago, Illinois, USA	100.0 11) 19)
ZF Chassis Systems Duncan LLC, Duncan, South Carolina, USA	100.0 11) 19)
ZF Chassis Systems Sdn. Bhd., Penang, Malaysia	100.0 <sup>15)</sup> <sup>19)</sup>
ZF Chassis Systems Tuscaloosa LLC, Tuscaloosa, Alabama, USA	100.0 11) 19)
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 <sup>4)</sup>
ZF Drivetech (Hangzhou) Co., Ltd., Hangzhou, China	100.0 4)
ZF Drivetech (Suzhou) Co., Ltd., Suzhou, China	100.0 4)
ZF Electronic Systems Juárez S.A. de C.V., Juárez, Mexico	100.0 17)
ZF Electronic Systems Pleasant Prairie LLC, Pleasant Prairie, Wisconsin, USA	100.0 11)
ZF Electronics (Zhuhai) Co., Ltd., Zhuhai, China	100.0 4)
ZF Electronics Asia Ltd., Hong Kong, China	100.0 15)
ZF Electronics Klášterec s.r.o., Klášterec, Czech Republic	100.0
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 <sup>4) 19)</sup>
ZF Fonderie Lorraine S.A.S., Grosbliederstroff, France	100.0 13)
ZF Friedrichshafen Holding España S.L., Sant Cugat del Vallès, Spain	100.0
ZF Gainesville LLC, Gainesville, Georgia, USA	100.0 11)
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 <sup>9)</sup>
ZF Hungária Kft., Eger, Hungary	100.0
ZF India Pvt. Ltd., Pune, India	100.0
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)

Foreign	Share in capital in %
ZF Japan Co., Ltd., Tokyo, Japan	100.0 15)
ZF Lemforder (Thailand) Co., Ltd., Rayong, Thailand	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 12) 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 <sup>19)</sup>
ZF Lemförder Métal France S.A., Florange, France	100.0 13)
ZF Lemförder Shanghai Chassistech Co., Ltd., Shanghai, China	76.0 <sup>4)</sup>
ZF Lemförder South Africa (Pty.) Ltd., Rosslyn, South Africa	100.0 19)
ZF Lemförder Sverige AB, Trollhättan, Sweden	100.0
ZF Lemförder TLM Dis Ticaret L.S., Izmir, Turkey	100.0 22)
ZF Lemförder TVA S.A., Ermua, Spain	100.0 8)
ZF Lemförder UK Ltd., Darlaston, Great Britain	100.0 <sup>23)</sup>
ZF Levice s.r.o., Levice, Slovakia	100.0 5)
ZF Marine (Zhuhai) Co., Ltd., Zhuhai, China	100.0 4)
ZF Marine Eurasia Makina Ticaret Limited Şirketi, Istanbul, Turkey	100.0 24)
ZF Marine Krimpen B.V., Krimpen aan de Lek, Netherlands	100.0 <sup>25)</sup>
ZF Marine Middle East LLC, Sharjah, United Arab Emirates	100.0 18)
ZF Marine Propulsion Systems LLC, Miramar, Florida, USA	100.0 11)
ZF Marine Singapore Pte. Ltd., Singapore, Singapore	100.0 15)
ZF Mexico S.A. de C.V., El Salto, Mexico	100.0 26)
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., Muntinlupa, Philippines	100.0 15)
ZF Powertrain Modules Saltillo S.A. de C.V., Ramos Arizpe, Mexico	100.0 27)
ZF Rubber & Plastics Hebron LLC, Hebron, Kentucky, USA	100.0 11)

