



# Merck Annual Report 2011

Merck Serono

Performance Materials

Consumer Health Care

*The road to tomorrow*

Merck Millipore

M



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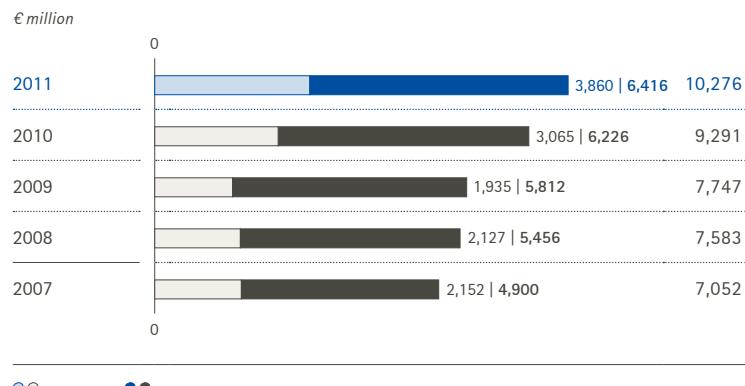
# The Merck Group

## In brief

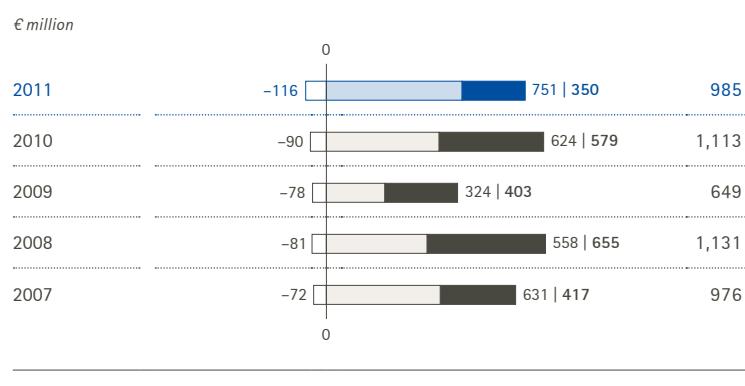
### Key figures of the Merck Group

€ million	Pharma- ceuticals	Chemicals	Corporate and Other	Total	Change in %
Total revenues	6,416.2	3,860.2	-	10,276.4	11
Gross margin	5,227.0	2,261.1	-	7,488.1	8.4
Research and development	1,248.3	268.8	-	1,517.1	8.6
Operating result	350.3	751.0	-116.2	985.1	-12
Exceptional items	25.1	157.1	-30.4	151.8	-
EBIT before depreciation and amortization (EBITDA)	1,571.7	1,305.1	-141.1	2,735.7	11
Earnings before interest and tax (EBIT)	375.4	908.1	-146.6	1,136.9	2.2
Return on sales in % (ROS: operating result/total revenues)	5.5	19.5	-	9.6	
Free cash flow	1,515.1	834.0	-912.7	1,436.4	-
Underlying free cash flow	1,245.0	801.3	-651.7	1,394.6	-17

### Total revenues by business sector (excluding Corporate and Other)



### Operating result by business sector



# The road to tomorrow

## Merck Annual Report 2011



**The road to tomorrow** starts with this Annual Report, which offers far more than a look back at the year 2011. Continue this journey into the future – with our online media and our media for tablet PCs. More information is available online at:

→ [www.merckgroup.com](http://www.merckgroup.com)  
→ [www.magazine.merck.de](http://www.magazine.merck.de)

# Merck Serono

# Consumer Health Care

# Merck Millipore

# Performance Materials

**Merck Serono** → discovers, develops and commercializes innovative prescription drugs of chemical and biotechnological origin. It is our largest division in terms of sales.

**Consumer Health Care** → offers patients and consumers high-quality over-the-counter products for a healthy lifestyle.

**Merck Millipore** → is a world-class partner to the life science industry with products that make life science research easier, more efficient and more economical.

**Performance Materials** → offers an extensive range of innovative products, technologies and special solutions for consumer electronics, lighting, printing technology, plastic and coating applications, and cosmetics.

Detailed information about our divisions is available starting on → **page 60**.

## We are on the road to tomorrow

Innovative  
Dynamic  
Future-oriented  
Values-based

We are a leading pharmaceutical, chemical and life science company with four strong divisions: Merck Serono, Consumer Health Care, Merck Millipore and Performance Materials.

We have a clear focus on research and development as well as profitable, high-margin specialties. With over 40,000 employees in 67 countries, we are committed to living social, economic and ecological responsibility – toward people, toward our partners in the market and toward our shareholders.

Four examples show how we are succeeding globally with the values that unite us and with our strategy entitled “Sustain. Change. Grow.”

“I have experienced myself what people can do [...] my ambition was aroused and thus I resolved [...] that I had to be the best [...]. This experience bore me abundant fruits later by teaching me that people [...] can achieve a great deal if they have the determination to do so.”



Emanuel Merck (1794 – 1855) → established the world's oldest pharmaceutical and chemical company out of the Engel-Apotheke (Angel Pharmacy), which was founded in 1668. Today we are continuing this tradition into the future with pioneering spirit and innovative strength.



1/4

Our research -  
For more quality of life



# The road to tomorrow

## #1

*Innovative  
thinking*

**Promoting research** → Merck ranks among the world's leading pharmaceutical, chemical and life science companies. Our success is based on our unwavering focus on research and innovation.

→ *Seeing the world through the eyes of our patients* is a unique source of inspiration which drives us to continuously strengthen our product offerings, taking advantage of the latest medical and technological advances to ultimately meet patient needs. Over the years, we have continuously worked on enhancing the product profile of Rebif®, our leading product for patients with relapsing multiple sclerosis, with new formulations, new delivery devices and new clinical data showing how best the product should be used. Recent achievements include the European approval to expand the use of Rebif® in patients with early signs of multiple sclerosis. We also extended our range of innovative delivery devices for the self-administration of Rebif® with the approval in select markets of Rebidose™, a single-use pre-filled pen.

**The needs of our patients are the focus of our innovation culture. For them, we develop pioneering therapies and solutions.**

**Providing independence** → Our Rebidose™ pen gives patients more independence, for example when traveling or on vacation.



**2/4**

*Our impetus -  
For new technologies*



# The road to tomorrow

#2

*Dynamic  
change*

**Transforming ideas into reality** → Merck embodies experience and pioneering spirit. Our corporate culture is based on the dynamism of innovation and the commitment of our employees.

→ With our corporate strategy “Sustain. Change. Grow.” we are addressing future-oriented sectors in which Merck already has extensive experience and a strong market position. As a leading global manufacturer of materials for liquid crystal (LC) displays and for innovative organic light-emitting diodes (OLEDs), we are working on key components for the communication technologies of tomorrow. We offer pioneering technologies and key products for the displays of televisions, notebooks, mobile telephones, digital cameras and navigation systems. We are opening up ever new horizons: At our technology center in Darmstadt, for example, we have realized the world’s largest OLED display to date.

We utilize the dynamism and potential of our employees in order to tap new, high-growth markets systematically and successfully.

**Setting milestones** → The world’s largest OLED display, manufactured using materials from Merck, represents an important step forward in developing the information technology of tomorrow.



3/4  
Our solutions -  
For the future



# The road to tomorrow

#3

## *Future-oriented growth*

**Recognizing potential** → Merck is growing in promising markets of the future with innovative products and new solutions for the world of tomorrow.

→ *Forward-looking innovations* and future-oriented actions have always been the core of our company and our entrepreneurial success. At an early stage, Merck recognized the tremendous potential of biotechnology, using it resolutely and responsibly for research and innovation – and not only for developing our own biotherapeutic drugs. Today we are among the leading suppliers of products and services for research and production in the life science industry. In this way, we help to make work easier, more efficient and more economical for our customers.

With our knowledge and experience we are tapping key markets of the future. We are keenly aware of our customers' needs. For example, we are one of the leading suppliers of cell culture media.

**Tapping growth markets** → Merck is one of the world's leading suppliers of laboratory chemicals and cell culture media for use in research and industrial production.



4/4

Our knowledge-  
for society



# The road to tomorrow

#4

## Values-based behavior

**Living our values** → Merck thinks and acts in a long-term and values-based manner. As a company, we actively take on responsibility in the communities in which we operate.

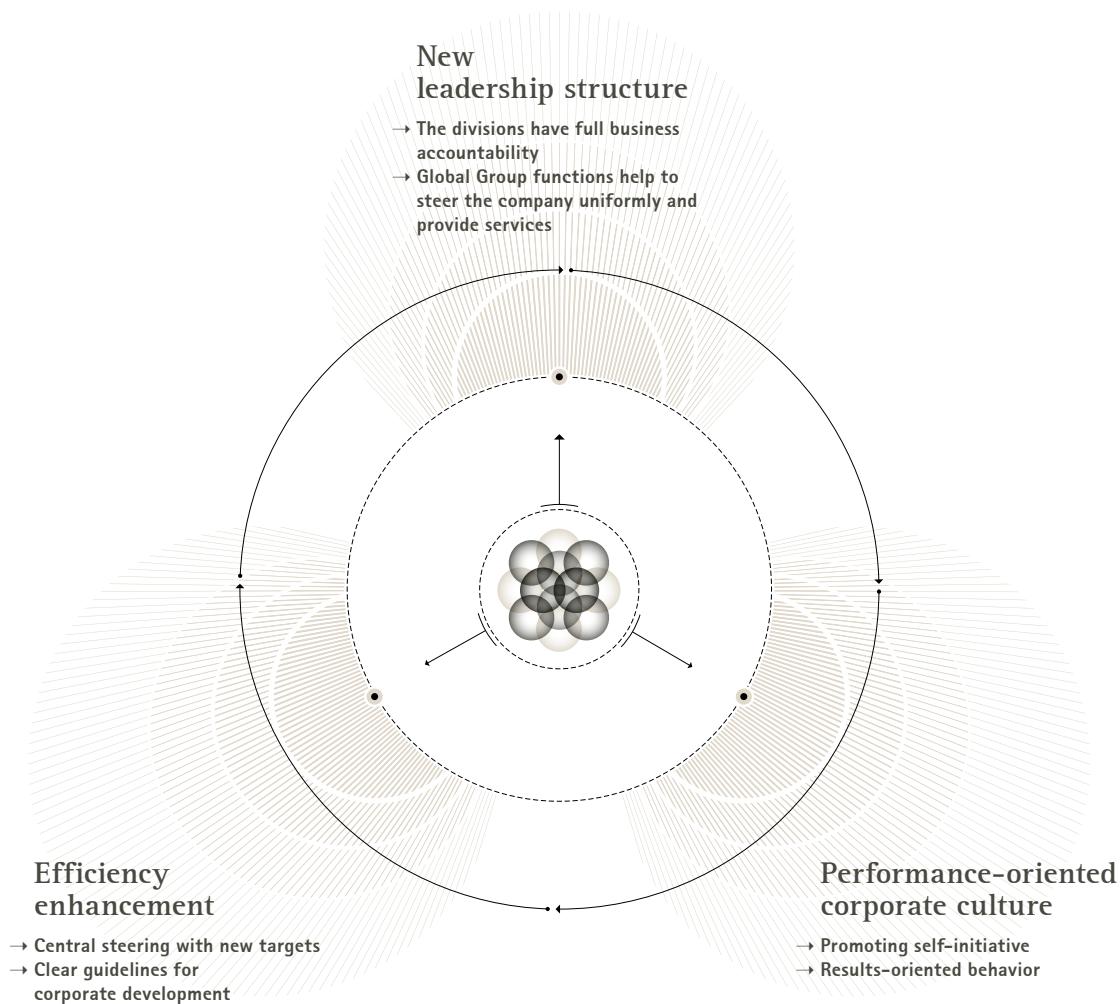
→ *As a company that is very conscious of its values*, we feel committed not only to the employees and shareholders of Merck but also to the community – at all our sites and worldwide. With the drug Cesol® 600, Merck has been cooperating with the World Health Organization since 2007 to fight schistosomiasis, an infectious disease caused by parasitic worms living in tropical water. It is estimated that around 200 million people are infected. Since the donation program began, Merck has supplied around 80 million tablets to treat around 19 million children. In 2011 we decided to expand our engagement tenfold. In the medium term we intend to provide 250 million tablets per year and to continue this donation until the disease has been eliminated in Africa.

We apply all our expertise and skills not only to achieve sustainable entrepreneurial success, but also to meet our social responsibility.

**Taking on responsibility** → Merck is supporting the fight against schistosomiasis, thereby protecting many children in Africa against this serious disease.



# Merck: The road to tomorrow



Transformation and change are the basis for future growth. With a lean organization, enhanced efficiency and a performance-oriented corporate culture, we will secure our position as a leading innovation-driven enterprise and rigorously expand our cutting-edge positions.

**We are making our organization leaner** → In the future, the divisions at Merck will assume global responsibility for their businesses. The Group will steer corporate development, take over central administrative tasks and services, and consolidate administration, legal and compliance tasks. The individual legal entities in the countries will implement the regulations defined by the divisions and Group functions.

**We are enhancing our efficiency** → Based on investment and cost-cutting targets that will be defined in the first half of 2012, Merck will develop specific initiatives to meet these objectives. These activities will be supported by suitable Human Resources measures. The implementation and success of the program will be continually monitored and evaluated.

**We are establishing a performance-oriented corporate culture** → Merck is fostering a performance-oriented corporate culture – by means of clearly defined responsibilities and by promoting self-initiative, commitment, decisiveness and results-oriented behavior.

# 01

## To our Shareholders

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## Letter from Karl-Ludwig Kley

»Merck has changed significantly in recent years.«



→ [Letter from  
Karl-Ludwig Kley](#)

Darmstadt, February 2012

# Dear Shareholders,

Merck performed well in 2011. Total revenues, which increased by nearly 11%, exceeded the € 10 billion mark for the first time in the company's history. The milestone we set for ourselves in 2007 has thus been achieved.

In accordance with our strategic objectives, we grew particularly in Asia and North America. We will further intensify our activities in both regions since they offer our businesses the greatest potential for growth.

The operating result amounted to € 985 million, declining by 11.5%. The main reasons for this were the one-time effects in the second quarter. These primarily included the impairment loss on our biotech production plant in Corsier-sur-Vevey (Switzerland) as well as reassessments of various pharmaceutical projects. In addition, we set up provisions for the costs of discontinuing the development of cladribine tablets. Consequently, profit after tax declined by 2% to € 629 million.

We are, of course, not satisfied with the development of this result. Our focus in 2012 will therefore be on improving the operating result.

For our shareholders, 2011 was a good year. With a price increase of 29%, Merck shares were the best-performing stock in the DAX®. We would like to underscore both this excellent development and the sharp decline in debt with a suitable dividend payment. We therefore intend to propose to the Annual General Meeting on April 20 an increase of € 0.25 in the dividend to € 1.50 per share. The basis for this proposal is the excellent business performance of Merck, the robust underlying operating result as well as the positive future prospects for the company.

Merck has changed significantly in recent years.

- By acquiring Serono, we became a leading global manufacturer of biopharmaceuticals.
- With the divestment of the Generics business, we shifted our focus to innovation-driven and higher-margin activities.
- And with the acquisition of Millipore, we established ourselves as a leading partner to the global life science industry.

With its new structure, Merck is in a good starting position to sustainably exploit the growth opportunities in the pharmaceutical, chemical and life science sectors.

→ [Letter from  
Karl-Ludwig Kley](#)

We will now focus on achieving a lasting improvement in the operating result. After all, future growth must also be financed. For this purpose, we have initiated the “Fit for 2018” program, which we will be implementing in two phases.

In the first phase, which will last until 2013, we will work to enhance our efficiency and lower our costs. This also includes implementing a leaner management structure.

We have already made good progress at the organizational level. On January 1, 2012, a new global leadership organization became effective. It replaces the former country-based structure with clear leadership by our global businesses.

We will optimize processes and structures especially in those areas where our success has not yet met our expectations. This applies specifically to our Pharmaceuticals research and development organization, which we largely restructured in 2011.

In order to accelerate the ongoing transformation process and to strengthen our expertise, we made not only organizational, but also personnel changes.

With three new members, the Executive Board has been complete since mid-2011. In January, Stefan Oschmann took over responsibility for our Pharmaceuticals business sector. Kai Beckmann followed in April as Head of Group Human Resources. And Matthias Zachert has been Chief Financial Officer since June. Matthias Zachert succeeded Michael Becker, who retired after 13 successful years working for Merck. I'd like to thank Michael Becker for his tremendous commitment and achievements. He made great contributions to Merck.

We made new appointments not only to the Executive Board, but also to numerous level-two management positions. We recruited executives from well-known companies in our sectors, which has enabled us to meaningfully strengthen expertise, leadership experience and diversity at Merck.

Since early 2012, we have been working intensely to identify objectives and measures that will improve our positioning at our sites in 67 countries around the world. The changes introduced will be significant and encompass all areas of the company.

→ [Letter from  
Karl-Ludwig Kley](#)

Once the first phase of the “Fit for 2018” program has been completed, from 2014 we’ll again focus more strongly on growth – which of course doesn’t mean we’ll have lost sight of this objective in the meantime. We will continue to seize attractive growth opportunities, either by making smaller acquisitions or in-licensing pharmaceutical development compounds. Since the speed at which the efficiency program will be completed around the world will vary greatly, individual businesses or countries could also realize their growth objectives sooner than 2014.

Changes such as the current ones are nothing new for Merck. On the contrary. One of our recipes for success, which has enabled us to remain in existence for 344 years, is the ability to change. This has been the only way for Merck to survive wars, currency reforms and changes in government systems while continuing to operate its businesses successfully.

Whenever changes take place, our employees can rely on the fact that Merck remains a community based on a shared set of values, attaches great importance to social partnership, and appropriately involves employee representatives in the individual steps of the process. This of course also applies to the implementation of our efficiency-enhancement and cost-reduction program. The aim of “Fit for 2018” is to shape Merck so that we can leverage our strong market position to achieve sustainable, profitable growth with innovative products. We will fulfill this ambition.

We sincerely thank you for the trust and support you have given us on the journey so far. And we’d be pleased if you would continue to accompany Merck in that same spirit of trust on the “road to tomorrow.”

*Sincerely  
Karl-Ludwig Kley*

Karl-Ludwig Kley  
Chairman of the Executive Board

## The Executive Board

### Karl-Ludwig Kley **Chairman of the Executive Board**

- Born in 1951, lawyer
- Member of the Supervisory Board and Board of Partners of Merck from March 2004 to June 2006; member of the Executive Board since September 2006
- Responsibility for Group functions: Group Strategy; Group Communications; Group Legal and Compliance; Group Auditing

### Kai Beckmann **Head of Group Human Resources/Chief Administration Officer**

- Born in 1965, university degree in computer science
- Joined Merck in 1989, member of the Executive Board since April 2011
- Responsibility for Group functions: Group Human Resources; Group Information Services; Site Management Darmstadt and Gernsheim; Inhouse Consulting
- Regional responsibilities: EMEA (Europe, Middle East, Africa)

### Stefan Oschmann **Head of the Pharmaceuticals business sector**

- Born in 1957, veterinarian
- Member of the Executive Board since January 2011
- Responsibility for Group functions: Patents & Scientific Information
- Regional responsibility: North America and Latin America

### Bernd Reckmann **Head of the Chemicals business sector**

- Born in 1955, biochemist
- Joined Merck in 1986, member of the Executive Board since 2007
- Responsibility for Group functions: Quality Management; Logistics and Supply Chain
- Regional responsibility: Asia-Pacific

### Matthias Zachert **Chief Financial Officer**

- Born in 1967, university degree in business administration
- Member of the Executive Board since June 2011
- Responsibility for Group functions: Group Accounting & Subsidiaries; Group Controlling; Group Finance; Group Taxes; Group Insurance; Group Procurement; Investor Relations

→ [The Executive Board](#)



Bernd Reckmann

Stefan Oschmann

Kai Beckmann

Matthias Zachert

Karl-Ludwig Kley

## Merck Shares At a glance

### Share data<sup>1</sup>

		2011	2010
Dividend	/ in €	1.50	1.25
Share price high (July 22, 2011/Sept. 10, 2010)	/ in €	78.47	72.28
Share price low (Sept. 12, 2011/Feb. 25, 2010)	/ in €	56,82	57.62
Year-end share price	/ in €	77.03	59.85
Market capitalization <sup>2</sup> (at year-end)	/ in € million	16,745	13,011
Market capitalization <sup>3</sup> of free float (at year-end)	/ in € million	4,978	3,868

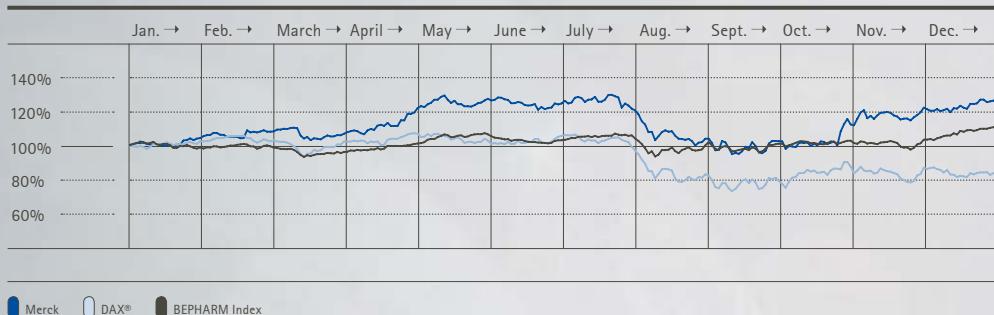
<sup>1</sup> Share-price relevant figures relate to the closing price in XETRA® trading on the Frankfurt Stock Exchange

<sup>2</sup> Based on the theoretical number of shares (217.4 million) on December 31

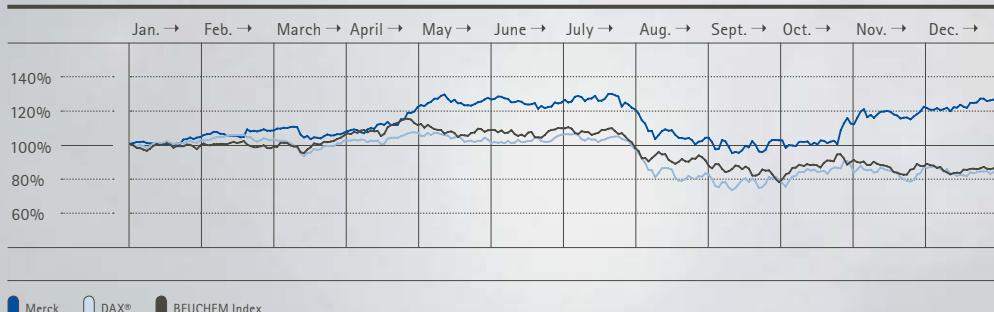
<sup>3</sup> Based on the number of shares in free float (64.6 million) on December 31

## WKN: 659990 ISIN: DE0006599905

### The performance of Merck shares vs. the DAX® and the Bloomberg Europe 500 Pharmaceuticals Index (BEPHARM) in 2011



### The performance of Merck shares vs. the DAX® and the Bloomberg EMEA Chemicals Index (BEUCHEM) in 2011



## Merck in the Capital Market

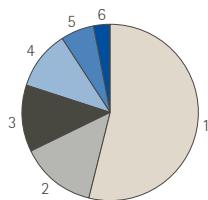
Merck shares rose by 29% in 2011, outperforming the DAX® as well as the relevant pharmaceutical and chemical indices. Value-oriented investors are rewarding our business model.

### Best-performing stock in the DAX®

In 2011, the Merck share price moved in a range of € 57 to € 78, clearly outperforming the DAX®, Germany's blue chip index, and the Bloomberg Europe 500 Pharmaceuticals Index (BEPHARM). Merck shares finished the year as the DAX® stock with the highest growth rate. Merck shares had already performed in line with or better than these indices in the first quarter. After a decline in mid-March, the share price recovered and hit an annual high of € 78.47 on July 22, 2011. On July 27, the share price fell by nearly 5% from € 77.49 to € 73.76 following the publication of our second-quarter results, in which we recorded substantial one-time expenses and lowered our earnings guidance for the full year. Due to the financial crisis, share prices fell worldwide. Merck shares were not immune to this trend and therefore declined further in value, like many other shares as well. The share price hit an annual low of € 56.82 on September 12, 2011. Afterwards, our share price performance remained stable until the spike on October 26, 2011. This was the date on which Merck announced its results for the third quarter of 2011. The high share price level rose again slightly and was maintained until year-end, and Merck shares closed the year with a considerable gain. During the same period, the DAX® declined by 15%. The BEPHARM rose by 13%, whereas the BEUCHEM, the Bloomberg EMEA Chemicals Index, performed negatively, declining by 14%.

At nearly 500,000, the average number of Merck shares traded daily was 13% lower in 2011 than in 2010.

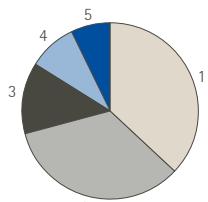
### Identified investors by region



1 United States	54%
2 United Kingdom	14%
3 Germany	12%
4 Rest of Europe	11%
5 France	6%
6 Rest of world	3%

Source: King Worldwide (Status: October 2011)

### Identified investors by type



1 Value	37%
2 GARP (Growth at reasonable price)	34%
3 Index	13%
4 Growth	9%
5 Other	7%

Source: King Worldwide (Status: October 2011)

→ [Merck in the Capital Market](#)

Owing to lower investor assessments of Merck's growth potential, in particular the proportion of GARP investors increased in 2011 (GARP: growth at reasonable price). The proportion of value investors remained at a high level.

As of December 31, 2011, the following shareholders reported their holdings in Merck shares to the company in accordance with the German Securities Trading Act:

	Number of shares held	% of free float	Reported on
Sun Life Financial Inc., Toronto (Canada)	6,175,369	9.56	1/21/10
Templeton Global Advisors Ltd., Nassau (Bahamas)	3,271,264	5.06	9/9/10
Templeton Investment Counsel LLC, Wilmington, DE (USA)	3,312,537	5.13	3/30/11
BlackRock Inc., New York, NY (USA)	3,270,245	5.06	4/15/11
Capital Research and Management Company, Los Angeles, CA (USA)	3,160,836	4.89	7/1/11
Deutsche Bank, Frankfurt (Germany)	2,894,577	4.48	4/10/10
MFS Institutional Advisors Inc., Boston, MA (USA)	1,955,336	3.03	11/9/11

#### **Around 57% of shares represented at the Annual General Meeting**

At the Annual General Meeting on April 8, 2011 in Frankfurt, 56.6% of the share capital was represented. In 2010, the figure was 58.2%. With the exception of agenda item 7, which concerned a resolution on the approval of a compensation system for members of the Executive Board and passed with 70.3% of the votes, more than 99% of the votes were in favor of each of the other five agenda items. Further details can be found on our website at [www.merckgroup.com/investors](http://www.merckgroup.com/investors).

#### **Dividend**

Owing to the good full-year results, the Executive Board will propose the payment of a dividend of € 1.50 for 2011, corresponding to an increase of 20% compared with 2010 and equivalent to a distribution ratio (total dividend payment as a proportion of net income) of 53%. Based on the closing price of Merck shares on December 30, 2011 of € 77.03, this corresponds to a dividend return of 1.95%. An update to our dividend policy is currently being discussed. We plan to present the outcome to the Annual General Meeting.

#### **Merck bonds**

In 2011, the capital market showed high volatility particularly owing to the turmoil over the stability of the common European currency and the economic situation of several eurozone countries. This volatility was also reflected in the price development of Merck's outstanding bonds.

After having issued a euro bond of € 3.2 billion in the course of the Millipore acquisition, the largest euro bond issue by a company in 2010, Merck did not make any new emissions in 2011. As the financing of the acquisition in 2010 led to a sharp rise in financial liabilities, it was announced in 2010 that the level of debt would be reduced again as quickly as possible. Merck successfully achieved this objective in 2011 on a net basis (when financial liabilities are offset against liquid assets). On a gross basis, however, only minor changes occurred as there were no maturities from the bond issue in 2011. The changes relate primarily to the convertible bond placed by Millipore in 2006. Merck took over this convertible bond within the scope of the

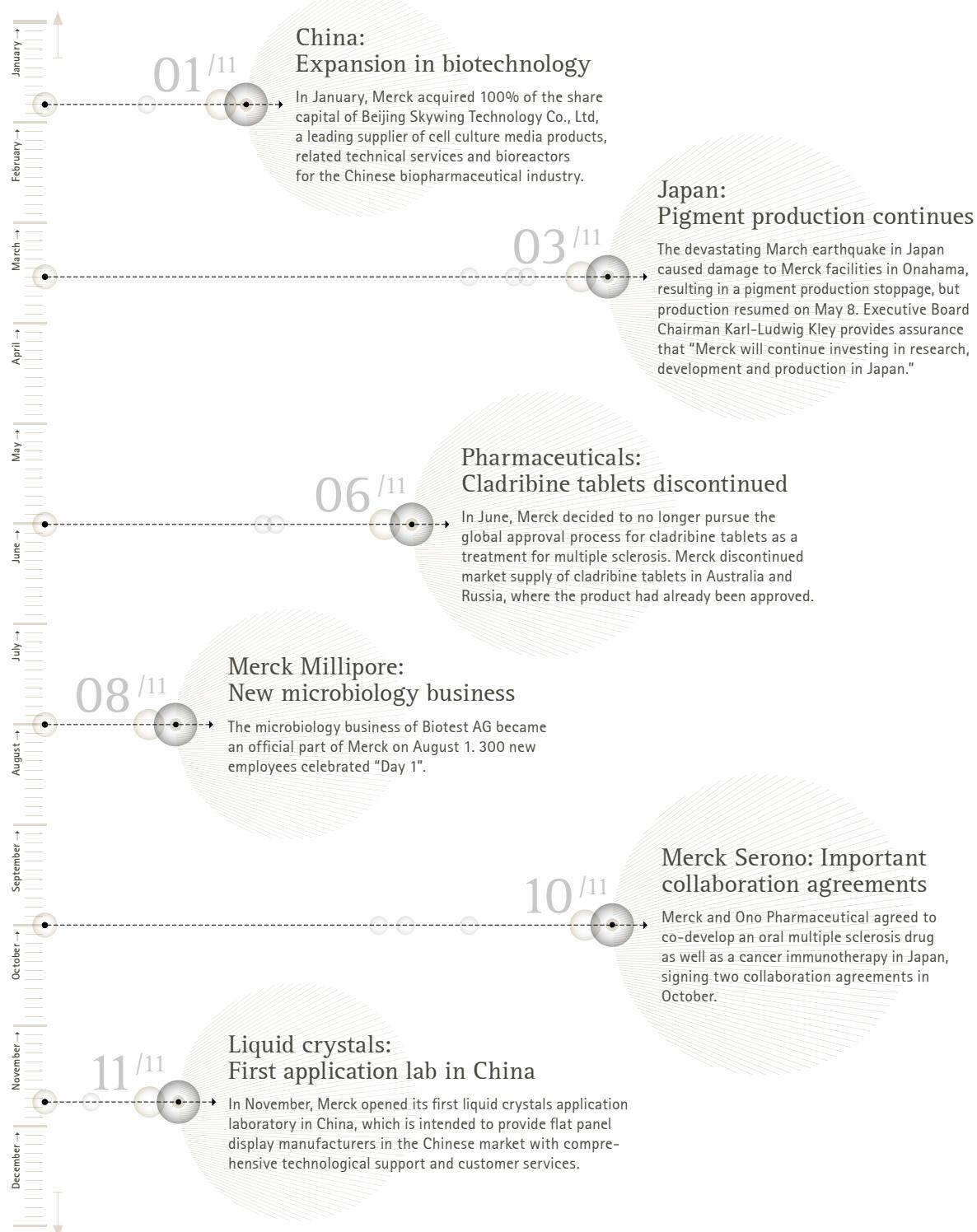
→ [Merck in the Capital Market](#)

acquisition. The majority of the investors in the convertible bond exercised a conversion right resulting from the acquisition in 2010. The still outstanding total nominal amount of US\$ 27.2 million was repaid in the fourth quarter of 2011, which slightly reduced financial liabilities.

Neither Standard & Poor's nor Moody's adjusted their credit ratings for Merck in 2011. While Standard & Poor's issued Merck a BBB+, Moody's issued a Baa2 rating. Both agencies issued a stable outlook on this long-term rating.

# Merck:

## Key Events in 2011



# Merck

## # 02 Group Management Report 2011

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# The Year 2011 in Figures

## Merck Group

Total revenues € 10,276 million	EBITDA € 2,736 million	EBIT € 1,137 million	Employees 40,676
Underlying free cash flow € 1,395 million	R&D costs € 1,517 million	Return on sales (ROS) 9.6%	Global presence 67 countries

## Merck Serono → page 60

Total revenues € 5,920 million	R&D costs € 1,225 million
Employees 16,867	Operating result € 304 million
Underlying free cash flow € 1,205 million	Return on sales (ROS) 5.1%

## Consumer Health Care → page 71

Total revenues € 496 million	R&D costs € 23 million
Employees 1,226	Operating result € 46 million
Underlying free cash flow € 40 million	Return on sales (ROS) 9.3%

## Merck Millipore → page 75

Total revenues € 2,393 million	R&D costs € 135 million
Employees 8,544	Operating result € 226 million
Underlying free cash flow € 309 million	Return on sales (ROS) 9.4%

## Performance Materials → page 79

Total revenues € 1,467 million	R&D costs € 134 million
Employees 5,071	Operating result € 525 million
Underlying free cash flow € 492 million	Return on sales (ROS) 35.8%

↑  
↓  
Pharmaceuticals

↑  
↓  
Chemicals

## Overall Economic Situation

Growth of the global economy weakened significantly in 2011. Emerging markets and developing countries are the engines of global growth.

Although the German economy grew by another 3%, growth impetus tapered off especially in Europe owing to the debt and euro crisis, as governments reduced measures to stimulate the economy. Private demand was unable to offset this, particularly as consumers faced the risks and turmoil stemming from the debt crisis, the Japanese earthquake in March, and the Arab Spring uprisings in the Middle East and North Africa.

According to the International Monetary Fund (IMF), gross domestic product (GDP) of the industrialized countries increased by 1.6% in 2011, compared with 3.2% in 2010. The IMF stated that global GDP rose by 3.8% in 2011. The Organization for Economic Cooperation and Development (OECD) also expects the GDP of its 34 member states to increase by 1.9% in 2011. Therefore, according to both institutions, not the industrial countries, but emerging markets and developing countries were the engines of global growth.

Merck operates the businesses of its four divisions in two business sectors, Pharmaceuticals and Chemicals.

### Pharmaceutical market

IMS Health, a provider of pharmaceutical industry market data, forecasts that global pharmaceutical sales will amount to around US\$ 880 billion (around +6%) in 2011. According to IMS Health, the top global therapeutic classes in terms of sales are oncologics, lipid regulators, respiratory agents and antidiabetics. In geographic terms, the largest markets are as follows: the United States, followed by Japan, China and Germany.

According to the market research firm Nicholas Hall, the global volume of the over-the-counter drugs market rose by 4.5% in 2011 to € 81 billion. Europe is the most important market, followed by North America, Asia (excluding Japan), Japan and Latin America.

### Chemical market

Dynamic development of chemical production  
+4% worldwide (VCI)

The chemical industry developed dynamically in 2011. According to ICIS, a chemical market research institute, global chemical industry growth will exceed that of global GDP in the coming years.

For specialty chemicals, a field in which Merck operates, ICIS expects global production to rise by 3.5% in 2011. In the course of 2011, the European Chemical Industry Council (Cefic) lowered its original annual forecast for production growth of its member companies from 4.5% to 2.5%.

For 2011, the German Chemical Industry Association (VCI) reported an increase in chemical production of 4% compared to 2010. Total sales of the German chemical industry rose by 9% in 2011 to € 186.5 billion. Consequently, Germany ranks fourth globally after the United States, China and Japan.

## Financial Position and Results of Operations

2011 reflects the impact of the Millipore acquisition over a 12-month period. A better balance now exists between the Pharmaceuticals and Chemicals business sectors.

### Solid business performance in a challenging environment

Total revenues exceed € 10 billion for the first time

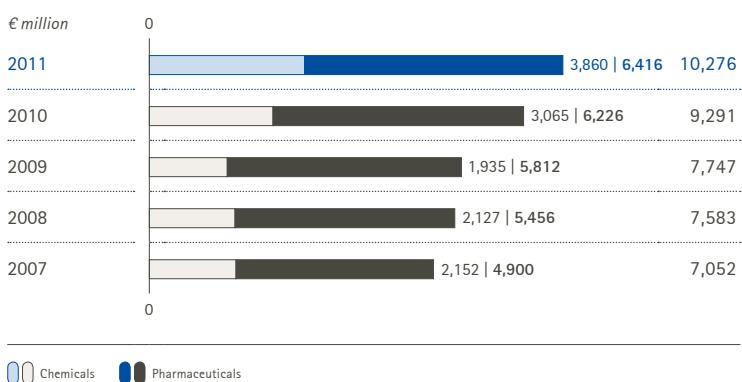
In 2011, Merck delivered a solid business performance in a challenging environment. All four divisions contributed to this development. Total revenues of the Merck Group rose in fiscal 2011 by € 986 million or 11% to € 10,276 million. This increase was primarily due to the acquisition of Millipore Corporation, a leading U.S. life science company, which we completed in July 2010. Overall, acquisitions and divestments accounted for 6.4% of the increase in total revenues in 2011. Organically, i.e. excluding acquisitions, divestments and exchange rate effects, total revenues rose by 4.8%. Foreign exchange rates lowered total revenues by 0.6% compared to 2010.

Generally, the comparability of the income statement for 2011 with that for 2010 is impacted by the acquisition of Millipore. While the Millipore business was included in 2010 only as of July, fiscal 2011 reflects all of Millipore's expenses and income for 12 months.

At € 370 million, royalty, license and commission income, which is disclosed as part of total revenues, was slightly higher than in 2010.

### Total revenues by business sector

(excluding Corporate and Other)



Cost of sales rose by 17% to € 2,788 million, growing somewhat more sharply than total revenues. In the year-on-year comparison of cost of sales, it should be noted that 2010 included a one-time expense of € 86 million, which was attributable to the market valuation of the acquired Millipore inventories within the scope of the purchase price allocation. Organically, cost of sales increased by 7.0%. Gross margin rose by 8.4% to € 7,488 million in 2011.

Marketing and selling expenses rose by 7.1% to € 2,393 million from € 2,235 million in 2010. The increase is largely due to the fact that in 2010, the marketing and selling expenses of the Millipore companies were only included for six months. Adjusted for acquisitions and foreign exchange rates, the increase totaled 2.0%. In 2011, the ratio of marketing and selling expenses to total revenues declined slightly from 24% to 23%.

Marketing and selling expenses 2% higher on adjusted basis

→ Financial Position and Results of Operations

Royalty, license and commission expenses rose to € 512 million from € 480 million. They are incurred for sales of products which we either co-market with partners or for which we pay royalty fees in order to market. This is especially the case for our Merck Serono products Rebif® and Erbitux®. Royalty, license and commission income and expenses include the royalty, license and commission income reported in total revenues as well as the expenses for marketing licenses and to a lesser extent production licenses. The components are as follows:

**Royalty, license and commission income and expenses by division in 2011**

€ million	Total	Merck Serono	Consumer Health Care	Merck Millipore	Performance Materials	Corporate and Other
Royalty + license expenses	-216	-187	-2	-13	-14	-
Royalty + license income	354	340	2	10	2	-
<b>Total</b>	<b>138</b>	<b>153</b>	<b>-</b>	<b>-3</b>	<b>-12</b>	<b>-</b>
Commission expenses	-296	-291	-2	-3	-	-
Commission income	16	16	-	-	-	-
<b>Total</b>	<b>-280</b>	<b>-275</b>	<b>-2</b>	<b>-3</b>	<b>-</b>	<b>-</b>

**Royalty, license and commission income and expenses by division in 2010**

€ million	Total	Merck Serono	Consumer Health Care	Merck Millipore	Performance Materials	Corporate and Other
Royalty + license expenses	-183	-163	-	-7	-13	-
Royalty + license income	340	323	2	7	8	-
<b>Total</b>	<b>157</b>	<b>160</b>	<b>2</b>	<b>-</b>	<b>-5</b>	<b>-</b>
Commission expenses	-297	-293	-	-3	-1	-
Commission income	22	22	-	-	-	-
<b>Total</b>	<b>-275</b>	<b>-271</b>	<b>-</b>	<b>-3</b>	<b>-1</b>	<b>-</b>

Administration expenses rose by 5.6% to € 505 million. This increase was due primarily to changes in the scope of consolidation. Organically, these expenses rose by only 0.3%.

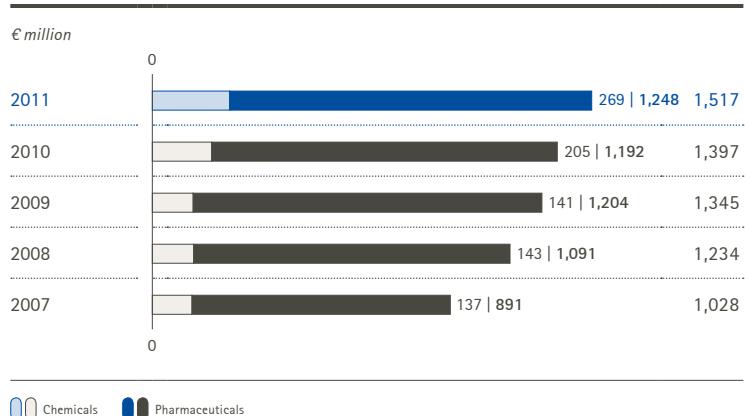
Showing a net expense of € 582 million, the line item "Other operating income and expenses" was 49% higher than the net expense of € 390 million reported in 2010. This sharp increase is due largely to the asset impairment of the Large-Scale Biotech production plant (LSB) at the Merck Serono Biotech Center in Switzerland. Owing to expected overcapacity, an asset impairment of € 165 million was recognized on the LSB in 2011. Due to a reassessment of the business potential of cladribine tablets and the related decision to no longer pursue the global approval process, one-time expenses of € 13 million were recognized. Additionally, in this context, provisions were set up for research services still to be performed. Transaction and integration costs for Millipore amounted to € 38 million in 2011, which compares with € 87 million in 2010. Write-downs of receivables were recorded mainly for outstanding receivables from state hospitals and health care organizations in Italy, Spain, Greece and Portugal.

Assets impairment  
of production plant  
in Switzerland

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At € 1,517 million, research and development spending was 8.6% higher than in 2010. This was mainly attributable to expensive late-stage clinical trials of drug candidates in the Merck Serono division. At the same time, we recorded expenses of € 42 million for research and development services still to be performed in connection with the return of the rights to safinamide to Newron Pharmaceuticals S.p.A., Milan, Italy. Despite the decision to discontinue the development and commercialization of safinamide for the treatment of Parkinson's disease, we will maintain the ongoing clinical trial program with safinamide. In order to secure and expand our market positions in the Merck Millipore and Performance Materials divisions, we spent a total of € 269 million on research and development (2010: € 205 million). At 15%, the ratio of R&D expenses to total revenues remained at the previous year's level.

**Research and development spending by business sector**



Amortization of intangible assets increased sharply to € 1,005 million in 2011 from € 819 million in 2010. This total mainly includes amortization of intangible assets in connection with the purchase price allocations for Serono and Millipore. The increase is due, on the one hand, to the fact that the amortization of intangible assets from the purchase price allocation for the Merck Millipore division are included for a full year, whereas 2010 only included amortization for the second half of the year. In addition, in the second quarter of 2011, the estimate of the remaining useful life of Rebif® was shortened by two years owing to the increasing market influence of oral forms of treatment for multiple sclerosis. This increased amortization by € 51 million in 2011. This item also includes expenses for amortization of intangible assets resulting from the Serono purchase price allocation. Owing to our decision to no longer pursue the global approval process for cladribine tablets, the residual book value of € 50 million was written off. In 2011, in order to focus our research activities, all ongoing research projects were subjected to an intensive assessment. In connection with changes in the development plan for safinamide, a potential add-on therapy for Parkinson's disease, we wrote off the residual book value of € 63 million. Further impairments amounting to € 35 million resulted from the decision to discontinue the development of IMO-2055, a candidate for cancer treatment. In addition, owing to the termination of a further research project in the Merck Serono division, an

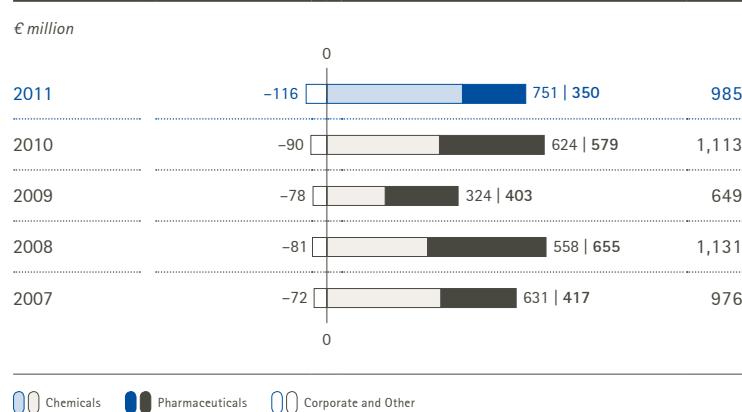
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Impairments impact the operating result

impairment loss of € 9 million was recognized on an intangible asset. Impairment losses of € 9 million on various patents in the Performance Materials division were recorded in 2011.

The operating result of the Merck Group totaled € 985 million in 2011. This corresponds to a year-on-year decline of 12%, which was due in particular to the aforementioned one-time expenses.

#### Operating result by business sector



#### Exceptional items

In 2011, gains totaling € 152 million were disclosed under exceptional items. These relate in particular to the gain on the divestment of the Crop BioScience business amounting to € 157 million. Further information on this can be found in the Notes under "Scope of consolidation". Furthermore, in 2011 exceptional items also included a subsequent gain of € 19 million from the sale of distribution rights in connection with the divestment of Théramex in 2010 as well as income of € 9 million owing to the adjustment of previous exceptional items. In addition, provisions for environmental protection measures amounting to € 29 million as well as expenses of € 4 million in connection with the litigation regarding Dey Inc., USA, are reported under exceptional items.

#### Financial result

The financial result showed an expense balance of € 286 million compared to € 252 million in 2010. The marked increase of 14% was due mainly to expenses resulting from exchange rate differences.

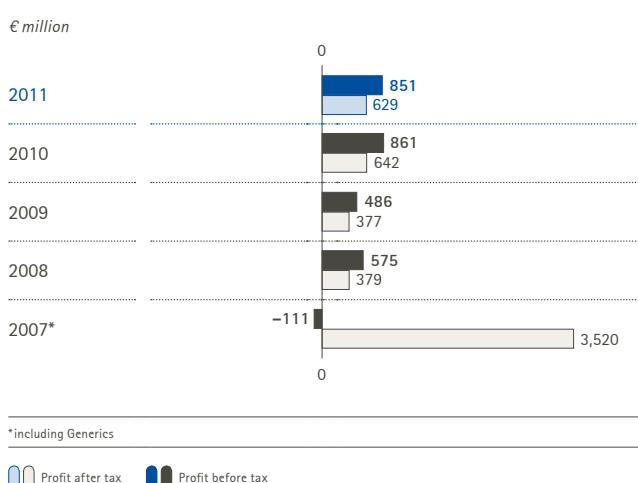
#### Profit after tax

Adjusted for exceptional items, the tax ratio was 26.1%, compared to 25.3% in 2010. It should be noted that a change in the applicable tax rate led to an adjustment of a deferred tax liability in 2011. The resulting one-time deferred tax income had a favorable impact on the tax ratio.

Profit after tax amounted to € 629 million, which is 2.0% less than in 2010.

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### Profit before and after tax



### Dividend proposal

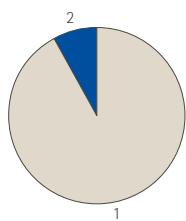
Dividend proposal:  
Increase to € 1.50

### Solid growth in the Pharmaceuticals business sector

The Pharmaceuticals business sector, which comprises the Merck Serono division for innovative prescription drugs and Consumer Health Care for over-the-counter pharmaceuticals, increased its total revenues in 2011 by 3.1% to € 6,416 million. This business sector accounted for 62% of the Merck Group's total revenues in 2011. Total revenues of the Merck Serono division increased by 2.9% and of the Consumer Health Care division by 5.1%.

### Pharmaceuticals | Total revenues by division

€ million/% of Pharmaceuticals total revenues



1 Merck Serono	5,920	92%
2 Consumer Health Care	496	8%

The operating result of the Pharmaceuticals business sector fell by 40% to € 350 million. The positive development of the Consumer Health Care division, which more than tripled its operating result from € 14 million to € 46 million, was overshadowed by the sharp decline of 46% in the operating result of the Merck Serono division, which totaled € 304 million. With respect to the increase in the operating result

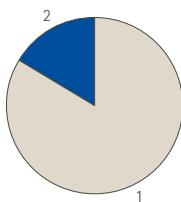
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of the Consumer Health Care division, it should be noted that 2010 was adversely affected especially by restructuring charges in China as well as a warehouse fire in the United Kingdom. Apart from higher cost of sales in the Merck Serono division as well as increased R&D spending, high one-time expenses adversely affected the operating result. These related mainly to the asset impairments of the Large-Scale Biotech production plant in Switzerland, cladribine and safinamide. The underlying core operating result, which excludes Merck Serono-related amortization of intangible assets and integration costs as well as other one-time charges, increased in 2011 by 6.9% to € 1,382 million from € 1,292 million in 2010.

The Pharmaceuticals business sector generated 32% of the Group operating result (excluding Corporate and Other). Return on sales (ROS) declined sharply from 9.3% to 5.5%. Based on the underlying core operating result, the return relative to total revenues was 21.5% (2010: 20.8%).

#### Pharmaceuticals | Operating result by division

€ million/% of Pharmaceuticals operating result



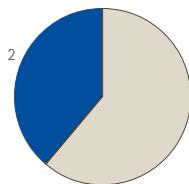
1	Merck Serono	304	87%
2	Consumer Health Care	46	13%

#### Chemicals business sector

The Chemicals business sector comprises the Merck Millipore division with its three business units BioScience, Lab Solutions and Process Solutions, as well as the Performance Materials division with its two business units Liquid Crystals and Pigments & Cosmetics. In 2011, the Chemicals business sector achieved a sharp rise in total revenues, which increased by 26% to € 3,860 million. Chemicals accounted for 38% of total revenues and 68% of the operating result of the Merck Group (excluding Corporate and Other). Return on sales (ROS) decreased slightly from 20.4% to 19.5%. Total revenues of the Merck Millipore and Performance Materials divisions increased by 48% and 1.0%, respectively. However, for the Merck Millipore division, it should be noted that the Millipore companies were only included in the financial statements for six months in 2010. Organically, meaning adjusted for acquisition and exchange rate effects, total revenues of the Chemicals business sector increased by 4.2%.

#### Chemicals | Total revenues by division

€ million/% of Chemicals total revenues

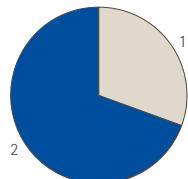


1	Merck Millipore	2,393	62%
2	Performance Materials	1,467	38%

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### Chemicals | Operating result by division

€ million/% of Chemicals total revenues



1 Merck Millipore	226	30%
2 Performance Materials	525	70%

The operating result of the Chemicals business sector increased by 20% to € 751 million, with the operating result of the two divisions developing differently in 2011. While Merck Millipore increased its operating result from € 48 million to € 226 million, Performance Materials sustained a decline of 8.9% in its operating result, which totaled € 525 million.

### Growth by quarter

Total revenues by quarter € million	1st quarter	2nd quarter	3rd quarter	4th quarter	2011	2010
<b>Total</b>	<b>2,564</b>	<b>2,555</b>	<b>2,532</b>	<b>2,625</b>	<b>10,276</b>	<b>9,291</b>
Pharmaceuticals	1,544	1,598	1,602	1,672	6,416	6,226
Chemicals	1,020	957	930	953	3,860	3,065

### Components of growth by quarter

Change in total revenues vs. 2010 in %	1st quarter	2nd quarter	3rd quarter	4th quarter	2011	2010
Organic growth	3.1	5.1	6.9	3.7	4.8	7.9
Pharmaceuticals	0.9	6.3	8.7	4.2	5.0	4.9
Chemicals	9.1	2.4	3.9	2.7	4.2	16.9
Exchange rate effects	3.2	-3.1	-2.2	-0.1	-0.6	3.7
Acquisitions/divestments	15.8	13.7	-0.9	-0.5	6.4	8.4
Total	22.1	15.7	3.8	3.1	10.6	19.9

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Germany is our top-selling country in Europe

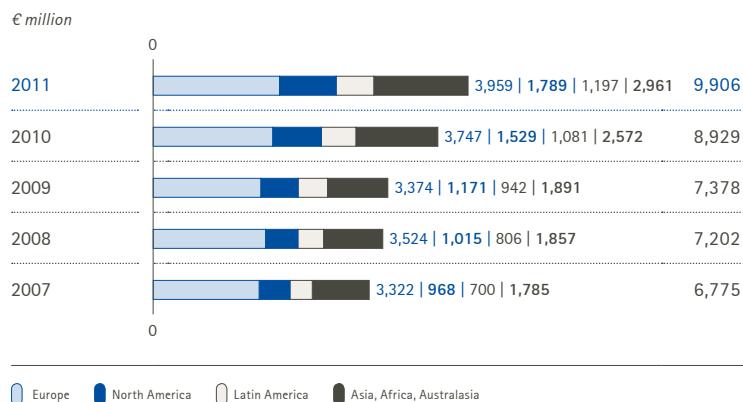
### Europe remains our top sales region

Accounting for 40% of sales, Europe remains our largest sales region, followed by Asia, Africa, Australasia (30%), North America (18%) and Latin America (12%). At € 3,959 million, sales in Europe were 5.7% higher than in 2010. Within this region, Germany is the top-selling country (+6%, € 826 million in 2011 compared to € 779 million in 2010), followed closely by France (+2.4%, € 731 million in 2011 compared to € 714 million in 2010) and less closely by Italy (+2.8%, € 376 million in 2011 compared to € 366 million in 2010).

Within Europe, France contributed the highest share of pharmaceutical sales in the Merck Serono and Consumer Health Care divisions, then followed by Germany. Like many other European countries, both these markets recorded sales declines with prescription drugs. By contrast, we generated increasing revenues with prescription drugs in some eastern European countries.

Both Chemicals divisions achieved sales growth in Europe. The increase in the Merck Millipore division was higher than in Performance Materials. However, this is the result of limited comparability since in the previous year, Merck Millipore's sales were only consolidated as of July 2010.

### Merck Group | Sales by region



Asia, which is the second-largest sales region of the Merck Group, achieved sales growth of 16% to € 2,674 million. With sales of € 587 million (+26% compared to € 468 million in 2010), Japan is our largest market in Asia. Prescription drugs, the Performance Materials and Merck Millipore divisions each accounted for roughly the same share of sales in Japan. Ranking second in Asia, Taiwan generated sales of € 581 million, which was at the same level as in 2010. Business in Taiwan is dominated by the liquid crystals activities of our Performance Materials division, which are also mixed locally in Taiwan for our customers and account for 89% of sales in the country. China, including Hong Kong, generated sales of € 412 million (+50% or € 137 million more than in 2010) ranked third in terms of our sales in Asia. Prescription drugs accounted for 53% of sales in China, which doubled. Merck Millipore and Performance Materials each accounted for almost one-quarter of our sales in China. With sales of € 401 million (+11% compared to € 360 million in 2010), South Korea ranks fourth in Asia followed by India, where sales totaled € 179 million (+15% compared to € 156 million in 2010). More than half of our sales in India are attributable to Merck Millipore; slightly more than one-third to Merck Serono.

