ANNUAL REPORT

2010

COVER PICTURE

DIALOGUE WITH PARTNERS

Bayer's researchers maintain a constant dialogue with scientists at leading universities, as well as with customers and cooperation partners. The focus of this communication is on jointly addressing questions related to tomorrow's challenges – fully in line with our mission "Bayer: Science For A Better Life."

In the cover picture of our Annual Report, chemist Dr. Christoph Gürtler – project manager at Bayer MaterialScience – and scientist Daniela d'Elia from RWTH Aachen University discuss how to use climate-damaging carbon dioxide as a valuable raw material for sustainable industrial production. This is the objective of the "Dream Production" project launched by Bayer and its partners in science and industry. The idea is to chemically bind CO_2 and use it to partially replace conventional fossil raw materials in the manufacture of polymers. The picture shows the two researchers viewing a scanning electron micrograph of a polyurethane foam.

For direct access to a chapter, simply click on its name.

Key Data

[Table 1.1]

	2009	2010	Change
	€ million	€ million	%
Bayer Group			
Sales	31,168	35,088	+12.6
EBIT[1]	3,006	2,730	−9.2
EBIT before special items[2]	3,772	4,452	+18.0
EBITDA[3]	5,815	6,286	+8.1
EBITDA before special items[2]	6,472	7,101	+9.7
EBITDA margin before special items[4]	20.8%	20.2%	
Income before income taxes	1,870	1,721	−8.0
Net income	1,359	1,301	−4.3
Earnings per share (€)[5]	1.70	1.57	−7.6
Core earnings per share (€)[6]	3.64	4.19	+15.1
Gross cash flow[7]	4,658	4,771	+2.4
Net cash flow[8]	5,375	5,773	+7.4
Net financial debt	9,691	7,917	−18.3
Capital expenditures as per segment table	1,669	1,621	−2.9
Research and development expenses	2,746	3,053	+11.2
Dividend per Bayer AG share (€)	1.40	1.50	+7.1
HealthCare			
Sales	15,988	16,913	+5.8
EBIT	2,640	1,861	−29.5
EBIT before special items[2]	3,012	3,030	+0.6
EBITDA[3]	4,148	4,116	−0.8
EBITDA before special items[2]	4,468	4,405	−1.4
EBITDA margin before special items[4]	27.9%	26.0%	
Gross cash flow[7]	3,153	2,948	−6.5
Net cash flow[8]	3,431	3,320	−3.2
CropScience			
Sales	6,510	6,830	+4.9
EBIT	798	261	−67.3
EBIT before special items[2]	1,017	787	−22.6
EBITDA[3]	1,311	767	−41.5
EBITDA before special items[2]	1,508	1,293	−14.3
EBITDA margin before special items[4]	23.2%	19.0%	
Gross cash flow[7]	1,043	546	−47.7
Net cash flow[8]	745	1,399	+87.8
MaterialScience			
Sales	7,520	10,154	+35.0
EBIT	(266)	780	•
EBIT before special items[2]	(126)	780	•
EBITDA[3]	341	1,356	•
EBITDA before special items[2]	446	1,356	•
EBITDA margin before special items[4]	5.9%	13.4%	
Gross cash flow[7]	319	1,058	•
Net cash flow[8]	849	763	−10.1

In some cases, the sum of the figures given in this report may not precisely equal the stated totals and percentages may not be exact due to rounding.

1 EBIT = operating result as shown in the income statement

2 EBIT(DA) before special items is not defined in the International Financial Reporting Standards and should therefore be regarded only as supplementary information. The company considers EBITDA before special items to be a more suitable indicator of operating performance since it is not affected by depreciation, amortization, impairments or special items. By reporting this indicator, the company aims to give readers a clearer picture of the results of operations and ensure greater comparability of data over time. See also Combined Management Report, Chapter 4.2 "Calculation of EBIT(DA) Before Special Items."

3 EBITDA = EBIT plus amortization and impairment losses on intangible assets and depreciation and impairment losses on property, plant and equipment, minus impairment loss reversals.

4 The EBITDA margin before special items is calculated by dividing EBITDA before special items by sales.

5 Earnings per share as defined in IAS 33 = adjusted net income divided by the average number of shares. For details see Note [16] to the consolidated financial statements.

6 Core earnings per share are not defined in the International Financial Reporting Standards and should therefore be regarded only as supplementary information. The company considers that this indicator gives readers a clearer picture of the results of operations and ensures greater comparability of data over time. The calculation of core earnings per share is explained in the Combined Management Report, Chapter 4.3.

7 Gross cash flow = income after taxes, plus income taxes, plus non-operating result, minus income taxes paid or accrued, plus depreciation, amortization and impairment losses, minus impairment loss reversals, plus/minus changes in pension provisions, minus gains/plus losses on retirements of noncurrent assets, minus gains from the remeasurement of already held assets in step acquisitions. The change in pension provisions includes the elimination of non-cash components of the operating result (EBIT). It also contains benefit payments during the year. For details see Combined Management Report, Chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group."

8 Net cash flow = cash flow from operating activities according to IAS 7

Bayer: Science For A Better Life

Bayer is a global enterprise with core competencies in the fields of health care, nutrition and high-tech materials.

As an inventor company, we set trends in research-intensive areas. Our products and services are designed to benefit people and improve their quality of life. At the same time we aim to create value through innovation, growth and high earning power.

We are committed to the principles of sustainable development and to our social and ethical responsibilities as a corporate citizen.

Our Values.

Bayer's corporate culture is an important factor in the company's success. Central to this culture are our values: Leadership, Integrity, Flexibility and Efficiency – or LIFE for short. They provide us with guidance for our daily work as we seek solutions to the major challenges of our time, in line with our mission "Bayer: Science For A Better Life."

LIFE

L LEADERSHIP

- Be passionate for people and performance
- Show personal drive, inspire and motivate others
- Be accountable for actions and results, successes and failures
- Treat others fairly and with respect
- Give clear, candid and timely feedback
- Manage conflicts constructively
- Create value for all our stakeholders

I INTEGRITY

- Be a role model
- Comply with laws, regulations and good business practices
- Trust others and build trustful relationships
- Be honest and reliable
- Listen attentively and communicate appropriately
- Ensure sustainability: balance short-term results with long-term requirements
- Care about people, safety and the environment

F FLEXIBILITY

- Drive change actively
- Be ready to adapt to future trends and needs
- Challenge the status quo
- Think and act with customers in mind
- Seek out opportunities and take calculated risks
- Be open-minded
- Embrace lifelong learning

E EFFICIENCY

- Manage resources smartly
- Focus on activities that create value
- Do things simply and effectively
- Deliver with appropriate costs, speed and quality
- Speed up good decision-making
- Be accountable for consistent execution
- Collaborate for better solutions

Our Brand.

The Bayer brand has a special charisma and is among the most famous worldwide. Around the globe, the name “Bayer” stands for innovative, high-quality products. At the same time, our brand symbolizes trust and reliability and therefore makes the company more competitive. That is why we are further raising our brand profile by using our umbrella brand even more systematically and effectively.

The Bayer Cross enjoys a very good reputation internationally. We firmly believe that our brand architecture can also help to increase the brand's value over the long term. Following a detailed analysis, we have therefore optimized our brand portfolio. We plan to steadily reduce the number of brands used by Bayer Group companies in the future. This will strengthen our umbrella brand and improve people's perception of it. Bayer products will also be more quickly and more clearly recognized as a result.

Individual units of the subgroups and service companies will no longer have independent brand presences. For example, the pharmaceuticals business will in future be conducted under the "Bayer HealthCare Pharmaceuticals" brand instead of "Bayer Schering Pharma."

We will also make greater use of the Bayer brand in the future in our search for highly qualified people, making our company even more attractive to potential new employees. And our approximately 111,000 employees worldwide will be even more convincing brand messengers.

In this way the value-creating potential of the Bayer Cross will increasingly benefit stockholders, customers and employees and enhance brand strength, brand value and Bayer's competitiveness.

Good growth prospects for our businesses

Dear Stockholders:

As the new Chairman of the Board of Management, I am pleased to present Bayer's Annual Report for 2010. First, I would like to take the opportunity to make a personal statement: Bayer is a strong, world-class enterprise, and I am very proud to be a part of it.

We all know that my predecessor Werner Wenning rendered outstanding service to Bayer. Until the change of leadership on October 1, 2010, I had the opportunity to work closely with him – and I am very grateful to him for his support.

The other new members of our management team have also started their tasks with great dedication: Sandra Peterson at the helm of Bayer CropScience, Jörg Reinhardt at Bayer HealthCare, and of course Werner Baumann, the new Chief Financial Officer of Bayer AG. We are confident that together with Wolfgang Plischke and Richard Pott – our existing colleagues on the Bayer AG Board of Management – and Bayer MaterialScience Chairman Patrick Thomas, we will prove to be a strong team.

Now let's look at fiscal 2010. Although the effects of the crisis could still be felt, the global economy recovered surprisingly quickly from the deep recession. Total economic output continued to grow in the second half of 2010, albeit at a slower pace.

In this environment, we raised Group sales by 12.6 percent to an all-time high of €35.1 billion. Adjusted for currency and portfolio effects, sales advanced by 8.0 percent. EBITDA before special items came in at €7.1 billion, which means we improved our operating performance by 9.7 percent. And with core earnings per share up by 15.1 percent, we achieved the targets we communicated for 2010. We also reduced net financial debt by €1.8 billion to €7.9 billion by further increasing our operating cash flow.

This performance was largely due to the tremendous expertise and the hard work of our employees, for which I would like to thank them on behalf of the entire Board of Management.

We are facing new challenges in 2011 and beyond, however. Earnings in 2010 were partly supported by unexpected developments. For example, the MaterialScience subgroup returned to the pre-crisis level more quickly than anticipated, and currency effects were also clearly in our favor. However, the performance of the CropScience

and HealthCare subgroups did not meet our expectations. In HealthCare, generic competition had a very noticeable effect. A particularly negative factor is the pressure on YAZ®/Yasmin®, the best-selling product line of our Pharmaceuticals Division. Sales – and especially earnings – are also being weighed down by health system reforms that are impacting prices in many countries. In addition, we raised both our marketing and R&D expenditures. In the CropScience subgroup, strong generic competition – particularly for herbicides – led to a sharp decline in prices. Last year was also characterized by adverse weather conditions in nearly all of the subgroup's principal markets.

Aside from these challenges, however, we believe our businesses have good growth prospects. That is because the products and solutions offered by our three subgroups address some of today's most significant global trends in the areas of health care, nutrition and high-tech materials. To take advantage of the growth opportunities these trends present, we must continue to focus on our core competency: the development of innovative products. This is summed up by our mission "Bayer: Science For A Better Life."

Specifically, that means that in HealthCare we must continue to invest in our active-substance pipeline and market our new products more effectively in the future. A product that holds great promise is the anticoagulant Xarelto®. In early 2011, applications were submitted both in Europe and the United States for marketing authorization for stroke prevention in non-valvular atrial fibrillation. We stand by our forecast that Xarelto® has a peak sales potential of more than €2 billion. Other examples from our well-stocked pipeline are VEGF Trap-Eye (ophthalmology), Qlaira® and YAZ® Plus (gynecology), Alpharadin™ and new indications for Nexavar® (both oncology), and finally riociguat (cardiology).

In CropScience, too, we intend to commercialize our innovations as fast as possible. Our R&D pipeline in the conventional crop protection segment is among the best in the world, and we will continue investing in this area. We plan to bring six new products to market by 2012. In addition, we aim to progress more quickly in the area of seeds and plant traits, which also will require further funding. This is because our customers, the farmers, will increasingly be looking to purchase conventional crop protection products and the new technologies – seeds and plant traits – as a complete package.

Bayer MaterialScience is developing many new products and applications that make major contributions to resource efficiency and climate protection. The fact that MaterialScience generates more than 20 percent of sales with products introduced to the market since 2005 illustrates this subgroup's success. However, with commoditization increasing in some parts of the portfolio, MaterialScience has a clear focus: it must achieve cost and technology leadership. This, however, it can only do by maintaining a high level of capital investment.

All three subgroups must continue to expand their presence in the emerging markets, because that is where our customer industries are expanding fastest. This demands significant investment in local production and research facilities – and in human resources development.

Thus conflicting demands are being made by the challenges facing our business and by the need to invest in our innovative capability and in the emerging markets that hold the key to our future growth and competitiveness. It is crucial that we set the right course today so that we can exploit tomorrow's opportunities.

In 2010 we already raised our research and development expenditures by 11.2 percent to a new high of €3.1 billion – about €300 million more than in the previous year. We expect to invest the same amount in R&D again in 2011, and will also continue to increase our capital spending in the emerging markets.

At the same time, we must enhance our financial flexibility to make this investment possible despite the challenges I have mentioned. As announced in November last year, we will raise the necessary funds through a targeted transfer of resources, supported by efficiency and cost-containment measures. The goal here is more innovation and less administration.

This ambitious course requires that we exercise even greater care in developing our human resources worldwide, and that our employees understand exactly what our company does and why. Bayer has always stood for good values – the right values. However, we have simplified these to make them a practical framework for our actions. The result is the word LIFE, which is directly based on our mission "Science For A Better Life." For us, "science" represents our status as an inventor company and our clear commitment to research and innovation. "Life" describes our conduct toward our stakeholders.

The "L" in LIFE stands for "Leadership." By this we mean the willingness to perform, inspire and be accountable. "I" as in "Integrity" means that we balance the expectations of all stakeholders and comply with all laws and regulations without exception. That is the only way to give our business a stable and credible foundation. The "F" in LIFE stands for the "Flexibility" to accept change, view it as an opportunity and adapt accordingly. The final letter is an "E" for "Efficiency." We aim to manage resources smartly and do things as simply and effectively as possible.

In short, we are pursuing an evolutionary goal. We will improve our people development and, through the efficiency measures we have announced, create the financial headroom we need to systematically invest in our future.

With a solid post-crisis year behind us, we have created the conditions for capitalizing on our future opportunities in the global arena. On behalf of the Board of Management and the entire company, I would like to thank you for your trust. I hope you will continue to support our endeavors on behalf of Bayer.

Sincerely,

Marijn Dekkers

DR. MARIJN DEKKERS
Chairman of the Board of Management of Bayer AG

Board of Management

DR. MARIJN DEKKERS
Chairman
(since October 2010)

Born in 1957 in the Dutch city of Tilburg, Dekkers studied chemistry and chemical engineering in Nijmegen and Eindhoven. After gaining a Ph.D., he began a career in research with General Electric in the United States. In 1995 he moved to Honeywell. In 2000 Dekkers was appointed Chief Operating Officer of Thermo Electron Corporation, becoming President and CEO two years later. This company later acquired Fisher Scientific and was renamed Thermo Fisher Scientific Inc. He succeeded Werner Wenning effective October 1, 2010. Marijn Dekkers is married with three daughters.

WERNER BAUMANN
Finance · Europe region
(since May 2010)

Born in Krefeld in 1962, Werner Baumann studied economics in Aachen and Cologne. He joined Bayer AG in 1988, where his first duties were in the Corporate Finance Department. Baumann subsequently held positions in Spain and the U.S. before returning to Germany in 2002 to become a member of the Executive Committee of the newly formed Bayer HealthCare subgroup and a year later a member of its Board of Management, also serving as Labor Director. He succeeded Klaus Kühn effective May 1, 2010. Werner Baumann is married with four children.

DR. WOLFGANG PLISCHKE
Technology · Innovation · Environment · Asia/Pacific region

Born in Stuttgart in 1951, Wolfgang Plischke studied biology at the University of Hohenheim. Having gained his Ph.D., Plischke began his career with Bayer at the subsidiary Miles in 1980. He held a number of positions in Germany and abroad, becoming Head of the Pharmaceuticals Business Group in North America in 2000. Two years later he took charge of the Pharmaceuticals Business Group of Bayer AG. Plischke was appointed to the Bayer AG Board of Management in March 2006. He has been Chairman of the German Association of Research-Based Pharmaceutical Companies since December 2007. Wolfgang Plischke is married with two sons.

DR. RICHARD POTT
Strategy · Human Resources · Labor Director · Americas, Africa and Middle East regions

Born in Leverkusen in 1953, Richard Pott studied physics at the University of Cologne, where he obtained his Ph.D. In 1984 Pott joined the company's Central Research Division. After holding various positions in the Corporate Staff Division, he became Head of Corporate Planning and Controlling in 1997 and Head of the former Specialty Products Business Group in 1999. He was appointed to the Bayer AG Board of Management in May 2002. Richard Pott is married with three children.

From left: Dr. Wolfgang Plischke, Dr. Marijn Dekkers, Dr. Richard Pott, Werner Baumann

Report of the Supervisory Board

Dear stockholders:

During 2010 the Supervisory Board monitored the conduct of the company's business by the Board of Management on a regular basis with the aid of detailed written and oral reports received from the Board of Management, and also acted in an advisory capacity. In addition, the Chairman of the Supervisory Board maintained a constant exchange of information with both the Chairman of the Board of Management serving until September 30, 2010, and with his successor. In this way the Supervisory Board was kept continuously informed about the company's intended business strategy, corporate planning (including financial, investment and human resources planning), earnings performance, the state of the business and the situation in the company and the Group as a whole.

The documents relating to Board of Management decisions or actions which – by law or under the Articles of Incorporation or the rules of procedure – required the approval of the Supervisory Board were inspected by the Supervisory Board at its plenary meetings, sometimes after preparatory work by the committees. In certain cases the Supervisory Board gave its approval on the basis of documents circulated to its members. The Supervisory Board was involved in decisions of material importance to the company. We discussed at length the business trends described in the reports from the Board of Management and the prospects for the development of the Bayer Group as a whole, the individual organizational units and the principal affiliated companies in Germany and abroad.

Four plenary meetings of the Supervisory Board took place during 2010. No member of the Supervisory Board attended fewer than half of its meetings. The members of the Board of Management attended all the meetings of the Supervisory Board.

Principal topics discussed by the Supervisory Board

The deliberations of the Supervisory Board focused on questions relating to the strategies and business activities of the Group as a whole and of the subgroups. The discussions at the respective meetings in 2010 centered on various topics. At the February meeting, the Supervisory Board discussed the 2009 Annual Report and the agenda for the 2010 Annual Stockholders' Meeting. It also dealt at length with the Bayer Group's risk management system and matters related to the Board of Management's compensation. At its September meeting, the Supervisory Board dealt mainly with the company's situation and strategic issues and discussed the new recommendations of the German Corporate Governance Code. At the meeting in December 2010, the Board of Management presented its planning for the business operations, the finances and the asset and liability structure of the Bayer Group in the years 2011 through 2013. In accordance

with the new recommendation of the Corporate Governance Code with regard to the appropriate consideration of women for membership of supervisory and management boards, the Supervisory Board resolved at this meeting on measures to increase the proportion of women on both boards and also resolved on the target described in the Corporate Governance Report regarding the composition of the Supervisory Board. In addition, the results of the audit of the Supervisory Board's efficiency were discussed and amendments made to its rules of procedure. Following the December meeting, an information and discussion forum took place on the subject of the legal basis for the Supervisory Board's activities.

Committees of the Supervisory Board

The Supervisory Board has a Presidial Committee, an Audit Committee, a Human Resources Committee and a Nominations Committee*.

* The description of the responsibilities and membership of the committees, which forms part of the Report of the Supervisory Board, can be found in the Corporate Governance Report on page 88ff. of this Annual Report and therefore is not reproduced here.

Work of the committees

In 2010 the Presidial Committee was not required to convene in its capacity as the Mediation Committee under Section 27 Paragraph 3 of the German Codetermination Act, or to make any other decisions.

The Audit Committee met four times during the year, addressing in particular the company's and the Group's accounting and financial reporting, the Group's risk management system, the internal control system and corporate compliance issues. The Audit Committee also set the budget for the services of the external auditor and discussed with the auditor the main areas of the audit for the 2010 fiscal year. The Chairman of the Board of Management and the Chief Financial Officer regularly attended the meetings of the Audit Committee. The auditor was present at all the meetings of the Audit Committee, reporting in detail on the audit work and the audit reviews of the interim financial statements.

The meetings of the Audit Committee also dealt with a number of other topics. At the February meeting, it discussed the risk report, which covered the risk management system, planning and market risks, legal risks, corporate compliance, the report on process and organizational risks and the internal control system, and the report by Corporate Auditing. At this meeting it also submitted a recommendation to the full Supervisory Board concerning the resolution to be put before the Annual Stockholders' Meeting on the appointment of the auditor of the financial statements. The April meeting focused on the Bayer Group's financial management system and the Compliance Officer's yearly report.

The Human Resources Committee convened on two occasions and also passed one resolution after the relevant documents had been circulated to its members. The subjects of the meetings and of this resolution passed outside of the meetings were matters concerning the compensation of the members of the Board of Management and their service contracts.

On one occasion in 2010, in accordance with its responsibilities, the Nominations Committee discussed possible candidates for future election to the Bayer AG Supervisory Board as representatives of the stockholders and developed the target set by the Supervisory Board for its composition.

The meetings and decisions of the committees, and especially the meetings of the Audit Committee, were prepared on the basis of reports and other information provided by the Board of Management. Reports on the committee meetings were presented at the plenary meetings of the Supervisory Board.

Corporate Governance

The Supervisory Board dealt with the ongoing development of corporate governance at Bayer, taking into account the amendments made to the German Corporate Governance Code in May 2010. At its meeting in December, the Supervisory Board amended its own rules of procedure in line with the new recommendations of the Code and the new statutory requirements. In December 2010 the Board of Management and the Supervisory Board issued a new declaration of compliance, which is also reproduced in the Corporate Governance Report on page 88 of this Annual Report.

Membership of the Supervisory Board

Karl-Josef Ellrich left the Supervisory Board on June 30, 2010. Roswitha Süsselbeck, an elected substitute, joined the Supervisory Board on July 1, 2010. The Supervisory Board elected Willy Beumann to succeed Mr. Ellrich as a member of the Human Resources Committee.

Financial statements and audits

The financial statements of Bayer AG were prepared according to the requirements of the German Commercial Code and Stock Corporations Act. The consolidated financial statements of the Bayer Group were prepared according to the German Commercial Code and the International Financial Reporting Standards (IFRS). The combined management report was prepared according to the German Commercial Code. The auditor, PricewaterhouseCoopers Aktiengesellschaft, Wirtschaftsprüfungsgesellschaft, Essen, has audited the financial statements of Bayer AG, the consolidated financial statements of the Bayer Group and the combined management report. The conduct of the audit is explained in the auditor’s reports. The auditor finds that Bayer has complied, as appropriate, with the German Commercial Code, the German Stock Corporations Act and/or the International Financial Reporting Standards endorsed by the European Union, and issues an unqualified opinion on the financial statements of Bayer AG and the consolidated financial statements of the Bayer Group. The financial statements of Bayer AG, the consolidated financial statements of the Bayer Group, the combined management report and the audit reports were submitted to all members of the Supervisory Board. They were discussed in detail by the Audit Committee and at a plenary meeting of the Supervisory Board. The auditor submitted a report on both occasions and was present during the discussions.

We examined the financial statements of Bayer AG, the proposal for distribution of the profit, the consolidated financial statements of the Bayer Group and the combined management report. We found no objections, thus we concur with the result of the audit. We have approved the financial statements of Bayer AG and the consolidated financial statements of the Bayer Group prepared by the Board of Management. The financial statements of Bayer AG are thus confirmed. We are in agreement with the combined management report and, in particular, with the assessment of the future development of the enterprise. We also concur with the dividend policy and the decisions concerning earnings retention by the company. We assent to the proposal for distribution of the profit, which provides for payment of a dividend of €1.50 per share.

The Supervisory Board would like to thank the Board of Management and all employees for their dedication and hard work in 2010.

Leverkusen, February 24, 2011
For the Supervisory Board:

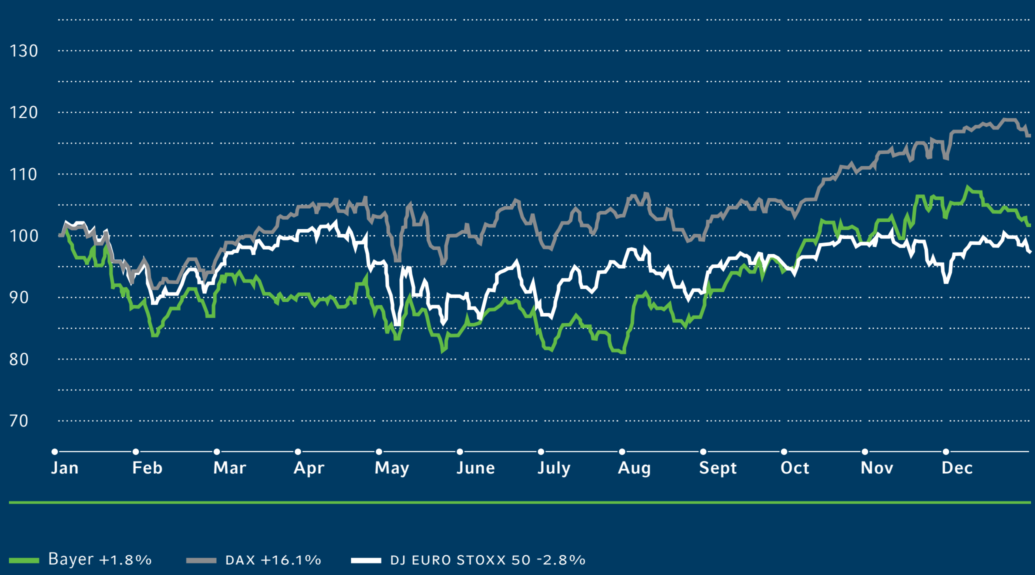
Manfred Schneider

DR. MANFRED SCHNEIDER
Chairman

Investor Information

Performance of Bayer Stock in 2010 [Graphic 2.1]

(indexed; 100 = closing price on December 31, 2009)



- Bayer stock performance in 2010: approx. 2 percent
- Five-year annual return: approx. 12 percent
- Board of Management and Supervisory Board propose dividend increase to €1.50 per share for 2010

The stock market in 2010

SIGNIFICANT MARKET RECOVERY

Starting in the spring, the markets were dominated by the debate over the debt crisis in certain eurozone countries. However, thanks to the robust economic recovery in Germany the DAX maintained the upward trend that began in 2009, closing 2010 up 16 percent on the year. Following a highly volatile sideways trend in the first three quarters of the year, the DAX made significant gains in the fourth quarter and topped 7,000 points at the beginning of December before closing the year at 6,914 points.

The European equities index EURO STOXX 50 (performance index) slipped by roughly 3 percent, partly because of the problems in some countries of the European Union. Share price trends in the United States and Japan diverged, with the S&P 500 gaining some 13 percent but the Nikkei 225 losing about 3 percent.

SLIGHT IMPROVEMENT IN BAYER STOCK

INTERNET

For more information about Bayer on the capital market, go to WWW.INVESTOR.BAYER.COM

Including the dividend of €1.40 per share paid in May 2010, the performance of Bayer stock came to nearly 2 percent for the year. It closed 2010 at €55.30, having reached a year high of €58.62 a short time earlier. Bayer stock thus outperformed the EURO STOXX 50 (performance index) for the fourth year in a row.

The trading volume in our shares receded by about 16 percent from the previous year to an average 3.6 million per day.

GOOD, STABLE CREDIT STANDING ON THE BOND MARKET

The risk premium required by investors for corporate bonds with a good credit rating rose slightly in 2010. Since long-term interest rates declined during the year, Bayer's refinancing terms on the capital market remained favorable.

The increase in risk premiums during the year can be seen from the trend in credit default swaps (CDS) shown in Graphic 2.2. The market price of these tradable insurance contracts, which are used to hedge against default of a borrower, depends on the underlying credit risk and thus helps to determine the credit margin when raising debt.

The rise in Bayer's CDS during the year was relatively moderate. Bayer utilized the favorable conditions on the corporate bond market to make a JPY 10 billion private placement in Japan. The company had no further refinancing requirements in 2010. On the contrary, Bayer's good liquidity position allowed early repayment of the remaining €885 million of the syndicated loan raised to partly finance the acquisition of Schering, Berlin, Germany.

A list of the bonds issued by Bayer can be found in Note [27] to the consolidated financial statements.

LONG-TERM RETURN ON BAYER STOCK REMAINS AHEAD OF THE MARKET

A long-term investor who purchased Bayer shares for €10,000 five years ago and reinvested all dividends would have seen the value of the position grow to €17,965 as of December 31, 2010, giving an average annual return of 12.4 percent.

Long-Term Returns on Bayer Stock in % p.a. (Dividends Reinvested) [Table 2.1]

Annual returns	1 year 2010	3 years 2008–10	5 years 2006–10
	%	%	%
Bayer	+1.8	–1.1	+12.4
DAX	+16.1	–5.0	+5.0
DJ EURO STOXX 50	–2.8	–11.1	–1.9

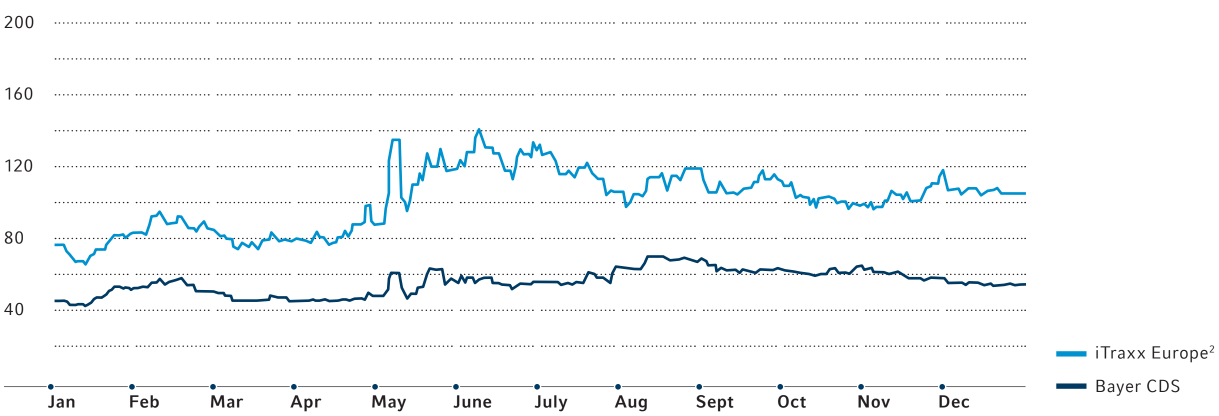
Bayer Stock Data [Table 2.2]

		2009	2010
Earnings per share	€	1.70	1.57
Core earnings per share*	€	3.64	4.19
Gross cash flow per share	€	5.63	5.77
Equity per share	€	22.92	22.85
Dividend per share	€	1.40	1.50
Year-end price**	€	55.96	55.30
High for the year**	€	56.45	58.62
Low for the year**	€	32.69	44.12
Total dividend payment	€ million	1,158	1,240
Number of shares entitled to the dividend (Dec. 31)	million	826.95	826.95
Market capitalization (Dec. 31)	€ billion	46.3	45.8
Average daily share turnover on German stock exchanges	million	4.3	3.6
Price/EPS**		32.9	35.2
Price/core EPS**		15.4	13.2
Price/cash flow**		9.9	9.6
Dividend yield	%	2.5	2.7

* For details on the calculation of core earnings per share, see Combined Management Report, Chapter 4.3.
** Xetra closing prices (source: Bloomberg)

Rates for Five-Year Credit Default Swaps (CDS) 2010 [Graphic 2.2]

in basis points[1]



[1] source: Bloomberg
[2] iTraxx Europe is a CDS index comprising the CDS of 125 companies (including financial institutions) with investment-grade ratings.

A SUSTAINABLE INVESTMENT

Bayer stock is included in many stock indices and investment funds that list companies with sustainable and responsible corporate strategies, such as the Dow Jones Sustainability World and Europe indices, the FTSE4Good Global and Europe indices, the Advanced Sustainable Performance Indices Eurozone and the NYSE Euronext Low Carbon Europe Index. Storebrand, a Norwegian financial services provider focusing on sustainable investment, classifies Bayer as a best-in-class company in the pharmaceutical sector.

In 2010 the Carbon Disclosure Project (CDP) included Bayer in its Carbon Disclosure Leadership Index (CDLI) for the sixth consecutive year. Bayer was also represented in 2010 in the newly established Carbon Performance Leadership Index (CPLI), which honors detailed reporting of climate goals and strategy along with specific actions and achievements in emissions reduction.

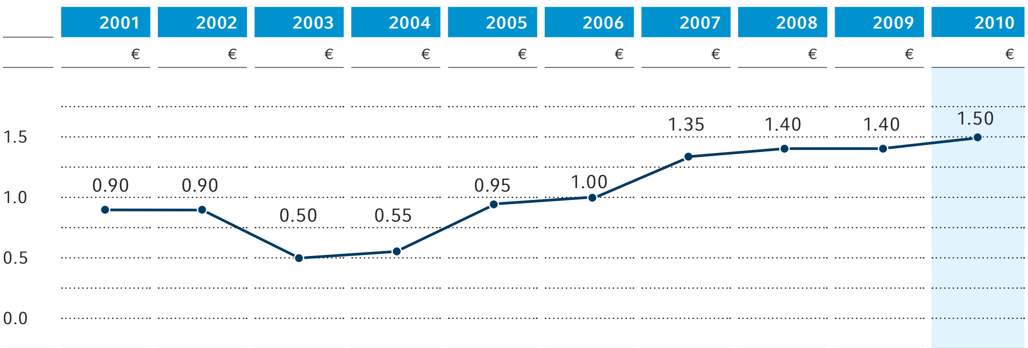
Our sustainability reporting is based on the guidelines of the Global Reporting Initiative. During the year we also explained Bayer's commitment to sustainability at numerous one-on-one meetings with investors and analysts.

DIVIDEND INCREASE TO €1.50 PER SHARE

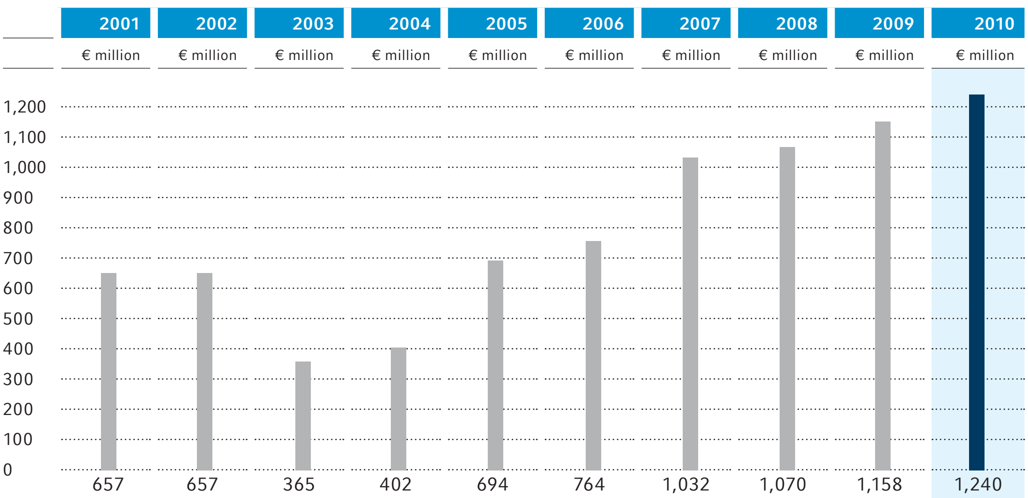
The Board of Management and the Supervisory Board will propose to the Annual Stockholders' Meeting that a dividend of €1.50 per share be paid for 2010. This results in a payout ratio of approximately 36 percent calculated on core earnings per share, which is within the target corridor of 30 to 40 percent (for details on the calculation of core earnings per share, see Chapter 4.3 of the Combined Management Report).

The dividend yield calculated on the share price of €55.30 at year end 2010 amounts to 2.7 percent and the total dividend payment to €1,240 million.

Dividends Per Share [Graphic 2.3]



Total Dividend Payment [Graphic 2.4]



STOCKHOLDERS' PORTAL WELL RECEIVED

Since the Annual Stockholders' Meeting in 2010, we have offered an online stockholders' portal on our IR website. Here investors can view their entries in the share register, amend their address data or register to receive invitations to future stockholders' meetings by email. Our stockholders are making good use of this service, which will already reduce printing and mailing costs for the notice of the next Annual Stockholders' Meeting.

INTERNET

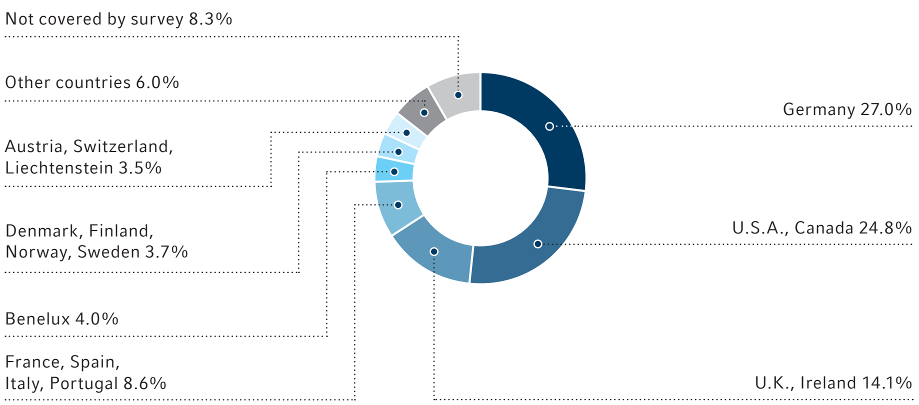
Our online services for stockholders can be found at WWW.INVESTOR.BAYER.COM/EN/STOCK/STOCKHOLDERS-PORTAL

During the period prior to the Meeting, stockholders can use the portal to register to attend the meeting, order admission tickets for themselves or a proxy, or issue a power of attorney and voting instructions to one of the proxies designated by the company. For our next Annual Stockholders' Meeting we will offer stockholders a postal vote option, which will also be available via the stockholders' portal.

INTERNATIONAL OWNERSHIP STRUCTURE

At the end of 2010, approximately 306,000 stockholders were listed in our share register. The following graphic shows the geographical distribution of our stockholders, based on the results of an international survey conducted in November 2010:

Ownership Structure by Country [Graphic 2.5]



COMMUNICATION WITH THE CAPITAL MARKET

Intensive dialogue with the capital market has traditionally been a high priority for Bayer. In 2010 our Investor Relations team visited 26 financial centers – mostly accompanied by the Chairman of the Board of Management or the Chief Financial Officer – and held more than 400 one-on-one meetings.

In addition to our regular quarterly and annual reporting, we held IR conference calls to update stockholders on the development status of rivaroxaban.

Our annual "Meet Management" event, which was held for the fifth time in 2010, is now an established part of our IR program for the capital market. This platform gives investors and analysts the opportunity for detailed discussions on the company's development and future prospects at smaller meetings with members of the Group and subgroup management boards.

AWARDS FOR INVESTOR RELATIONS ACTIVITIES

According to a report published by the German Investor Relations Association (DIRK) and the German business magazine *WirtschaftsWoche*, Bayer's investor relations activities are the best of all the DAX companies. For this we were honored with the German Investor Relations Award 2010.