ZF Services UK Ltd., Lenton-Nottingham, Great Britain  100.0  ZF Stankov s.r.o., Pilsen, Czech Republic  ZF Steyr Ges.m.b.H., Steyr, Austria  100.0 <sup>29)</sup> ZF Steyr Präzisionstechnik Ges.m.b.H., Steyr, Austria  100.0 <sup>5)</sup>	Foreign	Share in capital in %
ZF Sachs España S.A., Bilbao, Spain         100.0 %           ZF Sachs Italia S.p.A., Candiolo, Italy         100.0 21           ZF Sachs Korea Co., Ltd., Changwon, South Korea         91.45           ZF Sachs Slovakia a.s., Tinava, Slovakia         100.0           ZF Sachs Subuth Africa (Pty) Ltd., Alberton, South Africa         100.0           ZF Sachs Suspansiyon Sistemleri Sanayi ve Ticaret A.S., Gebze, Turkey         100.0           ZF Sachs Suspension France S.A.S., Mouy, France         100.0 18           ZF Sachs Suspension France S.A.S., Mouy, France         100.0 18           ZF Sarvices (China) Co., Ltd., Shanghai, China         100.0 19           ZF Sarvices Korea Co., Ltd., Shanghai, China         100.0 19           ZF Services España S.A.U., Sant Cugat del Vallès, Spain         100.0 19           ZF Services France S.A.S., Antony (Paris), France         100.0 19           ZF Services Korea Co., Ltd., Scoul, South Korea         100.0 19           ZF Services Nederland B.V., Delfgauw, Natherlands         100.0 19           ZF Services Noderland B.V., Delfgauw, Natherlands         100.0 19           ZF Services South Africa (Pty), Ltd., Johannesburg, South Africa         100.0 10           ZF Services Subk Ltd., Lenton-Nottingham, Great Britain         100.0 10           ZF Starky Ges.m.b.H., Steyr, Austria         100.0 19           ZF Steyr Ges.m.b.H., Steyr,	ZF Sachs Argentina S.A., San Francisco, Argentina	100.0
ZF Sachs Italia S.p.A., Candiolo, Italy         100.0 21)           ZF Sachs Korea Co., Ltd., Changwon, South Korea         91.45           ZF Sachs Slovakia a.s., Trava, Slovakia         100.0           ZF Sachs South Africa (Pty.) Ltd., Alberton, South Africa         100.0           ZF Sachs Suspansivon Sistemleri Sanayi ve Ticaret A.S., Gebze, Turkey         100.0           ZF Sachs Suspansivon France S.A.S., Mouy, France         100.0 130           ZF Sachs Suspansivon France S.A.S., Mouy, France         100.0 130           ZF Sachs Suspansivon France S.A.S., Mouy, France         100.0 130           ZF Sachs Suspansivon France S.A.S., Mouy, France         100.0 130           ZF Sachice (Malaysia) Sdn. Bhd., Kuala Lumpur, Malaysia         100.0 180           ZF Services China) Co., Ltd., Shanghai, China         100.0 120           ZF Services Australia Pty, Ltd., Sydney, Australia         100.0 120           ZF Services Spaña S.A.U., Sant Cugat del Valles, Spain         100.0 120           ZF Services Spaña S.A.U., Sant Cugat del Valles, Spain         100.0 10           ZF Services Storae Co., Ltd., Seoul, South Korea         100.0 10           ZF Services Nerae Co., Ltd., Seoul, South Korea         100.0 10           ZF Services Nederland B.V., Delfgauw, Netherlands         100.0 10           ZF Services Schweiz AG, Volketswil, Switzerland         100.0 10	ZF Sachs Automotive of America Inc., Northville, Michigan, USA	100.0 11)
ZF Sachs Korea Co., Ltd., Changwon, South Korea         91.45           ZF Sachs Slovakia a.s., Trava, Slovakia         100.0           ZF Sachs South Africa (Pty), Ltd., Alberton, South Africa         100.0           ZF Sachs Suspansion France S.A.S., Mouy, France         100.0           ZF Sachs Suspension France S.A.S., Mouy, France         100.0 130           ZF Sachs Sachs Service (Malaysia) Sdn. Bhd., Kuala Lumpur, Malaysia         100.0 160           ZF Services (China) Co., Ltd., Shanghai, China         100.0 160           ZF Services Australia Pty, Ltd., Sydney, Australia         100.0 170           ZF Services France S.A.S., Antony (Paris), France         100.0 180           ZF Services France S.A.S., Antony (Paris), France         