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Sales in the United States increase by 17%

Sales in North America, our third-largest sales region, grew by 17% to € 1,789 million. The United States accounted for 92% of this figure, with sales increasing by 17% to € 1,642 million from € 1,403 in 2010. Merck Millipore's contribution more than doubled to now more than one-third of our U.S. sales. A declared aim of the acquisition of Millipore was to increase our sales contribution from the Chemicals business sector in the United States. Prescription drugs from the Merck Serono division generated 59% of our sales in the United States.

In Latin America, Brazil is our largest market, followed by Mexico. We increased our sales in Brazil by 13% to € 404 million in 2011 from € 359 million in 2010. Merck Serono accounted for 79% and Merck Millipore for 16% of sales.

We consider Mexico to be a strategic market. Sales increased by 2.8% to € 204 million and were generated mainly by Merck Serono (70%). Consumer Health Care accounted for 15% of sales and Merck Millipore for 10% of sales.

**Acquisitions: Merck Millipore division further strengthened**

By acquiring the shares in Beijing Skywing Technology Co. Ltd., Beijing, China, in early 2011, the Merck Millipore division expanded its business in the Process Solutions business unit to include a leading supplier to the biopharmaceutical sector in China. In addition, in March 2011 the division acquired the industrial microbiology business of Biotest AG, based in Dreieich, Germany. The activities of Biotest were integrated into the Lab Solutions business unit and have expanded the portfolio of biomonitoring test systems. The acquisition of Amnis Corporation based in Seattle, Washington (USA), which was announced in August 2011, closed in the fourth quarter of 2011. Amnis is a manufacturer of flow cytometry instruments for cell analysis and has been assigned to the BioScience business unit.

**High equity ratio**

The total assets of the Merck Group amounted to € 22,120 million as of December 31, 2011. This represents a decrease of € 268 million or 1.2% over 2010. The decline is primarily due to the partial covering of pension obligations of Merck KGaA. As part of a Contractual Trust Arrangement (CTA), in 2011 Merck KGaA transferred liquid assets amounting to € 520 million to a trustee, Merck Pensionstreuhand e.V., Darmstadt. The trustee used € 218 million of these liquid assets to acquire Merck Capital Asset Management Limited, Malta, which holds the financial assets to cover pension obligations. These assets were previously disclosed separately in the balance sheet. As a result of netting the new plan assets against the pension obligations, total assets declined accordingly in 2011.

The equity ratio was 47.4% as of December 31, 2011, increasing by 1.1 percentage points compared to December 31, 2010 (46.3%).

The considerably higher level of net financial debt (financial debt minus cash and cash equivalents as well as short-term securities/financial assets) resulting from the acquisition of Millipore in 2010 was reduced by € 1,000 million from € 4,484 million at the end of 2010 to € 3,484 million as of December 31, 2011. This is mainly attributable to the very good development of free cash flow in 2011.

The two rating agencies Standard & Poor's and Moody's adjusted their ratings in 2010 owing to the higher debt level resulting from the Millipore acquisition. While Standard & Poor's issued a rating of BBB+ with

Net financial debt lowered by € 1 billion

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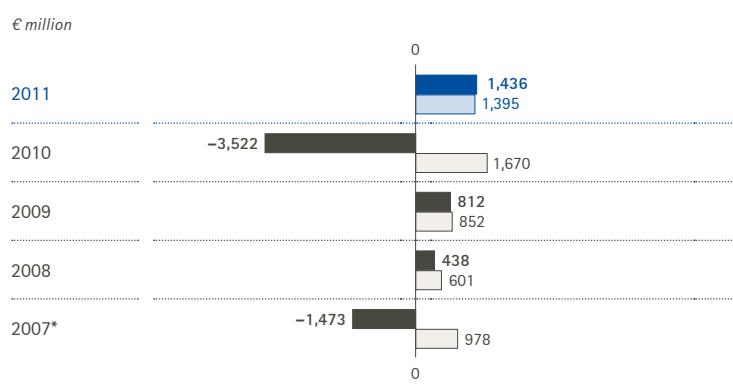
a stable outlook on March 2, 2010 (previously: A-), Moody's changed its rating on July 16, 2010 from A3 before the acquisition to Baa2 (stable outlook). The ratings remained unchanged in 2011.

**Solid development of free cash flow and underlying free cash flow**

Free cash flow of the Merck Group amounted to € 1,436 million in 2011 compared to € -3.522 million in 2010. While the 2010 figure was characterized by the purchase price payment for Millipore, cash inflows of € 201 million from the divestment of the Crop BioScience business were recorded in 2011. In addition, the receipt of the purchase price payment for Théramex, our former women's health business which we sold in 2010, had a positive impact of € 270 million on free cash flow in 2011. In 2011, € 161 million was spent on acquisitions. Moreover, in 2011, free cash flow was lowered by payments of € 119 million in connection with litigation. The corresponding provisions had been set up for this amount. Payments to externally finance the pension obligations of Merck KGaA (CTA) lowered free cash flow by € 302 million. The balance of interest paid and interest received also resulted in a decline in free cash flow compared to 2010. The cash outflow from interest paid increased in 2011 to € 163 million (2010: € 97 million). This increase is due to the interest payment date in March 2011 for major bonds issued in 2010 in order to finance the Millipore acquisition.

Underlying free cash flow, i.e. adjusted for the payments to externally finance pension obligations of Merck KGaA (CTA) as well for effects of acquisitions and divestments, decreased by 16% to € 1,395 million from € 1,670 million in 2010. This decline is mainly attributable to Corporate and Other, which also includes interest and tax payments, as well as to the Pharmaceuticals business sector. The cash outflow of Corporate and Other increased significantly by 31% from € -496 million to € -652 million. The contribution of the Pharmaceuticals business sector to underlying free cash flow decreased in 2011 by 8.0% to € 1,245 million. At € 801 million, the contribution of the Chemicals business sector to underlying free cash flow remained at the same level as in 2010 (€ 812 million).

**Free cash flow and underlying free cash flow**



\*including Generics

Underlying free cash flow   Free cash flow

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Over 75% of capital spending in Europe

### Capital spending at a high level

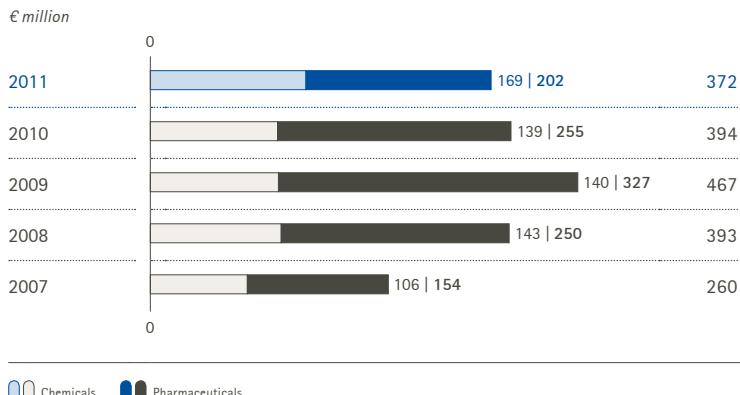
In 2011, capital spending (including leasing) totaled € 372 million, which was € 24 million or 6.1% less than in 2010. As a result, the ratio of capital spending to total revenues was 3.6% in 2011, compared to 4.3% in 2010.

Individual capital investment projects, each with a value of more than € 1 million, accounted for nearly 54% of capital spending. In regional terms, Europe, primarily Germany and Switzerland, accounted for around 76% of the total. In Germany, Merck invested € 135 million in both new and expanded production capacities as well as in research and development facilities in Darmstadt and Gernsheim in particular, our two largest production sites. In Switzerland, capital spending totaled € 75 million, mainly for the expansion of our biopharmaceutical production facilities.

In North America, we spent € 38 million – about € 29 million for the Chemicals business sector and around € 9 million for Pharmaceuticals – and in Latin America € 19 million. Our subsidiaries in Asia accounted for a total capital spending volume of € 30 million, particularly for the Chemicals business sector.

Capital spending by the Pharmaceuticals business sector totaled € 202 million, with the Merck Serono division accounting for most of this amount. In 2011, the main focus of the investments was on the expansion of our biotech production capacities in Corsier-sur-Vevey, Switzerland. As in previous years, this represents the single largest capital investment project of the Merck Group. Around 26% of capital spending in Pharmaceuticals related to headquarters in Darmstadt, Germany.

### Capital spending on property, plant and equipment (excluding Corporate and Other)



Both Chemicals divisions focus capital spending on Darmstadt and Gernsheim

Capital spending on property, plant and equipment in the Chemicals business sector amounted to € 169 million, with the Merck Millipore division accounting for € 105 million and the Performance Materials division for € 64 million. Performance Materials invested chiefly in the Darmstadt and Gernsheim sites, our main locations (both in Germany), in order to expand and modernize existing production facilities and to improve infrastructure.

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The capital spending of the Merck Millipore division also focused mainly on Darmstadt and Gernsheim as well as the United States. Around € 43 million of the division's total capital spending was attributable to the former Millipore companies.

#### **Key financial performance indicators of the Merck Group**

Return on sales (ROS) – the ratio of operating result to total revenues – and underlying free cash flow on revenues (FCR) are currently the two key financial performance indicators that the divisions use to steer their business. We also use them for short- and long-term internal target agreements.

ROS declined from 12.0% in 2010 to 9.6% in 2011. Despite increased total revenues, return on sales declined in both the Pharmaceuticals and Chemicals business sectors. This was attributable to a significant decrease in the operating result due to higher operating costs, but mainly also owing to one-time expenses in connection with impairment losses in the Merck Serono division.

FCR also fell short of the good previous year's level of 18%, decreasing to 13.6% in 2011. Both indicators, ROS and FCR, are presented by division in the Segment Reporting, starting on page 175.

EBITDA is becoming an important key financial indicator

Earnings before interest, taxes, depreciation and amortization (EBITDA) is also a key financial indicator for Merck that will become increasingly important in the future. For EBITDA, as per the definition, depreciation and amortization of non-current assets are added back to earnings before interest and taxes (EBIT). Since the acquisitions of Serono and Millipore, amortization of intangible assets has been significantly lowering the operating result. When high impairment losses are also incurred, as was the case in 2011, the operating result alone does not reflect the actual earning power of the business. EBITDA increased in 2011 by 11% to € 2,736 from € 2,457 million in 2010.

#### **Value added**

Value added is a measure of the economic strength of a company and indicates how the corporate result is achieved and for what it is used. Our corporate result, meaning the sum of total revenues, other income and financial income, amounted to € 10,685 million in 2011 (2010: € 9,552 million). After deducting the costs of materials as well as other purchased services and expenses, gross value added amounted to € 5,769 million compared to € 5,008 million in 2010. Following the deduction of depreciation and amortization, net value added in 2011 amounted to € 4,169 million (2010: € 3,750 million). With a share of 71%, the majority of value added amounting to € 2,974 million benefited employees in the form of personnel expenses. Financial expenses increased over 2010 to € 344 million. At € 222 million, income taxes remained virtually unchanged. Profit after tax decreased to € 629 million from € 642 million in 2010.

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#### Net value added statement

€ million	2011	2010
Total revenues	10,276	9,291
Other income	351	221
Financial income	58	40
<b>Corporate result</b>	<b>10,685</b>	<b>9,552</b>
Cost of materials	-1,453	-1,246
Other purchased services/expenses	-3,463	-3,298
<b>Gross value added</b>	<b>5,769</b>	<b>5,008</b>
Depreciation and amortization	-1,600	-1,258
<b>Net value added</b>	<b>4,169</b>	<b>3,750</b>

#### Distribution of net value added

€ million	2011	2010
Personnel expenses	2,974	2,597
Financial expenses	344	291
Taxes on income	222	220
Profit after tax	629	642
<b>Net value added</b>	<b>4,169</b>	<b>3,750</b>

#### Capital and shares

The following information comprises disclosures pursuant to section 315 (4) of the German Commercial Code (HGB) and the explanatory report pursuant to section 176 (1) sentence 1 of the German Stock Corporation Act (AktG).

As of the balance sheet date, the company's subscribed capital is divided into 64,621,125 no-par value bearer shares plus one registered share. Each share therefore corresponds to € 2.60 of the share capital. The holder of the registered share is E. Merck Beteiligungen KG. It is entitled and obliged to appoint one-third of the members of the Supervisory Board representing the limited liability shareholders. If the holder of the registered share is a general partner, he or she has no such right of appointment. The transfer of the registered share requires the company's approval. The approval is granted at the sole discretion of the personally liable general partner with an equity interest, namely E. Merck KG.

According to the Articles of Association of Merck, the general partners not holding an equity interest who form the Executive Board are admitted by E. Merck KG with the consent of a simple majority of the other general partners. A person may only be a general partner not holding an equity interest if he or she is also a general partner of E. Merck KG. In addition, at the proposal of E. Merck KG and with the approval of all general partners not holding an equity interest, further persons who are not general partners not holding an equity interest may be appointed to the Executive Board.

→ [Financial Position and Results of Operations](#)

The Articles of Association can be amended by a resolution of the General Meeting that requires the approval of the general partners. The resolutions of the General Meeting are, notwithstanding any mandatory statutory provisions to the contrary, adopted by a simple majority of the votes cast. Where the law requires a capital majority in addition to the voting majority, resolutions are adopted by a simple majority of the share capital represented in the vote. The Articles of Association specify the authorized share capital. The Executive Board is authorized, with the approval of the Supervisory Board and of E. Merck KG, to increase the share capital on one or several occasions until April 3, 2014 by up to a total of € 56,521,124.19 by issuing new shares against cash or contributions in kind. If the authorized capital is utilized, the Executive Board is authorized, with the approval of the Supervisory Board, to exclude shareholders' subscription rights in the case of a capital increase of up to 10% of the share capital by issuing new shares against cash contributions if the issue price of the new shares is not materially lower than the market price. In addition, with the approval of the Supervisory Board, the shareholders' subscription rights can be excluded in order to enable E. Merck KG to exercise its right pursuant to Article 32 (3) of the Articles of Association to participate in a capital increase by issuing shares or freely transferable share subscription rights. Lastly, with the approval of the Supervisory Board, the subscription rights can also be excluded in order to enable E. Merck KG to exercise its right pursuant to Article 33 of the Articles of Association to convert its equity interest into share capital. The Articles of Association also encompass contingent capital. Accordingly, the share capital is contingently increased by up to € 66,406,298.40 divided into 25,540,884 shares. The contingent capital increase serves to grant exchange rights to E. Merck KG in accordance with Article 33 of the Articles of Association to enable it to convert its equity interest into shares. The company is not authorized to acquire its own shares.

The company has not entered into any material agreements subject to a change of control pursuant to a takeover offer nor has it concluded any compensation agreements with the members of the Executive Board or employees in the event of a takeover offer.

#### **Summary assessment**

Solid balance sheet,  
decline in financial debt

Overall, Merck's business performance in 2011 was solid.

As of the beginning of 2011, both the Pharmaceuticals and Chemicals business sectors recorded higher total revenues compared to year-earlier quarters. Particularly the Chemicals business sector contributed significantly to the increase in total revenues as a result of the acquisition of Millipore in 2010. In 2011, the operating result of the Merck Group was heavily impacted by one-time expenses – particularly by impairment losses in the Pharmaceuticals business sector – and consequently fell short of the very strong result of 2010. EBITDA, where depreciation and amortization of non-current assets are added back to earnings before interest and taxes (EBIT), increased in 2011.

The balance sheet ratios and the key financial indicators remained very solid in 2011 and reflected a conservative finance policy. For example, the high equity ratio of 2010 improved further. Group net financial debt was also considerably reduced in 2011 as a result of continuing strong free cash flow.

## Corporate Responsibility

Our corporate culture has always been characterized by responsible behavior – whether with respect to our products, our employees, the environment, or society. That is because not only ownership, but also business success creates responsibility.

Firmly establishing responsible behavior throughout the company is one of the basic principles of company management at Merck. In order to sustainably implement these principles, a Corporate Responsibility committee discusses relevant overarching issues. This committee includes representatives from the individual divisions and Group functions such as Environmental Protection and Quality Assurance, Human Resources and Legal.

In 2011, the Executive Board signed the Access to Health Charter, which focuses on important health care issues in developing countries. Likewise in 2011, Merck launched the Merck Bioethics Advisory Panel (MBAP), which convenes at least once a year in order to advise the company on scientific, legal and ethical evaluations of bioethical topics. The MBAP comprises six external members from the fields of science and ethics, as well as experts from Merck.

Merck is a member of the FTSE4Good Index, a leading international stock index for sustainable investment. Companies are included in this index based on criteria such as effective environmental protection as well as adherence to and support of human rights principles. In 2011, Merck was also included in the sustainability index of Deutsche Börse.

Corporate responsibility activities and key issues are selected on the basis of materiality analyses. These activities and issues are described on the following pages, on our website, and in our extensive Corporate Responsibility Report, which we publish every two years. Merck conducts these materiality analyses at regular intervals in order to identify and prioritize the sustainability topics that are most important to the company. The analysis took into account the perspectives of various stakeholder groups, including, for instance, employees, business associates, site neighbors, and investors.

Materiality analyses  
serve as a basis for  
CR activities

### Employees

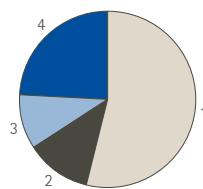
As of December 31, 2011, our company had 40,676 employees, which represents a minimal change compared to 2010 (40,562 employees). Merck was represented in 67 countries by 228 companies and had 65 production sites located in 24 countries.

In several countries, there were significant changes in the number of employees. In Germany, the workforce increased by 560 employees. This was mainly attributable to both the acquisition of Biostest AG's microbiology business, as well as to chemicals production, where we increased the number of permanent employees and reduced the share of temporary workers. In China, the number of employees rose by 167, which is primarily due to the acquisition of Beijing Skywing Technology Co., Ltd. and to the expansion of the Merck Serono operations there. In Argentina, the workforce decreased by 256. This was partly attributable to the transfer of CardioMetabolic Care and General Medicine commercial activities to the Argentinean company Laboratorio Elea SACIFyA in Buenos Aires; it was also a result of the divestment of the Crop BioScience business, which was based in Argentina and employed the majority of the employees there.

→ [Corporate Responsibility](#)

A total of 523 young people were enrolled in vocational training programs in 23 different occupations at the Darmstadt site, the largest of the Merck Group.

**Number of employees as of December 31, 2011/  
percentage of total workforce**



### Core topics of our international human resources work

Globally uniform HR programs, structures and processes

As an integrated global company, Merck implements uniform HR programs, structures and processes worldwide. For instance, we broadened the target group of the Performance Management Process to include a larger portion of the workforce; we enhanced the Global Rewards Policy and implemented the Talent & Succession Management Process at a global level. All global programs were initiated in newly added businesses such as Merck Millipore. These programs aim to develop a performance culture based on the joint strategic direction of the company, to establish a performance-related, market-oriented compensation structure, and to fill positions with the right people.

Merck is using the motto "Make great things happen" to position itself in the global job market. The aim is to convey to potential applicants a sense of what makes Merck unique: an inspiring, motivating work environment in which innovations thrive; an environment in which all employees have the opportunity to apply their ideas and commitment to benefit customers and the company, while at the same time developing themselves further.

#### Performance management

Performance management is of crucial importance for promoting entrepreneurial success and for identifying and developing employee potential. Key features here are clear objectives, differentiated feedback in performance management, transparent performance assessment, and the preparation of individual development plans. Currently, 21,429 employees are participating in the globally uniform Performance Management Process.

→ [Corporate Responsibility](#)

### Global Rewards Policy

The Global Rewards Policy applies to all Merck companies worldwide and ensures a systematic compensation structure. The policy describes the principles governing how employees are compensated depending on their performance and capabilities, and on the situation in the respective labor market. In order to take into account the changing needs of our global business, we further developed existing compensation systems, especially with regard to variable compensation.

### Career opportunities

Merck wants to offer its talented employees the opportunity to have an interesting career and to continually develop themselves both personally and professionally within the company. The Talent & Succession Management Process and the Expert Talent Process are two systematic processes that Merck uses to identify and specifically promote employees who show potential for a management position or an expert career path. These programs enable Merck to appoint the right people to management positions while at the same time retaining talented employees. In 2011, 78% of promotions to management positions were filled by internal candidates.

In addition, we complemented these processes by externally recruiting personnel to fill several key positions with the aim of combining new global perspectives with our existing experience.

### Employee engagement survey

Motivated and committed employees are our most valuable asset. Merck wants to offer its employees adequate scope for them to make their best individual contribution to the success of the company. In order to create the right conditions for this, Merck regularly conducts a Group-wide employee survey in which employees are able to express their assessment of Merck as an employer, their motivation and identification with the company, as well as their needs. The results are incorporated into measures that we use to continuously improve the framework conditions. Altogether 87% of employees participated in the most recent survey, which was conducted in September 2011 in 28 languages. The overall results show that the majority of employees identify strongly with Merck and engage themselves for the success of the company. The results are at or above industry averages in most categories.

### Occupational health and safety

In terms of accident prevention and occupational health and safety, we again made significant progress in lowering the most important indicator, the lost time injury rate (LTIR). This internationally used key figure describes the number of workplace accidents resulting in lost time per one million working hours. Merck had set itself the goal of reducing the LTIR to 2.5 by 2015. In 2011, we even outperformed this goal, achieving an LTIR of 2.0.

In order to maintain this good result, we are continuing the BeSafe! program we launched in 2010, with the aim of further strengthening our safety culture. The program has a globally uniform structure, but also features local programs to meet the specific requirements of the individual sites. BeSafe! focuses on establishing the safety culture as a management task and on empowering the independent responsibility of our employees.

Group-wide employee survey conducted regularly

→ [Corporate Responsibility](#)

## Accidents

	2011	2010	2009	2008	2007
LTIR (Lost Time Injury Rate)	2.0	3.0	3.5	3.9	4.7
Number of fatalities	–	1	–	1	3

Not portfolio-adjusted

## Diversity in the workforce

As an international company, Merck endeavors to achieve a good balance between different cultures and nationalities, between different age groups, and between male and female employees. We are convinced that workforce diversity promotes team performance, contributing to the company's entrepreneurial success. In order to sustainably anchor this diversity, we want to further develop existing measures.

### Ratio of men and women

Goal: To increase the percentage of women wherever they are underrepresented

Women currently make up 43% of the workforce. The ratio of female to male employees varies among individual business areas, functions and regions. In the Pharmaceuticals business sector, 47% of all employees are female, in Group functions 41% and Chemicals 38%. In North America, 47% of all employees are female, in Europe 45%, in Latin America 44%, and in Asia 33%. At 52%, the proportion of women in research and development is highest, followed by administration with 50%. The lowest percentages of women are in production (34%) and infrastructure (29%). Merck has set itself the goal of increasing the percentage of female employees wherever they are underrepresented.

### Internationality

74% of all employees come from countries other than Germany. One of our basic principles is to hire and develop employees from the countries in which we operate. The internationality of our workforce, which we want to further intensify, is also bolstered by the fact that the divisional headquarters of Merck Serono are located in Geneva (Switzerland), and the headquarters of the Merck Millipore division are located in Billerica, Massachusetts (USA).

### Demographics

Demographic change, and the associated aging of the population, is not equally noticeable in all countries in which we operate. However, we must adapt to it, particularly in Germany, some other EU countries, and the United States. In these countries, the average age of our employees exceeds 40 – and we assume that this figure will increase further. In Europe, we are addressing these demographic challenges through various programs. These include adapting workplaces to the needs of older employees and establishing a health management program to maintain their ability to do their job.

→ [Corporate Responsibility](#)

Entrepreneurial opportunities through balanced diversity

### Management positions

Balanced diversity among the executive staff enhances career advancement opportunities for talented employees. However, it also enables the company to leverage a broad base of experience and allows for more differentiated entrepreneurial decision-making.

The percentage of women in management positions, meaning Global Grade 14 and higher, is currently 23% calculated across the entire company (excluding Merck Millipore employees since the global grading system has not yet been fully implemented for them). The percentage is higher at the legal entities in the countries than at corporate headquarters in Darmstadt; it is also higher in the Pharmaceuticals business sector than in Chemicals. The ratio of women in management positions is lower in certain Group functions, such as IT for example. We set ourselves a global objective of increasing the percentage of women in management positions to 25% to 30% by 2016. In order to attain this goal, we have local measures already in place, such as the Cross-Company Mentoring and the Women in Mentoring programs, as well as greater work-life balance opportunities. However, we also intend to develop further programs; in April 2011, we therefore created the function of Chief Diversity Officer to support the implementation of such measures.

56% of all management positions (Global Grade 14 and higher) are held by persons of non-German nationality – altogether 54 different nationalities are represented in such positions. The internationality of our management levels reflects the global nature of our business activities.

### Responsibility for products and the environment

We are committed to ensuring that no dangers arise from our products if used correctly. When developing new products, we take the sustainability aspects of their entire life cycle into account. Extensive documentation of product properties and compliance with all legal requirements are a high priority for us. Our expertise in this area enables us to offer our customers added value; for instance, we provide them with informational material and training.

Merck products are tested extensively before being launched onto the market, for example in toxicological and clinical trials for drugs; or toxicological and ecotoxicological studies for chemicals. The cornerstones are quality, usefulness and safety for people and the environment. We also offer reliable product storage and safe transport.

→ [Corporate Responsibility](#)

### REACH: Phase 2 has begun

In the phase-wise implementation of the EU regulation REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals), we successfully completed Phase 1, and have now begun to register all substances that we produce in volumes ranging between 100 and 1,000 metric tons per year. These substances must be completely registered with the European Chemicals Agency (ECHA) by June 1, 2013. At Merck, this currently applies to around 75 substances, which we have compiled into a priority list.

Our goal is not only to meet regulatory requirements, but also to ensure the availability of raw materials as well as the marketability of our products. In order to remain up to date in regulatory matters, we are also working with external expert groups, which enables us to exchange ideas directly with the relevant EU agencies.

### Global Product Strategy (GPS)

Providing relevant information on product safety

We have committed ourselves to the Global Product Strategy (GPS), which is an integral part of the Responsible Care Charter. It aims to achieve a globally uniform standard for evaluating product safety. At Merck, we are implementing the GPS by compiling online product safety summaries that are available on websites such as the GPS portal of the International Council of Chemical Associations (ICCA). These use generally understandable language to describe chemical, physical, ecological, and toxicological substance properties, along with potential hazards and risks when handling chemicals. They also explain which measures are required in order to use the products safely. Together with our safety data sheets, we offer our customers an abundance of information on how to safely handle and further process our products.

### Merck Bioethics Advisory Panel set up

To ensure that we meet our own high standards, the Merck Bioethics Advisory Panel met for the first time in 2011. Composed of independent, high-profile scientists and bioethicists from various countries, this panel acts in an advisory capacity on bioethical issues. The panel specifically addresses bioethical topics that arise at Merck, such as questions regarding biopharmaceuticals or nanotechnology. It also recommends to the Executive Board how standards of ethics and integrity can be maintained, improved and harmonized.

Merck confirmed its position especially regarding stem cell and fertility research in two policy papers: the "Merck Stem Cell Policy" and the "Merck Fertility Research Policy". These define how Merck conducts discovery and development, how it does business, and which limits apply.

→ [Corporate Responsibility](#)

Improving access to  
medicine in developing  
countries

#### **Access to Health initiative launched**

We utilize our scientific expertise and global market presence to provide products and services that focus on patients. For many years, Merck has been promoting and working on programs to increase access to medicine, such as our two lighthouse projects, the Merck Praziquantel Donation Program and the Minilab, a compact mobile laboratory offered by the Global Pharma Health Fund (GPHF), as well as a range of local initiatives. To enable an integrated, comprehensive approach, Merck launched its Access to Health initiative in 2011. This constitutes a uniform framework spanning all divisions and functions of the company, allowing us to more effectively address the complex issues relating to access to medicine and health in developing countries. Topics include the research and development of medicines for neglected diseases, as well as counterfeit medicines, product donations, pricing, patents, and intellectual property.

#### **Environmental protection spending**

Spending on environmental protection, health and safety totaled € 141 million in 2011. This figure includes investments made in the reporting period, as well as operating costs.

#### **EHS management system**

Our responsibility to protect the environment derives from the Merck Values and our corporate strategy. The basis for steering environmental protection activities is the Corporate EHS Policy with its principles and strategies for the environment, health and safety. The EHS Policy is implemented through internal guidelines and instructions for compliant behavior, such as the Merck Group EHS, Security and Quality Manual. Our guidelines are oriented primarily to the key elements of the global Responsible Care Charter, which was formulated in 2005 by national and international associations of the chemical industry.

#### **ISO 14001 confirmed**

In the course of the annual audit, the ISO 14001 group certificate was confirmed for our environmental management system for 2011 as well. As part of this, the three largest production sites of the former Millipore organization were examined by our certifier and included into the group certificate. The other production sites of the former Millipore organization are currently setting up environmental management systems that conform to ISO 14001, with the goal of integrating these into our group certificate by the end of 2012.

#### **Reducing greenhouse gas emissions by 20%**

We want to continually improve our performance as well as use energy, water and materials economically and efficiently. We are doing this to reduce our impact on the environment as well as to achieve cost savings derived from efficiency. We are currently focusing on climate protection: By 2020, we aim to reduce our total direct and indirect greenhouse gas emissions by 20% – measured against 2006 levels.

→ [Corporate Responsibility](#)

## Energy

	2011	2010	2009	2008	2007
Energy consumption (in GWh)	1,454	1,465	1,341	1,462	1,473
<b>Purchased energy</b>					
Natural gas (in million m <sup>3</sup> )	76.3	77.4	72.1	78.0	75.0
Light heating oil (in kilotons)	8.2	8.1	6.2	8.3	9.1
Heavy heating oil (in kilotons)	0.1	0.3	0.2	0.6	0.9
Electricity (in GWh)	509	513	475	515	538

Portfolio-adjusted in accordance with the Greenhouse Gas Protocol

## CO<sub>2</sub>eq emissions (eq=equivalents)

Emissions in kilotons	2011	2010	2009	2008	2006*
Direct CO <sub>2</sub> eq emissions	317	351	302	304	319
Indirect CO <sub>2</sub> eq emissions	204	208	192	215	227
Total CO <sub>2</sub> eq emissions	521	559	494	519	546

Portfolio-adjusted in accordance with the Greenhouse Gas Protocol

\* Base year for our climate targets

## Air emissions

Emissions in kilotons	2011	2010	2009	2008	2007
VOC (volatile organic compounds)	0.2	0.2	0.2	1.9	1.9
Nitric oxides	0.1	0.2	0.1	0.2	0.2
Sulfur dioxide	0.02	0.03	0.03	0.05	0.03
Dust	0.03	0.02	0.02	0.02	0.02

Not portfolio-adjusted

## EDISON climate protection program expanded

In order to achieve its climate goals, Merck launched a climate protection program called EDISON in 2009. This initiative pools all Merck Group activities worldwide that are aimed at climate protection and energy efficiency. The objective is to reduce energy consumption, thus cutting costs, conserving resources and protecting the environment. In 2011, energy checks were conducted at the Chemicals production sites in Altdorf, Switzerland; Savannah, GA, United States; and Taicang, China. Another energy audit was performed at the Merck Serono site in Semoy, France. In Darmstadt and Gernsheim, production plants were also systematically reviewed as part of an in-depth process.

Thanks to the various energy checks, we have identified numerous potential ways to save energy. The Executive Board additionally earmarked around € 10 million for 2012 in order to leverage this potential by implementing concrete measures throughout the Group.

→ [Corporate Responsibility](#)

Lower energy consumption and a proactive safety culture

#### **Energy Star and national model for construction safety**

There are many examples of achievements and activities in this area. In February 2011, the Merck Millipore site in Billerica, MA (United States) received an Energy Star label from the U.S. Environmental Protection Agency for the building's outstanding energy efficiency with regard to use of photovoltaics, among others. Only those buildings that use 35% less energy overall and therefore generate fewer greenhouse gas emissions than conventional buildings earn this designation.

The Harvard School of Public Health classified our new pharmaceutical research facility, likewise located in Billerica, as a national model for construction safety. During its construction, which involved a total of 370,000 work hours, not a single recordable loss-time accident occurred. Furthermore, a proactive safety culture in the design and construction stages laid the foundation for end-users to work in a safe environment.

#### **Green<sup>3</sup> concept**

An increasing number of display manufacturers are driving the development of eco-friendly, economical, safe technologies. With its Green<sup>3</sup> concept, the Liquid Crystals business unit, a leading manufacturer of materials for liquid crystal displays, is making an important contribution to this development. We develop innovative, eco-friendly materials for energy-efficient displays; we help our customers design ecological production processes and support them in the development of eco-friendly LC displays. For example, Merck liquid crystals for PS-VA technology (polymer-stabilized vertical alignment) enhance the energy efficiency of displays by significantly reducing background lighting, which is one of the most expensive components to produce as well the biggest energy consumer. In 2011, the Green<sup>3</sup> concept was expanded to also include cosmetics products from our Performance Materials division.

#### **Product carbon footprint**

A carbon footprint quantifies the total amount of greenhouse gas emissions that a product causes throughout its entire life cycle. In view of the growing importance of the topic, Merck has started pilot assessments of product carbon footprints for sample product groups in order to develop both a fundamental concept and a realistic approach for determining greenhouse gas emission totals.

→ [Corporate Responsibility](#)

## Responsibility for society

Our social commitment comprises local and regional charitable projects that the Merck subsidiaries implement independently as part of the existing Corporate Responsibility concept, as well as global projects. The latter include the Merck Praziquantel Donation Program, the Global Pharma Health Fund (GPHF) and the Deutsche Philharmonie Merck.

### **Merck Praziquantel Donation Program: Combating schistosomiasis**

Goal: To eliminate schistosomiasis in Africa

In 2007, we entered into a partnership with the World Health Organization (WHO) to combat the worm disease schistosomiasis in African school children. As part of this collaboration, Merck is donating Cesol® 600 tablets containing the active ingredient praziquantel. Schistosomiasis is the most common tropical disease in Africa after malaria, causing primarily children to suffer. More than five million children were treated in 2011. We extended the partnership to fight schistosomiasis, which was originally planned for a period of ten years, and will continue donating Cesol® 600 until the disease has been eliminated in Africa.

### **Global Pharma Health Fund: Protection from counterfeit medicines**

The Global Pharma Health Fund (GPHF), which is funded by Merck, is combating counterfeit medicines in developing and emerging countries. According to WHO estimates, between 10% and 30% of the medicines offered worldwide are either counterfeit or of inferior quality. Many African and Asian countries are especially affected by this since they lack effective regulatory and enforcement systems for medicines. In order to effectively identify counterfeits and quickly remove them from circulation, around 470 compact mobile laboratories, or GPHF-Minilabs, were in use in more than 70 countries at the end of 2011. These Minilabs make it possible to rapidly identify 57 different drug active ingredients and to immediately detect inferior or ineffective medicines.

### **Deutsche Philharmonie Merck: Cultural promotion**

The Deutsche Philharmonie Merck is one example of how we promote culture. With up to 80 professional musicians and a very diverse concert repertoire, this orchestra is not only an integral part of the cultural life in the vicinity of our corporate headquarters in Darmstadt – it also tours internationally. In autumn 2011, the Deutsche Philharmonie Merck performed in seven cities in India as part of the "Year of Germany in India 2011–2012", and then went on to play in Bangkok to celebrate the 20th anniversary of the Merck entity in Thailand. Nearly 10,000 people attended the concerts in Asia.

The Divisions of the Merck Group  1/4

# Merck Serono

→ Merck Serono is the largest division of Merck. It markets innovative prescription drugs of chemical and biological origin. The division offers its leading brands in around 150 countries. Merck Serono focuses on highly specialized therapeutic areas such as multiple sclerosis, oncology, fertility, and endocrinology. The division also offers classic branded products in the area of cardiometabolic care, particularly adapted to the medical needs of patients in emerging markets.

## Key products by therapeutic area

- **Multiple sclerosis (MS):** REBIF®
- **Oncology:** ERBITUX® (solid tumors)
- **Fertility:** GONAL-F®, PEROVERIS™, LUVERIS®, OVIDREL®/OVITRELLE®, CRINONE®, CETROTIDE® (infertility treatment)
- **Endocrinology:** SAIZEN® (growth disorders), SEROSTIM® (HIV-associated wasting), EGRIFTA® (HIV-associated abdominal lipohypertrophy), KUVAN® (metabolic disorder hyperphenylalaninemia)
- **CardioMetabolic Care:** CONCOR® franchise (cardiovascular diseases), GLUCOPHAGE® franchise (type 2 diabetes), EUTHYROX® (thyroid disorders)

## Key developments in 2011

- Sales of ERBITUX® rise 4.3% to € 855 million, REBIF® sales increase by 1.4% to € 1,691 million
- Extended indication of REBIF® to treat patients with early signs of multiple sclerosis approved in Europe
- Application to extend the indication of ERBITUX® to first-line therapy of advanced or metastatic non-small cell lung cancer in patients with high EGFR expression submitted again in the EU
- Following negative feedback from the drug regulatory authorities in the United States and the EU, Merck Serono decides not to pursue further the worldwide approval process for cladribine tablets
- All rights for safinamide returned to Newron as part of the review and reprioritization of the R&D pipeline
- Launch of three new pre-filled pens for the self-administration of GONAL-F®, LUVERIS® and OVIDREL® in select markets

→ [Merck Serono](#)

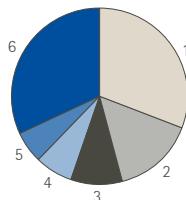
### Growth also thanks to classic products

Sales of the Merck Serono division increased slightly over 2010. More than half of this growth was attributable to the three top-selling products in our CardioMetabolic Care portfolio.

The Merck Serono division increased total revenues by 2.9% to € 5,920 million in 2011. Sales rose nominally by 2.9% as well, with foreign exchange rates and divestments exerting a negative impact. Organic growth amounted to 5.1%. The classic branded products from the Glucophage® and Concor® franchises as well as our thyroid products were responsible for more than half of the sales growth driven by emerging markets. Our five top-selling biopharmaceuticals – Rebif®, Erbitux®, Gonal-f®, Saizen®, and Serostim® – generated 60% of sales. Rebif®, our drug to treat relapsing multiple sclerosis, was once again our leading product with sales of € 1,691 million (+1.4%). Erbitux®, our targeted cancer therapy, achieved sales of € 855 million (+4.3%).

#### Our five top-selling drugs by sales in 2011

€ million / % of divisional sales



1	Rebif®	1,691	31 %
2	Erbitux®	855	15 %
3	Gonal-f®	526	9 %
4	Concor® franchise	397	7 %
5	Glucophage® franchise	346	6 %
6	Other products	1,749	32 %

Operating result declines due to one-time effects

At € 356 million, royalty, license and commission income was higher than in 2010. Gross margin increased slightly to € 4,888 million (+2.0%). Research and development expenses increased by 5.0% to € 1,225 million. The operating result declined by 46% to € 304 million owing to one-time write-downs totaling € 322 million and additional one-time expenses. The largest single effect was the asset impairment of our biotech production plant in Corsier-sur-Vevey (Switzerland) amounting to € 165 million owing to overcapacity. Exceptional items amounted to € 25 million mainly due to a gain of € 19 million in connection with the divestment of Théramex to Teva in 2010. This gain relates to milestone payments for the transfer of distribution rights to Théramex products in a number of countries, including Spain and Brazil. Return on sales (ROS) declined to 5.1%; underlying free cash flow decreased by 7.8% to € 1,205 million.

→ [Merck Serono](#)

### Merck Serono | Key figures

€ million	2011	2010	Δ in %
Total revenues	5,920	5,754	2.9
Gross margin	4,888	4,793	2.0
R&D	1,225	1,167	5.0
Operating result	304	565	-46
Exceptional items	25	69	-63
Free cash flow	1,475	1,298	14
Underlying free cash flow	1,205	1,308	-7.8
ROS in %	5.1	9.8	

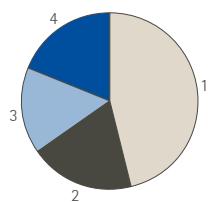
### Asia and Latin America drive growth

Double-digit sales growth in Latin America

Europe was once again Merck Serono's top-selling region in 2011, accounting for nearly half of the division's sales, or € 2,545 million. The 3.3% decline was due mainly to the divestment of the Théramex women's health business in 2010. Despite negative exchange rate movements, sales in North America increased by 2.6% to € 1,063 million, mainly thanks to the good performance of Rebif®. Sales in Latin America rose by 11% to € 897 million mainly as a result of the strong growth of our CardioMetabolic Care products and Erbitux®. Geographically, Asia accounted for the largest share of the division's sales growth and recorded a 16% increase in sales to € 865 million. However, this rise was largely due to lower year-earlier sales in China resulting from a change in our local distribution strategy in the third quarter of 2010.

### Merck Serono | Sales by region

€ million/% of divisional sales



1 Europe	2,545	46%
2 North America	1,063	19%
3 Latin America	897	16%
4 Asia, Africa, Australasia	1,059	19%

### Oncology

The targeted oncology drug Erbitux® (cetuximab) is currently approved for use in colorectal cancer in 90 countries and in head and neck cancer in 88 countries. It is used as a standard treatment in combination with chemotherapy for all lines of therapy or as a monotherapy for pretreated patients in epidermal growth factor receptor (EGFR)-expressing, KRAS wild-type metastatic colorectal cancer (mCRC). In addition, the monoclonal antibody is a standard first-line therapy for the treatment of recurrent and/or metastatic squamous cell carcinoma of the head and neck (SCCHN) in combination with platinum-based chemotherapy,

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Erbitux® for lung cancer:  
Indication extension  
submitted in the EU

as well as in combination with radiotherapy for locally advanced head and neck cancer. We are exploring further indications in additional studies. Sales of Erbitux® rose by 4.3% to € 855 million in 2011.

In the first half of 2011, we sustained a decline in sales in Japan. This was attributable to increased competitive pressure and the introduction of the KRAS biomarker test, which, in line with our commitment to personalized cancer therapy, was introduced after label expansion into first-line metastatic colorectal cancer. As of the third quarter, sales in Japan began to stabilize and then to recover slowly. Sales in the rest of Asia as well as Latin America rose markedly; Europe also saw slight growth.

In March, we submitted an indication extension application to the European Medicines Agency (EMA). The application relates to the indication for Erbitux® in combination with standard first-line platinum-based chemotherapy in patients with advanced or metastatic non-small cell lung cancer (NSCLC) with high epidermal growth factor receptor (EGFR) expression. We have established the latter as a predictive biomarker for Erbitux® in the disease. In 2009, the Committee for Medicinal Products for Human Use (CHMP) of the EMA previously adopted a negative opinion on the use of Erbitux® in NSCLC.

## Multiple Sclerosis

Continued growth  
of Rebif® sales despite  
new competition

With Rebif® (interferon beta-1a), we offer a leading drug for the treatment of relapsing multiple sclerosis (MS). Rebif® is registered in more than 90 countries. According to estimates, around 2 million people suffer from MS worldwide. In spite of the availability of a new oral drug on the market, the sales development of Rebif® remained satisfactory, increasing slightly by 1.4% to € 1,691 million in 2011. With sales of € 773 million, North America was, for the first time, our largest market for Rebif®. Sales grew by 2.9% over 2010. In Europe, sales of Rebif® were slightly below the previous year's level and totaled € 742 million (-1.4%). The highest sales were achieved in Germany and Italy, where we recorded growth rates of 6.8% and 2.7%, respectively. In Latin America, sales increased by 3.2% to € 111 million; in Asia, Africa, Australasia, growth amounted to 14%. The human serum albumin-free formulation of Rebif® is now available in 40 countries around the world. We launched this product, which has improved injection tolerability, in 2007. After having evaluated feedback from the U.S. Food and Drug Administration (FDA), we decided not to pursue registration in the United States any longer.

As of the end of 2011, roughly 30,000 patients outside of the United States were using Rebismart™, the only electronic injection device in MS. Launched in 2009, Rebismart™ allows Rebif® patients to customize their injection settings, and an electronic injection history also enables active adherence management.

Merck Serono is actively supporting the MS community. For example, with the digital platform "UniteMS.net", we created an international social MS network. We also set up the Web portal "MS World Council" especially for health care professionals in 2011. We are also involved in several collaborations designed to advance research into MS, such as our collaboration with Fast Forward, a not-for-profit organization established by the American National Multiple Sclerosis Society.

Based on feedback from the regulatory authorities in the EU and the United States, we decided in June to not pursue further the worldwide approval process for cladribine tablets. Attempting to fulfill the requirements of the European Medicines Agency and the FDA would have necessitated a new, multi-year clinical trial program. In Australia and Russia, where cladribine tablets were registered under the brand name Movectro®, we discontinued market supply of the product in close coordination with the authorities.

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## Fertility

We are a global leader with our portfolio of medicines to treat infertility. Merck is the only company that offers recombinant versions of the three main reproductive hormones. The Fertility business unit increased its sales in 2011 by 6.1% to € 697 million and expanded its market share. Europe accounted for nearly half our sales, which remained at the previous year's level. We recorded double-digit growth rates in Asia, Africa, Australasia and Latin America, while sales declined in North America.

Gonal-f® shows strong growth in Asia, Africa, Australasia

Gonal-f® (follitropin alfa for injection) is a recombinant form of natural follicle-stimulating hormone (FSH). It is approved in more than 100 countries and is the world's leading fertility drug. Sales of this product increased by 4.3% to € 526 million thanks to strong, mainly organic growth of 18% in Asia, Africa, Australasia. Sales in both China and Japan grew by around one-third. In Europe, which is our top-selling region for Gonal-f®, sales increased slightly. In North America, sales of Gonal-f® fell by 6.4%, mainly owing to a decrease in the generally declining U.S. market.

Cetrotide® is a medication used to prevent premature ovulation. The use of this class of drugs (gonadotropin-releasing hormone antagonists) is increasing and Cetrotide® benefited from this trend. Sales increased by 32% to € 50 million. Ovidrel®/Ovitrelle® is the only recombinant version of the natural hormone hCG. It is used to trigger follicle maturation and ovulation and generated a 10% increase in sales to € 50 million, mainly thanks to good growth outside of Europe. Our combination treatment Pergoveris™ is used to stimulate follicular development in infertile women with severe luteinizing hormone (LH) and follicle-stimulating hormone (FSH) deficiency. Worldwide sales, which were attributable almost exclusively to Europe, declined by 7.5% to € 29 million.

Three new injection devices expand options for patients

We expanded our range of user-friendly injection devices in 2011 to include three pre-filled pens for the self-administration of the liquid formulations of Gonal-f®, Luveris® (lutropin alfa; recombinant luteinizing hormone) and Ovidrel®. The new pens are approved in Europe, Australia, New Zealand and Canada, and market launches are ongoing.

## Endocrinology

The specialized drugs and user-friendly injection devices offered by the Endocrinology business unit can help improve the lives of patients with endocrine and metabolic disorders. Sales increased by 8.0% to € 342 million, based on growth in all regions. Our recombinant human growth hormone Saizen® is approved in around 80 countries for the treatment of a variety of diseases. According to estimates, the incidence of growth hormone deficiency in children is between 1 in 4,000 and 1 in 10,000. Non-childhood-related adult growth hormone deficiency can also be a significant problem which affects 3 in 10,000 each year.

Saizen® generated sales of € 225 million, which was 0.5% less than in the previous year. We nearly offset a decline in prices in several regions of the world (United States, Latin America, Europe) with good volume growth in almost all countries where the product is marketed. At € 105 million, sales in Europe were slightly lower (-1.6%) than in 2010.

Since 2007, around 30,000 patients have used our electronic injection device Easypod™ for the administration of Saizen®. In 2011, we introduced in select markets Easypod™ Connect software, a new approach to monitoring patients' adherence to Saizen® injected using Easypod™.

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Significant sales growth for Kuvan®

Kuvan® (sapropterin) is the first drug approved in Europe for treatment of hyperphenylalaninemia (high levels of phenylalanine in the blood) in patients with the genetic metabolic disorder phenylketonuria (PKU) or a deficiency of the key coenzyme tetrahydrobiopterin (BH4). According to estimates, around 50,000 people are affected in Europe; 20% to 50% of PKU patients could benefit from treatment with Kuvan®. By launching Kuvan® in new markets and expanding the number of patients, we increased global sales of the product by 72% to € 34 million.

Since the registration of Egrifta® (tesamorelin for injection), a registered trademark of Theratechnologies Inc., in the United States at the end of 2010 as a therapy for reducing excess abdominal fat in HIV patients with lipodystrophy, we now offer two drugs for the treatment of HIV-related diseases. The other product Serostim® is used in the United States to treat patients suffering from HIV-associated wasting. Sales of our two drugs used in HIV totaled € 82 million (+17%).

## CardioMetabolic Care and General Medicine

The CardioMetabolic Care and General Medicine business unit comprises our drugs for treating diabetes, cardiovascular diseases and thyroid disorders, as well as other globally and regionally marketed products. Sales increased by 1.8% to € 1,976 million. Adjusted for the sales of our Théramex subsidiary, which we divested in 2010, growth amounted to 6.5%. We continued to grow especially in emerging markets by making full use of our medical expertise in conducting intensive life-cycle management programs for our products. In this way we were also able to limit the effects of generic competition in mature markets.

Concor® performs strongly in emerging markets

The branded Concor® products such as Concor®COR and Lodoz®, which contain the active ingredient bisoprolol, achieved sales of € 397 million, which was 6.4% more than in 2010. We succeeded in maintaining sales at a virtually consistent level in France, our top-selling market, despite strong generic competition. At the same time, we achieved strong sales gains in the growth markets of Asia and Latin America. In 2011, we launched Concor AM®, a combination product containing two complementary active ingredients: the beta-blocker bisoprolol and the calcium channel blocker amlodipine. We launched Concor AM® in Hungary in 2011. Launches in additional markets in Europe and Latin America will follow in 2012.

Drugs to treat thyroid disorders: Sales increase in China

Globally, around 366 million people have diabetes, and the prevalence of this disease is rising. The active ingredient metformin, which is contained in our product Glucophage®, remains the drug of choice for first-line treatment of type 2 diabetes. More than seven million patients worldwide rely on our oral metformin products to treat this condition. The branded products from the Glucophage® range generated sales of € 346 million – an increase of 9.6%. Performance in growth markets was particularly dynamic. Sales of the Glucophage® range rose by 44% in Asia to € 100 million and by 18% in Latin America to € 94 million. We recorded sales declines in Europe because at times we reached our production capacity limits.

Merck is the world's largest supplier of medicines to treat thyroid disorders. Sales of our key product, the thyroid hormone Euthyrox®, increased by 19% to € 175 million. Sales of all Merck thyroid products grew by 17% to € 199 million. Emerging markets also drove growth in this field. For instance, sales in China increased by 69% to € 20 million. This market offers tremendous potential as around 90 million people in China have thyroid disorders yet only 2% of them currently receive drug therapy.

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Thanks to their good competitive position in key markets outside of Europe, our other products generated sales of € 1,034 million. Sales of the Neurobion® range increased by 10% to € 198 million. Neurobion® is a multivitamin to treat and prevent vitamin B deficiency. Neurobion® products are available in more than 70 countries.

## Status of our innovative compounds

Therapeutic area	Compound	Indication	Status
Oncology			
	Erbitux® (cetuximab, anti-EGFR monoclonal antibody) <sup>1</sup>	Non-small cell lung cancer (NSCLC)	EU: filed
	Cilengitide (integrin inhibitor)	Adjuvant colorectal cancer <sup>2</sup>	Phase III
	Stimuvax® (cancer immunotherapy) <sup>3</sup>	Gastric cancer	Phase III
	Cilengitide	Glioblastoma (brain tumor)	Phase III
	Anti-integrin monoclonal antibody (DI17E6)	Non-small cell lung cancer (NSCLC)	Phase III
	Pimasertib (AS703026/MSC1936369B, MEK inhibitor)	Head and neck cancer (SCCHN)	Phase II
		Non-small cell lung cancer (NSCLC)	Phase II
		Metastatic colorectal cancer (mCRC)	Phase II
		Metastatic prostate cancer (mCRPC)	Phase II
		Solid tumors and hematological malignancies	Phase I
	Novel combinations of pimasertib with one of two PI3K inhibitors from sanofi-aventis U.S. Inc. <sup>4</sup>	Solid tumors	Phase I
	MEK inhibitor (AS703988/MSC2015103B)	Solid tumors	Phase I
	c-Met kinase inhibitor (EMD1214063) <sup>5</sup>	Solid tumors	Phase I
	NHS-IL12 (cancer immunotherapy) <sup>6</sup>	Solid tumors	Phase I
Multiple Sclerosis	Human serum albumin-free formulation of Rebif®	Treatment of patients with early signs of MS	EU: approved
	ONO-4641 (oral S1P receptor modulator)	MS	Phase II
	ARX 424 (long-acting interferon)	MS	Phase I
	ATX-MS-1467 (immune tolerance therapy) <sup>7</sup>	MS	Phase I
	Extended-release formulation of interferon beta-1a <sup>8</sup>	MS	Phase I
	Plovamer (PI-2301, second-generation peptide copolymer)	MS	Phase I
	DI Fc-IFN beta variant (long-acting interferon)	MS	Phase I
Rheumatology	Atacicept (anti-BLyS/anti-APRIL fusion protein) <sup>9</sup>	Systemic lupus erythematosus (SLE)	Phase II
	Fibroblast growth factor (FGF) 18 <sup>10</sup>	Cartilage injury	Phase II
Endocrinology	Kuvan® (sapropterin)	Osteoarthritis	Phase I
		PKU in children under the age of 4 <sup>10</sup>	Phase III

<sup>1</sup> Collaboration between Merck KGaA, Darmstadt, Germany, and ImClone LLC, a wholly-owned subsidiary of Eli Lilly and Company. Erbitux® is a trademark of ImClone, used under license by Merck.

<sup>2</sup> Study sponsored and coordinated by the Fédération Francophone de Cancérologie Digestive (FFCD).

<sup>3</sup> Exclusive worldwide licensing rights acquired from Oncothyreon Inc.

<sup>4</sup> Combined with PI3K/mTOR inhibitor (SAR245409), conducted by Merck, or combined with PI3K inhibitor (SAR245408), conducted by sanofi-aventis U.S. Inc.

<sup>5</sup> Scientific collaboration with M. D. Anderson Cancer Center

<sup>6</sup> Sponsored by the National Cancer Institute (NCI), USA

<sup>7</sup> Collaboration with Apitope Technology (Bristol) Ltd.

<sup>8</sup> Collaboration with Flamet Technologies S.A.

<sup>9</sup> In-licensed from ZymoGenetics, Inc., a wholly-owned subsidiary of Bristol-Myers Squibb Company

<sup>10</sup> Phase IIb study as part of the EMA's requirements for registration

NSCLC: Non-small cell lung cancer

SCCHN: Squamous cell carcinoma of the head and neck

mCRC: Metastatic colorectal cancer

mCRPC: Metastatic castration-resistant prostate cancer

SIP: Sphingosine-1 phosphate

PKU: Phenylketonuria

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## Opportunities in Research & Development

At € 1,225 million, research and development spending in 2011 was 5.0% higher than in 2010. This was partly due to the continued high number of costly trials in late-stage clinical development. We operate research centers in Europe, the United States and Asia. This allows us to optimally exploit strong local networks and ensures diversity. The pipeline comprises eleven programs in Phase I clinical trials, seven in Phase II and five in Phase III.

Oncology, multiple sclerosis and immune system-related disorders are our key areas of focus. In addition, we continue to conduct product development in Fertility and Endocrinology. We intend to increasingly apply our strengths in biotechnology to immune-related diseases and explore new indications in this area.

In order to balance our presence globally, we are increasing our R&D activities in the United States and China. We expanded our engagement in the Beijing area through a strategic partnership with Pharmaron and opened an R&D laboratory on the Pharmaron campus in August 2011. As of December 31, 2011, around 2,850 people worked for the research and development function of the Merck Serono division.

### New organization

To meet the growing demands on pharmaceutical companies, we are realigning our R&D organization. Research and Early Development was separated from late-stage Development and Medical. The transition between the two takes place at "proof of confidence," when the available data is sufficient to justify significant investment in further clinical development. Our aim is to create an agile, flexible and innovative organization for research and early-stage development, strongly supported by scientific networks and focusing on translational science and medicine. In late-stage clinical development, we are aiming to ensure that standardized processes run reliably, effectively and in compliance with the highest quality standards in order to enhance our chances of satisfying the requirements of regulatory authorities for drug approval.