Bayer also took second place among EURO STOXX 50 companies in the Capital Investor Relations Award 2010. We are delighted to have received this recognition from the capital market for our IR work over the past year (see also "Highlights 2010" on page 41).

In addition, Bayer's IR website was ranked best in the health care sector and third in Europe in the IR Global Rankings conducted by MZ Consult of the United States, based on an evaluation of more than 500 companies in 35 countries.

Bayer HealthCare

FOR BETTER HEALTH

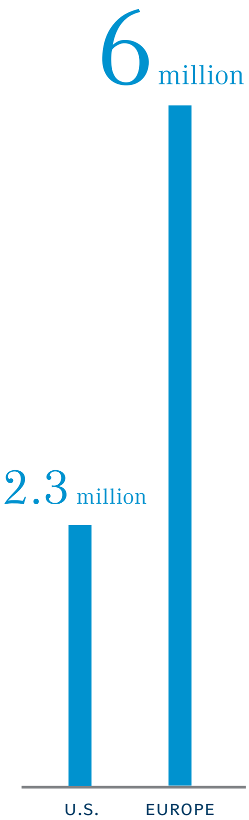
"How can we better help patients with atrial fibrillation?"

PROFESSOR ROBERT M. CALIFF (left),
Director, Translational Research Institute at Duke University, Durham, North Carolina, United States

Professor Robert M. Califf, Vice Chancellor for Clinical Research at Duke University in Durham in the u.s. state of North Carolina, and Dr. Scott D. Berkowitz, Head of the Thrombosis Group at Bayer HealthCare in the United States

Protecting against thrombosis

Thrombosis can occur without warning – and can be life-threatening. If a blood clot blocks a vessel in the brain, heart or lung, the result can be a stroke, myocardial infarction or pulmonary embolism. That is the background to the search by Bayer scientists for new substances to prevent and treat thrombosis.



More than 2.3 million Americans and nearly six million Europeans suffer from atrial fibrillation.

Günter Wiewinner keeps detailed records. He writes down the days on which he has to take half a tablet to prevent his blood from coagulating and the days when he needs to take a whole tablet. He enters the dates of his regular appointments for blood tests and notes whether his coagulation level is within the target range. This punctilious record-keeping is based on pure necessity. Wiewinner has atrial fibrillation, and the tablets protect him from having a stroke. But he has to adhere to a complex schedule if they are to have the desired effect. The 84-year-old retiree from Münster, Germany, explains: "I take a whole tablet each day for four days in a row, then half a tablet, then a whole tablet again for three days. Then on the ninth day it's half a tablet, and after that the cycle starts over."

Wiewinner isn't alone. Atrial fibrillation is one of the most common heart rhythm disorders worldwide, affecting over 2.3 million people in the United States and up to six million Europeans. Around 10 percent of the over-80 age group have this condition. Atrial fibrillation is not life-threatening in itself, but patients with the disorder are five times more likely to suffer a stroke than the population at large. This is because in atrial fibrillation, the two upper chambers of the heart – the atria – contract in an uncontrolled fashion instead of regularly. This allows blood to accumulate in the chambers, which in turn creates a risk of blood clots forming. If one of these thrombi finds its way into an artery in the brain, the person may suffer a stroke.

"Every year strokes caused by atrial fibrillation take a terrible toll on the lives of millions of people and their families all over the world," explains Professor Werner Hacke, Medical Director of the Neurology Center at Heidelberg University Hospital. Preventive administration of anticoagulant drugs can reduce the risk of a stroke, yet studies conclude that only about 25 percent of patients with atrial fibrillation are currently receiving appropriate therapy.

The main reason for this is the limitations of the long-established coagulation-inhibiting drugs, the vitamin K antagonists. These limitations are what makes Wiewinner's medication schedule so complex. Like every patient who has to take vitamin K antagonists permanently to guard against thrombosis, he has been prescribed a personalized dosage determined by his weight, age and other factors.

> “We’re searching for an alternative to the standard therapy – for the benefit of patients.”

DR. SCOTT D. BERKOWITZ,
Head of the Thrombosis Group, responsible for clinical development of rivaroxaban at Bayer HealthCare in the United States

This is the only way to keep the medication level within the therapeutic target range, because the effect of vitamin K antagonists is difficult to predict. If the level is too low, the drug will not be sufficiently effective. If it is too high, the risk of bleeding increases, and that means the patient has frequent gum bleeds and bruises at the slightest impact. In rare cases internal bleeding may occur.

The patient’s blood has to be sampled daily at the start to find the optimal dosage. In Wiewinner’s case it took several weeks to adjust his medication correctly. But even when that has been done, the patient’s coagulation status still has to be determined regularly. This monitoring is important because other medications can enhance or impair the action of vitamin K antagonists. The same applies to certain foods: spinach, broccoli or other green vegetables, for example, can only be eaten in small amounts, and strict limits apply for alcoholic beverages.

Wiewinner has all this under control. The retired vocational college instructor has drawn up a list on his computer that enables him to log his medication, coagulation levels and physician appointments. He has used his computer to help some other patients with atrial fibrillation by producing lists for them because, as he says, “It’s all very complicated for some people.” Wiewinner knows about this from discussions among the members of the cardiac arrhythmias self-help group in Münster.

Günter Wiewinner from Münster, Germany, suffers from atrial fibrillation. The tablets protect him from having a stroke. But he has to adhere to a complex dosage schedule if they are to have the desired effect.

A new class of anticoagulant drugs

Physicians are well aware of the disadvantages of the established drugs to protect against thrombosis and would welcome the introduction of a new class of anticoagulants. "The current standard therapy is effective but by no means ideal for either doctors or patients to use," says Hacke. Novel medicines with a different mechanism of action could change this. One of these is rivaroxaban, a drug developed by Bayer's researchers. The active ingredient is designed to inhibit coagulation factor Xa, which plays a central role in the complex blood coagulation cascade.

"With rivaroxaban there is no need for regular blood tests," says Dr. Scott D. Berkowitz, Head of the Thrombosis Group and responsible for clinical development of rivaroxaban at Bayer HealthCare in the United States. "Effective prevention of thrombosis without the need for regular monitoring is in everyone's interest. The latest results from the ROCKET AF study offer hope that rivaroxaban will be a therapeutic alternative to prevent strokes in people with non-valvular atrial fibrillation." Professor Robert M. Califf, Co-Chairman of the ROCKET AF study Executive Committee and Vice Chancellor for Clinical Research at Duke University in Durham, North Carolina, United States, agrees: "It's exciting to have rivaroxaban as a potential new therapy option." More than 14,000 patients at around 1,100 study centers in 45 countries took part in the study.

65,000

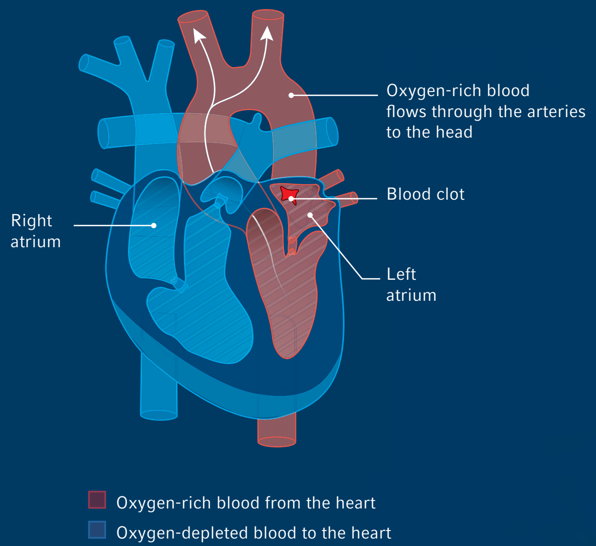
people are taking part in the study program for rivaroxaban, making it the most intensively researched oral, direct Factor Xa inhibitor worldwide.

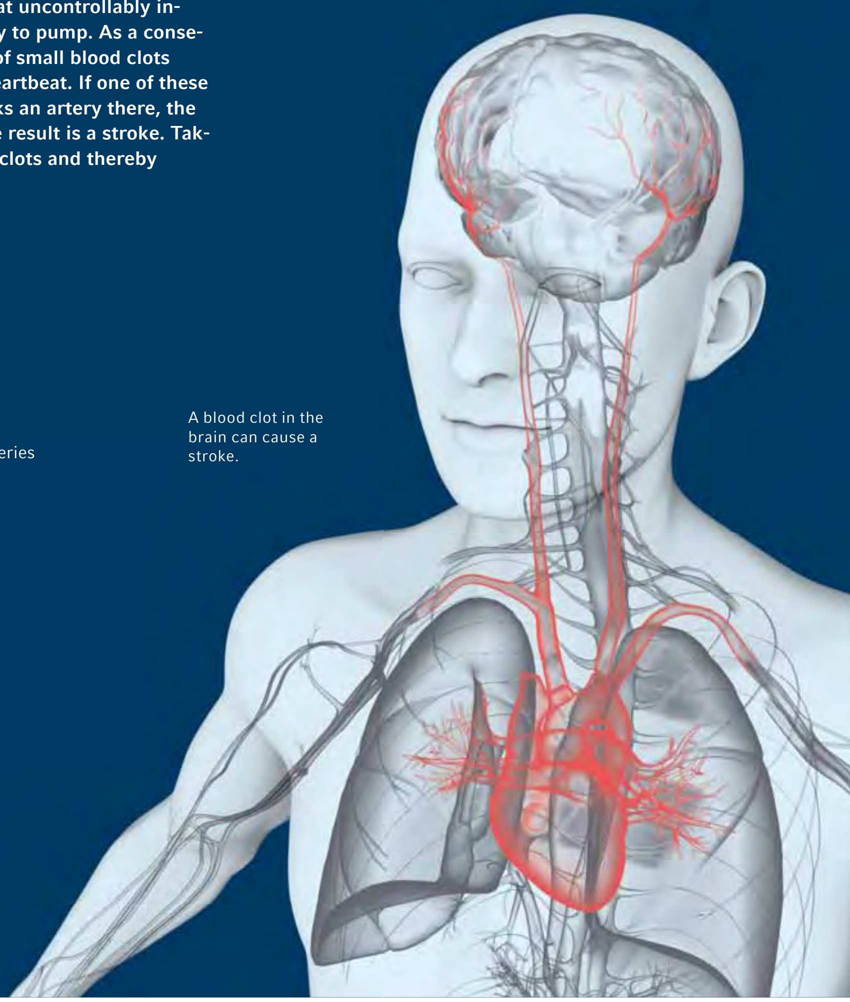
Comprehensive development program

The ROCKET AF study is part of the extensive clinical development program for rivaroxaban in which Bayer and Johnson & Johnson are investigating the substance's potential in the prevention and therapy of a broad spectrum of acute and chronic thromboembolic diseases. With over 65,000 patients participating in the program, rivaroxaban is currently the most intensively researched oral, direct Factor Xa inhibitor worldwide. The active substance is approved in more than 100 countries under the brand name Xarelto® for the prevention of thrombosis following elective knee and hip replacement surgery. Xarelto® is the only new-generation anticoagulant to show consistently superior efficacy compared with the current standard therapy enoxaparin in studies in this indication. Bayer has submitted an application to the European Medicines Agency (EMA) for marketing authorization for stroke prevention in patients with non-valvular atrial fibrillation, and Johnson & Johnson has sub-

Rivaroxaban research in Wuppertal, Germany: Bayer employee Astrid Hübner examines new test compounds.

ATRIAL FIBRILLATION CAN TRIGGER A STROKE
A healthy heart beats 60 to 100 times per minute. In atrial fibrillation, the heart's rhythm is impaired. Its two upper chambers – the atria – beat uncontrollably instead of regularly. This has an impact on the heart's capacity to pump. As a consequence, blood accumulates in the atria, increasing the risk of small blood clots forming that may be squeezed out into the body with the heartbeat. If one of these blood clots travels via the main artery to the brain and blocks an artery there, the tissue can no longer be supplied with sufficient oxygen. The result is a stroke. Taking anticoagulant drugs can prevent the formation of blood clots and thereby greatly reduce the risk of stroke.





A blood clot in the brain can cause a stroke.

mitted a corresponding application to the U.S. Food and Drug Administration (FDA).

Rivaroxaban may also offer an option for the long-term treatment of deep vein thrombosis (DVT). The results from the large-scale EINSTEIN-DVT Phase III clinical study were presented last August at the annual congress of the European Society of Cardiology in Stockholm, Sweden. The study results indicated that rivaroxaban is as effective as the current standard therapy – involving enoxaparin injection followed by a vitamin K antagonist – which requires the aforementioned regular blood monitoring. Based on these results, Bayer has also submitted an application to the EMA for marketing authorization for the treatment of DVT.

In the future, rivaroxaban could become available as a therapy option for the prevention of stroke in patients with non-valvular atrial fibrillation. Günter Wiewinner would be pleased to see an alternative to the current therapy. Says the retiree: "No more blood samples and just one tablet each day – that would certainly make life easier."

Prestigious award

Rivaroxaban is able to block a central factor in the human coagulation cascade and is thus believed to prevent unwanted thrombi that could otherwise migrate into the bloodstream and constrict blood vessels. Bayer has won various awards for the development of its anticoagulant Xarelto® (rivaroxaban), including the 2010 Prix Galien International for the best pharmacological innovation – an honor that is equivalent in pharmaceutical research to the Nobel Prize.

In December 2009, Bayer scientists Dr. Elisabeth Perzborn, Dr. Dagmar Kubitza and Dr. Frank Misselwitz were awarded the German Future Prize 2009, an award conferred by the Federal President for achievements in technology and innovation. They donated the €250,000 prize money to a fund for a new research award, which Bayer then doubled to €500,000. The new prize will be endowed with €30,000 and will be awarded every two years starting in 2011.

Bayer CropScience

FOR HEALTHIER NUTRITION

“How can we improve the quality of fruit and vegetables?”

NIKOLA RICHTER (left),
Product developer for salad manufacturer Bauer Funken, Kempen, Germany

Bayer tomato breeder Coert Engels and product developer Nikola Richter from salad manufacturer Bauer Funken inspect an Intense® tomato in a Nunhems greenhouse in the Netherlands.

From seed to table

The demand for high-quality fruit and vegetables is increasing worldwide. In the emerging economies, too, more and more people want to buy fresh tomatoes, melons and bell peppers. Bayer CropScience offers innovative solutions for breeders, growers and the food trade, helping to ensure that high-quality, vitamin-rich fruit and vegetables are available to an expanding world population – now and in the future.

Some tomato seeds are more valuable than gold. A gram of the precious metal cost €34 last December, while a gram of tomato seed can be worth €112.

*as of December 31, 2010

It was love at first bite. Mexican food scientist Veronica Castaneda Muñoz enthuses about her first encounter with a very special tomato: "I took one bite – and that was it! There was no spraying of juice and the taste was excellent." Castaneda Muñoz, who works on her father's vegetable farm in Camalu, Mexico, is talking about an innovative product of Bayer research: the Intense® tomato from Nunhems, the vegetable seed business of Bayer CropScience.

The flesh of this tomato is firm and has such a dense structure that the juice is retained even under pressure. "That makes it ideal for sandwiches, for example, which would otherwise be soaked through after just a few hours. Intense is going to be a great success with producers of ready-made salads, too," says the young manager of some 83 hectares of tomato plantations. For two years now, the Castaneda family has partnered with specialist distributor The Produce Exchange with a view to meeting the increasing demand for Intense® tomatoes in the United States. The Produce Exchange is building on the experience gained from its cooperation with Nunhems experts in Spain and Mexico to optimally address the requirements of the U.S. market. "We're currently test-marketing the Intense tomato under the name Tesoro™ at Raley's Supermarkets in Northern California, and sales are exceeding all expectations," says Steve Rainey of The Produce Exchange.

Intense® was specially developed to simplify the processing of tomatoes by hotels, restaurants and other caterers. In Europe, it is already successfully marketed in the United Kingdom, France, Germany, Italy, Spain, Belgium and the Netherlands. Bayer's tomato now is firmly established on the Turkish market, too, and is widely available from major supermarket chains in Australia. Now it is taking the U.S. market by storm – supplied partly from the Castaneda family's plantations.

"Tomatoes are the most widely grown vegetable in the world," explains Albert Schirring, Global Crop Manager Vegetables at Bayer CropScience. "Global sales are estimated at around US$13 billion annually." Some 130 million tons are harvested worldwide every year. China tops the list, producing about a quarter of the world's tomatoes, followed by the United States and Turkey.

> "We're looking for the best ways to achieve optimal nutrition."
>
> **COERT ENGELS,**
> **tomato breeder in the Netherlands for Nunhems, Bayer CropScience's vegetable seed business**

Intensive research and development

The seed is more valuable than gold – and not just because of the high yield. It took elaborate research and development work to bring the Intense® tomato to market. "We use conventional breeding methods – but greatly accelerate the process," explains Coert Engels, a tomato breeder at Nunhems. This approach, known as "integrated breeding," draws on the results obtained by his colleagues in the research lab. The scientists take samples from the leaves of new seedlings and extract the genetic information from them for DNA analysis. They mainly look for the genes responsible for quality, disease resistance, sweetness, shape or color.

From thousands of seedlings, they can then select those with the required properties without having to wait for the plants to grow and produce fruit. "We can use the results to breed tomatoes with specific characteristics, which saves us years of development work," Engels says. "We do this without introducing any foreign genes." As well as their Intense® tomatoes, the breeders at Nunhems have also developed seedless watermelons, particularly high-yielding cucumber varieties, and lettuces with a longer shelf life.

Enhanced plant traits

Both conventional crop protection and biotechnology play a major strategic role at Bayer CropScience. Bayer's global BioScience network includes some 1,000 scientists and breeders. Activities include the Nunhems seed business, with some 2,500 traditionally bred varieties of 28 vegetable crops, and projects focusing on large-scale crops such as soybeans, canola (oilseed rape), wheat, cotton, rice, corn and sugarcane.

The company plans to expand its biotechnology program in the future. The aim is for sales in the BioScience business unit to double from €687 million in 2010 to around €1.4 billion by 2018.

It was love at first bite: food scientist Veronica Castaneda Muñoz grows the Intense® tomato at her agricultural enterprise Berry Veg de Baja in Mexico to supply the U.S. market.

Dr. Birgitt Walz-Tylla, head of Food Chain Management at Bayer CropScience, with Georg Funken in his raw-salad processing plant at Kempen, Germany

PODCAST CENTER

Nunhems, the vegetable seed business of Bayer CropScience, continues to step up its research activities. For an audio podcast on the expansion of research into new vegetable varieties, go to WWW.PODCAST.BAYER.COM

With the main focus on improving plant traits, researchers are aiming for plants that give consistently high yields. The vegetable breeders and scientists at Nunhems are working to improve the cultivation properties and crop quality of their vegetable varieties through conventional breeding in combination with modern research techniques.

Genome research, however, is more advanced in the principal arable crops. Bayer's researchers have already scored major successes with canola, for example. A team led by Dr. Bart Lambert, Product Research Manager Oilseeds at Bayer CropScience in Ghent, Belgium, collaborated with several partners to decode the canola genome. Lambert and his team now use the library of 30,000 plant genes as a source for breeding new varieties that give higher yields.

Bayer employee Sandra Briels rears plants in the Nunhems laboratory in the Netherlands.

Crop protection safeguards harvests

But it takes more than the right seed to ensure a good harvest. Farmers also need to protect their fields and orchards from the insect pests, fungi and weeds that can cause major crop losses. For this reason, sustainable and innovative crop protection is central to Bayer CropScience's overall strategy for the agricultural value chain. The latest innovation is Luna®, a family of products to control problem fungi that spread through fields and attack numerous crops, including stone fruit, berries and cucumbers, often just before the end of the growing season. "Fruit and vegetable growers and traders lose billions every year to these crop diseases, quite apart from storage and transportation losses," explains Dr. Heiko Rieck, project manager at Bayer CropScience in Monheim, Germany.

Fluopyram, the active ingredient in Luna®, can now provide relief. It effectively controls the harmful microorganisms and also increases the storage life of fruit and vegetables, thus reducing post-harvest losses. The active ingredient also reliably protects canola and soybeans against fungi, helping to safeguard harvests worldwide and boost yields.

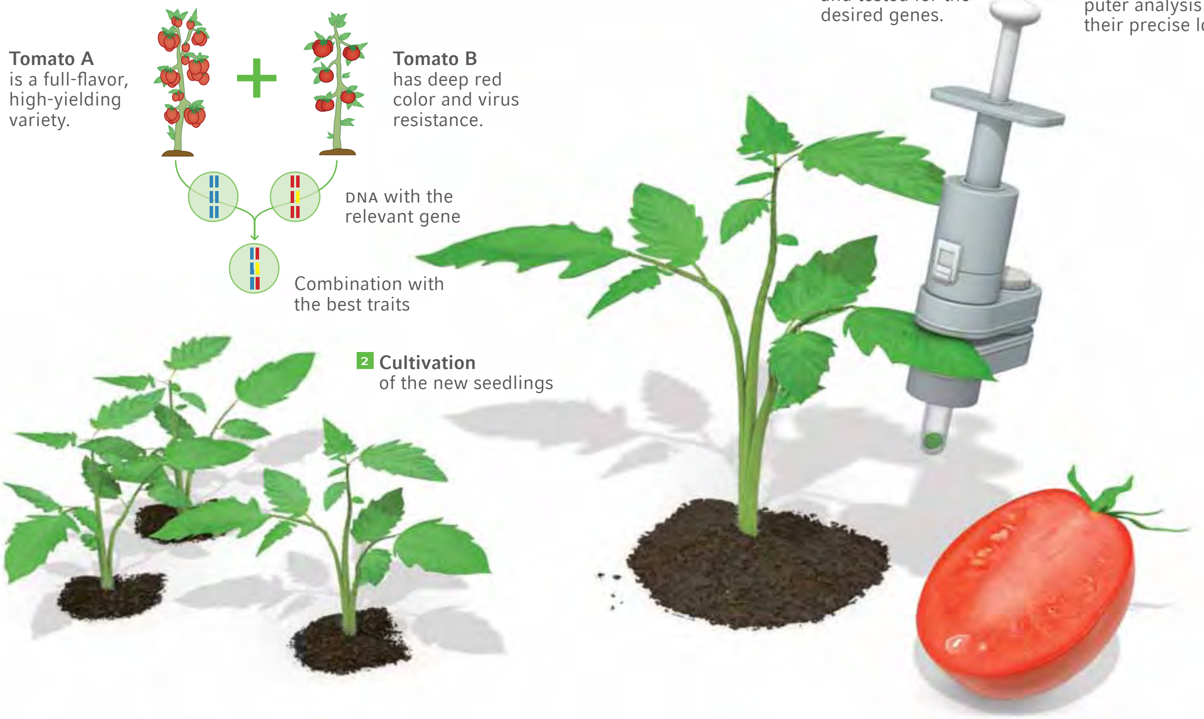
Global support for farmers

This is where the Food Chain Partnership program picks up the reins, rounding out the range of innovative solutions that Bayer CropScience offers for the entire agricultural value chain. "We support farmers worldwide and help them market their produce internationally," explains Dr. Birgitt Walz-Tylla, head of Food Chain Management at Bayer CropScience. "Consumers everywhere are increasingly demanding sustainable agricultural production and better-quality fruit and vegetables. They want to know where and how their food was grown.” The program was launched to promote partnership right along the food chain – from producer to retailer – for the benefit of all concerned.

Seeds, soil, water, biodiversity, climate and crop protection are all important issues for farmers, but a correct and sustainable post-harvest strategy – how to market carrots, leeks, cucumbers, melons and so on – is equally vital. Bayer CropScience is so far supporting the sustainable production of high-quality food with more than 200 projects ongoing around the globe.

In a project in the Indian state of Punjab, for example, the food chain managers have optimized the entire chain, from crop production to retail sale. They cooperated with the Bharti-Walmart joint venture to review all the steps in the process, from the selection of the right seeds and fertilizers to sustainable crop protection, transportation and sale. “A completely new kind of trade has sprung up in India. Major domestic food retailers seeking to offer high-quality products are looking for farmers capable of supplying this quality,” Walz-Tylla comments. By the time the project in Punjab was completed, the farmers had boosted their incomes by 35 percent and customers could buy fresher, healthier vegetables at the Bharti-Walmart food markets.

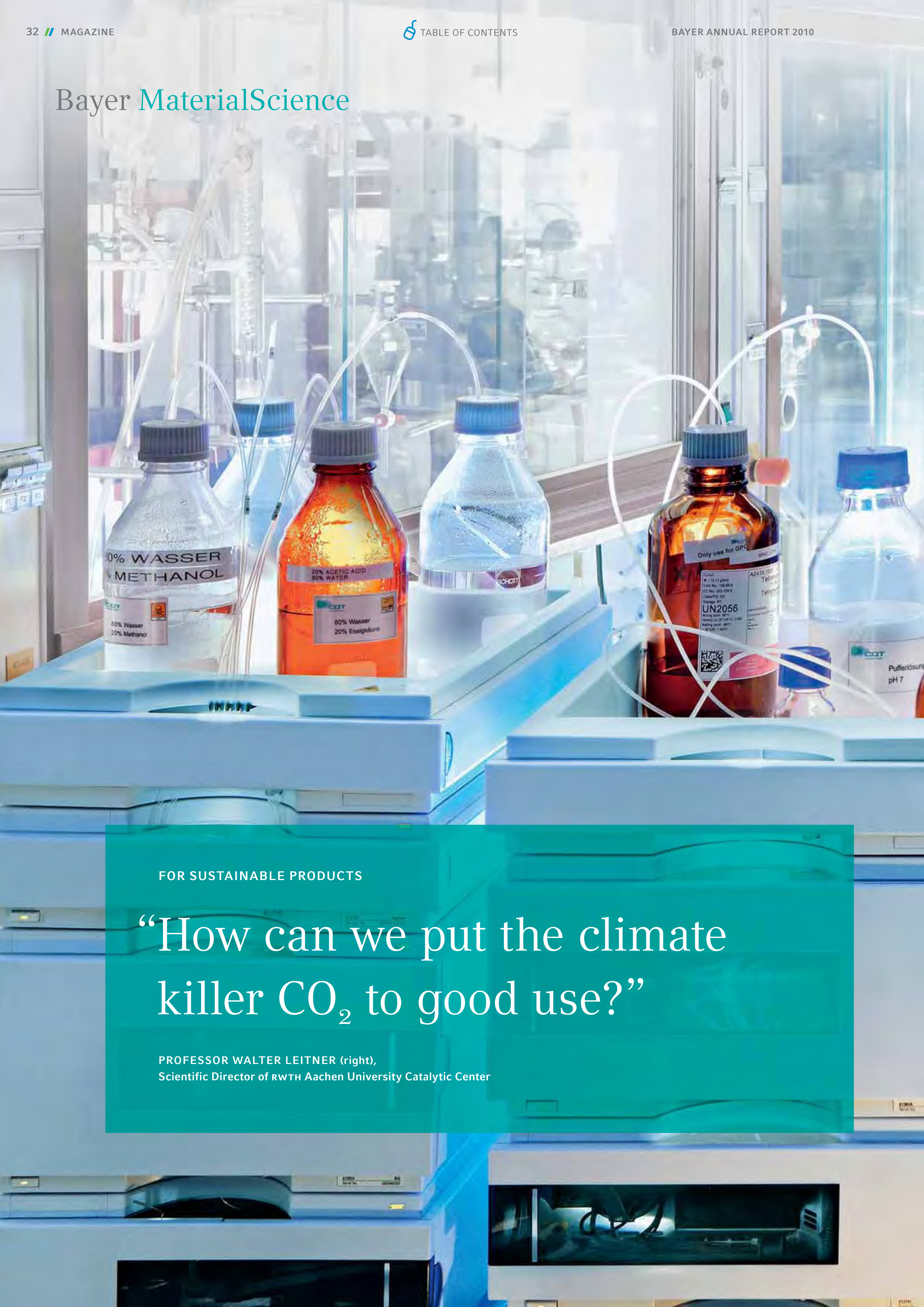
With Central American countries placing increasing importance on food quality and safety, the Food Chain Partnership program is also popular with vegetable experts in Mexico. For example, Mauricio Castaneda Castro – Veronica Castaneda Muñoz’s father – has devoted himself almost entirely to his work as President of the Committee for Food Quality and Food Safety in the Mexican state of Baja California for more than two years now. His daughter looks after the agricultural enterprise Berry Veg de Baja, which farms a total of 150 hectares. And Nunhems’ most recent seed-breeding successes are also arousing the food scientist’s curiosity: one of these is “Multileaf,” a lettuce that falls into many leaves of the same size with a single cut of the knife. This and some new, crisp cucumber varieties are meeting with great interest from catering and hobby cooks and wholesalers in the United States.



THE PERFECT TOMATO

Traits in a tomato variety – such as color, yield, shape and flavor – are determined by various genes. Using special markers, biotechnologists can identify the relevant sections of DNA and create the plant’s genetic fingerprint. In this way they can tell at the seedling stage whether the new variety contains the desired gene for deep red color or virus resistance, for example. This saves time and money.

Bayer MaterialScience

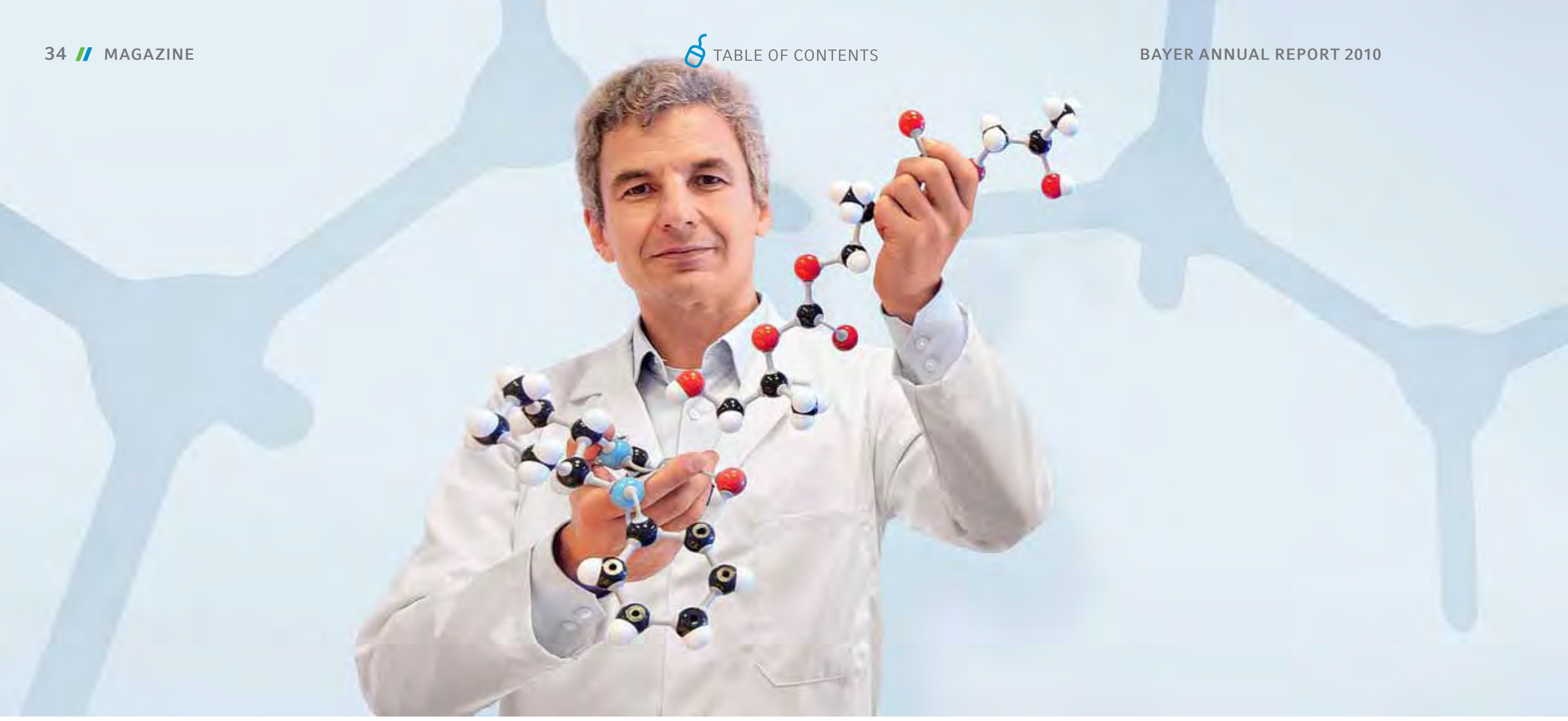


FOR SUSTAINABLE PRODUCTS

"How can we put the climate killer CO_2 to good use?"

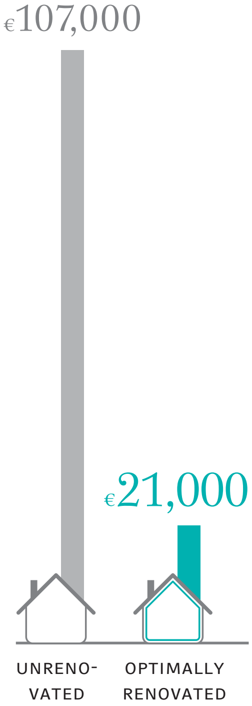
PROFESSOR WALTER LEITNER (right),
Scientific Director of RWTH Aachen University Catalytic Center

Bayer researcher Dr. Thomas Ernst Müller (left) and Professor Walter Leitner of RWTH Aachen University discuss the sustainable use of carbon dioxide.



High-tech for climate protection

In global terms, last year was the warmest year since weather records have been kept. The world needs climate protection. With innovative technologies and high-tech materials, Bayer is making a sustainable contribution to overcoming global challenges such as increasing energy efficiency, protecting the climate and conserving resources.



Total heating costs of a single-family home over 20 years: €107,000 for an unrenovated house, €21,000 for an optimally renovated house

Source: German Energy Agency

Ecosystems and animal species are disappearing, glaciers are melting and sea levels are rising. Last summer brought torrential flooding and extreme heatwaves. For the experts at Bayer MaterialScience, this underlines the need to place climate protection at the top of the agenda.

Oil is increasingly scarce, and carbon dioxide is heating up the climate. "That's why we're searching for alternatives to fossil fuels and are also looking to put harmful greenhouse gases to good use," says chemist Dr. Christoph Gürtler, who heads up the catalysis program at Bayer MaterialScience. The idea is to use climate-damaging CO_2 as a valuable raw material for sustainable industrial production. That's the aim of the "Dream Production" project. Working together, researchers from Bayer MaterialScience, Bayer Technology Services, RWTH Aachen University and RWE Power AG have developed an innovative catalytic process to harness carbon dioxide for manufacturing eco-friendly plastics.

This is particularly useful in the case of polyurethane, over twelve million tons of which are processed every year. Energy-saving polyurethane slabs insulate buildings and refrigerators and help to reduce weight in cars. Polyurethane production using carbon dioxide is particularly sustainable. "This way we conserve valuable raw materials. As an organic insulating material, this plastic also saves around 70 times more energy during its service life than is needed to manufacture it," explains Gürtler.

> **85%**
> Catalytic technology is currently employed in the manufacture of more than 85 percent of all chemical products.

Positive environmental balance

The environmental balance would be even better if the energy for producing polyurethane came from renewable sources. The amount of energy generated by wind naturally varies, occasionally yielding excess quantities of energy that could be harnessed for the production of materials such as polyurethanes. This is the main aim of the CO_2RRECT (CO_2 Reaction using Regenerative Energies and Catalytic Technologies) project, jointly launched by Bayer Technology Services,

“We’re using waste CO_2 to manufacture high-tech plastics.”

DR. THOMAS ERNST MÜLLER,
Chemist at Bayer MaterialScience and Director of the Catalytic Center

Bayer MaterialScience, RWE, Siemens and ten partners from universities and the scientific community.

“Chemical processes demand a constant energy supply,” says Dr. Alexandra Große Böwing, project manager at Bayer Technology Services. Surplus electricity could be used to produce hydrogen – itself an energy source – from water by electrolysis. “In the envisaged production process, the hydrogen produced with renewable energy would be converted using CO_2 into basic chemicals for manufacturing polymers,” says Große Böwing.

A tankful of sunshine

Polyurethane and other high-tech materials from Bayer also help protect the climate in other ways. “Solar Impulse,” the solar aircraft of adventurer Bertrand Piccard, is due to fly around the world in a few years’ time, powered solely by the sun. The prototype of this solar aircraft contained more than 11,500 solar cells for generating electricity that is stored in lithium-ion batteries and used to power the aircraft at night.

On board the high-tech aircraft was a wide range of products from Bayer MaterialScience, including lightweight polyurethane foams in the cockpit cladding, engine cowling and wings. It also featured films and upholstery elements containing Bayer raw materials. “In this way we want to show how our innovative materials can promote the use of renewable energy – and at the same time test new technologies as drivers of eco-friendly mobility,” says Johannes Seesing, project manager at Bayer MaterialScience. The proportion of Bayer materials in the second solar aircraft could be significantly higher.

“We expect to reduce the weight of the aircraft, thanks to high-tech materials and energy-saving lightweight products from Bayer MaterialScience,” says aviation pioneer Piccard. If the first circumnavigation of the globe in a solar aircraft succeeds, it would be a huge success for Solar Impulse and Bayer MaterialScience and would boost confidence in the future of renewable energy sources and climate protection.

Climate-friendly construction

Bayer experts aim to contribute to this with solutions for sustainable construction, as the erection and operation of buildings accounts for some 40 percent of global energy consumption. The essence of Bayer MaterialScience’s EcoCommercial Building (ECB) program is therefore to adapt buildings to the climate and use the company’s expertise to unlock economic and ecological benefits.

Johannes Seesing and Dr. Stephanie Vogel from Bayer MaterialScience in front of a model of the solar aircraft, holding a thin Makrofol® film used for the cockpit windshield

There is great potential for energy-saving, eco-friendly building design. “Offices, factories, hospitals and supermarkets need building solutions and services that deliver lasting improvements in energy efficiency and eco-friendliness – improvements that boost corporate profitability at the same time,” says Dr. Thomas Braig, Head of the ECB program for the Europe, Middle East and Africa region.

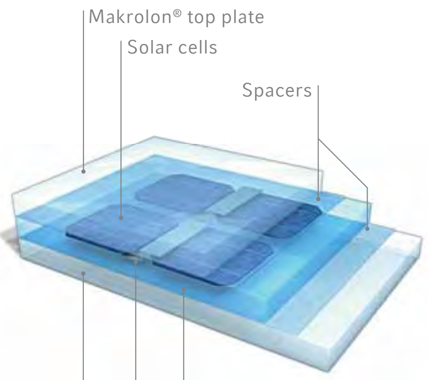
“Green buildings” are attracting growing interest from construction companies and investors throughout the world. But environmental protection also needs to satisfy investors, which is why the ECB combines environmental with economic aspects and offers cost-effective implementation that makes sustainable construction the new standard. “Although the initiative is just one year old, it has already gained a foothold worldwide,” says Peter Vanacker, member of the Executive Committee of Bayer MaterialScience and global patron of the ECB program. So far, the program has been launched in Europe, North and Central America, the Middle East, India, China, Southeast Asia and Japan. The Bayer network is based on the local expertise and innovative capabilities of its member companies. “The extra investment required for a building to meet sustainability criteria normally pays off within six to ten years,” Vanacker points out.