100.0 180           ZF Services Korea Co., Ltd., Seoul, South Korea         100.0 180           ZF Services Moderland B.V., Delfgauw, Netherlands         100.0 180           ZF Services Schweiz AG, Volketswil, Switzerland         100.0 180           ZF Services Schweiz AG, Volketswil, Switzerland         100.0 180           ZF Services Suth Africa (Pty.) Ltd., Johannesburg, South Africa         100.0           ZF Services Strik Sanayi vo Ticaret A.S., Istanbul, Turkoy         100.0           ZF Services WL Ltd., Lenton-Nottingham, Great Britain         100.0 180           ZF Stery Ges.m.b.H., Steyr, Austria         100.0 180 <t< td=""><td>ZF Sachs España S.A., Bilbao, Spain</td><td>100.0 <sup>8)</sup></td></t<>	ZF Sachs España S.A., Bilbao, Spain	100.0 <sup>8)</sup>
ZF Sachs Slovakia a.s., Trnava, Slovakia         100.0           ZF Sachs South Africa (Pty.) Ltd., Alberton, South Africa         100.0           ZF Sachs Süspanskyon Sistemleri Sanayi ve Ticaret A.S., Gebze, Türkey         100.0           ZF Sachs Süspanskyon Sistemleri Sanayi ve Ticaret A.S., Gebze, Türkey         100.0           ZF Sachs Süspension France S.A.S., Mouy, France         100.0           ZF Sales & Service (Malaysia) Sdn. Bhd., Kuala Lumpur, Malaysia         100.0           ZF Services (China) Co., Ltd., Shanghai, China         100.0           ZF Services (China) Co., Ltd., Shanghai, China         100.0           ZF Services Australia Pty. Ltd., Sydney, Australia         100.0           ZF Services España S.A.U., Sant Cugat del Vallès, Spain         100.0           ZF Services France S.A.S., Antony (Paris), France         100.0           ZF Services Korea Co., Ltd., Seoul, South Korea         100.0           ZF Services Notes Rorea Co., Ltd., Seoul, South Korea         100.0           ZF Services Nederland B.V., Delfgauw, Netherlands         100.0           ZF Services Sokheeiz AG, Volketswil, Switzerland         100.0           ZF Services Sothwalf Africa (Pty.) Ltd., Johannesburg, South Africa         100.0           ZF Services Surk Sanayi ve Ticaret A.S., Istanbul, Türkey         100.0           ZF Services Utk Ltd., Lenton-Nottingham, Great Britain         100.0 <td>ZF Sachs Italia S.p.A., Candiolo, Italy</td> <td>100.0 21)</td>	ZF Sachs Italia S.p.A., Candiolo, Italy	100.0 21)
ZF Sachs South Africa (Pty.) Ltd., Alberton, South Africa         100.0           ZF Sachs Süspansiyon Sistemleri Sanayi ve Ticaret A.S., Gebze, Türkey         100.0           ZF Sachs Suspension France S.A.S., Mouy, France         100.0 ½0           ZF Sales & Service (Malaysia) Sdn. Bhd., Kuala Lumpur, Malaysia         100.0 ½0           ZF Services (China) Co., Ltd., Shanghai, China         100.0 ½0           ZF Services Australia Pty. Ltd., Sydney, Australia         100.0 ½0           ZF Services España S.A.U., Sant Cugat del Vallès, Spain         100.0 ½0           ZF Services France S.A.S., Antony (Paris), France         100.0           ZF Services Korea Co., Ltd., Seoul, South Korea         100.0           ZF Services Korea Co., Ltd., Seoul, South Korea         100.0           ZF Services Nederland B.V., Delfgauw, Netherlands         100.0 ½0           ZF Services Sex A. de C.V., Guadalajara, Mexico         100.0 ½0           ZF Services South Africa (Pty.) Ltd., Johannesburg, South Africa         100.0           ZF Services Türk Sanayi ve Ticaret A.S., Istanbul, Türkey         100.0           ZF Starkov s.r.o., Pilsen, Czech Republic         100.0 ½0           ZF Stery Ges.m.b.H., Steyr, Austria         100.0 ½0           ZF Stery Ges.m.b.H., Steyr, Austria         100.0 ½0           ZF Technologies LLC, Northville, Michigan, USA         100.0 ½0           ZF Tra	ZF Sachs Korea Co., Ltd., Changwon, South Korea	91.45