We worked further to build a collaborative scientific enterprise in 2011, investing specifically in partnerships with pharmaceutical companies, small biotech firms as well as academic institutions. Having the appropriate tools is one of the levers in the discovery of new medicines and we are therefore engaging in new technologies.

### Strong scientific network

In 2011, we further expanded our relationship with Ablynx and entered into a third agreement to co-discover and co-develop Nanobodies® against two targets in osteoarthritis. Nanobodies® are a novel class of antibody-based therapeutic proteins that combine the advantages of antibodies with those of small-molecule drugs. The agreement with F-Star is another example of our engagement in new technologies. Here our intention is to discover new antibody-derived therapeutics against inflammatory disease targets, using F-Star's modular antibody technology. We initiated our relationship with F-Star in 2010 through Merck Serono Ventures, our corporate venture capital fund.

In 2011, we set up the Merck Serono Israel Bioincubator Fund, a strategic and corporate initiative targeting Israeli biotechnology start-ups. The fund will offer both seed financing and the opportunity to use certain labs at Merck Serono's Israeli R&D center. We will commit a total of € 10 million to the program over a seven-year period.

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### Oncology: Strong data underscore the potential of Erbitux®

The results of the retrospective analysis of data from the Phase III CRYSTAL trial in metastatic colorectal cancer (mCRC) were published in 2011. The new analysis examined the benefits of first-line treatment with Erbitux® in combination with standard chemotherapy (FOLFIRI) in KRAS wild-type patients, dependent on metastatic site. Results showed that in patients with advanced metastatic disease that had spread beyond the liver, the additional administration of Erbitux® compared to chemotherapy alone led to a significant increase in overall survival of more than five months in palliative treatment.

In 2011, a further analysis of the randomized Phase II OPUS trial demonstrated an association between early tumor shrinkage and long-term median overall survival of more than two years in metastatic colorectal cancer patients with KRAS wild-type tumors who were treated with Erbitux® in combination with the standard chemotherapy FOLFOX. These results confirm earlier outcomes of a similar analysis of the pivotal Phase III CRYSTAL trial.

In 2011, recruitment was completed into the pivotal Phase III EXPAND clinical trial investigating the efficacy of Erbitux® in patients with advanced gastric cancer. This international study has recruited more than 870 patients since commencing enrollment in 2008.

Since 2007, we have been studying the efficacy and safety of the cancer immunotherapy Stimuvax® in patients with inoperable stage III non-small cell lung cancer in the pivotal Phase III START trial. We completed patient recruitment in 2011.

Merck Serono entered into two collaboration agreements with Ono Pharmaceutical to strengthen its multiple sclerosis and cancer franchises. The oncology agreement provides Ono with rights to co-develop and co-market Stimuvax® in Japan.

We completed patient enrollment into the global pivotal Phase III clinical study CENTRIC in June. In this trial, we are assessing the safety and efficacy of cilengitide in glioblastoma, the most aggressive type of brain tumor. Cilengitide is the first integrin inhibitor in oncology to have entered Phase III clinical development.

In December 2010, we signed a worldwide research and development agreement with sanofi-aventis U.S. Inc. This collaboration provides mutual access to experimental compound combinations. The novel combinations include one of our MEK inhibitors as well as two early-stage development compounds from sanofi-aventis. The trials in solid tumors are in Phase I.

Overall, we are investigating five projects in Phase I trials in patients with solid tumors and hematological malignancies. A further four Phase II trials are underway in head and neck cancer, non-small cell lung cancer, colorectal cancer as well as prostate cancer.

In order to be able to forge ahead with the most promising projects, we intend to terminate or transfer to partners projects with risk-benefit profiles that do not meet our requirements. We therefore discontinued clinical development of Erbitux® in triple-negative breast cancer as well as of the immunomodulator IMO-2055. Clinical development of one of the two c-Met kinase inhibitors in Phase I was also terminated based on the available comparative data.

Stimuvax® cancer immunotherapy:  
Development progressing on schedule

Early-stage pipeline:  
Priority given to the most promising projects

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### Multiple sclerosis: Indication extension for Rebif® approved in the European Union

In Neurodegenerative Diseases, our focus is on new therapeutic options for patients with multiple sclerosis. In November, the Committee for Medicinal Products for Human Use of the European Medicines Agency (EMA) issued a positive opinion on our application to extend the indication for our MS drug Rebif®. EU marketing authorization was granted in January 2012. The indication extension relates to the use of Rebif® in patients who have experienced a single demyelinating event, an early sign of the disease, and who are at high risk of converting to MS. The marketing authorization application submitted in June was based on the results of the two-year REFLEX study with over 500 patients. Rebif® significantly delayed the onset of MS in these patients. A three-year double-blind extension of the REFLEX study, called REFLEXION, is currently ongoing in order to provide long-term follow-up data. We also submitted marketing authorization applications for the new indication in Canada and Switzerland.

Compounds to treat MS added to pipeline

We further expanded our portfolio of compounds for the treatment of MS, acquiring from Peptimmune the global exclusive rights to plovamer (PI-2301), a second-generation peptide copolymer thought to enhance the regulatory response of the immune system, which has successfully completed Phase Ib trials in MS. In addition, we were granted a license by Ono Pharmaceutical to develop and commercialize ONO-4641, an oral investigational sphingosine-1-phosphate (S1P) receptor modulator, in Phase II in MS, worldwide except in Japan, Korea and Taiwan.

### Parkinson's disease: Rights to safinamide returned

In October, we announced our decision to return all rights for safinamide in Parkinson's disease and other therapeutic applications to our partner Newron Pharmaceuticals effective April 2012. Our decision was made as part of the ongoing review and re-prioritization of our R&D pipeline. In Merck Serono's view, safinamide has a more limited market potential than originally expected. We fully wrote off the book value of safinamide by the end of the second quarter of 2011. We will meet our contractual and ethical commitments regarding the ongoing clinical development program for safinamide in Parkinson's disease and will work with Newron to conduct an appropriate transfer of the program to Newron. This applies in particular to the two Phase III studies MOTION and SETTLE, for which patient recruitment was completed in the summer. We will continue to pursue innovative therapeutic options in the field of neurodegenerative diseases above and beyond MS and are currently investigating suitable indications.

### Fertility: Advancing the science of infertility treatment

Up to € 1 million granted to promote applied fertility research projects

The objective of our Fertility research and development work is to help infertile couples in every phase of the reproductive cycle from follicular development to pregnancy. We focus on drugs, delivery technologies and support services for the benefit of patients. Our innovative drugs address unmet medical needs and our application devices offer patients ease of use. Our research efforts concentrate on non-invasive methods to assess embryo quality and on the successful implantation of the embryo into the uterus.

Complementary to our own activities, we are supporting applied fertility research projects through the Grant for Fertility Innovation program. In 2011, for the second time, we awarded up to € 1 million to support five innovative projects with the same common goal: to improve the chances for couples to conceive.

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### **Endocrinology: Expanding the understanding of our drugs**

The aim of our Endocrinology research and development work is to offer patients with growth disorders and selected metabolic diseases new therapeutic options. We also want to continuously enhance the understanding of the products in our portfolio. In the PKU area we started the Phase IIIb trial SPARK in June. It is investigating the effects of Kuvan® in 50 European PKU patients younger than four years of age, for whom the drug is not yet approved. Additionally, with KAMPER, a multinational observational registry which started in 2009, we are studying the long-term safety of Kuvan®. Patient recruitment is still underway. For our growth hormone Saizen® we are using a two-pronged strategy in select countries to investigate how patients can achieve their full outcome potential. In the multinational observational study ECOS, which began in February, we are assessing patient adherence and its impact on treatment outcomes. The study aims to recruit and monitor at least 1,000 pediatric patients receiving Saizen® therapy via the Easypod™ injection device over a period of up to five years. In the pharmacogenetic program PREDICT, we are studying genetic markers that correlate with response to growth hormone treatment.

### **Rheumatological diseases: Treating lupus and damaged cartilage**

Our research and development work in Rheumatology is centered on molecules that modulate key pathogenic mechanisms. We are investigating the recombinant protein atacicept as a potential treatment for systemic lupus erythematosus (SLE) in a clinical trial. SLE is a chronic autoimmune disease that primarily affects women. As recommended by the Independent Data Monitoring Committee of the trial, the high-dose arm was discontinued in February because the risk-benefit profile for this group of patients was considered unfavorable. The study is being continued with the lower-dose and placebo groups.

We reset the SLE program to Phase II since the optimum dose regimen for Phase III trials still needs to be identified. In 2011, we started a new Phase I study in lupus nephritis (LN), a particularly severe form of SLE affecting the kidneys. Following a fatal cardiovascular event, the study was discontinued. The causality between this fatal event and the administration of atacicept is still being investigated.

Fibroblast growth factor 18 (FGF 18) is another recombinant protein in our rheumatology pipeline. Thanks to its novel mechanism of action, it could be the first disease-modifying treatment for osteoarthritis and the repair of damaged cartilage. We successfully completed the second Phase I trial of this agent in patients with osteoarthritis of the knee joint. Phase II trials are scheduled to begin in 2012. We are also investigating the efficacy of FGF 18 in the treatment of knee cartilage injury in an ongoing Phase II study.

Second Phase I trial completed for FGF 18 for osteoarthritis of the knee joint

## The Divisions of the Merck Group → 2/4

# Consumer Health Care

→ The *Consumer Health Care* division offers over-the-counter products for preventive health care and the self-treatment of minor ailments. The portfolio includes global branded products trusted by consumers and backed by science. Our Consumer Health Care business operates successfully in Europe, Latin America, Asia and Africa.

### Key products

- **Mobility:** Products to strengthen the joints and relieve pain, including the brands **SEVEN SEAS®**, **FLEXAGIL®** and **KYTТА®**
- **Everyday health protection:** Probiotic multivitamin products from the **BION®** and **MULTIBIONTA®** ranges; vitamins and minerals sold under brand names such as **CEBION®** and **DIABION®**
- **Women's and children's health:** **FEMIBION®**, products with folic acid and **METAFOLIN®** for pregnant and nursing women; **KIDABION® (HALIBORANGE®)**, a vitamin product range for children
- **Cough and cold:** Cold treatment **NASIVIN® (ILIADIN®)**

### Key developments in 2011

- Growth course significantly expanded; particularly strong growth in Germany, France and Belgium as well as in key future markets such as Russia, Brazil and India. Sales decline in the United Kingdom, Poland, Mexico, and Indonesia; sales grow in all regions
- Total revenues increase by 5.1%, operating result more than triples following one-time effects in 2010
- Improved cost structure and profitability lead to an ROS of 9.3%
- Brands strengthen further; double-digit sales growth for **BION®**, **KYTТА®** and **CEBION®**
- Innovative business models such as Intelligent Healthcare Solutions® in Germany and Lamberts Healthcare in the United Kingdom post sales growth of 76% and 6.8%, respectively

→ [Consumer Health Care](#)

### Strong growth

The Consumer Health Care division posted significantly stronger growth than in 2010, outperformed the market and substantially raised its profitability. Global sales of our strategic and local brands developed well. Thanks to our well-balanced portfolio, we grew in established and emerging markets.

### Focus on four health themes

Consumer Health Care specializes in over-the-counter pharmaceutical products and focuses on four health themes: Cough and Cold, Mobility, Everyday Health Protection, and Women's and Children's Health. The main distribution channels for our products are pharmacies as well as retail chains, drug stores and mail order in some countries and certain markets.

### Consumer Health Care | Key figures

€ million	2011	2010	Δ in %
Total revenues	496	472	5.1
Gross margin	339	317	6.9
R&D	23	25	-8.1
Operating result	46	14	231
Exceptional items	-	-	
Free cash flow	40	45	-12
Underlying free cash flow	40	45	-12
ROS in %	9.3	2.9	

### General business performance

Total revenues of the Consumer Health Care division rose by 5.1% to € 496 million in 2011. Organic growth was 4.9%, which exceeded average market growth of 4.5%.

The operating result of the division more than tripled to € 46 million. This was due to the fact that the division was less impacted by negative one-time effects than in 2010. As part of systematic efforts taken primarily in the fourth quarter to improve the division's cost structure, marketing, selling and administration expenses declined. ROS amounted to 9.3%, which also represented a significant improvement over the previous year's level of 2.9%.

The division's EBIT was € 46 million compared to € 14 million in 2010. Free cash flow was € 40 million. At € 23 million, R&D spending was slightly lower than in 2010.

### Strong brands

Bion® – our top-selling brand worldwide

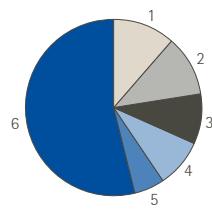
We have a well-balanced portfolio of global and local brands that in many countries rank either first or second in their respective market segments. Innovation based on scientific evidence and consumer insights is our top priority when developing our pipeline. Recent launches include Bion® Energie Plus, Bion® Allergo and Femibion® Intima.

→ [Consumer Health Care](#)

With the exception of Seven Seas®, all our key brands generated strong single- and double-digit sales increases. Global sales of the Bion® brand grew by 17% to € 63 million, with France accounting for € 36 million of this amount. At € 43 million, sales of Femibion® rose by 4.7%. Sales of Nasivin®, the well-known brand that turned 50 in 2011, increased by 4.7% to € 49 million. Sales of the other local brands in the Cough & Cold category grew by 7.8% to € 55 million. Sales of the Kytta® brand rose by 18% to € 18 million and sales of Cebion® increased by 13% to € 30 million. Seven Seas® sustained a slight sales decline of 2.3% to € 43 million owing to a difficult market environment in the United Kingdom, its core market.

**Top five brands by sales in 2011**

€ million / % of divisional sales



	€ million	%
1 Bion®	63	13%
2 Nasivin®	49	10%
3 Femibion®	43	9%
4 Seven Seas®	43	8%
5 Cebion®	30	6%
6 Other products	266	54%

**More than two-thirds of sales generated in Europe**

By region, Europe accounts for 69%, Latin America for 17%, Asia, Africa, Australasia for 13%, and North America for 1% of our sales. Europe thus remains our largest market with sales of € 341 million, an increase of 3% over 2010. We performed well in emerging markets such as India, Russia and Brazil, with growth rates of 22%, 21% and 20%, respectively.

**France is our largest market**

Number one in the French OTC market

France remains our top-selling country, recording sales of € 104 million in 2011, 3.2% more than in 2010. Our subsidiary is meanwhile the number-one company in the French consumer health care market. The Bion® range again performed well, also thanks to a new advertising campaign. Sales rose by 13% to € 36 million. Bion® Energie Plus was launched in 2011. In addition to the ingredients of classic Bion®-3 – vitamins, minerals and probiotic bacteria – the new product contains extracts from the Chinese medicinal herb schisandra, ginseng and a special co-enzyme to replenish the body's energy reserves.

**Germany**

We generated sales of € 62 million in Germany, which was 8.3% more than in 2010. Sales of Intelligent Healthcare Solutions®, our brand of diet and beauty products for direct sales, for example via the home shopping networks QVC and HSE24, developed well, increasing by 76% to € 18 million. Sales of Kytta® remained stable despite heavy investment by competitors. Additional indications were approved, namely acute back pain and knee osteoarthritis.

→ [Consumer Health Care](#)

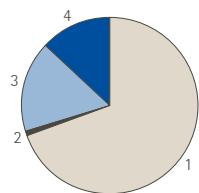
### United Kingdom and other European countries

In the United Kingdom, which is currently characterized by a generally difficult market environment, sales declined by 3.4% to € 52 million. We expanded the well-established Seven Seas® portfolio to include a range of health oils. These are fish oil products with different combinations of health-promoting additives, such as calcium, zinc, biotin, L-cysteine, garlic, gingko and vitamin B1. Sales of nutritional supplements for direct sales by our British subsidiary Lamberts Healthcare rose by 6.8%.

Belgium, another important European market, saw a 6.1% increase in sales to € 29 million, for which Femibion®, Bion®, and the local Mobility brands, were responsible. We performed strongly in Russia, generating sales of € 12 million. The majority of these sales were attributable to Nasivin®, which posted growth of 24%.

### Consumer Health Care | Sales by region

€ million/% of total divisional sales



1 Europe	341	69%
2 North America	4	1%
3 Latin America	86	17%
4 Asia, Africa, Australasia	63	13%

### Latin America

Strong growth in Brazil, Venezuela and Chile

The Consumer Health Care division also performed well in Latin America, where sales grew by 6.6%. We also recorded a 20% increase in sales in Brazil to € 9.5 million. Sales in Venezuela surged by 42% to € 21 million. Sales of Cebion®, our main product in this market, advanced by 66%. In Chile, sales increased by 22%. Bion® is a success story in this market, where sales of this product grew by 35% to € 4.2 million. In Mexico, our largest market in Latin America, sales declined by 11% to € 31 million. This was mainly due to inventory reductions by a key wholesaler and the sharp drop in sales of Diabion®, a vitamin product for people with diabetes, following strong rebate activities in 2010.

### Asia, Africa, Australasia

Sales also rose in Asia, increasing by 12%. India was a growth driver of the region, posting a 22% increase in sales. Nasivion® became the leading nasal spray prescribed by physicians, yet it is also available without a prescription. Nasivion® sales in India grew by 29% and totaled € 4.3 million. Indonesia, our largest market in the region, saw a 13% decline in sales, whereas business in Malaysia and the Philippines remained stable. South Africa, our largest market in Africa, again achieved a slight improvement in sales, which totaled € 9.5 million.

## The Divisions of the Merck Group → 3/4

# Merck Millipore

→ The *Merck Millipore* division is a leading supplier to the global life science industry, offering a broad range of innovative products and services used in the research, development and production of biotech and pharmaceutical drugs as well as general laboratory applications.

## Key product groups

- Products and services to support life science researchers in both industry and academia who are seeking to understand complex biological systems and identify new therapeutic targets. Examples include biomarker discovery assays, cell analysis tools and flow cytometry instrumentation.
- Laboratory instrumentation and services for a wide variety of life science research and industrial applications, including organic and inorganic chemistry, chromatographic analysis, and environmental monitoring in the pharmaceutical industry. Examples include laboratory chemicals, laboratory water purification systems, microbiology media, test kits and systems.
- Products and services that enable pharmaceutical and biopharmaceutical manufacturers to improve productivity, minimize complexity, reduce risk and lower cost – from scale-up to full-scale production. Examples include raw materials, active pharmaceutical ingredients (API), cell culture media, excipients and regulatory services, as well as products to support clarification, purification, viral clearance, sterile filtration and process development.

## Key developments in 2011

- Strong sales performance driven by growth in the Americas and Asia and demand from biopharma and laboratory customers
- BioScience, Lab Solutions and Process Solutions strengthen their offerings through acquisitions of Amnis Corporation, Biotest AG's microbiology business and Beijing Skywing Technology Co., Ltd.
- New, state-of-the-art Biopharmaceutical Technical and Training Center opened in Shanghai, China
- New Merck Millipore brand launched

→ [Merck Millipore](#)

### Solid growth in a challenging market

Despite a global economic downturn, the Merck Millipore division, which was formed after Merck's acquisition of Millipore in 2010, reported solid organic revenue growth in 2011. This was mainly achieved through new product launches and acquisitions. The division's three business units – BioScience, Lab Solutions and Process Solutions – all increased their sales in 2011.

Total revenues for 2011 were € 2,393 million, a 48% increase over 2010. Organic revenue growth was 4.3%. Foreign exchange rates reduced revenue growth by 1.2% and acquisitions added 45% growth for the year.

#### Merck Millipore | Key figures

€ million	2011	2010	Δ in %
Total revenues	2,393	1,613	48
Gross margin	1,387	845	64
R&D	135	74	80
Operating result	226	48	-
Exceptional items	-	-	-
Free cash flow	141	-4,672	
Underlying free cash flow	309	263	17
ROS in %	9.4	3.0	

The gross margin of the division increased by 64% to € 1,387 million in 2011. Gross margin in 2010 included one-time charges of € 86 million for the step-up of inventories from Millipore as part of the purchase price allocation.

Higher spending on marketing and sales and R&D

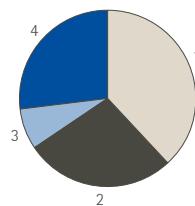
To support future growth, the division continued to increase operational spending, making investments in marketing and selling as well as in R&D. The operating result totaled € 226 million in 2011 compared to € 48 million in 2010. The operating result includes € 190 million of amortization of intangible assets.

Merck Millipore's solid performance was led by sales growth in North America, Latin America and Asia. As a leader in the life science industry on the forefront of emerging technologies, all three business units of the Merck Millipore division continued to invest in innovation, which was reflected in R&D spending. The division's long-term growth is tied to its ability to bring new, value-added products and services to the marketplace – to develop better, simpler and more effective solutions to customers' productivity and safety challenges.

→ [Merck Millipore](#)

### Merck Millipore | Sales by region

€ million / % of divisional sales



1 Europe	906	38%
2 North America	648	27%
3 Latin America	183	8%
4 Asia, Africa, Australasia	646	27%

#### BioScience: Expanding its product portfolio

The BioScience business unit provides products and services to support life science researchers in both industry and academia. It consists of two business fields: Life Science and Discovery & Development Solutions.

BioScience reported sales of € 421 million in 2011. Growth was driven by a broad portfolio of products and services. Geographically, sales gains were primarily driven by Asian and Latin American markets. BioScience sales were fueled by strong growth in strategic market segments such as multiplexing and flow cytometry and hampered by a slowdown in academic and government funding. New BioScience product innovations, such as the Scepter™ handheld automated cell counter and the Samplicity™ filter system, continued to win industry accolades in 2011 and establish Merck Millipore as a life science leader.

In 2011, with the acquisition of Seattle-based Amnis Corporation, the BioScience business unit gained access to leading technology in high-speed cell imaging instrumentation used in flow cytometry applications. This acquisition, which complements the business unit's Guava product range, puts Merck Millipore at the forefront of cell analysis and helps the division address several unmet customer needs.

#### Lab Solutions: Leveraging its global footprint

The Lab Solutions business unit supplies laboratory chemicals, instrumentation and services for a wide variety of life science research and industrial applications, most notably for the pharmaceutical industry. It comprises three business fields: Lab Essentials, Lab Water and BioMonitoring.

In 2011, Lab Solutions generated sales amounting to € 1,006 million. Growth was fueled by strong sales in Lab Water and BioMonitoring. Geographically, growth was strongest in the Asia, Africa, Australasia region as well as in North America and Latin America. In Europe, growth was slower due primarily to macroeconomic weakness.

Sales in Asia and Latin America rise sharply

→ [Merck Millipore](#)

Acquisition of Biotest's  
microbiology business  
expands the product  
portfolio

Larger range of products  
for upstream production  
of biopharmaceuticals

Innovation was a major driver for Lab Solutions. An example is a new collection and recycling program developed by Lab Water that addresses customer requests for sustainable solutions.

In 2011 Lab Solutions expanded its product portfolio with the acquisition of Biotest AG's microbiology business, which includes the Hycon and heipha Dr. Müller GmbH product ranges. This acquisition has strengthened the BioMonitoring business field and the division's position in the fast-growing industrial microbiology testing market.

#### **Process Solutions: Delivering innovative products and services**

The Process Solutions business unit provides fully integrated solutions that enable pharmaceutical and biopharmaceutical manufacturers to develop and produce drugs safely and efficiently. It consists of two business fields: Pharm Chemicals Solutions and Biopharm Process Solutions.

Process Solutions sales totaled € 956 million in 2011. Growth was driven by strong performance in emerging markets and sales to global biotech customers, who increased their production of biologic drugs and vaccines in the second half of the year.

Process Solutions stepped up its new product launches in 2011 with the introduction of a number of new products, including high-quality customized cell culture media, the Mobius® CellReady 200 L bioreactor and Eshmuno® HCX chromatography media.

In 2011, Process Solutions also strengthened its upstream processing offerings to customers in China, through the acquisition of Beijing Skywing Technology Co., Ltd., a leading supplier of cell culture media, corresponding technical services and bioreactors for the biotech industry in China.

## The Divisions of the Merck Group → 4/4

# Performance Materials

→ Liquid crystals from Merck are used throughout the world, in LCD TVs, monitors, tablet computers, notebooks, and mobile phones. We also focus on materials for energy-saving lighting using LEDs (light-emitting diodes) and OLEDs (organic LEDs), as well as for OLED smartphone displays. Pigments for the coatings, plastics and printing industries as well as pigments and active ingredients for cosmetic applications are another important part of Performance Materials portfolio. The division is the market leader for pearl luster effect pigments – a highly specialized niche within the pigment market.

## Key products

- LICRISTAL® – Liquid crystal mixtures for displays
- ISIPHOR™ – Phosphors for energy-efficient, high-quality LED lighting
- LIVILUX® – Materials for OLEDs (organic light-emitting diodes) in displays and for innovative lighting
- ISISHAPE® – Efficient, eco-friendly materials for structuring solar cells and touchscreens
- IRIODIN®, XIRALLIC®, COLORSTREAM® – Effect pigments for use in coatings, packaging and product design
- TIMIRON®, COLORONA®, RONAFLAIR®, XIRONA® – Effect and functional pigments for cosmetic formulations
- RONACARE® – Cosmetic active ingredients for skin care

## Key developments in 2011

- Continuing strong demand for high-tech liquid crystals from Merck: Total revenues of the LC business rise by 8.0% despite pressure on prices
- Despite a sales decline of 5.4% in the Pigments & Cosmetics business unit, total revenues of the division increase to € 1,467 million
- After the earthquake in Japan on March 11, production of XIRALLIC® effect pigments resumes at the Onahama site in May
- Decision to commission a new XIRALLIC® production line in Germany to increase supply reliability
- Reactive mesogens add new impetus to the LC business
- Divestment of the Crop BioScience business to Novozymes A/S in Denmark

→ [Performance Materials](#)

### A broad portfolio

The Performance Materials division comprises our materials businesses and activities. The product portfolio ranges from liquid crystal mixtures for flat-panel LC displays to effect pigments and cosmetic active ingredients. The Performance Materials division consists of the Liquid Crystals and the Pigments & Cosmetics business units. Advanced Technologies develops materials for lighting technologies, photovoltaics and energy storage.

### Restrained growth

Despite declining demand from customer segments of the Pigments business, as well as the partially stagnating LC display market, total revenues of the division rose in 2011 by 1% to € 1,467 million, from € 1,452 million in 2010. While the division reported an underlying core operating result of € 525 million, the divestment of the Crop BioScience business in February hindered stronger growth of total revenues. Exceptional items amounted to € 157 million from the divestment of the Crop BioScience business to Novozymes A/S in Denmark.

### Performance Materials | Key figures

€ million	2011	2010	Δ in %
Total revenues	1,467	1,452	1.0
Gross margin	874	951	-8.1
R&D	134	131	2.9
Operating result	525	576	-8.9
Exceptional items	157	-1	-
Free cash flow	693	542	28
Underlying free cash flow	492	549	-10
ROS in %	35.8	39.7	

High level of R&D spending maintained

The Performance Materials division generated more than 70% of its total revenues with liquid crystals. The 8.0% increase in total revenues of the LC business was offset by a decline in the Pigments & Cosmetics business unit, where total revenues were 5.4% lower than in 2010. The division's gross margin decreased by 8.1% to € 874 million from € 951 million in 2010. Consequently, the operating result fell by 8.9% to € 525 million from € 576 million in 2010. This decline was mainly attributable to decreased production capacity utilization at times, increased raw materials costs, as well as additional expenses for new product launches. However, the division's profitability was lower than in 2010; return on sales (ROS) amounted to 35.8% in 2011, compared to 39.7% in 2010. In order to defend and expand our leadership position, we invested steadily in research and development. R&D spending rose to € 134 million in 2011 from € 131 million in 2010.

The earthquake and tsunami that struck Japan in March 2011 and paralyzed the infrastructure in the north-eastern part of the country hardly impacted the division's liquid crystals business. We took advantage of having multiple LC production sites in Asia, using all three to supply our customers in this emergency situation. While the natural disaster did cause damage to the pigments production plant in Onahama, this only slightly impacted the pigments business in the first half of 2011. Production at this site

→ [Performance Materials](#)

resumed in May after an interruption of only four weeks. Merck will additionally begin producing Xirallic® pigments, which are in high demand for automotive coatings, at its German site in Gernsheim in 2012.

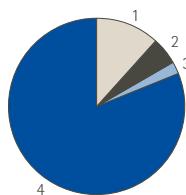
### Liquid Crystals: Higher demand in a stagnating market

Falling prices of televisions impact display producers

Flat-screen display manufacturers particularly felt the economic impact of the sharp decline in television prices in 2011. Although our customers responded to the overall weaker economic situation by reducing inventories, total revenues of the Liquid Crystals business unit increased by 8.0% to € 1,094 million from € 1,013 million in 2010. The effects of declining prices and negative foreign exchange rate effects were offset by high sales volumes. This was attributable to the continuing strong demand for our broad portfolio of innovative liquid crystal mixtures used in flat-panel TVs, computer monitors, smartphone touchscreens, and tablet computers. Therefore, the Liquid Crystals business unit, which accounts for the majority of the division's total revenues, continued its solid growth in 2011. This stemmed from the ongoing demand, particularly for IPS (in-plane switching) technologies for smartphone touchscreens and PS-VA (polymer-stabilized vertical alignment) as well as VA (vertical alignment) technologies for TV displays.

### Performance Materials | Sales by region

€ million /% of divisional sales



	€ million	% of divisional sales
1 Europe	167	11%
2 North America	74	5%
3 Latin America	30	2%
4 Asia, Africa, Australasia	1,194	82%

Success with reactive mesogens

In addition, the business with reactive mesogens developed very positively; sales soared to € 19 million from € 4 million in 2010. Reactive mesogens are polymerizable liquid crystals that can be used, for instance, as a material for optical films, including film-patterned retarder (FPR) products for 3D screens.

With the inauguration of an application laboratory for liquid crystals in Shanghai, we laid the cornerstone for further intensifying cooperation with our customers. We invested around € 1 million in this center.

→ [Performance Materials](#)

### **OLED technology progressing rapidly**

Besides liquid crystal technology, our researchers are working on materials for innovative displays. The special focus of development here is on OLED materials, which are already being used in mobile phones and MP3 players. Having commissioned the OLED Application Development Laboratory (ADL) in Poseung, South Korea, in October, we are further expanding our position in the OLED market of this country. Apart from applications in the display sector, OLED materials can also be used for lighting. They make it possible to create new types of lighting elements that offer diffuse, glare-free light and are extremely energy-efficient. They lend a special atmosphere not only to living spaces, but also any setting requiring unique lighting.

### **Broad range of innovative LED lighting materials and high-tech materials for photovoltaic technologies**

In addition, our researchers are working on innovative lighting materials for LEDs, which are an alternative to conventional light bulbs and energy-saving lamps. Light-emitting diodes increase the color intensity of light and display, consume less energy and help reduce CO<sub>2</sub> emissions.

In the photovoltaics sector, we are developing materials and printing technologies for solar cell production. With the isishape® range, we offer manufacturers printable structuring materials that improve solar cell efficiency and permit eco-friendly production processes. Parallel to this, we are working with leading partners around the world on new technologies, for example dye-sensitized solar cells that imitate nature's photosynthesis process.

### **Pigments & Cosmetics: Economic developments and inventory reductions impact business**

As a result of a decline in demand, total revenues of the Pigments & Cosmetics business unit decreased to € 372 million in 2011 from € 393 million in 2010. Besides the natural disaster in Japan and the associated production outages at our site in Onahama, global economic developments also impacted our Pigments business. Consequently, after a strong start to the year, many of our customers began to reduce inventories. Business with cosmetic active ingredients performed well in the course of the year.

Owing to continuously rising energy and raw material costs, effective November 1, Merck increased its prices for pigments and cosmetic raw materials by 5% to 15% – in individual cases by as much as 30%. The prices for Xirallic® pearl effect pigments were also raised. These pigments are used in high-quality automotive coatings and continue to be a mainstay of our Pigments business. Our decision to establish a second production site for Xirallic® effect pigments outside of Japan will enable us to significantly increase our supply reliability for this very important part of our portfolio.

In 2011, Merck significantly strengthened its expertise both in cosmetic functional fillers and active ingredients as well as in the core business with pearl effect pigments. In addition, we continue to focus our innovation efforts on high value-added segments. We are achieving this by developing products that make it possible to design entirely new effects and by resolutely expanding our highly specialized applications expertise.

Alternatives to light bulbs and energy-saving lamps

Prices for pigments and cosmetic raw materials raised

## Corporate and Other

Corporate and Other comprise Group administration expenses, the financial result, taxes as well as certain exceptional items not allocated to the individual divisions.

Group administration expenses relate primarily to Merck KGaA and consist of typical holding company functions. These include, for example, the Group finance and accounting, tax, procurement, communications, and human resources departments to the extent that their services cannot be allocated to the divisions. Corporate costs also include expenses for central, non-allocated IT functions and corporate IT projects in connection with the expansion and harmonization of IT systems within the Merck Group.

The operating result of Corporate and Other totaled € -116 million in 2011 compared to € -90 million in 2010. In 2011, exceptional items amounted to € -30 million (2010: € -68 million) and mainly include expenses of € 29 million owing to provisions for environmental protection measures. Expenses reported as exceptional items for this segment in 2010 were primarily due to litigation. The financial result was € -286 million compared to € -252 million in 2010. At € -222 million (2010: € -220 million), tax expenses consist of corporation and trade income taxes for the companies domiciled in Germany as well as comparable income taxes for companies domiciled abroad. This item contains not only effective taxes but also deferred taxes, which take into consideration the difference in the carrying values between the tax accounts of the Group companies and the consolidated balance sheet. The latter result primarily from the purchase price allocations for Serono and Millipore.

Free cash flow amounted to € -913 million in 2011 compared to € -736 million in 2010. In 2011, payments amounting to € 119 million (2010: € 241 million) were made in connection with existing legal risks. Payments to externally finance pension obligations of Merck KGaA (CTA) lowered free cash flow in 2011 by € 302 million. Cash outflows from interest paid less interest received amounted to € 163 million in 2011. This was € 66 million more than in 2010 (€ 97 million). This increase is due to the interest payment date in March 2011 for major bonds issued in 2010 in order to finance the Millipore acquisition. In addition, free cash flow includes Group administration expenses and tax payments. The balance of tax payments and tax refunds increased to € 358 million in 2011 from € 317 million in 2010.

In the reconciliation of free cash flow to underlying free cash flow, cash inflows from the divestment of the Generics business amounting to € 41 million (2010: cash outflows of € 240 million) as well as the payments for the external financing of pension obligations of Merck KGaA (CTA) amounting to € 302 million were eliminated in 2011. Underlying free cash flow of Corporate and Other amounted to € -652 million, which was 31% lower than in 2010.

### Corporate and Other | Key figures

€ million	2011	2010	Δ in %
Total revenues	-	-	-
Gross margin	-	-	-
R&D	-	-	-
Operating result	-116	-90	30
Exceptional items	-30	-68	-55
Free cash flow	-913	-736	24
Underlying free cash flow	-652	-496	31

## Risk Report

Risks are inherent to entrepreneurial activity. We have put systems in place to identify risks at an early stage and minimize them by taking appropriate action. Currently no risks can be identified that could jeopardize the continued existence of the Merck Group.

### Risk and opportunity management

Merck is part of a complex, global business world and is therefore exposed to a multitude of external and internal influences. Every business decision is therefore based on the associated risks and opportunities. Through our risk management activities, we recognize, assess and manage risks early on and implement appropriate measures to minimize them. Opportunity management is conducted in the operating units on the basis of the corporate strategy. More information can be found in the Report on Expected Developments starting on page 91.

Within the context of the Group-wide risk management process, the division heads, managing directors of Merck subsidiaries, and the heads of Group functions are specified as employees with responsibility for risks. Every six months, these risk managers assess their active risk status and report their entire risk portfolio to Risk Management. Risks are assessed based on their potential impact on EBIT and the likelihood of their occurrence. Risk Management uses this information to determine the current risk portfolio for the Merck Group and for the individual legal entities, reporting this to the Executive Board, the Supervisory Board and the Finance Committee. Significant changes in the assessment of already known risks as well as new, significant risks are reported on an ad hoc basis.

### Internal control system for the consolidated accounting process

The objective of the internal control system for accounting is to implement controls that provide assurance that the financial statements are prepared in compliance with the relevant accounting laws and standards. It covers measures designed to ensure the complete, correct and timely transfer and presentation of information that is relevant for the preparation of the consolidated financial statements and the management report of the Merck Group.

The control system is subject to continuous further development and is an integral component of the accounting and financial reporting processes in all relevant local units and Merck Group functions. With respect to the accounting process, the internal control system measures are intended to minimize the risk of material false statements in the consolidated accounting process of the Merck Group.

#### Key tools

The internal control system is geared to ensuring the accuracy of the consolidated accounting process and the preparation of compliant financial statements. The Group function Accounting & Subsidiaries centrally steers the preparation of the consolidated financial statements of Merck KGaA as the parent company of the Merck Group. This Group function defines the reporting requirements that all the Merck subsidiaries must meet as a minimum requirement. At the same time, this function steers and monitors the scheduling and process-related requirements of the consolidated financial statements.

The Group-wide accounting guidelines form the basis for the preparation of the statutory financial statements of the parent company as well as of the German and foreign subsidiaries; the guidelines are adapted to reflect changes in the financial regulatory environment and are updated in accordance with

→ [Risk Report](#)

internal reporting requirements. One of the requirements of the Group-wide guidelines is to present Group-internal business processes as the basis for proper settlement of intercompany balances. Additional controls have been implemented in the consolidation process.

The Group function Accounting & Subsidiaries also ensures the timely central management of changes to the equity holding structure and correspondingly adapts the Merck Group's scope of consolidation.

The individual companies have a local internal control system. Where finance processes are handled by a Shared Service Center, the internal control system of the Shared Service Center is additionally applied. They ensure that accounting complies with IFRS (International Financial Reporting Standards) and with the Merck Group accounting guidelines. The Group function Accounting & Subsidiaries provides support to the local contacts and ensures a consistently high quality of reporting throughout the entire reporting process.

The accounting process is designed at all levels to ensure a clearly defined segregation of duties and assignment of responsibilities to the units involved in the accounting process at all times within the scope of continuous dual control.

For the assessment of balance sheet items, the Group function Accounting & Subsidiaries closely cooperates with Merck Group Risk Management in order to correctly reflect potential balance sheet risks. For special issues, such as the evaluation of intangible assets and pension obligations, external experts are additionally involved where necessary. For the Group accounting process, Merck globally uses a standard SAP software tool. Via a detailed authorization concept to limit user rights on a need-to-have basis, the system contains both single entity reporting and the consolidated financial statements.

The effectiveness of Merck's internal control system with regard to accounting and the compliance of financial reporting of the individual companies is confirmed by both the local managing director and the head of finance by signing the single entity reporting. All the structures and processes described are subject to constant review by Internal Auditing based on an annual audit plan specified by the Executive Board. The results of these audits are dealt with by the Executive Board, the Supervisory Board and the Finance Committee.

The internal control system at Merck makes it possible to lower the risk of materially false accounting statements to a minimum. However, no internal control system – regardless of its design – can prevent a residual risk.

### Business-related risks

Total revenues and the operating result of the Merck Group depend on a large number of pharmaceutical and chemical products for various industries. This diversification lowers risk since the markets differ in their structure and economic cycles. This is also an expression of the Merck strategy to remain an integrated pharmaceutical and chemical company. Merck integrates its risk management system into the ongoing business planning processes. Potential negative developments, for example changes in customer demand or new political framework conditions, are described and evaluated in the Risk Report. We can, therefore, take countermeasures in a timely manner if any events lead to deviations from the business plan. Risks in connection with investment decisions are minimized by the use of detailed guidelines.

→ [Risk Report](#)

### Political and regulatory risks

As a global company, Merck faces political and regulatory changes in many countries and markets. In 2011, increasingly restrictive requirements were imposed in the pharmaceutical environment in terms of drug pricing, reimbursement and approval, a trend that can be seen in many countries. These requirements can negatively impact the profitability of our products and jeopardize the success of market launches and new approvals. Close communication with health and regulatory agencies serves as a preventive measure to avert risks. The destabilization of political systems, possible erection of trade barriers and monetary policy changes can lead to declines in sales in certain countries and regions. Diversification in terms of products, industries and regions serves to mitigate potential negative effects.

### Research and development risks

For Merck, innovation is a major element of the strategies of its Pharmaceuticals and Chemicals business sectors. Research and development projects can experience delays, expected budgets can be exceeded or targets remain unmet. Research and development are of special importance to the Pharmaceuticals business sector. Research and development projects are constantly monitored by a portfolio management system. In the course of portfolio management, we regularly evaluate and, if necessary, refocus research areas and all R&D pipeline projects. Sometimes development projects are discontinued after high levels of investment at a late phase of clinical development. Decisions – such as those relating to the transition to the next clinical phase – are taken with a view to minimizing risk. Furthermore, there is a risk that the regulatory authorities either do not grant or delay approval, which can have an impact on earnings. Additionally, there is the danger that undesirable side effects of a pharmaceutical product could remain undetected until after approval or registration, which could result in a restriction of approval or withdrawal from the market.

### Product quality and availability risks

Merck is exposed to product liability risks. This includes complying with the highest quality standards in the production of pharmaceuticals (Good Manufacturing Practices) and is monitored by the regulatory authorities. Quality controls along the entire value chain minimize these risks. This starts with the qualification of our suppliers. Quality controls also include comprehensive quality requirements for raw materials, purchased semifinished products and plants, as well as long-term strategic alliances in the case of supply- and price-critical precursor products.

### Financial risks

As a company that operates internationally and due to its presence in the capital market, Merck is exposed to various financial risks. These are primarily liquidity, default, and market-price risks; fluctuations in the valuation of pension obligations; and risks of changing fair values of tangible and intangible assets.

In order to ensure its continued existence, a company must be able to fulfill its commitments from operating and financial activities at all times. Merck therefore has a central Group-wide liquidity management process to reduce potential liquidity risks. In addition, we have a € 2 billion syndicated multicurrency credit facility, which expires in 2014. This ensures Merck's continuing solvency in case any liquidity bottlenecks occur despite the Group's positive operating cash flow. As our loan agreements do not contain any financial covenants, these agreed lines of credit can be accessed even if Merck's credit rating should deteriorate. In

→ [Risk Report](#)

fiscal 2009, Merck set up a debt issuance program that forms the contractual basis for the issue of bonds. In 2010, the volume of this program was increased from € 5 billion to € 10 billion.

Default risks arise in connection with financial investments, loans and financing commitments as well as receivables in operating business. Due to the impact of the financial crisis in the eurozone, an increased default risk continues to exist. Merck has therefore reviewed all its positions with trading partners in the respective countries and has adjusted its default risks as necessary.

Merck minimizes these risks by spreading its financial positions and the associated active management of its trading partners. Significant financial transactions involving credit risk are only entered into with banks that have a good credit rating and a minimum rating of A- from Standard & Poor's. In addition, Merck's large banking syndicate – the existing credit line of € 2 billion was syndicated by 17 banks – reduces possible losses in the event of default. Nevertheless, the default of individual trading partners cannot be fundamentally excluded, even if they have an excellent credit rating.

Companies with international business operations in different currency and interest rate regions are inevitably exposed to currency and interest risks. Merck is also affected by these market price risks owing to its global group structure and the associated financial transactions, receivables and liabilities in operating business, as well as expected future cash flows from sales and costs in foreign currency. Merck therefore uses derivative financial instruments to minimize currency risks and financing costs caused by exchange rate or interest rate fluctuations. Financial transactions, receivables and liabilities recognized in foreign currency are generally hedged. In certain cases, the company also hedges anticipated sales and future costs for a period of up to three years. (More information can be found in the consolidated financial statements as of page 125).

The values of individual items in the balance sheet are exposed to the risk of changing market and business circumstances and thus also to changes in fair values. The need for write-downs could significantly impact profit and lead to changes in balance sheet ratios. This applies in particular to the high level of intangible assets including goodwill, which have become significantly more important in the consolidated financial statements due to the acquisitions of Serono in 2007 and Millipore in 2010, as well as the related purchase price allocations. Further details can be found under Intangible assets.

Merck has commitments in connection with pension obligations. The present value of these obligations can be influenced by changes in the relevant valuation parameters, e.g. the interest rate or death probabilities. Pension obligations are regularly evaluated by preparing annual actuarial valuations. Part of these obligations is covered by the pension provisions disclosed in the balance sheet, while the other obligations are externally funded (more information can be found under Provisions for pensions and other post-employment benefits). As far as pension obligations are covered by plan assets consisting of interest-bearing securities, shares, real estate, and other financial assets, decreasing or negative returns on these assets can adversely impact the value of the plan assets and thus result in further additions to pension provisions. The risk of market fluctuations in the value of plan assets is reduced by a diversified investment strategy.

#### **Assessments by independent rating agencies**

The capital market makes use of the assessments published by rating agencies in order to assist lenders in evaluating the risks of a financial instrument. Merck is currently rated by the agencies Standard & Poor's and Moody's. Neither Standard & Poor's nor Moody's adjusted their credit ratings for Merck in 2011. While Standard & Poor's issued Merck a BBB+, Moody's issued it a Baa2 rating, both with a stable outlook.

→ [Risk Report](#)

## Legal risks

Merck is exposed to litigation risks. These include in particular risks in the areas of product liability, competition and antitrust law, pharmaceutical law, patent law, tax law, and environmental protection. As a research-based company, Merck has a valuable portfolio of industrial property rights, such as patents and brand names. These can become the target of attacks and infringements.

We are engaged in legal proceedings and government investigations, the outcome of which cannot currently be predicted. We also continue to bear the risks from certain proceedings against companies of the Generics group that we sold to Mylan in 2007. Therefore, Merck continues to be responsible for risks arising from cases concerning drug pricing in the United States. In addition, the Merck Serono division is involved in a licensing dispute in Israel. In the United States, Merck faces certain risks in connection with the commercialization of a product. In Germany, Merck is involved in antitrust proceedings concerning its exclusive distribution agreement with the laboratory wholesale distributor VWR International. Owing to a decision by the German Federal Antitrust Office, Merck is obliged to supply a number of products from its Laboratory business to other laboratory wholesale distributors in Germany.

The company has taken all possible measures to protect its own legal position. Generally, Merck strives to minimize and manage its legal risks. We have taken the necessary precautions to identify threats and defend our rights where necessary.

A compliance program applies for our employees worldwide, which enjoins them to comply with laws and guidelines, as well as provides them with the relevant training and support. The core of the program is the Merck Code of Conduct, which defines ethical behavior guidelines.

Insofar as possible and practical, the company limits liability and damage risks through insurance coverage, the type and scope of which is continually adjusted to current requirements.

## Human resources risks

Merck's future success and growth is highly dependent on its innovativeness. Therefore the competence, capabilities and engagement of employees in all sectors in which Merck operates are crucial to the success of the company.

The talent markets relevant to Merck are characterized by intensive competition. The competition is additionally intensified by the scarcity of qualified specialists in the sectors in which we operate and by demographic challenges in the global markets. Therefore sourcing, recruiting and retaining key specialists and talents within Merck is one of the key priorities for the company.

In order to address the talent challenges that Merck faces, Merck is globally implementing integrated programs to ensure future success. These global programs enhance a series of different aspects that are important in order to be successful in the talent markets.

Merck is investing in a global employer brand, which communicates the Merck Values and the unique employer value proposition that Merck provides to its current and future employees. In addition to that, we will be streamlining and ensuring an integrated global recruiting process.

Merck regularly measures the engagement of its employees. The results of the employee survey show managers and employees the key challenges for Human Resources; they identify the key improvement areas for Merck to focus on in order to motivate and retain employees.

Merck has been investing in talent processes for a number of years. Through a global talent and succession management approach, Merck analyzes current and future capability gaps for the business. Merck's

→ [Risk Report](#)

sourcing strategy is aligned with the outcomes of the Talent & Succession Management Process. In addition to all of the above, the Reward and Development strategy is being more strongly aligned to the needs of the business. Through our Total Rewards Policy, we ensure that we offer competitive compensation in all relevant markets.

### Information technology risks

Non-uniform IT systems and processes jeopardize the optimum focus, compromising adequate support of the globalization process at Merck.

#### **Risks resulting from the complexity of internal and external requirements**

IT risks with an impact on the business result occur when information is unavailable or erroneous, unintentionally disclosed or when the processes to be depicted have been implemented in IT systems in a way that is too inflexible, too complex or illegal. Security gaps and insufficient emergency planning measures can quickly become incidents that affect the entire company.

Data protection violations owing to incorrect authorizations create a negative external impression. The increasing dependency on IT as well as the growing interconnectivity of IT landscapes make it necessary for companies to invest heavily in maintenance and enhancement. In conjunction with constantly new legal requirements, data processing represents a time-consuming and costly activity. As the complexity of the IT landscape increases, so do the potential risks.

#### **Risks resulting from external threats**

The general risk situation means more professional threats can be expected, with the trend moving toward targeted industrial espionage and sabotage. Significant risk scenarios for Merck include the failure of the central IT systems, the publication of classified confidential research and business development data, the manipulation of IT systems in chemical process control, and the revocation of drug registrations due to deficient validation of the relevant IT systems.

#### **Risk minimization strategy**

Merck ensures the necessary availability of business-critical application systems and access to business-relevant data by means of redundant structures of technical components, networks and sites, as well as suitable, tested contingency measures. Security guidelines are in place for the entire Merck Group. They include appropriate organizational and technical precautions for access control, access rights, virus protection and data protection. The efficacy of these measures is continuously monitored and reviewed by Internal Auditing as well as external auditors. A dedicated process ensures that IT risks are evaluated and appropriate measures taken. Based on the measures taken, we assume that the likelihood of a serious IT risk occurring is low.

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## Environmental and safety risks

Merck is a company with global production operations and is exposed to risks of possible damage to people, goods and its image. We minimize the risks to people and the environment by means of auditing, advising and training in matters of environmental protection as well as occupational health and safety. In order to ensure the continuity of plant and equipment, Merck monitors these risks both at our own locations as well as at suppliers and contract manufacturers. By adhering to high technical standards, our rules of conduct, and all legal requirements in environmental protection and occupational health and safety, Merck ensures the preservation of its goods and assets.

## Management assessment of the overall risk situation

Currently no risks can be identified that could jeopardize the continued existence of the Merck Group. This is the finding of this Risk Report, which was prepared in accordance with German Accounting Standard 5.

## Report on Expected Developments

The Executive Board expects total revenues of the Merck Group to increase slightly in both 2012 and 2013. At Group level, EBITDA before exceptional items will rise slightly in 2012 and then improve further in 2013. In view of expected economic developments, overall we expect operating business to develop positively. However, it cannot be ruled out that the operating result will be adversely impacted by one-time expenses for the introduction of efficiency-enhancement and cost-reduction measures.

### **Forecast for overall global economic development**

For 2012, the International Monetary Fund (IMF) forecasts a 3.3% increase in global gross domestic product (GDP), including a 1.2% rise in the industrialized countries. According to the estimate, in 2012 industrialized countries with good economic ties to Asia will perform best. According to the IMF, the sovereign debt crisis in the EU is threatening the global economy and the eurozone will experience a weak recession in 2012.

For developing countries and emerging markets, the IMF expects GDP growth of 5.4%. The IMF assesses the prospects for emerging markets more moderately owing to the situation in Europe as well as weaker domestic demand. The IMF forecasts global GDP growth of 3.9%. GDP growth is expected to improve by 1.9% in industrialized countries in 2013.

The Organization for Economic Cooperation and Development (OECD) assumes that for the coming years, overall global economic growth measured by GDP will continue to be driven primarily by developing countries and emerging markets, and not by OECD member states. For its member states, the OECD expects GDP to increase by 1.6% in 2012 and by 2.3% in 2013. However, should the euro crisis intensify and the U.S. economy deteriorate, the aforementioned figures would be meaningless and would need to be lowered. In this scenario, GDP of the United States would decline by 1.8% (2012) and 0.1% (2013); in the eurozone GDP would likely fall by 2.1% (2012) and 2.3% (2013). However, if the euro crisis is quickly contained, GDP developments would be as follows: GDP would grow by 2.8% (2012) and 3.4% (2013) in the United States and by 1.3% (2012) and 3.3% (2013) in the eurozone.

The forecasts for 2012 made by Datamonitor, a provider of economic data, are similar to those of the IMF and OECD and therefore underpin their assumptions of upcoming developments.

As far as possible, our forecast takes into account uncertainties in relation to overall economic developments as well as in certain markets.

### **General forecast for the pharmaceutical sector**

According to calculations by the pharmaceutical data provider Evaluate Pharma, the global market for prescription and over-the-counter (OTC) products will increase by 2.7% to US\$ 765 billion in 2012. For 2013, sales are predicted to increase by 3.8% to US\$ 794 billion compared to 2012. Evaluate Pharma also assumes that the share of biopharmaceuticals among the 100 top-selling pharmaceutical products will increase to 44% in the coming years.

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The pharmaceutical market research firm IMS Health (Intercontinental Marketing Services Health) forecasts that the global pharmaceutical market will grow by between 3% and 6% annually up until 2015, based on sales of US\$ 856 billion in 2010. In the five preceding years, the market grew by an average of 6.2% per year. According to the data, overall market volume should increase by between US\$ 210 billion and US\$ 240 billion up until 2015, then reaching a total volume of between US\$ 1,065 billion and US\$ 1,095 billion. While the U.S. market represented 36% of the global market in 2010, this share is expected to decline to 31% by 2015. The United States will then still be the world's largest market (US\$ 320 billion to US\$ 350 billion). IMS Health sees Japan remaining in second place in 2015 (11% share, US\$ 110 billion to US\$ 140 billion), followed by China (US\$ 115 billion to US\$ 125 billion) and Germany (US\$ 38 billion to US\$ 43 billion).

#### **General forecast for the chemical industry**

For the years 2012 and 2013, ICIS market researchers expect that global chemical production will grow by 5.3% and 4.7%, respectively, provided that a recession does not occur. Rising energy prices, declining construction activity as well as the debt crisis in the United States and Europe could have a negative impact on the forecasts.

According to ICIS, global capital spending will increase to more than US\$ 1 trillion in 2016 from US\$ 548 billion in 2011. ICIS forecasts that emerging markets will show stronger growth than the industrialized countries, above all China, which is already the world's largest producer of chemicals. India will also achieve high growth rates. For specialty chemicals, a market in which Merck operates, ICIS expects global production to rise by 4% in 2012 and by 2.9% in 2013.

The European chemical industry association Conseil Européen de l'Industrie Chimique (Cefic) expects chemical production by European chemical companies to increase by 2.5% in 2012. In 2013, it may become possible to achieve the level last seen in 2007, before the serious crisis of 2008. The Cefic member companies represent 21% of global chemical production.

The German Chemical Industry Association (VCI) forecasts that sales will grow by 2% in 2012, based on sales of € 186.5 billion in 2011. Production should increase by 1%.

In November 2011, the French chemical industry association Union des Industries Chimiques (UIC), which holds a leading position in Europe alongside the VCI, revised its outlook for production growth in 2012 from 2.4% to 1.8%. The reasons given were the perceptible economic crisis and the associated reluctance of customers to restock their warehouses.

#### **Forecast for sales and operating result of the Merck Group**

Merck has an extensive risk and opportunity management system, which is described in the Risk Report (page 84 et seq.). Relative to the forecast period of two years published here, we mainly see business-related opportunities and risks. Owing to Merck's diversification and broad product portfolio, a very different spectrum of important opportunities and risks results for each individual division. The relevant explanations are given for the respective divisions in the Management Report.

→ [Report on Expected Developments](#)

Our forecasts for Merck take into account the company's weighing up of risks and opportunities in accordance with our operational plans and medium-term assumptions. However, possible acquisitions, divestments and other exceptional items are not included.