One member of the network is Ed. Züblin AG, which is collaborating with Bayer on the turnkey construction of energy-efficient commercial buildings. A collaboration was agreed with the Green Hospital program of Asklepios – Europe’s largest privately-owned hospital operator – in September 2010. Bayer MaterialScience also intends its ECB program to contribute significantly to the construction of the Masdar City clean-technology cluster in the United Arab Emirates.

Soccer stadium as a power plant

Integrating photovoltaics into the architecture is also very important for climate-friendly construction. And this is where Makrolon® plastic comes in. With panels made from this Bayer polycarbonate, solar modules can be perfectly integrated into roof designs. “This can transform a soccer stadium, for example, into a power plant,” says Dr. Volker Benz, project manager for polycarbonate sheeting at Bayer MaterialScience. A photovoltaic

STRUCTURE OF THE SOLAR MODULE



SOLAR POWER ON THE STADIUM ROOF
The transparent inner ring of the roof on the new Weser Stadium in Bremen, Germany, doesn’t only protect soccer fans from wind and rain: it also lets sunlight through and produces energy at the same time using lightweight solar modules from Sunovation GmbH. These are based on a sandwich construction with top and base plates made of Makrolon® from Bayer.

Bayer employees Xiang Liu (left) and development engineer Erika Zhu at the Global Footwear Competence Center in Shanghai, where the "green shoe" concept was developed

system with 200,000 solar cells (see graphic) located on the roof of the Weser Stadium in Bremen, Germany, is designed to produce enough electricity to supply about 300 households. "That saves 500 tons of carbon dioxide emissions per year," says Benz.

A further innovation in climate protection from Bayer MaterialScience is now going global. It began in Shanghai, where Bayer's materials experts have developed the unique "Ecotrekker" concept for a "green shoe" incorporating numerous sustainable materials and technologies. The foam layer of the shoe soles alone contains up to 70 percent renewable raw materials. "Manufacturers, consumers and the environment benefit from this concept in equal measure," says Dr. John Zhang, head of the Global Footwear Competence Center in Shanghai. The target group for sustainable shoe concepts like the Ecotrekker includes leading producers such as adidas, PUMA, Nike, Timberland and UVEX.

Growth market of Asia

The Global Footwear Competence Center ensures Bayer MaterialScience is represented in the world's most important footwear-producing country. Over nine billion pairs of shoes were made in China in 2010 alone, close to half of global output. The fact that the Ecotrekker concept started off in China is just one instance of the increasing global alignment of research, production and sales markets. Asia's plastics industry is enjoying tremendous growth, with demand from the construction, consumer goods, electronics, automotive and electrical industries rising on account of substantial stimulus programs launched by the Chinese government.

"The rapid economic growth in China and throughout the region offers us excellent opportunities that we intend to make the most of," says Bayer MaterialScience CEO Patrick Thomas. Bayer plans to considerably increase its capacities for the production of high-tech materials in China by 2016, investing about €1 billion at the Shanghai site and significantly expanding its research and development activities in China.

The headquarters of the Polycarbonates business unit will be relocated from the company's Leverkusen headquarters to Shanghai. The aim is to ensure even greater proximity to Asia's booming market for polycarbonate plastics. In addition, Bayer will spend a total of €110 million to build five new customer support facilities in Shanghai and three other Chinese cities by 2012.

The purpose of this investment by Bayer MaterialScience is to substantially increase its presence in Asia, because markets have long become global and climate change also affects the whole world. Researchers and developers at Bayer MaterialScience are addressing both of these challenges and offering solutions that contribute to efficient global climate protection.

PODCAST CENTER

Bayer plans to continue expanding its production capacities for high-tech materials in China, thereby sharpening its focus on the Asia/Pacific region. For an audio podcast on this topic go to WWW.PODCAST.BAYER.COM

Highlights 2010

Werner Wenning (left) presented the new Chairman of the Board of Management, Dr. Marijn Dekkers, with a relay baton made of Makrolon® containing all the messages written by his predecessors to their respective successors according to company tradition.

Change at the top

Werner Wenning handed over chairmanship to Dr. Marijn Dekkers

Another milestone in the history of the Bayer Group was reached on October 1, when Werner Wenning handed over the chairmanship of the Bayer AG Board of Management to Dr. Marijn Dekkers. "Bayer was and is my company. And my heart will continue to beat for Bayer," Wenning admitted at a ceremony attended by some 300 people from industry, politics, sports and society. Declared Dekkers: "My goal is the same as that of all my predecessors. We want the best for Bayer and Bayer's stakeholders."

There were moving moments for the guests invited to the event at Bayer's "Kasino" hotel in Leverkusen. Looking back at the nearly 45 years he worked for Bayer, Wenning said: "There were many things that inspired and fascinated me." For Wenning, it was the company's internationalism, its people and its research that made Bayer so fascinating. "Bayer is and will remain an inventor company. That is something we can all be proud of."

Wenning thanked the Supervisory Board and its Chairman for their effective cooperation, his colleagues on the Board of Management for their unity in all decision-making, and the works councils for being fair and dependable partners. "I would like to thank all the company's employees worldwide, without whose active support we would never have reached the goals we set for ourselves," he said.

In keeping with tradition, the departing CEO presented the new leader with a relay baton containing all the notes handwritten by each CEO to his successor. Wenning's message to Dr. Dekkers was: "To be truly happy you need three things: someone you love, a challenging task and a great deal of hope. I believe you have all these things. Your predecessor Werner Wenning."

Supervisory Board Chairman Dr. Manfred Schneider honored Werner Wenning as a man "who has made an enormous contribution to Bayer's evolution. That's why we owe him a special debt of gratitude and recognition for his highly successful work on behalf of the entire Bayer Group." He said that Wenning had strategically realigned the company, focused on Bayer's own innovative capability and committed it to the principle of sustainability. Said Schneider: "We know Bayer as a healthy, well positioned company that can look to the future with confidence."

PODCAST CENTER

A video podcast on the chairmanship handover can be found at WWW.PODCAST.BAYER.COM

Bayer HealthCare expands competencies in biologicals

A development laboratory for biological active substances at Bayer HealthCare in Wuppertal, Germany

In another major step toward fighting serious diseases such as cancer, Bayer HealthCare is building a new facility center in Wuppertal, occupying an area of more than 1,000 square meters, for the biotechnological production of pharmaceutical substances used in clinical trials. The €35 million investment in this center will enable Bayer to expand its competencies in the area of biological products.

"For a research-based pharmaceutical and chemical company like Bayer, innovation is the key to future growth. The new cell biology facility center represents an investment in our long-term success. Wuppertal provides the right conditions for these activities," said Dr. Wolfgang Plischke, the member of the Bayer AG Board of Management responsible for Technology, Innovation and Environment, at the groundbreaking ceremony in the city's pharmaceutical and chemical park. The center is due to start operating in late 2012.

In the area of Biologicals – medicines manufactured by biotechnological methods – Bayer HealthCare is concentrating mainly on antibodies, coagulation factors and other therapeutic proteins. "This enhances our ability to offer new drugs to treat serious diseases such as cancer," said Professor Andreas Busch, member of the Bayer HealthCare Executive Committee. In the past few years, the company has steadily added to its expertise in biologicals research. "The new facility center enlarges our production capacities so that we can manufacture a larger number of potential active ingredients in sufficient quantities even for the late stages of clinical development," said Busch.

Support for sustainable development in the Middle East

Masdar City in the United Arab Emirates is intended to be the first climate-neutral city.

Bayer's "EcoCommercial Building Program" has now been launched in the Middle East as well. This was announced by Bayer MaterialScience at the construction industry fair "The BIG 5" in Dubai. Successfully introduced in key markets of Europe, the United States and China, this network for sustainable construction supports decision-makers in implementing environmentally friendly, energy-saving projects – from the passive house to zero-emissions buildings with increased user comfort and lower life-cycle costs. The initiative complements the efforts of regional governments to promote sustainable development by focusing on energy-efficient buildings (see page 35f.).

"Energy efficiency in buildings is one of the most effective levers in tackling greenhouse gas emissions and ensuring that scarce resources – from fossil fuels to water – are used more sparingly," said Stephan Rosenthal, Managing Director of Bayer Middle East, at the launch event.

Pioneering active ingredient for weed control

Bayer CropScience has received the first registration for its new herbicidal active ingredient indaziflam. The product will be launched in the United States in 2011 under the brand name Specticle™ for professional users in the turf segment. It is planned to introduce it later in the ornamentals and industrial vegetation management segments as well.

Bayer CropScience also plans to offer do-it-yourself gardeners a range of indaziflam-based products under the Bayer Advanced™ brand. "Registration in the U.S. paves the way for the global use of indaziflam as the new base herbicide Alion in crops such as fruits, vines, nuts, citrus, olives and sugarcane," said Dr. Rüdiger Scheitza, member of the Board of Management of Bayer CropScience. The company anticipates global annual peak sales potential of more than €150 million for products based on indaziflam.

UNEP youth and environmental partnership extended

The global youth and environment partnership between the United Nations Environment Programme (UNEP) and Bayer has been extended through the end of 2013. Since the partnership was launched in 2004, millions of young people have benefited from numerous projects ranging from tree planting, the development of educational materials and creative competitions to the organization of major children's and youth conferences and the strengthening of youth representation at important global events. Bayer will support the joint activities to the tune of €1.2 million annually.

"Young people and children make up over 37 percent of the world's population. Their future will be shaped by our action to protect the planet," said United Nations Under-Secretary General and UNEP Executive Director Achim Steiner. "The partnership with Bayer aims to improve young people's access to vital information about the state of the planet, support their initiatives and ensure their voices are heard in the international arena."

Young Environmental Envoys visit BayKomm in Leverkusen.

Said Bayer AG Management Board Chairman Dr. Marijn Dekkers: "We are looking forward to continuing this successful partnership with UNEP that strikes such a chord with young people throughout the world. We are committed to initiating constructive dialogue with and supporting young people who are interested in environmental issues. After all, they can make a valuable contribution through their justified interest, critical awareness, commitment and passion for environmental protection."

Elvira Allakhiarova examines a patient.

Gaining vision

Two parallel Phase III trials with VEGF Trap-Eye in wet age-related macular degeneration (AMD) have yielded positive results. All regimens of VEGF Trap-Eye successfully met the primary endpoint, defined as the proportion of patients who maintained or improved vision over 52 weeks. The drug is a development product of Bayer HealthCare and Regeneron Pharmaceuticals. The two companies are planning to submit applications for marketing approval in Europe and the United States in the first half of 2011 based on the positive trial results. VEGF Trap-Eye also showed positive results in a further indication. In the first Phase III study in patients with central retinal vein occlusion, the compound showed superior efficacy as compared to placebo for the primary endpoint of this study: improvement of vision from starting point.

Success of climate strategy confirmed

Bayer's leading position in climate protection and sustainable development was again confirmed by its renewed inclusion in 2010 in the Carbon Disclosure Leadership Index (CDLI) – as the best company in its sector. The listing was announced in New York by the Carbon Disclosure Project (CDP) investor group. As a result, Bayer is the only European chemical and pharmaceutical company to be included for the sixth consecutive year in the world's first global climate index. The CDLI includes 51 of the world's 500 biggest listed companies (Global 500 Index) that display the greatest transparency in reporting on greenhouse gas emissions and climate strategy.

Bayer is also included in the newly established Carbon Performance Leadership Index (CPLI) and has been awarded the "A" rating. The CPLI evaluates the companies' specific measures and achievements in protecting the climate and dealing with the impact of climate change. Currently, 48 companies from the Global 500 Index are included in the CPLI. Both the CDLI and the CPLI were compiled following detailed investigation and analysis of climate-relevant corporate data by the auditing firm PricewaterhouseCoopers (PwC) on behalf of the CDP. This database is the largest of its kind in the world. The CDP initiative now includes 534 institutional investors managing combined assets of US$64 trillion. These investors expect companies to provide comprehensive climate-relevant information so that they can base their investment decisions on companies' contributions to climate protection and how they address the challenges posed by climate change.

"We are delighted by our renewed listing in the CDLI and the listing in the new CPLI, both of which we regard as confirmation of the success of our climate strategy," says Dr. Wolfgang Plischke, member of the Board of Management of Bayer AG responsible for Technology, Innovation and Environment.

Bayer stock has been included once again in the Dow Jones Sustainability World Index (DJSI World) and re-included in the Dow Jones Sustainability Europe Index (DJSI Europe), providing renewed proof of the company's standing as an international leader in sustainability.

3D films took the visitors on a journey into the world of research – this animation shows the macula, part of the eye's retina.

Bayer: well-stocked product pipeline

At the press forum entitled "Bayer's Perspective on Innovation 2010," the company showed 3D movies for the first time to more graphically illustrate its innovative capability. Management Board Chairman Dr. Marijn Dekkers and Board research spokesman Dr. Wolfgang Plischke used the event, held at BayKomm in Leverkusen, to outline the company's research potential to an audience of some 140 journalists.

"We have an excellent track record of innovation," said Dekkers, explaining that the company's products help patients, farmers and other customers all over the world. "And we as a company need these innovations. They are our lifeblood. We must innovate – and commercialize the results – if we are to compete successfully."

However, Dekkers also expressed concern at certain trends. First, he said, there is the question of whether society remains willing to pay a reasonable price for innovations, particularly in the field of health care. Dekkers also said the lack of acceptance for new technologies poses problems, appealing to politicians and authorities to ensure objectivity and transparency in appraising new developments.

Dr. Plischke, the member of the Board of Management responsible for research, presented successful projects from the three subgroups' pipelines. Among the outstanding developments he mentioned for Bayer HealthCare is the anticoagulant Xarelto®. Bayer CropScience plans to introduce six more crop protection active ingredients to the market by 2012, representing an added sales potential of more than €1 billion. And Bayer MaterialScience is developing new products and applications along with leading-edge technologies and production processes – while at the same time reducing its energy consumption and using alternative raw materials.

Top marks for investor relations

Dual accolade for Bayer: according to a survey by the German Investor Relations Association DIRK and the financial magazine *WirtschaftsWoche*, Bayer does the best investor relations work of all DAX companies. For this the company won the German Investor Relations Award 2010. In addition, Bayer garnered second place among EURO STOXX 50 companies in the Capital Investor Relations Award 2010.

DIRK joined with the researchers at London-based Thomson-Reuters-Extel to survey more than 800 fund managers and analysts from 17 European countries. The financial market professionals awarded points to investor relations departments and managers in categories such as the transparency and accuracy of annual and quarterly reports, the reliability of forecasts, and specialist and industry knowledge. They singled out Bayer's "consistently well informed team and high quality of reporting."

Capital magazine and the German Association for Financial Analysis and Asset Management bestow the Capital Investor Relations Award to rate the quality of capital market communications by the most important German and European companies. To this end, they polled around 400 analysts and fund managers from international financial institutions.

Expansion of research on vegetable varieties

New facilities for faster and more efficient development of vegetable varieties: Bayer CropScience's vegetable seed business Nunhems is investing €12 million in the expansion and modernization of its research center at Leudal in the Netherlands. The new facilities should be operational by the end of 2011. In addition, Nunhems has invested some US$30 million in a new vegetable seed processing facility and the modernization of existing seed processing and storage capacities at its site in Parma, Idaho, United States.

Strengthening the product portfolio for cereals

Farmer Neels Neethling (left) and employee Tol Kapstein inspect wheat quality.

Bayer CropScience has received registrations for the new cereal fungicide bixafen in its first markets, the United Kingdom and Germany. The approvals strengthen the company's product portfolio for use in cereal crops. From the start of the 2011 growing season, farmers in both countries can thus benefit from the new fungicide's advantages in the fight against fungal diseases in wheat and barley. Bayer CropScience is marketing the product under the main brand name Aviator® Xpro® and anticipates global annual peak sales potential of about €300 million. Registrations in other European countries for products based on the new active ingredient are expected to follow soon.

The company is also investing considerable resources in research and development to increase the productivity of wheat cultivation and develop outstanding new varieties. For example, Bayer CropScience and Israeli company Evogene have entered into a five-year collaboration to accelerate the development and commercialization of improved wheat varieties. Improvements will be pursued for wheat yield, drought tolerance and fertilizer use efficiency.

Bayer has also acquired the wheat breeding programs of two Ukrainian breeding companies, SORT and EUROSORT, based in Mironivka near the capital Kiev. The agreement will give Bayer CropScience access to outstanding wheat lines with excellent winter hardiness and drought tolerance. Bayer CropScience has already established wheat-breeding programs on the site of the renowned Mironivka Institute.

To improve wheat breeding and generate new wheat varieties, the company has signed a non-exclusive agreement with the University of Nebraska-Lincoln in the United States. This public-private partnership will allow both parties to expand their wheat breeding programs and make innovative solutions available to wheat growers.

Touchscreens feel like keyboards.

Screen fields that "respond"

Bayer MaterialScience has acquired Artificial Muscle, Inc. of Sunnyvale, California, United States, a technology leader in the field of electroactive polymer films. These films are attached beneath the touchscreens of devices such as smartphones. They create a vibration that the user perceives as tactile feedback when touching the screen. This innovative technology is marketed under the name Bayfol Reflex™.

New animal health products

Bayer has strengthened its worldwide animal health business by acquiring the Bomac Group, a New Zealand-based supplier of animal health products, and concluding an agreement with specialty pharmaceuticals company Piedmont Pharmaceuticals LLC, based in the U.S. state of North Carolina.

Bomac has a broad range of 290 products for the livestock sector, focusing particularly on the treatment of mastitis in dairy cattle and on parasiticides for sheep. Bayer aims to benefit from Bomac's research and development expertise, especially with respect to mastitis management and parasite control, using these products to expand its presence in the Asia/Pacific and Latin America regions.

Separately, Bayer has acquired an innovative oral application technology for veterinary medicines from Piedmont Pharmaceuticals. The agreement reached also gives Bayer access to two further products in late-stage development at Piedmont.

"This agreement with Piedmont complements our internal R&D efforts and expands our portfolio of offerings to veterinarians and pet-owners," says Dr. Jean-Luc Lowinski, Head of Bayer HealthCare's Animal Health Division. "This novel technology will enable us to provide a number of new products to improve the health of companion animals."

The innovative dosage form – a chewable tablet – is well received and well tolerated by cats and dogs. The formulation technology will allow easy administration of different active ingredients to animals.

Maximizing opportunities in Asia/Pacific

Bayer intends to significantly expand its capacities for the production of high-performance materials in China by 2016. Investment totaling some €1 billion is planned at the Shanghai site. Bayer is thus sharpening its focus on the Asia/Pacific region, where it predicts steady growth in its customer industries.

Capacities for the polyurethane raw material MDI are to be more than doubled to one million tons a year and for polycarbonate engineering plastics to 500,000 tons per year. The company also plans to considerably expand its research and development activities there. The headquarters of the Polycarbonates business unit will be relocated from company headquarters in Leverkusen to Shanghai to achieve even greater proximity to the booming polycarbonates market of Asia (see page 37).

"The expansion of our capacities in China is a major step toward greatly strengthening our presence in the emerging economies," explained Bayer AG Management Board Chairman Dr. Marijn Dekkers. "We aim to increase Group sales in Greater China to around €5 billion by 2015, with MaterialScience accounting for more than half of this amount." In fiscal 2009, the Bayer Group in Greater China had sales of €2.1 billion, including MaterialScience sales of €1.2 billion. "The strong economic growth in China and the entire Asia/Pacific region presents us with outstanding opportunities that we intend to maximize," added Patrick Thomas, Chairman of the Board of Management of Bayer MaterialScience. "It's strategically important for us to have the necessary capacities in the region to meet rising demand."

Bayer employee Gary Xi at the polycarbonate production plant in Shanghai

Grabbing malaria mosquitoes "by the nose"

New approaches to fighting malaria: Bayer CropScience and SentiSearch Inc. plan to work together with leading U.S.-based scientists to "grab insects by the nose." The two companies have entered into a two-year research collaboration aimed at identifying new molecules to target odorant receptors in insects. Such substances could prevent disease-transmitting insects from being able to "smell" people.

Millions of olfactory receptor neurons help the insects not only to locate food, but also to home in on a host where they can lay their eggs. These insects are more than just bothersome to people: they can also be very dangerous. One example is the malaria-transmitting Anopheles mosquito, which identifies its hosts partly by the CO_2 content of their breath. The aim is for the new molecules to block the relevant receptors so that the insects can no longer perceive human odors.

"Bayer CropScience is the market leader in vector control in the public health and agricultural settings, including animal health. Our activities include playing a significant role in the prevention of malaria," said Dr. Alexander Klausener, Head of Research at Bayer CropScience. According to Klausener, this new cooperation with leading scientists from Columbia and The Rockefeller University in New York will give the company access to a new and innovative approach to insect control.

Contraceptive pills registered in the United States

The U.S. Food and Drug Administration (FDA) has approved Bayer HealthCare's new oral contraceptives Safyral™, Beyaz® and Natazia™.

Safyral™ combines the hormone ingredients of the birth control pill Yasmin® – and Beyaz® those of the pill YAZ® – with metafolin, a stable form of folate, which is a vitamin B also found in food. Folate levels are raised in women who take Safyral™ or Beyaz®. The product is designed to reduce the risk of a neural tube defect should pregnancy occur shortly after a woman stops taking the pill.

Natazia™ is available in many countries outside the United States as Qlaira®. It is the first product in a new class of oral contraceptives whose estrogen component is based on estradiol.

Combined Management Report

of the Bayer Group and Bayer AG as of December 31, 2010

For direct access to a chapter, simply click on its name.

Fiscal 2010:

Bayer: operating performance on track

Progress in research and development spurs optimism

- Group targets achieved
- Strong year at MaterialScience – HealthCare and CropScience below expectations
- Over €3 billion for research and development
- Net income diminished by high special charges
- Strong operating cash flow – net financial debt below €8 billion
- Confidence for 2011: core earnings per share expected to grow by about 10%

1. Overview of Sales, Earnings and Financial Position

FULL YEAR 2010

Bayer achieved its targets for the Group in 2010. Sales rose by 12.6% – or by 8.0% on a currency- and portfolio-adjusted basis (Fx & portfolio adj.) – to a record €35.1 billion. EBITDA before special items improved by 9.7% to €7.1 billion. Core earnings per share advanced by 15.1% to €4.19. These increases were attributable to the strong recovery in the MaterialScience business and to positive currency effects. However, HealthCare did slightly less well than expected, while CropScience was well below our expectations, particularly in the first half of the year. We have adopted a package of selected measures to strengthen HealthCare and CropScience for the long term and enhance our innovative capability. At the same time we significantly raised our research and development (R&D) spending in 2010 to €3.1 billion (2009: €2.7 billion) to support our R&D pipeline, which continues to develop positively.

Net income, however, receded by 4.3% to €1,301 million (2009: €1,359 million), greatly hampered in 2010 by special charges of €1.7 billion, mainly for impairments and litigations. Earnings per share thus came in at only €1.57 (2009: €1.70).

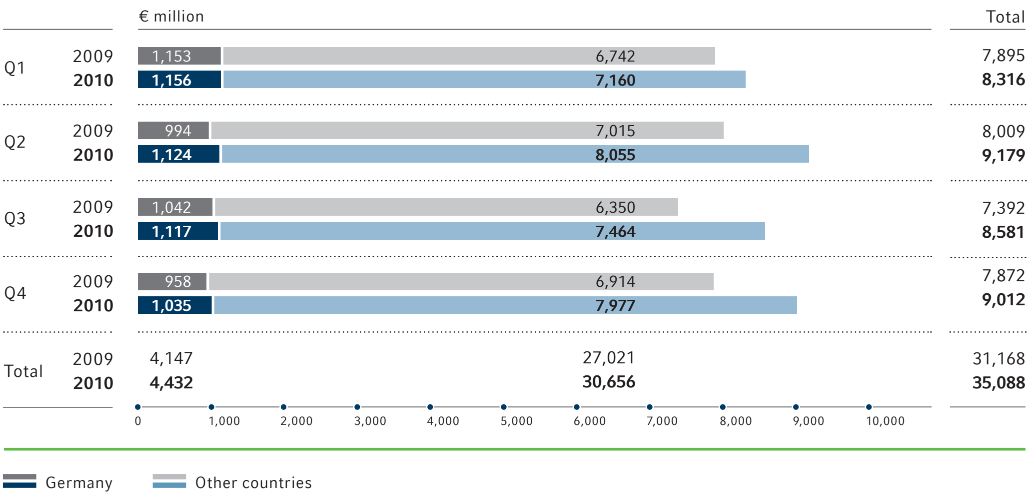
Net financial debt declined by €1.8 billion to €7.9 billion, thanks to a further improvement in operating cash flow.

Change in Sales [Table 3.1]

	2009	2010
	%	%
Volume	−2.9	+6.7
Price	−2.8	+1.3
Currency	+0.6	+4.9
Portfolio	−0.2	−0.3
Total	**–5.3**	**+12.6**

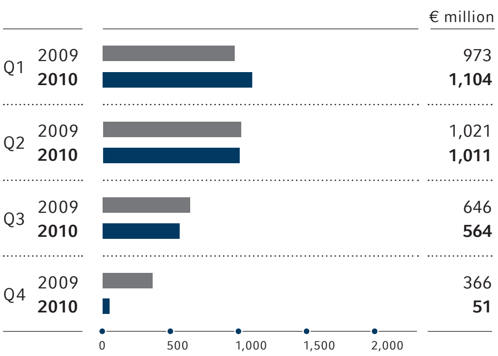
Group **sales** rose to €35,088 million (2009: €31,168 million). On a currency- and portfolio-adjusted basis, business at HealthCare edged forward by 1.7%. Sales of CropScience came in slightly below the prior year (Fx & portfolio adj. -1.3%) due to the weak first-half performance. By contrast, business expanded by a substantial 30.1% (Fx & portfolio adj.) at MaterialScience due to the economic recovery, with volumes already back to 2008 levels by the second quarter.

Bayer Group Quarterly Sales [Graphic 3.1]



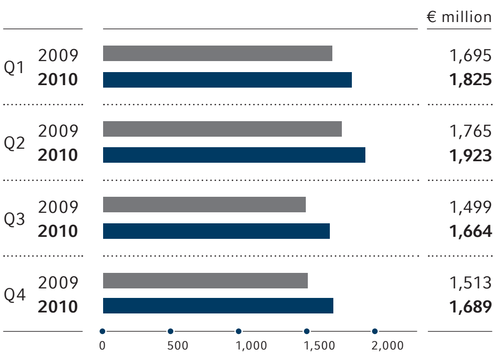
Despite the positive business development at MaterialScience, **EBIT** of the Bayer Group fell by 9.2% to €2,730 million (2009: €3,006 million). Earnings were diminished by special charges of €1,722 million (2009: €766 million). Of the special charges for 2010, impairments accounted for €957 million, litigations for €703 million and restructuring for €62 million. EBIT before special items amounted to €4,452 million (2009: €3,772 million). **EBITDA** before special items advanced by 9.7% to €7,101 million (2009: €6,472 million) buoyed by some €0.4 billion in positive currency effects. EBITDA before special items of MaterialScience tripled to €1,356 million, largely on account of significantly higher volumes and selling prices. By contrast, EBITDA before special items of CropScience fell by 14.3% to €1,293 million (2009: €1,508 million) in a weak, fiercely contested market. At HealthCare, EBITDA before special items dipped to €4,405 million (2009: €4,468 million), mainly as a result of higher selling and R&D expenses, negative effects of the health system reforms in various countries, and the effects of the early genericization of YAZ® in the United States.

Bayer Group
Quarterly EBIT [Graphic 3.2]



Q1-3 2010 figures restated

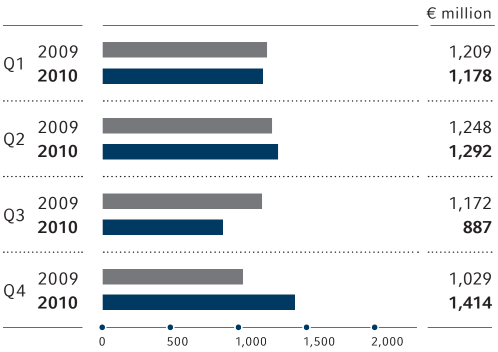
Bayer Group
Quarterly EBITDA Before Special Items [Graphic 3.3]



Q1-3 2010 figures restated

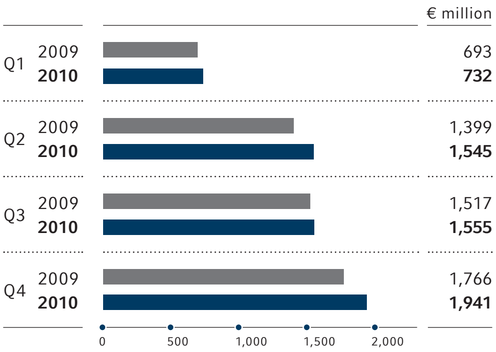
After a **non-operating result** of minus €1,009 million (2009: minus €1,136 million), including net interest expense of €499 million (2009: €548 million), **income before income taxes** amounted to €1,721 million (2009: €1,870 million). After tax expense of €411 million (2009: €511 million) and non-controlling interest, **net income** for 2010 was €1,301 million (2009: €1,359 million). Earnings per share came in at €1.57 (2009: €1.70). Core earnings per share increased by 15.1% to €4.19 (2009: €3.64). The calculation of core earnings per share is explained in Chapter 4.3 "Core Earnings Per Share."

Gross Cash Flow by Quarter [Graphic 3.4]



Q1-3 2010 figures restated

Net Cash Flow by Quarter [Graphic 3.5]



Gross cash flow in 2010 improved by 2.4% to €4,771 million (2009: €4,658 million). After a significant reduction in tied-up funds thanks to a further improvement in our working capital management, net cash flow advanced by 7.4% to €5,773 million (2009: €5,375 million). Net financial debt fell by €1.8 billion compared to December 31, 2009, amounting to €7.9 billion at the end of 2010. The net pension liability – the aggregate of pension obligations and plan assets – rose by €0.8 billion compared with December 31, 2009, to €7.2 billion, mainly because of lower long-term interest rates on the capital market.

FOURTH QUARTER OF 2010

The Bayer Group achieved substantial increases in sales and underlying earnings in the fourth quarter of 2010, while EBIT was held back mainly by impairments. The improvement in our operating performance was mainly due to the continued recovery in the MaterialScience business. CropScience raised sales and EBITDA before special items. At HealthCare, sales edged ahead while EBITDA before special items posted a slight year-on-year decline.

Group **sales** grew by 14.5% to €9,012 million (Q4 2009: €7,872 million). Adjusted for currency and portfolio effects (Fx & portfolio adj.), business expanded by 8.1%. HealthCare sales increased by 7.3% (Fx & portfolio adj. +1.4%), with business in the Pharmaceuticals segment advancing slightly overall on a currency- and portfolio-adjusted basis despite a decrease in North America. Consumer Health sales were level with the previous year after adjusting for currency effects. The drop in sales of blood glucose monitoring systems in the United States, caused by the difficult market situation, was offset by the positive development in the other divisions. CropScience had a strong fourth quarter, with sales advancing by 18.2% (Fx & portfolio adj. +9.7%) in a positive market environment. Sales of MaterialScience climbed by 28.2% (Fx & portfolio adj. +21.6%) from the low prior-year figure, which was due to the economic crisis.

EBIT of the Bayer Group dropped by 86.1% to €51 million (Q4 2009: €366 million). Fourth-quarter earnings in 2010 were diminished by substantial special charges totaling €954 million (Q4 2009: €451 million), which in 2010 principally included impairment losses of €825 million. Of the remaining amount, €67 million was incurred for litigations in the United States, including €41 million at HealthCare relating to YAZ®/Yasmin® and €26 million at CropScience relating mainly to an intended settlement program in connection with litigations concerning genetically modified rice (LL RICE). We also took special charges of €62 million for restructuring in HealthCare. EBIT before special items improved by 23.0% to €1,005 million (Q4 2009: €817 million).

EBITDA before special items of the Bayer Group improved by 11.6% to €1,689 million (Q4 2009: €1,513 million), driven mainly by strong earnings growth at MaterialScience and positive currency effects. HealthCare recorded EBITDA before special items of €1,138 million (Q4 2009: €1,154 million), including a €68 million gain from the settlement of a patent dispute concerning YAZ® that partially offset the margin loss during the year. EBITDA before special items of CropScience advanced to €270 million (Q4 2009: €166 million), including one-time income of €44 million from the divestment of some older active ingredients and the execution of a license agreement. At MaterialScience, EBITDA before special items came in at €297 million (Q4 2009: €203 million).

After a non-operating result of minus €237 million (Q4 2009: minus €248 million), we recorded a pre-tax loss of €186 million for the fourth quarter of 2010 (Q4 2009: income of €118 million), leading to tax income of €45 million (Q4 2009: €38 million). After non-controlling interest, this gave a net loss of €145 million (Q4 2009: net income of €153 million). Earnings per share were minus €0.18 (Q4 2009: €0.18). Core earnings per share rose to €0.95 (Q4 2009: €0.90). The calculation of core earnings per share is explained in Chapter 4.3 "Core Earnings Per Share."

Gross cash flow of the Bayer Group advanced by 37.4% year on year to €1,414 million (Q4 2009: €1,029 million) in light of the improved operating performance. Net cash flow moved ahead by 9.9% to €1,941 million (Q4 2009: €1,766 million). We significantly reduced net financial debt in the fourth quarter of 2010 to €7.9 billion (September 30, 2010: €9.1 billion).

Key Data by Subgroup and Segment, 4th Quarter [Table 3.2]

	Sales		EBIT		EBITDA before special items*	
	4th Quarter 2009	4th Quarter 2010	4th Quarter 2009	4th Quarter 2010	4th Quarter 2009	4th Quarter 2010
	€ million	€ million	€ million	€ million	€ million	€ million
HealthCare	**4,164**	**4,468**	**463**	**(129)**	**1,154**	**1,138**
Pharmaceuticals	2,698	2,897	234	(307)	789	830
Consumer Health	1,466	1,571	229	178	365	308
CropScience	**1,398**	**1,653**	**(56)**	**118**	**166**	**270**
Crop Protection	1,177	1,367	(42)	160	149	266
Environmental Science, BioScience	221	286	(14)	(42)	17	4
MaterialScience	**2,016**	**2,584**	**14**	**156**	**203**	**297**
Reconciliation	**294**	**307**	**(55)**	**(94)**	**(10)**	**(16)**
Group	**7,872**	**9,012**	**366**	**51**	**1,513**	**1,689**

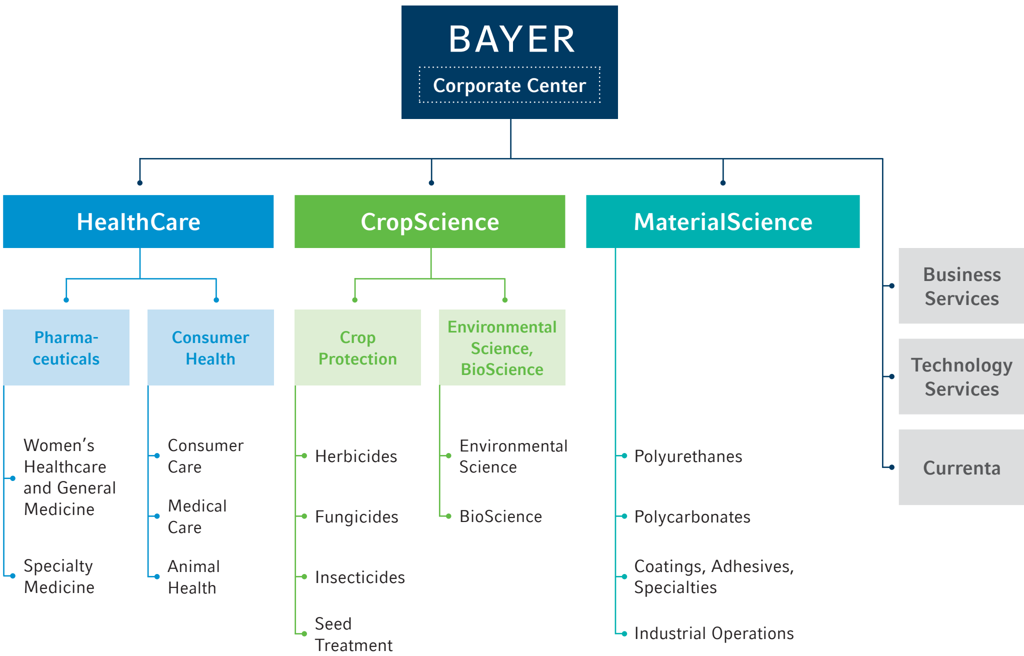
* For definition see Chapter 4.2 "Calculation of EBIT(DA) Before Special Items."

2. Business and Operating Environment

2.1 Corporate Structure

Bayer AG, headquartered in Leverkusen, Germany, is the strategic management holding company for the Bayer Group. Business operations are conducted by the HealthCare, CropScience and MaterialScience subgroups.

Bayer Group Structure [Graphic 3.6]

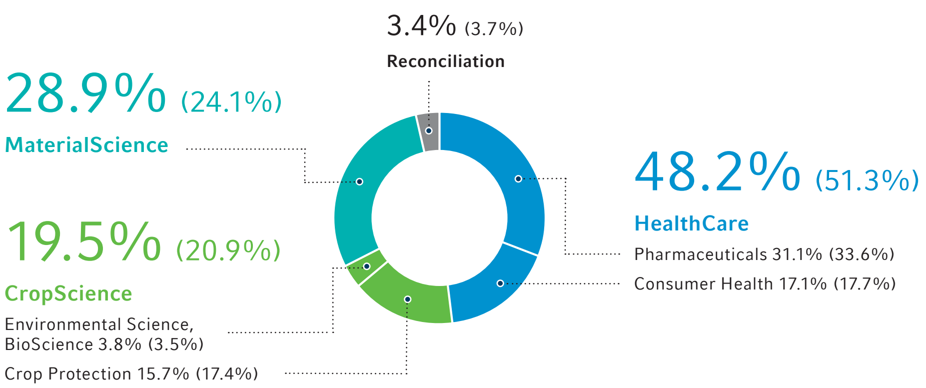


The globally operating **HealthCare** subgroup is divided into the Pharmaceuticals and Consumer Health segments. The Pharmaceuticals segment comprises two business units focusing on prescription products: Women's Healthcare and General Medicine; and Specialty Medicine. Our Consumer Health segment includes the Consumer Care, Medical Care and Animal Health divisions. The main focus of the Consumer Care Division is on non-prescription medicines and dietary supplements. Medical Care comprises the businesses with blood glucose meters, contrast-enhanced diagnostic imaging equipment, and mechanical systems for treating constricted or blocked blood vessels. The products of the Animal Health Division are destined for use in livestock and companion animals.

CropScience is active in the fields of chemical crop protection, non-agricultural pest and weed control, seed breeding and the improvement of plant traits. Organizationally, our CropScience business is divided into the Crop Protection segment and the Environmental Science, BioScience segment. Reflecting its product offering, Crop Protection is comprised of the Herbicides, Fungicides, Insecticides and Seed Treatment business units. Within the Environmental Science, BioScience segment, the Environmental Science business unit markets non-agricultural pest and weed control products while the BioScience business unit focuses on seeds and plant traits.