ZF Sachs Süspansiyon Sistemleri Sanayi ve Ticaret A.S., Gebze, Turkey         100.0           ZF Sachs Suspension France S.A.S., Mouy, France         100.0 130           ZF Saches Service (Malaysia) Sdn. Bhd., Kuala Lumpur, Malaysia         100.0 180           ZF Sachices (China) C.o., Ltd., Shanghai, China         100.0 4           ZF Services (Abstralia Pty. Ltd., Sydney, Australia         100.0 120           ZF Services Lespaña S.A.J., Sant Cugat del Vallès, Spain         100.0 8           ZF Services France S.A.S., Antony (Paris), France         100.0           ZF Services Korea Co., Ltd., Seoul, South Korea         100.0           ZF Services Nederland B.V., Delfgauw, Netherlands         100.0           ZF Services S.A. de C.V., Guadalajara, Mexico         100.0 280           ZF Services Schweiz AG, Volketswil, Switzerland         100.0           ZF Services Suth Africa (Pty.) Ltd., Johannesburg, South Africa         100.0           ZF Services UK Ltd., Lenton-Nottingham, Great Britain         100.0           ZF Services UK, Jid., Lenton-Nottingham, Great Britain         100.0           ZF Stery Präzisionstechnik Ges.m.b.H., Steyr, Austria         100.0 10           ZF Stery Präzisionstechnik Ges.m.b.H., Steyr, Austria         100.0 10           ZF Stery Präzisionstechnik Ges.m.b.H., Steyr, Austria         100.0 10           ZF Tansmissions Gray Court LtC, Gray Court, South Carolina, USA	ZF Sachs Slovakia a.s., Trnava, Slovakia	100.0
ZF Sachs Suspension France S.A.S., Mouy, France         100.0 130           ZF Sales & Service (Malaysia) Sdn. Bhd., Kuala Lumpur, Malaysia         100.0 150           ZF Services (China) Co., Ltd., Shanghai, China         100.0 40           ZF Services Australia Pty. Ltd., Sydney, Australia         100.0 120           ZF Services España S.A.U., Sant Cugat del Vallès, Spain         100.0 180           ZF Services France S.A.S., Antony (Paris), France         100.0 130           ZF Services Korea Co., Ltd., Seoul, South Korea         100.0           ZF Services Nederland B.V., Delfgauw, Netherlands         100.0 110           ZF Services S.A. de C.V., Guadalajara, Mexico         100.0 280           ZF Services Schweiz AG, Volketswil, Switzerland         100.0           ZF Services Suth Africa (Pty.) Ltd., Johannesburg, South Africa         100.0           ZF Services UK Ltd., Lenton-Nottingham, Great Britain         100.0           ZF Services UK Ltd., Lenton-Nottingham, Great Britain         100.0           ZF Steyr Präzisionstechnik Ges.m.b.H., Steyr, Austria         100.0 50           ZF Steyr Präzisionstechnik Ges.m.b.H., Steyr, Austria         100.0 50           ZF Tenhologies LtC, Northville, Michigan, USA         100.0 110           ZF Transmissions Gray Court LtC, Gray Court, South Carolina, USA         100.0 110           ZF Transmissions Shanghai Co., Ltd., Tianjin, China         51.0 4	ZF Sachs South Africa (Pty.) Ltd., Alberton, South Africa	100.0
ZF Sales & Service (Malaysia) Sdn. Bhd., Kuala Lumpur, Malaysia       100.0 150         ZF Services (China) Co., Ltd., Shanghai, China       100.0 41         ZF Services Australia Pty. Ltd., Sydney, Australia       100.0 122         ZF Services España S.A.U., Sant Cugat del Vallès, Spain       100.0 18         ZF Services France S.A.S., Antony (Paris), France       100.0 130         ZF Services Korea Co., Ltd., Seoul, South Korea       100.0	ZF Sachs Süspansiyon Sistemleri Sanayi ve Ticaret A.S., Gebze, Turkey	100.0
ZF Services (China) Co., Ltd., Shanghai, China         100.0 4)           ZF Services Australia Pty. Ltd., Sydney, Australia         100.0 12)           ZF Services España S.A.U., Sant Cugat del Vallès, Spain         100.0 8)           ZF Services España S.A.U., Sant Cugat del Vallès, Spain         100.0 13)           ZF Services Korea Co., Ltd., Seoul, South Korea         100.0           ZF Services Korea Co., Ltd., Seoul, Suth Korea         100.0           ZF Services Nederland B.V., Delfgauw, Netherlands         100.0 25)           ZF Services Nederland B.V., Delfgauw, Netherlands         100.0 28)           