The forecasts assume a moderate development of energy and raw material prices, as well as increasing personnel costs. Since we produce specialty chemicals, the volatility of oil prices does not have a direct impact on our business. As a company that operates globally, Merck is exposed to a variety of foreign exchange risks, arising especially from the U.S. dollar and the Swiss franc. Targeted hedging measures are taken to offset these risks to a certain degree.

Against the background of expected overall economic developments, the Executive Board assumes that total revenues of the Merck Group will increase slightly in 2012 and 2013. However, in both the Performance Materials division and the Pharmaceuticals business sector, we see ourselves exposed to relative price pressure especially as a result of the structural problems faced by health care systems. This could potentially impact total revenues.

Furthermore, the Executive Board expects that before exceptional items, the EBITDA of the Merck Group will increase slightly in 2012 and then increase further in 2013. Reported EBITDA could, however, be lower due to one-time expenses within the scope of the efficiency-enhancement and cost-reduction programs. Book value write-downs of intangible assets with definite useful lives that were measured at fair value in connection with the acquisitions of Serono and Millipore will also have a negative impact on EBIT in 2012 and 2013. In addition, as of April 2011, the estimated remaining useful life of Rebif® was shortened by two years to 2019. Consequently, amortization amounting to € 17 million in the first quarter of 2012 will have an additional adverse impact in comparison with 2011. The commissioning of the Large-Scale Biotech production plant in Switzerland in 2012 will also increase depreciation of property, plant and equipment by € 26 million per year. Merck is aiming for the ratio of R&D expenses to total revenues to amount to around 14% in 2012. In 2013, we expect research spending to decline further. We continue to expect a tax ratio of around 25% in both 2012 and 2013.

We expect free cash flow from operating business to be high in 2012 and 2013. Should payments for litigation be necessary, this would have a negative impact on free cash flow. The financial liabilities of the Merck Group will steadily decrease in the coming years, also as a result of our high free cash flow. Capital spending on property, plant and equipment will increase moderately to around € 360 million to € 380 million in 2012 and will remain roughly at this level in 2013. We expect the equity ratio to increase slightly and remain at a high level in both 2012 and 2013.

Apart from Europe, Merck considers Brazil, China, India, Japan, Mexico, Russia, South Korea, and the United States to be strategically important. Details on the respective business forecasts and expected developments for these countries can be found in the forecasts for the divisions.

For fiscal 2011, we intend to maintain our existing, long-term dividend policy and are proposing to the Annual General Meeting the payment of a dividend of € 1.50 per share. Based on our earnings expectations for the next two years, the family of owners and Merck shareholders can continue to expect to receive an earnings-oriented dividend.

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Merck largely achieved the growth forecasts it made for 2011 total revenues in a difficult global economic environment. Due to negative one-time effects in the second quarter of 2011, the growth forecast made for the 2011 operating result could not be achieved. The target set for the operating result would have been achieved had these one-time effects not occurred.

The actual results of the Merck Group and its divisions may deviate substantially from the expectations of the likely developments. This would be the case if one of the uncertainties mentioned here, or others, were to occur, or if the planning assumptions were to prove inaccurate.

#### **Forecast for the Merck Serono division**

Cancer and multiple sclerosis are of particular importance to the Merck Serono division as they are diseases for which we offer patients therapeutic options. In the diabetes field, our product Glucophage® is the drug of choice for first-line treatment of type II diabetes.

External market observers such as IMS Health consider oncology drugs as the world's largest pharmaceutical market by therapeutic class. While the volume of this market amounted to US\$ 57.1 billion in 2010, it is estimated to increase by 5% to 8% annually to between US\$ 75 billion and US\$ 80 billion by 2015. Evaluate Pharma shares this estimation. This market is expected to grow annually by an average of 7.1% to € 90.5 billion by 2016. According to estimates by Evaluate Pharma, Erbitux® will generate global sales of US\$ 2.23 billion by 2016, which includes the sales figures for Merck, Bristol-Myers-Squibb and Eli Lilly.

According to Evaluate Pharma, in 2012 the global market for drugs to treat multiple sclerosis will be dominated by Copaxone (Teva Pharmaceuticals, 28.1% market share), followed by Avonex (Biogen Idec, 20.8%), Rebif® (Merck, 16.1%), Betaferon/Betaseron (Bayer, 10.9%) as well as Tysabri (Elan, 6.9%). Evaluate Pharma expects a total market volume of US\$ 14.5 billion for MS drugs by 2016; the market is expected to grow by an average of 4.5% annually.

According to the forecasts prepared by IMS Health, the market for drugs to treat multiple sclerosis will rank 13th among all therapeutic classes in 2015 and have a volume of between US\$ 12 billion and US\$ 15 billion, corresponding to annual growth of between 5% and 8%.

According to IMS Health, antidiabetic agents will represent the second-largest category of global health care spending in 2015. By 2015, the market is likely to reach a volume of between US\$ 43 billion and US\$ 48 billion, which corresponds to an annual increase of between 4% and 7%. This expectation is also confirmed by Evaluate Pharma. This market is expected to grow by an average of 7.5% per year to US\$ 47.3 billion in 2016 and will be the therapeutic class with the second-largest market volume after oncology drugs.

For the Merck Serono division, we expect total revenues in 2012 to remain at the level of 2011 and increase slightly in 2013. The efficiency-enhancement and cost-reduction program could adversely affect reported EBITDA primarily in 2012, yet also in 2013. However, in 2012 EBITDA before exceptional items should slightly exceed the good level of 2011. If the efficiency-enhancement measures are successfully implemented, EBITDA before exceptional items can be expected to increase further in 2013. Free cash flow of the Merck Serono division will initially decline substantially in 2012 compared to 2011 owing to the proceeds of around € 270 million from the 2010 divestment of the Théramex business booked in 2011. However, compared with 2012, free cash flow should increase in 2013 owing to moderately higher earnings and a stable capital spending level.

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As a regularly recurring expense, divisional EBIT includes book value write-downs of intangible assets with definite useful lives that were measured at fair value within the scope of the Serono acquisition. Amortization is expected to amount to around € 660 million in 2012 and to decline to around € 600 million in 2013 owing to the expiration of the useful lives of several assets. Marketing and selling expenses, administration expenses and R&D costs could decrease significantly in 2012 and 2013 as a result of the efficiency program.

Merck Serono assumes that the sales of Rebif®, its top-selling product, will decline in the coming years owing to increased competitive pressure among multiple sclerosis therapies. The oncology drug Erbitux® will continue to show slight growth in 2012 and 2013. For the Fertility as well as CardioMetabolic Care and General Medicine business units, we also expect to see slight growth in both 2012 and 2013. Products such as Kuvan® and Egrifta™, which were approved in recent years, will help the Endocrinology business unit to achieve higher sales growth. The markets of Asia and Latin America will remain our geographic growth drivers in the coming years. Opportunities in Europe and the United States, Merck Serono's key sales markets, will result from life cycle management as well as the development of new dosage forms.

We see important opportunities and risks for the Merck Serono division closely linked to the successful launch of new products. Ongoing high levels of national debt in some countries and the associated potential reductions in health care spending could lead to further declines in sales. Moreover, litigation has been widespread in the pharmaceutical industry for years and this has also adversely impacted Merck Serono in the past. We cannot rule out the possibility of this also being the case in the coming years.

#### **Forecast for the Consumer Health Care division**

According to the market research firm Nicholas Hall, the global volume of the over-the-counter drugs market rose by 4.5% to € 81 billion in 2011. For 2012, Nicholas Hall expects stronger growth of 5.9% to around € 85.4 billion and for 2013 anticipates growth of 5.1% to around € 89.7 billion.

The market researchers forecast growth primarily in Latin America (slightly more than 10% annually) and Asia (slightly more than 9% annually). According to Nicholas Hall, the market in Europe is to grow by 4.3% in 2012 and 4.2% in 2013. For the United States, Nicholas Hall forecasts growth of 3.6% in 2012 and 2.4% in 2013.

Merck assumes that the total revenues of its Consumer Health Care division will increase slightly in 2012 and 2013. However, in both these years the focus will be on raising profitability. Therefore, EBITDA before exceptional items is expected to rise in 2012 and 2013. This will be achieved, for example, by strict cost control in all operating areas as well as by focusing on growth markets. In parallel to the increase in EBITDA before exceptional items, free cash flow is expected to develop positively in 2012 and 2013.

In 2012 and 2013, the opportunities and risks of the Consumer Health Care division will be closely linked to the development of the existing product portfolio and geographic reach. The focus here will be placed equally on strategic and local brands. Increasing the profitability of existing products will be one of the main priorities. Geographically, Consumer Health Care will continue to focus on Europe – its core market – as well as growth markets in Asia, Latin America and eastern Europe. The Consumer Health Care division faces risks especially from global changes in health care policy framework conditions and consumer purchasing behavior, factors that can negatively impact the business.

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### Forecast for the Merck Millipore division

Market researchers from Frost & Sullivan expect that the market volume of laboratory products, one of Merck Millipore's main markets, will amount to US\$ 39.2 billion (+3.7%) and US\$ 40.5 billion (+3.5%) in 2012 and 2013, respectively.

Frost & Sullivan emphasizes that the markets in China and India will register double-digit growth, namely 17.5% in India from 2010 to 2013 and 16.6% in China in the same period. By the end of 2013, both markets would then each account for 9% of the total global market. Other markets would only show single-digit growth.

Evaluate Pharma forecasts that global research and development spending by the pharmaceutical industry, and thus the customers of Merck Millipore, will grow by an average of 2.5% per year from 2010 to 2016. According to Evaluate Pharma, R&D costs will then total US\$ 134.1 billion (+1%) in 2012 and US\$ 137.1 billion (+2.2%) in 2013.

It can be assumed that government-sponsored academic research will continue to suffer from public budget spending cuts. In the United States, for example, Frost & Sullivan market researchers believe this area of spending will increase by only 0.3% in 2012 and even decline by 0.7% in 2013. Overall, government spending on pharmaceutical and biotech research around the world will increase by 2.4% in 2012, according to Frost & Sullivan. In 2011, it declined by 1.1%.

The food industry is one of the sales markets for numerous products offered by the Merck Millipore division. Datamonitor, a provider of economic data, forecasts that the global market volume of the beverage industry will increase by 3.9% in both 2012 and 2013. For the food industry, Datamonitor expects growth rates of 3.3% in 2012 and 3.5% in 2013.

Against this background, the Merck Executive Board expects that the Merck Millipore division will achieve moderate total revenue growth in 2012 and 2013. Following the strong rise in EBITDA in 2011 due to the full-year consolidation of the Millipore business, EBITDA before exceptional items is expected to rise again in 2012. We also assume that EBITDA before exceptional items will rise further in 2013 compared to 2012.

The division's EBIT includes book value write-downs of intangible assets that were measured at fair value in connection with the Millipore acquisition. These are expected to amount to around € 190 million in 2012 and 2013. Innovations and new product launches will be one focus of the division's future growth. For this reason, R&D costs are expected to rise further in 2012 and 2013. Despite higher capital spending on property, plant and equipment in 2012 and 2013 to support growth, free cash flow will be clearly positive in the coming years.

The BioScience business unit of Merck Millipore develops products that help scientists to better understand complex biological systems and to discover and develop new therapies. The extensive product portfolio of Merck Millipore is well positioned to grow in the dynamic bioscience market, parts of which will continue to face challenges. The slowdown in global economic growth in conjunction with cuts in government research budgets is currently causing the life science market to soften. For this business unit we see further risks particularly associated with the ongoing consolidation and restructuring of the pharmaceutical industry, but also with the expiration of patents and the development of new products. The Lab Solutions business unit supplies a broad portfolio of innovative, reliable, high-quality products for general laboratory applications in a wide variety of industries. The opportunities for the Process Solutions business

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unit lie especially in a comprehensive product and service portfolio, a geographic presence in future growth markets, as well as in potential volume increases that could develop as a result of demand from producers of biosimilars.

Apart from the established markets of Europe and North America, the geographic growth drivers of the Merck Millipore division will be China and India in particular. Significant risks for the division exist owing to the cost pressure in the biopharmaceutical industry. Overall, we aim to achieve further earnings growth in an uncertain market environment by offering a broad product portfolio, aligning our business globally and leveraging regional strengths.

#### **Forecast for the Performance Materials division**

Display Search, a market research firm for the display sector, forecasts that the number of liquid crystal displays sold will increase by 15% in 2012 and by 11% in 2013. Growth will primarily be attributable to LCD televisions, followed by increasing demand for LC displays for monitors. In both 2012 and 2013, the share of LCD televisions is expected to increase from 84% (2011) to more than 90% in 2012 and to 94% in 2013.

Some of our pigments are used in coatings for the automotive industry. The German Automobile Industry Association (VDA) expects that the automobile market will grow by 4% to 68 million units in 2012. According to VDA, growth is expected in India (+10%) and China (+8%), with both countries together accounting for one-quarter of the global automobile market. VDA is also optimistic for Brazil, for which it forecasts growth of 3%.

According to research by Datamonitor, the value of the market for skin care products is to increase by 4% in 2012 and in a similar range of 3.9% in 2013. This is also a market for products from the Performance Materials division. Datamonitor also expects that the global market for make-up cosmetics, a further sales market for our products, will grow by 4.2% in 2012 and by 4.1% in 2013.

The Performance Materials division consists of two business units, Liquid Crystals and Pigments & Cosmetics, as well as the Advanced Technologies unit, which is responsible for building new growth businesses. The Liquid Crystals business unit supplies materials for liquid crystal displays as well as for new lighting and display technologies. The Pigments & Cosmetics business unit supplies effect pigments for the plastics, printing and coating industries. Further key customers include cosmetic manufacturers, to whom we supply decorative pigments and active ingredients. The Advanced Technologies unit is driving forward the establishment of new businesses.

The division assumes that the Liquid Crystals business unit will maintain its market leadership position in LC mixtures in the coming years. At the same time, we expect market volumes to increase steadily. However, market pressure on the prices of LC mixtures will continue. Growth will be driven by new LC mixtures for innovative LCD technologies. To maintain our technological leadership in liquid crystals, R&D activities will continue at a high level. This also applies to promising future businesses with reactive mesogens, OLEDs and solid state lighting, which will account for an above-average share of the growth achieved by the Performance Materials division. We are prepared for the above-average growth of the Chinese display market and have invested locally to participate in it.

In addition, the Performance Materials division expects that the Pigments & Cosmetics business unit will grow only slightly. This development is due to the temporary weakening of economic activity.

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The Performance Materials division expects total revenues to grow slightly in 2012 and 2013. Volume growth especially in Liquid Crystals could possibly be offset by price pressure in the market. Therefore, in 2012, EBITDA before exceptional items should remain approximately at the level of 2011 and also remain roughly constant in 2013. Efficiency-enhancement measures could adversely affect reported EBITDA especially in 2012, yet also in 2013. Excluding the effects of divestments, free cash flow in 2012 and 2013 will remain at the high level of the previous years. This will be ensured by carefully managing capital spending and working capital, among other things.

## Subsequent Events

On February 3, 2012, Merck announced the signing of a global agreement with Threshold Pharmaceuticals, Inc., South San Francisco, CA (USA), to co-develop and commercialize TH-302, Threshold's small molecule hypoxia-targeted drug.

Under the terms of the agreement, Merck will receive co-development rights, exclusive global commercialization rights and will provide Threshold an option to co-commercialize the therapeutic in the United States. In exchange, Threshold will receive an upfront payment of € 19 million (US\$ 25 million) and could receive up to € 26.5 million (US\$ 35 million) in additional development milestones during 2012. Threshold is also eligible to receive a € 15 million (US\$ 20 million) milestone payment based on positive results from its randomized Phase II trial in pancreatic cancer.

In the United States, Threshold will have primary responsibility for development of TH-302 in the soft tissue sarcoma indication. Threshold and Merck will jointly develop TH-302 in all other cancer indications being pursued. Merck will pay 70% of worldwide development costs for TH-302.

Subject to FDA approval in the United States, Merck will initially be responsible for commercialization of TH-302 with Threshold receiving a tiered, double-digit royalty on sales. Under the royalty-bearing portion of the agreement, Threshold retains the option to co-promote TH-302 in the United States. Additionally, Threshold retains the option to co-commercialize TH-302 allowing the company to participate in up to 50% of the profits in the United States, based on certain revenue tiers. Outside of the United States, Merck will be solely responsible for the commercialization of TH-302 with Threshold receiving a tiered, double-digit royalty on sales in these territories.

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## Corporate Governance

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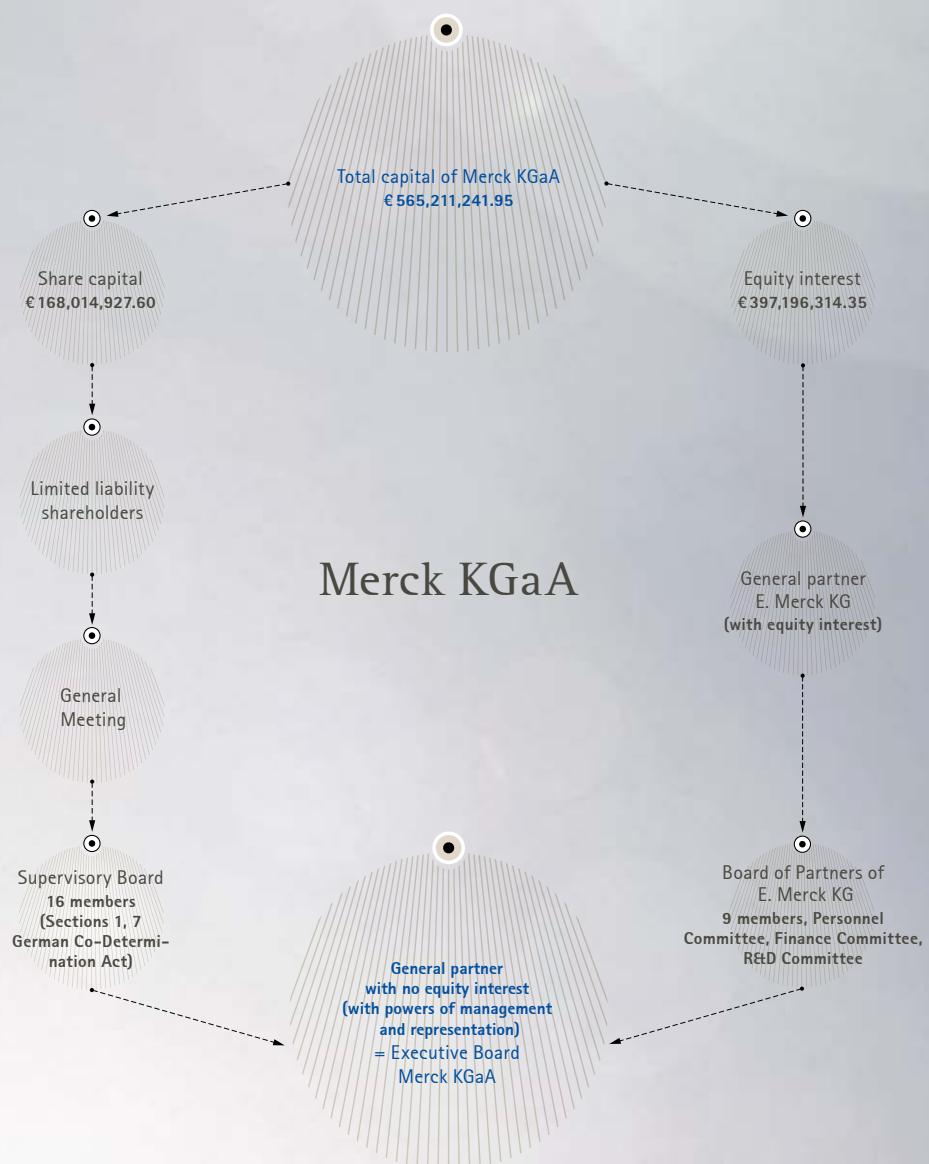
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## Merck KGaA at a glance

Capital structure and bodies of Merck KGaA



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## Statement on Corporate Governance

The Statement on Corporate Governance contains the Statement of Compliance, relevant information on practices within the company as well as a description of the procedures of the corporate bodies.

### Joint Report of the Executive Board and the Supervisory Board according to section 3.10 of the German Corporate Governance Code including Statement of Compliance

The German Corporate Governance Code is geared exclusively toward the conditions found in a German stock corporation (Aktiengesellschaft) and not toward a corporation with general partners (Kommanditgesellschaft auf Aktien) such as Merck KGaA. Merck KGaA has resolved to apply the Code logically to serve the interests of its shareholders. In order to enable shareholders to compare the situation at other companies more easily, we base corporate governance on the conduct recommendations made by the Code Commission relating to management and supervision (governance) and forego having our own, equally permissible, code. With one exception, the recommendations of the Code, the intent and meaning of which are applied, were complied with in the past and will continue to be complied with in the future.

For a clearer understanding, the following gives a general explanation of the Kommanditgesellschaft auf Aktien (KGaA) company form. The specific situation at Merck is then described and additional references are made to the General Meeting and shareholder rights.

#### **Corporation with general partners (Kommanditgesellschaft auf Aktien)**

The corporation with general partners is a company that constitutes a separate legal entity in which at least one partner has unlimited liability with regard to the creditors of the company (general partner) and in which the other shareholders are not personally liable for the obligations of the company (limited shareholders) (section 278 (1) of the German Stock Corporation Act – hereinafter referred to as "AktG"). It is therefore a hybrid of an Aktiengesellschaft (German stock corporation) and a Kommanditgesellschaft (limited partnership) with a focus on German stock corporation law. Distinctive differences to the Aktiengesellschaft include the presence of general partners, who essentially also manage the company's business activities, the absence of a management board, and the restriction of rights and obligations of the supervisory board (see page 115 for a description of the supervisory board procedures). This legal form also involves special features with regard to the General Meeting. For example, many of the resolutions made require the consent of the general partners (section 285 (2) AktG), including the adoption of the annual financial statements (section 286 (1) AktG). A large number of the conduct recommendations contained in the Code, which is geared toward Aktiengesellschaften, can therefore only be applied to a KGaA as appropriate.

#### **Merck KGaA**

See diagram on page 100

The general partner E. Merck KG holds around 70% of the total capital of Merck KGaA (equity interest); the shareholders hold the remainder, which is divided into shares (share capital). E. Merck KG is excluded from the management of business activities. The general partners with no equity interest (Executive Board), on the other hand, manage business activities. Nevertheless, due to its substantial capital investment and unlimited personal liability, E. Merck KG has a strong interest in the businesses of Merck KGaA operating efficiently and in compliance with procedures, and exercises its influence accordingly. Merck KGaA's participation in the profit/loss of E. Merck KG in accordance with Articles 26 et seq. of the Articles of Association further harmonizes the interests of the shareholders and of E. Merck KG.

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E. Merck KG appoints and dismisses the Executive Board. In addition, E. Merck KG has created bodies – complementing the expertise and activities of the Supervisory Board – to monitor and advise the Executive Board. This task applies primarily to the Board of Partners of E. Merck KG. Based on the provisions of the German Stock Corporation Act, the Articles of Association of Merck KGaA and the rules of procedure of the various committees, Merck KGaA has a set of rules for the Executive Board and its supervision that meet the requirements of the Code. The investors, who bear the entrepreneurial risk, are protected as provided for by the Code.

#### **The General Meeting of Merck KGaA**

The Annual General Meeting takes place within the first eight months of the fiscal year. The sixteenth General Meeting of Merck KGaA was held in Frankfurt am Main, Germany, on April 18, 2011. At 56.60%, the proportion of share capital represented at the meeting was stable. At 58.22%, the proportion was slightly higher in 2010.

In accordance with Article 21 (3) of the company's Articles of Association, the annual financial statements, the management report, the report of the Supervisory Board, and the proposal on the appropriation of net retained profit must be presented to the General Meeting and explained during the General Meeting. In particular, the Annual General Meeting passes resolutions concerning the approval of the annual financial statements, the appropriation of net retained profit, the approval of the actions of the Executive Board members and the Supervisory Board members, as well as the choice of the auditor. At the same time, the General Meeting has the power to pass resolutions concerning changes to the Articles of Association. With certain exceptions (such as the measures listed in section 285 (2) sentence 2 AktG), the resolutions of the General Meeting require the approval of the general partners.

All the documents and information concerning upcoming General Meetings are posted on our website. Moreover, the General Meeting is webcast live on the Internet from its commencement until the end of the speech by the Chairman of the Executive Board. The introductory speeches by the Chairman of the Executive Board and the Chairman of the Supervisory Board are recorded in order to make them available to interested members of the public at any time after the meeting. In this way, we are satisfying our own high transparency requirements.

#### **Shareholder rights**

The shareholders of Merck KGaA exercise their rights at the General Meeting. Each Merck share grants the holder one vote at the General Meeting.

Shareholders may exercise their voting rights personally, through an authorized representative, or through a proxy appointed by the company. Voting rights are only subject to special restrictions in accordance with Article 22 (5) of the company's Articles of Association. Accordingly, insofar as general partners hold shares, they cannot exercise the voting rights deriving from their shares with respect to the election and dismissal of the Supervisory Board, the approval of the actions of the Executive Board members and the Supervisory Board members, the election of the auditor, the appointment of special auditors and the resolution on indemnification claims.

A summary explanation of shareholder rights with respect to the General Meeting is available in German on the company's website.

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### **Statement of Compliance**

On February 24, 2012, the Executive Board and the Supervisory Board issued, in accordance with section 161 of the German Stock Corporation Act (Aktiengesetz), the following statement of compliance with the recommendations of the German Federal Government Commission on the Corporate Governance Code:

With the exception of the following instance, since the last statement of compliance on February 17, 2011, the Merck Group has complied with the recommendations of the German Federal Government Commission on the Corporate Governance Code published on May 26, 2010, and shall continue to do so in the future.

Contrary to section 5.4.1 sentence 2, an age limit is not taken into account when proposing candidates for election to the Supervisory Board. The age of Supervisory Board members is not a criterion for their qualifications and competence. Moreover, we do not wish to forgo the many years of experience of Supervisory Board members.

### **Compensation report**

(Sections 4.2.5 and 5.4.6 of the German Corporate Governance Code)

The compensation report is part of the audited Notes to the Group accounts.

#### **Compensation of members of the Executive Board of Merck KGaA**

Contrary to management board members of German stock corporations, the members of the Executive Board of Merck KGaA are not employed officers of the company. Rather, they are personally liable general partners of both Merck KGaA and the general partner E. Merck KG, and in this capacity they receive profit-based compensation from E. Merck KG. Therefore, the obligation to individually publish the compensation of management board members of publicly listed German stock corporations does not apply to the Executive Board of Merck KGaA. The following presentation of individual compensation is therefore being made on a voluntary basis.

Contrary to publicly listed German stock corporations, at Merck KGaA it is not the Supervisory Board, but the Board of Partners of E. Merck KG that decides on the amount and composition of compensation. E. Merck KG has transferred the execution of this right to its Personnel Committee. Among other things, the Personnel Committee is responsible for the following decisions: contents of contracts with Executive Board members, granting of loans and advance salary payments, approval for taking on honorary offices, board positions and other sideline activities, as well as the division of responsibilities within the Executive Board of Merck KGaA. The compensation system defined by the Personnel Committee for Executive Board members takes into account various compensation-relevant aspects, including the responsibility of the individual Executive Board members, their individual performance, the performance of the company, as well as the amount of compensation paid to executive board and management board members of comparable companies. The Personnel Committee regularly commissions an independent compensation consultant to review the appropriateness of compensation.

#### **Features of the compensation system**

The compensation paid to the Executive Board members of Merck KGaA in fiscal 2011 comprises fixed components, variable compensation and additions to pension provisions. Benefits in kind and other benefits are additionally granted.

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### Fixed compensation

Fixed compensation is paid in the form of 12 equivalent monthly installments. The following table provides an overview of the amount of the fixed compensation paid in 2010 and 2011:

#### Compensation of the Executive Board members of Merck KGaA

	Fixed compensation	
€ thousand	2011	2010
Karl-Ludwig Kley	1,100	1,000
Michael Becker*	800	800
Kai Beckmann (since 4/1/11)	600	n/a
Stefan Oschmann (since 1/1/11)	1,000	n/a
Bernd Reckmann	1,000	750
Elmar Schnee (until 6/30/11)**	450	900
Matthias Zachert (since 6/1/11)	583	n/a
<b>Total</b>	<b>5,533</b>	<b>3,450</b>

\*Michael. Becker was the Chief Financial Officer of Merck KGaA until May 31, 2011. After June 1, 2011, Michael Becker remained a General Partner of Merck KGaA, but was no longer a member of the Executive Board.

\*\* Elmar Schnee was a General Partner of Merck KGaA in the period from January 1, 2011 to June 30, 2011, but was no longer a member of the Executive Board of Merck KGaA, nor of the Executive Management Board of Merck Serono S.A. Elmar Schnee received fixed compensation from Merck Serono S.A. in Geneva in line with his contract as a member of the Executive Management Board of the company, which expired on June 30, 2011.

### Variable compensation

Variable compensation is based on the three-year rolling average of profit after tax of the E. Merck Group. Exceptional factors that amount to more than 10% of the Group profit and for which the Executive Board member is not responsible are eliminated. The members of the Executive Board receive an individually fixed per mille rate of the Group profit calculated in this manner. Additionally, the Personnel Committee can decide on a one-time payment based on the achievement of qualitative objectives.

In connection with the acquisition and integration of Millipore, the Personnel Committee made use of this option and decided to grant one-time payments to Karl-Ludwig Kley and Michael Becker (€ 500 thousand each) as well as to Bernd Reckmann (€ 1.2 million). These one-time payments for the achievement of objectives in connection with the Millipore transaction are included in the variable compensation components disclosed for 2011.

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The following table provides an overview of the amount of the variable compensation paid in 2010 and 2011:

	Variable compensation	
€ thousand	2011***	2010****
Karl-Ludwig Kley	3,100	2,189
Michael Becker*	2,084	1,314
Kai Beckmann (since 4/1/11)	1,188	n/a
Stefan Oschmann (since 1/1/11)	2,100	n/a
Bernd Reckmann	3,300	1,095
Elmar Schnee (until 6/30/11)**	1,042	1,752
Matthias Zachert (since 6/1/11)	1,079	n/a
<b>Total</b>	<b>13,893</b>	<b>6,350</b>

\* Michael Becker was the Chief Financial Officer of Merck KGaA until May 31, 2011. After June 1, 2011, Michael Becker remained a General Partner of Merck KGaA, but was no longer a member of the Executive Board.

\*\* Elmar Schnee was a General Partner of Merck KGaA in the period from January 1, 2011 to June 30, 2011, but was no longer a member of the Executive Board of Merck KGaA.

\*\*\* The variable compensation for 2011 is based on an extrapolation since the consolidated result of the E. Merck Group was not yet available when this information was prepared and includes the aforementioned one-time payments to Karl-Ludwig Kley, Michael Becker and Bernd Reckmann.

\*\*\*\* The variable compensation stated for 2010 deviates from the data provided in 2011 since the consolidated result of the E. Merck Group was not yet available when this information was prepared and was therefore extrapolated.

### Total compensation

Consequently, this results in the following total compensation for the Executive Board members of Merck KGaA:

€ thousand	Fixed compensation		Variable compensation		Total	
	2011	2010	2011	2010	2011	2010
Karl-Ludwig Kley	1,100	1,000	3,100	2,189	4,200	3,189
Michael Becker	800	800	2,084	1,314	2,884	2,114
Kai Beckmann	600	n/a	1,188	n/a	1,788	n/a
Stefan Oschmann	1,000	n/a	2,100	n/a	3,100	n/a
Bernd Reckmann	1,000	750	3,300	1,095	4,300	1,845
Elmar Schnee	450	900	1,042	1,752	1,492	2,652
Matthias Zachert	583	n/a	1,079	n/a	1,662	n/a
<b>Total</b>	<b>5,533</b>	<b>3,450</b>	<b>13,893</b>	<b>6,350</b>	<b>19,426</b>	<b>9,800</b>

### Pension provisions

The individual contractual pension obligations grant the members of the Executive Board entitlement to a lifelong old-age pension or surviving dependents' pension in the event of reaching the individual contractually agreed age limit, permanent disability, or death.

The amount of the old-age pension is determined by a percentage share of pensionable compensation defined by the Personnel Committee.

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The individual values are presented in the following table:

	Pensionable compensation (€ thousand)	Percentage entitlement
Karl-Ludwig Kley	790	70
Michael Becker	560	75
Kai Beckmann	300	41
Stefan Oschmann	500	45
Bernd Reckmann	500	56
Elmar Schnee	570	49
Matthias Zachert	400	40

The percentage entitlement increases up until retirement annually by 2% up to 70% for Michael Beckmann and Matthias Zachert, as well as for Bernd Reckmann, whose pension entitlement was correspondingly increased in fiscal 2011.

The following amounts were added to pension provisions in 2011:

€ thousand	Additions to pension provisions		Amount of pension provisions as of Dec. 31, 2011
	2011	2010	
Karl-Ludwig Kley	-1,699	2,162	5,268
Michael Becker	1,247	1,216	7,302
Kai Beckmann	1,053	n/a	1,825
Stefan Oschmann	498	n/a	498
Bernd Reckmann	693	829	4,309
Elmar Schnee	1,016	777	3,458
Matthias Zachert	153	n/a	153
<b>Total</b>	<b>2,961</b>	<b>4,984</b>	<b>22,813</b>

The surviving dependents' pension grants the spouse a lifelong surviving dependents' pension amounting to 60% of the pension entitlement, dependent children either a half-orphan's or an orphan's pension maximally until the age of 25.

**Benefits in the event of termination of the duties as an Executive Board member**

Above and beyond existing pension obligations, no further obligations exist in the event of the premature termination of the contractual relationships of the Executive Board members.

**Miscellaneous**

The members of the Executive Board additionally receive certain benefits, mainly contributions to insurance policies as well as a company car, which they are entitled to use privately. The members of the Executive Board must declare these benefits in their tax returns. In total, the value of miscellaneous benefits amounted to € 121 thousand in 2011 (2010: € 86 thousand). Of this amount, in 2011 € 28 thousand was attributable to Karl-Ludwig Kley (2010: € 29 thousand), € 22 thousand to Michael Becker (2010: € 24 thousand),

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Kai Beckmann € 14 thousand, € 15 thousand to Stefan Oschmann, € 25 thousand to Bernd Reckmann (2010: € 26 thousand), € 3 thousand to Elmar Schnee (2010: € 7 thousand), and Matthias Zachert € 14 thousand. The members of the Executive Board do not receive additional compensation for serving on the boards of Group companies.

Should members of the Executive Board be held liable for financial losses while executing their duties, under certain circumstances this liability risk is covered by a D&O insurance policy from Merck KGaA. The D&O insurance policy has a deductible in accordance with the legal requirements and the recommendations of the German Corporate Governance Code.

**Payments to former Executive Board members and their surviving dependents**

Pension payments to former members of the Executive Board or their surviving dependents amounted to € 9,734 thousand in 2011 (2010: € 9,091 thousand). Pension provisions totaling € 89,204 thousand exist for pension entitlements of this group of persons (2010: € 90,082 thousand).

**Outlook: Variable compensation as of 2012**

At its meeting on February 7, 2012, the Personnel Committee of the Board of Partners of E. Merck KG resolved to add a long-term variable compensation component to the variable compensation of the members of the Executive Board. This Merck Long-Term Incentive Plan is effective as of January 1, 2012. It aims to enhance the sustainability of the compensation system and to align it not only with the target achievement based on key performance indicators, but above all with a sustainable performance of Merck shares. To prepare for its resolution, the Personnel Committee was supported by an independent external compensation advisor.

Subject to the resolution of the Personnel Committee each year, under the Merck Long-Term Incentive Plan the members of the Executive Board could be eligible to receive a certain number of virtual shares – Merck Share Units (MSUs) – at the end of a three-year performance period. The number of MSUs depends on the total value defined for the respective person and the average closing price of Merck shares in Xetra trading during the last 60 trading days prior to January 1 of the respective fiscal year. In order to participate in the Plan, members of the Executive Board must personally own an investment in Merck shares equivalent to 10% of their respective fixed annual compensation, taking into account the equity interest held in E. Merck KG as a General Partner. It is not permitted to sell these shares during the performance period.

After termination of the three-year performance period, the number of MSUs to be granted is determined based on the development of two key performance indicators (KPIs). These are:

- a) the performance of the Merck share price compared to the DAX® with a weighting of 70%, and
- b) the development of the EBITDA margin, adjusted for exceptional items, during the performance period as a proportion of a defined target value with a weighting of 30%.

Depending on the development of the KPIs, at the end of the respective performance period the members of the Executive Board are granted between 0% and 150% of the MSUs they could be eligible to receive.

The members of the Executive Board receive a payment based on the number of MSUs granted. The value of an MSU corresponds to the average closing price of Merck shares in Xetra trading during the last 60 trading days prior to January 1 after the performance period. The net amount after taking tax into account is invested in Merck shares by the members of the Executive Board. One third of these shares may be sold at the earliest one year after termination of the performance period, another third after two years, and another third after three years.

In fiscal 2012, the members of the Executive Board are eligible to receive MSUs with the following total values: Karl-Ludwig Kley € 1.5 million, Kai Beckmann € 1.0 million, Stefan Oschmann € 1.0 million, Bernd Reckmann € 1.0 million and Matthias Zachert € 1.0 million. The Executive Board resolved to

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introduce a new long-term incentive plan for eligible executives and employees effective January 1, 2012 which corresponds in its composition largely to the Merck Long-Term Incentive Plan.

#### Compensation of the Supervisory Board members of Merck KGaA

The compensation of the Supervisory Board members is defined by Article 20 of the Articles of Association of Merck KGaA. Apart from reimbursement of their expenses, the members of the Supervisory Board receive fixed and variable compensation.

The fixed compensation amounts to € 7,000 per year. The Chairman receives double this amount and the Vice Chairman receives one and a half times this amount.

The members of the Supervisory Board also receive € 550 for each percent of the dividend resolved by the General Meeting in excess of 6% of the share capital, with a corresponding portion for fractions of a percent. The Chairman receives double this amount and the Vice Chairman receives one and a half times this amount.

Supervisory Board members who have only been in office for part of the fiscal year receive lower compensation in proportion to their term of office. The company reimburses the value-added tax levied on the compensation.

The individual values are presented in the following table:

#### Compensation of the Supervisory Board members of Merck KGaA

	Fixed compensation		Variable compensation		Total compensation	
	2011	2010	2011	2010	2011	2010
€						
Rolf Krebs <sup>1</sup> (Chairman)	14,000	14,000	56,859	46,288	70,859	60,288
Heiner Wilhelm (Vice Chairman)	10,500	10,500	42,644	34,716	53,144	45,216
Crociifissa Attardo	7,000	7,000	28,429	23,144	35,429	30,144
Mechthild Auge	7,000	7,000	28,429	23,144	35,429	30,144
Johannes Baillou <sup>2</sup>	7,000	7,000	28,429	23,144	35,429	30,144
Frank Binder <sup>3</sup>	7,000	7,000	28,429	23,144	35,429	30,144
Wolfgang Büchele <sup>2</sup>	7,000	7,000	28,429	23,144	35,429	30,144
Michael Fletterich	7,000	7,000	28,429	23,144	35,429	30,144
Edeltraud Glänzer	7,000	7,000	28,429	23,144	35,429	30,144
Michaela Freifrau von Glenck <sup>4</sup>	7,000	7,000	28,429	23,144	35,429	30,144
Frieder Kaufmann	7,000	7,000	28,429	23,144	35,429	30,144
Hans-Jürgen Leuchs <sup>2</sup>	7,000	7,000	28,429	23,144	35,429	30,144
Albrecht Merck <sup>3</sup>	7,000	7,000	28,429	23,144	35,429	30,144
Karl-Heinz Scheider	7,000	7,000	28,429	23,144	35,429	30,144
Theo Siegert <sup>1</sup>	7,000	7,000	28,429	23,144	35,429	30,144
Osman Ulusoy	7,000	7,000	28,429	23,144	35,429	30,144
<b>Total</b>	<b>122,500</b>	<b>122,500</b>	<b>497,509</b>	<b>405,020</b>	<b>620,009</b>	<b>527,520</b>

<sup>1</sup>As members of corporate bodies of E. Merck KG, these Supervisory Board members each received an additional payment of € 150,000 for performing this function in 2011 (2010: € 150,000).

<sup>2</sup>As members of corporate bodies of E. Merck KG, these Supervisory Board members each received an additional payment of € 140,000 for performing this function in 2011 (2010: € 140,000).

<sup>3</sup>As members of corporate bodies of E. Merck KG, these Supervisory Board members each received an additional payment of € 120,000 for performing this function in 2011 (2010: € 120,000).

<sup>4</sup>As members of corporate bodies of E. Merck KG, these Supervisory Board members each received an additional payment of € 80,000 for performing this function in 2011 (2010: € 80,000).

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### **Ownership, purchase or sale of shares in the company by members of the Executive Board and of the Supervisory Board**

Section 6.6 of the German Corporate Governance Code

As of December 31, 2011, the members of the Executive Board and of the Supervisory Board either directly or indirectly held 27,892 shares of Merck KGaA. Their total ownership represents less than 1% of the issued shares of Merck KGaA. Transactions executed by members of the Executive Board and of the Supervisory Board are disclosed on the Merck website at [www.merckgroup.com/investors](http://www.merckgroup.com/investors) → Corporate Governance → Directors' Dealings.

## **Information on Corporate Governance Practices**

### **Reporting**

It is Merck KGaA's objective to provide the latest information to all shareholders, media, financial analysts and interested members of the public, while creating the greatest possible transparency. For this reason, Merck uses a wide range of communication platforms to engage in a timely dialogue with all interested parties about the situation of the company and business changes. Merck's principles include providing factually correct, comprehensive and fair information.

Information subject to disclosure requirements, as well as information that is not, can be accessed worldwide on the Merck KGaA website ([www.merckgroup.com](http://www.merckgroup.com)), which is the company's most important publication platform. Apart from a detailed financial calendar, quarterly and half-year financial reports covering the past six years are available here in German and English. In addition, in line with the legal requirements, ad hoc announcements are published on the website. These contain information on circumstances that could impact the Merck share price.

Regular press conferences, investor meetings on the occasion of investor conferences as well as road-shows offer another platform for dialogue. The company presentations prepared for this purpose are also available on the Merck KGaA website. In addition, the Investor Relations team is always available to private and institutional investors who wish to receive further information.

To ensure the greatest possible transparency, all documents concerning the Annual General Meeting are available on the company website. Additionally, some parts of the Annual General Meeting are webcast live on the Internet.

### **Dealing with insider information**

Dealing properly with insider information is very important to us. Our insider committee examines the existence of insider information, ensures compliance with legal obligations, and prepares any necessary measures. The members of the insider committee are appointed by the Executive Board; at least two members work in Group Legal & Compliance. The insider committee meets at regular intervals, yet also meets when circumstances require. The Chief Financial Officer is vested with the authority to make the final decision on handling potential insider information.

In order to ensure a high level of protection for insider information, in 2011 the Executive Board issued an internal insider guideline applicable throughout the Group worldwide. This guideline informs employees about their responsibilities under insider trading laws and gives clear instructions for compliant behavior. In addition, it describes the function of the insider committee in detail. Moreover, our Code of Conduct, which is binding on all employees, also contains an explicit, detailed reference to the ban on using insider information. Within the scope of obligatory training courses on the Code of Conduct, all employees are instructed on the subject of insider trading.

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### **Accounting and audits of financial statements**

Merck KGaA prepares its consolidated financial statements and Group management report in accordance with International Financial Reporting Standards (IFRS), as applicable in the EU, as well as the supplementary rules applicable under section 315a (1) of the German Commercial Code (HGB) and as stipulated by our Articles of Association. The Group financial statements and the Group management report are prepared by the Executive Board and examined by an auditor, taking into account the generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW).

The Supervisory Board commissioned KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin, to audit the Group financial statements and the Group management report for 2011. Neither party identified any conflicts of interest. Moreover, the Supervisory Board agreed with KPMG AG that the auditor shall inform the Supervisory Board without delay of any grounds for bias or disqualification occurring during the audit if these cannot be immediately rectified. Additionally, the auditor must immediately report to the Supervisory Board any findings and issues which emerge during the audit that have a direct bearing upon the tasks of the Supervisory Board. The auditor shall inform the Supervisory Board or note in the audit report any circumstances determined during the audit that would render inaccurate the Statement of Compliance made by the Executive Board and the Supervisory Board. It has also been agreed with the auditor that in order to assess whether the Executive Board has fulfilled its obligations in accordance with section 91 (2) AktG, the audit will also cover the company's early warning risk identification system. Moreover, the auditor is required to examine and evaluate the accounting-relevant internal control system insofar as this is necessary and appropriate for assessing the accuracy of financial reporting.

### **Values and compliance**

In accordance with its Mission Statement, "We at Merck do what we say and then measure ourselves on this basis," Merck relies on a common set of values: courage, achievement, responsibility, respect, integrity, and transparency. Based on a corporate culture that places the fundamental company values at the center of our entrepreneurial actions, the Code of Conduct helps those involved in the business process to implement the values when dealing with one another on a daily basis.

Merck has created the Code of Conduct as a set of rules and regulations intended to help Merck employees to act responsibly and to take the right decisions in their daily work. The Code of Conduct explains the principles for dealings with business associates, general partners, colleagues, and employees, as well as the communities in which we operate. Thus, it supports all employees in acting ethically – not only in their dealings with one another, but also outside the company. The Code of Conduct is thus the main set of rules of our compliance program.

To Merck, compliance means observing legal and company-internal regulations and the basic ethical principles anchored in the company values. With the Code of Conduct and the various unit-specific compliance rules, the values are integrated into daily work and business practice. The Code of Conduct is binding on all employees, both at headquarters as well as the legal entities abroad. The Compliance Office monitors observance of the Code of Conduct with support from corresponding auditing and training programs throughout the Group. All employees are called upon to report compliance violations to their supervisor, Legal, HR or other relevant departments. Merck created the position of Group Compliance Officer (GCO) in 2002. This employee is responsible for setting up, maintaining and further developing our global compliance program. By taking appropriate measures, the GCO helps to lower the risk of serious legal violations of, for instance, antitrust law or anticorruption rules. The role of the Group Compliance Officer is reflected in the legal entities by the approximately 60 local compliance officers, who ensure that compliance measures are implemented in the

The Code of Conduct can be found on the Merck website at:  
[www.merckgroup.com](http://www.merckgroup.com)  
 → Publications  
 → Code of Conduct

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legal entities in the countries. This Group-wide network is used to steer the global compliance program. Regular regional and global compliance meetings are held to promote the exchange of information within the network. Newcomer training seminars were introduced in 2010 for newly appointed compliance officers. These seminars serve to build up compliance expertise and strengthen teambuilding within the compliance organization.

A high degree of importance is attached to regular compliance seminars, which are conducted as on-site events, as well as via web-based training courses. By presenting various training topics on corruption, antitrust and competition law, health care compliance and the Code of Conduct, they serve to sensitize employees and management to the consequences of compliance violations and to show ways of avoiding them. By setting up a central speak-up line, employees can report compliance violations by telephone or via a web-based application in their respective national language. The speak-up line is available 24 hours a day, free of charge. Case numbers enable anonymous, two-way communication. The reports received are individually reviewed. If a compliance violation exists, corresponding corrective action is taken based on concrete action plans. If necessary, disciplinary measures are taken. These range from a simple warning up to the dismissal of the employee who violated a compliance rule. In 2011, Merck set up a compliance committee to guide these processes. The Compliance Committee consists of members from various Group functions; they are involved in reviewing compliance violations and introducing countermeasures. The joint work in the Compliance Committee enables processes between the various Group functions to be optimized.

In cooperation with Internal Auditing, the Compliance Office regularly reviews the implementation of Group-wide compliance measures at the legal entities abroad. The audits regularly focus on the local compliance structure, the compliance measures taken, as well as the existence of corresponding compliance guidelines and processes.

The Compliance function reports regularly to the Executive Board, informing it of the status of compliance activities, compliance risks as well as serious compliance violations. The Executive Board informs the supervisory bodies at least once a year about the key compliance issues.

#### **Risk and opportunity management**

The Executive Board, the Supervisory Board and the Finance Committee are regularly informed about the current risk portfolio of the Group and the individual companies. More detailed information can be found in the Risk Report on page 84 et seq.

#### **Avoidance of conflicts of interest**

Within the framework of their work, all Executive Board and Supervisory Board members of Merck KGaA are exclusively committed to the interests of the company and pursue neither personal interests nor grant unjustified advantages to third parties.

Before an Executive Board member takes on honorary offices, board positions or other sideline activities, this must be approved by the Personnel Committee of the Board of Partners of E. Merck KG.

The Chairman of the Executive Board, Karl-Ludwig Kley, and the Chief Financial Officer, Matthias Zachert, are both members of the Executive Board of E. Merck KG. This does not, however, lead to conflicts of interest.

In its report to the General Meeting, the Supervisory Board discloses any conflicts of interest involving its members and how they were dealt with. Consultancy agreements as well other service and work contracts of a Supervisory Board member with Merck require the approval of the Supervisory Board. In fiscal 2011, there were neither conflicts of interest nor consultancy agreements or other service or work contracts with Merck KGaA involving Supervisory Board members.

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### **Adherence to environmental and safety standards**

At Merck, closed-loop thinking guides the way in which we address environmental concerns and environmental protection issues. To this end, we integrate precautionary measures into our planning processes. Our Environment, Health and Safety Policy with its principles and strategies implements the guidelines formulated by the national and international associations of the chemical industry in the Responsible Care® guidelines. The Responsible Care® Global Charter developed by the International Council of Chemical Associations (ICCA) in 2006 puts even more emphasis than before on overall responsibility for products, supply chains and the community. Merck signed this expanded version of Responsible Care® for the entire Group in February 2007.

Many guidelines specify how the sites and employees of the Merck Group are to observe the principles in their daily work. The Group function Environment, Health, Safety, Security & Quality steers these global activities and ensures compliance with regulatory requirements, standards and business needs throughout the entire Group. In this way, Group-wide risks are minimized and continuous improvement is promoted in the areas of Environment, Health, Safety, Security, and Quality. Corporate Responsibility reports are also published at regular intervals.

### **Procedures of the Executive Board, Supervisory Board, Board of Partners and its Committees**

#### **Members of the Executive Board of Merck KGaA**

Notes on memberships of statutory supervisory boards and comparable German and foreign supervisory bodies (section 285 sentence 1, No. 10 HGB in conjunction with sections 125 (1) sentence 5 AktG)

<i>Member</i>	Memberships of (a) other statutory supervisory boards and (b) comparable German and foreign supervisory bodies of corporations
<b>Karl-Ludwig Kley</b> Darmstadt Chairman	(a) – Bertelsmann AG, Gütersloh – BMW AG, Munich (Vice Chairman) – 1. FC Köln GmbH & Co. KGaA, Cologne (Chairman)
<b>Michael Becker*</b> Darmstadt, Chief Financial Officer (until 5/31/11)	(a) – Symrise AG, Holzminden (since May 2011) (b) – Bâloise Holding AG, Basel, Switzerland
<b>Kai Beckmann</b> Griesheim, Head of Group Human Resources (since 4/1/11)	no board positions
<b>Stefan Oschmann</b> Munich, Head of the Pharmaceuticals business sector	(b) – Merck Serono S.A., (Chairman, since 1/10/11)

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Member	Memberships of (a) other statutory supervisory boards and (b) comparable German and foreign supervisory bodies of corporations
<b>Bernd Reckmann</b> Seeheim-Jugenheim, Head of the Chemicals business sector	(b) – Millipore Corp., Billerica, MA, USA (until 9/28/11) – Millipore Corp., Cidra, Puerto Rico (until 9/28/11)
<b>Elmar Schnee **</b> Darmstadt (until 6/30/11)	(b) – Merck Serono S.A., Corsins, Switzerland (until 1/10/11) – ChemGenex Pharmaceuticals Ltd., Geelong, Australia
<b>Matthias Zachert</b> Bonn, Chief Financial Officer (since 6/1/11)	no board positions

\* Michael Becker was Chief Financial Officer of Merck KGaA until May 31, 2011. After June 1, 2011, Michael Becker remained a General Partner of Merck KGaA, but was no longer a member of the Executive Board of Merck KGaA.

\*\* Elmar Schnee was a General Partner of Merck KGaA, but was no longer a member of the Executive Board of Merck KGaA in the period from January 1, 2011 to June 30, 2011.

The general partners with no equity interest (Executive Board) manage the business activities in accordance with the laws, the Articles of Association and the rules of procedure. They are appointed by E. Merck KG with the consent of a simple majority of the other general partners. The members of the Executive Board are jointly responsible for the entire management of the company. Certain tasks are assigned to individual Executive Board members based on a responsibility distribution plan. Each Executive Board member promptly informs the other members of any important actions or operations in his respective business area. The Executive Board is responsible for preparing the annual financial statements of Merck KGaA, the quarterly and half-year financial statements, as well as the annual financial statements of the Merck Group. In addition, the Executive Board ensures that all legal provisions, official regulations and the company's internal policies are abided by, and works to achieve compliance with them by all the companies of the Merck Group. A Group-wide guideline defines in detail which transactions require prior Executive Board approval.

The Executive Board provides the Supervisory Board with regular, up-to-date and comprehensive reports about all company-relevant issues concerning planning, business developments, the risk situation, and risk management. A Supervisory Board resolution regulates further details on the information and reporting duties of the Executive Board vis-à-vis the Supervisory Board.

The Executive Board informs the Board of Partners and the Supervisory Board at least quarterly of the progress of business and the situation of the company. In addition, the Executive Board informs the stated boards at least annually of the company's annual plans and strategic considerations.

The Executive Board passes its resolutions in meetings that are normally held twice a month.