MaterialScience develops, manufactures and markets high-performance products in the areas of polyurethanes, polycarbonates, coating and adhesive raw materials, and functional films. This subgroup also manufactures and markets selected inorganic basic chemicals. MaterialScience is divided into the Polyurethanes, Polycarbonates, and Coatings, Adhesives, Specialties business units, and the Industrial Operations area.

Share of Sales by Segment 2010 (2009 in parentheses) [Graphic 3.7]



Our subgroups are supported by the Business Services, Technology Services and Currenta service companies, which are reported in the reconciliation under "All Other Segments." The reconciliation also includes the Corporate Center and consolidation effects.

CHANGES IN CORPORATE STRUCTURE

Effective January 1, 2010, we transferred certain products from the Specialty Medicine to the General Medicine business unit within the Pharmaceuticals segment of the HealthCare subgroup. In addition, organizational changes resulted in the merger of the General Medicine and Women's Healthcare business units and the integration of the Diagnostic Imaging business unit into the Specialty Medicine business unit in the second quarter of 2010. The prior-year figures have been restated accordingly. The Women's Healthcare and General Medicine business unit was renamed "General Medicine" effective January 1, 2011.

Key Data by Subgroup and Segment [Table 3.3]

	Sales		EBIT		EBITDA before special items*	
	2009	2010	2009	2010	2009	2010
	€ million	€ million	€ million	€ million	€ million	€ million
HealthCare	**15,988**	**16,913**	**2,640**	**1,861**	**4,468**	**4,405**
Pharmaceuticals	10,467	10,908	1,696	884	3,193	3,100
Consumer Health	5,521	6,005	944	977	1,275	1,305
CropScience	**6,510**	**6,830**	**798**	**261**	**1,508**	**1,293**
Crop Protection	5,424	5,493	713	600	1,301	1,025
Environmental Science, BioScience	1,086	1,337	85	(339)	207	268
MaterialScience	**7,520**	**10,154**	**(266)**	**780**	**446**	**1,356**
Reconciliation	**1,150**	**1,191**	**(166)**	**(172)**	**50**	**47**
Group	**31,168**	**35,088**	**3,006**	**2,730**	**6,472**	**7,101**

* For definition see Chapter 4.2 "Calculation of EBIT(DA) Before Special Items."

2.2 Economic Environment

GLOBAL ECONOMY

In 2010 the global economy recovered from the deep recession more quickly than expected, with economic output well ahead of the previous year. After rapid expansion in the first half, the pace of growth slowed in the second half. This was mainly due to the expiration of economic stimulus programs along with increased efforts by consumers and the public sector in a number of industrialized countries to bring high debt levels under control. Unemployment also remained persistently high in many countries. As before, the economy was held back by the effects of the financial crisis, which still have not been fully overcome, though in many countries the economy continued to be buoyed by expansionary fiscal and monetary policies.

Economic development showed wide regional variations in 2010, with growth rates declining in nearly all regions in the final months of the year. The emerging markets of Asia and Latin America expanded fairly rapidly and remained key drivers of the economic recovery. The industrialized countries also recovered distinctly compared to 2009, although some of them continued to feel the impact of the economic and financial crisis in 2010. In the United States and Japan, the increase in growth rates already slowed in the spring of 2010. However, production growth in the European Union did not fall back until the second half of the year. Moderate growth was still achieved in the European Union as a whole thanks to the robust expansion in Germany.

HEALTHCARE

In 2010 the **market for prescription medicines** posted growth in the mid-single digits. Expansion slowed in the United States and the major European countries, partly as a consequence of more restrictive health care policies. These are leading to stricter cost controls, limiting access to certain types of treatment and also resulting in mandatory rebates in some cases. Growth continued in the emerging countries, where health services are becoming available to more and more people and prescription medicines are therefore in greater demand.

The global **consumer care market** grew somewhat more slowly than in the previous year, mainly as a result of the weak flu season in Europe and North America and despite keen demand for consumer care products in China and India. Despite a good performance in Latin America and Asia, the **diabetes care market** did not achieve tangible overall growth because of strong pressure on prices in the United States. The **animal health market** regained its average long-term trend, with growth in the mid-single digits.

CROPSCIENCE

Developments in the global **seed and crop protection** market varied widely in 2010. While farmers' overall demand for high-quality seed continued to rise significantly, the global crop protection market registered only very modest growth.

The relatively long winter combined with a wet spring in many regions reduced demand for crop protection products in North America and Europe, especially in the first half of the year. As the economy recovered, business conditions for farmers also improved from mid-year onward. Higher demand, coupled with weather-related harvest shortfalls in Russia and central Asia, for example, led to an increase in producer prices for the major agricultural crops. These effects came too late to compensate for the declining market trend in the northern hemisphere, but in time to spur the use of crop protection products at the start of the main growing season in Latin America. The liquidity bottlenecks at many farms in that region caused by the financial crisis also eased markedly. The market in Asia/Pacific as a whole stagnated in 2010, with trends varying in different parts of the region. While the market contracted in Japan and held steady in China, mainly due to adverse weather, the crop protection market benefited from favorable monsoon conditions in India and from the recovery in the agriculture industry in Australia after years of drought.

MATERIALSCIENCE

The customer industries relevant to MaterialScience recovered in 2010 from the sharp drop in sales in the previous year. Despite a slight cooling of the economy in the second half of 2010, global demand remained stable.

In 2010 the **automotive industry** overcame the previous year's slump in sales faster than expected. Business with new cars trended particularly well in the Asian markets and in Russia. In the United States, too, volumes again rose significantly. In western Europe, demand for cars was down as expected compared to the incentive-driven prior-year figures, although even here the rate of decline appeared to be slowing.

Following the shrinkage in the **electrical/electronics market** in the prior crisis year, rapid growth was again registered in 2010. While the industrialized countries benefited from regional stimulus programs in areas such as infrastructure and e-mobility, the strong growth in the emerging markets continued due to rising demand for electronic consumer goods.

The global **construction industry** stagnated in 2010, with varying regional trends. While the sector continued to shrink in western Europe, the United States and Japan, it posted robust growth in the emerging markets, particularly China, India and Brazil.

The business situation in the **furniture industry** brightened increasingly over the course of 2010, though the pace of recovery varied substantially from one region to another. While production showed only a modest increase in North America and some western European countries on account of weak demand, the Asian furniture industry benefited from robust demand in China and a gradual recovery in global demand for affordable furniture.

2.3 Procurement and Production

Uniform Group directives on procurement are in place. Our production-specific procurement activities, like production itself, are organized on a decentralized basis in light of the diverse nature of our business activities. By contrast, the procurement of indirect goods and services that are not relevant to production – such as consultancy services, business travel and fleet management, computer hardware and software, laboratory and workshop equipment, safety devices and office supplies – is centrally organized within our service companies.

HEALTHCARE

Production network creates advantages

The Product Supply unit of HealthCare steers the subgroup's entire supply chain, from raw material procurement to manufacturing to product shipment, utilizing a global production network consisting of its own sites and those of subcontractors. In this way we aim to steadily reduce costs, increase our flexibility and delivery reliability, and maintain high standards of quality, safety and environmental protection on a global basis. The manufacture of pharmaceuticals is subject to exceptionally stringent quality requirements defined by the term "Good Manufacturing Practices" (GMP). Compliance with these requirements is regularly audited by internal experts, regulatory authorities and external consultants.

The Pharmaceuticals segment generally procures the starting materials for the active ingredients of its prescription pharmaceuticals from external suppliers. To prevent supply bottlenecks and mitigate major price fluctuations, these starting materials and the intermediates we do not produce ourselves are generally purchased under global contracts and/or from a number of suppliers we have audited and approved.

Our active ingredients for prescription medicines are manufactured primarily at the sites in Wuppertal and Bergkamen, Germany, and Berkeley and Emeryville, California, United States. These substances are processed into finished products and packaged worldwide. Our medicines come in a wide range of delivery forms, including solids (coated or uncoated tablets, powders), semi-solids (ointments, creams) and liquid pharmaceuticals used in injections or infusions, for example. Our hormonal contraceptives are supplied as sugar- or film-coated tablets or used in intrauterine systems (coils), for example. These formulating and packaging activities take place in Berlin, Leverkusen and Weimar, Germany; Garbagnate, Italy; Beijing, China; São Paulo, Brazil; Turku, Finland; and various other sites in Europe, Asia and Latin America. The hemophilia drug Kogenate® is manufactured by a biotechnological process at Berkeley, California, United States. Betaferon®/ Betaseron® for the treatment of multiple sclerosis is produced in Emeryville, California, United States.

For the Consumer Care Division of the Consumer Health segment we produce certain active substances, such as acetylsalicylic acid and clotrimazole, within the Bayer Group in La Felguera, Spain. The principal raw materials we purchase from third parties are naproxen, citric acid, ascorbic acid and other vitamins, and paracetamol. To minimize business risks, we diversify our raw material procurement sources worldwide and conclude long-term supply agreements. Among the division's largest production sites are the facilities in Myerstown, Pennsylvania, United States; Cimanggis, Indonesia; Gaillard, France; Bitterfeld-Wolfen and Grenzach-Wyhlen, Germany; and Madrid, Spain.

Some four fifths of the Diabetes Care products (such as blood glucose meters) of our Medical Care division are procured from original equipment manufacturers (OEMs). Material prices and availability are covered in most cases by long-term contracts and therefore are not subject to major fluctuations. We hold strategic reserves of certain materials and finished products so that we can supply our customers consistently and reliably. Our production site for Diabetes Care products is located in Mishawaka, Indiana, United States. Most of the materials needed for our medical equipment business, too, are procured from external suppliers, their availability, quality and price stability being ensured by way of long-term agreements, careful choice of suppliers and active supplier management. The majority of our medical devices are manufactured at the U.S. sites near Pittsburgh, Pennsylvania, and at Coon Rapids, Minnesota.

The Animal Health Division procures the pharmaceutical active ingredients for its veterinary medicines both from within the Bayer Group and from external suppliers throughout the world. Our animal health products are manufactured mainly at the sites in Kiel, Germany, and Shawnee, Kansas, United States, and marketed worldwide.

CROPSCIENCE

CropScience procures most of its raw materials for the manufacture of crop protection products externally. These raw materials are mainly basic chemicals such as chlorine, sodium hydroxide solution and sulfuric acid, or synthesis components. Important raw materials are usually procured on the basis of long-term supply agreements. We reduce the risk of supply failure by diversifying our raw material sources and holding strategic reserves of important raw materials. The preferred use of certified suppliers with defined quality standards for both manufactured and procured raw materials is another important selection criterion.

Global production network for agrochemical and seed products at CropScience

CropScience has 36 production sites and formulating facilities of its own around the world where its Crop Protection and Environmental Science products are manufactured. Among the largest are the facilities in Dormagen and Frankfurt am Main, Germany; Kansas City, Missouri, United States; and Vapi, India. In addition to a number of central locations for the manufacture of our active ingredients, a network of decentralized formulation and filling sites enables us to respond rapidly to local market needs. At these sites the active ingredients are processed into herbicides, fungicides, insecticides, seed treatments and Environmental Science products according to local requirements and application areas. Packaging of the products also takes place in these facilities. We continued to invest in our global production network in 2010, selectively expanding our capacities for important products.

In the BioScience business unit, we produce our seeds at locations close to our customers in Europe, Asia, and North and South America. Our canola, cotton, rice and vegetable seed is produced in our own centers or grown under contract on a total area of more than 100,000 hectares.

MATERIALSCIENCE

Mix of procurement and captive production of energies to minimize price fluctuation risk

Key raw materials for our MaterialScience products are petrochemical feedstocks such as benzene, toluene and phenol. We generally purchase these materials on the procurement markets under long-term contracts. The operation of our production facilities also requires large amounts of energy, mostly in the form of electricity or steam. For steam generation, we aim for a balanced diversification of fuels and – as with electricity – a mix of external procurement and captive production to minimize the price fluctuation risk.

The principal production facilities of MaterialScience for the European market are located in Dormagen, Germany; Antwerp, Belgium; Krefeld, Germany; Brunsbüttel, Germany; and Tarragona, Spain. The major production site for the North American market is at Baytown, Texas, United States. In the Asia/Pacific region, the main sites are at Shanghai, China; and Map Ta Phut, Thailand. In the field of commodities we endeavor to reduce costs by operating high-capacity production facilities that enable us to supply our markets on an international basis. We also have a large number of production facilities close to local markets in 20 countries to serve our differentiated businesses. Of these facilities, our systems houses formulate and supply customized polyurethane systems, while others carry out compounding of polycarbonate granules close to the customer or manufacture our semi-finished products (polycarbonate sheet). We also operate regional production facilities for functional films made of polycarbonate or thermoplastic polyurethane.

2.4 Products, Distribution and Markets

Marketing activities within the Bayer Group are decentralized due to the diversified business portfolio.

HEALTHCARE

HealthCare supplies more than 20,000 articles to meet the needs of patients and consumers in the various markets. The high number is due to the breadth of the product range and the various delivery forms, dosages, pack sizes, and language versions of individual products and their packaging.

More than 20,000 articles worldwide

The Pharmaceuticals segment supplies prescription products in the areas of women's health care, general medicine and specialty medicine. In the field of medicines usually prescribed by general practitioners (General Medicine), we supply products such as Adalat® to treat high blood pressure and coronary heart disease, and Avalox®/Avelox® to treat certain infectious diseases. Our product portfolio in Women's Healthcare encompasses contraceptive products such as YAZ®/Yasmin®/Yasminelle® and Mirena®, and hormone replacement therapies such as Angeliq®. Our range of Specialty Medicine products, which are mainly prescribed by specialist physicians, includes the multiple sclerosis drug Betaferon®/Betaseron®, the hemophilia A therapy Kogenate®, and Nexavar® to treat certain types of cancer. Our contrast agents for diagnostic imaging include Ultravist®, Magnevist® and Gadovist®. In the pharmaceuticals market we are among the world's top 15 companies in terms of sales.

Our pharmaceutical products are primarily distributed through wholesalers, pharmacies and hospitals. Co-promotion and co-marketing agreements serve to optimize our distribution network. For example, the agreement with Johnson & Johnson subsidiary Ortho-McNeil concerning the joint further development and marketing of the anticoagulant Xarelto® ensures optimum progress in this area, conferring regional marketing rights that enable both partners to share in the product's expected success. Another example is the strategic alliance with Merck & Co., Inc. (formerly Schering-Plough), United States, under which that company markets selected general medicine products in the United States. On the other hand we co-market Zetia®, a product of Merck & Co., Inc., in Japan.

Our Consumer Health segment chiefly markets non-prescription products. The Consumer Care Division specializes in medicines available without a prescription, also known as over-the-counter (OTC) products. We offer products in most OTC categories, such as the pain relievers Aspirin® and Aleve® and the dermatology products Canesten® and Bepanthen®/Bepanthol®. The product range also includes nutritionals such as Supradyn®, One A Day®, Berocca® and Redoxon®, antacids and cough-and-cold products. Consumer Care is a leading player in the OTC market. The division also includes prescription dermatology products. While the division's sales and distribution channels outside Europe are typically supermarket chains, drugstores and other large retailers, pharmacies are the usual distribution channel in Europe.

Consumer Health segment: focus on non-prescription products

In the Medical Care Division we offer user-friendly blood glucose monitoring devices such as the single-strip Contour® system and the multi-strip Breeze® system. We also market the Contour® USB meter, which features integrated diabetes management software and direct plug-in to computers, and the A1CNow™ system for determining long-term blood glucose control (A1c). Outside Europe, these products are generally sold to consumers through pharmacies, drugstores, mass merchants, hospitals or wholesalers. In Europe, they are sold mainly through pharmacies. As well as being among the top companies in the market for blood glucose monitoring devices, we are the world's leading supplier of contrast agent injection systems for diagnostic and therapeutic medical procedures in computed tomography, magnetic resonance imaging and molecular imaging, and of mechanical systems for removing thrombi from blood vessels. We also offer service products for these systems. Our products are marketed to cardiologists, radiologists and vascular surgeons in hospitals and out-patient clinical sites through a global direct sales organization, supplemented in some cases by local distributors.

The Animal Health Division focuses on the health of companion animals and livestock, for which we offer pharmaceuticals and grooming products. The largest product line comprises Advantix® and Advantage® for the prevention and treatment of flea infestation in dogs and cats, followed by Baytril® for the control of infectious diseases, Drontal® and Drontal® Plus wormers, and Baycox® to treat coccidiosis in pigs. We occupy leading positions in individual countries and product segments, and are the world's fourth-largest animal health company in terms of sales. Depending on local regulatory frameworks, animal health products may be available to end users as prescribed by a veterinarian or prescription-free from veterinarians, pharmacies or retail stores.

CROPSCIENCE

Integrated, sustainable product portfolio at CropScience

CropScience offers a potent range of products and services in the areas of chemical crop protection, non-agricultural pest and weed control, seed breeding and plant traits. These are commercialized according to local market conditions. Our business is subject to the growing seasons for the relevant crops and the resulting sales cycles.

The Crop Protection business is based on a broad portfolio of highly effective herbicides, fungicides, insecticides and seed treatment products. Thanks to our innovative capability and many years of experience with pest control products, we are the global market leader in the insecticides market. Fungicides prevent or cure diseases caused by fungal infestation that can significantly impair harvest yields and quality. CropScience is the third-leading supplier to the global fungicides market. We occupy second position in the world market for weed control products (herbicides), including plant growth regulators. The Seed Treatment business unit focuses on the use of crop protection active ingredients specially developed for the protection of seeds and seedlings. With our insecticides, fungicides and combination products, we remain among the leading seed treatment suppliers in terms of sales. Our Crop Protection products are marketed either via wholesalers or directly through retailers by means of a two- or three-step distribution system, depending on local market conditions.

The products of our Environmental Science business unit are based on both proprietary and inlicensed crop protection active ingredients and are specially designed for non-agricultural uses. This unit markets plant care products and home and garden brands for consumers along with solutions for professional users in the green industry and the pest and vector control sector. In terms of sales, Bayer is among the world's leading suppliers of non-agricultural pest control products. The Environmental Science products are marketed through various distribution channels. Our home and garden products are sold to consumers via both wholesalers and specialist retailers. Products for professional users are sold via wholesalers. Much of our business in the vector control field is transacted in response to tendering by government agencies and non-governmental organizations.

In the BioScience business unit, our distribution activities are focused on seed production in the four core crops of cotton, canola, rice and vegetables, where we offer high-quality seed based on our own research and breeding expertise. We have achieved strong market positions in these four crops and are globally represented. Our most important markets are North America for canola seed; North and Latin America, India and southern Europe for cotton seed; and Asia for hybrid rice seed. Our vegetable seed varieties are sold in more than 100 countries throughout the world to farmers, breeders, specialist retailers and the processing industry. Traits developed using modern breeding methods are either incorporated into our own seed varieties or licensed to other seed companies for use in their products.

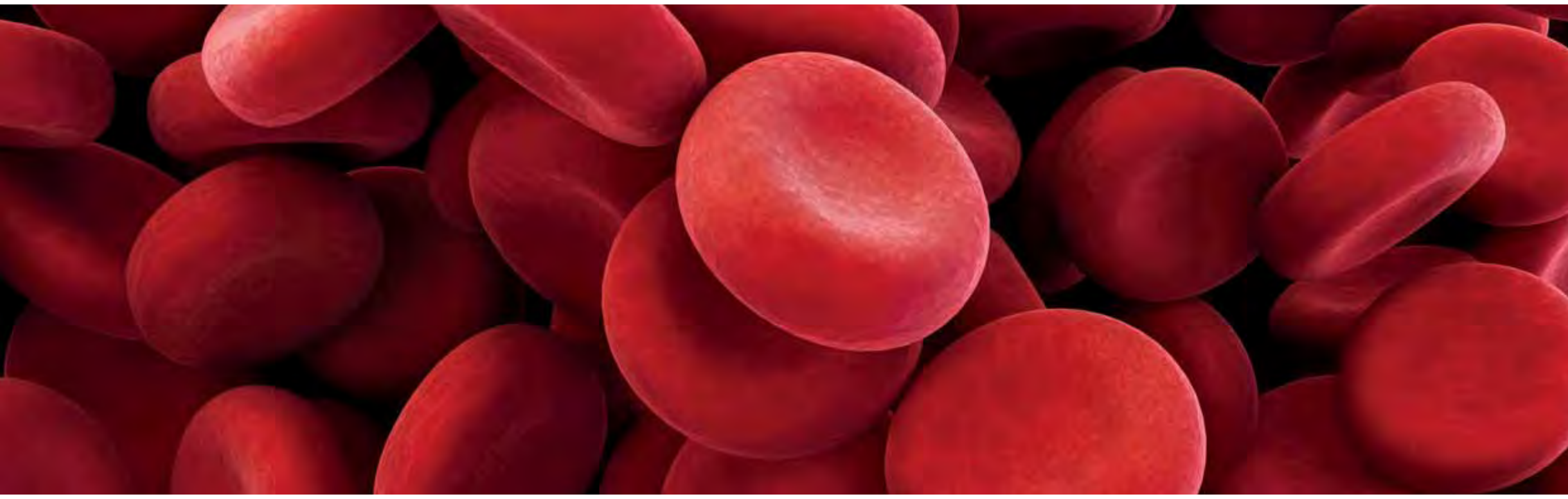
MATERIALSCIENCE

One of the largest companies in the global chemical industry, MaterialScience is a leading manufacturer and supplier of precursors for rigid and flexible foams, plastic granules, and raw materials for coatings and adhesives. The subgroup holds leading competitive positions in these product groups in all regional markets. We also manufacture and market plastics sheet and functional films as well as selected inorganic basic chemicals such as chlorine, sodium hydroxide solution, hydrogen, hydrochloric acid and nitric acid. These chemicals serve either as raw materials (such as chlorine) for the manufacture of our products or are generated as byproducts (such as sodium hydroxide solution) and sold to external customers.

MaterialScience has leading competitive positions in all regions

Our products are used mainly in the furniture, wood, construction, automotive, electrical/electronics, information technology and communications, chemicals, textile, sports equipment, leisure goods and medical equipment industries. Our polyurethane raw materials, such as diphenylmethane diisocyanate (MDI), toluene diisocyanate (TDI) and polyether, and the polyurethane systems based on them that are offered in the market are used, for example, in the production of mattresses, refrigerator insulations, automotive bumpers and shoe soles. Examples of applications for our polycarbonates, which we market under the Makrolon®, Bayblend®, Makroblend® and other trademarks, include housings for electrical appliances, CDs/DVDs and car headlamps. The Coatings, Adhesives, Specialties business unit manufactures raw materials for coatings used in the automobile and commercial vehicle industries and for adhesives used in footwear, for example. This business unit also produces films for applications including vehicle speedometers and computer housings.

We market our products mostly through regional and local distribution channels, making increasing use of e-commerce platforms for order processing. We also work with trading houses and local distributors who are responsible for business with small customers. Major customers with global operations are serviced directly by our key account managers.



3. Performance by Subgroup, Segment and Region

3.1 HealthCare

Key Data – HealthCare [Table 3.4]

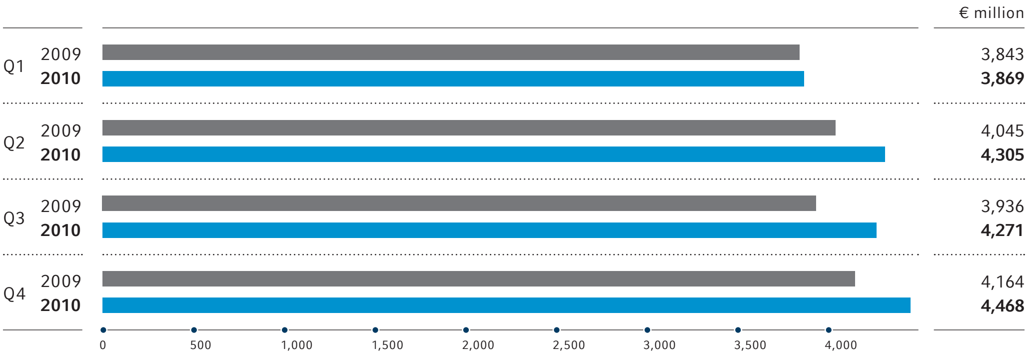
	2009	2010	Change	
				Fx&p adj.
	€ million	€ million	%	%
Sales	**15,988**	**16,913**	**+5.8**	**+1.7**
Change in sales				
Volume	+1.9%	+1.9%		
Price	+1.9%	−0.2%		
Currency	+0.6%	+4.7%		
Portfolio	−0.6%	−0.6%		
Sales by segment				
Pharmaceuticals	10,467	10,908	+4.2	+0.9
Consumer Health	5,521	6,005	+8.8	+3.4
Sales by region				
Europe	6,344	6,375	+0.5	
North America	4,634	4,666	+0.7	
Asia/Pacific	2,677	3,269	+22.1	
Latin America/Africa/Middle East	2,333	2,603	+11.6	
EBIT	**2,640**	**1,861**	**−29.5**	
Special items	*(372)*	*(1,169)*		
EBIT before special items*	***3,012***	***3,030***	***+0.6***	
EBITDA*	**4,148**	**4,116**	**−0.8**	
Special items	*(320)*	*(289)*		
EBITDA before special items*	***4,468***	***4,405***	***−1.4***	
EBITDA margin before special items*	27.9%	26.0%		
Gross cash flow**	**3,153**	**2,948**	**−6.5**	
Net cash flow**	**3,431**	**3,320**	**−3.2**	

Fx&p adj. = currency- and portfolio-adjusted
* For definition see Chapter 4.2 "Calculation of EBIT(DA) Before Special Items."
** For definition see Chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group."

Above: illustration of blood cells

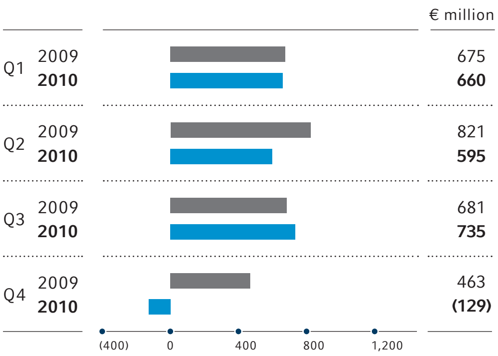
Sales of the HealthCare subgroup rose by 5.8% in 2010 to €16,913 million (2009: €15,988 million). Adjusted for currency and portfolio effects, the increase was 1.7%. The improvement was driven by the positive development of the Consumer Health segment.

HealthCare Quarterly Sales [Graphic 3.8]



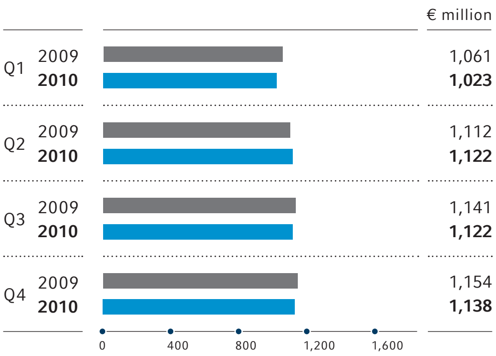
EBIT of the HealthCare subgroup fell by 29.5% in 2010 to €1,861 million (2009: €2,640 million). Special items totaled minus €1,169 million (2009: minus €372 million); for details see below. EBIT before special items, at €3,030 million (2009: €3,012 million), was in line with the previous year (+0.6%), while **EBITDA** before special items declined by 1.4% to €4,405 million (2009: €4,468 million). This was largely attributable to the effects of health system reforms in various countries, the early genericization of YAZ® in the United States and higher selling expenses in both segments. We also raised our spending on research and development. However, earnings were supported by positive currency effects.

HealthCare Quarterly EBIT [Graphic 3.9]



Q1-3 2010 figures restated

HealthCare Quarterly EBITDA Before Special Items [Graphic 3.10]



Q1-3 2010 figures restated

PHARMACEUTICALS

Key Data – Pharmaceuticals [Table 3.5]

	2009	2010	Change	Fx&p adj.
	€ million	€ million	%	%
Sales	**10,467**	**10,908**	**+4.2**	**+0.9**
Women's Healthcare and General Medicine	6,532	6,816	+4.3	+0.0
Specialty Medicine	3,935	4,092	+4.0	+2.2
Sales by region				
Europe	4,107	4,082	−0.6	
North America	2,712	2,531	−6.7	
Asia/Pacific	2,136	2,629	+23.1	
Latin America/Africa/Middle East	1,512	1,666	+10.2	
EBIT	**1,696**	**884**	**−47.9**	
Special items	*(322)*	*(1,140)*		
EBIT before special items*	***2,018***	***2,024***	***+0.3***	
EBITDA*	**2,912**	**2,834**	**−2.7**	
Special items	*(281)*	*(266)*		
EBITDA before special items*	***3,193***	***3,100***	***−2.9***	
EBITDA margin before special items*	30.5%	28.4%		
Gross cash flow**	**2,186**	**1,983**	**−9.3**	
Net cash flow**	**2,280**	**2,272**	**−0.4**	

2009 figures restated
Fx&p adj. = currency- and portfolio-adjusted
* For definition see Chapter 4.2 "Calculation of EBIT(DA) Before Special Items."
** For definition see Chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group."

Sales of the **Pharmaceuticals** segment increased by 4.2% in 2010 to €10,908 million (2009: €10,467 million). Adjusted for currency and portfolio effects, business was up by 0.9%. Sales grew strongly in the Asia/Pacific and Latin America/Africa/Middle East regions but decreased in North America, mainly because of lower sales of YAZ® in the United States. Reforms in the statutory health care systems of various countries also had a negative impact on the business.

Best-Selling Pharmaceutical Products [Table 3.6]

	2009	2010	Change	Fx adj.
	€ million	€ million	%	%
Betaferon®/Betaseron® (Specialty Medicine)	1,214	1,206	−0.7	−5.0
YAZ®/Yasmin®/Yasminelle® (Women's Healthcare and General Medicine)	1,278	1,111	−13.1	−15.8
Kogenate® (Specialty Medicine)	888	1,004	+13.1	+10.3
Nexavar® (Specialty Medicine)	604	705	+16.7	+11.7
Adalat® (Women's Healthcare and General Medicine)	633	664	+4.9	−2.3
Mirena® (Women's Healthcare and General Medicine)	490	539	+10.0	+4.6
Avalox®/Avelox® (Women's Healthcare and General Medicine)	460	497	+8.0	+4.2
Levitra® (Women's Healthcare and General Medicine)	360	429	+19.2	+13.1
Aspirin® Cardio (Women's Healthcare and General Medicine)	315	358	+13.7	+10.0
Glucobay® (Women's Healthcare and General Medicine)	315	347	+10.2	+2.9
Ultravist® (Specialty Medicine)	262	313	+19.5	+12.7
Cipro®/Ciprobay® (Women's Healthcare and General Medicine)	331	262	−20.8	−22.5
Magnevist® (Specialty Medicine)	219	215	−1.8	−7.3
Iopamiron® (Specialty Medicine)	199	185	−7.0	−17.2
Kinzal®/Pritor® (Women's Healthcare and General Medicine)	164	178	+8.5	+8.0
Total	**7,732**	**8,013**	**+3.6**	**−0.8**
Proportion of Pharmaceuticals sales	74%	73%		

Fx adj. = currency-adjusted

Sales of the **Women's HealthCare and General Medicine** business unit advanced by 4.3% to €6,816 million (2009: €6,532 million). After adjusting for exchange rates, sales were level with the prior year (+0.0%). There was a distinct drop in sales of the YAZ®/Yasmin®/Yasminelle® line of oral contraceptives (Fx adj. -15.8%), mainly because a generic competitor entered the U.S. market in June 2010. We saw a positive sales trend for YAZ®/Yasmin®/Yasminelle® outside the United States, chiefly in light of higher volumes for YAZ®. Sales of the hormone-releasing intrauterine device Mirena® (Fx adj. +4.6%) moved ahead in all regions.

Business with our erectile dysfunction treatment Levitra® (Fx adj. +13.1%) increased significantly in the United States, where we benefited from our distribution partner's new contract with a bulk customer. Sales of Aspirin® Cardio (Fx adj. +10.0%) for prevention of myocardial infarction rose appreciably thanks to higher volumes, particularly in the Asia/Pacific and Latin America/Africa/Middle East regions. The growth in sales of our antihypertensive Kinzal®/Pritor® (Fx adj. +8.0%) was primarily due to its approval in October 2009 for the prevention of cardiovascular disease, a new indication for this product. Our antibiotic Avalox®/Avelox® advanced by 4.2% (Fx adj.), thanks mainly to good business in the Asia/Pacific region. Sales of our oral antidiabetic Glucobay® (Fx adj. +2.9%) rose due to steady growth in China, while business receded elsewhere, particularly in Europe, on account of generic competition. Sales of Adalat® to treat high blood pressure (Fx adj. -2.3%) declined due to generic competition, especially in Europe, and government-imposed price reductions in Japan. By contrast, sales rose in China. Sales of our antibiotic Cipro®/Ciprobay® fell substantially (Fx adj. -22.5%), mainly because a U.S. government contract terminated in the first quarter of 2010.

Sales of the **Specialty Medicine** business unit were up by 4.0% to €4,092 million (2009: €3,935 million). Adjusted for currency and portfolio effects, the increase came to 2.2%. Business with our cancer drug Nexavar® (Fx adj. +11.7%) again moved ahead in all regions, with especially strong growth in Asia/Pacific. This was largely due to higher sales in Japan. Our blood-clotting medication Kogenate® advanced by 10.3% (Fx adj.) thanks to volume growth in all regions. Business with the multiple sclerosis drug Betaferon®/Betaseron® was down by 5.0% (Fx adj.) overall. Pleasing sales growth for this product in the Asia/Pacific and Latin America/Africa/Middle East regions was offset by a drop in business in other countries, particularly Germany, the United States and Russia, due to heightened competition. Business with the X-ray contrast agent Ultravist® (Fx adj. +12.7%) developed positively, especially in Latin America, where it replaced the older X-ray contrast agent Iopamiron®. Sales of Iopamiron® (Fx adj. -17.2%) decreased due to the resulting lower volume for the year and especially because of price reductions in Japan. Among our contrast agents for magnetic resonance imaging (MRI), Magnevist® (Fx adj. -7.3%) saw a continuing decline in sales. This was partly attributable to the change to Gadovist® (Fx adj. +14.7%), which posted strong growth, particularly in Europe.

EBIT of the Pharmaceuticals segment fell by a substantial 47.9% in 2010 to €884 million (2009: €1,696 million) after special charges of €1,140 million (2009: €322 million). Of these charges, impairment losses on intangible assets accounted for €874 million, litigations for €177 million, the write-down of a receivable relating to expected future purchase price payments for €56 million, and restructuring measures for €33 million. Of the impairment losses, an amount of €405 million was recognized on the "Schering" name in light of our new brand strategy. Following the regular review of our research and development pipeline, we also recognized impairment losses of €202 million on the sagopilone and Bonefos® research projects, and €267 million on our cancer drug Zevalin® and various Women's Healthcare products. EBIT before special items came in level with the previous year at €2,024 million (+0.3%). **EBITDA** before special items declined by 2.9% to €3,100 million (2009: €3,193 million). This contains positive currency effects and a €68 million gain from the settlement of a patent dispute concerning YAZ® that partially offset the margin loss during the year. On the other hand, we incurred higher research and development costs, mainly to support our Phase III projects. Earnings were also diminished by lower sales of YAZ® in the United States and the margin pressure exerted by health system reforms. In addition, we experienced an increase in selling expenses, mainly in connection with new product introductions and the reinforcement of our marketing activities as we expand the business in China.

CONSUMER HEALTH

Key Data – Consumer Health [Table 3.7]

	2009	2010	Change	Fx&p adj.
	€ million	€ million	%	%
Sales	**5,521**	**6,005**	**+8.8**	**+3.4**
Consumer Care	3,080	3,371	+9.4	+4.2
Medical Care	1,464	1,514	+3.4	−1.3
Animal Health	977	1,120	+14.6	+7.7
Sales by region				
Europe	2,237	2,293	+2.5	
North America	1,922	2,135	+11.1	
Asia/Pacific	541	640	+18.3	
Latin America/Africa/Middle East	821	937	+14.1	
EBIT	**944**	**977**	**+3.5**	
Special items	*(50)*	*(29)*		
EBIT before special items*	***994***	***1,006***	***+1.2***	
EBITDA*	**1,236**	**1,282**	**+3.7**	
Special items	*(39)*	*(23)*		
EBITDA before special items*	***1,275***	***1,305***	***+2.4***	
EBITDA margin before special items*	23.1%	21.7%		
Gross cash flow**	**967**	**965**	**−0.2**	
Net cash flow**	**1,151**	**1,048**	**−8.9**	

Fx&p adj. = currency- and portfolio-adjusted
* For definition see Chapter 4.2 "Calculation of EBIT(DA) Before Special Items."
** For definition see Chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group."

Sales of the **Consumer Health** segment advanced by 8.8% in 2010 to €6,005 million (2009: €5,521 million). Business expanded by 3.4% on a currency- and portfolio-adjusted basis, with all regions – particularly North America – contributing to this performance.

Best-Selling Consumer Health Products [Table 3.8]

	2009	2010	Change	Fx adj.
	€ million	€ million	%	%
Contour® (Medical Care)	601	602	+0.2	−4.5
Aspirin®* (Consumer Care)	400	418	+4.5	+0.2
Advantage® product line (Animal Health)	336	408	+21.4	+14.6
Aleve®/naproxen (Consumer Care)	217	273	+25.8	+18.7
Bepanthen®/Bepanthol® (Consumer Care)	186	212	+14.0	+12.0
Canesten® (Consumer Care)	188	210	+11.7	+7.7
One A Day® (Consumer Care)	153	178	+16.3	+10.0
Baytril® (Animal Health)	149	166	+11.4	+5.8
Supradyn® (Consumer Care)	136	138	+1.5	+0.7
Breeze® (Medical Care)	138	125	−9.4	−13.6
Total	**2,504**	**2,730**	**+9.0**	**+4.2**
Proportion of Consumer Health sales	45%	45%		

Fx adj. = currency-adjusted
*Total Aspirin® sales = €776 million (2009: €715 million), including Aspirin® Cardio, which is reflected in sales of the Pharmaceuticals segment.

In the **Consumer Care** Division, sales climbed by 9.4% to €3,371 million (2009: €3,080 million). Adjusted for currency and portfolio effects, the increase came to 4.2%. A notable increase in demand for our products in the United States particularly benefited sales of the analgesic Aleve® (Fx adj. +18.7%) and the One A Day® line of dietary supplements (Fx adj. +10.0%). Sales of Aspirin® (Fx adj. +0.2%) were flat with the previous year. Business with the Bepanthen®/ Bepanthol® line of skincare products (Fx adj. +12.0%) developed well, especially in Europe and Latin America, thanks to higher volumes and selling prices. Our antifungal Canesten® (Fx adj. +7.7%) advanced, mainly as a result of new product launches in Canada. Sales of Supradyn® multivitamins were level with the prior year (Fx adj. +0.7%).