ZF Services Schweiz AG, Volketswil, Switzerland         100.0 28)           ZF Services Schweiz AG, Volketswil, Switzerland         100.0           ZF Services Suth Africa (Pty.) Ltd., Johannesburg, South Africa         100.0           ZF Services UK Ltd., Lenton-Nottingham, Great Britain         100.0           ZF Services UK Ltd., Lenton-Nottingham, Great Britain         100.0           ZF Steyr Ges.m.b.H., Steyr, Austria         100.0 50           ZF Steyr Präzisionstechnik Ges.m.b.H., Steyr, Austria         100.0 50           ZF Steyr Präzisionstechnik Ges.m.b.H., Steyr, Austria         100.0 50           ZF Technologies LtC., Northville, Michigan, USA         100.0 110           ZF Transmissions Gray Court LtC, Gray Court, South Carolina, USA         100.0 110	ZF Sachs Suspension France S.A.S., Mouy, France	100.0 13)
ZF Services Australia Pty. Ltd., Sydney, Australia       100.0 122         ZF Services España S.A.U., Sant Cugat del Vallès, Spain       100.0 81         ZF Services France S.A.S., Antony (Paris), France       100.0 133         ZF Services Korea Co., Ltd., Seoul, South Korea       100.0         ZF Services LLC, Chicago, Illinois, USA       100.0 110         ZF Services Nederland B.V., Delfgauw, Netherlands       100.0 280         ZF Services Schweiz AG, Volketswil, Switzerland       100.0 280         ZF Services Schweiz AG, Volketswil, Switzerland       100.0         ZF Services South Africa (Pty.) Ltd., Johannesburg, South Africa       100.0         ZF Services UK Ltd., Lenton-Nottingham, Great Britain       100.0         ZF Stervices UK Ltd., Lenton-Nottingham, Great Britain       100.0 290         ZF Stery Ges.m.b.H., Steyr, Austria       100.0 50         ZF Steyr Präzisionstechnik Ges.m.b.H., Steyr, Austria       100.0 50         ZF Suspension Technology Guadalajara S.A. de C.V., El Salto, Mexico       100.0 300         ZF Technologies LLC, Northville, Michigan, USA       100.0 110         ZF Transmissions Gray Court LLC, Gray Court, South Carolina, USA       100.0 110         ZF Transmissions Shanghai Co., Ltd., Shanghai, China       51.0 41 191         ZF Wind Power (Tianjin) Co., Ltd., Tianjin, China       99.71 31         ZF Wind Power Coimbatore Ltd., Co	ZF Sales & Service (Malaysia) Sdn. Bhd., Kuala Lumpur, Malaysia	100.0 15)
ZF Services España S.A.U., Sant Cugat del Vallès, Spain       100.0 8)         ZF Services France S.A.S., Antony (Paris), France       100.0 13)         ZF Services Korea Co., Ltd., Seoul, South Korea       100.0         ZF Services LLC, Chicago, Illinois, USA       100.0 11)         ZF Services Nederland B.V., Delfgauw, Netherlands       100.0 29)         ZF Services S.A. de C.V., Guadalajara, Mexico       100.0 29)         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 Steyrices UK Ltd., Lenton-Nottingham, Great Britain       100.0 29)         ZF Steyr Ges.m.b.H., Steyr, Austria       100.0 5)         ZF Steyr Präzisionstechnik Ges.m.b.H., Steyr, Austria       100.0 5)         ZF Suspension Technology Guadalajara S.A. de C.V., El Salto, Mexico       100.0 30)         ZF Technologies LLC, Northville, Michigan, USA       100.0 11)         ZF Transmissions Gray Court LLC, Gray Court, South Carolina, USA       100.0 11)         ZF Transmissions Shanghai Co., Ltd., Shanghai, China       51.0 41 19)         ZF Wind Power (Tianjin) Co., Ltd., Tianjin, China       99.71 31)         ZF Wind Power Coimbatore Ltd.,	ZF Services (China) Co., Ltd., Shanghai, China	100.0 4)