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## Supervisory Board

Member	Memberships of (a) other statutory supervisory boards and (b) comparable German and foreign supervisory bodies of corporations
<b>Rolf Krebs</b> Mainz, Physician, Chairman	(a) – Epigenomics AG, Berlin (Chairman) – Ganymed Pharmaceuticals AG, Mainz (Chairman) – Merz GmbH & Co. KGaA, Frankfurt – Merz Pharmaceuticals GmbH, Frankfurt – Senator GmbH & Co. KGaA, Frankfurt (b) – E. Merck KG, Darmstadt – Air Liquide S.A., Paris
<b>Heiner Wilhelm</b> Reinheim, Chairman of the Works Council of the Darmstadt site of Merck KGaA, Vice Chairman	no board positions
<b>Crociifissa Attardo</b> Darmstadt, Full-time member of the Works Council of the Darmstadt site of Merck KGaA	no board positions
<b>Mechthild Auge</b> Wehrheim, Head of Strategy, CardioMetabolic Care, Merck Serono, Merck KGaA	no board positions
<b>Johannes Baillou</b> Vienna, Austria, Managing Partner of Bondi Immobilien-Consulting GmbH, Vienna	(b) – E. Merck KG, Darmstadt (Vice Chairman)
<b>Frank Binder</b> Zurich, Switzerland, Chief Executive Officer of Novarca Deutschland GmbH, Frankfurt/Main	(a) – Landbell AG für Rückhol-Systeme, Mainz (Chairman) (b) – E. Merck KG, Darmstadt – Athena AG, Zurich (until 12/16/11) – BMR-Yachting AG, Zurich (Chairman)
<b>Wolfgang Büchele</b> Manheim, Member of the Board of Directors of Kemira Oy, Finland	(b) – E. Merck KG, Darmstadt – BorsodChem Zrt, Kazincbarcika, Hungary (Chairman of the Board until 1/31/11, Member of the Board of Directors from 2/1/11 until 12/31/11) – First Chemical Holding Kft, Budapest, Hungary (until 12/31/11) – Kemira Oy, Helsinki, Finland
<b>Michael Fletterich</b> Gernsheim, Chairman of the Works Council of the Gernsheim site of Merck KGaA	no board positions
<b>Edeltraud Gläner</b> Wiesbaden, Member of the Managing Board of Industriegewerkschaft Bergbau, Chemie, Energie (IG BCE)	(a) – B. Braun Melsungen AG, Melsungen – Solvay Deutschland GmbH, Hannover (Vice Chairman)
<b>Michaela Freifrau von Glenck</b> Zurich, Switzerland Teacher	no board positions

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Member	Memberships of (a) other statutory supervisory boards and (b) comparable German and foreign supervisory bodies of corporations
<b>Frieder Kaufmann</b> Rossdorf, Full-time member of the Works Council of the Darmstadt site of Merck KGaA	no board positions
<b>Hans-Jürgen Leuchs</b> Ingelheim, Graduate chemist	(b) – E. Merck KG, Darmstadt – Zeton B.V., Enschede, Netherlands – Zeton International Inc., Burlington, ONT, Canada
<b>Albrecht Merck</b> Schriesheim, Commercial Director of the Castel Peter winery, Bad Dürkheim	(b) – E. Merck KG, Darmstadt
<b>Karl-Heinz Scheider</b> Gross-Zimmern, Head of Contract Manufacturing Chemicals, Merck KGaA	no board positions
<b>Theo Siegert</b> Düsseldorf, Managing Partner of de Haen Carstanjen & Söhne, Düsseldorf	(a) – Deutsche Bank AG, Frankfurt – E.ON AG, Düsseldorf – Henkel AG & Co. KGaA, Düsseldorf (b) – E. Merck KG, Darmstadt – DKSH Holding Ltd., Zurich, Switzerland
<b>Osman Ulusoy</b> Wiesbaden, Vice Regional Director (Hesse-Thuringia) of Industriegewerkschaft Bergbau, Chemie, Energie (IG BCE)	(a) – Evonik Röhm GmbH, Darmstadt (Vice Chairman until 8/1/11)

The Supervisory Board performs a monitoring function. It supervises the management of the company by the Executive Board. In comparison with the supervisory board of a German stock corporation, the role of the supervisory board of a corporation with general partners (KGaA) is limited. This is due to the fact that the members of the Executive Board are personally liable partners and therefore are themselves responsible for the management of the company. In particular, the Supervisory Board is not responsible for appointing and dismissing general partners or for regulating the terms and conditions of their contracts. The authority for this belongs to E. Merck KG. Nor does the Supervisory Board have the authority to issue rules of procedure for the Executive Board or a catalog of business transactions requiring approval. This authority likewise belongs to E. Merck KG (Article 13 (3) sentence 1 and (4) sentence 1 of the Articles of Association). However, the fact that the Supervisory Board has no possibilities to directly influence the Executive Board restricts neither its information rights nor audit duties. The Supervisory Board must monitor the Executive Board in terms of legality, regularity, usefulness, and economic efficiency. In particular, the Supervisory Board has the duty to examine the reports provided by the Executive Board. This includes regular reports on the intended business policy, as well as other fundamental issues pertaining to corporate planning, especially financial, investment and HR planning; the profitability of the Merck Group; the progress of business; the risk situation; risk management (including compliance), and the internal auditing system. In addition, by means of consultation with the Executive Board, it creates the basis for supervision of the management of the company by the Supervisory Board according to section 111 (1) of the German Stock Corporation Act (AktG).

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The Supervisory Board deals with the quarterly and half-year consolidated financial statements and examines the annual financial statements of the Merck Group as well as the annual financial statements of Merck KGaA, taking into account the auditor's reports. The adoption of the annual financial statements is not the responsibility of the Supervisory Board, but of the Annual General Meeting. The Supervisory Board normally meets four times a year. Further meetings may be convened if demanded by a member of either the Supervisory Board or the Executive Board. As a rule, resolutions of the Supervisory Board are passed at meetings. At the instruction of the chairman, in exceptional cases a resolution may be passed by other means, details of which are given in the rules of procedure.

The members of the Board of Partners of E. Merck KG and of the Supervisory Board may be convened to a joint meeting if so agreed by the chairmen of the two boards.

The rules of procedure prescribe that the Supervisory Board may form committees as and when necessary. The Supervisory Board currently has no committees. Because of the limited authority of the Supervisory Board, it does not appear appropriate to subdivide it further.

The German Stock Corporation Act (Aktiengesetz) prescribes that the Supervisory Board of a publicly listed company must have at least one independent member on its Supervisory Board who has professional expertise in accounting or auditing. Theo Siegert satisfies these requirements and is furthermore the Chairman of the Finance Committee of the Board of Partners of E. Merck KG.

#### **Board of Partners of E. Merck KG**

Some of the responsibilities that lie with the supervisory board of a German stock corporation are fulfilled at Merck by E. Merck KG. This applies primarily to the Board of Partners of E. Merck KG. Therefore, the Board of Partners and the composition and procedures of its committees are described in the following.

The Board of Partners has nine members.

Member	Memberships of (a) other statutory supervisory boards and (b) comparable German and foreign supervisory bodies of corporations
<b>Frank Stangenberg-Haverkamp</b> Darmstadt, Vice Chairman of the Executive Board and General Partner of E. Merck KG, Chairman	(a) – Fortas AG, Rösrath (Chairman) – M.A.X. Automation AG, Düsseldorf (since 6/20/11) (b) – Travel Asset Group Ltd., Feltham, United Kingdom (Chairman)
<b>Johannes Baillou</b> Vienna, Austria, Managing Partner of Bondi Immobilien-Consulting GmbH, Vienna	(a) – Merck KGaA, Darmstadt
<b>Jon Baumhauer</b> Munich, Chairman of the Executive Board and General Partner of E. Merck KG	no board positions
<b>Frank Binder</b> Zurich, Switzerland Managing Director of Novarca Deutschland GmbH, Frankfurt/Main	(a) – Merck KGaA, Darmstadt – Landbell AG für Rückhol-Systeme, Mainz (Chairman) (b) – Athena AG, Zurich (until 12/16/11) – BMR-Yachting AG, Zurich (Chairman)

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Member	Memberships of (a) other statutory supervisory boards and (b) comparable German and foreign supervisory bodies of corporations
<b>Wolfgang Büchel</b> Mannheim, Member of the Board of Directors of Kemira Oy, Finland	(a) – Merck KGaA, Darmstadt (b) – BorsodChem Zrt, Kazincbarcika, Hungary Chairman of the Board until 1/31/11, Member of the Board of Directors from 2/1/11 until 12/31/11 – First Chemical Holding Kft, Budapest, Hungary (until 12/31/11) – Kemira Oy, Helsinki, Finland
<b>Rolf Krebs</b> Mainz, Physician	(a) – Merck KGaA, Darmstadt – Epigenomics AG, Berlin (Chairman) – Ganymed Pharmaceuticals AG, Mainz (Chairman) – Merz GmbH & Co. KGaA, Frankfurt – Merz Pharmaceuticals GmbH, Frankfurt – Senator GmbH & Co. KGaA, Frankfurt (b) – Air Liquide S.A., Paris
<b>Hans-Jürgen Leuchs</b> Ingelheim, Graduate chemist	(a) – Merck KGaA, Darmstadt (b) – Zeton B.V., Enschede, Netherlands – Zeton International Inc., Burlington ONT, Canada
<b>Albrecht Merck</b> Schriesheim, Commercial Director of the Castel Peter winery, Bad Dürkheim	(a) – Merck KGaA, Darmstadt
<b>Theo Siegert</b> Düsseldorf, Managing Partner of Haen Carstanjen & Söhne, Düsseldorf	(a) – Merck KGaA, Darmstadt – Deutsche Bank AG, Frankfurt – E.ON AG, Düsseldorf – Henkel AG & Co. KGaA, Düsseldorf (b) – DKSH Holding Ltd., Zurich, Switzerland

The Board of Partners supervises the Executive Board in its management of the company. It informs itself about the business matters of Merck KGaA, and may inspect and examine the company's accounts and other business documents, and the assets for this purpose. According to Article 13 (4) of the Articles of Association of Merck KGaA, the Executive Board requires the approval of E. Merck KG for transactions that are beyond the scope of the Group's ordinary business activities. For such transactions to be approved, approval must first be obtained from the Board of Partners of E. Merck KG. The Board of Partners convenes as and when necessary; however, it meets at least four times a year. The members of the Executive Board of Merck KGaA are invited to all meetings of the Board of Partners, unless the Board of Partners resolves otherwise in individual cases. The members of the Board of Partners may convene a joint meeting with the Supervisory Board of Merck KGaA if so agreed by the chairmen of the two boards.

The Board of Partners may confer the responsibility for individual duties to committees. Currently the Board of Partners has three committees in place: the Personnel Committee, the Finance Committee, and the Research and Development Committee.

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### **Personnel Committee**

The Personnel Committee has four members: Frank Stangenberg-Haverkamp (Chairman), Jon Baumhauer, Rolf Krebs, and Theo Siegert.

The Personnel Committee meets at least twice a year. Further meetings are convened as and when necessary. Meetings of the Personnel Committee are attended by the Chairman of the Executive Board of Merck KGaA unless the Committee decides otherwise.

The Personnel Committee is responsible for, among other things, the following decisions concerning members and former members of the Executive Board: contents of employment contracts and pension contracts, granting of loans and advance payments, approval for taking on honorary offices, board positions and other sideline activities, as well as division of responsibilities within the Executive Board of Merck KGaA. The Personnel Committee passes its resolutions by a simple majority – in matters concerning the Chairman of the Executive Board unanimity is required. The Chairman of the Committee regularly informs the Board of Partners of its activities.

### **Finance Committee**

The Finance Committee has four members: Theo Siegert (Chairman), Johannes Baillou, Wolfgang Büchele, and Frank Stangenberg-Haverkamp.

The Finance Committee holds at least four meetings a year, at least one of which is a joint meeting with the auditor. Further meetings are convened as and when necessary. Meetings of the Finance Committee are attended by the Chief Financial Officer of Merck KGaA. Other members of the Executive Board of Merck KGaA may attend the meetings upon request by the Committee. These meetings regularly include the Chairman of the Executive Board. The Finance Committee is responsible for, among other things, analyzing and discussing the annual financial statements and the respective auditor's report as well as the quarterly and half-year financial reports. Furthermore, the Finance Committee recommends to the Chairman of the Supervisory Board annual audit focuses for the auditors. It also recommends an auditor for the Supervisory Board's corresponding suggestion to the General Meeting. In addition, the Finance Committee is concerned with the financial position, results of operations and liquidity of Merck, as well as accounting and compliance issues. Upon request of the Board of Partners, the Finance Committee examines capital spending projects that must be approved by the Board of Partners and provides recommendations pertaining thereto.

### **Research and Development Committee**

The Research and Development Committee has three members: Rolf Krebs (Chairman), Hans-Jürgen Leuchs and Frank Stangenberg-Haverkamp.

The Research and Development Committee is convened as and when necessary, but holds meetings at least twice a year. Meetings of the Research and Development Committee are attended by members of the Executive Board of Merck KGaA upon request of the Committee. These meetings regularly include the Chairman of the Executive Board as well as the members of the Executive Board responsible for the Pharmaceuticals and Chemicals business sectors. The Chairman of the Research and Development Committee is responsible, among other things, for analyzing and discussing the research activities of Pharmaceuticals and Chemicals. The Pharmaceuticals and Chemicals business sectors present the status of their respective research to the Research and Development Committee in special meetings. The Committee deals thoroughly with the pharmaceutical research progress report and with developments of new medicines in Phases II and III of clinical research. The Chairman of the Committee reports to the Board of Partners on the insights gained from the meetings held.

## Report of the Supervisory Board

The Supervisory Board again properly executed its duties in 2011 in accordance with the law as well as the company's Articles of Association and rules of procedure. In particular, the Supervisory Board monitored the work of the Executive Board diligently and regularly.

### **Cooperation with the Executive Board**

The cooperation with the Executive Board was characterized by intensive, trustworthy exchange. During fiscal 2011, the Executive Board provided the Supervisory Board with regular written and verbal reports on the business development of Merck KGaA and the Merck Group. In particular, the Supervisory Board was informed about the market and sales situation of the company against the background of the macroeconomic development, the financial position of the company and its subsidiaries along with their earnings development, as well as corporate planning. Within the scope of quarterly reporting, the sales and operating results were presented for the Merck Group as a whole, and broken down by division and region. Aside from the Supervisory Board meetings, the Chairman of the Supervisory Board also maintained and continues to maintain a regular exchange of information with the Chairman of the Executive Board.

### **Key topics of the Supervisory Board meetings**

Four Supervisory Board meetings were held in fiscal 2011. At these meetings, the Supervisory Board discussed the reports of the Executive Board in detail and discussed company developments and strategic issues together with the Executive Board.

At the meeting held on February 17, 2011, the Supervisory Board dealt mainly with the annual financial statements and consolidated financial statements for 2010. The Executive Board reported on business developments in 2010 and the key information contained in the 2010 annual financial statements. In addition, the auditor reported on the examination of the financial statements. Lastly, the Supervisory Board approved the proposals to be made to the Annual General Meeting and adopted the statement on corporate governance including the Statement of Compliance with the German Corporate Governance Code in a joint report of the Executive Board and Supervisory Board.

The meeting held on April 27, 2011 focused on current business developments. In addition, the Supervisory Board closely examined the internal auditing system. Furthermore, the head of Group Auditing submitted his report, which the Supervisory Board accepts and discusses on an annual basis. The report included information on the integration of Millipore into the internal auditing system of the Merck Group. The meeting also focused on reporting as well as a discussion on the work of the Research and Development Committee of the Board of Partners of E. Merck KG.

At its meeting held on July 26, 2011, the Supervisory Board discussed business developments in the first half of 2011 as well as the company's risk management. For this purpose, the company risk manager presented his annual report to the Supervisory Board. He explained the individual risks that had been identified as well as the approach to handling them, and he presented the structure of the risk management process in comparison to the previous risk report. No risks that threaten the continued existence of the company were identified.

The fourth Supervisory Board meeting in fiscal 2011 was held on October 25, 2011. At this meeting, the Supervisory Board discussed the results of the 2011 efficiency audit as well as the report of the Executive Board on the third quarter of 2011. Here, the Executive Board also reported on the realignment of the Merck Group in order to improve processes as well as on the planned program to boost efficiency and reduce costs. In addition, the head of Group Legal & Compliance presented the compliance report for 2011 to the Supervisory Board. This report is a standard part of the October meeting every year. Furthermore, the Supervisory Board adopted new rules of procedure for itself.

→ [Report of the Supervisory Board](#)

### **Annual financial statements**

The annual financial statements of Merck KGaA, the consolidated financial statements of the Merck Group, and the management reports for Merck KGaA and the Merck Group, including the accounts, were audited by KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin. The auditors issued an unqualified audit opinion on the annual financial statements and management report for Merck KGaA in accordance with German Auditing Standards. For the consolidated financial statements prepared in accordance with International Financial Reporting Standards, the auditors issued the auditor's report, reproduced in the Annual Report of the Merck Group. In addition, the auditors audited the calculation of Merck KGaA's participation in the profits of E. Merck KG in accordance with Article 27 (2) of the Articles of Association. The annual financial statements of Merck KGaA, the consolidated financial statements of the Merck Group, the management reports for Merck KGaA and the Merck Group, and the proposal by the Executive Board for the appropriation of the net retained profit were presented and distributed to the Supervisory Board, together with the auditor's reports.

In accordance with Article 14 (2) of the Articles of Association, the Supervisory Board also examined the annual financial statements of Merck KGaA and the management report for Merck KGaA, the proposal for the appropriation of the net retained profit and the auditor's report presented in accordance with Article 27 (2) of the Articles of Association. It also examined the consolidated financial statements of the Merck Group as well as the management report for the Merck Group, and took note of the auditor's report of KPMG AG Wirtschaftsprüfungsgesellschaft, Berlin.

The discussion of the relevant agenda item at the Supervisory Board's meeting on February 24, 2012 to approve the financial statements was also attended by the auditors who sign the audit opinion on the annual financial statements of Merck KGaA and the consolidated financial statements of the Merck Group, and who reported on their audit. The Supervisory Board took note of and approved the results of the audit. On completion of its examination, the Supervisory Board raised no objections and thus approves the annual financial statements and management report for Merck KGaA, the consolidated financial statements of the Merck Group and the management report for the Merck Group prepared by the Executive Board, as well as the report presented by the auditors in accordance with Article 27 (2) of the Articles of Association. Following its own examination of the situation, the Supervisory Board gave its consent to the proposal for the appropriation of the net retained profit.

### **Corporate governance and Statement of Compliance**

Corporate governance is a topic of high priority for the Supervisory Board. According to its own estimation, the Supervisory Board consists of a sufficient number of independent members. There were no conflicts of interest, as defined by the German Corporate Governance Code, involving Supervisory Board members during 2011. After addressing corporate governance topics in detail, the Executive Board and Supervisory Board resolved to adopt and issue the updated Statement of Compliance on February 14, 2012 (Executive Board) and on February 24, 2012 (Supervisory Board) in accordance with section 161 of the German Stock Corporation Act (Aktiengesetz). The statement is permanently available on the website of Merck KGaA ([www.merckgroup.com](http://www.merckgroup.com) → Investors → Corporate Governance). More information on corporate governance at Merck KGaA, including the compensation of the Executive Board and Supervisory Board, is given in the Statement of Compliance on pages 101 et seq. of the Annual Report.

→ [Report of the  
Supervisory Board](#)

### **Committees**

The Supervisory Board of Merck KGaA currently has no committees on account of the special features that apply to the Supervisory Board of a corporation with general partners (KGaA) under German company law and because a corresponding need for this has not emerged to date. Therefore, no report is given on the work of committees.

### **Personnel matters**

No member of the Supervisory Board participated in less than half of the Supervisory Board meetings in fiscal 2011. There were no changes in the composition of the Supervisory Board in 2011. In particular, there were no new elections, new appointments to bodies or formations of new bodies.

Darmstadt, February 24, 2012

The Supervisory Board of Merck KGaA



Rolf Krebs  
Chairman

# Objectives of the Supervisory Board with respect to its composition

## **Initial situation**

According to section 5.4.1 (2) and (3) of the German Corporate Governance Code, the Supervisory Board shall specify concrete objectives regarding its composition which, while considering the specifics of the enterprise, take into account the international activities of the enterprise, potential conflicts of interest, an age limit to be specified for the members of the Supervisory Board, and diversity.

## **General notes on the composition of the Supervisory Board**

The Supervisory Board of Merck KGaA consists of 16 members, eight of whom represent the shareholders and a further eight who represent the employees. The eight employee representative members are elected by employee delegates pursuant to the provisions of the German Co-determination Act (Mitbestimmungsgesetz - "MitbestG"). These consist of six company employees, including a senior executive, as well as two union representatives. The Supervisory Board has no statutory proposal right with respect to electing the delegates or employee representatives. Owing to a delegation right of E. Merck Beteiligungen KG, two of the eight shareholder representatives are specified. The Supervisory Board likewise has no statutory proposal right with respect to exercising this delegation right. The remaining six shareholder representatives are elected by the General Meeting. In accordance with section 124 (3) sentence 1 AktG, the Supervisory Board shall propose to the General Meeting Supervisory Board members for election. These proposals require a majority of the votes of the shareholder representative members of the Supervisory Board. The next scheduled election to the Supervisory Board shall take place in 2013. The General Meeting is not required to follow the election proposals. The appointment objectives that the Supervisory Board applies as set forth below therefore do not represent requirements to be met by those eligible to elect or to delegate members. Instead, they are intended to express the objectives pursued by the Supervisory Board in office with regard to its advisory and monitoring functions.

## **Objectives of the Supervisory Board with respect to its composition**

In accordance with section 5.4.1 (2) of the German Corporate Governance Code, the Supervisory Board has specified the following objectives with respect to its composition and reports on the status of their implementation below:

## **Expertise and diversity**

Professional qualifications and personal expertise are the two most important prerequisites for appointments to seats on the Supervisory Board. When proposing Supervisory Board candidates for election or delegation, the Supervisory Board will always give top priority to these prerequisites, which are essential for fulfilling its legal duties.

Overall, the Supervisory Board's policy is to optimally meet its monitoring and advisory duties by having a diversity of members. Diversity includes, in particular, internationality as well as different experience backgrounds and career paths. The proportion of women on the Supervisory Board is also considered to be an aspect of diversity. When preparing proposals for election or delegation, due consideration shall be given in individual cases to the extent to which different, yet complementary professional profiles, career and life experiences as well as appropriate representation of both genders can benefit the work of the Supervisory Board. Additionally, the Supervisory Board shall support the Executive Board in its efforts to increase diversity within the company.

→ [Objectives of the Supervisory Board with respect to its composition](#)

#### **In-depth knowledge of the fields relevant to the company**

The Supervisory Board shall have at least four members with in-depth knowledge and experience in fields that are important to the company, including at least one expert in pharmaceuticals and one in chemicals.

Merck is currently meeting this objective for the composition of the Supervisory Board. At present, the Supervisory Board has more than four members who have in-depth knowledge of and experience on the pharmaceutical and chemical industries. More than four Supervisory Board members also have executive experience in companies that operate specifically in the pharmaceuticals and/or chemicals sector.

#### **Management experience**

The Supervisory Board shall have at least three members who have experience in managing or supervising a medium- or large-sized company.

The Supervisory Board has more than three members who have the corresponding experience. This includes both Supervisory Board members who were or still are management board members or directors in such companies, as well as Supervisory Board members who have gained experience in supervisory bodies of German and/or foreign companies of this size.

#### **Family company**

The Supervisory Board shall have at least one member who has experience in managing medium- or large-sized family-owned companies.

The Supervisory Board currently has multiple members who have the appropriate management experience in family-owned companies of this size.

#### **Internationality**

The Supervisory Board shall have at least three members with business experience in the main sales markets of Merck KGaA. Currently, the main sales markets of Merck KGaA are Europe, North and Latin America, and Asia-Pacific.

The present composition of the Supervisory Board satisfies this objective. More than three Supervisory Board members have entrepreneurial experience in Europe, covering a wide range of countries. More than three Supervisory Board members have experience in management positions in companies that operate globally. Two of these members worked in the United States, one in the United Kingdom, and one was responsible for the Asian region.

#### **Women on the Supervisory Board**

Four women are currently members of the Supervisory Board of Merck KGaA. This corresponds to 25% of the Supervisory Board. When nominating candidates for election to the Supervisory Board or making proposals for delegation, the Supervisory Board shall examine whether the percentage of women can be increased by suitable candidates.

The Supervisory Board currently consists of 25% women, which it considers a satisfactory percentage. This is based on both the percentage of women in management positions at Merck, as well as the fact that the supervisory boards of other companies have a comparable percentage of women.

→ [Objectives of the Supervisory Board with respect to its composition](#)

#### **No material conflicts of interest**

No one who is likely to have a lasting conflict of interest shall serve as a member of the Supervisory Board. Therefore, no one shall be proposed for election or delegation to the Supervisory Board who simultaneously serves on a body of or advises a major competitor of the company, or owing to another function, e.g. advisor to major contract partners of the company, could potentially become involved in a conflict of interest. Moreover, the Supervisory Board complies with the requirements of the German Corporate Governance Code with respect to conflicts of interest.

No Supervisory Board member serves on a body of or advises a major competitor, or provides consultancy services thereto. No Supervisory Board member performs a function that could lead to a lasting conflict of interest.

#### **No age limit**

An age limit for Supervisory Board members is not specified since age is not a criterion for qualifications and expertise. Moreover, we do not wish to forgo the many years of experience of Supervisory Board members.

The achievement of the aforementioned objectives shall be pursued initially until 2015, taking into account applicable law within the scope of elections and reelections, delegations as well as court appointments of replacement members if these become necessary. All Supervisory Board members will correspondingly influence those eligible to elect or delegate. Taking into consideration the aforementioned criteria and in accordance with its duties under German stock corporation law, the Supervisory Board will also propose to the General Meeting the candidates it believes to be best suited in each case.

Every year, the Supervisory Board will provide information in the Annual Report on the status of implementing its objectives.

# 04

# Merck Consolidated Financial Statements for 2011

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# Merck

## Consolidated Income Statement

€ million	Note	2011	2010
<b>Sales</b>	→ 01	<b>9,905.9</b>	8,928.9
Royalty, license and commission income	→ 02	370.5	361.7
<b>Total revenues</b>		<b>10,276.4</b>	9,290.6
Cost of sales	→ 03	-2,788.3	-2,385.4
<b>Gross margin</b>		<b>7,488.1</b>	6,905.2
Marketing and selling expenses	→ 04	-2,393.0	-2,234.5
Royalty, license and commission expenses	→ 05	-500.5	-477.0
Administration expenses	→ 06	-504.8	-478.2
Other operating expenses and income	→ 07	-581.9	-390.4
Research and development	→ 08	-1,517.1	-1,397.1
Amortization of intangible assets	→ 09	-1,004.7	-818.6
Investment result	→ 10	-1.0	4.1
<b>Operating result</b>		<b>985.1</b>	1,113.5
Exceptional items	→ 11	151.8	-0.8
<b>Earnings before interest and tax (EBIT)</b>		<b>1,136.9</b>	1,112.7
Financial result	→ 12	-285.8	-251.6
<b>Profit before income tax</b>		<b>851.1</b>	861.1
Income tax	→ 13	-222.1	-219.6
<b>Profit after tax</b>		<b>629.0</b>	641.5
of which attributable to Merck KGaA shareholders		617.5	632.1
of which non-controlling interest	→ 14	11.5	9.4
Earnings per share (in €)	→ 15		
basic		2.84	2.91
diluted		2.84	2.91

# Merck

## Consolidated Statement of Comprehensive Income

	€ million	2011	2010
<b>Profit after tax</b>		<b>629.0</b>	<b>641.5</b>
<b>Available-for-sale financial assets</b>			
Fair value adjustments	26.5	-6.5	
Reclassification to income statement	-24.2	-17.1	
Deferred taxes	1.6	1.8	
Changes recognized in equity	3.9	-21.8	
<b>Derivative financial instruments</b>			
Fair value adjustments	-50.1	-125.3	
Reclassification to income statement	12.3	17.2	
Reclassification to assets	-	-24.4	
Deferred taxes	4.3	23.9	
Changes recognized in equity	-33.5	-108.6	
<b>Actuarial gains and losses from defined benefit obligations and similar obligations</b>			
Changes in actuarial gains and losses	-27.7	-170.7	
Deferred taxes	7.4	28.5	
Changes recognized in equity	-20.3	-142.2	
<b>Exchange differences on translating foreign operations</b>			
Change recognized in equity	-47.9	840.5	
Reclassification to income statement	3.5	-	
Changes recognized in equity	-44.4	840.5	
<b>Gains/losses recognized immediately in equity</b>		<b>-94.3</b>	<b>567.9</b>
<b>Comprehensive income</b>		<b>534.7</b>	<b>1,209.4</b>
of which attributable to Merck KGaA shareholders	527.1	1,194.4	
of which attributable to non-controlling interest	7.6	15.0	

# Merck

## Consolidated Balance Sheet

€ million	Note	Dec. 31, 2011	Dec. 31, 2010
<b>Current assets</b>			
Cash and cash equivalents	→ 16	937.8	943.7
Marketable securities and financial assets	→ 17	1,117.1	55.6
Trade accounts receivable	→ 18	2,328.3	2,296.3
Inventories	→ 19	1,691.1	1,673.5
Other current assets	→ 20	250.2	564.7
Tax receivables	→ 21	72.7	93.7
Assets held for sale	→ 22	–	36.7
		<b>6,397.2</b>	<b>5,664.2</b>
<b>Non-current assets</b>			
Intangible assets	→ 23	11,764.3	12,484.1
Property, plant and equipment	→ 24	3,113.4	3,241.5
Investments at equity	→ 25	–	5.0
Non-current financial assets	→ 26	60.3	130.3
Financial assets covering pensions	→ 27	–	216.9
Other non-current assets	→ 20	54.9	52.9
Deferred tax assets	→ 13	730.0	593.1
		<b>15,722.9</b>	<b>16,723.8</b>
<b>Total assets</b>		<b>22,120.1</b>	<b>22,388.0</b>
<b>Current liabilities</b>			
Current financial liabilities	→ 28	1,394.4	356.1
Trade accounts payable	→ 29	1,100.8	1,200.1
Other current liabilities	→ 30	1,102.1	1,054.6
Tax liabilities	→ 31	399.4	368.4
Current provisions	→ 32	365.5	374.5
Liabilities directly related to assets held for sale	→ 22	–	5.9
		<b>4,362.2</b>	<b>3,359.6</b>
<b>Non-current liabilities</b>			
Non-current financial liabilities	→ 28	4,144.9	5,127.4
Other non-current liabilities	→ 30	43.6	42.9
Non-current provisions	→ 32	619.5	524.2
Provisions for pensions and other post-employment benefits	→ 33	1,136.9	1,581.6
Deferred tax liabilities	→ 13	1,319.6	1,380.5
		<b>7,264.5</b>	<b>8,656.6</b>
<b>Net equity</b>	→ 34		
Equity capital		565.2	565.2
Reserves		8,671.7	8,484.2
Gains/losses recognized immediately in equity		1,210.2	1,280.4
<b>Equity attributable to Merck KGaA shareholders</b>		<b>10,447.1</b>	<b>10,329.8</b>
Non-controlling interest		46.3	42.0
		<b>10,493.4</b>	<b>10,371.8</b>
<b>Total liabilities and stockholders' equity</b>		<b>22,120.1</b>	<b>22,388.0</b>

# Merck

## Consolidated Cash Flow Statement

€ million	Note	2011	2010
<b>Profit after tax</b>		<b>629.0</b>	<b>641.5</b>
Depreciation/amortization/impairment losses/write-ups		1,597.4	1,257.9
Changes in inventories		-75.3	38.0
Changes in trade accounts receivable		-3.7	-187.0
Changes in trade accounts payable		-119.3	117.5
Changes in provisions		-431.0	-73.6
Changes in other assets and liabilities		-148.7	97.8
Neutralization of gain/loss on disposals of assets		-208.8	-102.4
Other non-cash income and expenses		31.6	-7.1
<b>Net cash flows from operating activities</b>	→ 36	<b>1,271.2</b>	<b>1,782.6</b>
Purchase of intangible assets		-79.7	-104.2
Purchase of property, plant and equipment		-366.3	-396.2
Acquisitions		-161.0	-4,843.7
Investments in financial assets		-10.5	-16.0
Disposal of non-current assets		787.4	54.8
Purchase/sale of marketable securities		-4.7	0.2
Changes in financial assets covering pensions		-3.5	-8.6
Changes in other financial assets		-1,057.7	1,431.3
<b>Net cash flows from investing activities</b>	→ 37	<b>-896.0</b>	<b>-3,882.4</b>
Dividend payments		-86.8	-86.1
Profit transfers to E. Merck KG and changes in reserves		-326.5	-261.1
Changes in liabilities to E. Merck KG		77.3	150.6
Bonds issued		-	3,181.7
Repayment of bonds		-20.8	-500.0
New borrowings of other current and non-current financial liabilities		16.8	84.4
Repayments of other current and non-current financial liabilities		-44.1	-32.0
<b>Net cash flows from financing activities</b>	→ 38	<b>-384.1</b>	<b>2,537.5</b>
<b>Changes in cash and cash equivalents</b>		<b>-8.9</b>	<b>437.7</b>
Changes in cash and cash equivalents due to currency translation		1.8	-34.2
Cash and cash equivalents as of January 1		943.7	541.4
Cash and cash equivalents as of December 31		936.6	944.9
Plus/less cash and cash equivalents included in assets held for sale		1.2	-1.2
<b>Cash and cash equivalents as of December 31</b>	→ 39	<b>937.8</b>	<b>943.7</b>

# Merck

## Consolidated Statement of Changes in Net Equity

For details see Note [34]

€ million	Equity capital		Reserves		
	General partner's equity Merck KGaA	Subscribed capital Merck KGaA	Capital reserves (share premium) Merck KGaA	Retained earnings/ Net retained profit	Actuarial gains and losses
<b>Balance as of January 1, 2010</b>	<b>397.2</b>	<b>168.0</b>	<b>3,813.7</b>	<b>4,733.7</b>	<b>-228.7</b>
Profit after tax	-	-	-	632.1	-
Gains/losses recognized immediately in equity	-	-	-	-	-141.9
<b>Comprehensive income</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>632.1</b>	<b>-141.9</b>
Dividend payments	-	-	-	-64.6	-
Profit transfers to/from E. Merck KG including transfers to reserves	-	-	-	-261.1	-
Changes in scope of consolidation/Other	-	-	-	0.8	0.2
<b>Balance as of December 31, 2010</b>	<b>397.2</b>	<b>168.0</b>	<b>3,813.7</b>	<b>5,040.9</b>	<b>-370.4</b>
<b>Balance as of January 1, 2011</b>	<b>397.2</b>	<b>168.0</b>	<b>3,813.7</b>	<b>5,040.9</b>	<b>-370.4</b>
Profit after tax	-	-	-	617.5	-
Gains/losses recognized immediately in equity	-	-	-	-	-20.2
<b>Comprehensive income</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>617.5</b>	<b>-20.2</b>
Dividend payments	-	-	-	-80.8	-
Profit transfers to/from E. Merck KG including transfers to reserves	-	-	-	-326.5	-
Changes in scope of consolidation/Other	-	-	-	-2.4	-0.1
<b>Balance as of December 31, 2011</b>	<b>397.2</b>	<b>168.0</b>	<b>3,813.7</b>	<b>5,248.7</b>	<b>-390.7</b>

Gains/losses recognized immediately in equity					
Available-for-sale financial assets	Derivative financial instruments	Currency translation difference	Equity attributable to Merck KGaA shareholders	Non-controlling interest	Equity
<b>18.8</b>	<b>47.5</b>	<b>509.9</b>	<b>9,460.1</b>	<b>53.5</b>	<b>9,513.6</b>
–	–	–	632.1	9.4	641.5
–21.8	–108.6	834.6	562.3	5.6	567.9
<b>–21.8</b>	<b>–108.6</b>	<b>834.6</b>	<b>1,194.4</b>	<b>15.0</b>	<b>1,209.4</b>
–	–	–	–64.6	–21.5	–86.1
–	–	–	–261.1	–	–261.1
–0.1	–	0.1	1.0	–5.0	–4.0
<b>–3.1</b>	<b>–61.1</b>	<b>1,344.6</b>	<b>10,329.8</b>	<b>42.0</b>	<b>10,371.8</b>
<b>–3.1</b>	<b>–61.1</b>	<b>1,344.6</b>	<b>10,329.8</b>	<b>42.0</b>	<b>10,371.8</b>
–	–	–	617.5	11.5	629.0
3.9	–33.5	–40.6	–90.4	–3.9	–94.3
<b>3.9</b>	<b>–33.5</b>	<b>–40.6</b>	<b>527.1</b>	<b>7.6</b>	<b>534.7</b>
–	–	–	–80.8	–6.0	–86.8
–	–	–	–326.5	–	–326.5
–	–	–	–2.5	2.7	0.2
<b>0.8</b>	<b>–94.6</b>	<b>1,304.0</b>	<b>10,447.1</b>	<b>46.3</b>	<b>10,493.4</b>

# Merck

## Notes to the Group accounts

### Company information

The accompanying consolidated financial statements have been prepared with Merck KGaA, Darmstadt, which manages the operations of the Merck Group, as parent company. In accordance with the provisions of the German financial reporting disclosure law (Publizitätsgesetz), consolidated financial statements are also prepared for E. Merck KG, the ultimate parent company and general partner of Merck KGaA with an equity interest of 70.27% as of December 31, 2011. These include Merck KGaA and its subsidiaries. The authoritative German versions of these financial statements are filed with the electronic German Federal Gazette (elektronischer Bundesanzeiger) and can be accessed at [www.ebundesanzeiger.de](http://www.ebundesanzeiger.de).

### Reporting principles

The consolidated financial statements of the Merck Group have been prepared in accordance with consistent accounting policies. Pursuant to section 315a of the German Commercial Code (HGB), the International Financial Reporting Standards (IFRS) in force on the reporting date and adopted by the European Union as issued by the International Accounting Standards Board (IASB) and the IFRS Interpretations Committee have been applied.

The following rules take effect as of fiscal 2011:

- Revised version of IAS 24 "Related Party Disclosures"
- Amendment to IAS 32 "Financial Instruments: Presentation"
- Amendment to IFRS 1 "First-time Adoption of International Financial Reporting Standards"
- "Improvements to International Financial Reporting Standards" (issued by the IASB in May 2010)
- IFRIC 19 "Extinguishing Financial Liabilities with Equity Instruments"
- Amendment to IFRIC 14 "IAS 19 – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction"

The new rules do not have any material effects on the consolidated financial statements.

The following rule takes effect as of fiscal 2012:

- Amendment to IFRS 7 "Financial Instruments: Disclosures"

From today's perspective we do not expect the new rule to have a material impact on the consolidated financial statements.

The following rules were published by the International Accounting Standards Board (IASB) and the IFRS Interpretations Committee, but not yet adopted by the EU as of the balance sheet date:

- IFRS 9 "Financial Instruments"
- IFRS 10 "Consolidated Financial Statements"
- IFRS 11 "Joint Arrangements"
- IFRS 12 "Disclosure of Interests in Other Entities"
- 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"
- Amendment to IAS 27 "Consolidated and Separate Financial Statements"
- Amendment to IAS 28 "Investments in Associates"
- Amendment to IAS 32 "Financial Instruments: Presentation"
- Amendment to IFRS 1 "First-time Adoption of International Financial Reporting Standards"

→ Scope of consolidation

- Amendment to IFRS 7 "Financial Instruments: Disclosures"
- IFRIC 20 "Stripping Costs in the Production Phase of a Surface Mine"

The effects that IFRS 9, which is expected to be adopted as of 2015, will have on the consolidated financial statements are currently being examined. We currently do not expect the other new rules to have any material effects on the consolidated financial statements.

### Scope of consolidation

Including the parent company Merck KGaA, Darmstadt, 228 (2010: 236) German and foreign companies were fully consolidated in the annual financial statements of the Merck Group. Of these companies, 206 (2010: 214) are located abroad. Four companies were consolidated for the first time within the scope of the acquisition of the microbiology business of Biostest AG, Dreieich, Germany. With the acquisition of Amnis Corporation, Seattle, WA (USA), two companies were added to the scope of consolidation. As of January 1, 2011, Beijing Skywing Technology Co., Ltd., Beijing, China was consolidated for the first time. A further three companies were consolidated for the first time due to their increased importance to the Merck Group. Eighteen companies were deconsolidated, nine of which were the result of a company merger, three companies were deconsolidated due to secondary importance, and two companies were liquidated. Three companies were deconsolidated due to divestment, two of which within the scope of the disposal of the Crop BioScience business as well as Serono Contracting Ltd., United Kingdom. In addition, Merck Capital Asset Management Limited, Malta, was deconsolidated in connection with the establishment of a Contractual Trust Arrangement (CTA) to externally finance the pension obligations of Merck KGaA. No companies were consolidated on a pro rata basis. The two associates included using the equity method were divested in 2011. This did not have a material impact on the consolidated financial statements.

Due to secondary importance, 25 (2010: 27) subsidiaries are not consolidated. The impact of each of these subsidiaries on sales, profit after tax, assets and equity is less than 1% relative to the entire Merck Group. The interests in subsidiaries not consolidated due to secondary importance are measured at cost and presented under non-current financial assets. A list of all the Merck Group's shareholdings can be found in Note [56].

### Acquisitions

At the end of December 2010, Merck acquired 100% of the shares in Beijing Skywing Technology Co., Ltd., Beijing, China. The acquired company, which is now part of the Merck Millipore division, is a leading supplier to the biopharmaceutical sector in China. The purchase price amounted to € 14.5 million. The first-time consolidation of Beijing Skywing Technology Co., Ltd. took place on January 1, 2011.

The microbiology business of Biostest AG, Dreieich, Germany, was acquired in the reporting period. The transaction closing and consequently the first-time consolidation of this business took place on August 1, 2011. The purchase price amounted to € 85.9 million. The ready-prepared culture media and tools of the acquired business complement the existing range of culture media and test systems of the Merck Millipore division.

On October 4, 2011, Merck acquired 100% of the shares in Amnis Corporation, Seattle, WA (USA). The acquisition expands the flow cytometry portfolio of the Merck Millipore division. The purchase price amounted to € 77.3 million. The first-time consolidation of Amnis Corporation took place on October 4, 2011.

In 2011, € 0.5 million was used to acquire non-controlling interests in a company that we had already fully consolidated.

→ Scope of consolidation

Acquisition-related costs totaling € 1.5 million (€ 0.3 million of which in 2010) were incurred in connection with the aforementioned acquisitions and were expensed in the income statement. Within the scope of the purchase price allocation, the acquired assets and liabilities were recognized at fair values in the balance sheet in accordance with IFRS 3.

The acquisitions had the following effects on the consolidated balance sheet:

€ million	Amnis Corporation	Microbiology business	Beijing Skywing	Total
<b>Current assets</b>				
Cash and cash equivalents, marketable securities and other financial assets	0.7	0.7	0.7	2.1
Inventories	2.8	9.2	1.6	13.6
Receivables	1.5	7.3	0.8	9.6
Other current assets	0.1	0.2	0.2	0.5
	<b>5.1</b>	<b>17.4</b>	<b>3.3</b>	<b>25.8</b>
<b>Non-current assets</b>				
Goodwill	50.3	34.6	6.5	91.4
Other intangible assets	26.9	46.5	5.8	79.2
Property, plant and equipment	0.2	16.6	0.6	17.4
Other non-current assets	–	0.1	–	0.1
Deferred tax assets	–	0.4	–	0.4
	<b>77.4</b>	<b>98.2</b>	<b>12.9</b>	<b>188.5</b>
<b>Assets</b>	<b>82.5</b>	<b>115.6</b>	<b>16.2</b>	<b>214.3</b>
<b>Current liabilities</b>				
Current financial liabilities	–	4.9	–	4.9
Other current liabilities	2.0	8.4	0.2	10.6
	<b>2.0</b>	<b>13.3</b>	<b>0.2</b>	<b>15.5</b>
<b>Non-current liabilities</b>				
Non-current financial liabilities	–	1.1	–	1.1
Provisions for pensions and other post-employment benefits	–	3.2	–	3.2
Other non-current liabilities	–	0.1	–	0.1
Deferred tax liabilities	3.2	12.0	1.5	16.7
	<b>3.2</b>	<b>16.4</b>	<b>1.5</b>	<b>21.1</b>
<b>Liabilities</b>	<b>5.2</b>	<b>29.7</b>	<b>1.7</b>	<b>36.6</b>
<b>Net assets acquired/purchase price</b>	<b>77.3</b>	<b>85.9</b>	<b>14.5</b>	<b>177.7</b>

The most significant impact of the purchase price allocation on the balance sheet and the income statement results from the fair value adjustment of intangible assets.

→ [Scope of consolidation](#)

With respect to the microbiology business of Biotest AG, intangible assets relate particularly to the measurement of the existing customer relationships, and to a lesser extent to technologies and brands. The gross value of the acquired receivables at the time of the acquisition amounted to € 7.3 million. The best possible estimate of the irrecoverable debts amounted to less than € 0.1 million. The deferred tax liabilities disclosed relate mainly to the write-up of intangible assets. The remaining difference between the purchase price of € 85.9 million and fair values of € 51.3 million was reported as goodwill. This mainly includes the expertise of the workforce, increases in market shares and future synergy effects. Synergies are primarily expected in the areas of administration, purchasing, production as well as by combining certain subsidiaries abroad. The fair value adjustments made as part of the purchase price allocation are still to be considered as preliminary as of December 31, 2011. Only the measurement of inventories in the balance sheet as of the date of first-time consolidation is final. For all other balance sheet items, the accounting analyses and calculations have not yet been completed. Therefore, adjustments to these items could still occur in 2012 based on new information. The purchase price for the acquired microbiology business includes a purchase price component of € 15.1 million that has not yet been paid.

Within the scope of the purchase price allocation for Amnis Corporation, intangible assets were identified mainly for technologies, and to a lesser extent also for brands. The gross amounts of the acquired receivables were € 1.5 million at the time of the acquisition; no irrecoverable debts were identified. Tax-loss carryforwards that Merck can make use of were taken into consideration. This led to a decline in deferred tax liabilities that arose particularly in connection with the write-up of intangible assets. The remaining difference between the purchase price of € 77.3 million and fair values of € 27.0 million was disclosed as goodwill, which mainly includes market share increases, the expertise of the workforce and synergies that are primarily expected in R&D. The fair values are still to be considered as preliminary. Adjustments relating to the valuations on the acquisition date could still result in 2012.

The impact of the acquisitions on total revenues and profit after tax was as follows:

€ million	Amnis Corporation	Microbiology business	Beijing Skywing	Total 2011
Total revenues	3.4	19.4	5.2	28.0
Profit after tax	0.0	-0.5	-0.5	-1.0

Profit after tax also included the amortization of the step-up of intangible assets within the scope of the purchase price allocation as well as higher cost of sales due to the step-up of the acquired inventories to fair values. Had the microbiology business and Amnis Corporation been included in the consolidated financial statements of the Merck Group as of January 1, 2011, for the period from January 1 to December 31, 2011 total revenues and profit after tax would have amounted to € 10,311.1 million and € 627.6 million, respectively.

→ Scope of consolidation

The calculation of these figures assumed that the adjustments of the book values as a result of the purchase price allocation would have been identical. Consequently, amortization of intangible assets was included for 12 months. The step-up of the acquired inventories to fair values – in accordance with the assumed inventory turnover period – was taken into consideration in full. The information on the hypothetical consolidation of the microbiology business of Biotest AG as well as Amnis Corporation as of January 1, 2011 in the consolidated financial statements of the Merck Group is required under IFRS and only intended for comparability purposes. The comparison does not necessarily present a development that would have resulted had the microbiology business of Biotest AG as well as Amnis Corporation actually been consolidated as of January 1, 2011. Nor are these statements intended to project future events or results.

**Divestment of the Crop BioScience business**

The sale of our Crop BioScience business to Novozymes A/S, Denmark, took place in the first quarter of 2011. In the Group balance sheet as of December 31, 2010, the corresponding assets and liabilities were disclosed under "Assets held for sale" and "Liabilities directly related to assets held for sale". The Performance Materials division generated sales of around € 46 million with this business in 2010. We received the proceeds of € 208.2 million from the divestment in the first quarter of 2011. Merck generated a gain on the sale of € 157.1 million, which is disclosed in the income statement under "Exceptional items."

Based on the values on the closing date, the divestment of the Crop BioScience business had the following impact on the Group financial statements:

	€ million	2011
<b>Current assets</b>		
Cash and cash equivalents	1.2	
Inventories	5.0	
Receivables	10.3	
Other current assets	0.6	
	<b>17.1</b>	
<b>Non-current assets</b>		
Intangible assets	13.3	
Property, plant and equipment	4.2	
Other non-current assets	2.0	
	<b>19.5</b>	
<b>Assets</b>		<b>36.6</b>
<b>Current liabilities</b>		1.4
<b>Non-current liabilities</b>		0.3
<b>Liabilities</b>		1.7
<b>Net assets</b>		<b>34.9</b>
 <b>Selling price</b>		<b>208.2</b>
<b>Subtotal</b>		<b>173.3</b>
<b>Realized currency translation differences</b>		<b>-3.5</b>
<b>Transaction costs/provisions</b>		<b>-12.7</b>
<b>Gain on the divestment</b>		<b>157.1</b>

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## Accounting policies

The accounting policies have remained unchanged in comparison with 2010.

### **Assumptions and estimates**

The preparation of the consolidated financial statements requires that assumptions and estimates be made to a certain extent. This affects in particular the amount and the presentation of assets and liabilities, information on contingent liabilities, as well as reported income and expenses. Corresponding scope for discretion results, for example, when performing impairment tests of intangible assets and of property, plant and equipment, as well as when recognizing and measuring provisions. In each case, the assumptions and estimates are based on the state of knowledge and data currently available; however the actual results may deviate from the expected values and lead to corresponding adjustments of book values for the relevant assets and liabilities. The assumptions and estimates relevant to the preparation of the consolidated financial statements are reviewed on an ongoing basis. Changes to estimates are taken into account in the period in which the change was made as well as in later periods insofar as the change relates to both the reporting period and later periods. The material assumptions and parameters for the estimates made are presented in the Notes.

### **Consolidation methods**

The consolidated financial statements are based on the single-entity financial statements of the consolidated companies as of December 31, 2011, which were prepared applying consistent accounting policies in accordance with IFRS.

Acquisitions are accounted for using the purchase method in accordance with IFRS 3. Subsidiaries consolidated for the first time in the reporting period are measured at the carrying values at the time of acquisition on the basis of corresponding financial statements. Resulting differences are recognized as assets and liabilities to the extent that their fair values differ from the values actually carried in the financial statements. Any remaining difference is recognized as goodwill within intangible assets, and is subjected to an impairment test if there are indications of impairment, or at least once a year.

In cases where a company was not acquired in full, the pro rata carrying value of the non-controlling interest is recognized.

When additional shares in non-controlling interest are acquired, the difference between the purchase price and the book value of this interest is recognized immediately in equity.

Interests in associates over which Merck has significant influence are – as far as they are material – included in accordance with IAS 28 using the equity method of accounting.

Intragroup sales, expenses and income, as well as all receivables and payables between the consolidated companies, were eliminated. The effects of intragroup deliveries reported under non-current assets and inventories were adjusted by eliminating any intragroup profits. In accordance with IAS 12, deferred taxes are applied to these consolidation measures.

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### Currency translation

The functional currency concept applies to the translation of financial statements of consolidated companies prepared in foreign currencies. The companies of the Merck Group conduct their operations independently. The functional currency of these companies is generally the respective local currency. In accordance with IAS 21, assets and liabilities are translated at the closing rate, and income and expenses are translated at weighted average annual rates to euros, the reporting currency. Any currency translation differences arising during consolidation of Group companies are taken directly to equity. If Group companies are deconsolidated, existing currency differences are reversed and recognized in income.

Business transactions that are conducted in currencies other than the functional currency are recorded using the current exchange rate on the date of the transaction. Foreign currency monetary items (cash and cash equivalents, receivables and payables) in the single-entity financial statements of the consolidated companies prepared in the functional currency are translated at the respective closing rates. Exchange differences from the translation of monetary items are recognized in the income statement with the exception of net investments in a foreign operation. Hedged items are likewise carried at the closing rate in accordance with IAS 21. The resulting gains or losses are eliminated in the income statement against offsetting amounts from the fair value measurement of derivatives. Non-monetary items denominated in foreign currencies are carried at historical cost.

Currency translation is based on the following key exchange rates:

1 € =	Average annual rate		Closing rate	
	2011	2010	Dec. 31, 2011	Dec. 31, 2010
British pound (GBP)	0.870	0.858	0.838	0.861
Chinese renminbi (CNY)	9.001	8.995	8.151	8.818
Japanese yen (JPY)	111.119	116.583	100.361	108.670
Swiss franc (CHF)	1.234	1.380	1.217	1.253
Taiwanese dollar (TWD)	40.938	41.787	39.170	38.938
U.S. dollar (USD)	1.393	1.329	1.294	1.336

### Recognition of sales and other revenue

Sales are recognized net of related taxes as well as revenue-lowering items. They are deemed realized once the goods have been delivered or the services have been rendered and the material opportunities and risks of ownership have been transferred to the purchaser. The amount of revenue can be reliably determined and payment is sufficiently probable. When sales are recognized, estimated amounts are set aside for expected revenue-lowering items, for example rebates, discounts and returns.

In addition to revenue from the sale of goods, sales also include revenue from services, but the volume involved is insignificant.

Depending on the substance of the relevant agreements, royalty, license and commission income is recognized either immediately or on an accrued basis if further contractual obligations exist.

Dividend income is recognized when the shareholders' right to receive the dividend is established. This is normally the date of the dividend resolution. Interest income is recognized on a time-proportionate basis using the effective rate method.

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### Research and development

The breakdown of research and development costs by division and region is presented under Segment Reporting. In addition to the costs of research departments and process development, this item also includes the cost of purchased services and the cost of clinical trials. The costs of research and development are expensed in full in the period in which they are incurred. Development expenses in the Pharmaceuticals business sector cannot be capitalized since the high level of risk up to the time that pharmaceutical products are marketed means that the requirements of IAS 38 are not satisfied in full. Costs incurred after regulatory approval are insignificant. In the same way, the risks involved until products are marketed means that development expenses in the Chemicals business sector cannot be capitalized.

In addition to our own research and development, Merck is also a partner in collaborations aimed at developing marketable products. These collaborations typically involve payments for the achievement of certain milestones.

With respect to this situation, an assessment is required as to whether these upfront or milestone payments represent compensation for services performed (research and development expense) or whether the payments represent the acquisition of a right that has to be capitalized. Reimbursements for R&D are offset against research and development costs.

### Financial instruments: Principles

A financial instrument is any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity. A distinction is made between non-derivative and derivative financial instruments.

Derivatives can be embedded in other financial instruments or in non-financial instruments. Under IFRS, an embedded derivative must be separated from the host contract and accounted for separately at fair value if the economic characteristics of the embedded derivative are not closely related to the economic characteristics of the host contract. Merck did not have any separable embedded derivatives during the fiscal year. Issued compound financial instruments with both an equity and a liability component must be recognized separately depending on their characteristics. Merck was not a party to hybrid or compound financial instruments during the fiscal year.

As a rule, Merck accounts for regular way purchases or sales of financial instruments at the settlement date and derivatives at the trade date.

Financial assets and financial liabilities are generally measured at fair value on initial recognition, if necessary including transaction costs. The fair value of a financial instrument is the amount which would be agreed by two willing, independent parties in an arm's length transaction for that financial instrument. If quoted prices in an active market are available, they are used to measure the financial instrument. In other cases, generally accepted financial techniques using observable prices on the market or third-party valuations are used.

Financial assets are derecognized in part or in full if the contractual rights to the cash flows from the financial asset have expired or if control and substantially all the risks and rewards of ownership of the financial asset have been transferred to a third party. Financial liabilities are derecognized if the contractual obligations have been discharged, cancelled, or expire. Cash and cash equivalents are carried at nominal value.

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**Financial instruments: Categories and classes of financial instruments**

Financial assets and liabilities are classified into the following IAS 39 measurement categories and IFRS 7 classes.

"Financial assets and financial liabilities at fair value through profit or loss" can be both non-derivative and derivative financial instruments. Financial instruments in this category are subsequently measured at fair value. Gains and losses on financial instruments in this measurement category are recognized directly in the income statement. This measurement category includes an option to designate non-derivative financial instruments as at "fair value through profit or loss" on initial recognition (fair value option) or as "financial instruments held for trading". We did not apply the fair value option during the fiscal year. Merck only assigns derivatives to the "held for trading" measurement category. Special accounting rules apply to derivatives that are designated as hedging instruments in a hedging relationship (hedge accounting).

"Held-to-maturity investments" are non-derivative financial assets with fixed or determinable payments and fixed maturity that are quoted in an active market. To be able to assign a financial asset to this measurement category, the entity must have the positive intention and ability to hold it to maturity.

These investments are subsequently measured at amortized cost. If there is objective evidence that such an asset is impaired, an impairment loss is recognized in profit or loss. Subsequent reversals of impairment losses are also recognized in profit or loss up to the amount of the original cost of the asset. At Merck, this measurement category is used for short-term securities and other current financial assets, as well as long-term investments.

"Loans and receivables" are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are subsequently measured at amortized cost. If there is objective evidence that such assets are impaired, an impairment loss is recognized in the income statement. Subsequent reversals of impairment losses are also recognized in the income statement up to the amount of the original cost of the asset. Long-term non-interest-bearing and low-interest receivables are measured at their present value. Merck primarily assigns trade receivables, loans, and miscellaneous other current and non-current receivables to this measurement category. Merck uses a separate allowance account for impairment losses on trade and other receivables.