In the **Medical Care** Division, sales gained 3.4% to €1,514 million (2009: €1,464 million). On a currency-adjusted basis, business was down by 1.3%. This was chiefly attributable to the negative development of the diabetes care market in the United States, where both prices and volumes declined. Sales of our Breeze® (Fx adj. -13.6%) and Contour® (Fx adj. -4.5%) lines of blood glucose meters were particularly affected. In Europe, however, the Contour® business performed well, due in part to new product launches. Sales of our medical equipment business (Fx adj. +7.2%) showed an overall improvement, particularly in the United States.

Sales of the **Animal Health** Division climbed by a very satisfactory 14.6% to €1,120 million (2009: €977 million), thanks to the positive development in all regions. After adjusting for currency effects, the increase came to 7.7%. The strongest growth was achieved in North America. Business with the Advantage® line of flea, tick and worm control products (Fx adj. +14.6%) expanded significantly, especially in the United States, where we benefited from the initial stocking and further expansion of a new distribution channel through pet-product retailers. Sales of our Baytril® antibiotic (Fx adj. +5.8%) rose in the United States, while business in Europe was down because of the increasing generic competition.

EBIT of the **Consumer Health** segment improved by 3.5% in 2010 to €977 million (2009: €944 million) after special charges of €29 million (2009: €50 million), which in 2010 were incurred in connection with restructuring. EBIT before special items rose by 1.2% to €1,006 million (2009: €994 million). **EBITDA** before special items grew by 2.4% to €1,305 million (2009: €1,275 million). This was mainly attributable to the positive business performance at Consumer Care and Animal Health and to favorable currency effects. However, earnings were held back by an increase in selling expenses that was mainly caused by Consumer Care's marketing and distribution costs returning to normal levels following a reduction in the crisis year 2009.

3.2 CropScience

Key Data – CropScience [Table 3.9]

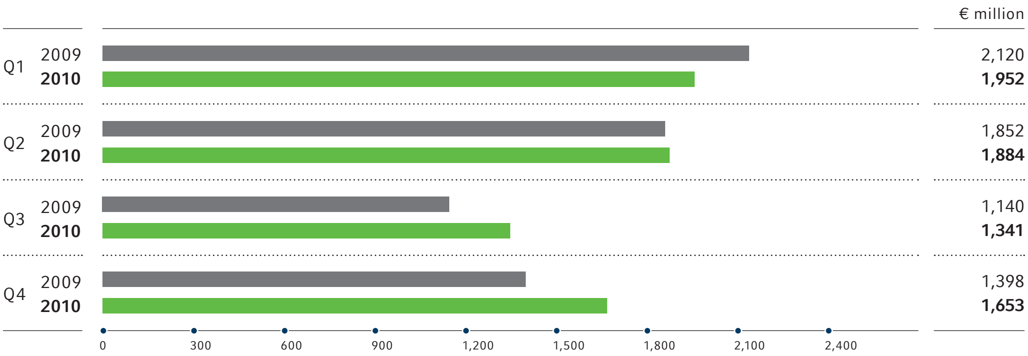
	2009	2010	Change	
				Fx&p adj.
	€ million	€ million	%	%
Sales	**6,510**	**6,830**	**+4.9**	**−1.3**
Change in sales				
Volume	+1.2%	−0.7%		
Price	+1.3%	−0.6%		
Currency	−0.6%	+6.0%		
Portfolio	+0.1%	+0.2%		
Sales by segment				
Crop Protection	5,424	5,493	+1.3	−4.7
Environmental Science, BioScience	1,086	1,337	+23.1	+15.6
Sales by region				
Europe	2,540	2,381	−6.3	
North America	1,529	1,535	+0.4	
Asia/Pacific	1,028	1,229	+19.6	
Latin America/Africa/Middle East	1,413	1,685	+19.2	
EBIT	**798**	**261**	**−67.3**	
Special items	*(219)*	*(526)*		
EBIT before special items*	***1,017***	***787***	***−22.6***	
EBITDA*	**1,311**	**767**	**−41.5**	
Special items	*(197)*	*(526)*		
EBITDA before special items*	***1,508***	***1,293***	***−14.3***	
EBITDA margin before special items*	23.2%	19.0%		
Gross cash flow**	**1,043**	**546**	**−47.7**	
Net cash flow**	**745**	**1,399**	**87.8**	

Fx&p adj. = currency- and portfolio-adjusted
* For definition see Chapter 4.2 "Calculation of EBIT(DA) Before Special Items."
** For definition see Chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group."

Above: detail photograph of a canola leaf

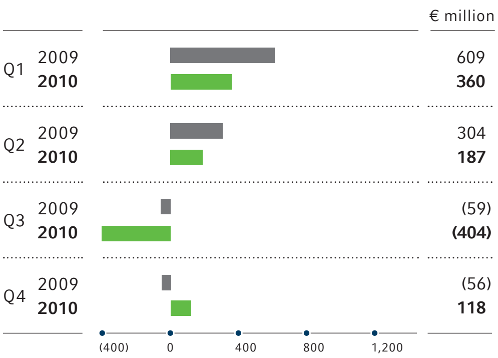
CropScience raised **sales** by 4.9% in 2010 to €6,830 million (2009: €6,510 million). Adjusted for currency and portfolio effects, however, business dipped by 1.3%. This was due to weaker sales in Crop Protection, while the Environmental Science, BioScience segment turned in a positive performance.

CropScience Quarterly Sales [Graphic 3.11]



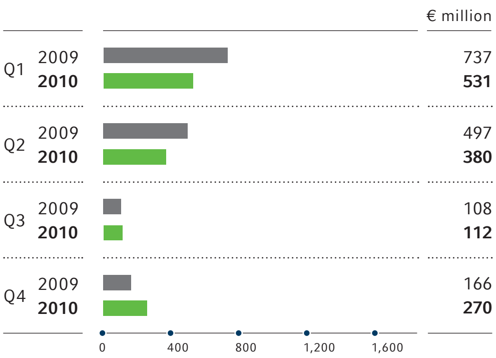
EBIT of CropScience fell substantially year on year from €798 million to €261 million. Earnings were held back by special charges of €526 million (2009: €219 million), which in 2010 related to an intended settlement program and legal and defense costs in connection with litigations concerning genetically modified rice (LL RICE) in the United States. EBIT before special items shrank by 22.6% to €787 million (2009: €1,017 million). **EBITDA** before special items declined by 14.3% to €1,293 million (2009: €1,508 million). This decrease was due mainly to significantly lower volumes and a drop in prices in Crop Protection and increased expenses for research and development in the BioScience business unit.

CropScience Quarterly EBIT [Graphic 3.12]



Q1-3 2010 figures restated

CropScience Quarterly EBITDA Before Special Items [Graphic 3.13]



Q1-3 2010 figures restated

Best-Selling CropScience Products* [Table 3.10]

	2009	2010	Change	
	€ million	€ million	%	Fx adj. %
Confidor®/Gaucho®/Admire®/Merit® (Insecticides/Seed Treatment/Environmental Science)	606	597	−1.5	−7.0
Flint®/Stratego®/Sphere®/Nativo® (Fungicides)	400	453	+13.3	+6.6
Basta®/Liberty®/Rely®/Ignite® (Herbicides)	323	270	−16.4	−24.6
Proline®/Input®/Prosaro® (Fungicides)	267	259	−3.0	−7.0
Atlantis® (Herbicides)	231	210	−9.1	−10.7
Folicur®/Raxil® (Fungicides/Seed Treatment)	210	206	−1.9	−8.3
Poncho® (Seed Treatment)	183	192	+4.9	−2.1
Decis®/K-Othrine® (Insecticides/Environmental Science)	170	184	+8.2	+1.2
Fandango® (Fungicides)	146	140	−4.1	−4.9
Puma® (Herbicides)	167	139	−16.8	−24.0
Total	**2,703**	**2,650**	**−2.0**	**−7.6**
Proportion of CropScience sales	42%	39%		

Fx adj. = currency-adjusted
*Figures are based on active ingredient class. For the sake of clarity, only the principal brands of the Crop Protection and Environmental Science business units are listed.

CROP PROTECTION

Key Data – Crop Protection [Table 3.11]

	2009	2010	Change	
	€ million	€ million	%	Fx&p adj. %
Sales	**5,424**	**5,493**	**+1.3**	**−4.7**
Herbicides	1,986	1,944	−2.1	−8.3
Fungicides	1,564	1,570	+0.4	−5.0
Insecticides	1,234	1,370	+11.0	+4.2
Seed Treatment	640	609	−4.8	−10.2
Sales by region				
Europe	2,206	2,030	−8.0	
North America	1,081	956	−11.6	
Asia/Pacific	862	1,021	+18.4	
Latin America/Africa/Middle East	1,275	1,486	+16.5	
EBIT	**713**	**600**	**−15.8**	
Special items	*(162)*	*0*		
EBIT before special items*	***875***	***600***	***−31.4***	
EBITDA*	**1,161**	**1,025**	**−11.7**	
Special items	*(140)*	*0*		
EBITDA before special items*	***1,301***	***1,025***	***−21.2***	
EBITDA margin before special items*	24.0%	18.7%		
Gross cash flow**	**924**	**743**	**−19.6**	
Net cash flow**	**591**	**1,079**	**+82.6**	

Fx&p adj. = currency- and portfolio-adjusted
* For definition see Chapter 4.2 "Calculation of EBIT(DA) Before Special Items."
** For definition see Chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group."

Sales in the **Crop Protection** segment rose by 1.3% in 2010 to €5,493 million (2009: €5,424 million). Adjusted for shifts in currency parities, sales were down by 4.7%. Business with our seed treatments, herbicides and fungicides trended downward in a shrinking market. By contrast, business with our insecticides expanded.

In the **Europe** region, sales fell by 8.0% to €2,030 million (2009: €2,206 million). The currency-adjusted decline was 9.6%. The negative development in Europe affected all business units and was largely due to the exceptionally weak business performance in France. This in turn resulted mainly from considerable market shrinkage caused by an extremely competitive environment and adverse weather conditions.

Sales of our crop protection products in **North America** receded by 11.6% to €956 million (2009: €1,081 million). Adjusted for currency effects, the decrease came to 18.4%. This decline was primarily due to a disappointing performance by our herbicides business, with price declines for our principal products in the first half of the year. Heavy competitive pressure from generic manufacturers and high inventory levels in the distribution channels also led to a sharp decline in fungicide sales in the United States and to lower volumes for our products Prosaro® and Stratego®. Sales of seed treatments in the United States, however, improved, largely because of the successful launch of Poncho®/Votivo™. This new product contains the bacterium Bacillus firmus, a biological component that provides better protection against threadworms in the soil (nematodes).

Sales in the **Asia/Pacific** region advanced by 18.4% to €1,021 million (2009: €862 million). Adjusted for currency effects, business improved by 5.3%. Market development in this region was impacted by extreme weather conditions. Business in Japan receded considerably for weather-related reasons. However, this was more than offset by a good performance in other countries, particularly India, Australia and China. Driven by a rise in prices for agricultural raw materials and favorable monsoon conditions, the insecticides, fungicides and herbicides businesses in India each saw double-digit growth. The main contributors to the positive development were the herbicide Balance® in Australia, where it was used particularly in sugarcane, and the insecticide Belt® in China.

In the **Latin America/Africa/Middle East** region, sales climbed by 16.5% to €1,486 million (2009: €1,275 million). Adjusted for currency effects, business expanded by 8.8%. Business developed very well in Latin America, especially in fungicides, herbicides and insecticides. The growth driver in the fungicides business was our innovative product Sphere® Max in Brazil and Argentina. We saw impressive growth in insecticides, especially in Brazil, with the new product Belt®, which has already been extremely well received by the market, and the insecticide Connect®. Herbicide sales rose again, mainly due to pleasing volume levels for Finale® and the corn herbicide Soberan® in Brazil. Business with seed treatments, however, was distinctly below the prior year due to weak sales in Brazil. The good growth in business in the Middle East region was partly the result of an especially strong performance in Turkey. We achieved moderate sales growth in Africa.

EBIT of the **Crop Protection** segment declined by 15.8% to €600 million (2009: €713 million). There were no special items in 2010 (2009: minus €162 million). EBIT before special items thus fell 31.4% short of the prior year's €875 million. **EBITDA** before special items for the segment fell by 21.2% to €1,025 million (2009: €1,301 million). Earnings were hampered by the lower volumes and the resulting drop in capacity utilization in the first half, and by price erosion in North America.

ENVIRONMENTAL SCIENCE, BIOSCIENCE

In the **Environmental Science, BioScience** segment, sales climbed by 23.1% in 2010 to €1,337 million (2009: €1,086 million). Adjusted for currency and portfolio effects, business increased by a substantial 15.6%.

Key Data – Environmental Science, BioScience [Table 3.12]

	2009	2010	Change	
				Fx&p adj.
	€ million	€ million	%	%
Sales	**1,086**	**1,337**	**+23.1**	**+15.6**
Environmental Science	583	650	+11.5	+5.4
BioScience	503	687	+36.6	+27.4
Sales by region				
Europe	334	351	+5.1	
North America	448	579	+29.2	
Asia/Pacific	166	208	+25.3	
Latin America/Africa/Middle East	138	199	+44.2	
EBIT	**85**	**(339)**	**.**	
Special items	*(57)*	*(526)*		
EBIT before special items*	***142***	***187***	***+31.7***	
EBITDA*	**150**	**(258)**	**.**	
Special items	*(57)*	*(526)*		
EBITDA before special items*	***207***	***268***	***+29.5***	
EBITDA margin before special items*	19.1%	20.0%		
Gross cash flow**	**119**	**(197)**	**.**	
Net cash flow**	**154**	**320**	**.**	

Fx&p adj. = currency- and portfolio-adjusted
* For definition see Chapter 4.2 "Calculation of EBIT(DA) Before Special Items."
** For definition see Chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group."

Sales of the **Environmental Science** business unit rose by 11.5% to €650 million (2009: €583 million). Adjusted for currency effects, this represented a 5.4% improvement, to which all regions contributed. Business with consumer products expanded considerably, thanks above all to the positive development in Germany. Sales of products for professional users advanced, especially those of the insecticide Ficam® and other products in Africa and the new insecticide Temprid® in the United States. Sales in France, however, were markedly lower year on year due to adverse changes in the business environment.

BioScience saw a 36.6% rise in sales to €687 million (2009: €503 million). Adjusted for currency and portfolio effects, business moved ahead strongly by 27.4%. We achieved double-digit sales growth in each of the main crops: cotton, canola, rice and vegetables. The largest increase was in our cotton seed business in North America as a result of product innovations and the recovery in the cotton market. Sales of InVigor® canola seed in North America also continued to advance, due partly to the rise in our seed prices – accompanied by price reductions for the respective canola herbicides – and partly to the higher volumes that resulted from increased crop acreages. Sales of our Arize® rice seed showed particularly good growth in Asia despite adverse weather conditions. Business with vegetable seeds moved ahead in all regions, particularly Latin America/Africa/Middle East and Asia/Pacific.

EBIT of the Environmental Science, BioScience segment fell by €424 million to minus €339 million (2009: €85 million). Special charges of €526 million in 2010 (2009: €57 million) related to an intended settlement program and legal and defense costs in connection with litigations concerning genetically modified rice (LL RICE) in the United States. EBIT before special items rose by 31.7% to €187 million (2009: €142 million). **EBITDA** before special items for the segment, at €268 million, exceeded the prior-year figure of €207 million by 29.5%, mainly on account of volume growth in both business units. BioScience also saw an overall rise in selling prices and a resulting improvement in margins, which more than offset the higher expenses for the expansion of our research and development activities.

3.3 MaterialScience

Key Data – MaterialScience [Table 3.13]

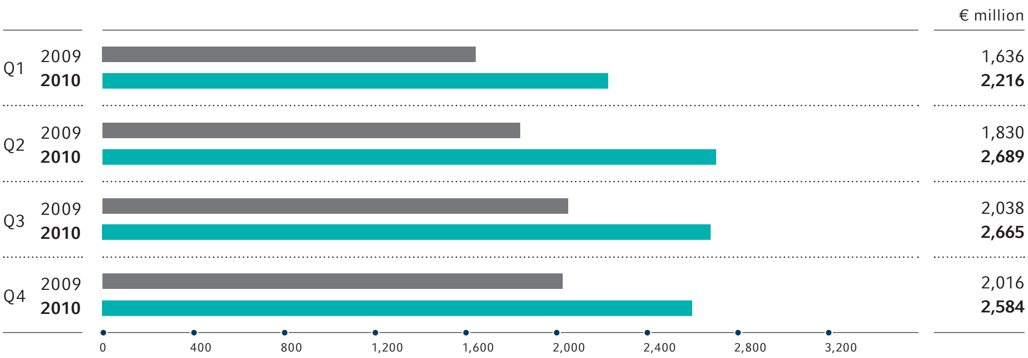
	2009	2010	Change	
				Fx&p adj.
	€ million	€ million	%	%
Sales	**7,520**	**10,154**	**+35.0**	**+30.1**
Change in sales				
Volume	−12.4%	+23.8%		
Price	−12.3%	+6.3%		
Currency	+1.6%	+4.9%		
Portfolio	+0.3%	0.0%		
Sales by business unit				
Polyurethanes	3,783	5,024	+32.8	+27.8
Polycarbonates	1,873	2,791	+49.0	+42.9
Coatings, Adhesives, Specialties	1,364	1,791	+31.3	+27.2
Industrial Operations	500	548	+9.6	+7.7
Sales by region				
Europe	3,054	3,950	+29.3	
North America	1,536	2,022	+31.6	
Asia/Pacific	1,951	2,907	+49.0	
Latin America/Africa/Middle East	979	1,275	+30.2	
EBIT	**(266)**	**780**	.	
Special items	*(140)*	*0*		
EBIT before special items*	***(126)***	***780***	.	
EBITDA*	**341**	**1,356**	.	
Special items	*(105)*	*0*		
EBITDA before special items*	***446***	***1,356***	.	
EBITDA margin before special items*	5.9%	13.4%		
Gross cash flow**	**319**	**1,058**	.	
Net cash flow**	**849**	**763**	**−10.1**	

Fx&p adj. = currency- and portfolio-adjusted
* For definition see Chapter 4.2 "Calculation of EBIT(DA) Before Special Items."
** For definition see Chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group."

Above: granules of Makrolon® high-performance polycarbonate

The positive business performance of MaterialScience in 2010 was driven by the marked recovery in the economy following the global financial and economic crisis. While business continued to be held back at the beginning of the year, sales in the final three quarters returned to pre-crisis levels. **Sales** in 2010 came in at €10,154 million, up 35.0% (Fx & portfolio adj. +30.1%) against the prior-year figure of €7,520 million. This substantial growth resulted from double-digit volume increases in all business units and regions due to considerably higher demand from all of our main customer industries. Volumes, too, thus regained pre-crisis levels. We also achieved higher selling prices overall compared with the previous year, implementing significant increases in the Asia/Pacific, Europe and Latin America/Africa/Middle East regions. Prices in North America were level with the previous year.

MaterialScience Quarterly Sales [Graphic 3.14]



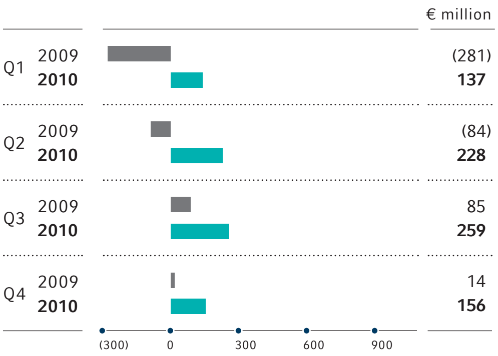
Sales of the **Polyurethanes** business unit advanced by 32.8% to €5,024 million (2009: €3,783 million). On a currency- and portfolio-adjusted basis, business improved by 27.8%. Growth was mainly attributable to significantly higher volumes in all product groups – diphenylmethane diisocyanate (MDI), toluene diisocyanate (TDI) and polyether – and in all regions. The largest increases in absolute terms were registered in Europe and Asia/Pacific, where we also significantly raised selling prices. As a result, we recorded a positive price effect overall despite price stagnation in Latin America/Africa/Middle East and North America.

Sales of the **Polycarbonates** business unit climbed by 49.0% (Fx adj. +42.9%) to €2,791 million (2009: €1,873 million). This was largely the result of the gratifying business trend in our granules product group, which saw substantial growth in volumes and selling prices in all regions. Sales of polycarbonate sheet/semi-finished products also increased. Here we benefited from higher volumes in all regions, which more than offset the overall drop in selling prices.

The **Coatings, Adhesives, Specialties** business unit posted sales of €1,791 million, up 31.3% (Fx adj. +27.2%) from the prior-year figure of €1,364 million. Growth was driven by significantly higher volumes in all product groups and regions, with rising demand in Asia/Pacific and Europe having a particularly positive effect. While selling prices were low in the first quarter, we were able to raise them as the year progressed, restoring prices for the year as a whole to 2009 levels.

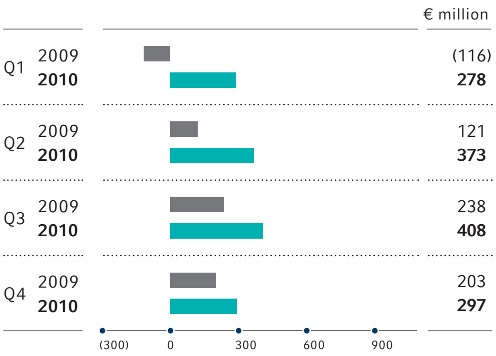
Sales of **Industrial Operations** gained 9.6% (Fx adj. +7.7%) to €548 million (2009: €500 million). In the two primary regional markets – Europe and North America – we achieved significant volume increases that more than offset the drop in prices.

MaterialScience
Quarterly EBIT [Graphic 3.15]



Q1-3 2010 figures restated

MaterialScience
Quarterly EBITDA Before Special Items [Graphic 3.16]



Q1-3 2010 figures restated

The markedly improved business situation was also reflected in earnings. **EBIT** rose to €780 million (2009: minus €266 million). There were no special items (2009: minus €140 million). **EBITDA** before special items came in well ahead of the prior year at €1,356 million (2009: €446 million), thanks mainly to substantial volume growth. We also benefited from increased selling prices for our products, which more than offset the price increases on the raw material markets. Efficiency improvements had a further positive impact.

3.4 Performance by Region

Sales by Region and Segment (by Market)

	Europe				North America			
	2009	2010			2009	2010		
	€ million	€ million	% yoy	Fx adj. % yoy	€ million	€ million	% yoy	Fx adj. % yoy
HealthCare	**6,344**	**6,375**	**+0.5**	**−1.1**	**4,634**	**4,666**	**+0.7**	**−4.9**
Pharmaceuticals	4,107	4,082	−0.6	−2.0	2,712	2,531	−6.7	−11.5
Consumer Health	2,237	2,293	+2.5	+0.8	1,922	2,135	+11.1	+4.4
CropScience	**2,540**	**2,381**	**−6.3**	**−7.7**	**1,529**	**1,535**	**+0.4**	**−6.4**
Crop Protection	2,206	2,030	−8.0	−9.6	1,081	956	−11.6	−18.4
Environmental Science, BioScience	334	351	+5.1	+4.5	448	579	+29.2	+22.7
MaterialScience	**3,054**	**3,950**	**+29.3**	**+29.2**	**1,536**	**2,022**	**+31.6**	**+24.5**
Group (incl. reconciliation)	**12,968**	**13,751**	**+6.0**	**+5.0**	**7,705**	**8,228**	**+6.8**	**+0.7**

yoy = year on year; Fx adj. = currency-adjusted

4. Earnings; Asset and Financial Position of the Bayer Group

4.1 Earnings Performance of the Bayer Group

Bayer Group Summary Income Statements [Table 3.15]

	2009	2010	Change
	€ million	€ million	%
Sales	**31,168**	**35,088**	**+12.6**
Cost of goods sold	15,135	17,103	+13.0
Selling expenses	7,923	8,803	+11.1
Research and development expenses	2,746	3,053	+11.2
General administration expenses	1,623	1,647	+1.5
Other operating income and expenses – net	(735)	(1,752)	.
EBIT [operating result]	**3,006**	**2,730**	**−9.2**
Non-operating result	**(1,136)**	**(1,009)**	**+11.2**
Income before income taxes	**1,870**	**1,721**	**−8.0**
Income taxes	(511)	(411)	−19.6
Income after taxes	**1,359**	**1,310**	**−3.6**
of which attributable to non-controlling interest	0	9	.
of which attributable to Bayer AG stockholders (net income)	1,359	1,301	−4.3

Sales of the Bayer Group rose by 12.6% from the previous year to €35,088 million (2009: €31,168 million), thanks largely to the recovery in the MaterialScience business. Adjusted for currency and portfolio effects, sales grew by 8.0%.

[Table 3.14]

Asia/Pacific				Latin America/Africa/Middle East				Total			
2009	2010			2009	2010			2009	2010		
€ million	€ million	% yoy	Fx adj. % yoy	€ million	€ million	% yoy	Fx adj. % yoy	€ million	€ million	% yoy	Fx adj. % yoy
2,677	**3,269**	**+22.1**	**+9.7**	**2,333**	**2,603**	**+11.6**	**+8.9**	**15,988**	**16,913**	**+5.8**	**+1.1**
2,136	2,629	+23.1	+10.8	1,512	1,666	+10.2	+9.3	10,467	10,908	+4.2	−0.2
541	640	+18.3	+4.9	821	937	+14.1	+8.3	5,521	6,005	+8.8	+3.5
1,028	**1,229**	**+19.6**	**+6.4**	**1,413**	**1,685**	**+19.2**	**+10.9**	**6,510**	**6,830**	**+4.9**	**−1.1**
862	1,021	+18.4	+5.3	1,275	1,486	+16.5	+8.8	5,424	5,493	+1.3	−4.7
166	208	+25.3	+12.3	138	199	+44.2	+30.4	1,086	1,337	+23.1	+16.5
1,951	**2,907**	**+49.0**	**+39.3**	**979**	**1,275**	**+30.2**	**+23.6**	**7,520**	**10,154**	**+35.0**	**+30.1**
5,712	**7,481**	**+31.0**	**+19.3**	**4,783**	**5,628**	**+17.7**	**+12.5**	**31,168**	**35,088**	**+12.6**	**+7.7**

The cost of goods sold advanced by 13.0% to €17,103 million. This was mainly due to a considerable increase at MaterialScience, which in turn resulted chiefly from the growth in volumes and higher average raw material prices for the year. The ratio of the cost of goods sold to total sales was 48.7% (2009: 48.6%). Selling expenses rose by 11.1% year on year to €8,803 million (2009: €7,923 million), and were thus equivalent to 25.1% (2009: 25.4%) of sales. HealthCare accounted for the greater part of the increase. We raised our research and development expenses in 2010 by a further 11.2% to €3,053 million (2009: €2,746 million). The ratio of R&D expenses to sales was 8.7% (2009: 8.8%). General administration expenses were just 1.5% higher at €1,647 million (2009: €1,623 million). The negative balance of other operating income and expenses, at €1,752 million, resulted mainly from special charges related to impairments, litigations and restructuring measures (see also Chapter 4.2 "Calculation of EBIT(DA) Before Special Items").

EBIT for 2010 came in at €2,730 million (2009: €3,006 million).

The non-operating result improved by €127 million to minus €1,009 million (2009: minus €1,136 million). It included lower net interest expense of €499 million (2009: €548 million), interest cost of €372 million (2009: €436 million) for pension and other provisions, a €59 million (2009: €59 million) net loss from investments in affiliated companies and a €70 million (2009: €92 million) net exchange loss. The improvement in the net interest position was mainly due to the reduction in financial debt. The decrease in interest expense for pension and other provisions was mainly the result of higher returns on pension plan assets, which are offset against the interest cost for defined benefit plans.

Tax expense in 2010 amounted to €411 million (2009: €511 million). Income after taxes came in at €1,310 million (2009: €1,359 million). Income attributable to non-controlling interest amounted to €9 million (2009: €0 million). Bayer Group net income for 2010 was €1,301 million (2009: €1,359 million).

4.2 Calculation of EBIT(DA) Before Special Items

Key performance indicators for the Bayer Group are EBIT before special items and EBITDA before special items. These indicators are reported in order to allow a more accurate assessment of business operations. The special items – comprising effects that are non-recurring or do not regularly recur or attain similar magnitudes – are detailed in the following table. "EBITDA," "EBITDA before special items" and "EBIT before special items" are not defined in the International Financial Reporting Standards and should therefore be regarded only as supplementary information. The company considers EBITDA before special items to be a more suitable indicator of operating performance since it is not affected by depreciation, amortization, impairments or special items. By reporting this indicator, the company aims to give readers a clearer picture of the results of operations and ensure greater comparability of data over time. The EBITDA margin before special items, which is the ratio of EBITDA before special items to sales, serves as a relative indicator for the internal and external comparison of operational earning power.

Depreciation, amortization and impairments rose by 26.6% in 2010 to €3,556 million (2009: €2,809 million), comprising €2,308 million (2009: €1,537 million) in amortization and impairments of intangible assets and €1,248 million (2009: €1,272 million) in depreciation and impairments of property, plant and equipment. Included here were impairments of €985 million, of which €78 million did not constitute special items. Impairments and write-downs also included a €56 million write-down of other receivables.

Special Items Reconciliation [Table 3.16]

	EBIT* 2009	EBIT* 2010	EBITDA** 2009	EBITDA** 2010
	€ million	€ million	€ million	€ million
After special items	**3,006**	**2,730**	**5,815**	**6,286**
HealthCare	**372**	**1,169**	**320**	**289**
Schering integration	87	0	79	0
of which gain from divestitures	*(114)*	*0*	*(114)*	*0*
Impairments and write-downs	32	930	0	56
Restructuring	47	62	35	56
Litigations	180	177	180	177
Additional funding for the pension assurance association	26	0	26	0
CropScience	**219**	**526**	**197**	**526**
Restructuring	177	0	155	0
Litigations	35	526	35	526
Additional funding for the pension assurance association	7	0	7	0
MaterialScience	**140**	**0**	**105**	**0**
Restructuring	130	0	95	0
Additional funding for the pension assurance association	10	0	10	0
Reconciliation	**35**	**27**	**35**	**0**
Litigations	10	0	10	0
Additional funding for the pension assurance association	25	0	25	0
Impairments and write-downs	0	27	0	0
Total special items	**766**	**1,722**	**657**	**815**
Before special items	**3,772**	**4,452**	**6,472**	**7,101**

* EBIT = operating result as per income statements
** EBITDA = EBIT plus amortization and impairment losses on intangible assets and depreciation and impairment losses on property, plant and equipment, minus impairment loss reversals

4.3 Core Earnings Per Share

Earnings per share according to IFRS are affected by the purchase price allocation for acquisitions and other special factors. To enhance comparability, we also determine core net income after eliminating amortization and impairments of intangible assets, impairments of property, plant and equipment, and special items in EBITDA including the related tax effects.

From this core net income we calculate core earnings per share in the same way as earnings per share. Core earnings per share form the basis for our dividend policy. Core earnings per share in 2010 amounted to €4.19 (2009: €3.64).

Core Earnings Per Share [Table 3.17]

	2009	2010
	€ million	€ million
EBIT as per income statements	**3,006**	**2,730**
Amortization and impairment losses on intangible assets	1,537	2,308
Impairment losses on property, plant and equipment	88	53
Special items (other than impairment losses)	657	815
Core EBIT	**5,288**	**5,906**
Non-operating result (as per income statements)	(1,136)	(1,009)
Income taxes (as per income statements)	(511)	(411)
Tax effects related to impairments and special items	(685)	(1,012)
Income after taxes attributable to non-controlling interest (as per income statements)	0	(9)
Core net income	**2,956**	**3,465**
Financing expenses for the mandatory convertible bond, net of tax effects	47	0
Adjusted core net income	**3,003**	**3,465**
	Shares	Shares
Weighted average number of issued ordinary shares	**801,050,237**	**826,947,808**
(Potential) shares (to be) issued upon conversion of the mandatory convertible bond	24,955,936	0
Adjusted weighted average total number of issued and potential ordinary shares	**826,006,173**	**826,947,808**
Core earnings per share (€)	**3.64**	**4.19**

The calculation of earnings per share according to IFRS is explained in Note [16] to the consolidated financial statements. The (adjusted) core net income, core earnings per share and core EBIT are not defined in IFRS.

4.4 Value Management

CASH VALUE ADDED-BASED SYSTEM

One of the prime objectives of the Bayer Group is to sustainably increase enterprise value. We use a Group-wide value management system to plan, control and monitor our businesses. An important value-based indicator is the cash value added (CVA), which shows the degree to which the cash flows needed to cover the costs of equity and debt and of reproducing depletable assets have been generated. If the CVA is positive, the respective company or business entity has exceeded the minimum requirements. If it is negative, the anticipated capital and asset reproduction costs have not been earned. The CVA is an indicator for a single reporting period. For a year-on-year comparison we therefore use our second central steering parameter for value management, the delta CVA, which is the difference between the CVAs of two consecutive periods. A positive delta CVA denotes an increase in the company's value.

The value-based indicators aid management's decision-making, especially regarding strategic portfolio optimization and the allocation of resources for acquisitions and capital expenditures. The focus at the operational level is on the key drivers of enterprise value: growth (sales), cost efficiency (EBITDA) and capital efficiency (working capital, capital expenditures), since these directly affect value creation.

CALCULATING THE COST OF CAPITAL

Bayer calculates the cost of capital according to the debt/equity ratio at the beginning of the year using the weighted average cost of capital (WACC) formula. The cost of equity capital is the return expected by stockholders, computed from capital market information. The cost of debt used in calculating WACC is based on the terms for ten-year Eurobonds issued by industrial companies with an "A-"rating.

Weighted average cost of capital for the Bayer Group

7.8%

To take into account the different risk and return profiles of our principal businesses, we calculate individual capital cost factors after income taxes for each of our subgroups. In 2010 these were 8.1% (2009: 8.0%) for HealthCare, 7.5% (2009: 7.5%) for CropScience and 7.1% (2009: 7.0%) for MaterialScience. The minimum return required for the Group in 2010 was 7.8% (2009: 7.7%).

GROSS CASH FLOW, CASH VALUE ADDED AND CASH FLOW RETURN ON INVESTMENT AS PERFORMANCE YARDSTICKS

The gross cash flow as published in our statement of cash flows is the measure of our internal financing capability. Bayer has chosen this parameter because it is relatively free of accounting influences and is therefore a more meaningful performance indicator.

Taking into account the costs of capital and of reproducing depletable assets, we determine the gross cash flow hurdle. If the gross cash flow hurdle is equaled or exceeded, the CVA is positive and thus the required return on equity and debt plus the cost of asset reproduction has been earned.

In calculating the hurdle we made methodical changes compared to the previous year, mainly relating to the reproduction requirements for intangible assets. In addition, material participating interests of direct relevance to business operations are included in the capital invested starting in 2010. The figures for 2009 have been restated accordingly.

The profitability of the Group and of its individual business entities is measured by the cash flow return on investment (CFROI). This is the ratio of the gross cash flow to the capital invested, which is derived from the statement of financial position and basically comprises the property, plant and equipment and intangible assets required for operations – stated at cost of acquisition or construction – plus working capital, less interest-free liabilities (such as current provisions). To reduce fluctuations in the capital invested, the CFROI is computed on the basis of the average figure for the respective year.

The CFROI hurdle for 2010 was 10.0% (2009: 9.9%), while the corresponding gross cash flow hurdle was €4,384 million (2009: €4,280 million).

Actual gross cash flow came in at €4,771 million, exceeding the hurdle by 8.8%. Thus in 2010 we earned our entire capital and asset reproduction costs, and the positive CVA of €387 million shows that Bayer not only exceeded the minimum return and reproduction requirements but earned a premium on the capital invested. Given the previous year's CVA of €378 million, the Bayer Group therefore recorded a positive delta CVA of €9 million, showing that it created slightly more value than in the previous year. The CFROI for 2010 amounted to 10.9% (2009: 10.7%).

Positive delta CVA
=
value created

HealthCare and MaterialScience exceeded their target returns including asset reproduction, while CropScience was €335 million below the gross cash flow hurdle. The CFROI for HealthCare was 12.8% (2009: 13.6%). CropScience was below the previous year with a CFROI of 5.9% (2009: 11.6%). MaterialScience recorded a CFROI of 11.0% (2009: 3.4%).

Value Management Indicators by Subgroup [Table 3.18]

	HealthCare		CropScience		MaterialScience		Bayer Group	
	2009	2010	2009	2010	2009	2010	2009	2010
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Gross cash flow hurdle (GCF hurdle)	2,258	2,291	822	881	960	973	4,280	4,384
Gross cash flow* (GCF)	3,153	2,948	1,043	546	319	1,058	4,658	4,771
Cash value added (CVA)	895	657	221	(335)	(641)	85	378	387
Delta cash value added (delta CVA)	(13)	(238)	(150)	(556)	(582)	726	(836)	9
CFROI hurdle	9.7%	9.9%	9.6%	9.4%	9.9%	10.6%	9.9%	10.0%
Cash flow return on investment (CFROI)	13.6%	12.8%	11.6%	5.9%	3.4%	11.0%	10.7%	10.9%
Average capital invested	23,261	23,022	8,967	9,189	9,442	9,589	43,566	43,622

2009 figures restated
*For definition see Chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group."

4.5 Liquidity and Capital Expenditures of the Bayer Group

Bayer Group Summary Statements of Cash Flows [Table 3.19]

	2009	2010
	€ million	€ million
Gross cash flow*	**4,658**	**4,771**
Changes in working capital/other non-cash items	717	1,002
Net cash provided by (used in) operating activities (net cash flow)	**5,375**	**5,773**
Net cash provided by (used in) investing activities	**(1,501)**	**(2,414)**
Net cash provided by (used in) financing activities	**(3,246)**	**(3,230)**
Change in cash and cash equivalents due to business activities	**628**	**129**
Cash and cash equivalents at beginning of period	**2,094**	**2,725**
Change due to exchange rate movements and to changes in scope of consolidation	3	(14)
Cash and cash equivalents at end of period	**2,725**	**2,840**

2009 figures restated

* Gross cash flow = income after taxes, plus income taxes, plus non-operating result, minus income taxes paid or accrued, plus depreciation, amortization and impairment losses, minus impairment loss reversals, plus/minus changes in pension provisions, minus gains/plus losses on retirements of noncurrent assets, minus gains from the remeasurement of already held assets in step acquisitions. The change in pension provisions includes the elimination of non-cash components of the operating result (EBIT). It also contains benefit payments during the year.

OPERATING CASH FLOW

Gross cash flow rose by 2.4% in 2010 to €4,771 million (2009: €4,658 million). It improved significantly at MaterialScience due to the growth in business, but declined markedly at HealthCare and CropScience, partly due to higher litigation-related expenses. We reduced funds tied up in working capital by a substantial €1.0 billion. Net cash flow of the Group rose by 7.4% to €5,773 million (2009: €5,375 million). Net cash flow reflected income tax payments of €838 million (2009: €500 million).