ZF Services France S.A.S., Antony (Paris), France       100.0 13)         ZF Services Korea Co., Ltd., Seoul, South Korea       100.0         ZF Services LtC, Chicago, Illinois, USA       100.0 11)         ZF Services Nederland B.V., Delfgauw, Netherlands       100.0 25)         ZF Services S.A. de C.V., Guadalajara, Mexico       100.0 28)         ZF Services Schweiz AG, Volketswil, Switzerland       100.0         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 29)         ZF Steyr Ges.m.b.H., Steyr, Austria       100.0 5)         ZF Steyr Präzisionstechnik Ges.m.b.H., Steyr, Austria       100.0 5)         ZF Suspension Technology Guadalajara S.A. de C.V., El Salto, Mexico       100.0 30)         ZF Technologies LLC, Northville, Michigan, USA       100.0 11)         ZF Transmissions Gray Court LLC, Gray Court, South Carolina, USA       100.0 11)         ZF Transmissions Shanghai Co., Ltd., Shanghai, China       51.0 4) 19)         ZF Wind Power (Tianjin) Co., Ltd., Tianjin, China       99.71 31)         ZF Wind Power Coimbatore Ltd., Coimbatore, India	ZF Services Australia Pty. Ltd., Sydney, Australia	100.0 12)
ZF Services Korea Co., Ltd., Seoul, South Korea       100.0         ZF Services LLC, Chicago, Illinois, USA       100.0 110         ZF Services Nederland B.V., Delfgauw, Netherlands       100.0 250         ZF Services S.A. de C.V., Guadalajara, Mexico       100.0 280         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 Services UK, Ltd., Lenton-Nottingham, Great Britain       100.0 290         ZF Stankov s.r.o., Pilsen, Czech Republic       100.0 290         ZF Steyr Ges.m.b.H., Steyr, Austria       100.0 50         ZF Steyr Präzisionstechnik Ges.m.b.H., Steyr, Austria       100.0 50         ZF Suspension Technology Guadalajara S.A. de C.V., El Salto, Mexico       100.0 300         ZF Technologies LLC, Northville, Michigan, USA       100.0 110         ZF Transmissions Gray Court LLC, Gray Court, South Carolina, USA       100.0 110         ZF Transmissions Shanghai Co., Ltd., Shanghai, China       51.0 40 190         ZF Wind Power (Tianjin) Co., Ltd., Tianjin, China       99.71 311         ZF Wind Power Coimbatore Ltd., Coimbatore, India       100.0 250	ZF Services España S.A.U., Sant Cugat del Vallès, Spain	100.0 8)
ZF Services LLC, Chicago, Illinois, USA       100.0 111         ZF Services Nederland B.V., Delfgauw, Netherlands       100.0 251         ZF Services S.A. de C.V., Guadalajara, Mexico       100.0 281         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 29         ZF Steyr Ges.m.b.H., Steyr, Austria       100.0 50         ZF Steyr Präzisionstechnik Ges.m.b.H., Steyr, Austria       100.0 50         ZF Suspension Technology Guadalajara S.A. de C.V., El Salto, Mexico       100.0 300         ZF Technologies LLC, Northville, Michigan, USA       100.0 11)         ZF Transmissions Gray Court, LLC, Gray Court, South Carolina, USA       100.0 11)         ZF Transmissions Shanghai Co., Ltd., Shanghai, China       51.0 40 19         ZF Wind Power (Tianjin) Co., Ltd., Tianjin, China       99.71 31)         ZF Wind Power Coimbatore, India       100.0 25	ZF Services France S.A.S., Antony (Paris), France	100.0 13)
ZF Services Nederland B.V., Delfgauw, Netherlands  ZF Services S.A. de C.V., Guadalajara, Mexico  ZF Services Schweiz AG, Volketswil, Switzerland  ZF Services Schweiz AG, Volketswil, Switzerland  ZF Services South Africa (Pty.) Ltd., Johannesburg, South Africa  ZF Services Türk Sanayi ve Ticaret A.S., Istanbul, Turkey  100.0  ZF Services UK Ltd., Lenton-Nottingham, Great Britain  2F Services UK Ltd., Lenton-Nottingham, Great Britain  100.0  ZF Stankov s.r.o., Pilsen, Czech Republic  ZF Steyr Ges.m.b.H., Steyr, Austria  100.0 5)  ZF Steyr Präzisionstechnik Ges.m.b.H., Steyr, Austria  100.0 5)  ZF Steyr Präzisionstechnik Ges.m.b.H., Steyr, Austria  100.0	ZF Services Korea Co., Ltd., Seoul, South Korea	100.0
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ZF Wind Power Coimbatore Ltd., Coimbatore, India 100.0 32)	ZF Wind Power (Tianjin) Co., Ltd., Tianjin, China	99.71 31)
	ZF Wind Power Antwerpen N.V., Kontich, Belgium	100.0 <sup>25)</sup>
ZF Wind Power Gainesville LLC, Gainesville, Georgia, USA 100.0 11)	ZF Wind Power Coimbatore Ltd., Coimbatore, India	100.0 32)
	ZF Wind Power Gainesville LLC, Gainesville, Georgia, USA	100.0 11)