"Available-for-sale financial assets" are those non-derivative financial assets that are not assigned to the measurement categories "financial assets and financial liabilities at fair value through profit or loss", "loans and receivables" or "held-to-maturity investments". Financial assets in this category are subsequently measured at fair value. Changes in fair value are recognized immediately in equity and are only transferred to the income statement when the financial asset is derecognized. If there is objective evidence that such an asset is impaired, an impairment loss is recognized immediately in the income statement, including any amounts already recognized in equity. Reversals of impairment losses on previously impaired equity instruments are recognized immediately in equity. Reversals of impairment losses on previously impaired debt instruments are recognized in profit or loss up to the amount of the impairment loss. Any amount in excess of this is recognized directly in equity. At Merck, this measurement category is used in particular for short-term securities and other current financial assets, as well as long-term financial investments and securities.

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Financial assets in this category for which no fair value is available or fair value cannot be reliably determined are measured at cost less any cumulative impairment losses. Impairment losses on financial assets carried at cost may not be reversed.

"Other financial liabilities" are non-derivative financial liabilities that are subsequently measured at amortized cost. Differences between the amount received and the amount to be repaid are amortized to profit or loss over the maturity of the instrument. Merck primarily assigns financial liabilities, trade payables, and miscellaneous other non-derivative current and non-current liabilities to this category.

There were no reclassifications between the aforementioned measurement categories during the fiscal year.

The classes required to be disclosed in accordance with IFRS 7 consist of the measurement categories set out above. Additionally, cash and cash equivalents with an original maturity of up to 90 days, finance lease liabilities, and hedging derivatives used in hedge accounting are also classed in accordance with IFRS 7. See Note [43] for a detailed overview.

#### **Financial instruments: Derivative and hedge accounting**

Merck uses derivatives solely to hedge recognized assets or liabilities and forecast transactions. Hedge accounting in accordance with IFRS is applied to part of these hedges. A distinction is made between fair value hedge accounting and cash flow hedge accounting. As a rule, designation of a hedging relationship requires a hedged item (underlying) and a hedging instrument specifically assigned to that hedged item. At Merck, all hedges relate to existing or highly probable hedged items. Merck only uses derivatives as hedging instruments.

Changes in the fair value or cash flows of the hedged item and the hedging instrument must be effective at all times. In both cash flow and fair value hedges, the ineffective portion of the gain or loss on a hedging instrument is recognized in profit or loss. Merck uses the dollar offset method to measure hedge effectiveness. There are strict documentation requirements for hedge accounting. Derivatives that do not or no longer meet the documentation or effectiveness requirements for hedge accounting, or whose hedged item no longer exists, are reported as "financial assets and liabilities at fair value through profit or loss." Changes in fair value are then recognized in profit or loss.

As a rule, the purpose of a fair value hedge is to offset the exposure to changes in the fair value of recognized hedged items (financial assets or financial liabilities) through offsetting changes in the fair value of a hedging instrument. Offsetting gains and losses on the hedging instrument resulting from changes in fair value are recognized in profit or loss, net of deferred taxes. Offsetting gains and losses on the hedged item that are attributable to the hedged risk are also recognized in profit or loss, irrespective of the item's allocation to a measurement category.

At Merck, cash flow hedges are normally a hedge of the exposure to variability in cash flows resulting from highly probable forecast transactions in foreign currencies. In cash flow hedges, the effective portion of the gains and losses on the hedging instrument is recognized in equity until the hedged item occurs. This is also the case if the hedging instrument expires, is sold, or is terminated before the hedged transaction occurs. The ineffective portion of a cash flow hedge is always recognized in profit or loss. See Note [41] for a detailed overview.

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#### **Other non-financial assets and liabilities**

Other non-financial assets are carried at amortized cost. Impairment losses are recognized for any credit risks. Long-term non-interest-bearing and low-interest receivables are carried at their present value. Other non-financial liabilities are carried at the amount to be repaid.

#### **Inventories**

Inventories are carried at cost using the weighted average method. In accordance with IAS 2, in addition to directly attributable unit costs, manufacturing costs also include overheads attributable to the production process, including an appropriate share of depreciation charges on production facilities, which are determined on the basis of normal capacity utilization of the production facilities.

Inventories are written down if the net realizable value is lower than the acquisition or manufacturing cost carried in the balance sheet.

#### **Intangible assets**

Acquired intangible assets are recognized at cost and are classified as assets with finite and indefinite useful lives. Self-developed intangible assets are not capitalized. Intangible assets with indefinite useful lives acquired in the course of business combinations are recognized at fair value on the date of acquisition. This includes purchased goodwill and intangible assets used in products that have not yet reached market maturity. Intangible assets with indefinite useful lives are not amortized, however they are tested for impairment when a triggering event arises or at least once a year. Goodwill is tested for impairment either annually or if there are indications of impairment, and is allocated to cash-generating units. A cash-generating unit is normally a division as presented under Segment Reporting. The carrying amounts of the cash-generating units are compared with their recoverable amounts and impairment losses are recognized where the recoverable amount is lower than the carrying amount. The recoverable amount of a cash-generating unit is determined as the higher of fair value less costs to sell and value in use estimated using the discounted cash flow method. When measuring goodwill, Merck determines the recoverable amount by discounting expected cash flows and therefore uses the value-in-use method. Initially, reference is made to existing forecasts that usually cover a period of four years. Cash flows for periods in excess of this are included using an individualized long-term growth rate for the specific cash-generating unit.

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In the business plan, a long-term growth rate of 2.8% was used to measure the goodwill of the Merck Millipore division. The long-term growth rates used for the other divisions are as follows: Merck Serono 1.5%, Consumer Health Care 2.5%, and Performance Materials 1.0%. The use of division-specific long-term growth rates is suited to taking the specific business and the imminent growth prospects thereof into account.

The expected future cash flows are discounted using a weighted average cost of capital (WACC) of 7.0% (2010: 8.5%). A 10% reduction in future cash flows was assumed when calculating sensitivity. We regard greater volatility as unlikely based on our experience. Even if the actual future cash flows were 10% lower than the expected cash flows, there would be no need to record impairment losses for goodwill.

Any impairment losses on other intangible assets with indefinite useful lives are calculated in the same way as for goodwill.

Impairment losses recognized on indefinite-lived intangible assets other than goodwill are reversed if the original reasons for impairment no longer apply. Intangible assets with a finite useful life are depreciated using the straight-line method. The useful lives of acquired patents, licenses and similar rights, brand names, trademarks and software are between 3 and 15 years. Amortization of intangible assets other than software is reported separately. This item primarily comprises amortization in connection with the Serono and Millipore purchase price allocations, but also to a certain extent amortization of other intangible assets. Amortization of software is allocated to the functional costs in the income statement.

An impairment test is performed if there are indications of impairment. Impairment losses are determined using the same methodology as for indefinite-lived intangible assets. Impairment losses recognized on finite-lived intangible assets are reversed if the original reasons for impairment no longer apply.

**Property, plant and equipment**

Property, plant and equipment is carried at the cost of acquisition or manufacture less depreciation. The component approach is applied here in accordance with IAS 16. Subsequent acquisition and manufacturing costs are only capitalized if it is probable that future economic benefits will arise for the Group and the cost of the asset can be measured reliably. The cost of manufacture of self-constructed property, plant and equipment is calculated on the basis of the directly attributable unit costs and an appropriate share of overheads, including depreciation and write-downs. Financing costs are capitalized if material. In accordance with IAS 20, costs of acquisition or manufacture are reduced by the amount of government grants

→ Accounting policies

in those cases where government grants or subsidies have been paid for the acquisition or manufacture of assets (investment grants). Grants related to expenses which no longer offset future expenses are recognized in income. Property, plant and equipment is depreciated by the straight-line method over the useful life of the asset concerned. Depreciation of property, plant and equipment is based on the following useful lives:

**Useful life of property, plant and equipment**

	Useful life
Production buildings	maximum of 33 years
Administration buildings	maximum of 40 years
Plant and machinery	6 to 25 years
Operating and office equipment; other facilities	3 to 10 years

The useful lives are reviewed regularly and adjusted if necessary. If indications of a decline in value exist, an impairment test is performed. The determination of the possible need to recognize impairments proceeds in the same way as for intangible assets. If the reasons for an impairment loss no longer exist, a write-up is recorded.

**Investment property**

Assets of this category are of minor importance to the Merck Group and are carried at cost and recognized under "Land, land rights and buildings including buildings on third-party land". As of December 31, 2011, Merck had no assets of this category (2010: € 5.5 million).

**Leasing**

Where assets are leased and economic ownership lies with the Group company (finance lease), the asset is recognized at the present value of the lease payments or the lower fair value in accordance with IAS 17 and depreciated over its useful life. The corresponding payment obligations from future lease payments are recorded as liabilities.

**Deferred taxes**

Deferred tax assets and liabilities result from temporary differences of consolidated companies between the carrying amount of an asset or liability in the balance sheet and its tax base as well as from consolidation activities, as far as the carrying amount of the asset or liability is recovered or settled in future periods. In addition, deferred tax assets are recorded in particular for tax loss carryforwards if and insofar as their utilization is probable in the foreseeable future. In accordance with the liability method, the tax rates enacted and published as of the balance sheet date are used.

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### Provisions

Provisions are recognized in the balance sheet if Merck has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources will be required to settle the obligation and the amount of the obligation can be measured reliably. The carrying value of provisions takes into account the amounts required to cover future payment obligations, recognizable risks and uncertain obligations of the Merck Group to third parties. Measurement is based on the settlement amount with the highest probability or if the probabilities are equivalent, it is based on the expected value of the settlement amounts. Long-term provisions are discounted and carried at their present value as of the balance sheet date. To the extent that reimbursement claims exist as defined in IAS 37, they are recognized separately as an asset as soon as their realization is virtually certain.

### Provisions for pensions and other post-employment benefits

Provisions for pensions and other post-employment benefits are recorded in the balance sheet in accordance with IAS 19. Depending on the legal, economic and fiscal circumstances prevailing in each country, different retirement benefit systems are provided for the employees of the Merck Group. As a rule, these systems are based on length of service and salary of the employees. Pension obligations of the Merck Group include both defined benefit and defined contribution plans and comprise both obligations from current pensions and accrued benefits for pensions payable in the future. In the Merck Group, defined benefit plans are funded and unfunded. Subsequent to the establishment of a Contractual Trust Arrangement (CTA) in 2011 to cover the pension obligations of Merck KGaA, the bulk of the obligation is covered by funds. The smaller portion is covered by provisions reported in the balance sheet. These provisions also contain other post-employment benefits, such as accrued future health care costs for pensioners in the United States.

The obligations of our companies under defined benefit plans are measured using the projected unit credit method. Under the projected unit credit method, dynamic parameters are taken into account in calculating the expected benefit payments after an insured event occurs; these payments are spread over the entire period of service of the participating employees. Annual actuarial opinions are prepared for this purpose. In accordance with the option under IAS 19.93A, actuarial gains and losses resulting from changes in actuarial assumptions and/or experience adjustments (the effects of differences between the previous actuarial assumptions and what has actually occurred) are recognized immediately in equity as soon as they are incurred, taking deferred taxes into account. Consequently, the balance sheet discloses the full scope of the obligations while avoiding the fluctuations in expenses that can result especially when the calculation parameters change. The actuarial gains and losses recorded in the respective reporting period are presented separately in the Statement of Comprehensive Income.

→ [Notes to the consolidated income statement](#)

## Notes to the consolidated income statement

### **(1) Sales**

Sales are generated primarily from the sale of goods and to a limited degree also include revenues from services rendered. Merck Group sales totaled € 9,905.9 million in 2011, which represents an increase of 10.9% compared to 2010. Adjusted for the impact of foreign exchange rates and acquisitions, primarily as a result of the Millipore acquisition, organic growth amounted to 4.8%. Sales are presented by business sector, division and region in the Segment Reporting (see Note [35]).

### **(2) Royalty, license and commission income**

In 2011, royalty and license income totaled € 354.2 million (2010: € 339.4 million) and mainly included royalty and license income from the products Avonex® (Biogen Idec), Humira® (Abbott), Enbrel® (Amgen), Puregon® (Merck & Co.) and Viibryd® (Forest Laboratories Inc.), as well as income from the active pharmaceutical ingredients bisoprolol and metformin.

In 2011, commission income totaled € 16.3 million (2010: € 22.3 million). This primarily consisted of cooperation and distribution agreements, such as for Ikorel® (Sanofi-Aventis) and Euthyrox® (Bracco). The breakdown of royalty, license and commission income by business sector and division is presented in the Segment Reporting (see Note [35]).

### **(3) Cost of sales**

Cost of sales primarily includes the cost of manufactured products as well as goods purchased for resale. In accordance with IAS 2, the cost comprises overheads directly attributable to the production process, including depreciation charges on production facilities and, if necessary, inventory write-downs, in addition to directly attributable costs, such as the cost of materials, personnel and energy. We also disclose write-downs of inventories as part of cost of sales. In 2010, this item included a one-time charge of € 85.8 million, which is attributable to the fair value measurement of the inventories acquired from Millipore. This amount was fully expensed in 2010 and consequently lowered the gross margin.

### **(4) Marketing and selling expenses**

In addition to the cost of sales and marketing departments and of the sales force, marketing and selling expenses include advertising and logistics. The increase compared to 2010 is due largely to the fact that the income statement in 2010 only reflects the costs of the Millipore companies for half a year. The breakdown of marketing and selling expenses by business sector and division is presented in the Segment Reporting (see Note [35]).

### **(5) Royalty, license and commission expenses**

In 2011, royalty and license expenses amounted to € 204.1 million (2010: € 179.5 million) and commission expenses totaled € 296.4 million (2010: € 297.5 million). The breakdown of royalty, license and commission expenses by business sector and division is presented in the Segment Reporting (see Note [35]).

### **(6) Administration expenses**

Personnel costs and material expenses of management and administrative functions are recorded under this item unless they have been charged to other cost centers as internal services. The increase in administration expenses is due among other things to the consolidation of the Millipore companies, which in 2010 were only reflected in the income statement for a six-month period. The breakdown of administration expenses by business sector and division is presented in the Segment Reporting (see Note [35]).

→ [Notes to the consolidated income statement](#)

## (7) Other operating expenses and income

Other operating expenses and income can be broken down as follows:

€ million	2011	2010
Impairment losses	-185.5	-65.5
Write-downs of receivables	-123.7	-19.7
Restructuring and integration costs	-67.7	-64.4
Litigation	-61.1	-89.2
Premiums, fees and contributions	-52.0	-52.8
Project costs	-39.5	-79.2
Non-income-related taxes	-29.2	-23.7
Impairment losses on Greek sovereign bonds	-18.0	-
Expense for services performed	-17.8	-21.0
Other operating expenses	-130.1	-111.3
<b>Total other operating expenses</b>	<b>-724.6</b>	<b>-526.8</b>
 Gains on disposals of assets	53.0	37.6
Payments for services performed	30.5	26.8
Exchange rate differences from operating activities	12.3	24.7
Release of write-downs of receivables	9.2	10.0
Other operating income	37.7	37.3
<b>Total other operating income</b>	<b>142.7</b>	<b>136.4</b>
 <b>Total other operating expenses and income</b>	<b>-581.9</b>	<b>-390.4</b>

Owing to expected overcapacity at the Large-Scale Biotech production plant (LSB) currently being built at the Merck Serono Biotech Center in Switzerland, an impairment loss of € 165.1 million was recognized in 2011. The write-downs of receivables relate in 2011 mainly to receivables from state hospitals and health care organizations in Italy, Spain, Greece and Portugal and are due to the existing uncertainties in connection with the sovereign debt crisis in the eurozone. Integration costs amounting to € 37.9 million were incurred in respect of Millipore (2010: € 87.3 million). Of this amount, € 36.5 million was disclosed under "restructuring and integration costs" (2010: € 53.4 million) and € 1.4 million was disclosed under "project costs" (2010: € 33.9 million). Moreover, in 2011 restructuring and integration costs included expenses of € 12.8 million in connection with the decision to no longer further pursue the approval process for cladribine tablets. Initial measures in connection with the efficiency-enhancement and cost-reduction program were already taken in 2011. The resulting expenses of € 16.3 million were likewise recorded under "restructuring and integration costs."

Apart from the costs related to the Millipore acquisition, project costs mainly also include expenses incurred in connection with Group-wide IT projects. These include, for example, projects to harmonize IT applications and infrastructure throughout the Group.

Other operating expenses include, among other things, special environmental protection costs and non-allocatable personnel expenses. The breakdown of other operating expenses and income by business sector and division is presented in the Segment Reporting (see Note [35]).

→ Notes to the consolidated income statement

### (8) Research and development

Research and development costs rose in 2011 by 8.6% to € 1,517.1 million. Nearly half of this increase is attributable to the consolidation of the Millipore companies, whose expenses were only reflected in the income statement for half a year in 2010. Reimbursements for R&D amounting to € 22.9 million (2010: € 21.9 million) were offset against research and development costs. The breakdown of research and development costs by business sector and division is presented in the Segment Reporting (see Note [35]).

### (9) Amortization of intangible assets

Due to the particular significance of the amortization of intangible assets to the Merck Group, this item is disclosed separately in the income statement. Amortization of intangible assets increased sharply to € 1,004.7 million in 2011 from € 818.6 million in 2010. This total mainly includes amortization of intangible assets in connection with the purchase price allocations for Serono and Millipore. The increase is due on the one hand to the fact that amortization of intangible assets from the purchase price allocation for the Merck Millipore division is included for a full year, whereas 2010 only included amortization for the second half of 2010. In addition, in 2011, the estimate of the remaining useful life of Rebif® was shortened by two years. As of the second quarter, this increased write-downs by a total of € 51.3 million in 2011. This item additionally includes the following impairment losses: Owing to our decision to no longer pursue the global approval process for cladribine tablets, the residual book value of € 50.4 million was written off. In connection with changes in the development plan for safinamide, a potential add-on therapy for Parkinson's disease, we wrote off the residual book value of € 63.4 million. Further impairments amounting to € 35.4 million resulted from the decision to discontinue the development of IMO-2055, a candidate for cancer treatment. In addition, owing to the termination of a further research project in the Merck Serono division, an additional impairment loss of € 9.0 million was recorded. Impairment losses of € 8.6 million on various patents in the Performance Materials division were recorded in 2011. Amortization of software is allocated to the respective operating expenses.

### (10) Investment result

€ million	2011	2010
Investment result from associates (equity method)	–1.2	0.9
Other investment income/expense	0.2	3.2
	–1.0	4.1

→ Notes to the consolidated income statement

### (11) Exceptional items

Exceptional items comprised:

€ million	2011	2010
Gain on the divestment of the Crop BioScience business/transaction costs	157.1	-1.0
Gain on the divestment of the Théramex business	18.6	68.6
Adjustment of previous exceptional items	9.4	-
Expenses for environmental protection measures	-28.9	-
Expenses for litigation Dey Inc., USA	-4.4	-67.2
Selling price adjustments for the Electronic Chemicals business	-	-1.2
<b>Exceptional items</b>	<b>151.8</b>	<b>-0.8</b>

In 2011, exceptional items included € 157.1 million from the divestment of the Crop BioScience business to Novozymes A/S as well as an additional gain of € 18.6 million from the sale of distribution rights in connection with the divestment of the Théramex business, which closed at the end of 2010. Furthermore, expenses of € 28.9 million were incurred for provisions set up for environmental protection measures. Additional expenses of € 4.4 million were recognized in connection with the Dey Inc., USA, litigation. Income from the adjustment of previous exceptional items resulted from the provisions set up in connection with the discontinuation of Raptiva®.

### (12) Financial result

€ million	2011	2010
Interest income and similar income	57.8	33.0
Interest expenses and similar expenses	-227.2	-208.9
Interest component from currency hedging transactions	-17.0	-11.8
<b>-186.4</b>	<b>-187.7</b>	
Interest component of the additions to pension provisions and other non-current provisions	-67.4	-72.2
Exchange rate differences from financing activities	-30.4	1.1
Income/loss from financial interests	-1.6	7.2
<b>-285.8</b>	<b>-251.6</b>	

→ Notes to the consolidated income statement

### (13) Income tax

€ million	2011	2010
Current taxes in the period	-383.4	-329.8
Current taxes in the period on exceptional items	-38.6	-0.1
Taxes for previous periods	11.5	-8.8
Deferred taxes in the period	189.6	120.5
Deferred taxes in the period on exceptional items	-1.2	-1.4
	<b>-222.1</b>	<b>-219.6</b>
Tax ratio	26.1%	25.5%
Tax ratio before exceptional items	26.1%	25.3%

The tax expense consists of corporation and trade income taxes for the companies domiciled in Germany as well as comparable income taxes for foreign companies. Taxes for other periods include trade tax refunds in Germany and risk provisioning, both of which relate to prior years.

In 2011, changes in tax rates in individual companies resulted in a deferred tax expense of € 3.0 million (2010: expense of € 0.1 million). One-time deferred tax income of € 22.2 million was recognized owing to change in applicable tax rates. In addition, one-time deferred tax income of € 14.2 million resulted from the revaluation of deferred tax liabilities in connection with the shorter amortization period for Rebif®.

The reconciliation between deferred taxes in the balance sheet and deferred taxes in the income statement is presented below:

€ million	2011	2010
Change in deferred tax assets (balance sheet)	136.9	47.7
Change in deferred tax liabilities (balance sheet)	60.9	-617.0
Deferred taxes credited/debited to equity	-13.3	-54.2
Changes in scope of consolidation/currency translation/Other changes	3.9	742.6
<b>Deferred taxes (income statement)</b>	<b>188.4</b>	<b>119.1</b>

Tax loss carryforwards are structured as follows:

€ million	Dec. 31, 2011			Dec. 31, 2010		
	Germany	Abroad	Total	Germany	Abroad	Total
Tax loss carryforwards	1.8	188.1	<b>189.9</b>	2.0	194.2	<b>196.2</b>
thereof:						
Including deferred tax asset	-	100.9	<b>100.9</b>	-	125.7	<b>125.7</b>
Deferred tax asset	-	35.1	<b>35.1</b>	-	39.2	<b>39.2</b>
thereof:						
Excluding deferred tax asset	1.8	87.2	<b>89.0</b>	2.0	68.5	<b>70.5</b>
Theoretical deferred tax asset	0.3	28.2	<b>28.5</b>	0.5	20.5	<b>21.0</b>

→ Notes to the consolidated income statement

The decrease in tax loss carryforwards compared to 2010 was mainly the result of the positive business development of the relevant Group companies. Deferred tax assets are recognized for tax loss and interest carryforwards only if realization of the related tax benefits is probable in the foreseeable future.

The vast majority of the tax loss carryforwards either has no expiry date or can be carried forward for up to 20 years. The interest carryforward results from the German earnings stripping rule. In 2011, the income tax expense was reduced by € 25.7 million (2010: € 20.0 million) due to the utilization of tax loss carryforwards from prior years for which no deferred tax asset had been recognized in prior periods.

The tax loss carryforwards accumulated in Germany for corporation tax amounted to € 1.4 million (2010: € 1.5 million) and to € 0.4 million (2010: € 0.5 million) for trade tax.

The additional theoretically possible deferred tax assets amounted to € 28.5 million (2010: € 21.0 million). Deferred tax assets and liabilities correspond to the following balance sheet items:

€ million	Dec. 31, 2011		Dec. 31, 2010	
	Assets	Liabilities	Assets	Liabilities
Intangible assets	71.3	1,293.5	33.7	1,374.3
Property, plant and equipment	5.9	94.7	15.6	88.1
Current and non-current financial assets	14.9	21.1	5.9	19.3
Inventories	384.4	3.5	305.6	3.7
Current and non-current receivables/Other assets	32.4	20.7	44.6	2.8
Provisions for pensions and other post-employment benefits	130.8	14.2	129.7	18.1
Current and non-current other provisions	193.0	14.2	169.4	15.2
Current and non-current liabilities	74.1	6.0	27.8	5.8
Tax loss carryforwards	35.1	–	39.2	–
Tax refund claims/Other	29.2	92.8	58.2	89.8
Offset deferred tax assets and liabilities	–241.1	–241.1	–236.6	–236.6
<b>Deferred taxes (balance sheet)</b>	<b>730.0</b>	<b>1,319.6</b>	<b>593.1</b>	<b>1,380.5</b>

In addition to deferred tax assets on tax loss carryforwards, deferred tax assets of € 694.9 million (2010: € 553.9 million) were recognized for other temporary differences.

As of the balance sheet date, deferred tax liabilities for temporary differences for interests in subsidiaries as regards planned dividend payments amount to € 100.2 million (2010: € 102.8 million). Of this amount, € 83.5 million relates to deferred tax liabilities for non-distributed profits which had been accrued within the scope of the Millipore acquisition. In 2010, a deferred tax asset of € 3.0 million was recognized for the announced divestment of Crop BioScience. No deferred tax liabilities were recognized for other temporary differences since the reversal of these differences is not foreseeable. Temporary differences relating to the retained earnings of subsidiaries amount to € 3,508.8 million.

The following table presents the tax reconciliation from theoretical tax expense to tax expense before exceptional items and tax expense according to the income statement. The theoretical tax expense is determined by applying the statutory tax rate of 30.7% of a corporation headquartered in Darmstadt.

→ Notes to the consolidated income statement

€ million	2011	2010
Profit before income tax	851.1	861.1
Exceptional items	151.8	-0.8
<b>Profit before tax and exceptional items</b>	<b>699.3</b>	<b>861.9</b>
Tax rate	30.7%	30.7%
Theoretical tax expense before exceptional items	-214.7	-264.6
Tax rate differences	-5.1	45.7
Tax effect of companies with a negative contribution to consolidated profit	-3.2	-9.0
Tax for other periods	11.5	-8.8
Tax credits	38.2	22.9
Tax effect on tax loss carryforwards	25.7	25.8
Effect of non-deductible expenses/tax-free income/other tax effects	-34.7	-30.1
<b>Tax expense before exceptional items</b>	<b>-182.3</b>	<b>-218.1</b>
Tax ratio before exceptional items	26.1%	25.3%
Taxes on exceptional items	-39.8	-1.5
<b>Tax expense according to income statement</b>	<b>-222.1</b>	<b>-219.6</b>
Tax ratio according to income statement	26.1%	25.5%

#### (14) Non-controlling interest

Non-controlling interest in net profit is primarily composed of the minority interests in the listed companies Merck Ltd., India, and PT Merck Tbk., Indonesia as well as in Merck Ltd., Thailand, and Merck (Pvt.) Ltd., Pakistan.

#### (15) Earnings per share

Basic earnings per share are calculated by dividing the profit after tax attributable to the shareholders of Merck KGaA by the weighted average number of theoretical shares outstanding. The use of a theoretical number of shares takes into account the fact that the general partner's capital is not represented by shares. The share capital of € 168.0 million is divided into 64,621,126 shares. Accordingly, the general partner's capital of € 397.2 million is divided into 152,767,813 theoretical shares. Overall, the total capital thus amounts to € 565.2 million or 217,388,939 theoretical shares outstanding.

	2011	2010
Profit after tax attributable to Merck KGaA shareholders (€ million)	617.5	632.1
Weighted average number of theoretical shares outstanding (millions)	217.4	217.4
<b>Basic earnings per share (€)</b>	<b>2.84</b>	<b>2.91</b>

As of December 31, 2011 there were no potentially dilutive shares.

→ [Notes to the consolidated balance sheet](#)

## Notes to the consolidated balance sheet

### (16) Cash and cash equivalents

This item comprises:

€ million	Dec. 31, 2011	Dec. 31, 2010
Cheques, cash and bank balances	187.7	233.6
Short-term cash investments	750.1	710.1
<b>937.8</b>	<b>943.7</b>	

Changes in cash and cash equivalents as defined by IAS 7 are presented in the cash flow statement. This item includes short-term receivables due from related parties and affiliates amounting to € 8.2 million (2010: € 8.6 million).

Short-term cash investments mainly comprise fixed-term deposits with banks that have a very good credit rating.

### (17) Marketable securities and financial assets

This item comprises the following categories:

€ million	Dec. 31, 2011	Dec. 31, 2010
Financial investments held to maturity	27.3	22.7
Available-for-sale financial investments	307.9	11.3
Short-term financial investments/loans to third parties	760.0	0.3
Derivative assets (financial transactions)	21.9	21.3
<b>1,117.1</b>	<b>55.6</b>	

The significant increase in marketable securities and financial assets resulted mainly from short-term financial investments with an original maturity of more than 90 days, which included fixed-term deposits of € 760.0 million (2010: € 0.3 million). There were no write-downs or payments past due. As of December 31, 2011, the balance sheet item "available-for-sale financial investments" mainly includes commercial paper amounting to € 247.3 million as well as Greek sovereign bonds with a book value of € 10.9 million. The nominal value of the Greek sovereign bonds is € 43.2 million. We received these securities within the scope of an exchange of receivables that were due from Greek hospitals. In fiscal 2011, the first tranche amounting to € 12.4 million was repaid. Additionally, an impairment loss of € 18.0 million was recognized on remaining Greek sovereign bonds and reported under "Other operating expenses". Moreover, fair value adjustments of € +1.3 million, which were recognized in equity, were made on "available-for-sale financial investments" (2010: € -2.0 million).

→ Notes to the consolidated balance sheet

### (18) Trade accounts receivable

This item comprises:

€ million	Dec. 31, 2011	Dec. 31, 2010
Receivables from affiliates	–	0.3
Receivables from associates	–	0.8
Receivables from third parties	2,328.3	2,295.2
	<b>2,328.3</b>	<b>2,296.3</b>

Trade accounts receivable past due are as follows:

€ million	Dec. 31, 2011	Dec. 31, 2010
Neither past due nor impaired	1,676.0	1,659.0
Past due, but not impaired		
up to 3 months	196.5	265.7
up to 6 months	29.2	107.4
up to 12 months	17.7	96.4
over 1 year	10.4	109.5
Impaired	398.5	58.3
<b>Book value</b>	<b>2,328.3</b>	<b>2,296.3</b>

The corresponding write-downs developed as follows:

€ million	2011	2010
<b>January 1</b>	<b>–58.9</b>	<b>–46.0</b>
Additions (net)	–113.8	–10.8
Utilizations	23.6	5.2
Currency translation and other changes	0.1	–7.3
<b>December 31</b>	<b>–149.0</b>	<b>–58.9</b>

In fiscal 2011, trade receivables in Italy and Portugal with a nominal value of € 124.1 million were sold for € 118.8 million. Sufficient write-downs were recorded for these trade receivables in previous years. The sold receivables do not involve any further rights of recovery vis-à-vis Merck.

Net additions to write-downs relate mainly to receivables from state hospitals and health care organizations in Italy, Spain, Greece and Portugal. The sharp increase compared to 2010 is attributable to the existing uncertainties in connection with the sovereign debt crisis in the eurozone. The measurement of the respective receivables takes into account country-specific risk discounts as well as the age structure.

With regard to other receivables that are neither impaired nor delayed, as of the reporting date there are no indications that the debtors will not meet their payment obligations.

→ [Notes to the consolidated balance sheet](#)

### (19) Inventories

This item comprises:

€ million	Dec. 31, 2011	Dec. 31, 2010
Raw materials and production supplies	288.9	189.7
Work in progress, finished goods and goods purchased for resale	1,402.2	1,483.8
	<b>1,691.1</b>	<b>1,673.5</b>

Write-downs of inventories amounted to € 116.0 million in 2011 (2010: € 138.7 million). As of the balance sheet date, the residual book value of inventories that were written down amounts to € 894.8 million (2010: € 757.5 million). In 2011, inventory write-ups of € 0.7 million were recorded (2010: € 27.0 million). Inventories amounting to € 2,788.3 million (2010: € 2,385.4 million) were recognized as an expense in the reporting period. As of the balance sheet date, no inventories were used to secure liabilities.

### (20) Other assets

Other assets comprised the following:

€ million	current	non-current	Dec. 31, 2011	current	non-current	Dec. 31, 2010
Receivables from third parties	81.5	2.5	84.0	385.6	2.1	387.7
Receivables from related parties	6.2	–	6.2	17.0	–	17.0
Receivables from affiliates	0.4	–	0.4	2.4	–	2.4
<b>Other receivables</b>	<b>88.1</b>	<b>2.5</b>	<b>90.6</b>	<b>405.0</b>	<b>2.1</b>	<b>407.1</b>
Receivables from non-income related taxes	85.0	40.7	125.7	72.8	36.0	108.8
Prepaid expenses	37.1	3.6	40.7	48.2	2.7	50.9
Refund claims on plan assets	17.3	–	17.3	18.8	–	18.8
Derivative assets (operational)	2.6	–	2.6	2.2	0.4	2.6
Other assets	20.1	8.1	28.2	17.7	11.7	29.4
	<b>250.2</b>	<b>54.9</b>	<b>305.1</b>	<b>564.7</b>	<b>52.9</b>	<b>617.6</b>

The decline in other receivables resulted mainly from the receipt of the payment of our selling price receivable amounting to € 269.3 million from the sale of Théramex in 2010. Other assets mainly included prepayments as well as accrued interest income.

→ Notes to the consolidated balance sheet

Other receivables from third parties past due were as follows:

€ million	Dec. 31, 2011	Dec. 31, 2010
Neither past due nor impaired	69.0	345.0
Past due, but not impaired		
up to 3 months	4.7	8.4
up to 6 months	5.6	4.8
up to 12 months	0.4	0.6
over 1 year	4.3	2.0
Impaired	–	26.9
<b>Book value</b>	<b>84.0</b>	<b>387.7</b>

A settlement payment was made to the U.S. Department of Justice in 2010 in connection with the litigation of our former subsidiary Dey, Inc., USA, which we sold to Mylan. Insofar as this payment is tax-deductible, Merck is entitled to claim reimbursement from Mylan in the amount of the tax credit. The exact amount cannot be definitively determined at this point in time and depends on the assessment made by the tax authorities. Merck had written down this claim by € 52.6 million to a residual book value of € 26.9 million on December 31, 2010. In 2011, we received a partial payment in connection with this issue, which corresponded to the outstanding book value. The remaining claim was written off.

In 2011, we recognized impairments of € 0.7 million on other receivable from third parties (2010: € 0.0 million). Write-ups of other receivables from third parties were not necessary in either 2011 or 2010. With regard to other receivables that are neither impaired nor delayed, as of the reporting date there are no indications that the debtors will not meet their payment obligations.

#### **(21) Tax receivables**

Tax receivables amounted to € 72.7 million (2010: € 93.7 million) and resulted from tax prepayments that exceed the actual amount of tax payable for 2011 and prior fiscal years, and from refund claims for prior years as well as withholding tax credits.

→ [Notes to the consolidated balance sheet](#)

### (22) Assets held for sale and liabilities directly related to assets held for sale

As of December 31, 2011, there were no assets held for sale and liabilities directly related to assets held for sale. In the consolidated balance sheet as of December 31, 2010, the values for the Crop BioScience business were disclosed under this item. The sale of this business to Novozymes A/S closed in the first quarter of 2011. The following table presents this item in more detail:

€ million	Dec. 31, 2011	Dec. 31, 2010
<b>Current assets</b>		
Cash and cash equivalents	–	1.2
Inventories	–	4.6
Receivables	–	10.6
Other current assets	–	0.6
	–	<b>17.0</b>
<b>Non-current assets</b>		
Intangible assets	–	13.4
Property, plant and equipment	–	4.4
Other non-current assets	–	1.9
	–	<b>19.7</b>
<b>Assets held for sale</b>	–	<b>36.7</b>
<b>Current liabilities</b>		
Trade accounts payable	–	1.0
Other current liabilities	–	4.7
	–	<b>5.7</b>
<b>Non-current liabilities</b>		
	–	<b>0.2</b>
<b>Liabilities directly related to assets held for sale</b>	–	<b>5.9</b>

→ Notes to the consolidated balance sheet

### (23) Intangible assets

	Patents, licenses and similar rights, brands, trademarks and other		Goodwill	Software	Advance payments	Total
€ million	Finite useful life	Indefinite useful life				
<b>Acquisition cost January 1, 2010</b>	<b>7,598.7</b>	<b>501.3</b>	<b>1,982.7</b>	<b>212.8</b>	<b>32.9</b>	<b>10,328.4</b>
Currency translation	704.5	37.0	89.4	14.5	1.7	847.1
Changes in scope of consolidation	2,534.9	9.3	2,545.3	11.3	–	5,100.8
Additions	23.0	20.8	–	17.3	43.1	104.2
Disposals	–10.1	–0.5	–	–27.2	–0.1	–37.9
Transfers	76.5	–76.3	4.9	48.4	–35.7	17.8
Reclassification to assets held for sale	–29.8	–	–	–0.3	–	–30.1
<b>December 31, 2010</b>	<b>10,897.7</b>	<b>491.6</b>	<b>4,622.3</b>	<b>276.8</b>	<b>41.9</b>	<b>16,330.3</b>
<b>Accumulated amortization and impairment losses</b>						
<b>January 1, 2010</b>	<b>–2,419.2</b>	<b>–138.9</b>	<b>–38.8</b>	<b>–133.1</b>	<b>–</b>	<b>–2,730.0</b>
Currency translation	–234.8	–10.3	0.2	–11.2	–	–256.1
Changes in scope of consolidation	1.2	–	–	2.2	–	3.4
Amortization and impairment losses	–701.7	–164.4	–	–40.1	–	–906.2
Disposals	7.7	–	–	26.3	–	34.0
Transfers	0.1	–	–3.6	–4.5	–	–8.0
Write-ups	–	–	–	–	–	–
Reclassification to assets held for sale	16.4	–	–	0.3	–	16.7
<b>December 31, 2010</b>	<b>–3,330.3</b>	<b>–313.6</b>	<b>–42.2</b>	<b>–160.1</b>	<b>–</b>	<b>–3,846.2</b>
<b>Net carrying amount as of December 31, 2010</b>	<b>7,567.4</b>	<b>178.0</b>	<b>4,580.1</b>	<b>116.7</b>	<b>41.9</b>	<b>12,484.1</b>
<b>Acquisition cost January 1, 2011</b>	<b>10,897.7</b>	<b>491.6</b>	<b>4,622.3</b>	<b>276.8</b>	<b>41.9</b>	<b>16,330.3</b>
Currency translation	60.6	–0.3	45.1	1.9	–0.1	107.2
Changes in scope of consolidation	79.1	–	91.4	0.1	–	170.6
Additions	8.1	31.2	–	11.8	28.6	79.7
Disposals	–0.3	–0.3	–	–6.5	–0.4	–7.5
Transfers	11.9	–9.0	–	48.1	–44.0	7.0
Reclassification to assets held for sale	–	–	–	–	–	–
<b>December 31, 2011</b>	<b>11,057.1</b>	<b>513.2</b>	<b>4,758.8</b>	<b>332.2</b>	<b>26.0</b>	<b>16,687.3</b>
<b>Accumulated amortization and impairment losses</b>						
<b>January 1, 2011</b>	<b>–3,330.3</b>	<b>–313.6</b>	<b>–42.2</b>	<b>–160.1</b>	<b>–</b>	<b>–3,846.2</b>
Currency translation	–16.7	–0.1	–0.2	–1.4	–	–18.4
Changes in scope of consolidation	–	–	–	–	–	–
Amortization and impairment losses	–898.1	–1114.4	–	–51.5	–	–1,061.0
Disposals	0.3	0.3	–	6.0	–	6.6
Transfers	–0.2	–0.5	–	–3.3	–	–4.0
Write-ups	–	–	–	–	–	–
Reclassification to assets held for sale	–	–	–	–	–	–
<b>December 31, 2011</b>	<b>–4,245.0</b>	<b>–425.3</b>	<b>–42.4</b>	<b>–210.3</b>	<b>–</b>	<b>–4,923.0</b>
<b>Net carrying amount as of December 31, 2011</b>	<b>6,812.1</b>	<b>87.9</b>	<b>4,716.4</b>	<b>121.9</b>	<b>26.0</b>	<b>11,764.3</b>

→ Notes to the consolidated balance sheet

The changes in scope of consolidation include additions amounting to € 170.6 million (2010: € 5,263.9 million). The additions relate to the acquisitions of the microbiology business of Biotest AG as well as Amnis Corporation, Seattle, WA (USA), and the first-time consolidation of Beijing Skywing Technology Co., Ltd., Beijing, China. Details of these transactions are presented under "Scope of consolidation – Acquisitions." In 2010, changes in the scope of consolidation included disposals of € 159.7 million.

The net carrying amount of "Patents, licenses and similar rights, brands, trademarks and other" with finite useful lives amounting to € 6,812.1 million mainly includes the recognized assets from the Millipore purchase price allocation in 2010 and the Serono purchase price allocation in 2007. The vast majority is attributable to technologies and know-how. The remaining useful lives of these assets range between 7.0 and 14.5 years. This item also includes licenses from this acquisition with remaining useful lives of between 1.0 and 6.0 years. In response to the increasing market impact of oral therapies for multiple sclerosis, the amortization period of Rebif® was shortened by two years. In 2011, this led to higher expenses of € 51.3 million as of the second quarter due to amortization. In fiscal 2012, this change will increase amortization by a total of € 68.4 million.

In fiscal 2011, impairment losses on intangible assets with finite useful lives totaled € 59.0 million. Of this amount, € 50.4 million was attributable to the Merck Serono division for cladribine, and € 8.6 million to the Performance Materials division. These impairments are disclosed in the income statement under "Amortization of intangible assets".

The changes in goodwill caused by foreign exchange rates resulted almost exclusively from translating the goodwill for Millipore, half of which is carried in U.S. dollars, into the reporting currency.

Since goodwill and intangible assets with indefinite useful lives are not amortized, these are subjected to an annual impairment test. Here, book values were compared with values in use. Consequently, impairment losses of € 111.4 million on intangible assets resulted in fiscal 2011. Within the Merck Serono division, € 63.4 million of this amount was attributable to safinamide and € 35.4 million to the cancer drug candidate IMO-2055, which we will not be developing further. In addition, an impairment loss of € 9.0 million was incurred in connection with the termination of a further research project. This is disclosed in the income statement under "Amortization of intangible assets."

→ Notes to the consolidated balance sheet

The book values of "Patents, licenses and similar rights, brands, trademarks and other" as well as goodwill can be attributed to the divisions as follows:

€ million	Remaining useful life in years	Merck Serono	Consumer Health Care	Merck Millipore	Performance Materials	Total Dec. 31, 2011	Total Dec. 31, 2010
Patents, licenses and similar rights, brands, trademarks and other							
<b>Finite useful life</b>		<b>4,480.9</b>	<b>21.4</b>	<b>2,304.0</b>	<b>5.8</b>	<b>6,812.1</b>	<b>7,567.4</b>
Rebif®	8.0	2,944.9	–	–	–	2,944.9	3,296.5
Gonal-f®	7.0	664.6	–	–	–	664.6	759.6
Saizen®	8.0	245.9	–	–	–	245.9	276.6
Humira®	6.0	223.7	–	–	–	223.7	257.3
Avonex®	1.5	72.2	–	–	–	72.2	120.3
Enbrel®	1.0	38.0	–	–	–	38.0	74.9
Puregon®	3.0	34.4	–	–	–	34.4	45.8
Cladribine	–	–	–	–	–	–	51.7
Technologies	1.0–14.5	255.1	1.8	528.8	3.5	789.2	828.0
Brands	2.6–12.5	0.5	19.6	313.3	–	333.4	334.6
Customer relationships	0.8–15.5	1.6	–	1,461.9	2.3	1,465.8	1,522.1
<b>Indefinite useful life</b>		<b>87.5</b>	<b>–</b>	<b>–</b>	<b>0.4</b>	<b>87.9</b>	<b>178.0</b>
Safinamide	–	–	–	–	–	–	63.4
Other	–	87.5	–	–	0.4	87.9	114.6
<b>Goodwill</b>	<b>–</b>	<b>1,681.7</b>	<b>164.7</b>	<b>2,846.1</b>	<b>23.9</b>	<b>4,716.4</b>	<b>4,580.1</b>

Intangible assets with an indefinite useful life primarily relate to rights that Merck has acquired for products or technologies that are still in the research and development stage. Amortization will only begin once the products start to be marketed.

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## (24) Property, plant and equipment

€ million	Land, land rights and buildings, including buildings on third-party land	Plant and machinery	Other facili- ties, operating and office equipment	Construction in progress and advance payments to vendors and contractors	Total
<b>Acquisition cost January 1, 2010</b>	<b>1,894.2</b>	<b>2,455.5</b>	<b>804.9</b>	<b>509.2</b>	<b>5,663.8</b>
Currency translation	129.1	78.1	21.9	41.6	270.7
Changes in scope of consolidation	240.5	109.4	14.6	75.8	440.3
Additions	14.1	33.2	37.8	311.1	396.2
Disposals	-12.8	-76.9	-38.8	-2.3	-130.8
Transfers	61.9	70.1	6.6	-155.6	-17.0
Reclassification to assets held for sale	-5.1	-5.5	-1.6	-0.9	-13.1
<b>December 31, 2010</b>	<b>2,321.9</b>	<b>2,663.9</b>	<b>845.4</b>	<b>778.9</b>	<b>6,610.1</b>
<b>Accumulated depreciation and impairment losses January 1, 2010</b>	<b>-741.3</b>	<b>-1,735.9</b>	<b>-568.5</b>	<b>-10.5</b>	<b>-3,056.2</b>
Currency translation	-42.9	-64.9	-17.0	-	-124.8
Changes in scope of consolidation	-	13.9	12.7	-	26.6
Depreciation and impairment losses	-97.0	-177.7	-77.0	-	-351.7
Disposals	10.5	75.3	35.4	0.4	121.6
Transfers	-5.1	-0.3	12.6	-	7.2
Write-ups	-	-	-	-	-
Reclassification to assets held for sale	3.3	4.1	1.3	-	8.7
<b>December 31, 2010</b>	<b>-872.5</b>	<b>-1,885.5</b>	<b>-600.5</b>	<b>-10.1</b>	<b>-3,368.6</b>
<b>Net carrying amount as of December 31, 2010</b>	<b>1,449.4</b>	<b>778.4</b>	<b>244.9</b>	<b>768.8</b>	<b>3,241.5</b>
<b>Acquisition cost January 1, 2011</b>	<b>2,321.9</b>	<b>2,663.9</b>	<b>845.4</b>	<b>778.9</b>	<b>6,610.1</b>
Currency translation	27.3	3.7	3.4	-0.6	33.8
Changes in scope of consolidation	0.6	5.1	2.5	1.1	9.3
Additions	32.7	34.3	42.9	262.0	371.9
Disposals	-23.6	-41.2	-27.7	-1.8	-94.3
Transfers	117.1	159.4	48.7	-310.6	14.6
Reclassification to assets held for sale	-	-	-	-	-
<b>December 31, 2011</b>	<b>2,476.0</b>	<b>2,825.2</b>	<b>915.2</b>	<b>729.0</b>	<b>6,945.4</b>
<b>Accumulated depreciation and impairment losses January 1, 2011</b>	<b>-872.5</b>	<b>-1,885.5</b>	<b>-600.5</b>	<b>-10.1</b>	<b>-3,368.6</b>
Currency translation	-7.4	2.1	-2.6	-	-7.9
Changes in scope of consolidation	2.9	-	-	-	2.9
Depreciation and impairment losses	-96.2	-175.0	-85.9	-165.1	-522.2
Disposals	14.8	37.0	26.3	0.9	79.0
Transfers	3.4	-20.2	-0.7	-0.1	-17.6
Write-ups	0.8	1.4	0.2	-	2.4
Reclassification to assets held for sale	-	-	-	-	-
<b>December 31, 2011</b>	<b>-954.2</b>	<b>-2,040.2</b>	<b>-663.2</b>	<b>-174.4</b>	<b>-3,832.0</b>
<b>Net carrying amount as of December 31, 2011</b>	<b>1,521.8</b>	<b>785.0</b>	<b>252.0</b>	<b>554.6</b>	<b>3,113.4</b>

→ Notes to the consolidated balance sheet

The changes in scope of consolidation include additions amounting to € 17.4 million (2010: € 474.2 million) and disposals amounting to € 5.2 million (2010: 7.3 million). The additions are due mainly to the acquisition of the microbiology business of Biotest AG. Deconsolidations are due to the divestment of Serono Contracting Ltd., United Kingdom.

Impairment losses totaled € 167.4 million in fiscal 2011. Of this amount, € 165.1 million was attributable to the Large-Scale Biotech (LSB) production facility of the Merck Serono division in Corsier-sur-Vevey, Switzerland and is reported under "Other operating expenses".

Property, plant and equipment amounting to € 3.2 million served as collateral (2010: € 8.1 million). Total government grants and subsidies during the fiscal year amounted to € 14.8 million (2010: € 11.5 million).

Property, plant and equipment also includes assets that are leased. The total value of capitalized leased assets amounted to € 16.5 million (2010: € 11.6 million) and the corresponding obligations amounted to € 11.8 million (2010: € 7.1 million) (see Note [28]).

The book values of capitalized leased assets were as follows:

€ million	Dec. 31, 2011	Dec. 31, 2010
Capitalized leased land and buildings	14.1	9.3
Capitalized leased vehicles	1.2	2.3
Capitalized leased other property, plant and equipment	1.2	–
	<b>16.5</b>	<b>11.6</b>

**(25) Investments at equity**

€ million	2011	2010
Book value January 1	5.0	1.6
Additions	–	–
Share of profit	0.7	0.9
Impairment losses	–1.7	–
Disposals	–3.8	–
Currency translation	–0.2	0.3
Changes in scope of consolidation	–	2.2
<b>Book value December 31</b>	<b>–</b>	<b>5.0</b>

Impairment losses include a decline in the value of an associated company within the Merck Millipore division that is disclosed in the income statement under "Investment result." Investments at equity were divested during fiscal 2011.

→ [Notes to the consolidated balance sheet](#)

## (26) Non-current financial assets

€ million	Investments in		Securities			Total
	available-for-sale affiliates	available-for-sale companies	available-for-sale financial investments	financial investments held to maturity	Loans and other non-current financial assets	
<b>Book value January 1, 2010</b>	<b>79.4</b>	<b>22.0</b>	<b>1.0</b>	<b>–</b>	<b>16.0</b>	<b>118.4</b>
Currency translation	–	–	–	–	0.2	0.2
Changes in scope of consolidation	–	–4,419.8	–	–	–	–4,419.8
Additions	9.2	4,628.0	6.8	–	22.4	4,666.4
Impairment losses	–	–	–	–	–	–
Disposals	–15.2	–201.7	–0.3	–	–4.1	–221.3
Fair value adjustments of long-term investments taken directly to equity	–13.6	–	–	–	–	–13.6
Transfers	1.1	–1.1	–	–	–	–
<b>Book value December 31, 2010</b>	<b>60.9</b>	<b>27.4</b>	<b>7.5</b>	<b>–</b>	<b>34.5</b>	<b>130.3</b>
<b>Book value January 1, 2011</b>	<b>60.9</b>	<b>27.4</b>	<b>7.5</b>	<b>–</b>	<b>34.5</b>	<b>130.3</b>
Currency translation	–	–	–	–	–	–
Changes in scope of consolidation	–	92.7	–	–	–	92.7
Additions	12.9	150.0	–	–	5.2	168.1
Impairment losses	–14.9	–	–	–	–	–14.9
Disposals	–39.3	–257.7	–0.7	–	–21.0	–318.7
Fair value adjustments of long-term investments taken directly to equity	2.5	–	–	–	0.3	2.8
Transfers	–	–	–	–	–	–
<b>Book value December 31, 2011</b>	<b>22.1</b>	<b>12.4</b>	<b>6.8</b>	<b>–</b>	<b>19.0</b>	<b>60.3</b>

As of December 31, 2011, the book value of non-current financial assets amounting to € 60.3 million included non-current financial assets available-for-sale (investments) with a book value of € 32.6 million (2010: € 57.2 million) that were carried at cost since fair value could not be reliably determined.

Changes in the scope of consolidation totaling € 92.7 million include first-time consolidations of € 164.9 million (2010: € 4,612.6 million) and deconsolidations of € 257.6 million (2010: € 192.8 million). The first-time consolidations relate almost exclusively to the acquisition of the microbiology business of Biotest AG as well as Amnis Corporation, Seattle, WA (USA), and the first-time consolidation of Beijing Skywing Technology Co. Ltd., Beijing, China. The deconsolidations relate to Merck Capital Asset Management, Malta, as well as the divestments of our Crop BioScience business and Serono Contracting Ltd., United Kingdom.

A detailed presentation of this item can be found under "Scope of consolidation".

→ Notes to the consolidated balance sheet

The following unrealized gains and losses arising from non-current financial assets classified as available-for-sale were recognized in equity as of the balance sheet date:

€ million	Available-for-sale investments	Available-for-sale securities	Total Dec. 31, 2011	Available-for-sale investments	Available-for-sale securities	Total Dec. 31, 2010
Fair values/Book values	34.5	6.8	41.3	88.3	7.5	95.8
Amortized acquisition cost	34.2	6.8	41.0	90.5	7.5	98.0
Unrealized gains/losses	0.3	–	0.3	–2.2	–	–2.2

**(27) Financial assets covering pension obligations**

€ million	Available-for-sale financial assets	Financial assets held to maturity	Total
<b>Book value January 1, 2010</b>	<b>148.5</b>	<b>61.1</b>	<b>209.6</b>
Currency translation	–	–	–
Changes in scope of consolidation	–	–	–
Additions	72.1	21.0	93.1
Impairment losses	–	–	–
Disposals	–60.2	–17.5	–77.7
Fair value adjustments of long-term investments taken directly to equity	–8.1	–	–8.1
Transfers	–	–	–
<b>Book value December 31, 2010</b>	<b>152.3</b>	<b>64.6</b>	<b>216.9</b>
 <b>Book value January 1, 2011</b>	 <b>152.3</b>	 <b>64.6</b>	 <b>216.9</b>
Currency translation	–	–	–
Changes in scope of consolidation	–153.1	–65.8	–218.9
Additions	4.5	1.2	5.7
Impairment losses	–	–	–
Disposals	–2.2	–	–2.2
Fair value adjustments of long-term investments taken directly to equity	–1.5	–	–1.5
Transfers	–	–	–
<b>Book value December 31, 2011</b>	<b>–</b>	<b>–</b>	<b>–</b>

In connection with the establishment of a Contractual Trust Arrangement (CTA), which is being used to cover the pension obligations of Merck KGaA, the financial assets appropriated for this purpose were transferred to the CTA in December 2011. At the time of the transfer, the book value of the financial assets amounted to € 218.9 million.

→ Notes to the consolidated balance sheet

## (28) Financial liabilities

This item comprised:

€ million	current	non-current	Dec. 31, 2011	current	non-current	Dec. 31, 2010
Bonds	1,004.7	3,893.7	4,898.4	25.3	4,948.3	4,973.6
Commercial paper	–	–	–	10.0	–	10.0
Bank loans and overdrafts	106.9	20.3	127.2	85.7	30.0	115.7
Liabilities to related parties	199.2	–	199.2	190.3	–	190.3
Loans from third parties and other financial liabilities	17.2	66.0	83.2	14.3	63.8	78.1
Liabilities from derivatives (financial transactions)	63.9	155.6	219.5	28.7	80.0	108.7
Finance leases	2.5	9.3	11.8	1.8	5.3	7.1
	1,394.4	4,144.9	5,539.3	356.1	5,127.4	5,483.5

Bank financing commitments vis-à-vis the Merck Group were as follows:

€ million	Bank credit facilities	Utilization* as of Dec. 31, 2011	Interest	Due
Syndicated loan 2007	2,000.0	–	variable	2014
Bilateral credit facilities with banks	43.7	43.7	fixed	2012
Bilateral credit facilities with banks	7.7	7.7	fixed	2017
Bilateral credit facilities with banks	13.1	13.1	fixed	2018
Various bank lines	324.7	63.2	fixed / variable	< 1 year
	2,389.2	127.7		

\* Booked disagios are not taken into account in the disclosure

The current and non-current liabilities of the Merck Group to banks were denominated in the following currencies:

in %	Dec. 31, 2011	Dec. 31, 2010
Euros	19.0	51.7
U.S. dollars	0.8	1.3
Yen	1.2	–
Chinese renminbi	47.0	13.4
Venezuelan bolivar	18.7	–
Other currencies	13.3	33.6
	100.0	100.0

→ Notes to the consolidated balance sheet

In 2009, Merck created a Debt Issuance Program that forms the contractual basis for issuing bonds with a nominal volume of up to € 5 billion. In 2010, this volume was increased to € 10 billion.