INVESTING CASH FLOW

Net cash outflow for investing activities in 2010 totaled €2,414 million (2009: €1,501 million). Cash outflows for property, plant and equipment and intangible assets were 3.9% lower at €1,514 million (2009: €1,575 million). Of this amount, HealthCare accounted for €573 million (2009: €528 million), CropScience for €302 million (2009: €341 million) and MaterialScience for €498 million (2009: €504 million). These outflows included expenditures for the expansion of our polymers production site in Shanghai, China, and our production capacities in Berkeley, California, United States, as well as expenses related to a licensing and development agreement in the area of aesthetic dermatology and a strategic alliance in the field of cancer research. The €31 million in cash outflows for acquisitions included MaterialScience's purchase of Artificial Muscle, Inc., United States, in March 2010. The cash outflows for acquisitions in the previous year came to €308 million. Among the cash inflows in 2010 were €101 million (2009: €70 million) from divestitures and €53 million (2009: €56 million) in interest and dividends received. The increase in cash outflows for current financial assets mainly resulted from €623 million (2009: €11 million) in monetary investments on the capital market.

The principal strategically relevant capital expenditures for property, plant and equipment in the operating segments of the Bayer Group in 2010 and 2009 are listed in the following table:

Capital Expenditures for Property, Plant and Equipment [Table 3.20]

Segment	Description
Capital expenditures 2010	
Pharmaceuticals	Expansion of production capacities for new Kogenate® formulations in Berkeley, California, U.S.A.
	Installation of packaging capacities for the YAZ® product family, Berlin, Germany
	Capacity expansion for contrast media, Bergkamen, Germany
Consumer Health	Expansion of production and packaging capacities for vitamin tablets, Myerstown, Pennsylvania, U.S.A.
Crop Protection	Expansion of production capacity for fungicides in Kansas City, Missouri, U.S.A. and Dormagen, Germany
	Capacity expansions for insecticidal active ingredients in Dormagen, Germany
Environmental Science,	Expansion of research facilities in Nunhem, Netherlands
BioScience	Extension to a research laboratory in Ghent, Belgium
	Capacity expansion for the production of vegetable seeds in Parma, Idaho, U.S.A.
MaterialScience	Construction of a "world-scale" TDI production complex in Shanghai, China
	MakroColor production plant in Noida, India
	Construction of a polyurethanes systems house in Moscow, Russia
	Installation of an NaCl electrolyzer with an oxygen depolarized cathode for demonstration purposes in Uerdingen, Germany
Capital expenditures 2009	
Pharmaceuticals	Expansion of the production facility for contrast agents in Bergkamen, Germany
	Expansion and modernization of the Kogenate® facility in Berkeley, California, U.S.A.
	Expansion of production capacities for the YAZ® product family in Berlin, Germany
	Expansion of production capacity in Jakarta, Indonesia
Consumer Health	Expansion of the production facility for vitamins in Myerstown, Pennsylvania, U.S.A.
	Construction of a new distribution center in Lerma, Mexico, to consolidate storage capacities existing in different parts of Mexico
Crop Protection	Capacity expansions for herbicidal active ingredients in Frankfurt am Main and Knapsack, Germany, and Muskegon, Michigan, U.S.A.
	Expansion of production capacity for fungicides in Dormagen, Germany and Kansas City, Missouri, U.S.A.
	Expansion of production capacity for high-activity herbicides in Dormagen, Germany and Kansas City, Missouri, U.S.A.
	Expansion of formulating capacity for non-herbicides in Belford Roxo, Brazil
	Expansion of production capacity for fungicides in Muttenz, Switzerland
Environmental Science,	Capacity expansion for the production of vegetable seeds in Parma, Idaho, U.S.A.
BioScience	Extension to a BioScience research laboratory in Ghent, Belgium
MaterialScience	Construction of a "world-scale" TDI production complex in Shanghai, China
	Production facility for polyisocyanates in Ankleshwar, India
	Roll-to-roll coating line in Leverkusen, Germany
	Construction of a systems house in Guangzhou, China
	Nitrous oxide reduction unit at the nitric acid production facility in Dormagen, Germany
	Construction of a pilot plant for carbon nanotubes in Leverkusen, Germany
	EcoCommercial Building in Noida, India

FINANCING CASH FLOW

Net cash outflow for financing activities in 2010 amounted to €3,230 million (2009: €3,246 million), including net loan repayments of €1,544 million (2009: €1,442 million). Net interest payments were 34.1% lower at €517 million (2009: €785 million), partly due to the reduction in financial debt. There was a €1,160 million outflow for "dividend payments and withholding tax on dividends" (2009: €973 million).

LIQUID ASSETS AND NET FINANCIAL DEBT

Net Financial Debt [Table 3.21]

	Dec. 31, 2009	Dec. 31, 2010
	€ million	€ million
Bonds and notes / promissory notes	8,301	8,209
of which hybrid bond	1,267	1,303
Liabilities to banks	3,251	2,271
Liabilities under finance leases	550	562
Liabilities from derivatives	578	529
Other financial liabilities	178	196
Positive fair values of hedges of recorded transactions	(426)	(331)
Financial debt	**12,432**	**11,436**
Cash and cash equivalents	(2,725)	(2,840)
Current financial assets	(16)	(679)
Net financial debt	**9,691**	**7,917**

Net financial debt of the Bayer Group declined substantially in 2010, from €9.7 billion to €7.9 billion (-18.3%). This was attributable to cash inflows from operating activities, while negative currency effects came to €0.5 billion. As of December 31, 2010 the Group had cash and cash equivalents of €2.8 billion (2009: €2.7 billion). Financial liabilities amounted to €11.4 billion (2009: €12.4 billion), including the €1.3 billion subordinated hybrid bond issued in July 2005. Net financial debt should be viewed against the fact that Moody's and Standard & Poor's treat 75% and 50%, respectively, of the hybrid bond as equity. Unlike conventional borrowings, the hybrid bond thus only has a limited effect on the Group's rating-specific debt indicators. Our noncurrent financial liabilities declined in 2010 from €11.5 billion to €9.9 billion, while current financial liabilities rose from €1.5 billion to €1.9 billion.

4.6 Asset and Capital Structure of the Bayer Group

Bayer Group Summary Statements of Financial Position [Table 3.22]

	Dec. 31, 2009	Dec. 31, 2010	Change
	€ million	€ million	%
Noncurrent assets	34,049	33,188	−2.5
Current assets	16,993	18,318	+7.8
Total assets	51,042	51,506	+0.9
Equity	18,951	18,896	−0.3
Noncurrent liabilities	23,118	21,775	−5.8
Current liabilities	8,973	10,835	+20.8
Liabilities	32,091	32,610	+1.6
Total equity and liabilities	51,042	51,506	+0.9

Total assets increased in 2010 by 0.9% to €51.5 billion. Noncurrent assets declined by €0.9 billion to €33.2 billion, mainly due to amortization and impairments of intangible assets. Noncurrent assets included goodwill of €9.0 billion (2009: €8.7 billion), the increase being mainly due to shifts in exchange rates. Current assets rose by €1.3 billion compared with the previous year, to €18.3 billion.

Equity was almost level with the prior year at €18.9 billion, bolstered mainly by the €1.3 billion net income and €0.6 billion in positive currency effects. The €1.2 billion dividend payment made in 2010 and the €0.7 billion increase in pension obligations – recognized outside profit or loss – had the opposite effect. Our equity ratio (equity coverage of total assets) was 36.7% as of December 31, 2010 (2009: 37.1%).

Liabilities increased by €0.5 billion compared with December 31, 2009, to €32.6 billion, largely because of the increase in pension obligations and the allocations to provisions for litigations. Current and noncurrent financial liabilities declined by €1.1 billion to €11.8 billion.

Net Pension Liability [Table 3.23]

	Dec. 31, 2009	Dec. 31, 2010
	€ million	€ million
Provisions for pensions and other post-employment benefits	6,517	7,305
Benefit plan assets in excess of obligation	(100)	(76)
Net pension liability	**6,417**	**7,229**

The net pension liability increased from €6.4 billion to €7.2 billion in 2010, due especially to lower long-term capital market interest rates. Provisions for pensions and other post-employment benefits rose from €6.5 billion to €7.3 billion. Benefit plan assets in excess of obligations, reflected in the statement of financial position as “Other receivables,” came to €0.1 billion (2009: €0.1 billion).

Ratios [Table 3.24]

		2009	2010
Cost of sales ratio (%)	Cost of goods sold / Sales	48.6	48.7
R&D expense ratio (%)	Research and development expenses / Sales	8.8	8.7
Return on sales (%)	Income after taxes / Sales	4.4	3.7
EBIT margin (%)	EBIT / Sales	9.6	7.8
EBITDA margin before special items (%)	EBITDA before special items / Sales	20.8	20.2
Asset intensity (%)	Property, plant and equipment + intangible assets / Total assets	60.6	58.2
D&A/capex ratio (%)	Depreciation and amortization* / Capital expenditures*	159.4	156.8
Liability structure (%)	Current liabilities / Liabilities	28.0	33.2
Gearing	Net debt + pension provisions / Equity	0.9	0.8
Free operating cash flow (€ million)	Net operating cash flow less cash outflows for property, plant and equipment and intangible assets	3,800	4,259
Inventory turnover	Cost of goods sold / Inventories	2.5	2.8
Receivables turnover	Sales / Trade accounts receivable	5.1	5.3
Payables turnover	Cost of goods sold / Trade accounts payable	5.5	4.9
Equity ratio (%)	Equity / Total assets	37.1	36.7
Return on equity (%)	Income after taxes / Average equity	7.7	6.9
Return on assets (%)	Income before taxes and interest expense / Average total assets for the year	6.1	5.1

* property, plant and equipment + intangible assets

5. Earnings; Asset and Financial Position of Bayer AG

Bayer AG is the parent corporation of the Bayer Group and functions as a management holding company. The principal management functions for the entire Group are performed by the Board of Management of Bayer AG. These include strategic planning, resource allocation, executive management and financial management. The performance of Bayer AG is largely determined by the business performance of the Bayer Group.

The financial statements of Bayer AG were prepared in accordance with the German Commercial Code (HGB) and Stock Corporation Act (AktG). The provisions of the German Accounting Law Modernization Act (BilMoG), which came into force in 2009, were applied as in the previous year.

5.1 Earnings Performance of Bayer AG

Bayer AG Summary Income Statements according to the German Commercial Code [Table 3.25]

	2009	2010
	€ million	€ million
Income from investments in affiliated companies – net	2,984	2,045
Interest expense – net	(683)	(516)
Other non-operating income – net	276	128
Other operating income	169	165
General administration expenses	177	200
Other operating expenses	142	173
Income before income taxes	**2,427**	**1,449**
Income taxes	(201)	(204)
Net income	**2,226**	**1,245**
Allocation to retained earnings	(1,068)	(5)
Distributable profit	**1,158**	**1,240**

The earnings performance of Bayer AG essentially depends on the earnings of its subsidiaries and on the income and expenses relating to corporate financing activities.

In fiscal 2010, income from investments in affiliated companies was €2,045 million (2009: €2,984 million). Of this amount, Bayer Schering Pharma AG accounted for €1,163 million (2009: €2,349 million), Bayer CropScience AG for €569 million (2009: €604 million) and Bayer MaterialScience AG for €30 million (2009: minus €234 million). The decline at Bayer Schering Pharma AG was due to the fact that the prior-year figure included a €608 million gain in connection with the agreement with Genzyme on the sale of intangible assets. In addition, business operations in 2010 resulted in a €154 million rise in selling expenses and a €230 million increase in research and development expenses. One-time charges related to the transfer of pension obligations diminished income by €80 million. At Bayer CropScience AG, a decrease in the operating result was largely offset by an improvement in the non-operating result. Income transferred from Bayer MaterialScience AG increased as a result of the improvement in the economic situation. Further significant earnings components were €266 million (2009: €219 million) from Bayer Gesellschaft für Beteiligungen mbH, our holding company for foreign subsidiaries; €177 million (2009: €107 million) from Bayer Animal Health GmbH; and minus €135 million (2009: minus €135 million) from Bayer HealthCare AG, the holding company for the global HealthCare business.

Net interest expense amounted to €516 million, which was €167 million less than in the previous year. This was mainly due to the further drop in interest rates and partly to a decline in net debt. Of the net interest expense, €382 million (2009: €459 million) was attributable to transactions with third parties and €134 million (2009: €224 million) to intra-Group transactions.

Other non-operating income and expenses yielded a positive balance of €128 million, down from €276 million in the previous year. This was mainly due to a €136 million decline in income from the translation of foreign currency receivables and payables and from currency derivatives.

The balance of miscellaneous operating income and expenses relating to Bayer AG's performance of its functions as a holding company was minus €8 million (2009: plus €27 million), while general administration expenses amounted to €200 million (2009: €177 million). Whereas the increase in administration expenses was caused by higher pension expenses and an increase in personnel expenses resulting from the temporarily larger number of members of the Board of Management, the other items were impacted by a write-down on buildings.

Pre-tax income declined by €978 million to €1,449 million. Tax expense amounted to €204 million (2009: €201 million). After deduction of taxes, net income came in at €1,245 million. Of this amount, €5 million was allocated to other retained earnings and €1,240 million was recognized as the distributable profit.

Proposed dividend
€1.50
per share

The Board of Management and Supervisory Board will propose to the Annual Stockholders' Meeting on April 29, 2011 that the distributable profit be used to pay a dividend of €1.50 per share (826,947,808 shares) on the capital stock of €2,117 million entitled to the dividend for 2010.

5.2 Asset and Financial Position of Bayer AG

Bayer AG Summary Statements of Financial Position according to the German Commercial Code [Table 3.26]

	Dec. 31, 2009	Dec. 31, 2010
	€ million	€ million
ASSETS		
Noncurrent assets		
Intangible assets, property, plant and equipment	395	347
Financial assets	34,594	34,267
	34,989	**34,614**
Current assets		
Receivables from subsidiaries	1,928	2,040
Remaining receivables, other assets	400	464
Cash and cash equivalents, marketable securities	1,862	2,131
	4,190	**4,635**
Total assets	**39,179**	**39,249**
EQUITY AND LIABILITIES		
Equity	**14,391**	**14,478**
Provisions	**3,258**	**3,328**
Other liabilities		
Bonds and notes, liabilities to banks	7,029	5,842
Payables to subsidiaries	13,965	15,149
Remaining liabilities	536	452
	21,530	**21,443**
Total equity and liabilities	**39,179**	**39,249**

The asset and liability structure of Bayer AG is dominated by its role as a holding company in managing the subsidiaries and financing corporate activities. This is primarily reflected in the high level of investments in affiliated companies and of receivables from, and payables to, Group companies.

Total assets of Bayer AG were at the previous year's level of €39.2 billion. A €0.4 billion decline in noncurrent assets was offset by an increase of the same amount in current assets.

Property, plant and equipment and intangible assets remained virtually unchanged, while financial assets declined by just €0.3 billion to €34.3 billion. Financial assets included investments in subsidiaries amounting to €33.7 billion (2009: €34.1 billion), or 85.9% (2009: 87.1%) of total assets.

Receivables from subsidiaries amounted to €2.0 billion (2009: €1.9 billion), while payables to subsidiaries totaled €15.1 billion (2009: €14.0 billion). These amounts accounted for 5.2% of total assets and 38.6% of total equity and liabilities, respectively.

Of the unchanged amount of €39.2 billion in total assets, €14.5 billion (2009: €14.4 billion) was equity-financed. The equity ratio rose from 36.7% to 36.9%. Equity was increased by the €1,245 million net income, but diminished by the €1,158 million dividend payment for 2009.

Provisions increased by €0.1 billion compared with the start of the year to €3.3 billion because of higher provisions for taxes.

Other liabilities were almost unchanged at €21.4 billion (net of deductible receivables; 2009: €21.5 billion). However, the financial debt included here declined by €1.3 billion to €23.0 billion. The decrease included a €1.2 billion drop in external financial debt, comprising a €0.9 billion reduction in liabilities to banks and the repayment of a €0.3 billion bond issued in 2007.

6. Takeover-Relevant Information

REPORT PURSUANT TO SECTIONS 289 PARAGRAPH 4 AND 315 PARAGRAPH 4 OF THE GERMAN COMMERCIAL CODE (HGB)

The capital stock of Bayer AG amounted as of December 31, 2010 to €2,117 million, divided into 826,947,808 no-par bearer shares. The capital stock and the number of shares were thus unchanged from the end of the previous year. Each share confers one voting right.

A small number of shares may be subject to temporary trading restrictions, such as retention periods, in connection with employee stock participation programs.

INTERNET

We publish voting rights announcements at WWW.INVESTOR.BAYER.COM/STOCK/OWNERSHIP-STRUCTURE/VOTING-RIGHTS

We received no notifications in 2010 of direct or indirect holdings of shares in Bayer AG that exceed 10% of the capital stock. The company thus is not in possession of any notifications of holdings that exceed 10% of the capital stock.

Pursuant to Section 84, Paragraph 1 of the German Stock Corporation Act (AktG), the members of the Board of Management are appointed and dismissed by the Supervisory Board. Since Bayer AG falls within the scope of the German Codetermination Act, the appointment or dismissal of members of the Board of Management requires a majority of two thirds of the votes of the members of the Supervisory Board on the first ballot. If no such majority is achieved, the appointment may be approved pursuant to Section 31, Paragraph 3 of the Codetermination Act on a second ballot by a simple majority of the votes of the members of the Supervisory Board. If the required majority still is not achieved, a third ballot is held. Here again, a simple majority of the votes suffices, but in this ballot the Chairman of the Supervisory Board has two votes pursuant to Section 31, Paragraph 4 of the Codetermination Act. Under Section 6, Paragraph 1 of the Articles of Incorporation of Bayer AG, the Board of Management must comprise at least two members. The

Supervisory Board may appoint one member to be Chairman of the Board of Management pursuant to Section 84, Paragraph 2 of the German Stock Corporation Act or Section 6, Paragraph 1 of the Articles of Incorporation.

Under Section 179, Paragraph 1 of the German Stock Corporation Act, amendments to the Articles of Incorporation require a resolution of the Stockholders' Meeting. Pursuant to Section 179, Paragraph 2 of the German Stock Corporation Act, this resolution must be passed by a majority of three quarters of the voting capital represented at the meeting, unless the Articles of Incorporation provide for a different majority. However, where an amendment relates to a change in the object of the company, the Articles of Incorporation may only specify a larger majority. Section 17, Paragraph 2 of the Articles of Incorporation of Bayer AG utilizes the scope for deviation pursuant to Section 179, Paragraph 2 of the German Stock Corporation Act and provides that resolutions may be passed by a simple majority of the votes or, where a capital majority is required, by a simple majority of the capital.

Provisions of the Articles of Incorporation concerning Authorized Capital I and Authorized Capital II are entered in the commercial register of Bayer AG. With the approval of the Supervisory Board and until April 29, 2015, the Board of Management may use the Authorized Capital I to increase the capital stock by up to a total of €530 million. New shares may be issued against cash contributions and/or contributions in kind, but capital increases against contributions in kind may not exceed a total of €423 million. If the Authorized Capital I is used to issue shares in return for cash contributions, stockholders must normally be granted subscription rights. The Board of Management may only exclude stockholders' subscription rights to shares issued out of the Authorized Capital I that do not represent more than 20% of the existing capital stock. Absent a further resolution on the exclusion of stockholders' subscription rights, the Board of Management also may only exclude stockholders' subscription rights to shares issued under other authorizations regarding capital measures (Authorized Capital II, bonds with warrants or convertible bonds, purchase and sale of own shares) provided that such shares do not in total represent more than 20% of the existing capital stock.

With the approval of the Supervisory Board and until April 29, 2015, the Board of Management is also authorized to increase the capital by up to €212 million in one or more installments by issuing shares out of the Authorized Capital II in exchange for cash contributions. The stockholders must normally be granted subscription rights. However, the Board of Management is authorized, with the approval of the Supervisory Board, to exclude subscription rights for stockholders provided the capital increase out of the Authorized Capital II does not exceed 10% of the capital stock existing at the time this authorization becomes effective or the time this authorization is exercised and the issue price of the new shares is not significantly below the market price of the already listed shares.

The 2010 Annual Stockholders' Meeting adopted a resolution creating conditional capital of €212 million in connection with an authorization for the issuance of bonds with warrants or convertible bonds, profit-sharing rights or profit participation bonds (collectively referred to as "bonds") with a total face value of €6 billion. The Board of Management may, with the consent of the Supervisory Board and under certain conditions, exclude the bond subscription rights that would otherwise be granted to stockholders. One of the conditions is that the total amount of the shares required to service the bonds does not exceed 10% of the capital stock. Any other shares issued without granting subscription rights to the stockholders in direct or analogous application of Section 186, Paragraph 3, Sentence 4 of the German Stock Corporation Act shall be credited against this 10% limit. Further, the 2010 Annual Stockholders' Meeting authorized the Board of Management to purchase and sell company shares representing up to 10% of the capital stock. This authorization expires on April 29, 2015.

A material agreement that is subject to the condition precedent of a change of control pertains to the undrawn €3.5 billion syndicated credit facility arranged by Bayer AG and its U.S. subsidiary Bayer Corporation on March 31, 2005, which is available until 2012. The participating banks are entitled to terminate the credit facility in the event of a change of control at Bayer and demand repayment of any loans that may have been granted under this facility up to that time.

In addition, the terms of the €3.8 billion (as of December 31, 2010) in notes issued by Bayer in the years 2006 to 2010 under its multi-currency Euro Medium Term Notes program also contain a change-of-control clause. Holders of these notes have the right to demand the redemption of their notes by Bayer AG in the event of a change of control if Bayer AG's credit rating is downgraded within 120 days after such change of control becomes effective.

Agreements exist for members of the Board of Management in compliance with Section 4.2.3 of the German Corporate Governance Code to cover the eventuality of a takeover offer being made for Bayer AG. Under these agreements, payments promised in the event of early termination of the service contract of a Board of Management member due to a change of control are limited to the value of three years' compensation and may not compensate more than the remaining term of the contract.

The above arrangement does not apply to the service contract of a Board of Management member that was concluded prior to the entry into force of the relevant amendments to the German Corporate Governance Code in 2008. In this case, payments would be made in line with the provisions of the severance indemnity clause referred to in Chapter 7.2 ("Compensation Report") if a change of control were to lead to the termination of this member's service contract and his leaving the Bayer Group prior to his 60th birthday.

7. Corporate Governance Report

THIS CORPORATE GOVERNANCE REPORT ALSO CONSTITUTES THE REPORT PURSUANT TO SECTION 3.10 OF THE GERMAN CORPORATE GOVERNANCE CODE.

7.1 Declaration on Corporate Governance*

* not part of the audited management report

DECLARATION BY THE BOARD OF MANAGEMENT AND SUPERVISORY BOARD

concerning the German Corporate Governance Code (May 26, 2010 version) pursuant to Section 161 of the German Stock Corporation Act**

Under Section 161 of the German Stock Corporation Act, the Board of Management and the Supervisory Board of Bayer AG are required to issue an annual declaration that the company has been, and is, in compliance with the recommendations of the “Government Commission on the German Corporate Governance Code” as published by the Federal Ministry of Justice in the official section of the electronic Federal Gazette (Bundesanzeiger), or to advise of any recommendations that have not been, or are not being, applied and the reasons for this. An annual declaration was last issued in December 2009.

With respect to the past, the following declaration refers to the June 18, 2009 version of the Code. With respect to present and future corporate governance practices at Bayer AG, the following declaration refers to the recommendations in the May 26, 2010 version of the Code.

Pursuant to Section 161 of the German Stock Corporation Act, the Board of Management and Supervisory Board of Bayer AG hereby declare as follows:

1. The company has been in compliance with the recommendations of the Code since issuance of the last annual compliance declaration in December 2009 with the temporary exception stated in the compliance declaration of December 2009: Until March 31, 2010, the amount of the deductible for the D&O insurance for the members of the Supervisory Board was not in compliance with the recommendation given in Section 3.8 Paragraph 2 of the Code because the D&O insurance is a group policy for which a deductible in the recommended amount was only agreed when the policy came up for renewal on April 1, 2010.

2. The company is in compliance with the recommendations of the Code with the exception of the recommendation given in Section 5.4.5, which temporarily is not being complied with in full.

   The deviation from the recommendation given in Section 5.4.5 of the Code results from the fact that the Supervisory Board member Dr.-Ing. Ekkehard D. Schulz, Chairman of the Executive Board of ThyssenKrupp AG, is a member of the supervisory boards of more than three listed companies or companies with similar requirements (Bayer AG, MAN SE, RWE AG and AXA Konzern AG). Dr. Schulz will retire from the Executive Board of ThyssenKrupp AG at the end of the General Stockholders’ Meeting of ThyssenKrupp AG on January 21, 2011. All the members of the Board of Management and the Supervisory Board will be in compliance with the recommendation given in Section 5.4.5 of the Code from that date. Since Dr. Schulz has been a member of the three other supervisory boards mentioned above for many years and will now remain a member of the Executive Board of the above listed company for only a brief period, the temporary deviation from the recommendation given in Section 5.4.5 of the Code is considered acceptable.

Leverkusen, December 2010

For the Board of Management:

DR. DEKKERS BAUMANN

For the Supervisory Board:

DR. SCHNEIDER

** This is an English translation of a German document. The German document is the official and controlling version, and this English translation in no event modifies, interprets or limits the official German version.

BAYER IN COMPLIANCE WITH RECOMMENDATIONS OF THE CORPORATE GOVERNANCE CODE

Bayer has always placed great importance on responsible corporate governance and will continue to do so. In 2010 the company was able to issue a declaration that it has been compliant with the recommendations of the German Corporate Governance Code in the past with one temporary exception and intends to be fully compliant again in the future with one temporary exception.

INTERNET

WWW.BAYER.COM/EN/CORPORATE-GOVERNANCE.ASPX

The Board of Management and Supervisory Board last year again addressed the question of compliance with the Corporate Governance Code, particularly in light of the new recommendations included in the amended version of the Code published on May 26, 2010. The resulting declaration of compliance, reproduced above, was issued in December 2010 and posted on Bayer's website along with previous declarations.

DUTIES AND ACTIVITIES OF THE BOARD OF MANAGEMENT

Bayer AG is a strategic management holding company, run by its Board of Management on the Board's own responsibility with the goal of sustainably increasing the company's enterprise value and achieving defined corporate objectives. The Board of Management performs its tasks according to the law, the Articles of Incorporation and the Board's rules of procedure, and works with the company's other governance bodies in a spirit of trust.

Board of Management directs the Group's operations

The Board of Management defines the long-term goals and the strategies for the Group, its subgroups and its service companies, and sets forth the principles and directives for the resulting corporate policies. It coordinates and monitors the most important activities, defines the portfolio, develops and deploys managerial staff, allocates resources and decides on the Group's financial steering and reporting.

The members of the Board of Management bear joint responsibility for running the business as a whole. However, the individual members manage the areas assigned to them on their own responsibility within the framework of the decisions made by the entire Board. The allocation of duties among the members of the Board of Management is defined in a written schedule.

The entire Board of Management makes decisions on all matters of fundamental importance and in cases where a decision of the entire Board is prescribed by law or otherwise mandatory. The rules of procedure of the Board of Management contain a list of topics that must be dealt with and resolved by the entire Board.

Meetings of the Board of Management are held regularly. They are convened by the Chairman of the Board of Management. Any member of the Board of Management may also demand that a meeting be held. The Board of Management makes decisions by a simple majority of the votes cast, except where unanimity is required by law. In the event of a tie, the Chairman has the casting vote.

According to the Board of Management's rules of procedure and schedule of duties, the Chairman bears particular responsibility for leading and coordinating the Board's work. He represents the company and the Group in dealings with third parties and the workforce on matters relating to more than one part of the company or the Group. He also bears special responsibility for certain departments of the Corporate Center and their fields of activity.

The schedule of duties also assigns particular areas of specialist responsibility to the other members who served on the Board of Management in 2010. Each of these members also represents certain geographical regions. The previous Chairman of the Board of Management and the former Chief Financial Officer retired in 2010. The new Chairman of the Board of Management and the new Chief Financial Officer both had transition periods of several months in which to prepare for their new duties with the support of their respective predecessors.

No committees of the Board of Management have been set up in view of the small number of members and the role of Bayer AG as a strategic management holding company.

Supervisory Board oversees corporate management

SUPERVISORY BOARD: OVERSIGHT AND CONTROL FUNCTIONS

The role of the 20-member Supervisory Board is to oversee and advise the Board of Management. Under the German Codetermination Act, half the members of the Supervisory Board are elected by the stockholders, and half by the company's employees. The Supervisory Board is directly involved in decisions on matters of fundamental importance to the company, regularly conferring with the Board of Management on the company's strategic alignment and the implementation status of the business strategy.

The Chairman of the Supervisory Board coordinates its work and presides over the meetings. Through regular discussions with the Board of Management, the Supervisory Board is kept constantly informed of business policy, corporate planning and strategy. The Supervisory Board approves the annual budget and financial framework. It also approves the financial statements of Bayer AG and the consolidated financial statements of the Bayer Group, along with the combined management report, taking into account the reports by the auditor.

COMMITTEES OF THE SUPERVISORY BOARD

The Supervisory Board currently has the following committees:

Presidial Committee: This comprises the Chairman and Vice Chairman of the Supervisory Board along with a further stockholder representative and a further employee representative. The Presidial Committee serves primarily as the mediation committee pursuant to the German Codetermination Act. It has the task of submitting proposals to the Supervisory Board on the appointment of members of the Board of Management if the necessary two-thirds majority is not achieved in the first vote at a plenary meeting. Certain decision-making powers in connection with capital measures, including the power to amend the Articles of Incorporation accordingly, have also been delegated to this committee.

Audit Committee: The Audit Committee comprises three stockholder representatives and three employee representatives. The Chairman of the Audit Committee in 2010, Dr. Klaus Sturany, satisfies the statutory requirements concerning the independence and expertise in the field of accounting or auditing that a member of the Supervisory Board and the Audit Committee is required to possess. The Audit Committee meets regularly four times a year. Its tasks include examining the company's financial reporting along with the financial statements of Bayer AG, the consolidated financial statements of the Bayer Group, the combined management report, the proposal for the use of the distributable profit of Bayer AG, and the interim financial statements and management reports of the Bayer Group, all of which are prepared by the Board of Management. On the basis of the auditor's report on the audit of the financial statements of Bayer AG, the consolidated financial statements of the Bayer Group and the combined management report, the Audit Committee develops proposals concerning the approval of the statements by the full Supervisory Board. The Audit Committee is also responsible for the company's relationship with the external auditor. The Audit Committee submits a proposal to the full Supervisory Board concerning the auditor's appointment, prepares the awarding of the audit contract to the audit firm appointed by the Annual Stockholders' Meeting, suggests areas of focus for the audit and determines the auditor's remuneration. It also monitors the independence, qualifications, rotation and efficiency of the auditor.

In addition, the Audit Committee oversees the company's internal control system – along with the procedures used to identify, track and manage risk – and the internal audit system. It also deals with corporate compliance issues and discusses developments in this area at each of its meetings.

Human Resources Committee: On this committee, too, there is parity of representation between stockholders and employees. It consists of the Chairman of the Supervisory Board and three other members. The Human Resources Committee prepares the personnel decisions of the full Supervisory Board, which resolves on appointments or dismissals of members of the Board of Management. The Human Resources Committee resolves on behalf of the Supervisory Board on the service contracts of the members of the Board of Management. However, it is the task of the full Supervisory Board to resolve on the total compensation of the individual members of the Board of Management and the respective compensation components, as well as to regularly review the compensation system on the basis of recommendations submitted by the Human Resources Committee. The Human Resources Committee also discusses the long-term succession planning for the Board of Management.

Nominations Committee: This committee carries out preparatory work when an election of stockholder representatives to the Supervisory Board is to be held. It suggests suitable candidates for the Supervisory Board to propose to the Annual Stockholders' Meeting for election. The Nominations Committee comprises the Chairman of the Supervisory Board and the other stockholder representative on the Presidial Committee.

Detailed information on the work of the Supervisory Board and its committees is provided in the Report of the Supervisory Board on page 10ff. of this Annual Report.

OBJECTIVES FOR THE COMPOSITION OF THE SUPERVISORY BOARD

The Supervisory Board should be composed in such a way that its members together possess the necessary expertise, skills and professional experience to properly perform their duties. In view of Bayer AG's global operations, the Supervisory Board endeavors at all times to have several members who have international business experience or an international background. A further objective concerning the composition of the Supervisory Board is that, absent special circumstances, its members should not hold office beyond the end of the next Annual Stockholders' Meeting following their 72nd birthday, and that at least 75% of the Supervisory Board members must be independent. The Supervisory Board assesses the independence of its members according to the recommendation contained in Section 5.4.2 of the German Corporate Governance Code. In assessing independence, the Supervisory Board also considers the criteria given in the recommendation of the European Commission of February 15, 2005.[1]

Another goal for the composition of the Supervisory Board is to gradually increase the proportion of women on the Supervisory Board to at least 20% in the medium term. The aim is to have at least 15% female members following the elections to the Supervisory Board in 2012. It is intended to achieve the medium-term goal at the subsequent Supervisory Board election due to take place in 2017. These targets refer to the Supervisory Board as a whole, and are designed to be achieved evenly among the stockholder and employee representatives. However, since the Supervisory Board can only nominate candidates for election as stockholder representatives, it can only take the targets into account in these nominations. This assumes that suitable female candidates can be found for election as stockholder representatives.

IMPLEMENTATION STATUS OF THE OBJECTIVES

The Supervisory Board has several members with international business experience and other international connections. No member of the Supervisory Board is older than the target maximum age. One member, Hubertus Schmoldt, has been a member of the Supervisory Board since 1995, and thus has served more than three terms of office. However, Mr. Schmoldt has no business ties to the company or its Board of Management that in the opinion of the Supervisory Board could result in a conflict of interest. Currently, 10% of the Supervisory Board members are women. An increase in the proportion of women on the Supervisory Board is targeted for the next regular elections to be held at the Annual Stockholders' Meeting in 2012.

PERSONAL LIABILITY IN PLACE OF A DEDUCTIBLE

Until March 31, 2010 the company met the recommendation in the German Corporate Governance Code regarding deductibles for any Directors' & Officers' (D&O) liability insurance by obtaining personal declarations from each member of the Board of Management and Supervisory Board. According to these declarations, the members of the Board of Management undertook, should they cause damage to the company or third parties through gross negligence (as defined by German law) in the performance of their duties, to pay for such damage up to the equivalent of half their total annual compensation for the year in which any such damage occurred; the members of the Supervisory Board undertook until March 31, 2010, to pay for such damage, if caused by them, up to the equivalent of the variable portion of their respective annual compensation as Supervisory Board members for the relevant year.

The company agreed the statutory deductible for members of the Board of Management when the D&O insurance was renewed effective April 1, 2010. It also agreed a deductible for the members of the Supervisory Board in the amount recommended by the German Corporate Governance Code, effective on the same date. The personal declarations referred to above thus became obsolete as of April 1, 2010.

[1] Annex 2 to the recommendation of the European Commission of February 15, 2005, on the role of non-executive or supervisory directors of listed companies and on the committees of the (supervisory) board (2005/162/EC).

DISCLOSURE OF SECURITIES TRANSACTIONS BY MEMBERS OF THE BOARD OF MANAGEMENT OR SUPERVISORY BOARD

Members of the Board of Management and Supervisory Board and their close relatives are legally required to disclose all transactions involving the purchase or sale of Bayer stock where such transactions total €5,000 or more in a calendar year. Bayer publishes details of such transactions immediately on its website and also notifies the German Financial Supervisory Authority accordingly. This information is provided to the company register for archiving.

The following transaction was reported to Bayer AG in 2010:

Securities Transactions by Members of the Board of Management or Supervisory Board [Table 3.27]

Werner Baumann, Board of Management						
Date/Place	Security/Right	ISIN	Transaction	Price/Currency	Quantity	Total transaction volume
Jan. 4, 2010/Xetra	Shares	DE000BAY0017	Sale	€56.30	8,000	€450,400.00

Information filed with the company by members of the Board of Management and Supervisory Board shows that, on the closing date for the financial statements, their total holdings of Bayer AG stock or related financial instruments were equivalent to less than 1% of the issued stock.

SYSTEMATIC MONITORING OF ALL BUSINESS ACTIVITIES

Bayer has a control system in place enabling it to identify any business or financial risks at an early stage and take appropriate action to manage them. This control system is designed to ensure timely and accurate accounting for all business transactions and the constant availability of reliable data on the company's financial position.

When acquisitions are made, we aim to bring the acquired units' internal control systems into line with those of the Bayer Group as quickly as possible.

However, the control and risk management system cannot provide absolute protection against losses arising from business risks or fraudulent actions.

CORPORATE COMPLIANCE

Our corporate activity is governed by national and local laws and statutes that place a range of obligations on the Bayer Group and its employees throughout the world. Bayer manages its business responsibly in compliance with the statutory and regulatory requirements of the countries in which it operates.

Bayer expects legally and ethically impeccable conduct from all of its employees in daily business operations, as the way they carry out their duties affects the company's reputation. By ensuring regular dialogue between employees and their supervisors and providing training courses involving the responsible Compliance Officers, the company endeavors to acquaint its employees with the numerous statutory and regulatory requirements of the countries where they work that are of relevance to them. This lays the foundation for managing the business responsibly and in compliance with the respective applicable laws.

The Board of Management states in the Corporate Compliance Policy that Bayer is unreservedly committed to corporate compliance and will forgo any business transactions that would violate compliance principles. The Policy also details the organizational framework for corporate compliance and specifies areas in which violations of applicable law can have particularly serious adverse consequences, both for the entire enterprise and for individual employees. The principles set forth in the Corporate Compliance Policy are designed to guide employees in their business-related actions and protect them from potential misconduct. Its core requirements are:

- adherence to antitrust regulations,
- integrity in business transactions and the ban on exerting any kind of improper influence,
- the observance of product stewardship and the commitment to the principle of sustainability,
- the strict separation of business and personal interests, and
- the commitment to ensure fair and respectful working conditions across the enterprise.

Employees may contact either their respective supervisors or the local Compliance Officers for support and advice on ensuring legally compliant conduct in specific business situations.

Each Group company with business operations has at least one Compliance Officer. Some foreign companies have several local Compliance Officers with clearly defined responsibilities for the different business units within the respective companies. The main responsibilities of each local Compliance Officer include:

- providing advice to the operational business units,
- assessing risks,
- running or arranging compliance training programs,
- investigating any reports of possible compliance violations and initiating appropriate corrective action, and
- meeting Group-level reporting obligations toward the Chief Subgroup Compliance Officers at the Group management companies.

The Chief Subgroup Compliance Officers in turn report to the Group Compliance Officer, who is appointed by the Group Management Board. At least once a year, the Group Compliance Officer and the Head of Corporate Auditing report to the Audit Committee of the Supervisory Board on any compliance violations that have been identified.

The issue of corporate compliance is a permanent part of the performance targets agreed with the members of the Group Leadership Circle (GLC). By virtue of their positions, these executives have a special obligation to set an example for their employees, spread the compliance message increasingly within their companies and take organizational measures to implement it. As of 2010, a GLC member may be required to repay the STI awards granted for up to five of the preceding years if a systematic violation of applicable law that caused financial loss to Bayer was committed in one or more years by a direct report and appropriate action by the GLC member could have prevented the violation.