## At-equity consolidated companies

Domestic	Share in capital in %
ZF Lenksysteme GmbH, Schwäbisch Gmünd	50.0
ZF Lenksysteme Nacam GmbH, Bremen	100.0 1) 33)

Foreign	Share in capital in %
Shanghai Sachs Powertrain Component Systems Co., Ltd., Shanghai, China	50.0 <sup>4)</sup>
ZF Commercial Vehicle Steering (Shandong) Co., Ltd., Jinan, China	100.0 33)
ZF Lenksysteme (Shanghai) Co., Ltd., Minhang, China	100.0 33)
ZF Lenksysteme Hungária Kft., Eger, Hungary	100.0 33)
ZF Lenksysteme India Pvt. Ltd., Pune, India	74.0 <sup>33)</sup>
ZF Lenksysteme (Nanjing) Co., Ltd., Nanjing, China	100.0 33)
ZF Liuzhou Axle Co., Ltd., Liuzhou, China	50.0 <sup>4)</sup>
ZF PWK Mécacentre S.A.S., St. Etienne, France	50.0 <sup>13)</sup>
ZF Shanghai Steering Systems Co., Ltd., Shanghai, China	51.0 <sup>33)</sup>
ZF Shanghai Steering Systems (Yantai) Co., Ltd., Yantai, China	51.0 <sup>34)</sup>
ZF Shanghai Steering Systems (Wuhan) Co., Ltd., Wuhan, China	51.0 <sup>34)</sup>
ZF Sistemas de Direção Ltda., Sorocaba-SP, Brazil	100.0 33)
ZF Steering Jincheng (Nanjing) Co., Ltd., Nanjing, China	70.0 <sup>33)</sup>
ZF Steering Systems LLC, Florence, Kentucky, USA	100.0 33)
ZF Steering (Malaysia) Sdn. Bhd., Penang, Malaysia	100.0 33)
ZF Systèmes de Directions France S.A.S., Marignier, France	100.0 33)
ZF Systèmes de Direction Nacam S.A.S., Vendôme, France	100.0 33)

- 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 Holding Austria Ges.m.b.H., 1 % held by ZF Steyr Präzisionstechnik Ges.m.b.H.
- 7) 99% interest held by ZF Asia Pacific Pte. Ltd. and 1% held by ZF Marine Singapore Pte. Ltd.
- 8) Held by ZF Friedrichshafen Holding España S.L.
- 9) Held by ZF Auto Industrial Brake and Chassis Investment Holdings (Pty.) Ltd.
- 10) Held by ZF Lemförder South Africa (Pty.) Ltd.
- 11) Held by ZF North America Inc.
- 12) Held by ZF Holdings Australia Pty. Ltd.
- 13) Held by Compagnie Financière de ZF S.A.S.
- 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) 99% interest held by ZF Lemförder AKS Modülleri Sanayi ve Ticaret A.S. and 1% held by ZF Friedrichshafen AG.
- 23) Held by Midwest Lemförder Ltd.
- 24) 74% held by ZF International B.V. and 26% held by ZF Marine Krimpen B.V.
- <sup>25)</sup> Held by ZF International B.V.
- 26) 99.99994% interest held by ZF International B.V. and 0.00006% by ZF Friedrichshafen AG.
- 27) 99.9998% interest held by ZF Mexico S.A. de C.V.
- and 0.0002 % held by ZF International B.V.
- 28) 99.9987 % interest held by ZF Mexico S.A. de C.V. and 0.0013% held by ZF International B.V.
- 29) 99% interest held by ZF Holding Austria Ges.m.b.H. and 1% held by ZF Steyr Präzisionstechnik Ges.m.b.H.
- $^{\rm 30)}$  99.99951% interest held by ZF Mexico S.A. de C.V. and 0.00049% held by ZF International B.V.
- 31) Held by Hansen Drives Ltd., Hong Kong.
- 32) Held by Hansen Drives Pte. Ltd.
- 33) Held by ZF Lenksysteme GmbH.
- 34) Held by ZF Shanghai Steering Systems Co., Ltd.