The following bonds were issued by the Merck Group:

Issuer	Nominal value	Maturity	Nominal interest rate	Issue price
Merck Financial Services GmbH, Germany	€ 500 million	March 2010 – March 2012	2.125%	99.775
Merck Finanz AG, Luxembourg	€ 500 million	December 2005 – December 2012	* 2.317%	99.716
Merck Financial Services GmbH, Germany	€ 750 million	March 2009 – September 2013	4.875%	99.697
Merck Financial Services GmbH, Germany	€ 1,350 million	March 2010 – March 2015	3.375%	99.769
Merck Financial Services GmbH, Germany	€ 100 million	December 2009 – December 2015	** 3.615%	100.000
Millipore Corporation, USA	€ 250 million	June 2006 – June 2016	5.875%	99.611
Merck Financial Services GmbH, Germany	€ 60 million	November 2009 – November 2016	4.000%	100.000
Merck Financial Services GmbH, Germany	€ 70 million	December 2009 – December 2019	4.250%	97.788
Merck Financial Services GmbH, Germany	€ 1,350 million	March 2010 – March 2020	4.500%	99.582

\*made variable by interest rate swaps based on six-month EURIBOR and fixed in 2010 by interest rate futures based on six-month EURIBOR

\*\*fixed by interest rate swaps

Within the scope of the Millipore acquisition, Merck took over a convertible bond with a nominal value of US\$ 550 million. In 2010, the majority of investors exercised the conversion right that resulted in the course of the acquisition. Millipore Corporation, USA, repaid the remaining outstanding interests with a nominal volume of US\$ 27.2 million in 2011 for an amount of € 20.8 million.

To meet short-term capital requirements, Merck KGaA has a commercial paper program with a volume of € 2 billion, which had not been utilized as of the reporting date.

In addition, a € 2 billion multi-currency term loan and revolving credit facility from fiscal 2007 is available. The loan has a term of seven years and was agreed with an international banking syndicate. This credit line had not been utilized as of the reporting date.

Liabilities from financial leasing represent the discounted amount of future payments arising from finance leases. This item primarily relates to liabilities from finance leases for buildings. Information on liabilities due to related parties can be found in Note [52].

### (29) Trade accounts payable

Trade accounts payable consisted of the following:

€ million	Dec. 31, 2011	Dec. 31, 2010
Liabilities due to third parties	1,100.5	1,200.0
Liabilities due to affiliates	0.3	0.1
<b>1,100.8</b>	<b>1,200.1</b>	

Trade accounts payable included accrued amounts of € 647.2 million (2010: € 648.1 million) for outstanding invoices and accrued reductions in sales revenues.

→ Notes to the consolidated balance sheet

### (30) Other liabilities

This item comprised:

€ million	current	non-current	Dec. 31, 2011	current	non-current	Dec. 31, 2010
Liabilities to related parties	319.3	–	319.3	260.6	–	260.6
Liabilities to affiliates	0.6	–	0.6	3.2	–	3.2
Accrued interest	104.2	–	104.2	103.5	–	103.5
Payroll liabilities	64.4	1.1	65.5	65.0	0.6	65.6
Liabilities from profit distributions	1.6	–	1.6	0.7	–	0.7
Other financial liabilities to third parties	39.0	2.7	41.7	48.7	4.0	52.7
<b>Sundry other financial liabilities</b>	<b>529.1</b>	<b>3.8</b>	<b>532.9</b>	<b>481.7</b>	<b>4.6</b>	<b>486.3</b>
Accruals for personnel expenses	425.6	–	425.6	443.0	–	443.0
Deferred income	24.2	1.6	25.8	29.0	27.2	56.2
Advance payments received from customers	9.8	0.1	9.9	12.6	–	12.6
Liabilities from derivatives (operational)	64.5	36.6	101.1	26.8	11.1	37.9
Liabilities from non-income related taxes	48.9	1.5	50.4	61.5	–	61.5
	<b>1,102.1</b>	<b>43.6</b>	<b>1,145.7</b>	<b>1,054.6</b>	<b>42.9</b>	<b>1,097.5</b>

Liabilities to related parties existed vis-à-vis the general partner E. Merck KG and resulted from profit entitlements as of the balance sheet date. Other financial liabilities due to third parties also include liabilities due to insurance companies, as well as contractually agreed payment obligations vis-à-vis other companies.

### (31) Tax liabilities

Tax liabilities amounted to € 80.0 million (2010: € 57.5 million). Tax liabilities totaling € 399.4 million (2010: € 368.4 million) also include provisions for tax liabilities of € 319.4 million (2010: € 310.9 million).

→ [Notes to the consolidated balance sheet](#)

### (32) Provisions

Provisions developed as follows:

€ million	Restructuring	Litigation	Personnel	Environmental protection	Other	Total
<b>January 1, 2011</b>	<b>40.1</b>	<b>482.0</b>	<b>171.7</b>	<b>70.4</b>	<b>134.5</b>	<b>898.7</b>
Additions	18.8	146.6	50.0	30.4	176.2	422.0
Utilizations	-18.3	-118.8	-80.1	-13.2	-35.8	-266.2
Release	-2.7	-47.1	-17.9	-1.9	-30.5	-100.1
Currency translation	-	13.7	0.5	-	8.9	23.1
Changes in scope of consolidation/Other	0.1	-2.7	3.8	2.4	3.9	7.5
<b>December 31, 2011</b>	<b>38.0</b>	<b>473.7</b>	<b>128.0</b>	<b>88.1</b>	<b>257.2</b>	<b>985.0</b>
thereof current	26.5	60.9	31.8	6.2	240.1	365.5
thereof non-current	11.5	412.8	96.2	81.9	17.1	619.5

Provisions for restructuring mainly include provisions for severance payments for employees in connection with restructuring projects, contractually agreed severance obligations and provisions for onerous contracts. The relevant provisions are recognized when detailed restructuring plans have been prepared and communicated.

As a pharmaceutical, chemical and life science company with global production operations, Merck is exposed to a multitude of litigation risks. These include in particular risks in the areas of product liability, competition and antitrust law, pharmaceutical law, patent law, tax law, and environmental protection. We are engaged in legal proceedings and government investigations, the outcome of which cannot currently be predicted. Appropriate provisions to cover these risks are disclosed on the relevant balance sheet date. Nevertheless, decisions by courts or government agencies – which, as experience has shown, involve uncertainties – or settlement agreements could lead to additional expenses or cash outflows that could have material effects on the financial and earnings position of the Merck Group. As of the balance sheet date, Merck recorded provisions for litigation amounting to € 473.7 million (2010: € 482.0 million). In 2011, additional provisions for litigation were set up and charged to other operating expenses. Provisions for litigation take into account the material litigation risks described in the following. Our former generics subsidiary Dey Inc., USA, is alleged to have falsely reported price information. Although Dey Inc. was divested within the context of the sale of the Generics business to Mylan Inc., PA (USA) in 2007, Merck continues to be liable for costs incurring from the aforementioned legal disputes since the mentioned risk was not transferred to Mylan. In this connection, claims were settled in a number of U.S. states as well as with the U.S. Department of Justice in previous years. In 2011, one settlement agreement was reached in a further U.S. state.

The legal dispute with the Italian company Italfarmaco S.p.A. in which Italfarmaco S.p.A. claims damages on account of an allegedly wrongful termination of a license and supply agreement relating to the product Rebif® in Italy was settled in 2011 out of court. The remaining provisions were released insofar as they do not relate to outstanding legal fees.

Moreover, as of the balance sheet date, provisions exist in connection with the legal dispute with the company Israel Bio-Engineering Project Limited Partnership (IBEP), in which IBEP claims intellectual property rights and license fees in connection with the funding and development of Rebif® and other products.

→ [Notes to the consolidated balance sheet](#)

Furthermore, provisions exist for patent litigation with Biogen Idec in connection with Rebif® in the United States. In addition, provisions exist in connection with the marketing of Rebif® in the United States.

As of the balance sheet date, provisions were also set up for litigation with the federal state of São Paulo, Brazil. The federal state of São Paulo is demanding compensation from the Brazilian company Merck S.A., Brazil, in connection with the marketing of the product Raptiva®. Merck withdrew Raptiva® from the market in early 2009.

For various smaller pending legal disputes against companies of the Merck Group, provisions that are considered appropriate from today's perspective have been set up.

Provisions for employee benefits include obligations from the Merck Long-Term Incentive Plan (LTIP) amounting to € 33.7 million (2010: € 29.8 million). The LTIP offers eligible executives and employees of the Merck Group a long-term, profit-related compensation component. The Executive Board is excluded. The amount paid depends on the achievement of the two financial performance indicators "Underlying free cash flow on revenues (FCR)" and "Return on sales (ROS)" at the end of a three-year period. The plan has caps on potential future payments in the event of a high level of target achievement. By contrast, if the level of target achievement is too low, no payments are made. Moreover, this item includes provisions for obligations for the partial early retirement program, other severance pay and anniversary bonuses.

With respect to provisions for defined-benefit pensions and other post-employment benefits, see Note [33].

Provisions for environmental protection exist in Germany and the United States.

Other provisions consist additionally of provisions for uncertain commitments in the context of contributions, levies and fees.

### (33) Provisions for pensions and other post-employment benefits

The calculation of obligations as well as the relevant plan assets was based on the following actuarial parameters:

in %	Germany		Other countries	
	2011	2010	2011	2010
Discount rate	4.5	4.5	3.8	4.0
Future salary increases	2.5	2.5	2.8	3.0
Future pension increases	1.8	1.8	3.0	3.2
Staff turnover	1.9	1.9	7.7	7.3
Expected return on plan assets	4.5	–	4.4	4.9
Future cost increases for health care benefits	–	–	5.0	5.0

There are average values weighted by the present value of the respective benefit obligation. The average expected return on plan assets is weighted by the fair value of the respective plan assets. Plan assets for funded benefit obligations primarily comprise fixed-income securities, liquid assets, stocks and real estate. They do not include financial instruments issued by Merck Group companies or real estate used by Group companies.

→ Notes to the consolidated balance sheet

The balance sheet item "Provisions for pensions and other post-employment benefits" can be broken down as follows:

€ million	Dec. 31, 2011	Dec. 31, 2010
Present value of benefit obligations funded by provisions	167.1	1,467.7
Present value of funded benefit obligations	2,322.8	888.1
<b>Present value of all benefit obligations</b>	<b>2,489.9</b>	<b>2,355.8</b>
Fair value of plan assets of all funds	-1,370.3	-793.3
<b>Funded status</b>	<b>1,119.6</b>	<b>1,562.5</b>
Other changes	-	0.3
<b>Net liability recognized in the balance sheet</b>	<b>1,119.6</b>	<b>1,562.8</b>
Refund claims on plan assets	17.3	18.8
<b>Provisions for pensions and other post-employment benefits</b>	<b>1,136.9</b>	<b>1,581.6</b>

Within the scope of a Contractual Trust Arrangement (CTA) of Merck KGaA, liquid assets amounting to € 520.0 million were transferred to a trustee, Merck Pensionstreuhand e.V., Darmstadt, in December 2011. The trustee used € 218.1 million of these liquid assets to acquire Merck Capital Asset Management Limited, Malta, which holds the financial assets being used to cover pension obligations and previously disclosed separately in the balance sheet. These financial assets are thus part of the plan assets. Accordingly, benefit obligations of Merck KGaA were reclassified from the category "funded by provisions" to the category "funded".

In 2011, the following items were recognized in income:

€ million	2011	2010
Current service cost	81.9	69.5
Past service cost	0.3	-0.1
Interest cost on pension obligations	100.2	99.6
Expected return on plan assets	-39.1	-34.1
Other effects	-1.0	0.1
<b>Total amount recognized in income</b>	<b>142.3</b>	<b>135.0</b>

The present value of commitments for future health care expenses of retirees in the United States is based on an expected future increase in health care costs of 5.0%. If the rate of increase is one percentage point higher or lower, the measurement of the present value of the commitment would be either € 0.9 million higher or € 0.8 million lower. The expenses recognized in 2011 would have been € 0.1 million higher or lower.

→ Notes to the consolidated balance sheet

The actual gain on plan assets amounted to € 26.2 million (2010: gain of € 61.0 million). Apart from the interest component stemming from the interest expense on the pension obligations and the expected return on the plan assets, which are disclosed in the financial result, the relevant expense of defined benefit and defined contribution plans is distributed across the individual functional areas.

During the reporting period the present value of the benefit obligations changed as follows:

€ million	benefit obligations funded by provisions	funded benefit obligations	2011	benefit obligations funded by provisions	funded benefit obligations	2010
Present value of all defined obligations on January 1	1,467.7	888.1	2,355.8	1,260.2	617.5	1,877.7
Currency translation differences	-0.5	25.0	24.5	2.8	71.2	74.0
Current service cost	9.0	72.9	81.9	35.4	34.1	69.5
Interest cost on pension obligations	7.0	93.2	100.2	66.3	33.3	99.6
Other effects recognized in income	-0.2	-0.7	-0.9	0.1	0.1	0.2
Actuarial gains/losses	0.7	14.1	14.8	160.5	37.2	197.7
Pension payments in the reporting period	-6.3	-95.7	-102.0	-56.6	-37.9	-94.5
Reclassification Merck KGaA due to CTA	-1,310.6	1,310.6	-	-	-	-
Transfers/Changes in scope of consolidation/Other changes	0.3	15.3	15.6	-1.0	132.6	131.6
<b>Present value of all defined obligations on December 31</b>	<b>167.1</b>	<b>2,322.8</b>	<b>2,489.9</b>	<b>1,467.7</b>	<b>888.1</b>	<b>2,355.8</b>

In 2011, actuarial losses from pension obligations included experience adjustments (losses) amounting to € 9.6 million (2010: gains of € 10.0 million).

The fair value of the plan asset of all funds changed as follows in the reporting period:

€ million	2011	2010
Fair value of the plan assets on January 1	793.3	582.6
Currency translation differences	23.2	68.1
Expected return on plan assets	39.1	34.1
Other effects recognized in income	-	0.1
Actuarial gains/losses	-12.9	26.9
Funding CTA Merck KGaA	520.0	-
Employer contributions	39.3	36.4
Employee contributions	14.1	12.5
Pension payments in the reporting period	-42.1	-37.1
Transfers/Changes in scope of consolidation/Other changes	-3.7	69.7
<b>Fair value of the plan assets of all funds on December 31</b>	<b>1,370.3</b>	<b>793.3</b>

The actuarial losses of € 12.9 million (2010: gains of € 26.9 million) correspond to the experience adjustments for the plan assets.

→ Notes to the consolidated balance sheet

In 2011, actuarial gains (+) and losses (–) as well as the effects of limiting defined benefit assets in accordance with IAS 19.58 amounting to € -27.7 million (2010: € -170.7 million) were taken to equity, together with other effects totaling € -2.8 million (2010: € -4.8 million). Moreover, € 0.2 million (2010: € -0.2 million) was transferred to retained earnings. As of December 31, 2011, for the aforementioned reasons, a total of € -503.2 million (2010: € -472.9 million) was taken to equity for the benefit obligations presented here.

The fair value of the plan assets can be allocated to the individual asset categories as follows:

in %	Dec. 31, 2011	Dec. 31, 2010
Debt instruments	43.3	41.6
Equity instruments	15.9	34.1
Real estate	11.2	14.4
Other assets	29.6	9.9
	100.0	100.0

On average, the expected rate of return on debt instruments is 3.6%, on equity instruments 5.5% and on real estate 4.8%. The respective rates of return take into account country-specific conditions and are based, among other things, on interest and dividend income expected over the long term as well increases in the value of the investment portfolio after the deduction of directly allocable taxes and expenses.

Over the past five years, the funded status, composed of the present value of the defined benefit obligations and the fair value of the plan assets, has changed as follows:

€ million as of Dec. 31	2011	2010	2009	2008	2007
Present value of the defined benefit obligations	2,489.9	2,355.8	1,877.7	1,585.9	1,665.9
Fair value of the plan assets of all funds	-1,370.3	-793.3	-582.6	-462.6	-520.5
<b>Funded status</b>	<b>1,119.6</b>	<b>1,562.5</b>	<b>1,295.1</b>	<b>1,123.3</b>	<b>1,145.4</b>

We expect that the direct payments to beneficiaries will amount to around € 60 million in 2012. Employer contributions to plan assets will probably amount to around € 39 million in 2012.

The cost of ongoing contributions in 2011 for defined contribution plans that are financed exclusively by external funds and for which the companies of the Merck Group are only obliged to pay the contributions amounted to € 19.1 million in 2011 (2010: € 16.7 million). In addition, employer contributions of € 56.4 million (2010: € 49.9 million) were transferred to the German statutory pension insurance system and € 28.9 million (2010: € 19.6 million) to statutory pension insurance systems abroad.

→ [Notes to the consolidated balance sheet](#)

### (34) Equity

A strong equity position is important for Merck to ensure the continued existence of the company. Based on our financial strategy, the Executive Board regularly reviews various key figures that reflect the capitalization of the company. Gearing (ratio of net debt and pension provisions to net equity) and the equity ratio are important indicators here.

As of the balance sheet date, the subscribed capital of the company is divided into 64,621,125 no-par value bearer shares as well as one registered share. The amount resulting from the issue of shares by Merck KGaA exceeding the nominal amount is recognized in the capital reserves. The reserves also contain the retained earnings and the net retained profit of the consolidated subsidiaries as well as actuarial gains and losses.

The disclosure of non-controlling interest is based on the stated equity of the subsidiaries concerned after any adjustment required to ensure compliance with the accounting policies of the Merck Group, as well as pro rata consolidation entries.

The net equity attributable to non-controlling interests mainly relates to the minority interests in Merck Ltd., India, Merck Ltd., Thailand, PT Merck Tbk, Indonesia, and Merck (Pvt.) Ltd., Pakistan.

In addition to the dividend payments to the shareholders of Merck KGaA and to minority shareholders in subsidiaries of the Merck Group, the appropriation of profits includes the transfer of profits from Merck & Cie to E. Merck KG in accordance with the company agreements. It also includes the reciprocal transfer of profits between E. Merck KG and Merck KGaA in accordance with the Articles of Association, which is as follows:

€ million	2011		2010	
	E. Merck KG	Merck KGaA	E. Merck KG	Merck KGaA
Result of E. Merck KG	2.7	-	12.3	-
Result of ordinary activities of Merck KGaA	-	1,326.9	-	709.4
Extraordinary result	-	-20.5	-	-21.0
Adjustment for trade income tax in accordance with Art. 27 (1) Articles of Association of Merck KGaA	-	-	-	-
Trade income tax in accordance with Art. 30 (1) Articles of Association of Merck KGaA	-	29.1	-	-71.0
<b>Basis for the appropriation of profits</b>	<b>(100%)</b>	<b>2.7</b>	<b>1,335.5</b>	<b>12.3</b>
Profit transfer to E. Merck KG				
Ratio general partner's capital to total capital	(70.274%)	938.5	-938.5	433.9
Profit transfer from E. Merck KG				
Ratio share capital to total capital	(29.726%)	-0.8	0.8	-3.7
Trade tax	-	-	-	-
Corporation tax	-	-23.6	-	-16.7
<b>Net income</b>	<b>940.4</b>	<b>374.2</b>	<b>442.5</b>	<b>170.5</b>

→ Notes to the consolidated  
balance sheet

In accordance with the provisions of the Articles of Association, E. Merck KG has a 70.274% interest in the profit/loss of Merck KGaA while Merck KGaA has an interest of 29.726% in the profit/loss of E. Merck KG. Merck KGaA's profit from ordinary activities adjusted for trade income tax and extraordinary result, on which the appropriation of its profit is based, amounts to € 1,335.5 million (2010: € 617.4 million). Merck KGaA transferred € 938.5 million of its profit to E. Merck KG (2010: € 433.9 million). The profit/loss of E. Merck KG, on which the appropriation of profit/loss is based, amounts to € 2.7 million (2010: € 12.3 million). Consequently, this results in a profit transfer to Merck KGaA of € 0.8 million (2010: € 3.7 million).

Moreover, in 2011 € 44.3 million (2010: € 43.0 million) was transferred by Merck & Cie to E. Merck KG.

For 2010, a dividend of € 1.25 per share was distributed. The dividend proposal for fiscal 2011 will be € 1.50 per share, corresponding to a total dividend payment of € 96.9 million to shareholders.

→ Segment reporting

### **(35) Segment reporting**

The classification of asset and income figures as well as of other key figures by business sector or by region is in accordance with IFRS 8. The reportable segments presented correspond to the internal organizational and reporting structure of the Merck Group. Within the Merck Serono division, we focus on specialist therapeutic areas and market innovative prescription drugs of chemical and biotechnological origin. The Consumer Health Care division comprises Merck's business with high-quality over-the-counter products for preventive health care and self-treatment of minor ailments. These two divisions form the Pharmaceuticals business sector.

The Merck Millipore life science division comprises the activities of the Millipore Corporation, which was acquired in 2010, and the majority of our former Performance & Life Science Chemicals division. The Performance Materials division consists mainly of the Liquid Crystals and Pigments & Cosmetics business units. As of 2011, the Cosmetic Actives business field is reported under the Performance Materials division. As of December 31, 2010, and in fiscal 2010, this business field was still part of the Merck Millipore division. The business field generated sales of € 68.1 million and an operating result of € –3.9 million in 2010. The previous year's figures have been adjusted accordingly.

Corporate and Other mainly includes the income and expenses that cannot be allocated to the operating segments, e.g. expenses for central administrative functions. The financial result and taxes on income are also allocated in full to Corporate and Other. The fields of activity are described in detail in the sections about the divisions in the management report.

Apart from total revenues, the success of a segment is mainly determined by the division's operating result as well as free cash flow and the key figures derived from these such as "Underlying free cash flow on revenues (FCR)" and "Return on sales (ROS)". The accounting standards used to calculate these performance indicators are the same as those used in external reporting (IFRS).

Transfer prices for intragroup sales are determined on an arm's-length basis. There were no significant intercompany relations between the business segments.

Neither in 2011 nor in 2010 did any single customer account for more than 10% of Group sales.

→ Segment reporting

## Information by business sector and division

€ million	Merck Serono		Consumer Health Care		Pharmaceuticals	
	2011	2010	2011	2010	2011	2010
Sales	5,564.4	5,409.0	494.2	469.7	6,058.6	5,878.7
Royalty, license and commission income	355.6	344.5	2.0	2.3	357.6	346.8
Total revenues	5,920.0	5,753.5	496.2	472.0	6,416.2	6,225.5
Gross margin	4,888.3	4,792.8	338.7	316.9	5,227.0	5,109.7
Marketing and selling expenses	-1,414.4	-1,451.4	-233.0	-235.9	-1,647.4	-1,687.3
Royalty, license and commission expenses	-478.5	-456.2	-3.7	-1.2	-482.2	-457.4
Administration expenses	-257.8	-269.9	-23.7	-24.7	-281.5	-294.6
Other operating expenses and income	-408.8	-169.6	-5.1	-12.1	-413.9	-181.7
Research and development	-1,225.4	-1,167.1	-22.9	-24.9	-1,248.3	-1,192.0
Operating result	304.2	565.1	46.1	13.9	350.3	579.0
Exceptional items	25.1	68.6	-	-	25.1	68.6
Earnings before interest and tax (EBIT)	329.3	633.7	46.1	13.9	375.4	647.6
Net operating assets	9,207.2	10,359.7	321.1	310.8	9,528.3	10,670.5
Segment liabilities	-1,163.6	-1,268.9	-80.7	-86.4	-1,244.3	-1,355.3
Capital spending on property, plant and equipment	197.0	247.7	5.2	6.9	202.2	254.6
Investments in intangible assets	53.0	85.1	6.2	1.3	59.2	86.4
Depreciation and amortization	-840.8	-766.5	-11.3	-11.6	-852.1	-778.1
Impairment losses	-344.4	-171.0	-0.3	-7.1	-344.7	-178.1
Net cash flows from operating activities	1,374.0	1,590.1	48.6	46.6	1,422.6	1,636.7
Net cash flows from investing activities	101.3	-292.0	-8.8	-1.1	92.5	-293.1
Free cash flow	1,475.3	1,298.1	39.8	45.5	1,515.1	1,343.6
Underlying free cash flow	1,205.2	1,307.8	39.8	45.5	1,245.0	1,353.3
FCR in %	20.4	22.7	8.0	9.6	19.4	21.7
ROS in %	5.1	9.8	9.3	2.9	5.5	9.3

\*As of 2011, the Cosmetic Actives business field is reported under the Performance Materials division (previously it was reported under the Merck Millipore division).  
The figures for 2010 have been adjusted accordingly.

## Information by country and region

€ million	Germany		France		Switzerland		Rest of Europe	
	2011	2010	2011	2010	2011	2010	2011	2010
Sales by customer location	825.8	779.4	731.2	714.2	139.0	111.4	2,263.0	2,141.8
Sales by company location	1,394.5	1,315.0	853.6	810.4	168.0	149.9	1,946.2	1,819.4
Total revenues	1,430.7	1,333.2	862.6	821.6	382.3	364.6	1,955.0	1,836.3
Intangible assets	226.8	184.0	325.7	343.9	5,984.1	6,701.0	2,383.7	2,452.1
Property, plant and equipment	1,070.7	1,088.5	152.6	140.0	855.5	987.3	390.5	399.5
Research and development	-677.9	-649.7	-50.0	-49.4	-609.2	-566.4	-41.2	-32.8
Number of employees	10,900	10,340	3,002	2,916	2,323	2,407	5,605	6,016

→ [Segment reporting](#)

Merck Millipore*		Performance Materials*		Chemicals		Corporate and Other		Group	
2011	2010	2011	2010	2011	2010	2011	2010	2011	2010
2,382.6	1,605.4	1,464.7	1,444.8	3,847.3	3,050.2	–	–	9,905.9	8,928.9
10.2	7.2	2.7	7.7	12.9	14.9	–	–	370.5	361.7
2,392.8	1,612.6	1,467.4	1,452.5	3,860.2	3,065.1	–	–	10,276.4	9,290.6
1,387.5	844.5	873.6	951.0	2,261.1	1,795.5	–	–	7,488.1	6,905.2
–608.1	–409.1	–133.3	–135.2	–741.4	–544.3	–4.2	–2.9	–2,393.0	–2,234.5
–16.0	–9.4	–2.3	–10.2	–18.3	–19.6	–	–	–500.5	–477.0
–106.7	–73.2	–35.7	–41.7	–142.4	–114.9	–80.9	–68.7	–504.8	–478.2
–104.6	–135.5	–32.0	–52.0	–136.6	–187.5	–31.4	–21.2	–581.9	–390.4
–134.5	–74.5	–134.3	–130.6	–268.8	–205.1	–	–	–1,517.1	–1,397.1
226.1	47.9	524.9	576.1	751.0	624.0	–116.2	–89.5	985.1	1,113.5
–	–	157.1	–1.0	157.1	–1.0	–30.4	–68.4	151.8	–0.8
226.1	47.9	682.0	575.1	908.1	623.0	–146.6	–157.9	1,136.9	1,112.7
6,608.6	6,435.6	1,331.0	1,289.7	7,939.6	7,725.3	–1.3	74.7	17,466.6	18,470.5
–335.4	–361.4	–131.7	–166.8	–467.1	–528.2	–22.9	–14.9	–1,734.3	–1,898.4
105.3	75.1	64.1	64.3	169.4	139.4	0.3	2.2	371.9	396.2
12.0	6.9	2.7	3.9	14.7	10.8	5.8	7.0	79.7	104.2
–283.7	–168.5	–102.5	–102.4	–386.2	–270.9	–5.4	–3.2	–1,243.7	–1,052.2
–1.8	–10.7	–9.5	–16.7	–11.3	–27.4	–	–0.2	–356.0	–205.7
404.0	252.7	564.8	610.4	968.8	863.1	–1,120.2	–717.2	1,271.2	1,782.6
–263.3	–4,924.6	128.6	–68.2	–134.7	–4,992.8	–853.8	1,403.5	–896.0	–3,882.4
140.6	–4,671.9	693.4	542.2	834.0	–4,129.7	–912.7	–736.4	1,436.4	–3,522.5
308.7	263.4	492.6	548.8	801.3	812.2	–651.7	–495.7	1,394.6	1,669.8
12.9	16.3	33.6	37.8	20.8	26.5	–	–	13.6	18.0
9.4	3.0	35.8	39.7	19.5	20.4	–	–	9.6	12.0

North America		Latin America		Asia		Africa, Australasia		Group	
2011	2010	2011	2010	2011	2010	2011	2010	2011	2010
1,789.1	1,529.6	1,196.7	1,080.6	2,674.4	2,305.5	286.7	266.4	9,905.9	8,928.9
1,781.2	1,512.6	1,167.3	1,054.0	2,418.6	2,114.9	176.5	152.7	9,905.9	8,928.9
1,781.9	1,514.8	1,171.9	1,055.9	2,515.5	2,211.5	176.5	152.7	10,276.4	9,290.6
2,599.6	2,537.9	11.4	15.4	232.7	249.2	0.3	0.6	11,764.3	12,484.1
366.0	358.6	82.1	79.7	190.7	181.1	5.3	6.8	3,113.4	3,241.5
–95.2	–56.8	–10.9	–7.3	–28.6	–31.4	–4.1	–3.3	–1,517.1	–1,397.1
4,962	4,909	4,198	4,546	9,019	8,681	667	747	40,676	40,562

→ Segment reporting /  
Notes to the consolidated  
cash flow statement

The following reconciliation applied to operating assets in the Segment Reporting:

€ million	Dec. 31, 2011	Dec. 31, 2010
Assets	22,120.1	22,388.0
Monetary assets (cash and cash equivalents, loans, securities)	-2,082.7	-1,042.4
Financial assets covering pensions	-	-216.9
Non-operating receivables, tax receivables, deferred taxes and deferred pension payments	-836.5	-723.1
Assets held for sale	-	-36.7
<b>Operating assets (gross)</b>	<b>19,200.9</b>	<b>20,368.9</b>
Trade accounts payable	-1,100.8	-1,200.1
Other operating liabilities	-633.5	-698.3
<b>Operating assets (net)</b>	<b>17,466.6</b>	<b>18,470.5</b>

The Merck Millipore division accounted for € -1.2 million (2010: € 0.9 million) and the Corporate and Other segment for € 0.2 million (2010: € 3.2 million) of the investment result disclosed in the income statement.

### Notes to the consolidated cash flow statement

#### (36) Net cash flows from operating activities

Tax payments in 2011 totaled € 436.0 million (2010: € 336.1 million). Tax refunds totaled € 78.3 million (2010: € 18.7 million). Interest paid totaled € 238.7 million (2010: € 134.7 million). This increase was due to the first interest payment for the bonds issued in 2010 in connection with the Millipore acquisition. Interest received totaled € 75.5 million (2010: € 38.1 million). Within the scope of a Contractual Trust Arrangement (CTA), € 520.0 million was transferred to a trustee, Merck Pensionstreuhand e.V., Darmstadt. This led to a corresponding decline in pension provisions and to a decrease in cash flows from operating activities. In 2011, provisions for litigation risks amounting to € 118.8 million were used. This lowered free cash flow by the same amount.

#### (37) Net cash flows from investing activities

A total of € 171.5 million was used for acquisitions and investments in other financial assets (2010: € 4,859.7 million). Of this amount, € 161.0 million (2010: € 4,843.7 million) was used for acquisitions. Investments in other financial assets totaled € 10.5 million (2010: € 16.0 million). The major acquisitions in fiscal 2011 were:

€ million	Amnis Corporation	Microbiology business	Other	Total 2011
Purchase price paid	77.3	70.8	15.0	163.1
Cash and cash equivalents acquired	-0.7	-0.7	-0.7	-2.1
<b>Acquisitions</b>	<b>76.6</b>	<b>70.1</b>	<b>14.3</b>	<b>161.0</b>

→ [Notes to the consolidated cash flow statement](#)

The divestment of Théramex in December 2010 led to in cash inflows of € 270.2 million in 2011, mainly as a result of the payment of our purchase price receivable. Cash inflows from the divestment of the Crop BioScience business amounted to € 200.9 million. The sale of Merck Capital Asset Management Limited, Malta, to Merck Pensionstreuhand e.V., Darmstadt, resulted in cash inflows of € 218.1 million.

Net cash outflows from changes in other financial assets amounting to € 1,057.7 million mainly results from short-term monetary deposits and the purchase of short-term securities and financial assets.

**(38) Net cash flows from financing activities**

Disclosed dividend payments and transfers of profits in accordance with the Articles of Association were broken down as follows in the fiscal year:

€ million	2011	2010
Dividends to shareholders	-80.8	-64.6
Dividends to shareholders of non-controlling interest	-6.0	-21.5
<b>Dividend payments</b>	<b>-86.8</b>	<b>-86.1</b>

€ million	2011	2010
Profit transfer in accordance with the Articles of Association from E. Merck KG to Merck KGaA	0.8	3.7
Profit transfer in accordance with the Articles of Association from Merck KGaA to E. Merck KG	-938.5	-433.9
Changes in reserves of Merck KGaA by E. Merck KG	655.5	212.1
<b>Profit transfer from Merck KGaA to E. Merck KG</b>	<b>-282.2</b>	<b>-218.1</b>
Profit transfer from Merck & Cie to E. Merck KG	-44.3	-43.0
<b>Profit transfer to E. Merck KG</b>	<b>-326.5</b>	<b>-261.1</b>
Changes in financial liabilities to E. Merck KG	8.9	71.5
Changes in other liabilities to E. Merck KG	68.4	79.1
<b>Changes in liabilities to E. Merck KG</b>	<b>77.3</b>	<b>105.6</b>
<b>Total cash transfers to and from E. Merck KG</b>	<b>-249.2</b>	<b>-110.5</b>

**(39) Cash and cash equivalents**

The composition of cash and cash equivalents is presented under Notes to the Consolidated Balance Sheet.

→ Notes to the consolidated cash flow statement/  
Other disclosures

#### (40) Free cash flow and underlying free cash flow

Free cash flow and underlying free cash flow are calculated as follows:

€ million	2011	2010
<b>Net cash flows from operating activities</b>	<b>1,271.2</b>	<b>1,782.6</b>
Purchase of intangible assets	-79.7	-104.2
Purchase of property, plant and equipment	-366.3	-396.2
Acquisitions	-161.0	-4,843.7
Investments in financial assets	-10.5	-16.0
Disposal of non-current assets	787.4	54.8
Purchase/sale of marketable securities	-4.7	0.2
<b>Free cash flow</b>	<b>1,436.4</b>	<b>-3,522.5</b>
External financing of pension obligations Merck KGaA (CTA)	301.9	-
Acquisition-related payments	168.1	4,941.9
Payments related to divestments of business	-511.8	250.4
<b>Underlying free cash flow</b>	<b>1,394.6</b>	<b>1,669.8</b>

Free cash flow and underlying free cash flow are indicators that we use internally to measure the contribution of our divisions to liquidity. Free cash flow includes all net cash flows from operating activities as well as investing activities performed in connection with operating business. We do not include in free cash flow pure financial investments and similar monetary deposits of more than three months, which are also to be reported as net cash flows from investing activities under IFRS.

In the reconciliation of free cash flow to underlying free cash flow, the net payments for the external financing of the pension obligations of Merck KGaA (CTA) amounting to € 301.9 million as well as cash flows for both acquisitions and divestments are taken into account. The acquisition-related payments of € 168.1 million (2010: € 4,941.9 million) consist of acquisitions amounting to € 161.0 million (2010: € 4,843.7 million) as well as further payments amounting to € 7.1 million. These relate mainly to payments made in 2011 in connection with the acquisition of Millipore. In 2011, we received payments totaling € 200.9 million from the divestment of the Crop BioScience business, € 270.2 million from the divestment of Théramex, and € 40.7 million in connection with the divestment of the Generics business in 2006.

#### Other disclosures

##### (41) Derivative financial instruments

Merck uses derivative financial instruments exclusively to hedge currency and interest rate positions, and thereby reduce foreign exchange and interest rate risks. Foreign currency risks from recognized transactions are largely hedged. Merck currently uses marketable forward exchange contracts, interest rate futures, interest rate swaps and currency options as hedging instruments. Depending on the nature of the hedging transaction, changes in the fair values of hedged items are disclosed in the income statement either in the operating result or, in the case of financial transactions, in the financial result.

→ Other disclosures

The strategy to hedge interest rate and foreign exchange rate fluctuations arising from future transactions is set by a Merck Group financial risk committee, which meets on a regular basis. A review period of up to 36 months normally serves as the basis for entering into currency derivative contracts. Extensive guidelines regulate the use of derivatives. There is a ban on speculation. Derivative transactions are subject to continuous risk management procedures. Trading, settlement and control functions are strictly separated. Derivative financial contracts are only entered into with banks that have a good credit rating. Related default risks are continuously monitored.

The following derivative financial positions were held as of the balance sheet date:

€ million	Nominal volume		Fair value	
	Dec. 31, 2011	Dec. 31, 2010	Dec. 31, 2011	Dec. 31, 2010
Cash flow hedge	6,493.9	3,713.5	-276.7	-102.0
Interest	850.0	100.0	-30.2	-1.1
Currency	5,643.9	3,613.5	-246.5	-100.9
Fair value hedge	500.0	502.5	5.4	15.3
Interest	500.0	500.0	5.4	15.4
Currency	-	2.5	-	-0.1
No hedge accounting	1,996.3	5,298.0	-24.4	-18.1
Interest	750.0	1,500.0	-16.6	-0.6
Currency	1,246.3	3,798.0	-7.8	-17.5
	<b>8,990.2</b>	<b>9,514.0</b>	<b>-295.7</b>	<b>-104.8</b>

The fair values for derivatives stated here does not include accrued interest (clean price).

The nominal volume is the aggregate of all buy and sell amounts relating to derivative contracts. The fair values result from the valuation of open positions at market prices, ignoring any opposite movements in the value of the underlyings. They correspond to the income or expenses which would result if the derivatives contract were closed out as of the balance sheet date. Transactions are recognized at fair value on the basis of quoted prices or current market data provided by a recognized information service.

The maturity structure of the hedging transactions (nominal volume) is as follows as of the balance sheet date:

€ million	Remaining maturity less than 1 year	Remaining maturity more than 1 year	Total Dec. 31, 2011	Remaining maturity less than 1 year	Remaining maturity more than 1 year	Total Dec. 31, 2010
	Dec. 31, 2011	Dec. 31, 2010		Dec. 31, 2011	Dec. 31, 2010	
Foreign exchange contracts	3,934.2	2,956.0	<b>6,890.2</b>	4,454.0	2,960.0	<b>7,414.0</b>
Interest rate swaps	500.0	1,100.0	<b>1,600.0</b>	500.0	100.0	<b>600.0</b>
Interest rate futures	500.0	-	<b>500.0</b>	1,500.0	-	<b>1,500.0</b>
	<b>4,934.2</b>	<b>4,056.0</b>	<b>8,990.2</b>	<b>6,454.0</b>	<b>3,060.0</b>	<b>9,514.0</b>

The forward exchange contracts that are entered into to reduce the exchange rate risk with a total nominal volume of € 6,180.4 million and currency options with a total nominal volume of € 709.8 million primarily serve to hedge intercompany financing in foreign currency as well as to hedge future cash flows. These

→ [Other disclosures](#)

mainly served to hedge fluctuations in the exchange rates of the U.S. dollar (€ 4,483.5 million), the Swiss franc (€ 432.1 million), the Japanese yen (€ 758.7 million) and the Taiwanese dollar (€ 306.2 million).

Future transactions are only in a cash flow hedging relationship if the occurrence can be assumed to be highly probable. The nominal volume of hedged future transactions amounted to € 2,829.8 million (2010: € 3,613.5 million) as of the balance sheet date and related to both the hedging of future sales in U.S. dollars, Taiwanese dollars and Japanese yen and costs in Swiss francs as well as hedging of future interest rate risks in euros. The occurrence of hedged foreign exchange items is expected within the next 36 months. Moreover, we use forward exchange contracts to hedge financial investments and borrowings in foreign currency and designate them as cash flow hedges. In addition, to refinance bonds maturing in 2012 and 2015, we entered into forward interest rate swap contracts with a nominal value of € 750 million to hedge the current interest rate level. The measurement thereof is disclosed in equity at 100% effectiveness. In addition, interest rate hedge contracts with a nominal volume of € 250 million for bonds due in 2012 were fully recognized as an expense since refinancing is no longer expected. The resulting expenses from the fair value of the hedge amounting to € 14.8 million were reported in the financial result. During the fiscal year, expenses of € 50.1 million (2010: income of € 125.3 million) from the fair value measurement of derivatives were recognized in equity. € 12.3 million (2010: € 17.2 million) was transferred from equity and recognized as an expense (2010: expense).

The interest expense of the euro benchmark bond, which was issued in 2005 with a volume of € 500 million and a coupon of 3.75% was variabilized to the six-month Euribor through interest rate swaps and is measured as a fair value hedge. In 2011, the fair value measurement of the bond led to income of € 10.0 million (2010: income of € 0.2 million). This was offset by an expense in the same amount from the interest rate swap. Net interest payments on the bond and interest rate swaps were fixed in 2011 by forward exchange contracts based on the six-month Euribor forward curve. The interest expense of the private placement of € 100 million made in the context of the debt issuance program in 2009 was fixed by an interest rate swap of three-month Euribor plus 0.77%, which was carried in the balance sheet as a cash flow hedge. The fair value measurement of the interest rate swap led to a fair value decline of € 3.7 million (2010: € 1.1 million). This amount was recognized in equity at 100% effectiveness. In 2011, no ineffectiveness for hedging transactions was recognized in income.

#### **(42) Management of financial risks**

Fluctuations in the price of currencies and interest rates can result in significant profit and cash flow risks for Merck. Therefore, Merck centralizes these risks as far as possible and steers them in a forward-looking manner, also by using derivative financial instruments. Merck uses scenario analyses to assess existing risks and possible effects of foreign currencies, interest and credit defaults. Merck is not subject to any material risk clusters from financial transactions. The Risk Report included in the Management Report provides further information on the management of financial risks.

#### **Foreign exchange risks**

Transaction risks: Owing to its international business focus, Merck is subject to foreign exchange risks within the scope of both ordinary business and financing activities. Different strategies are used to limit or exclude these risks.

→ Other disclosures

In principle, foreign exchange risks from financing activities are eliminated as far as possible through the use of forward exchange contracts. Foreign exchange risks arising from operating business are analyzed regularly and reduced if necessary through forward exchange contracts or currency options using hedge accounting.

The following table presents the net foreign exchange risk from expected and recognized transactions in 2012 in the key currencies:

€ million as of Dec. 31, 2011	CHF	GBP**	JPY	TWD	USD
Foreign exchange risk from balance sheet items	-119.0	-	191.0	62.4	2,462.3
Foreign exchange risk from contingent business and expected transactions in 2012	-471.7	-	322.0	459.0	843.5
<b>Transaction-related foreign exchange position</b>	<b>-590.7</b>	<b>-</b>	<b>513.0</b>	<b>521.4</b>	<b>3,305.8</b>
Position hedged by derivatives	201.4	-	-437.4	-203.9	-2,991.0
<b>Open-end foreign exchange risk position</b>	<b>-389.3</b>	<b>-</b>	<b>75.6</b>	<b>317.5</b>	<b>314.7</b>
Change in foreign exchange position due to a 10% appreciation of the euro*	38.9	-	-7.6	-31.7	-31.5
included in profit/loss	-4.7	-	2.3	0.1	1.8
recognized in equity	-3.5	-	22.3	14.0	51.1

\*A 10% devaluation of the euro would have an opposite effect of the same amount.

\*\* Since 2011, the net foreign exchange risk from GBP is no longer considered a material risk factor for Merck and is therefore no longer presented.

Furthermore, derivatives exist to hedge expected cash flows beyond the year 2012. If the euro were to appreciate by 10%, these would lead to an increase in equity amounting to € 21.5 million in Japanese yen and € 60.4 million in U.S. dollars. Due to the hedging of expected cash flows beyond the year 2011, this would have caused in 2010 a change in equity of € 20.0 million in Japanese yen.

The following table presents the corresponding net foreign exchange rate risk from expected and recognized transactions for 2010:

€ million as of Dec. 31, 2010	CHF	GBP	JPY	TWD	USD
Foreign exchange risk from balance sheet items	-80.9	74.9	206.6	70.4	2,804.9
Foreign exchange risk from contingent business and expected transactions in 2011	-467.9	114.2	291.3	421.5	1,147.1
<b>Transaction-related foreign exchange position</b>	<b>-548.8</b>	<b>189.1</b>	<b>497.9</b>	<b>491.9</b>	<b>3,952.0</b>
Position hedged by derivatives	130.0	-75.0	-386.5	-346.6	-3,294.2
<b>Open-end foreign exchange risk position</b>	<b>-418.8</b>	<b>114.1</b>	<b>111.4</b>	<b>145.3</b>	<b>657.8</b>
Change in foreign exchange position due to a 10% appreciation of the euro	41.9	-11.4	-11.1	-14.5	-65.8
included in profit/loss	-4.9	-	3.5	4.5	8.4
recognized in equity	-	-	14.5	23.1	40.5

→ [Other disclosures](#)

**Translation risks:** Many Merck companies are located outside the euro zone. The financial statements of these companies are translated into euros. Exchange differences in the assets of these companies resulting from currency fluctuations are recognized in equity.

**Interest rate risks**

Interest rate risks relate mainly to financial liabilities of € 5,539.3 million (2010: € 5,483.5 million) and monetary deposits of € 2,115.2 million (2010: € 1,346.5 million). If necessary, derivative financial instruments are used to change fixed interest payments into variable interest payments. The aim is to optimize the interest result and to minimize interest rate risks. Relative to net interest liabilities on the balance sheet date, a parallel shift in interest rates by +100 basis points would lead to income of € 10.3 million (2010: € 6.3 million). A parallel shift in interest rates by -100 basis points would lead to an expense of € -9.7 million (2010: € 5.6 million). This corresponds to a change in interest income of € 15.7 million (2010: € 9.1 million) or € -14.8 million (2010: € -8.4 million) on financial assets and additional interest expense of € 5.4 million (2010: € 2.8 million) or a decline in interest expense of € 5.1 million (2010: € 2.8 million) on financial liabilities. The resulting change in the market value of assets and derivative financial instruments recognized at fair value would increase equity by € 11.1 million (2010: lowered by € 6.8 million) or lower it by € 11.8 million (2010: increased by € 6.8 million).

**Share price risks**

The share portfolio of publicly listed companies amounting to € 8.7 million is generally exposed to a market value risk. A 10% change in the value of the stock market would impact equity by € 0.9 million. These changes in value are recognized in income at the time of disposal.

**Liquidity risks**

The liquidity risk, meaning the risk that Merck cannot meet its financial obligations, is limited by establishing the required financial flexibility and by effective cash management. Apart from liquid assets of € 2,054.9 million (2010: € 999.3 million), Merck has at its disposal a multi-currency revolving credit line of € 2 billion to be used for business purposes with a remaining term of three years as well as bilateral credit facilities of € 389.8 million (2010: € 324.8 million). There are no indications that the availability of credit lines already extended will be restricted.

Moreover, a commercial paper program with a volume of € 2 billion and a debt issuance program set up in 2009 with a volume of € 10 billion exist. Liquidity risks are regularly monitored and reported to the management. Our loan agreements do not contain any financial covenants.

Trade payables amounting to € 1,100.8 million (2010: € 1,200.1 million) have a remaining term of less than one year. With respect to operating liabilities from derivatives amounting to € 101.1 million (2010: € 37.9 million), € 64.5 million (2010: € 26.8 million) is short-term. Out of other financial liabilities amounting to € 532.9 million (2010: € 486.3 million), € 529.1 million (2010: € 481.7 million) is due within one year.

The following tables present the contractually set payments such as repayments and interest on financial liabilities and derivative financial instruments with a negative market value:

→ Other disclosures

€ million as of Dec. 31, 2011	Book value	Cash flows 2012		Cash flows 2013–2017		Cash flows 2018–2023	
		Interest	Repayment	Interest	Repayment	Interest	Repayment
Debt securities and commercial paper	4,898.4	179.1	1,000.0	518.2	2,490.5	141.3	1,420.0
Bank loans and overdrafts	127.2	1.4	110.0	2.0	16.4	–	1.0
Liabilities to related parties	199.2	0.2	199.2	–	–	–	–
Loans from third parties and other financial liabilities	83.2	4.9	15.3	8.0	63.0	–	4.4
Liabilities from derivatives (financial transactions)	219.5	–	63.9	–	155.6	–	–
Financial leasing liabilities	11.8	0.4	2.5	0.8	7.6	–	1.7
	<b>5,539.3</b>	<b>186.0</b>	<b>1,390.9</b>	<b>529.0</b>	<b>2,733.1</b>	<b>141.3</b>	<b>1,427.1</b>

€ million as of Dec. 31, 2010	Book value	Cash flows 2011		Cash flows 2012–2016		Cash flows 2017–2023	
		Interest	Repayment	Interest	Repayment	Interest	Repayment
Debt securities and commercial paper	4,983.6	190.4	35.3	643.3	3,509.5	213.8	1,419.3
Bank loans and overdrafts	115.7	1.7	81.2	3.1	29.9	0.1	4.6
Liabilities to related parties	190.3	–	190.3	–	–	–	–
Loans from third parties and other financial liabilities	78.1	4.5	11.0	8.0	58.7	–	8.5
Liabilities from derivatives (financial transactions)	108.7	–	28.7	–	80.0	–	–
Financial leasing liabilities	7.1	0.1	0.7	0.2	4.1	–	2.3
	<b>5,483.5</b>	<b>196.7</b>	<b>347.2</b>	<b>654.6</b>	<b>3,682.2</b>	<b>213.9</b>	<b>1,434.7</b>

**Credit risks**

Merck is only subject to a relatively low credit risk, meaning the unexpected loss of payment funds or income. Financial contracts are only entered into with banks with good ratings and the broad-based business structure of the Merck Group means that there is no particularly high concentration of credit risks with respect to either customers or individual countries. The credit risk with customers is continuously monitored by analyzing the age structure of trade accounts receivable. The financial crisis is leading to an increased risk of default in individual eurozone countries. Merck continuously reviews and monitors open positions vis-a-vis all trading partners in the affected countries and makes adjustments to its default risks as necessary. The theoretically maximum default risk corresponds to the book values.

→ Other disclosures**(43) Other disclosures on financial instruments**

The following table presents the reconciliation of the balance sheet items to the classes of financial instruments in accordance with IFRS 7:

€ million	Book value Dec. 31, 2011	Subsequent measurement according to IAS 39				Non-financial items
		Amortized cost	At cost	Fair value	Carrying value accord- ing to IAS 17	
<b>Assets</b>						
Cash and cash equivalents	937.8	937.8	–	–	–	–
Marketable securities and financial assets	1,117.1	787.3	–	329.8	–	–
Held for trading (non-derivatives)	–	–	–	–	–	–
Non-hedging derivatives	6.4	–	–	6.4	–	–
Held to maturity	27.3	27.3	–	–	–	–
Loans and receivables	760.0	760.0	–	–	–	–
Available-for-sale	307.9	–	–	307.9	–	–
Hedging derivatives	15.5	–	–	15.5	–	–
Trade receivables	2,328.3	2,328.3	–	–	–	–
Loans and receivables	2,328.3	2,328.3	–	–	–	–
Current and non-current other assets	305.1	90.6	–	2.6	–	211.9
Non-hedging derivatives	0.6	–	–	0.6	–	–
Loans and receivables	90.6	90.6	–	–	–	–
Hedging derivatives	2.0	–	–	2.0	–	–
Non-financial items	211.9	–	–	–	–	211.9
Non-current financial assets	60.3	18.6	32.6	9.1	–	–
Non-hedging derivatives	–	–	–	–	–	–
Held to maturity	–	–	–	–	–	–
Loans and receivables	18.6	18.6	–	–	–	–
Available-for-sale	41.3	–	32.6	8.7	–	–
Hedging derivatives	0.4	–	–	0.4	–	–
Financial assets covering pensions	–	–	–	–	–	–
Held to maturity	–	–	–	–	–	–
Available-for-sale	–	–	–	–	–	–
<b>Liabilities</b>						
Current and non-current financial liabilities	5,539.3	5,308.0	–	219.5	11.8	–
Non-hedging derivatives	27.8	–	–	27.8	–	–
Other liabilities	5,308.0	5,308.0	–	–	–	–
Hedging derivatives	191.7	–	–	191.7	–	–
Finance lease	11.8	–	–	–	11.8	–
Trade accounts payable	1,100.8	1,100.8	–	–	–	–
Other liabilities	1,100.8	1,100.8	–	–	–	–
Current and non-current other liabilities	1,145.7	532.9	–	101.1	–	511.7
Non-hedging derivatives	3.6	–	–	3.6	–	–
Other liabilities	532.9	532.9	–	–	–	–
Hedging derivatives	97.5	–	–	97.5	–	–
Non-financial items	511.7	–	–	–	–	511.7

The fair values of derivatives stated here do not include accrued interest (clean price).

→ Other disclosures

Subsequent measurement according to IAS 39							
Fair value Dec. 31, 2011	Book value Dec. 31, 2010	Amortized cost	At cost	Fair value	Carrying value according to IAS 17	Non-financial items	Fair value Dec. 31, 2010
937.8	943.7	943.7	–	–	–	–	943.7
	55.6	23.0	–	32.6	–	–	–
–	–	–	–	–	–	–	–
6.4	–	–	–	–	–	–	–
27.3	22.7	22.7	–	–	–	–	22.7
760.0	0.3	0.3	–	–	–	–	0.3
307.9	11.3	–	–	11.3	–	–	11.3
15.5	21.3	–	–	21.3	–	–	21.3
–	2,296.3	2,296.3	–	–	–	–	–
2,328.3	2,296.3	2,296.3	–	–	–	–	2,296.3
	617.6	407.1	–	2.6	–	207.9	–
0.6	1.3	–	–	1.3	–	–	1.3
90.6	407.1	407.1	–	–	–	–	407.1
2.0	1.3	–	–	1.3	–	–	1.3
	207.9	–	–	–	–	207.9	–
	130.3	16.6	57.2	56.5	–	–	–
–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–
18.6	16.6	16.6	–	–	–	–	16.6
41.3	95.8	–	57.2	38.6	–	–	95.8
0.4	17.9	–	–	17.9	–	–	17.9
	216.9	64.6	–	152.3	–	–	–
–	64.6	64.6	–	–	–	–	64.6
–	152.3	–	–	152.3	–	–	152.3
–	5,483.5	5,367.7	–	108.7	7.1	–	–
27.8	15.8	–	–	15.8	–	–	15.8
5,548.1	5,367.7	5,367.7	–	–	–	–	5,532.1
191.7	92.9	–	–	92.9	–	–	92.9
11.8	7.1	–	–	–	7.1	–	7.1
	1,200.1	1,200.1	–	–	–	–	–
1,100.8	1,200.1	1,200.1	–	–	–	–	1,200.1
	1,097.5	486.3	–	37.9	–	573.3	–
3.6	3.5	–	–	3.5	–	–	3.5
532.9	486.3	486.3	–	–	–	–	486.3
97.5	34.4	–	–	34.4	–	–	34.4
	573.3	–	–	–	–	573.3	–

→ Other disclosures

The net result of financial instruments comprises the impact of financial instruments on income. This includes mainly measurement results from currency translation, the adjustment to fair value, write-downs and write-ups as well as the recognition of premiums and discounts. Dividends and interest are not recognized in the net result of financial instruments, except for in the category "held for trading," which at Merck only includes derivatives that are not hedged.