COMMON VALUES AND LEADERSHIP PRINCIPLES

To complement the Corporate Compliance Policy, Bayer has committed itself to specific values. These values – Leadership, Integrity, Flexibility and Efficiency, or “LIFE” for short – provide guidance to all Bayer employees, both in business dealings and in working together within the company. All employees are obligated to align their work to the LIFE values. This is taken into account in human resources development and the regular performance evaluations.

DETAILED REPORTING

To maximize transparency, we provide regular and timely information on the Group's position and significant changes in business activities to stockholders, financial analysts, stockholders' associations, the media and the general public. Bayer complies with the recommendations of the Corporate Governance Code by publishing reports on business trends, financial position, results of operations and related risks four times a year.

In line with statutory requirements, the members of the Group Management Board provide an assurance that, to the best of their knowledge, the financial statements of Bayer AG, the consolidated financial statements of the Bayer Group and the combined management report provide a true and fair view.

The financial statements of Bayer AG, the consolidated financial statements of the Bayer Group and the combined management report are published within 90 days following the end of each fiscal year. During the fiscal year, stockholders and other interested parties are kept informed of developments by means of the half-year financial report and additional interim reports as of the end of the first and third quarters. The half-year financial report is voluntarily subjected to an audit review by the auditor, whose appointment by the Annual Stockholders' Meeting also relates specifically to this audit review.

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Bayer also provides information at news conferences and analysts' meetings. In addition, the company uses the Internet as a platform for timely disclosure of information, including details of the dates of major publications and events, such as the annual and interim reports or the Annual Stockholders' Meeting.

In line with the principle of fair disclosure, all stockholders and other principal target groups are treated equally as regards the communication of valuation-relevant information. All significant new facts are disclosed immediately to the general public. Stockholders also have immediate access to the information that Bayer publishes locally in compliance with the stock market regulations of various countries.

In addition to our regular reporting, we issue ad-hoc statements on developments that otherwise might not become publicly known but have the potential to materially affect the price of Bayer stock.

7.2 Compensation Report

COMPENSATION OF THE BOARD OF MANAGEMENT

In 2010 the compensation of the Board of Management basically comprised five components: a fixed annual salary, a short-term incentive award on a yearly basis in relation to a target amount, a long-term incentive award for a four-year period in relation to a target amount, a further long-term compensation component introduced in 2010 involving a grant of virtual Bayer shares subject to a three-year retention period, and a company pension plan conferring pension entitlements that increase with years of service. Compensation in kind and other benefits are also provided, such as the use of a company car for private purposes or reimbursement of the cost of health screening examinations.

The short-term incentive (STI) award for 2010 is calculated according to the Group's EBITDA margin before special items and the weighted average target attainment of the HealthCare, CropScience and MaterialScience subgroups. The Supervisory Board can adjust this award according to individual performance. The target attainment of the subgroups is measured chiefly in terms of their EBITDA before special items. A qualitative appraisal in relation to the market and competitors is also taken into account. Serving members of the Board of Management as of the closing date receive 50% of the STI as direct compensation and 50% in the form of the new long-term compensation component.

The amount of Werner Wenning's STI award for 2010 was set at the Supervisory Board's discretion. In consideration of Mr. Wenning's duties as Chairman of the Board of Management in 2010, and especially their successful transfer to Marijn Dekkers, the Supervisory Board specified a sum of €1,863 thousand, which was paid out in January 2011 as agreed. The STI award for Klaus Kühn was finalized upon his retirement from the Board of Management and paid out in May 2010.

The directly effected compensation for the service of the members of the Board of Management in 2010 totaled €10,019 thousand (2009: €8,830 thousand). Of this amount, fixed salaries accounted for €3,936 thousand (2009: €3,223 thousand), the part of the STI awards to be paid out in 2011 to the members of the Board of Management holding office on December 31, 2010 for €4,928 thousand (2009: €5,442 thousand), and compensation in kind and other benefits for €1,155 thousand (2009: €165 thousand), the latter item consisting mainly of amounts assigned to compensation in kind and other benefits in accordance with German taxation guidelines.

Since 2010 the long-term compensation of the members of the Board of Management holding office on December 31, 2010 has consisted of two components: a grant of virtual Bayer shares for which parts of the STI award – which was previously paid out in full – are used, and the long-term stock-based compensation program Aspire.

The 2010 Annual Stockholders' Meeting approved the compensation system for the members of the Board of Management by way of a consultative resolution. This system remains in effect.

According to the changes resolved by the Supervisory Board in December 2009 and confirmed by the Annual Stockholders' Meeting, 50% of the STI was granted in the form of virtual Bayer shares subject to a three-year retention period, thereby creating a new long-term compensation component. The value of these shares depends on the trend in the price of Bayer stock during the retention period. The basis for the conversion of this former part of the STI payment into virtual shares was the average official closing price of Bayer shares over the last 30 trading days of 2010 (November 18 – December 30, 2010) in the Xetra system of the Frankfurt Stock Exchange; this average price was €56.95. Wolfgang Plischke and Richard Pott receive one additional virtual Bayer share for every 20 virtual shares granted under the new system to compensate them for the conversion of part of the former STI into a long-term compensation component. The additional virtual shares are subject to the same retention period and value development.

In addition, the members of the Board of Management participate in the long-term stock-based compensation program Aspire I (annual tranches 2008 through 2010). Under this program, awards are paid out provided that the performance of Bayer stock (both in absolute terms and relative to the EURO STOXX 50 benchmark index) meets defined criteria over a period of three years (four years starting with the 2010 tranche). Further details of this program are provided in Note [26.6] to the consolidated financial statements. The fair value of the stock-based compensation newly granted in 2010 as of its grant date is included in the calculation of total compensation (see table below), although the award entitlement was only partially earned as of the closing date.

The following table shows the compensation components of the individual members of the Board of Management in 2010:

Board of Management Compensation – Aggregate Compensation [Table 3.28]

		Serving members of the Board of Management				Former members		
		Marijn Dekkers (Chairman)	Werner Baumann	Wolfgang Plischke	Richard Pott	Werner Wenning	Klaus Kühn	Total
		€ thousand	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand
Fixed salary	**2010**	**900**	**633**	**633**	**633**	**873**	**264**	**3,936**
	2009	-	-	633	633	1,165	792	3,223
Compensation in kind and other benefits	**2010**	**1,010***	**42**	**35**	**30**	**27**	**11**	**1,155**
	2009	-	-	49	39	36	41	165
Total non-performance-related compensation	**2010**	**1,910**	**675**	**668**	**663**	**900**	**275**	**5,091**
	2009	-	-	682	672	1,201	833	3,388
Short-term incentive	**2010**	**903**	**554**	**554**	**554**	**1,863**	**500**	**4,928**
	2009	-	-	1,010	1,010	2,158	1,264	5,442
Total directly effected compensation	**2010**	**2,813**	**1,229**	**1,222**	**1,217**	**2,763**	**775**	**10,019**
	2009	-	-	1,692	1,682	3,359	2,097	8,830
Fair value of stock-price-indexed compensation based on the short-term incentive	**2010**	**903**	**554**	**582**	**582**	**-**	**-**	**2,621**
	2009	-	-	-	-	-	-	-
Fair value of newly granted stock-based compensation as of grant date	**2010**	**261**	**206**	**291**	**291**	**184**	**33**	**1,266**
	2009	-	-	151	151	208	84	594
Aggregate compensation (according to the German Commercial Code)	**2010**	**3,977**	**1,989**	**2,095**	**2,090**	**2,947**	**808**	**13,906**
	2009	-	-	1,843	1,833	3,567	2,181	9,424

* including one-time relocation expenses

The award entitlements earned in 2010 – both from the 2010 tranche and from previous years' tranches on which the entitlements were only partially earned – are shown separately in the following table along with the changes in the value of entitlements from previous years' tranches based mainly on the performance of Bayer stock in 2010. The evaluation of stock performance is based on the average official closing price of Bayer shares over the last 30 trading days of 2010 (November 18 – December 30, 2010) in the Xetra system of the Frankfurt Stock Exchange; this average price was €56.95. The fair value of the award entitlement already earned in 2010 from the 2010 tranche is included under "Stock-based compensation entitlements earned in the respective year." Since certain components of the award entitlements are included in both tables, the figures in the following and the preceding table should not be added together.

Board of Management Compensation – Stock-Based Compensation [Table 3.29]

		Serving members of the Board of Management				Former members		
		Marijn Dekkers (Chairman)	Werner Baumann	Wolfgang Plischke	Richard Pott	Werner Wenning	Klaus Kühn	Total
		€ thousand	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand
Long-term incentive (stock-based compensation entitlements earned in the respective year)	**2010**	**67**	**124**	**234**	**234**	**322**	**98**	**1,079**
	2009	-	-	319	319	587	398	1,623
Change in value of existing entitlements	**2010**	**-**	**(21)**	**(44)**	**(44)**	**(61)**	**(56)**	**(226)**
	2009	-	-	212	212	390	265	1,079

The current members of the Board of Management are generally entitled to receive a pension upon leaving the Bayer Group, though not before the age of 60, in an annual amount equal to at least 30% of the last yearly fixed salary. This percentage increases depending on years of service as a member of the Board of Management and is capped at 60% except in the case of the member appointed prior to 2006, whose pension entitlement can rise to a maximum of 80% of his last yearly fixed salary. The respective surviving dependents' benefit is set at 60% of this pension level.

The current service cost for the pension entitlements of the members of the Board of Management is shown in the following table. The current service cost for pension entitlements according to the German Commercial Code (HGB) also includes any past service cost resulting from new entitlements or variations in existing entitlements. The change in the present value of pension entitlements also reflects the interest cost for entitlements earned in prior years, along with actuarial gains and losses. Expenses for the pension entitlements of the members of the Board of Management who retired during the year are included up to the respective retirement dates. Since HGB and IFRS prescribe different methods for calculating pension provisions, the table contains both the amounts disclosed in the financial statements of Bayer AG prepared according to HGB and those published in the consolidated financial statements of the Bayer Group prepared according to IFRS. The figures in each case represent divergent disclosures of one and the same pension entitlement.

Pension Entitlements [Table 3.30]

		Serving members of the Board of Management				Former members		
		Marijn Dekkers (Chairman)	Werner Baumann	Wolfgang Plischke	Richard Pott	Werner Wenning	Klaus Kühn	Total
		€ thousand	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand	€ thousand
Change in the present value of pension entitlements (IFRS)	**2010**	**2,612**	**621**	**1,017**	**1,074**	**823**	**426**	**6,573**
	2009	-	-	834	707	405	1,433	3,379
Current service cost for pension entitlements earned in the respective year (IFRS)	***2010***	***2,175***	***111***	***203***	***217***	***-***	***141***	***2,847***
	2009	*-*	*-*	*181*	*198*	*-*	*985*	*1,364*
Present value of pension entitlements at the closing date (IFRS)*	**2010**	**2,612**	**2,868**	**6,594**	**6,552**	**-**	**-**	**18,626**
	2009	-	-	5,577	5,478	14,675	6,335	32,065
Change in the present value of pension entitlements (German Commercial Code)	**2010**	**2,481**	**298**	**602**	**577**	**187**	**255**	**4,400**
	2009	-	-	482	279	(452)	1,048	1,357
Current service cost for pension entitlements earned in the respective year (German Commercial Code)	***2010***	***2,292***	***117***	***209***	***225***	***3***	***148***	***2,994***
	2009	*-*	*-*	*200*	*223*	*4*	*1,090*	*1,517*
Present value of pension entitlements at the closing date (German Commercial Code)	**2010**	**2,481**	**2,690**	**6,392**	**6,301**	**-**	**-**	**17,864**
	2009	-	-	5,794	5,728	15,128	6,597	33,247

* after deducting plan assets

Unlike the aggregate compensation according to the German Commercial Code, the aggregate compensation according to IFRS does not include the fair value of newly granted stock-based compensation, but rather the stock-based compensation entitlements earned in the respective year plus the change in the value of stock-based compensation entitlements from previous years that have not yet been paid out. It also contains the current service cost for pension entitlements.

The components of the Board of Management's compensation are summarized in the following table:

Board of Management Compensation according to IFRS [Table 3.31]

	2009	2010
	€ thousand	€ thousand
Directly effected compensation	8,830	10,019
Fair value of stock-price-indexed compensation based on the short-term incentive	-	2,621
Long-term incentive (stock-based compensation entitlements earned in the respective year)	1,623	1,079
Change in value of existing entitlements	1,079	(226)
Current service cost for pension entitlements earned in the respective year	1,364	2,847
Aggregate compensation (IFRS)	**12,896**	**16,340**

For the only Board of Management member whose service contract was concluded prior to the entry into force of the amendments to the German Corporate Governance Code in June 2008, a general severance indemnity clause applies if the service contract is terminated at the company's instigation prior to his 60th birthday. The basic principles according to this clause are as follows:

If a member of the Board of Management is not offered a new service contract upon expiration of his existing service contract because he is not reappointed to the Board of Management, or if the member is removed from the Board of Management prematurely during the term of his contract in the absence of grounds for termination without notice, he will receive a monthly bridging allowance amounting to 80% of his last monthly fixed salary for a maximum period of 60 months from the date of expiration of his service contract less the period for which he was released from his duties on full pay or otherwise compensated. (If he were removed during the term of his contract, he would also receive the payment due for the rest of the term, though this would be reduced to the amount of his annual fixed salary plus the target amount for the STI payment for at least twelve months.) His earnings from any new employment elsewhere would be offset against the bridging allowance. In the case of premature termination at the instigation of the company, further years of service might be credited under certain circumstances for the purpose of computing his Board of Management pension entitlement, though not beyond his 60th birthday.

The Supervisory Board has decided to follow the recommendation of the German Corporate Governance Code, as amended in June 2008, and limit severance payments under new service contracts. Under only one existing member's contract could the clause still be invoked. In the case of the remaining contracts, it has been agreed that payment claims can only arise in the event of premature contract termination by the company without cause. Such claims, including ancillary benefits, are then limited to the value of two years' compensation and may not compensate more than the remaining term of the contract. The severance payment cap is to be calculated on the basis of the total compensation (fixed salary plus the target value of the STI) for the previous year and, if appropriate, also the expected total compensation for the current year.

Post-contractual non-compete agreements have been concluded with the members of the Board of Management, providing for compensatory payments to be made by the company for the two-year duration of the post-contractual non-compete clause. For members appointed prior to 2010, this payment amounts to 50% of the average contractually agreed salary for the preceding three years. For the members newly appointed to the Board of Management as of January 1, 2010, the compensatory payment is 100% of the average fixed salary for the twelve months preceding their departure. It is offset against any severance payments.

Since his retirement from the Board of Management, Klaus Kühn has received regular payments as compensation for such a non-compete clause. The payments made to him in 2010 totaled €764,780.

Special supplementary arrangements apply in the event of a change of control, see Chapter 6 "Takeover-Relevant Information."

Members of the Board of Management – in common with all employees – who joined the company prior to January 1, 1979, are entitled to six months' pre-retirement leave. A payment may be made in lieu of this leave in certain circumstances. In 2010 this arrangement applied only to Werner Wenning, to whom a payment of €1,850 thousand was made in settlement of his claim to pre-retirement leave. This amount is included in the total of pensions paid to retired members of the Board of Management given below.

There were no loans to members of the Board of Management outstanding as of December 31, 2010, nor any repayments of such loans during the year.

We currently pay retired members of the Board of Management a monthly pension equal to 80% of the last monthly base salary received while in service. The pensions paid to former members of the Board of Management or their surviving dependents have been reassessed annually since January 1, 2009 and adjusted taking into account the development of consumer prices. These benefits are in addition to any amounts they receive under previous employee pension arrangements. The pensions paid to former members of the Board of Management and their surviving dependents amounted to €13,351 thousand (2009: €11,273 thousand). Pension provisions for former members of the Board of Management and their surviving dependents at the closing date amounted to €131,599 thousand (2009: €107,223 thousand) according to IFRS and €129,121 thousand (2009: €110,069 thousand) according to HGB.

COMPENSATION OF THE SUPERVISORY BOARD

The Supervisory Board is compensated according to the relevant provisions of the Articles of Incorporation, which provisions have not been altered since the resolution of the Annual Stockholders' Meeting on April 29, 2005. This provides that, in addition to reimbursement of their expenses, each member of the Supervisory Board receives fixed annual compensation of €60,000 and a variable annual compensation component. The variable compensation component is based on corporate performance in terms of the gross cash flow reported in the consolidated financial statements of the Bayer Group for the respective fiscal year. The members of the Supervisory Board receive €2,000 for every €50 million or part thereof by which the gross cash flow exceeds €3.1 billion, but the variable component for each member may not exceed €30,000.

In accordance with the recommendations of the German Corporate Governance Code, additional compensation is paid to the Chairman and Vice Chairman of the Supervisory Board and for chairing and membership of committees. The Chairman of the Supervisory Board receives three times the basic compensation, while the Vice Chairman receives one-and-a-half times the basic compensation. Members of the Supervisory Board who are also members of a committee receive an additional one quarter of the amount, with those chairing a committee receiving a further quarter. However, no member of the Supervisory Board may receive total compensation exceeding three times the basic compensation. It has been agreed that no additional compensation shall be paid for membership of the Nominations Committee. If changes are made to the Supervisory Board and its committees during the fiscal year, members receive compensation on a pro-rated basis.

No member of the Supervisory Board received compensation or any other benefits for personally performed services such as consultancy or agency services. The company has purchased insurance for the members of the Supervisory Board to cover their personal liability arising from their service on the Supervisory Board.

In addition to their compensation as members of the Supervisory Board, those employee representatives who are employees of Bayer Group companies receive compensation unrelated to their service on the Supervisory Board. The total amount of such compensation was €603 thousand (2009: €605 thousand).

There were no loans to members of the Supervisory Board outstanding as of December 31, 2010, nor any repayments of such loans during the year.

Compensation of the Members of the Supervisory Board of Bayer AG in 2010 [Table 3.32]

	Fixed Compensation	Variable Compensation	Total
	€ thousand	€ thousand	€ thousand
Dr. Paul Achleitner	75	38	113
André Aich	60	30	90
Willy Beumann	64	32	96
Dr. Clemens Börsig	60	30	90
Karl-Josef Ellrich [1]	37	19	56
Dr.-Ing. Thomas Fischer	75	38	113
Peter Hausmann	75	38	113
Prof. Dr.-Ing. e.h. Hans-Olaf Henkel	75	38	113
Reiner Hoffmann	60	30	90
Dr. rer. pol. Klaus Kleinfeld	60	30	90
Petra Kronen	75	38	113
Dr. rer. nat. Helmut Panke	60	30	90
Hubertus Schmoldt	75	38	113
Dr. Manfred Schneider (Chairman)	180	90	270
Dr.-Ing. Ekkehard D. Schulz	60	30	90
Roswitha Süsselbeck [2]	30	15	45
Dr. Klaus Sturany	90	45	135
Dipl.-Ing. Dr.-Ing. e.h. Jürgen Weber	75	38	113
Thomas de Win	120	60	180
Prof. Dr. Dr. h.c. Ernst-Ludwig Winnacker	60	30	90
Oliver Zühlke	60	30	90

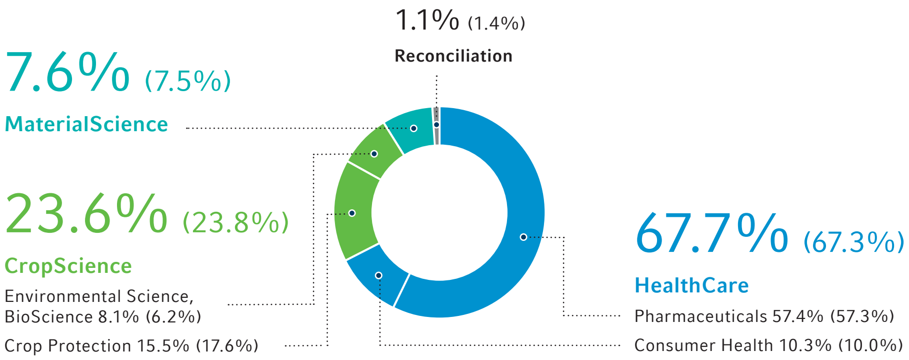
[1] Member of the Supervisory Board until June 30, 2010
[2] Member of the Supervisory Board effective July 1, 2010

8. Research and Development

Our mission "Bayer: Science For A Better Life" underscores Bayer's belief that innovation has a major role to play in addressing the global challenges of providing health care and nutrition for the world's growing population and conserving dwindling resources. Innovation will therefore remain a key driver of the company's growth in the future. Bayer has the resources at its disposal to continuously renew and expand its portfolio and optimize production processes through research and development. In 2010 we invested the record sum of €3,053 million – equivalent to 8.7% of sales – in research and development, compared with €2,746 million in the previous year. Our research and development activities are closely aligned to market needs and geared toward continuous improvement. Our own activities are supplemented by an international network of collaborations with leading universities, public-sector research institutes and partner companies that we continue to expand in alignment with our main areas of research and development. This network allows the pooling of expertise, helping us to rapidly translate new ideas into successful products. Another core element of our activities is the continuous development of the 13,200 individuals working in research and development throughout the Bayer Group.

€3.1 billion
for research and development

Share of Research and Development Expenses by Segment (2009 in parentheses) [Graphic 3.17]



HEALTHCARE

In 2010 we invested €2,066 million (2009: €1,847 million) in research and development (R&D) in the Pharmaceuticals and Consumer Health segments. This represented 67.7% of the Bayer Group's entire research and development expenditures and was equivalent to 12.2% of HealthCare sales. The number of HealthCare subgroup employees working in research and development at the time this report was finalized was 7,700.

€2,066 million
for research and development at HealthCare

In the Pharmaceuticals segment we increased our R&D expenditures to €1,751 million (2009: €1,572 million), or 16.1% (2009: 15.0%) of sales. Drug discovery in the Pharmaceuticals segment focuses on the areas of cardiology, diagnostic imaging, oncology and women's healthcare. The respective research activities and capacities are concentrated at three main sites in Berlin and Wuppertal, Germany, and Berkeley, California, United States. Work in Berlin and Wuppertal centers largely on identifying molecular targets and developing and optimizing lead compounds. Research is also carried out at these sites in the fields of drug metabolism, pharmacokinetics, toxicology and clinical pharmacology. Berkeley is a major research and development center in which protein-based biological research on the active ingredient Kogenate® takes place. In 2010 the global research network was strengthened by the opening of an innovation center near San Francisco, California, United States, for hematology research and the development of novel biological active substances. At this center, university research institutes and young biotechnology companies will work closely with our scientists. In addition, we established a new international R&D center in Beijing, China, to contribute to the research and development of medicines for China and other Asian countries. At both centers we are seeking strategic alliances with selected research and development partners.

To drive the development of new substances for treating diseases with a high unmet medical need, we conducted clinical studies with several drug candidates from our research and development pipeline during 2010. Following the completion of all necessary studies, we submitted applications to one or more authorities for registration or registration extensions for some of these drug candidates. The most important drug candidates currently in the registration process are:

Products in Registration [Table 3.33]

	Indication
Gadovist®	U.S.A., magnetic resonance imaging, central nervous system
Qlaira®/Natazia™ (E2V/DNG)	U.S.A., treatment of heavy and/or prolonged menstrual bleeding
Valette® Plus	E.U., oral contraception, combination product with folate
Xarelto®	Stroke prevention in atrial fibrillation
Xarelto®	E.U., treatment and secondary prevention of deep vein thrombosis
Xarelto®	U.S.A., prevention of venous thromboembolism following elective hip or knee replacement surgery
YAZ® Flex	E.U., oral contraception, flexible dosage regimen

The following table shows our most important drug candidates currently in Phase III or II of clinical testing:

Research and Development Projects (Phases III and II)* [Table 3.34]

	Indication	Status
Alemtuzumab	Multiple sclerosis	Phase III
Alpharadin™	Treatment of bone metastases in hormone-refractory prostate cancer	Phase III
ATX-101	Reduction of submental fat	Phase III
FC Patch low	Contraception	Phase III
Florbetaben	PET imaging in diagnosis of Alzheimer's disease	Phase III
Gadovist®	Magnetic resonance imaging	Phase III
LCS (ULD LNG contraceptive system)	Contraception	Phase III
Nexavar®	Breast cancer	Phase III
Nexavar®	Thyroid cancer	Phase III
Nexavar®	Non-small-cell lung cancer	Phase III
Regorafenib (DAST inhibitor)	Treatment of metastatic or inoperable gastrointestinal stromal tumors	Phase III
Regorafenib (DAST inhibitor)	Colon cancer	Phase III
Riociguat (sGC stimulator)	Pulmonary hypertension (CTEPH)	Phase III
Riociguat (sGC stimulator)	Pulmonary hypertension (PAH)	Phase III
Xarelto®	Prevention of venous thromboembolism in medically ill, immobilized patients	Phase III
Xarelto®	Treatment and secondary prevention of venous thromboembolism	Phase III
Xarelto®	Secondary prevention of acute coronary syndrome/myocardial infarction	Phase III
Vaginorm®	Vulvovaginal atrophy and female sexual dysfunction (FSD)	Phase III
VEGF Trap-Eye	Wet age-related macular degeneration	Phase III
VEGF Trap-Eye	Abnormal retinal angiogenesis following pathological myopia	Phase III
VEGF Trap-Eye	Central retinal vein occlusion	Phase III

Research and Development Projects (Phases III and II)* [Table 3.34 (continued)]

	Indication	Status
Alpharadin™	Treatment of bone metastases in breast cancer	Phase II
Amikacin Inhale	Pulmonary infection	Phase II
BAY 60-4552/vardenafil	Erectile dysfunction	Phase II
Cinaciguat (sGC activator)	Acute heart failure	Phase II
Ciprofloxacin Inhale	Pulmonary infection	Phase II
Mapracorat (ZK 245186, SEGRA)	Atopic dermatitis	Phase II
MEK inhibitor	Cancer	Phase II
Nexavar®	Breast cancer	Phase II
Nexavar®	Colon cancer, combination therapy	Phase II
Nexavar®	Ovarian cancer	Phase II
Nexavar®	Additional indications	Phase II
Regorafenib (DAST inhibitor)	Cancer	Phase II
Riociguat (sGC stimulator)	Pulmonary hypertension (COPD)	Phase II
Riociguat (sGC stimulator)	Pulmonary hypertension (ILD)	Phase II
Riociguat (sGC stimulator)	Pulmonary hypertension (LHD)	Phase II
VEGF Trap-Eye	Diabetic macular edema	Phase II

*as of February 15, 2011
PAH = pulmonary arterial hypertension; CTEPH = chronic thromboembolic pulmonary hypertension
COPD = chronic obstructive pulmonary disease; ILD = interstitial lung disease; PET = positron emission tomography
LHD = left heart disease
The nature of drug discovery and development is such that not all compounds can be expected to meet the pre-defined project goals. It is possible that any or all of the projects listed above may have to be discontinued due to scientific and/or commercial reasons and will not result in commercialized products. It is also possible that the requisite FDA, European Medicines Agency (EMA) or other regulatory approvals will not be granted for these compounds.

We regularly evaluate our research and development pipeline in order to prioritize and advance the most promising pharmaceutical projects.

Our novel anticoagulant Xarelto®, a direct Factor Xa inhibitor in tablet form, was launched onto the market in September 2008 for prophylaxis of venous thromboembolism (VTE) in adult patients following elective hip or knee replacement surgery. Bayer has received marketing authorization for this indication from health authorities in more than 100 countries around the world, including the E.U. member states, Australia, China, Canada and Mexico. Xarelto® is now on the market in over 75 countries. In a Phase III trial investigating Xarelto® in long-term treatment and secondary prevention of deep vein thrombosis, a novel, simplified therapeutic approach based on Xarelto® as a single-entity therapy demonstrated comparable efficacy to the current standard therapy and thus met the primary efficacy endpoint. In January 2011, based on the positive results of the registration-relevant, double-blind Phase III ROCKET AF trial, we submitted Xarelto® to the European Medicines Agency (EMA) for E.U. marketing authorization for stroke prevention in non-valvular atrial fibrillation and the treatment and secondary prevention of deep vein thrombosis, and our cooperation partner Johnson & Johnson submitted a New Drug Application to the U.S. Food and Drug Administration (FDA) for market authorization for stroke prevention in non-valvular atrial fibrillation. The extensive clinical trial program supporting Xarelto® makes it probably the most intensively studied oral, direct Factor Xa inhibitor in the world today. More than 65,000 patients will be enrolled into the clinical development program for this drug substance, which will evaluate the product in the prevention and treatment of thrombosis in a broad range of indications (see also Table 3.34).

Xarelto®: applications submitted for new indications

Based on positive Phase II trial outcomes with riociguat, the first member of a new class of vasodilating agents known as soluble guanylate cyclase (sGC) stimulators, we moved into Phase III trials with this substance in December 2008. Administered in tablet form, riociguat is currently being investigated as a new approach for the treatment of various forms of pulmonary hypertension.

Our development projects also include the innovative cancer drug Nexavar®, which we are jointly further developing with Onyx Pharmaceuticals, Inc., United States. The promising active substance sorafenib, which attacks both cancer cells and the vascular system of the tumor, is already being marketed worldwide to treat advanced renal cell carcinoma and hepatocellular carcinoma. Nexavar® is currently in various stages of clinical testing for the treatment of further tumor types. A Phase III study involving Nexavar® in combination with two chemotherapeutics commonly used in Europe compared to chemotherapy alone did not reach its primary endpoint – extension of overall survival – in patients with advanced non-small-cell lung carcinoma. Nexavar® continues to be investigated by Bayer and Onyx as well as independent scientists in the treatment of lung cancer in a variety of settings (see also Table 3.34).

With regorafenib we launched a Phase III program in April 2010 for treatment of advanced colorectal cancer. Regorafenib is a novel, oral multi-kinase inhibitor that inhibits various signaling pathways responsible for tumor growth. We are enrolling patients with metastatic colorectal carcinoma whose disease is progressing despite previous standard treatments.

In the field of women's healthcare we are conducting research in the field of gynecological therapies to expand the range of contraceptive options. Phase III clinical trials began in April 2009 with a contraceptive patch, intended to become the only transparent product of its kind and the smallest, lowest-dosed contraceptive patch on the market. Vaginorm®, a development product of our new collaboration with EndoCeutics, is being developed for the treatment of vaginal atrophy and female sexual dysfunction. Vaginorm® is currently being investigated in a Phase III trial program in Canada and the United States. It contains dehydroepiandrosterone (DHEA), a precursor of female and male sex hormones. Also undergoing Phase III development is the new hormone-releasing intrauterine device LCS, which is smaller than Mirena®, contains a lower hormone dose and is effective for up to three years.

The contraceptives YAZ® Plus and Yasmin® Plus, which each contain folate in addition to the hormonal components, were registered in the United States under the trade names Beyaz® and Safyral™, respectively. Our new oral contraceptive, marketed in Europe since May 2009 under the name Qlaira®, was registered in the United States as Natazia™ in the second quarter of 2010. The additional indication for treatment of heavy and/or prolonged menstrual bleeding was registered in Europe in October and has also been submitted for registration in the United States. Qlaira®/Natazia™ is the first product in a new class of oral contraceptives whose estrogen component is based on estradiol.

Our research activities in the area of diagnostic imaging are focused on the development of positron emission tomography (PET) tracers that could enable earlier and more accurate diagnosis of diseases in the future. Here, we are concentrating on three indications: central nervous system disorders, oncology and cardiovascular disease. With the development of the PET tracer florbetaben, we aim to contribute to earlier and more accurate diagnosis of Alzheimer's disease. Bayer launched the global Phase III program for florbetaben in November 2009.

We supplement our development product portfolio from our own R&D activities through targeted inlicensing.

Inlicensing complements our development portfolio

In June 2010 we formed a strategic alliance with OncoMed Pharmaceuticals, Inc., United States, to research, develop and market novel therapeutics to control cancer stem cells, which are believed to play a significant role in the emergence, metastasis and recurrence of cancer.

The collaboration formed in March 2010 with the U.S. specialty pharmaceutical and diagnostics company Prometheus Laboratories Inc. is aimed at the development of a diagnostic platform in cancer therapy. The purpose of the platform is to match patients with suitable drug candidates, thereby opening up new options for personalized cancer therapy in the future.

In collaboration with Genzyme Corp., United States, we are developing the humanized monoclonal antibody alemtuzumab, which is currently being tested in two global Phase III studies for the treatment of multiple sclerosis (MS).

The VEGF Trap-Eye joint developmental project with Regeneron Pharmaceuticals, Inc., United States, has achieved positive results in two parallel Phase III studies in wet age-related macular degeneration (AMD). Based on these data, we plan to file for marketing authorization in Europe and the United States together with Regeneron in the first half of 2011. VEGF Trap-Eye is also currently undergoing Phase III clinical development for the treatment of central retinal vein occlusion (CRVO), another frequent cause of blindness. In addition, a Phase II study in the treatment of diabetic macular edema (DME) is being conducted. VEGF (vascular endothelial growth factor) is a natural growth factor that stimulates the formation of new blood vessels (angiogenesis). VEGF Trap-Eye blocks this growth factor specifically and very effectively, thus preventing the abnormal formation of new blood vessels that tend to leak blood. The medication is administered directly into the eye. Once the product has been granted regulatory approval, Bayer will market it outside the United States. Regeneron Pharmaceuticals, Inc., United States, retains exclusive commercialization rights to VEGF Trap-Eye in the U.S.

In September 2009 Bayer inlicensed Alpharadin™, an alpha-emitting radiopharmaceutical, from Algeta ASA, Norway, for joint development and marketing as a potential cancer therapy. The substance is currently being evaluated in a global Phase III trial for the treatment of bone metastases in prostate cancer patients who no longer respond to hormone therapy. In 2010 the development program for Alpharadin™ was expanded to include a Phase II study in breast cancer patients with bone metastases.

Life-cycle management for products already on the market

We also invest in continuous life-cycle management to identify possible additional indications and improved delivery forms for products already on the market. For example, the U.S. Food and Drug Administration (FDA) has approved STAXYN™, a new formulation of our drug Levitra®. This is an orodispersible tablet that can therefore be taken without liquid. We have also received marketing authorization for the new formulation in Europe under the trade name Levitra®.

In the Consumer Health segment we increased our R&D expenditures to €315 million (2009: €275 million), or 5.2% (2009: 5.0%) of sales. In our Consumer Care Division, research and development activities at our product development centers in Morristown, New Jersey, United States, and Gaillard, France, concentrate on identifying, developing and commercializing non-prescription (over-the-counter = OTC) products. These efforts center on supporting both existing and new brands by implementing product-specific, clinical and regulatory development strategies that enable the successful exploitation of new technologies, the expansion of indications for existing products or the reclassification of current prescription medicines as OTC products. We introduced a variety of new product line extensions to several markets in 2010, such as the combination product Bayer® AM (active ingredients: acetylsalicylic acid and caffeine), new nutritionals (especially for menopausal women and performance-oriented men) sold under the One A Day® brand in the United States, and the antacid Mopralpro® in France. In the area of prescription dermatology products, we entered into a licensing and development agreement with U.S.-based KYTHERA Biopharmaceuticals, Inc., concerning the joint development of a substance for use in aesthetic dermatology.

The research and development activities of our Medical Care Division focus on blood glucose monitoring and the continuing development of medical equipment used in the diagnosis or treatment of various diseases. At the four U.S. research and development centers for our diabetes care business, the largest of which is in Tarrytown, New York, we are working to strengthen our product lines and continue our expansion into attractive segments of the diabetes market. In 2010 we progressed with the launch of several innovative products in key markets to meet specific needs of individuals with diabetes, including Contour® USB with integrated diabetes management software and the option of direct computer connection (plug & play), the diabetes management software Glucofacts® Deluxe, and A1CNow™ SelfCheck, which is used to determine long-term blood glucose values (A1c). The research and development activities for our medical equipment business focus on continuous enhancement of our contrast injection, thrombus removal and other vascular intervention systems. We also aim to enter additional attractive segments such as medical data management tools for contrast injection systems, and drug-eluting balloon catheters to treat vascular disease. The respective research and development centers are located near Pittsburgh, Pennsylvania, and Minneapolis, Minnesota, in the United States and in Sydney, Australia.

The Animal Health Division focuses its research and development activities in Monheim, Germany, on anti-infectives and parasiticides along with active substances for the treatment of non-infectious disorders in animals. Besides the development of new products to control parasites in companion animals and livestock, we continue to expand the product portfolio to treat chronic kidney diseases, cardiovascular disease and cancer in dogs and cats. A number of product line extensions also received approval in various markets. In the United States, for example, Advantage® was registered additionally for the prevention and treatment of flea and tick infestation in dogs.

CROPSCIENCE

€722 million

for research and development at CropScience

In 2010, €722 million (2009: €653 million) in research and development expenditures, or 23.6% of the Bayer Group total, were made in the CropScience subgroup. This was equivalent to 10.6% of subgroup sales.

CropScience maintains a global network of research and development facilities employing some 4,300 people. Our largest R&D sites for crop protection products are located in Monheim and Frankfurt am Main, Germany, and in Lyon, France. The major research centers of the BioScience unit, which focuses on seed technology and breeding, are located in Ghent, Belgium; Haelen, Netherlands; and Morrisville, North Carolina, United States.

While research is carried out centrally at a small number of sites, our development and seed breeding activities take place both at these sites and at field testing stations across the globe so that future active substances and crop varieties can be tested according to specific regional requirements.

As part of our integrated research approach, scientists in the fields of agricultural chemistry and seed technology are increasingly collaborating to pool the knowledge acquired through chemical, biological and genetic research and field development, aligning this expertise to our long-term research objectives and business strategies for the various crops.

In the Crop Protection segment we spent €476 million (2009: €482 million) for research and development in 2010. In this segment we identify and develop innovative, safe and sustainable products for use in agriculture as insecticides, fungicides, herbicides or seed treatments, and carry out research projects across all indications in new areas of future importance, such as plant health or stress tolerance. In addition to conventional chemistry, biology and biochemistry, modern technologies such as genomics, high-throughput screening and bioinformatics play an important role in identifying new chemical lead structures. Collaborations with external partners complement our own activities.

We broaden the range of uses for our products by developing new mixtures or innovative formulations of products already on the market so that they can be applied in additional crops or be made easier to handle.

The active ingredient pipeline of Crop Protection currently contains 13 development projects, of which nine are at an advanced stage and four at an early stage of development. A further 38 projects are in earlier research stages.

In 2010 we successfully commercialized our new rice fungicide isotianil (major brand: Routine®), a member of the isothiazole chemical class, in South Korea and Japan. This product will strengthen our portfolio in Asia. The active ingredient originating from our research pipeline was further developed in collaboration with Sumitomo Chemical Co., Ltd. of Japan. Isotianil protects rice against Pyricularia oryzae, the fungus that causes rice blast, by stimulating the plants' natural defense mechanisms.

We also successfully launched Bacillus firmus (major brand: Votivo™), a biological pest control agent for seed treatment applications, in the U.S. market. This product adds to our portfolio of conventional seed treatments to combat nematodes – threadworms that live in the soil.

We plan to launch four more promising new active ingredients in 2011-2012, subject to their successful registration:

Planned Product Launches [Table 3.35]

New active ingredient	Use	Planned launch
Bixafen	Fungicide	2011
Fluopyram	Fungicide	2011
Indaziflam	Herbicide	2011
Penflufen	Seed treatment fungicide	2012

CropScience anticipates a peak sales potential totaling in excess of €1 billion for isotianil, Bacillus firmus and the four substances listed above that are expected to be commercialized by 2012.