# 35 Company bodies

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

Friedrichshafen, February 25, 2014

ZF Friedrichshafen AG The Board of Management

Dr. Stefan Sommer

Wilhelm Rehm

Michael Hankel

Jürgen Holeksa

Dr. Konstantin Sauer

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, 2013. 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 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 7, 2014

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft

Graf Waldersee Bürkle

Wirtschaftsprüfer Wirtschaftsprüfer

\* Translation of Audit Opinion issued on the consolidated financial statements

# **5-YEAR DEVELOPMENTS**

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## Result structure, consolidated ZF Group

in € million	2009	2010	2011	2012 adjusted*	2013
Sales development	9,371	12,907	15,509	15,526	16,837
Change from prior year in %	-25.0	37.7	20.2	0.1	8.4
Employees at year's end 1)	60,945	64,600	71,488	68,406	72,643
Employees' annual average <sup>1)</sup>	61,709	62,558	68,164	67,561	71,091
Cost of materials	5,302	7,183	8,948	9,312	10,011
in % of sales	56.6	55.7	57.7	60.0	59.5
Personnel expenses	2,875	3,279	3,682	3,702	3,979
in % of sales	30.7	25.4	23.7	23.8	23.6
R&D expenses in % of sales	7.1	5.0	4.9	5.0	5.0
Capital expenditure	516	582	1,058	1,025	954
in % of sales	5.5	4.5	6.8	6.6	5.7
Depreciation on property, plant, and equipment	585	551	616	683	718
in % of sales	6.2	4.3	4.0	4.4	4.3
in % of capital expenditure	113,4	94.7	58.2	66.6	75.3
Free cash flow <sup>2)</sup>	-178	-174	-112	252	288
in % of sales	-1.9	-1.3	-0.7	1.6	1.7
Operating profit or loss	-361	680	850	597	756
in % of sales	-3.9	5.3	5.5	3.8	4.5
Net profit or loss before income tax	-467	548	715	530	683
in % of sales	-5.0	4.2	4.6	3.4	4.1
Net profit or loss after tax	-421	443	540	330	462
in % of sales	-4.5	3.4	3.5	2.1	2.7
Dividends paid					
Normal dividend	21.0	21.0	30.0	30.0	30.0
in % of subscribed capital	7.0	7.0	10.0	10.0	6.0
Extra dividend	_	3.0	-	-	-

<sup>\*</sup> As of 2012, adjusted by ZF Lenksysteme. Further explanations in the Notes to the Consolidated Financial Statements, "Changes in accounting policies".

<sup>1)</sup> Direct and indirect employees without temporary workers, apprentices, and holiday workers; starting from 2009, changed calculation method to determine number of part-time employees. 2) Cash flow from operating activities less cash flow from investing activities.

## Structure of the consolidated statement of financial position, consolidated ZF Group

in € million	2009	2010	2011	2012 adjusted*	2013
Cash	972	974	826	888	1,143
Trade receivables	1,433	1,909	2,307	1,963	2,221
Inventories	1,170	1,430	1,745	1,596	1,800
Other current assets	254	712	402	299	257
Non-current assets	4,361	4,770	5,887	6,277	6,549
Liabilities to banks	507	681	967	1,038	1,123
Trade payables	862	1,358	1,621	1,513	2,019
Provisions for pensions	1,837	1,889	2,211	2,612	2,785
Other liabilities	1,863	2,195	2,268	1,910	1,878
Subscribed capital	300	300	300	300	500
Reserves	2,700	3,045	3,582	3,395	3,311
Non-controlling interests	100	127	155	115	126
Profit available for distribution	21	200	63	140	228
Equity	3,121	3,672	4,100	3,950	4,165
in % of balance sheet total	38	37	37	36	35
Balance sheet total	8,190	9,795	11,167	11,023	11,970

<sup>\*</sup> As of 2012, adjusted by ZF Lenksysteme. Further explanations in the Notes to the Consolidated Financial Statements, "Changes in accounting policies".

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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Corporate Communications

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