The net results of financial instruments by category are as follows:

2011 € million	Net results				
	Interest	Write-downs	Write-ups	Fair value changes	Disposal gains/losses
<b>Financial instrument of the category</b>					
Held for trading	-	-	-	-57.5	-
Held to maturity	4.7	-	-	-	0.8
Loans and receivables	37.5	-123.7	9.2	-	-
Available-for-sale	9.5	-38.3	0.9	-	26.9
Other liabilities	-209.2	-	-	-	-

2010 € million	Net results				
	Interest	Write-downs	Write-ups	Fair value changes	Disposal gains/losses
<b>Financial instrument of the category</b>					
Held for trading	-	-	-	18.3	-
Held to maturity	15.2	-0.2	-	-	1.5
Loans and receivables	5.2	-72.4	9.3	-	-
Available-for-sale	10.8	-2.1	-	-	-
Other liabilities	-195.7	-	-	-	-

In 2011, taking into account the relevant economic hedging transactions, foreign exchange gains of € 12.3 million resulting from receivables and payables in operating business were recognized (2010: € 24.7 million). Foreign exchange losses of € 30.4 million (2010: gains of € 1.1 million) were booked for financial receivables/payables and measures to secure them. Losses of € 17.1 million (2010: gains of € 11.8 million) were booked for hedging of financial transactions.

→ Other disclosures

The fair value of stocks and bonds is mainly based on the official market prices and market values quoted on the balance sheet date. The fair value of interest-bearing securities is determined by discounting future cash flows using market interest rates. Forward exchange contracts and currency options are carried at fair value. They are measured using spot middle rates, foreign exchange volatilities and maturity-related interest premiums or discounts in relation to traded market prices applying recognized mathematical principles. The fair value measurement of interest rate forward contracts is based on an objective third-party assessment. The fair value of interest rate swaps held for interest rate hedging purposes is determined with standard market valuation models using interest rate curves available in the market. Compared with 2010, there were no changes in the method used to determine fair values.

The fair values of the financial instruments disclosed in our balance sheet were determined as follows:

€ million as of Dec. 31, 2011	Assets	Liabilities
<b>Prices quoted in an active market (Level 1)</b>	<b>58.4</b>	–
thereof available-for-sale	58.4	–
<b>Valuation technique including data from observable markets (Level 2)</b>	<b>283.1</b>	<b>–320.6</b>
thereof available-for-sale	258.2	–
thereof hedging derivatives	17.9	–289.2
thereof non-hedging derivatives	7.0	–31.4
<b>Valuation technique based on assumptions not supported by observable market data (Level 3)</b>	–	–

€ million as of Dec. 31, 2010	Assets	Liabilities
<b>Prices quoted in an active market (Level 1)</b>	<b>202.2</b>	–
thereof available-for-sale	202.2	–
<b>Valuation technique including data from observable markets (Level 2)</b>	<b>41.8</b>	<b>–146.6</b>
thereof available-for-sale	0.0	–
thereof hedging derivatives	40.5	–127.2
thereof non-hedging derivatives	1.3	–19.4
<b>Valuation technique based on assumptions not supported by observable market data (Level 3)</b>	–	–

→ [Other disclosures](#)

#### (44) Capital management

The objective of capital management is to secure the financial flexibility in order to maintain long-term business operations and to realize strategic options. Maintaining a stable investment grade rating, ensuring liquidity, limiting financial risks as well as optimizing the costs of capital are the objectives of our financial policy and set important framework conditions for capital management. Merck prefers to borrow capital via the capital markets and has a debt issuance program that enables rapid access to the capital market. In addition, we have both a commercial paper program with a volume of € 2 billion for short-term financing on the capital market as well as a syndicated credit facility of € 2 billion with a term of until October 2014.

The responsible committees of the Merck Group decide on the capital structure of the balance sheet, the equity base, the appropriation of net retained profit, the dividend level, financing of investments, as well as the assumption and repayment of debt.

#### (45) Contingent liabilities

€ million	Dec. 31, 2011	thereof subsidiaries	Dec. 31, 2010	thereof subsidiaries
Guarantees	101.0	–	105.0	–
Warranties	0.7	–	0.5	–
Other contingent liabilities	43.4	–	40.7	–

Most of the guarantees issued exist in connection with our pharmaceutical business in Italy, where pursuant to tax legislation, guarantees must be given for reimbursements of tax receivables from the Italian fiscal authorities as well as to secure the supply of products to public hospitals. As of December 31, 2011, these amounted to € 53.8 million (2010: € 54.0 million). Other contingent liabilities include, among other things, potential obligations from legal disputes, for which the probability of an outflow of resources did not suffice to recognize a provision as of the balance sheet date.

#### (46) Other financial obligations

Other financial obligations comprise the following:

€ million	Dec. 31, 2011	thereof subsidiaries	Dec. 31, 2010	thereof subsidiaries
Obligations to acquire intangible assets	950.5	–	1,003.6	–
Orders for capital expenditure on property, plant and equipment	84.9	–	179.2	–
Future operating lease payments	178.3	–	208.8	–
Long-term purchase commitments	281.4	–	315.2	–
Other financial obligations	19.1	–	18.2	–
	1,514.2	–	1,725.0	–

→ Other disclosures

Obligations to acquire intangible assets exist in particular within the scope of research and development collaborations. Here Merck has obligations to make milestone payments when its partner achieves certain objectives. In the unlikely event that all contract partners achieve all milestones, Merck would be obligated to pay up to € 950.5 million (2010: € 1,003.6 million) for the acquisition of intangible assets.

Our expectations regarding the potential maturities of these obligations are as follows:

€ million as of Dec. 31, 2011	within 1 year	1 - 5 years	more than 5 years	Total
Obligations to acquire intangible assets	42.6	120.2	787.7	<b>950.5</b>

€ million as of Dec. 31, 2010	within 1 year	1 - 5 years	more than 5 years	Total
Obligations to acquire intangible assets	32.9	219.3	751.4	<b>1,003.6</b>

Other financial obligations are carried at nominal value. The maturities of liabilities from lease agreements are composed as follows:

€ million as of Dec. 31, 2011	within 1 year	1 - 5 years	more than 5 years	Total
Present value of future payments from finance leases	2.5	7.6	1.7	<b>11.8</b>
Interest component of finance leases	0.4	0.8	–	<b>1.2</b>
<b>Future finance lease payments</b>	<b>2.9</b>	<b>8.4</b>	<b>1.7</b>	<b>13.0</b>
<b>Future operating lease payments</b>	<b>50.7</b>	<b>104.9</b>	<b>22.7</b>	<b>178.3</b>

€ million as of Dec. 31, 2010	within 1 year	1 - 5 years	more than 5 years	Total
Present value of future payments from finance leases	1.8	3.0	2.3	<b>7.1</b>
Interest component of finance leases	0.3	0.3	–	<b>0.6</b>
<b>Future finance lease payments</b>	<b>2.1</b>	<b>3.3</b>	<b>2.3</b>	<b>7.7</b>
<b>Future operating lease payments</b>	<b>50.3</b>	<b>130.3</b>	<b>28.2</b>	<b>208.8</b>

Operating lease agreements relate mainly to market-typical leasing arrangements to lease operating and office equipment. The payments resulting from operating lease agreements amounted to € 75.6 million (2010: € 72.0 million) and were recorded as an expense in 2011.

→ Other disclosures

#### (47) Personnel expenses/Headcount

Personnel expenses comprise the following:

€ million	2011	2010
Wages and salaries	2,458.7	2,145.5
Compulsory social security contributions and special financial assistance	347.4	319.3
Pension expenses	167.6	132.1
	<b>2,973.7</b>	<b>2,596.9</b>

As of December 31, 2011, the Merck Group had 40,676 employees (2010: 40,562). The average number of employees during the year was 40,570 (2010: 36,347). The increase in the average number of employees is due mainly to the consolidation of Millipore.

The breakdown of personnel by function is as follows:

Average number of employees	2011	2010
Production	9,317	8,327
Logistics	2,054	1,927
Marketing and Sales	12,322	11,541
Administration	4,696	4,378
Research & Development	4,632	4,116
Infrastructure and Other	7,549	6,058
	<b>40,570</b>	<b>36,347</b>

#### (48) Material costs

Material costs in 2011 amounted to € 1,453 million (2010: € 1,246 million) and are reported under cost of sales.

#### (49) Auditors' fees

The costs of the auditors (KPMG) of the financial statements of the Merck Group can be broken down as follows:

€ million	2011		2010	
	Merck Group	thereof KPMG AG	Merck Group	thereof KPMG AG
Audits of financial statements	7.2	1.7	8.1	2.4
Other audit-related services	0.1	–	0.2	–
Tax consultancy services	0.5	0.2	0.4	0.2
Other services	0.7	0.3	0.6	0.5
	<b>8.5</b>	<b>2.2</b>	<b>9.3</b>	<b>3.1</b>

#### (50) Corporate governance

The Statement of Compliance in accordance with section 161 of the German Stock Corporation Act (Aktiengesetz) was published in the corporate governance section of our website [www.merckgroup.com/investors](http://www.merckgroup.com/investors) → Corporate Governance in February 2011 and thus made permanently available.

→ Other disclosures

**(51) Companies opting for exemption under section 264 (3) HGB**

The following companies, which have been consolidated in these financial statements, have opted for exemption under section 264 (3) of the German Commercial Code (HGB):

Chemische Fabrik Lehrte Dr. Andreas Kossel GmbH, Lehrte  
Merck Export GmbH, Darmstadt  
Merck Selbstmedikation GmbH, Darmstadt  
Merck Shared Services Europe GmbH, Darmstadt  
Merck Serono GmbH, Darmstadt

**(52) Related-party disclosures**

Related parties in respect of the Merck Group are E. Merck KG as well as Emanuel Merck Vermögens KG and E. Merck Beteiligungen KG. In principle, direct or indirect subsidiaries of Merck KGaA, associates and joint ventures of the Merck Group as well as pension funds that are classified as funded defined benefit plans in accordance with IAS 19 are also related parties within the meaning of IAS 24. Members of the Executive Board and the Supervisory Board of Merck KGaA, the Executive Board and the Board of Partners of E. Merck KG as well as close members of their families are also related parties.

As of December 31, 2011, there were liabilities by Merck KGaA, Merck Financial Services GmbH and Merck & Cie, Altdorf, to E. Merck KG in the amount of € 518.5 million (2010: € 450.9 million). In addition, as of December 31, 2011, Merck KGaA had receivables from E. Merck KG in the amount of € 0.1 million (2010: € 12.3 million) and from E. Merck Beteiligungen KG in the amount of € 6.1 million (2010: € 4.7 million). The balances result mainly from the profit transfers by Merck & Cie to E. Merck KG as well as the reciprocal profit transfers between Merck KGaA and E. Merck KG. They included financial payables of € 199.2 million (2010: € 190.3 million) which were subject to standard market interest rates.

From January to December 2011, Merck KGaA performed services for E. Merck KG with a value of € 1.1 million (2010: € 1.1 million), for E. Merck Beteiligungen KG with a value of € 0.0 million (2010: € 0.4 million), and for Emanuel Merck Vermögens KG with a value of € 0.2 million (2010: € 0.2 million). During the same period, E. Merck KG performed services for Merck KGaA with a value of € 0.5 million (2010: € 0.5 million).

Business transactions with major subsidiaries have been eliminated during consolidation and are not disclosed further in the Notes. Information on pension funds that are classified as funded defined benefit plans in accordance with IAS 19 can be found under Provisions for pensions and other post-employment benefits. There were no further material transactions with these pension funds.

From January to December 2011, companies of the Merck Group supplied goods with a value of € 2.3 million (2010: € 1.1 million) to associates. As of December 31, 2011, companies of the Merck Group had no receivables from associates (2010: € 0.8 million). There were no further material transactions with associates.

There were no additional material transactions such as, for example, the provision of services or the granting of loans, between companies of the Merck Group and members of the Executive Board and the Supervisory Board of Merck KGaA, the Executive Board and the Board of Partners of E. Merck KG or members of their immediate families.

→ [Other disclosures](#)

### **(53) Executive Board and Supervisory Board compensation**

The compensation of the Executive Board of Merck KGaA is largely paid by the general partner, E. Merck KG, and recorded as an expense in its income statement. For January to December 2011, fixed salaries of € 5.5 million (2010: € 3.5 million) and variable compensation of € 13.9 million (2010: € 6.4 million) were recorded for members of the Executive Board of Merck KGaA. Furthermore, additions to pension provisions of E. Merck KG include current service costs of € 1.1 million (2010: € 2.1 million) for members of the Executive Board of Merck KGaA.

Subject to the approval of the Annual General Meeting on the proposed distribution of a dividend of € 1.50 per share, the compensation of the Supervisory Board amounting to € 0.6 million (2010: € 0.5 million) consists of a fixed portion of € 0.1 million (2010: € 0.1 million) and a variable portion of € 0.5 million (2010: € 0.4 million).

Further individualized information and details can be found in the Compensation Report on pages 103 et seq.

### **(54) Information on preparation and approval**

The Executive Board of Merck KGaA prepared the consolidated financial statements on February 14, 2012 and approved them for forwarding to the Supervisory Board. The Supervisory Board has the responsibility to examine the consolidated financial statements and to declare whether it approves them.

### **(55) Subsequent events**

On February 3, 2012, Merck announced the signing of a global agreement with Threshold Pharmaceuticals, Inc., South San Francisco, CA (USA), to co-develop and commercialize TH-302, Threshold's small molecule hypoxia-targeted drug.

Under the terms of the agreement, Merck will receive co-development rights, exclusive global commercialization rights and will provide Threshold an option to co-commercialize the therapeutic in the United States. In exchange, Threshold will receive an upfront payment of € 19 million (US\$ 25 million) and could receive up to € 26.5 million (US\$ 35 million) in additional development milestones during 2012. Threshold is also eligible to receive a € 15 million (US\$ 20 million) milestone payment based on positive results from its randomized Phase II trial in pancreatic cancer.

In the United States, Threshold will have primary responsibility for development of TH-302 in the soft tissue sarcoma indication. Threshold and Merck will jointly develop TH-302 in all other cancer indications being pursued. Merck will pay 70% of worldwide development costs for TH-302.

Subject to FDA approval in the United States, Merck will initially be responsible for commercialization of TH-302 with Threshold receiving a tiered, double-digit royalty on sales. Under the royalty-bearing portion of the agreement, Threshold retains the option to co-promote TH-302 in the United States. Additionally, Threshold retains the option to co-commercialize TH-302 allowing the company to participate in up to 50% of the profits in the United States, based on certain revenue tiers. Outside of the United States, Merck will be solely responsible for the commercialization of TH-302 with Threshold receiving a tiered, double-digit royalty on sales in these territories.

→ [List of shareholdings](#)

### (56) List of shareholdings

The following table presents the list of shareholdings of the Merck Group as of December 31, 2011.

Country	Company	Registered office	Equity interest (%)	thereof Merck KGaA (%)
I. Fully consolidated companies				
<b>Germany</b>				
Germany	Merck KGaA	Darmstadt	Parent company	
Germany	Allergopharma J. Ganzer KG	Reinbek	95.00	
Germany	Chemische Fabrik Lehrte Dr. Andreas Kossel GmbH	Lehrte	100.00	100.00
Germany	Chemitra GmbH	Darmstadt	100.00	100.00
Germany	Emedia Export Company mbH	Gernsheim	100.00	
Germany	heipa Dr. Müller GmbH	Epelheim	100.00	100.00
Germany	IHS-Intelligent Healthcare Solutions Ltd. & Co. KG	Frankfurt	100.00	
Germany	Litec-LLL GmbH	Greifswald	100.00	100.00
Germany	Merck BioSciences GmbH	Schwalbach/Ts.	100.00	
Germany	Merck China Chemicals Holding GmbH	Darmstadt	100.00	
Germany	Merck Consumer Health Care Holding GmbH	Darmstadt	100.00	100.00
Germany	Merck Export GmbH	Darmstadt	100.00	100.00
Germany	Merck Financial Services GmbH	Darmstadt	100.00	100.00
Germany	Merck Holding GmbH	Gernsheim	100.00	100.00
Germany	Merck Internationale Beteiligungen GmbH	Darmstadt	100.00	
Germany	Merck Schuchardt OHG	Hohenbrunn	100.00	100.00
Germany	Merck Selbstmedikation GmbH	Darmstadt	100.00	
Germany	Merck Serono GmbH	Darmstadt	100.00	100.00
Germany	Merck Shared Services Europe GmbH	Darmstadt	100.00	100.00
Germany	Merck Versicherungsvermittlung GmbH	Darmstadt	100.00	100.00
Germany	Merck Verwaltungsgesellschaft mbH	Darmstadt	100.00	100.00
Germany	Merck Vierte Allgemeine Beteiligungsgesellschaft mbH	Gernsheim	100.00	
Germany	Millipore GmbH	Schwalbach/Ts.	100.00	
<b>Other European countries</b>				
Switzerland	Allergopharma AG	Therwil	100.00	
Switzerland	Ares Trading SA	Aubonne	100.00	
Switzerland	Horizon North SA	Geneva	100.00	
Switzerland	Horizon South SA	Geneva	100.00	
Switzerland	Merck & Cie	Altdorf	98.87	98.87
Switzerland	Merck (Schweiz) AG	Zug	100.00	
Switzerland	Merck AG	Zug	100.00	20.87
Switzerland	Merck BioSciences AG	Läufelfingen	100.00	
Switzerland	Merck Serono SA	Coinsins	100.00	

→ [List of shareholdings](#)

Country	Company	Registered office	Equity interest (%)	thereof Merck KGaA (%)
Switzerland	Millipore AG	Zug	100.00	
Switzerland	SeroMer Holding SA	Chéserex	100.00	
France	Biotest S.a.r.l.	Buc	100.00	
France	Delahardt S.A.S.	Molsheim	100.00	
France	Laboratoire Médiflor S.A.S.	Lyon	100.00	
France	Merck Biodevelopment S.A.S.	Lyon	100.00	
France	Merck Chimie S.A.S.	Fontenay s/Bois	100.00	
France	Merck Médication Familiale S.A.S.	Lyon	100.00	
France	Merck S.A.	Lyon	99.77	88.95
France	Merck Santé S.A.S.	Lyon	100.00	
France	Merck Serono S.A.S.	Lyon	100.00	
France	Millipore S.A.S.	Molsheim	100.00	
United Kingdom	Amnis Europe Ltd.	London	100.00	
United Kingdom	Baird & Tatlock Ltd.	Hull	100.00	
United Kingdom	BioAnaLab Ltd.	London	100.00	
United Kingdom	Bioprocessing Corp. Ltd.	London	100.00	
United Kingdom	Bioprocessing Ltd.	London	100.00	
United Kingdom	British Cod Liver Oils Ltd.	Hull	100.00	
United Kingdom	Celliance Ltd.	Edinburgh	100.00	
United Kingdom	Chemicon Europe Ltd.	London	100.00	
United Kingdom	E. Merck Ltd.	Hull	100.00	
United Kingdom	Hofels Pure Foods Ltd.	Hull	100.00	
United Kingdom	Lamberts Healthcare Ltd.	Tunbridge Wells	100.00	
United Kingdom	Lipha Pharmaceuticals Ltd.	Hull	100.00	
United Kingdom	Marfleet Refining Company Ltd.	Hull	100.00	
United Kingdom	Merck BioSciences Ltd.	Nottingham	100.00	
United Kingdom	Merck Chemicals Ltd.	Nottingham	100.00	
United Kingdom	Merck Consumer Health Care Ltd.	Hull	100.00	
United Kingdom	Merck Cross Border Trustees Ltd.	Hull	100.00	
United Kingdom	Merck Investments Ltd.	Hull	100.00	
United Kingdom	Merck Ltd.	Hull	100.00	
United Kingdom	Merck Pension Trustees Ltd.	Hull	100.00	
United Kingdom	Merck Serono Europe Ltd.	London	100.00	
United Kingdom	Merck Serono Ltd.	Feltham	100.00	
United Kingdom	Millipore (U.K.) Ltd.	London	100.00	
United Kingdom	Millipore UK Holdings LLP	London	100.00	
United Kingdom	New Era Laboratories Ltd.	Hull	100.00	
United Kingdom	Phillips Yeast Products Ltd.	Hull	100.00	
United Kingdom	Rona Laboratories Ltd.	Hull	100.00	
United Kingdom	Serologicals European Holding Ltd.	London	100.00	
United Kingdom	Serologicals Global Holding Company Ltd.	London	100.00	

→ [List of shareholdings](#)

Country	Company	Registered office	Equity interest (%)	thereof Merck KGaA (%)
United Kingdom	Serologicals UK Holding Company Ltd.	London	100.00	
United Kingdom	Serono Ltd.	Feltham	100.00	
United Kingdom	Seven Seas Healthcare Ltd.	Hull	100.00	
United Kingdom	Seven Seas Ltd.	Hull	100.00	
United Kingdom	Seven Seas Pension Trustees Ltd.	Hull	100.00	
United Kingdom	Upstate Ion Channel Discovery Group Ltd.	London	100.00	
United Kingdom	Upstate Ltd.	London	100.00	
Italy	Allergopharma S.p.A.	Milan	100.00	
Italy	Baker Italia S.p.A.	Rome	100.00	
Italy	Istituto di Ricerche Biomediche Antoine Marxer RBM S.p.A.	Colleretto Giacosa	100.00	
Italy	Merck S.p.A.	Milan	100.00	
Italy	Merck Serono S.p.A.	Rome	99.74	
Italy	Millipore S.p.A.	Milan	100.00	
Spain	Merck, S.L.	Madrid	100.00	
Spain	Millipore Iberica S.A.	Madrid	100.00	
Belgium	Merck Consumer Healthcare N.V.-S.A.	Overijse	100.00	
Belgium	Merck N.V.-S.A.	Overijse	100.00	
Belgium	Millipore S.A./N.V.	Brussels	100.00	
Bulgaria	Merck Bulgaria EAD	Sofia	100.00	
Denmark	Merck A/S	Hellerup	100.00	
Denmark	Millipore A/S	Copenhagen	100.00	
Denmark	Survac ApS	Frederiksberg	100.00	100.00
Estonia	Merck Serono OÜ	Tallinn	100.00	
Finland	Merck OY	Espoo	100.00	
Finland	Millipore OY	Espoo	100.00	
Greece	Merck A.E.	Maroussi	100.00	
Ireland	Merck Millipore Ltd.	Carrigtwohill	100.00	
Ireland	Merck Serono (Ireland) Ltd.	Dublin	100.00	
Ireland	Millipore Cork	Carrigtwohill	100.00	
Ireland	Millipore Dublin International Finance Company	Dublin	100.00	
Ireland	Seven Seas (Ireland) Ltd.	Dublin	100.00	
Ireland	Tullagreen Holdings Ltd.	Dublin	100.00	
Croatia	Merck d.o.o.	Zagreb	100.00	
Latvia	Merck Serono SIA	Riga	100.00	
Lithuania	Merck Serono, UAB	Kaunas	100.00	
Luxembourg	Merck Re S.A.	Luxembourg	100.00	
Luxembourg	Merck-Finanz AG	Luxembourg	100.00	100.00
Luxembourg	Millilux S.a.r.L.	Luxembourg	100.00	
Luxembourg	Millipart S.a.r.L.	Luxembourg	100.00	
Luxembourg	Millipore International Holdings, S.a.r.L.	Luxembourg	100.00	

→ [List of shareholdings](#)

Country	Company	Registered office	Equity interest (%)	thereof Merck KGaA (%)
Malta	Merck Capital Holding Ltd.	St. Julians	100.00	99.92
Malta	Merck Capital Ltd.	St. Julians	100.00	
Netherlands	Merck B.V.	Schiphol-Rijk	100.00	
Netherlands	Millipore B.V.	Amsterdam Zuidoost	100.00	
Netherlands	Millipore International Holding Company B.V.	Amsterdam Zuidoost	100.00	
Netherlands	Millipore Ireland B.V.	Amsterdam Zuidoost	100.00	
Netherlands	Serono Tri Holdings B.V.	Schiphol-Rijk	100.00	
Norway	Merck AS	Oslo	100.00	
Norway	Millipore AS	Oslo	100.00	
Austria	Allergopharma Vertriebsgesellschaft m.b.H.	Vienna	100.00	
Austria	Arcana Life-Science-Produkte GmbH	Vienna	100.00	
Austria	Merck Gesellschaft mbH	Vienna	100.00	
Austria	Merck KGaA & Co. Werk Spittal	Spittal	100.00	99.00
Austria	Millipore GesmbH	Vienna	100.00	
Poland	Merck Sp.z.o.o.	Warsaw	100.00	
Poland	Millipore Sp.z.o.o. (in liquidation)	Warsaw	100.00	
Portugal	Merck, S.A.	Lisbon	100.00	
Romania	Merck Romania S.R.L.	Bucharest	100.00	
Russia	Merck LLC	Moscow	100.00	
Sweden	Merck AB	Solna	100.00	
Sweden	Merck SeQuant AB	Umea	100.00	
Sweden	Millipore AB	Solna	100.00	
Serbia	Merck d.o.o. Beograd	Belgrade	100.00	
Slovakia	Merck spol. s.r.o.	Bratislava	100.00	
Slovenia	Merck d.o.o.	Ljubljana	100.00	
Czech Republic	Merck spol.s.r.o.	Prague	100.00	
Czech Republic	Millipore s.r.o. (in liquidation)	Prague	100.00	
Turkey	Merck Ilac Ecza ve Kimya Ticaret AS	Istanbul	100.00	
Hungary	Merck Kft.	Budapest	100.00	
Hungary	Millipore Kft. (in liquidation)	Budapest	100.00	
<b>North America</b>				
United States	Amnis Corp.	Seattle	100.00	
United States	EMD Holding Corp.	Rockland	100.00	
United States	EMD Millipore Corp.	Billerica	100.00	
United States	EMD Serono Biotech Center, Inc.	Billerica	100.00	
United States	EMD Serono Holding Inc.	Rockland	100.00	
United States	EMD Serono Research Center, Inc.	Billerica	100.00	
United States	EMD Serono Research Institute, Inc.	Billerica	100.00	
United States	EMD Serono, Inc.	Rockland	100.00	
United States	EMD Shared Services America Corp.	Quincy	100.00	
United States	Millipore Asia Ltd.	Wilmington	100.00	

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Country	Company	Registered office	Equity interest (%)	thereof Merck KGaA (%)
United States	Millipore Pacific Ltd.	Wilmington	100.00	
United States	Millipore UK Holdings I, LLC	Wilmington	100.00	
United States	Millipore UK Holdings II, LLC	Wilmington	100.00	
United States	Randolph Diagnostics Development, Inc.	Rockland	100.00	
United States	Serono Laboratories Inc.	Rockland	100.00	
Puerto Rico	EMD Millipore Corp., Puerto Rico Branch	Cidra	100.00	
Canada	EMD Chemicals Canada Inc.	Oakville	100.00	
Canada	EMD Crop BioScience Canada Inc.	Oakville	100.00	
Canada	EMD Inc.	Mississauga	100.00	
Canada	Millipore (Canada) Ltd.	Toronto	100.00	
Bermuda	Millipore BioScience Caribe Ltd.	Hamilton	100.00	
Bermuda	Minerva Insurance Co. Ltd.	Hamilton	100.00	
<b>Latin America</b>				
Argentina	Merck Química Argentina S.A.I.C.	Buenos Aires	100.00	
Brazil	Merck S.A.	Rio de Janeiro	100.00	
Brazil	Millipore Industria e Comercio Ltda.	São Paulo	100.00	
Chile	Merck S.A.	Santiago de Chile	100.00	
Ecuador	Merck C.A.	Quito	100.00	
Guatemala	Merck, S.A.	Guatemala City	100.00	
Colombia	Merck S.A.	Bogotá	100.00	
Mexico	Merck, S.A. de C.V.	Mexico City	100.00	
Mexico	Millipore S.A. de C.V.	Mexico City	100.00	
Mexico	Serono de Mexico S.A. de C.V.	Mexico City	100.00	
Panama	Mesofarma Corporation	Panama City	100.00	
Peru	Merck Peruana S.A.	Lima	100.00	
Uruguay	ARES Trading Uruguay S.A.	Montevideo	100.00	
Venezuela	Merck S.A.	Caracas	100.00	
Venezuela	Representaciones MEPRO S.A.	Caracas	100.00	
<b>Asia, Africa, Australasia</b>				
China	Beijing Skywing Technology Co., Ltd.	Beijing	100.00	
China	Merck Chemicals (Shanghai) Co., Ltd.	Shanghai	100.00	
China	Merck Consumer Health Care Shanghai Trading Co., Ltd.	Shanghai	100.00	
China	Merck Ltd.	Hong Kong	100.00	
China	Merck Pharmaceutical (HK) Ltd.	Hong Kong	100.00	
China	Merck Serono (Beijing) Pharmaceutical R&D Co., Ltd.	Beijing	100.00	
China	Merck Serono Co., Ltd.	Beijing	100.00	
China	Merck Song-Jiang Ltd.	Shanghai	100.00	
China	Millipore (Shanghai) Trading Co., Ltd.	Shanghai	100.00	

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Country	Company	Registered office	Equity interest (%)	thereof Merck KGaA (%)
China	Millipore China Ltd.	Hong Kong	100.00	
China	Shanghai Yayang International Co., Ltd.	Shanghai	100.00	
China	Suzhou Taizhu Technology Development Co., Ltd.	Taicang	100.00	
India	Merck Ltd.	Mumbai	51.80	
India	Merck Specialities Pvt. Ltd.	Mumbai	100.00	
India	Millipore India Pvt. Ltd.	Bangalore	100.00	
Indonesia	P.T. Merck Tbk.	Jakarta	86.65	
Israel	Inter-Lab Ltd.	Yavne	100.00	
Israel	InterPharm Industries Ltd.	Yavne	100.00	
Israel	InterPharm Laboratories Ltd.	Yavne	100.00	
Israel	Merck Serono Ltd.	Herzlia Pituach	100.00	
Japan	Biotest K.K.	Tokyo	100.00	
Japan	Merck Ltd.	Tokyo	100.00	15.89
Japan	Merck Serono Co., Ltd.	Tokyo	100.00	
Malaysia	Merck Sdn Bhd	Petaling Jaya	100.00	
Malaysia	Millipore Asia Ltd., Malaysia Branch	Kuala Lumpur	100.00	
Pakistan	Merck (Pvt.) Ltd.	Karachi	75.00	26.00
Pakistan	Merck Pharmaceuticals (Pvt.) Ltd.	Karachi	75.00	
Pakistan	Merck Specialities (Pvt.) Ltd.	Karachi	100.00	
Philippines	Merck Inc.	Makati City	100.00	
Singapore	Merck Pte. Ltd.	Singapore	100.00	
Singapore	Millipore Singapore Pte. Ltd.	Singapore	100.00	
South Korea	Merck Advanced Technologies Ltd.	Pyungtaek-shi	100.00	
South Korea	Merck Ltd.	Seoul	100.00	
South Korea	Millipore Korea Ltd.	Seoul	100.00	
Taiwan	Merck Display Technologies Ltd.	Taipei	100.00	
Taiwan	Merck Ltd.	Taipei	100.00	
Taiwan	Millipore Asia Ltd., Taiwan Branch	Taipei	100.00	
Thailand	Merck Ltd.	Bangkok	45.11	
United Arab Emirates	Merck Serono Middle East FZ-LLC	Dubai	100.00	
Vietnam	Merck Vietnam Ltd.	Ho Chi Minh City	100.00	
Egypt	Merck Ltd.	Cairo	100.00	
Mauritius	Millipore Mauritius Ltd.	Cyber City	100.00	
South Africa	Merck (Pty) Ltd.	Modderfontein	100.00	
South Africa	Merck Pharmaceutical Manufacturing (Pty) Ltd.	Wadeville	100.00	
Tunisia	Merck Promotion SARL	Tunis	100.00	
Tunisia	Merck SARL	Tunis	100.00	
Australia	Merck Pty. Ltd.	Kilsyth	100.00	
Australia	Merck Serono Australia Pty. Ltd.	Sydney	100.00	
New Zealand	Merck Ltd.	Manukau City	100.00	

→ [List of shareholdings](#)

Country	Company	Registered office	Equity interest (%)	thereof Merck KGaA (%)
<b>II. Companies not consolidated due to secondary importance</b>				
<b>Germany</b>				
Germany	Merck 11. Allgemeine Beteiligungs GmbH	Darmstadt	100.00	100.00
Germany	Merck Financial Trading GmbH	Darmstadt	100.00	100.00
Germany	Merck Patent GmbH	Darmstadt	100.00	
Germany	Merck Sechste Allgemeine Beteiligungs- gesellschaft mbH	Darmstadt	100.00	
Germany	Merck Wohnungs- und Grundstücks- verwaltungsgesellschaft mbH	Darmstadt	100.00	100.00
<b>Other European countries</b>				
France	Financière du 8ème S.A.S.	Lyon	100.00	
France	Gonnon S.A.S.	Lyon	100.00	
United Kingdom	Merck Services U.K. Ltd.	Hull	100.00	
United Kingdom	Merck UK Limited Partnership	Poole	100.00	
United Kingdom	Nature's Best Health Products Ltd.	Tunbridge Wells	100.00	
Netherlands	Merck Holding Netherlands B.V.	Schiphol-Rijk	100.00	
Austria	Eurodrug Chemisch-pharmazeutische Produkte GmbH	Vienna	100.00	
Austria	Merck Vermögensverwaltungs-GmbH	Vienna	100.00	
Portugal	Laboratorio dos Produtos Sigma S.A.	Lisbon	100.00	
Portugal	Laquifa Laboratorios S.A.	Lisbon	100.00	

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Country	Company	Registered office	Equity interest (%)	thereof Merck KGaA (%)
<b>Latin America</b>				
Curaçao	Applied Research Systems ARS Holding N.V.	Curaçao	100.00	
Curaçao	CMIP (Curaçao) B.V.	Curaçao	100.00	
Dominican Republic	Merck Dominicana, S.R.L.	Santo Domingo	100.00	
<b>Asia, Africa, Australasia</b>				
Indonesia	P.T. Merck Specialities	Jakarta	100.00	
Morocco	Merck Maroc S.A.R.L.	Casablanca	100.00	
South Africa	Merck Chemicals (Pty) Ltd. (in liquidation)	Modderfontein	100.00	
South Africa	Serono South Africa Ltd.	Johannesburg	100.00	
Australia	Chemicon Australia Pty. Ltd.	Kilsyth	100.00	
Australia	E. Merck Pty. Ltd.	Kilsyth	100.00	
Australia	Merck Australia Pty. Ltd.	Kilsyth	100.00	
III. Associates not included at equity due to secondary importance				
<b>Other European countries</b>				
Switzerland	Vaximm AG	Basel	22.76	

**# 05**

## More Information

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## Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements of the Merck Group give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Darmstadt, February 14, 2012



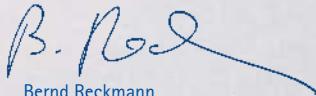
Karl-Ludwig Kley



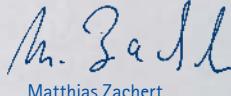
Kai Beckmann



Stefan Oschmann



Bernd Reckmann



Matthias Zachert

## Auditor's Report

We have audited the consolidated financial statements prepared by Merck Kommanditgesellschaft auf Aktien, Darmstadt, comprising the Consolidated Income Statement, the Consolidated Statement of Comprehensive Income, the Consolidated Balance Sheet, the Consolidated Cash Flow Statement, the Consolidated Statement of Changes in Net Equity, and the Notes to the Group accounts, together with the Group Management Report for the business year from January 1 to December 31, 2011. 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 section 315a (1) HGB [Handelsgesetzbuch "German Commercial Code"] and supplementary provisions of the articles of association 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 § 317 HGB [Handelsgesetzbuch "German Commercial Code"] and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the Group Management Report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the Group Management Report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements and Group Management Report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements comply with IFRSs, as adopted by the EU, the additional requirements of German commercial law pursuant to section 315a (1) HGB and supplementary provisions of the articles of association 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.

Frankfurt/Main, February 15, 2012

KPMG AG  
Wirtschaftsprüfungsgesellschaft

  
Rolf Nonnenmacher  
Wirtschaftsprüfer

  
Manfred Jenal  
Wirtschaftsprüfer

## Glossary

### A /a

**Affiliate** → A company that, due to its minor significance, is not included in the scope of consolidation.  
**Associate** → A company in which another entity holds a significant portion of the voting shares, but does not exert control over or jointly manage.

### B /b

**Beta-blockers** → A collective term for similarly acting drugs that act as inverse agonists on the body's beta receptors and thus inhibit the effect of stress hormones (notably, norepinephrine and epinephrine). They lower the heart rate and blood pressure, decrease the strength of heart beat, and reduce the heart's excitability.

**BH4** → Abbreviation for tetrahydrobiopterin, a key coenzyme in amino acid metabolism. BH4 lowers the blood phenylalanine levels in patients with BH4-responsive phenylketonuria.

**Biomarkers** → The term refers both to substances in the body and cell properties. Biomarkers can help doctors to identify a patient's disease. Certain genes tend to play a role in the treatment of cancers, in terms of whether they are "normal" (wild type) or have undergone transformation (mutant). A predictive biomarker is a parameter or a status that can help to predict whether a patient's disease, e.g. cancer, will respond to a certain treatment.

### C /c

**Cash flow** → Equals cash receipts minus cash payments over a given period of time.

**CEFIC** → European Chemical Industry Council

**CHMP** → Committee for Medicinal Products for Human Use: a scientific committee of the European Medicines Agency. It prepares the Agency's opinions and handles the authorization and risk assessment of medicinal products.

**Commercial paper program** → A commercial paper program provides the contractual framework for the issuance of commercial paper, which is a short-term debt instrument issued by a corporation.

**Compliance** → This term refers to compliance with laws and regulations as well as with voluntary codices that are internal to the Merck Group. Compliance is an element of diligent corporate governance.

**Corporate governance** → This term covers compliance with laws and regulations; the application of recognized standards and recommendations; the development of and adherence to internal guidelines; as well as the creation and implementation of guideline and control structures.

**Credit facility** → The financial scope up to which a bank has agreed to grant a loan to a borrower is referred to as a credit line or credit facility. A credit line is a revolving credit: the borrower can continuously draw funds and make payments until the term expires or the credit line is terminated.

### D /d

**DAX®** → Deutscher Aktienindex (German stock index): Its value is based on the stock prices of the 30 largest German companies by trading volume and free float market capitalization.

**Debt issuance program** → A debt issuance program provides the contractual framework for the issuance of bonds. Thanks to the current terms and conditions, the program allows the company flexibility when issuing bonds.

**Dividend yield** → The ratio of the dividend per share to the share price.

→ [Glossary](#)

## E /e

**Earnings per share** → Earnings per share are calculated as specified in IAS 33 by dividing the Group profit by the weighted average number of shares.

**EBIT** → Earnings before interest and taxes on income. Equals the operating result plus exceptional items.

**EBITDA** → Earnings before interest, taxes, depreciation and amortization: depreciation and amortization are added back to EBIT.

**EGFR** → Epidermal Growth Factor Receptor: It is upregulated in various tumor types and/or present in mutated form, resulting in uncontrolled growth and replication of tumor cells. Novel cancer therapies are aimed at blocking EGFR's oncogenic signal and hence stopping tumor growth.

**EMA** → European Medicines Agency: an official body of the European Union, headquartered in London. It is responsible for evaluating and monitoring medicines and plays a key role in the marketing authorization of medicinal products.

**Equity ratio** → Indicator that shows equity capital in proportion to total capital, serving to evaluate the financial stability and independence of a company.

**Euribor** → The Euro Interbank Offered Rate (EURIBOR) is the rate at which euro interbank term deposits are offered by one prime bank to another within the eurozone. Euribor rates are applicable for periods of one week to three weeks and one month to 12 months.

## F /f

**FCR** → Free cash flow on revenues: FCR is calculated from the underlying free cash flow as a percentage of total revenues. This is a key performance indicator for steering the business.

**FDA** → Food and Drug Administration: U.S. government agency responsible for protecting and advancing public health, especially as concerns food and drugs.

**Financial covenants** → Financial figures stipulated in loan contracts to which the company must adhere during the duration of the loan.

**First, second and third line therapy** → First-line therapy is the first therapy that patients receive after having been diagnosed. If they do not respond or cannot tolerate first-line therapy, second-line, or in a further step, third-line therapy follows.

**Free cash flow** → Sum of the net cash flow from operating activities minus investments in intangible assets, property, plant and equipment, acquisitions as well as investments in other financial assets, plus proceeds from the disposal of assets and changes in securities.

→ [Glossary](#)

## G /g

**GDP** → Gross domestic product: The total value of all goods (products and services) intended for final consumption that are produced within a country's borders in a given year.

**Gearing** → Ratio of net debt including pension provisions to net equity.

**GHS** → Globally Harmonized System of Classification and Labelling of Chemicals. An international standard system to classify chemicals, including labels and safety data sheets.

**Global Grade** → Merck is working with the Global Grading System developed by Towers Watson, a market-focused method to evaluate company positions.

**Goodwill** → Goodwill arises when a company acquires another company and primarily represents the difference between the fair value of the acquired net assets and the purchase price paid.

**GPHF** → Global Pharma Health Fund e.V. is a charitable organization funded by Merck. The organization's goal is to promote health care within the scope of development assistance, especially with respect to the fight against counterfeit medicines through the use of the GPHF-Minilab®.

**GPHF-Minilab®** → With the GPHF-Minilab®, the GPHF offers a unique mobile compact laboratory that is capable of testing the quality of medicines very quickly.

**Greenhouse Gas Protocol** → Most widely used accounting and reporting system for greenhouse gas emissions.

## H /h

**Hedging** → Hedging means protection against or limitation of certain clearly identified risks that might result from occurrences such as changes in foreign exchange rates or share prices. Fair value hedge: This primarily involves protecting against potential market value fluctuations of those assets and liabilities already recognized in the balance sheet. Cash flow hedge: The primary purpose of a cash flow hedge is to protect against uncertain cash flows that especially result from future transactions.

## I /i

**ICCA** → International Council of Chemical Associations.

**IFRS** → International Financial Reporting Standards (until 2001 known as International Financial Accounting Standards, IAS) are the standards that publicly traded companies must apply if their headquarters are domiciled in the European Union.

**IMF** → The International Monetary Fund, with headquarters in Washington, D.C., is a United Nations organization.

**Interest rate swaps** → An interest rate swap is an agreement between two contractual parties to exchange various interest payments. Thus, a company can transform a variable interest item into a fixed interest item and vice-versa.

**ISO 14001** → This international environmental management standard sets globally recognized requirements regarding an environmental management system.

→ [Glossary](#)

## J /j

**Joint venture** → This is a joint undertaking in which at least two legal, economically separate enterprises participate.

## K /k

**KRAS** → A biomarker that can show whether a patient with metastatic colorectal carcinoma is likely to respond to EGFR antibody therapy. This is done by testing the status of the KRAS gene in the tumor to see if it is normal (wild type) or abnormal (mutant). The KRAS acronym stands for Kirsten Rat Sarcoma.

## L /l

**LED** → A light-emitting diode (LED) is an electronic semiconductor device. When an electric current passes through it in the flow direction, it emits visible light, infrared radiation (IR diode) or ultraviolet radiation (UV diode). The wavelength of this depends on the semiconductor material used and the doping level.

**Liquid Crystals (LC)** → These specialty chemicals are used in LC displays (LCD), for example, in flat-panel televisions, notebooks, mobile telephones, etc.

**LTIR** → Lost time injury rate: indicator for workplace safety. The number of workplace accidents with one or more days of lost time per million hours worked.

**Lupus erythematosus (LE)** → An autoimmune disease linked to inflammatory rheumatic disease and classified as a collagen disease. There are two main types: lupus of the skin, and systemic lupus erythematosus (SLE). It may affect other organ systems apart from the skin and joints, e.g. the kidneys in lupus nephritis (LN).

## M /m

**Metafolin®** → Biologically active form of folate that occurs naturally in the human body and is utilized better by the body than folic acid. Folic acid and Metafolin® are important for cell division and blood formation and therefore the development and growth of new life.

**Monoclonal antibodies** → Highly specialized targeted antibodies synthesized using biotechnological methods. What makes them special is their ability to activate the body's natural mechanisms to fight disease. Monoclonal antibodies have mainly been used for cancer treatment and to suppress adverse immune responses.

**MUC1** → Also known as PEM (polymorphic epithelial mucin), MUC1 is a glycoprotein group mucin embedded in cell membranes and occurring in all human organs. The MUC1 mucin is an established tumor marker. In oncology, this tumor marker is the starting point for several new cancer therapies.

**Multi-currency credit facility** → A contract between a company and a bank (or several banks) under which the bank gives the company the possibility to access a predefined amount of money at certain conditions. Depending on the agreement, payment can be made in different currencies.

→ [Glossary](#)

## O / o

**OECD** → Organization for Economic Co-operation and Development, with headquarters in Paris, is a forum of 34 countries committed to the principles of democracy and market economy.

**OLED** → Organic light-emitting diodes. New technology for displays and lighting used, for example, in mobile telephones, MP3 players, and since recently also in televisions and lamps.

**Organic growth** → Organic growth is the part of a company's growth that is not derived from acquisitions or currency effects.

**OTC** → Over-the-counter drugs is the term used for pharmaceuticals that are available at stores and pharmacies without a prescription.

## P / p

**Praziquantel** → A vermicide used to fight flatworms, tapeworms and distoma including the schistosoma, the pathogen that causes the tropical disease schistosomiasis.

**Progression-free survival** → In oncology, the amount of time between a patient's enrollment in a clinical trial and disease progression or the patient's death.

**Provisions/reserves** → Provisions are set aside for liabilities whose amount or maturity are uncertain. Reserves, on the other hand, are part of a company's equity.

**PS-VA** → Polymer-stabilized vertical alignment: A polymer layer pre-aligns the molecules inside the display in a certain direction. In the black state, the liquid crystals are not exactly vertical, but slightly tilted: This allows the liquid crystals to switch more quickly. The light transmittance of the display is significantly higher, thus reducing the backlighting, one of the most costly components to produce.

**Purchase price allocation** → The purchase price allocation allows a company's acquisition costs (purchase price) to be assigned to the tangible and intangible assets and liabilities that were acquired with it.

## R / r

**Randomized study** → In medical research, randomization refers to the random assignment of subjects to treatment groups. The goal is to prevent the investigator from influencing the trial and to ensure that known and unknown influencing factors are distributed evenly across all groups.

**Rating** → Rating is an assessment of a borrower's ability to pay. Borrowers are classified according to a bank's own criteria (internal rating) or the criteria of international rating agencies such as Moody's or Standard & Poor's (external rating).

**REACH** → REACH stands for the Registration, Evaluation, Authorization and Restriction of Chemicals. This is an EU regulation that entered into force in mid-2007.

**Reactive mesogens** → Polymerizable liquid crystals that can be used, for example, as material for optical films. They help to enhance the display image quality.

**Recurrent** → In oncology, recurrent cancer means that the disease returns after it seems to have completely disappeared. This is often caused by the incomplete removal of the tumor.

**Research spending ratio** → Research spending as a proportion of the total revenues of the company or division.

**ROS** → Return on sales: Ratio of operating result to total revenues. This is a key performance indicator for steering the business.

→ [Glossary](#)

## S /s

**Schistosomiasis** → Schistosomiasis, also known as bilharzia, is a parasitic disease that is spread in warm lakes and ponds by snails that serve as intermediate hosts.

**Somatotropin** → A proteohormone occurring as a growth hormone in the human and animal organism. Somatotropin is essential to the achievement of normal height.

**Syndicated loan** → Also known as a "syndicated bank facility". This is a loan offered by a group of lenders. The lenders, such as banks or institutional investors, form a syndicate.

## T /t

**Tax rate** → The tax rate indicates the percentage rate by which Group profit before tax and exceptional items is to be multiplied in order to calculate the theoretical tax expense before exceptional items.

**Tax ratio** → The tax ratio indicates the ratio of total taxes to profit before tax.

**Tax ratio before exceptional items** → The tax rate before exceptional items indicates the ratio of total taxes (adjusted for the tax effects of exceptional items) to profit before tax (adjusted for exceptional items).

**Total revenues** → Sum of sales as well as royalty, license and commission income. Royalties are earned primarily through patents held by the Pharmaceuticals business sector.

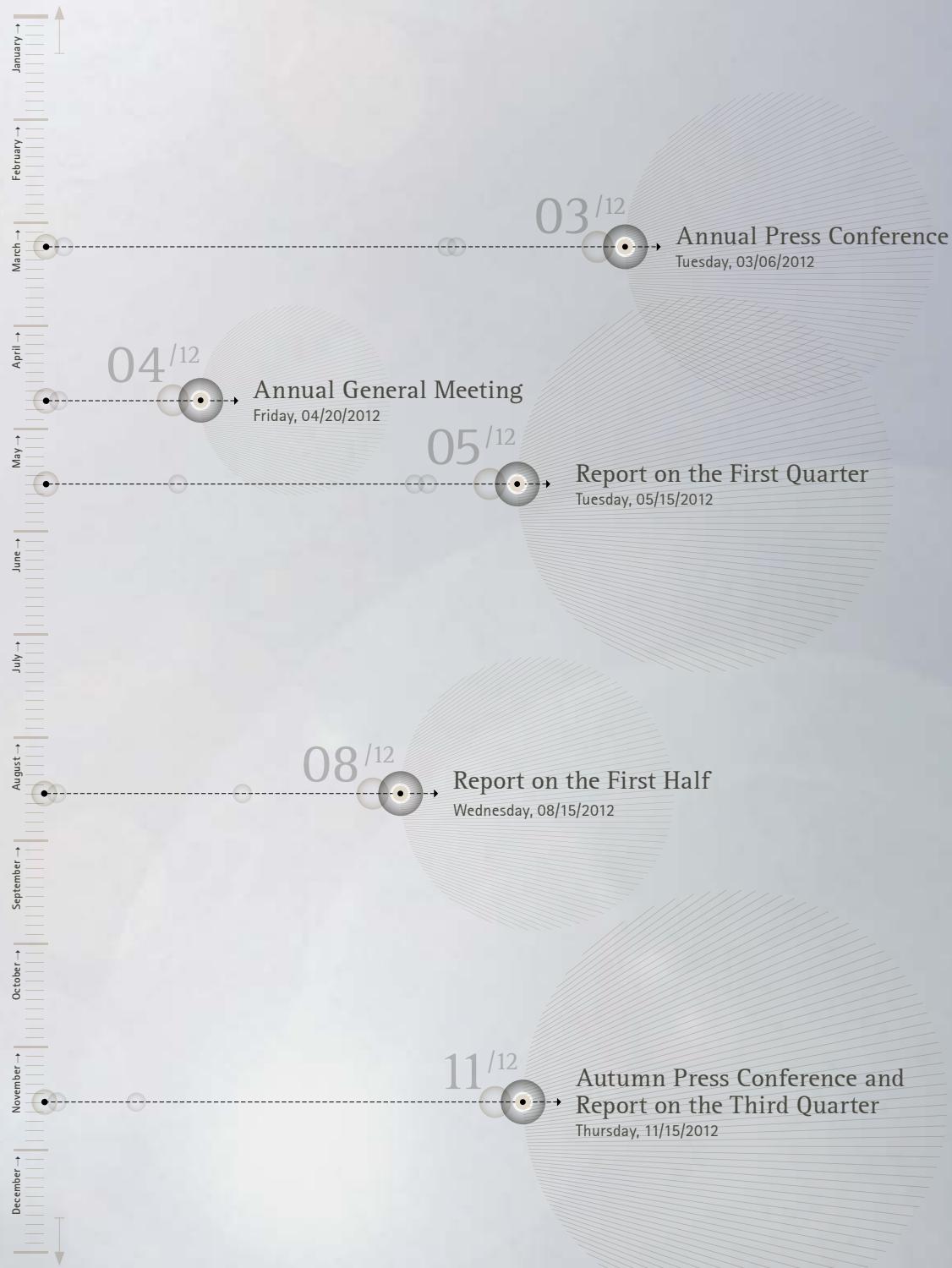
## U /u

**Underlying free cash flow** → Free cash flow adjusted for acquisitions and divestments.

## V /v

**VCI** → Verband der Chemischen Industrie (German Chemical Industry Association) represents the economic-political interests of 1,600 German chemical companies.

# Merck: Financial Calendar 2012



## Business Development 2002 – 2011

This overview may include historically adjusted values in order to ensure comparability with 2011.

€ million	2002	2003	2004
Total revenues by division	7,521	7,364	6,017
Pharmaceuticals	3,265	3,458	3,601
Merck Serono	1,850	1,546	1,619
Generics <sup>1</sup>	1,096	1,585	1,625
Consumer Health Care	319	327	357
Chemicals	1,791	1,707	1,696
Merck Millipore	–	–	–
Performance Materials	–	–	–
Liquid Crystals <sup>2</sup>	383	443	589
Performance & Life Science Chemicals <sup>2</sup>	1,216	1,083	1,107
Electronic Chemicals <sup>1</sup>	192	181	–
Laboratory Distribution <sup>1</sup>	2,711	2,427	582
Intragroup sales, Laboratory	–246	–228	–62
Corporate and Other	–	–	200
Operating result by business sector	616	736	776
Pharmaceuticals	272	389	391
Chemicals	260	316	420
Laboratory Distribution <sup>1</sup>	84	79	21
Corporate and Other	–	–48	–56
Earnings before income and taxes (EBIT)	559	538	1,044
EBIT before depreciation and amortization (EBITDA)	985	1,008	1,419
Profit before tax	412	423	961
Profit after tax	215	218	672
Free cash flow	441	442	1,889
Capital expenditure on property, plant and equipment	377	281	234
Research and development	608	605	599
Total assets	7,511	6,982	5,754
Net equity	2,054	2,363	2,800
Employees (number as of December 31)	34,504	34,206	28,877
Return on sales in % (ROS: Operating result/total revenues)	8.2	10.0	12.9
Earnings per share in €	1.18	1.15	3.47
Dividend per share in €	1.00	0.80	0.80
One-time bonus per share in €	–	–	0.20

<sup>1</sup>Business was divested.

<sup>2</sup>As a result of the acquisition of Millipore in 2010, the Chemicals business sector was reorganized.

<sup>3</sup>Including the divested Generics division (along with the gain on divestment).

<sup>4</sup>As of 2011, the Cosmetic Actives business field is reported under the Performance Materials division (previously it was reported under the Merck Millipore division). The figures for 2010 have been adjusted accordingly.

							Change in %
2005	2006	2007	2008	2009	2010	2011	
5,887	6,310	7,081	7,590	7,747	9,291	10,276	11
3,905	4,163	4,900	5,456	5,812	6,226	6,416	3.1
1,817	1,938	4,480	5,014	5,345	5,754	5,920	2.9
1,712	1,825	—	—	—	—	—	—
376	400	420	442	467	472	496	5.1
1,906	2,113	2,152	2,127	1,935	3,065	3,860	26
—	—	—	—	—	1,613 <sup>4</sup>	2,393	48
—	—	—	—	—	1,452 <sup>4</sup>	1,467	1.0
741	895	916	878	733	—	—	—
1,165	1,218	1,236	1,249	1,202	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—
76	34	29	7	—	—	—	—
883	1,105	976	1,131	649	1,113	985	-12
454	524	417	655	403	579	350	-40
492	641	631	558	324	624	751	20
—	—	—	—	—	—	—	—
-63	-60	-72	-81	-78	-90	-116	30
956	1,325	200	731	621	1,113	1,137	2.2
1,245	1,628	1,858	1,947	1,625	2,457	2,736	11
893	1,273	-111	575	486	861	851	-1.2
673	1,001	3,520 <sup>3</sup>	379	377	642	629	-2.0
657	-1,073	-1,473 <sup>3</sup>	438	812	-3,522	1,436	—
268	253	283 <sup>3</sup>	395	467	396	372	-6.1
713	752	1,028	1,234	1,345	1,397	1,517	8.6
7,281	8,102	14,922	15,645	16,713	22,388	22,120	-1.2
3,329	3,807	8,688	9,563	9,514	10,372	10,493	1.2
29,133	29,999	30,968	32,800	33,062	40,562	40,676	0.3
15.0	17.5	13.8	14.9	8.4	12.0	9.6	—
3.40	5.07	16.21 <sup>3</sup>	1.69	1.68	2.91	2.84	-2.4
0.85	0.90	1.20	1.50	1.00	1.25	1.50	20
—	0.15	2.00	—	—	—	—	—

[www.merckgroup.com](http://www.merckgroup.com)