Fluopyram (major brand: Luna®) has been developed to combat problematic plant diseases caused by fungal pathogens. It is planned to market this active ingredient – a member of the new pyridinyl-ethyl-benzamide class – worldwide for foliar application and seed treatment in more than 70 crops. Key benefits are better storability and longer shelf life of harvested produce.

Bixafen (major brands: Aviator®, Xpro®) is a new cereal fungicide that boosts yields thanks to its positive impact on plant physiology. This active ingredient, a member of the pyrazole class, was developed specifically for foliar application to combat speckled leaf blotch (Septoria tritici) and brown rust (Puccinia recondita). Representing a new group of active ingredients, bixafen is well suited as a component of resistance management.

Indaziflam (Alion®, Specticle®) is a new alkylazine herbicide with a long duration of action that is effective against a broad spectrum of difficult-to-control broad-leaf weeds and grasses. It is intended for use in agricultural specialty crops, such as fruit and grapes, and in numerous non-agricultural markets including weed control on paths and other paved areas.

Penflufen (Emesto®, Emerion®) is a novel pyrazole fungicide for use as a seed treatment in various crops, such as potatoes, oilseed rape/canola, soybeans, corn and cotton. This substance is effective against a number of seed-borne pathogens and features particularly broad action and efficacy against the fungus genus Rhizoctonia. Penflufen contributes to particularly strong seedling development due to its good seed tolerance.

In the Environmental Science, BioScience segment, we considerably raised our spending for research and development to €246 million (2009: €171 million). This increased expenditure was directed mainly toward expanding our research and development capabilities in BioScience.

The Environmental Science unit tests the compounds developed by Crop Protection and evaluates them for possible non-agricultural uses. In addition, we carry out tests with active ingredients from other companies and may purchase such ingredients if results are positive. Current development projects include gels and baits to combat insect pests, new herbicide and fungicide mixtures, biological solutions and products for insect vector control.

In 2010 the Natria™ product line was successfully launched in the United States and Germany. This new line of products based on natural or nature-derived ingredients complements the Bayer Advanced range in the United States and our 'Bayer Garten' portfolio in Germany. We plan to expand the product line and introduce it in France and other European markets during 2011. Following the submission of our Lifenet® mosquito net to the Pesticide Evaluation Scheme of the World Health Organization (WHOPES) in 2010, we plan to start with the launch of this product in selected countries in 2011. A new insecticide formulation with residual action to control mosquitoes was also submitted to the WHO in 2010. As part of a further research collaboration between CropScience and the Innovative Vector Control Consortium (IVCC) in Liverpool, United Kingdom, a new insecticides research platform was successfully established and yielded first results.

Research in our BioScience unit is dedicated to optimizing plant traits. We are developing new seed varieties of our established core crops – cotton, canola, rice and vegetables. We have expanded our research activities to include cereals and soybeans as additional core crops, and are conducting research to develop sugarcane varieties with an increased sugar content. Our research and development work focuses on improving the agronomic traits of these crops. For example, our scientists are working to develop crop plants with high tolerance against stress factors such as extreme temperatures and drought. We also aim to increase the plants' yield potential and quality of harvested materials. Examples here include improving the profile of canola oil or enhancing the properties of cotton fibers. Further areas of focus include developing new herbicide tolerance technologies based on alternative mechanisms of action, and improving the resistance of plants to damage from insects and disease. To do this we employ all modern breeding methods, including plant biotechnology techniques. Our BioScience research and development pipeline presently contains more than 60 promising lead projects and is complemented by around 80 current research agreements with public- and private-sector partners.

Business growth in BioScience is supported by new product introductions. An example is our LibertyLink® herbicide tolerance technology, marketed in the United States for soybean seeds in partnership with leading seed producers. In 2011 we plan to introduce several innovative seed varieties, including cotton with our proprietary glyphosate herbicide tolerance trait.

MATERIALSCIENCE

€231 million
for research and development at MaterialScience

In 2010, MaterialScience spent €231 million (2009: €207 million) on research and development (not including joint development activities with customers). MaterialScience thus accounted for 7.6% of the Bayer Group's total research and development expenses. The subgroup's expenses in this field amounted to 2.3% of sales. 1,000 employees were entrusted with research and development tasks.

Our focus in the field of Polyurethanes is on broadening the application areas for our products and improving their properties. A key area of application is in the construction industry, where rigid polyurethane foam serves as a highly efficient insulating material, making an active contribution to reducing energy consumption and protecting the climate. With many countries tightening their laws to reduce energy consumption in buildings, we anticipate growing demand for the relevant polyurethane foams in all climate zones, especially as they can provide significantly better thermal insulation than conventional insulating materials.

Polyurethane frames for photovoltaic units are another example of a groundbreaking application. Furthermore, in close cooperation with Puren GmbH of Überlingen, Germany, we have developed a system combining energy generation from solar radiation with highly efficient thermal insulation – thus satisfying two of today's key requirements for home construction.

The use of renewable raw materials also plays an important part in research and development activities. For example, a concept has been developed for a "green shoe," up to 90% of which consists of components manufactured by particularly environmentally friendly processes or using renewable raw materials. For example, the shoe sole is made of polyurethane produced mainly from soybean oil, and the toecap of a polycarbonate blend based partly on vegetable starch.

The focus of innovation in process development is on the production of new and improved raw materials and formulations. Specifically, MaterialScience is working with internal and external partners on ways to put climate-damaging carbon dioxide to good use in the manufacture of polyether polycarbonate polyol (PPP) feedstock for polyurethanes. Such intelligent use of CO_2 reduces our consumption of fossil raw materials and thus helps to protect the environment. This is made possible by a breakthrough in catalysis research based on the results of intensive cooperation between RWTH Aachen University and the CAT Catalytic Center in Aachen, Germany, operated jointly by MaterialScience and Bayer Technology Services.

Research and innovation in the area of polycarbonates focuses on the development of new polycarbonate products such as those for weight-saving applications, which set new efficiency and safety standards and allow greater design freedom.

Growth areas the focus of innovation

We use the term "focused innovation" for activities in which we focus our resources on satisfying unmet customer needs in clearly defined growth areas. We refer to our activities in developing new solutions jointly with external partners as "open innovation." One example is the collaborative project to develop new, LED-based automotive lighting technologies that could significantly improve the energy efficiency of headlamp systems. Here we are working closely with a major automotive parts supplier, a producer of injection molding tools and the Fraunhofer Society, Europe's largest applied research organization. The "global innovation" concept denotes the intensive support provided by our polycarbonate product and applications development center in Leverkusen, Germany, for our development activities around the world.

Our strategy focuses on selected development areas such as polycarbonate glazing and other lightweight solutions for the transportation sector, LED illumination management (for use in street lighting, for example), safety applications (such as safety glazing), and improvements in the cost efficiency of manufacturing processes. We also place importance on the continued development of highly eco-friendly materials, such as polycarbonate blends containing recycled plastics or bio-based substances. In this way we aim to help our customers achieve their sustainability goals.

The research and development departments of the Coatings, Adhesives, Specialties business unit drive forward the development of polyurethane raw materials for high-performance coatings, adhesives and sealants. A further objective of this business unit is to open up new technology-driven markets for our businesses with cosmetic and medical applications, functional films and nanotechnology. To this end we also maintain strategic alliances with partners from industry and academia.

The research and development activities serving our core businesses in conventional coating, adhesive and sealant raw materials are focused on the continued development of eco-friendly systems that are based on water rather than solvents or that can be efficiently radiation-cured. One example of a new market segment we have opened up for our products is our high-performance coating raw materials for wind turbines that can significantly improve the weather resistance of rotor blades.

Customized applications are also to be found in medical technology. In 2010 we combined our coating and adhesive materials portfolio for this sector under the brand name Baymedix®. Our offer includes highly functional coatings, special adhesive raw materials for wound care and closures, and thermoplastic polymers for surgical and diagnostic apparatus. In the field of cosmetics – where we develop precursors for facial and body care, hair styling and sun protection products – the new Baycusan® C product line satisfies important requirements for "green" raw materials, such as the absence of preservatives.

We have streamlined our research portfolio for functional films. Future activities will center partly around films based on polycarbonates or thermoplastic polyurethanes. Combining these with additional technologies or specific property profiles leads to new products such as multifunctional or holographic films, which open up new fields of application in a variety of industries. A modern coating line has been started up in Leverkusen for this purpose. Another area of focus is on electroactive polymers, where we have further strengthened our activities through the acquisition of the U.S. company Artificial Muscle, Inc. In 2010 we opened a new research center for functional films in Singapore, particularly to meet growing demand from the electronics market in Asia/Pacific for innovative film-based products.

BAYER TECHNOLOGY SERVICES

Technology Services supports all Bayer subgroups with technology platforms

All Bayer subgroups work closely with our service company Bayer Technology Services worldwide on technology solutions, particularly in the fields of process technology, plant engineering, automation and product development. For example, this service company cooperates with MaterialScience in the development of new production processes that make efficient use of energy and raw materials, thereby helping the subgroup to safeguard its technological and cost leadership. Examples include the new TDI production process being used for the first time at the MaterialScience site in Shanghai and the catalytic conversion of carbon dioxide to polymers. Centralized development work on technologies relevant to more than one subgroup, such as nanotechnology and biotechnology, along with expertise in mathematical simulation and statistical data analysis, helps HealthCare and CropScience to shorten development times for new products. This also includes the future development of entirely new production concepts, for example at the INVITE research center, a collaborative venture between Bayer Technology Services and Dortmund Technical University, which is currently under construction. Another key strategic factor here is international knowledge sourcing in areas ranging from country-specific expertise in the handling of capital expenditure projects to the global exploitation of innovations.

BAYER INNOVATION

Bayer Innovation develops new businesses adjacent to core activities

Bayer Innovation investigates and evaluates innovative areas adjacent to the subgroups' current core activities and develops them into viable new businesses for the Group. An example is the manufacture of plant-made pharmaceuticals. In 2010 a Phase I clinical study was launched with a personalized cancer vaccine to treat non-Hodgkin's lymphoma. In the agriculture sector, novel hybrid concepts based on the combination of polymer technologies and crop protection products are under development. The full potential of these technologies is being evaluated in close cooperation with the subgroups and external partners.

TRIPLE-I: INSPIRATION, IDEAS, INNOVATION

The innovation campaign entitled "Triple i: Inspiration, Ideas, Innovation" motivates Bayer employees worldwide to submit ideas for new products and thereby add to the company's innovative capability. More than 11,000 ideas have been submitted since the initiative was launched. Several products resulting from employees' ideas have already been successfully commercialized. In 2010, Triple-i focused on two main areas: the "Your Heart" campaign, designed to identify new opportunities in cardiovascular medicine, and the Triple-i-Vietnam campaign, aimed at the development of new applications for MaterialScience products in Vietnam.

9. Sustainability

9.1 Sustainability Strategy

The overriding goal of our sustainability strategy is that our company's actions be guided by long-term values. We are convinced that we can only be commercially successful over the long term if we balance economic growth with ecological and social responsibility. That responsibility is clearly expressed in our mission statement "Bayer: Science For A Better Life," our commitment to the ten principles of the United Nations Global Compact and our support for the Responsible Care® initiative of the chemical industry.

We aim to achieve sustainability on three levels:

1. Products and innovation: our products are the basis of our value creation, and innovations are the driver of sustainability.
2. Business activities: our relations with stakeholders, especially employees, suppliers and customers, are based on sustainable business activity. Core aspects are corporate compliance, responsible human resources policies, product stewardship and sustainable procurement management.
3. Social commitment: through our foundations and voluntary social initiatives, we focus on issues of particular social relevance with a clear link to our company.

Sustainability essentially means future viability and as such forms an integral part of our business strategy (see Chapter 11.2). Our innovative solutions address market opportunities and are aimed at solving global challenges. These are at the focus of our sustainability strategy. Based on this strategy we developed a Sustainability Program in 2009. The program places special importance on alliances for sustainable health care, innovative partnerships to improve the supply of high-quality food, and new solutions for climate protection and use of resources. We have selected eight lighthouse projects that clearly illustrate the focus of our sustainability strategy.

INTERNET

For more information on the Bayer Sustainability Program, go to: WWW.SUSTAINABILITYPROGRAM.BAYER.COM

Bayer Sustainability Program [Graphic 3.18]

Challenge	Global access to health care	Nutrition for a growing population	Climate and environmental protection
Focus	Alliances for sustainable health care	More high-quality food	Solutions for climate protection and resource use
Projects	• Family Planning • Neglected Diseases	• Food Chain Partnership Vegetables • Direct-Seeded Rice	• EcoCommercial Building Program • Energy Efficiency (2 projects) • Resource Efficiency

The alignment and steering of our Group-wide sustainability strategy have been assigned to a Group committee headed by the member of the Board of Management responsible for Innovation, Technology and Environment. This committee defines objectives and initiatives, decides on the relevant Group regulations and monitors their implementation.

Sustainability is also something we expect from our suppliers. At the end of 2009, therefore, we adopted and communicated a Supplier Code of Conduct as part of our "sustainability in procurement" strategy. This code contains our fundamental sustainability standards and requirements and is used to evaluate and select suppliers. In 2010 a total of 147 suppliers worldwide were evaluated from the risk point of view. Additional suppliers are evaluated in the course of country- and subgroup-specific projects.

In 2010 Bayer launched a Group-wide process and plant safety initiative to sharpen the focus of our commitment to safety. The most important principles and related organizational structures were set forth in the Group regulation "Process and Plant Safety." Adjustments to the organization were made in 2010 and the first measures, including special training programs, were implemented.

INTERNET

The Sustainable Development Report can be found at: WWW.BAYER.COM/EN/SUSTAINABLE-DEVELOPMENT-REPORT.ASPX

We pursue our sustainability commitment with the aid of objectives and indicators. In 2006 we defined specific objectives for the period through 2010 in several fields of activity: innovation, product stewardship, management excellence, social commitment and environmental responsibility. In our Sustainable Development Report 2010, we will publish a final report on this target program, publish new goals and describe in detail our accomplishments in the area of sustainability. There we will also outline our progress in implementing the 10 principles of the U.N. Global Compact by showing our activities, management systems and achievements. The Global Reporting Initiative (GRI) has certified that our most recent report meets the highest standard (Level A+) under the current GRI guidelines (G3).

9.2 Employees

Employee Data [Table 3.36]

	Dec. 31, 2009	Dec. 31, 2010
	FTE	FTE
Employees by region		
Europe	54,600	54,300
North America	16,600	16,400
Asia/Pacific	23,000	24,600
Latin America/Middle East/Africa	16,800	16,100
Employees by corporate function		
Production	48,400	47,200
Marketing and distribution	40,200	41,100
Research and development	12,800	13,200
General administration	9,600	9,900
Total	**111,000**	**111,400**
Trainees	2,700	2,600
	%	%
Percentage of women in the Group Leadership Circle	5.5	6.5
Number of nationalities in the Group Leadership Circle	22	21
Proportion of full-time employees with contractually agreed working time not exceeding 48 hours per week	100	100
Proportion of employees with health insurance	95	94
Proportion of employees eligible for a company pension plan or company-financed retirement benefits	74	73
Proportion of employees covered by collective agreements on pay and conditions	56	55

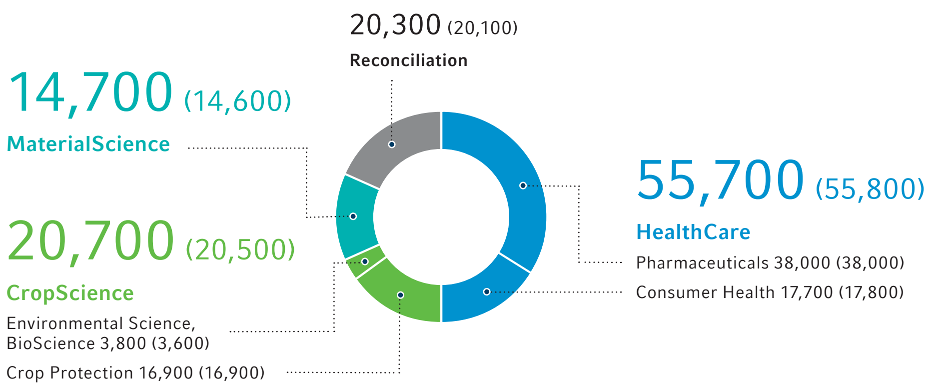
2009 figures restated
The number of employees on either permanent or fixed-term contracts is stated in full-time equivalents, with part-time employees included on a pro-rata basis in line with their contractual working hours. By contrast to the previous year, the figures in the above table include fixed-term employees but not trainees.

EMPLOYEE DATA

On December 31, 2010, the Bayer Group had 111,400 employees worldwide (2009: 111,000). Thus headcount remained virtually steady in 2010 (+0.4%). In Germany we had 36,200 employees (2009: 36,000), who made up 32.5% of the Group workforce. HealthCare had 55,700 employees (2009: 55,800), CropScience 20,700 (2009: 20,500), and MaterialScience 14,700 (2009: 14,600). The remaining 20,300 (2009: 20,100) employees worked mainly for the service companies. This figure also includes the 700 (2009: 700) employees of Bayer AG. There were an additional 2,600 (2009: 2,700) trainees on the closing date who are not included in the Group total.

Personnel expenses rose in 2010 by 4.2% to €8,099 million (2009: €7,776 million), chiefly as a result of currency effects and regular salary increases.

Employees by Segment (2009 in parentheses) [Graphic 3.19]



2009 figures restated

EMPLOYEE COMPENSATION AND BENEFITS

Compensation in the Bayer Group is based on a globally standardized system that ensures transparent and performance-oriented remuneration and incentives for all employees. Regular benchmarking against competitors helps in setting base salaries in line with the demands and responsibilities of each position. These are supplemented by attractive performance-related compensation components and extensive ancillary benefits.

For example, more than €500 million is earmarked for variable bonus awards to employees for the year 2010 under the Group-wide short-term incentive (STI) program alone. Included in our extensive range of ancillary benefits in many countries are various stock participation programs that enable employees to purchase Bayer stock at a discount, giving them a further opportunity to share in the company's economic success. Since 2005 we have offered senior and middle managers throughout the Group uniform stock-based compensation programs known as "Aspire" (see Note [26.6] to the consolidated financial statements) that are based on ambitious earnings targets and – in the case of Group Leadership Circle members – require an appropriate personal investment in Bayer stock.

Employee bonuses total more than

€500 million

ENGAGED AND LOYAL EMPLOYEES

Employee engagement drives the implementation of Bayer's strategy. Continuously promoting and developing the motivation and skills of our employees is thus a fundamental objective of our human resources policy. We gained valuable information and ideas in this area from our first ever global employee survey, which was carried out in 2010. In their responses to this anonymous poll, nearly 70% of employees in all countries and all areas of the company shared with us their perceptions of the strategy, culture and working conditions within the enterprise.

The survey results show that the overwhelming majority of the employees – well over 80% – feel close ties to Bayer and consider the company to be an attractive employer overall. Almost 85% of employees are highly motivated and particularly committed to the company's success. These results are confirmed by the low rate of voluntary terminations. At the main Group companies in Germany, this rate was just 0.4%. The Group-wide attrition rate, which also includes retirements and other reasons for people leaving our employment, was about 9% in 2010. We will take specific action in areas where the employees' responses to the survey revealed scope for improvement.

This action will be based on the Bayer Group's revised values and leadership principles, now expressed by the new succinct acronym "LIFE." The goal is to more firmly anchor and apply company policies in everyday business. LIFE stands for Leadership, Integrity, Flexibility and Efficiency.

RESPONSIBLE HUMAN RESOURCES POLICIES

Sustainability and social responsibility are also integral to our company policy – and more than 80% of our employees worldwide confirm this. Nearly all Group employees either have statutory health insurance or can obtain health insurance through the company, and 73% have access to a company pension plan. Involving the employee representatives is part of what partnership and responsibility mean to us as a company. The working conditions for 55% (2009: 56%) of our employees are governed by collective or company agreements. In China, for example, the employees of our Group companies have already elected union representation at six sites, with three more to follow shortly. Most of the Group-wide job cuts announced in November 2010 will be implemented so as to minimize social hardship. In Germany, which remains the company's largest base of operations with 36,200 employees, dismissals for operational reasons are prohibited through the end of 2012 under an agreement with the employee representatives.

DIVERSITY AND INTERNATIONALISM

As a global enterprise, it is Bayer's aim to have as diverse and as international a workforce as possible. For example, a total of 21 nations are represented in the Group Leadership Circle, the company's most senior management level. Nearly 70% of these executives are native to the countries in which they work. A further focus of our efforts to achieve greater employee diversity is on increasing the proportion of female employees, especially in management positions, over the long term. In 2010, 35% of Bayer Group employees worldwide were women. The Group Management Board has set a medium-term target for increasing the proportion of women in leadership positions. Accordingly, we aim to raise the proportion of female executives in the Group as a whole toward 30% by 2015.

Bayer Group Workforce Structure 2010 [Table 3.37]

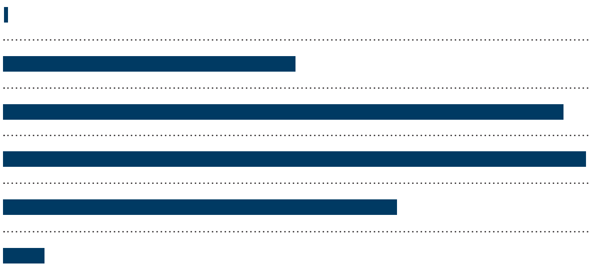
	Women	Men	Total
Non-payscale employees including managerial staff	10,200	22,100	32,300
Skilled employees	29,100	50,000	79,100
Total	**39,300**	**72,100**	**111,400**
Trainees	800	1,800	2,600

VOCATIONAL TRAINING AND RECRUITING

Diversity, international career opportunities, a modern work environment and social commitment make Bayer an attractive employer throughout the world. This enabled us to attract a total of over 4,000 specialists and managers with academic qualifications as new employees in 2010. In India alone, we recruited more than 750 university graduates, in Germany about 700 and in the United States over 350. To alert high school graduates and students to career opportunities at Bayer from an early stage, we expanded our university recruiting activities in 2010 to include corporate presentations on social networking sites. These communication activities were supplemented by the more than 2,700 challenging occupational internships that we awarded to students of various disciplines in the reporting period.

Apart from the hiring of university graduates, our own training programs for young people are among the most important measures we undertake to guard against a possible shortage of specialists resulting from demographic change. Once again in 2010, more than 900 young people began training courses in a total of over 20 occupations at our German sites.

Employees by Age Group in % [Graphic 3.20]



Age in years	%
< 20	0.2
20-29	15.6
30-39	29.9
40-49	31.1
50-59	21.0
> 60	2.2

CONTINUING EDUCATION AND KNOWLEDGE RETENTION

We are responding in a number of ways to the challenge posed by demographic change in many industrialized countries. We provide extensive continuing education programs to enhance employees' knowledge and adapt it to changing requirements. In 2010 we set up the Bayer Senior Experts Network (BaySEN), an initiative designed to harness retired managers' many years of experience for the company's benefit and pass it on to the next generation.

Another focus of our measures to address the demographic trend is the steady expansion of occupational health management. With employees now tending to retire later than in the past, we offer a range of programs in many countries to promote and maintain the health and employability of our people. For example, under the collective bargaining agreement on life worktime and demographic change, we now offer non-managerial employees in Germany a thorough medical check-up and enable people with jobs that are especially demanding to significantly reduce their working hours in the years prior to retirement.

9.3 Environment, Climate Protection and Safety

Bayer traditionally places great importance on protecting the environment and using natural resources responsibly. We use our expertise and experience both to optimize technologies and processes and to develop innovative products that help protect the environment, nature and the climate. We develop new solutions to optimize the use of resources, reduce emissions and avoid waste. Bayer has designed a method – the resource efficiency check – to analyze the total use of resources such as energy, water and raw materials and determine ways to minimize consumption. This check is currently being piloted in the MaterialScience and CropScience subgroups.

Key Performance Indicators [Table 3.38]

Category	Key Performance Indicators for Health, Safety and Environment	2009	2010
Health and Safety	Industrial injuries to Bayer employees resulting in at least one day's absence (number of injuries per million hours worked)	2.0	1.7
	Reportable industrial injuries to Bayer employees (number of injuries per million hours worked)	3.1	3.1
	Environmental incidents	13	7
	Transportation incidents	10	8
Emissions	Direct greenhouse gas emissions (CO_2 equivalents in million metric tons)*	4.57	4.80
	Indirect greenhouse gas emissions (CO_2 equivalents in million metric tons)*	3.53	3.70
	Volatile organic compounds (VOC) (thousand metric tons/year)	2.59	2.54
	Total phosphorus in waste water (thousand metric tons/year)	0.74	0.09
	Total nitrogen in waste water (thousand metric tons/year)	0.64	0.49
	Total organic carbon (TOC) (thousand metric tons/year)	1.35	1.42
Waste	Hazardous waste generated (million metric tons/year)	0.38	0.35
	Hazardous waste landfilled (million metric tons/year)	0.09	0.06
Use of resources	Water use (million m^3/year)	407	474
	Energy use (petajoules [10^{15} joules]/year)	77.33	85.71

2009 figures restated
*as per Greenhouse Gas Protocol

Further reduction in industrial injury rate

We regularly review our performance in the areas of health, safety and environment on the basis of key performance indicators – nearly all of which we improved in 2010, despite an approximately 20% increase in manufactured sales volume. Water and energy use increased as a result, along with total organic carbon (TOC) emissions. The industrial injury rate again declined and was well below our target of <2.0.

In 2010 there was also a decline in the number of environmental and transportation incidents. According to our internal voluntary commitment, we report even minor product releases. For substances with a high hazard potential, we report quantities greater than 100 kg. Unfortunately, even our extensive safety precautions and training procedures cannot entirely prevent environmental incidents or traffic accidents from occurring. Any such events are carefully analyzed and evaluated so that adequate steps can be taken to prevent a recurrence.

Bayer's aim is to achieve an appropriate and uniform standard of HSEQ (health, safety, environmental protection and quality) throughout the Bayer Group and steadily improve it. To meet this goal, the company has established HSEQ management systems in all subgroups and service companies that are based on recognized international standards and are regularly reviewed and updated. In 2010 about 90% of all Bayer production sites had an HSE management system audited by Bayer. More than 60% of our business activity (in relation to production volume and energy input, respectively) takes place at sites that are certified or validated externally according to recognized international standards such as ISO 14001, EMAS or OHSAS 18001. All subgroups and service companies have industry-specific quality management systems in place, such as ISO 9001 or GMP (Good Manufacturing Practice). The subgroups have additional systems and standards that address product-specific requirements.

Our highest priorities are the health and safety of everyone who handles our products and the protection of the environment. For us, product stewardship entails a thorough evaluation of health and environmental risks – from product research and development to production – and includes responsible product marketing, use and disposal. Nearly all products manufactured by Bayer are subject to wide-ranging statutory obligations concerning the publication of information, such as those imposed by the European Union chemicals policy "REACH." We completed the mandatory pre-registration with the chemicals agency ECHA in 2009. In 2010 we submitted within the deadline registration dossiers for 125 of the substances that Bayer manufactures or imports in very large quantities (> 1,000 tons per year) or that are particularly hazardous. For many of these substances, Bayer has formed registration consortia with competitors in order to share data and avert the need for additional animal studies.

CLIMATE PROTECTION

The Bayer Climate Program, announced in 2007, which forms a cornerstone of the Bayer Sustainability Program, addresses one of the major global challenges: climate change. We examine the energy efficiency of our processes and offer solutions for protecting the climate and coping with the effects of climate change. In 2010 Bayer was again named the best company in our sector in the global Carbon Disclosure Leadership Index, honoring our transparent reporting of the company's climate strategy and greenhouse gas emissions. The company is also represented in the newly created Carbon Performance Leadership Index (CPLI) with an "A" ranking. The CPLI evaluates companies' specific actions and achievements in protecting the climate and addressing the consequences of climate change.

Bayer Climate Check completed

Improving energy efficiency is a major factor in reducing our own greenhouse gas emissions. More than 140 production facilities and buildings – accounting for about 85% of production-related CO_2 emissions – throughout the Bayer Group were examined using the "Bayer Climate Check" analysis tool to determine the potential for reducing energy consumption and therefore CO_2 emission. We expect to have a realizable energy reduction potential of up to 10% by 2013. The results of the Climate Check completed in 2010 will be integrated into the STRUCTese® (Structured Efficiency System for Energy) management system to ensure that this potential is sustainably realized and the efficiency of our production processes steadily increased. It is planned to establish STRUCTese® at 60 of our most energy-intensive production facilities by the end of 2012 to support the realization of the reduction targets.

Process innovations are a further focus of our efforts to reduce greenhouse gas emissions. One example is an innovative, climate-friendly chlorine production process developed by Bayer together with its partners: in the future the oxygen depolarized cathode technology using common salt as a resource will make it possible to reduce energy consumption in chlorine production by 30%. In 2011 Bayer plans to bring a plant on stream in Germany that will use this process and have an initial capacity of 20,000 tons per year. In 2010 we also continued with process engineering modifications to further reduce nitrous oxide emissions.

The Bayer Climate Program also adopts other approaches, including measures such as the "Eco-Fleet" program to reduce CO_2 emissions caused by company cars, the use of new telecommunications technology to reduce business travel, and the improvement of energy efficiency in the IT environment. The steps taken as part of the Eco-Fleet program already cut CO_2 emissions by 15% between 2007 and the end of 2010.

Bayer bases its reporting of greenhouse gas emissions on the international standard of the Greenhouse Gas (GHG) Protocol. The company aims to hold total emissions to 2007 levels through 2020 despite growth in production. Despite the roughly 20% increase in manufactured sales volume in 2010, mainly at MaterialScience, we were able to limit the increase in direct greenhouse gas emissions to 5%. This was mainly driven by process improvements and energy-saving measures. Energy-related indirect greenhouse gas emissions also rose by 4.8%. The total of direct and indirect greenhouse gas emissions increased by 4.9%.

To track our target achievement more transparently, we publish detailed information on emission levels in our Sustainable Development Report.

INTERNET

Detailed information can be found at: WWW.CLIMATE.BAYER.COM

Bayer also provides solutions for climate protection. Energy usage in buildings accounts for some 30% of global CO_2 emissions. Climate protection in the construction sector is already achievable with Bayer's EcoCommercial Building (ECB) Program. With the help of a partner network of suppliers, construction firms, architects and building owners, Bayer and its partners develop customized solutions for energy-optimized commercial and public buildings, including even zero-emissions buildings. Apart from our offerings to customers, we are also implementing the ECB program within the Bayer Group itself. At the end of 2010, for example, we completed another Bayer building as part of the ECB Program, this time at Bayer's site in Greater Noida, India.

9.4 Social Commitment

€57 million
for social innovations

Bayer's social commitment is an established part of our sustainability strategy and corporate policy. The company considers itself part of society and sees its commitment to corporate citizenship as an investment in society's future viability and a long-term contribution to a favorable business environment. Bayer's social commitment is exemplified by numerous projects in many parts of the world, some of which the company has been organizing or supporting for years. In 2010 the company provided some €57 million (2009: €44 million) in funding in the four main areas of focus.

Expenses for Social Initiatives [Table 3.39]

Main sponsorship areas	2009	2010
	€ million	€ million
Education and research	5	7
Environment and nature	3	3
Health and social needs	15	26
Sports and culture	21	21

Our funding strategy is constantly evolving. We place special emphasis on projects addressing important needs of society as a whole to which we can contribute our technological and commercial expertise.

EDUCATION AND RESEARCH

Bayer traditionally places great importance on support for education and research because, as a research-based company, we depend heavily on recruiting highly trained scientists and on society's acceptance of technology.

Support for talented young researchers and leading scientists

The funding programs of the Bayer Science & Education Foundation cover the entire scientific training and career path. In 2010 the foundation provided total funding of some €1 million – on the one hand to engaged school students and trainees and for innovative school projects, and on the other to outstanding university students, young scientists and leading researchers. The focus of this funding in both cases is on the natural sciences and medicine.

In 2010 the fourth "Baylab" student laboratory opened at the company's Leverkusen headquarters. Some 3,400 school students took advantage of the instruction offered in the areas of health care, nutrition and plastics during the first year. In all, some 11,500 schoolchildren and teachers benefited from the "Baylabs" program, which, apart from the new student laboratory with its more general focus, includes the subject-specific "Baylab health," "Baylab plants" and "Baylab plastics." Bayer won the 2010 Enterprise Award of the German state of North Rhine-Westphalia for this educational project.

The "Humboldt Bayermobile," a research laboratory on wheels, began visiting schools in 2010. The Bayer foundation is supporting this joint science education project of Bayer and Humboldt University in Berlin with funding of €300,000 for an initial period of three years. The international Bayer education initiative "Making Science Make Sense" was again implemented in 12 countries in 2010. This project targets elementary school students, to whom Bayer employees convey the fascination of science through hands-on experiments.

As part of our campaign to prevent child labor in our supply chain in India, we are implementing an integrated package of measures – entitled "Learning for Life" – that enables children and young people to attend school or vocational training courses and is designed to prevent cotton seed suppliers from employing them as laborers. The focus of the program is currently on vocational training. In the state of Karnataka, for example, more than 1,900 young people regularly attended the vocational training we introduced in conjunction with local non-governmental organizations, initially at five government schools, in the 2009/2010 and 2010/2011 academic years.

ENVIRONMENT AND NATURE

Another focus of our social commitment is on educating young people about environmental issues.

Involving young people in environmental protection

In 2010 Bayer and the United Nations Environment Programme (UNEP) again organized about a dozen environmental projects for children and young people as part of their global partnership. These activities centered on the International Children's Conference on the Environment in Nagoya, Japan, attended by some 250 participants from 40 countries, which focused on biodiversity. Thanks once again to particularly strong interest from China, the annual children's painting competition run jointly by Bayer and UNEP received a record 3.2 million entries from 95 countries. In 2010, a total of about 50 young people from 18 countries took part in a week-long study trip to Germany to learn more about environmental protection – the annual highlight of Bayer's "Young Environmental Envoys" program. In 2010 Bayer and UNEP extended their partnership by a further three years until the end of 2013. Bayer will continue to support the joint projects with annual funding of €1.2 million.

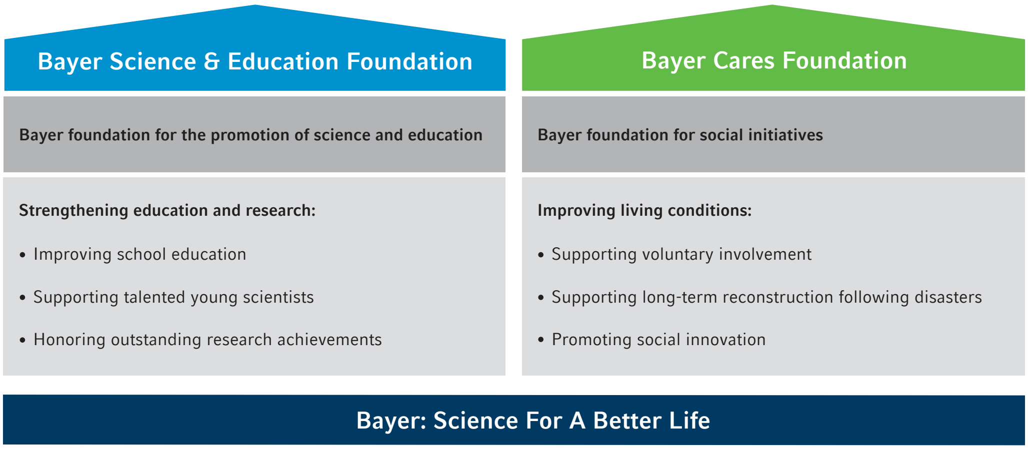
Among the activities of the research group of Professor Jianfu Zhao at the Bayer-Tongji Chair for Sustainable Development at Tongji University in Shanghai, China, in 2010 were four research projects dealing with topics such as the correlation between efficient energy and water use. The Bayer Science & Education Foundation supported the research and teaching activities of this endowed professorship with total funding of €150,000 in 2010.

HEALTH AND SOCIAL NEEDS

Bayer is globally committed to improving social conditions and health care with the dual aim of promoting social stability in the communities near its sites and helping to solve global health challenges.

As part of our ongoing aid programs, we again supported the World Health Organization (WHO) in 2010 in the fight against neglected tropical diseases. The company donated free supplies of medicines included on the WHO Essential Drug List, such as drugs to combat Chagas disease, an infection widespread in Latin America that is transmitted via the bite of the assassin bug.

Foundations [Graphic 3.21]



The Bayer Cares Foundation, dedicated to promoting our social commitment, spent a total of more than €140,000 in 2010 to support 54 charitable volunteering programs in the communities near the company's sites in Germany and Latin America. In this way the Foundation rewarded volunteerism by employees and other citizens who actively participate in projects aimed at addressing social needs.

In 2010 the Foundation also presented for the first time the "Aspirin Social Award" – worth a total of €35,000 – for innovative aid and consultancy programs in the area of health care.

The Bayer Cares Foundation joined with Caritas International in funding a health center that will provide medical care to 30,000 victims of the earthquake in Haiti. This was made possible by Bayer employees in 34 countries, who donated a total of €250,000 in response to the company's global appeal. Bayer AG added a further €100,000 to this amount for a total of €350,000. In the immediate aftermath of the earthquake, the company donated emergency relief in the form of antibiotics and painkillers worth over €650,000, bring the total value of Bayer's aid to Haiti to more than €1 million.

SPORTS AND CULTURE

Bayer has been sponsoring sports and culture for over a century.

We support a wide variety of clubs for recreational, youth and disabled sports. Bayer has joined with the German Soccer Federation (DFB) in a new initiative to help schoolchildren with mental and learning disabilities play soccer. Dubbed "Simply Soccer," the initiative establishes and supports partnerships between special-needs schools and soccer clubs with the aim of giving more children and young people with disabilities access to club-level soccer and promote mutual learning among people with and without disabilities.

The Bayer Arts & Culture program and our clubs and societies traditionally contribute to the cultural life of the communities near our sites, enhancing their attractiveness to employees and other citizens alike.

10. Events After the Reporting Period

Since January 1, 2011, no events of special significance have occurred that we expect to have a material impact on the financial position or results of operations of the Bayer Group.

11. Future Perspectives

11.1 Opportunity and Risk Report

11.1.1 Opportunity and Risk Management

Business operations necessarily involve opportunities and risks. Effective management of opportunities and risks is therefore a key factor in sustainably safeguarding a company's value.

Management of opportunities and risks is essential for steering the company

Managing opportunities and risks is an integral part of the corporate governance system in place throughout the Bayer Group, not the task of one particular organizational unit. Thus the organizational units are closely interlinked in this respect. Key elements of the opportunity and risk management system are the planning and controlling process, Group regulations and the reporting system.

At regular conferences held to discuss business performance, the opportunities and risks that are evaluated both qualitatively and quantitatively in determining the strategies of the strategic business entities and the regions are updated, and targets and necessary actions are agreed upon.

Opportunity management in the Bayer Group is based on the detailed observation and analysis of individual markets and the early recognition and evaluation of trends from which opportunities can be identified. Macroeconomic, industry-specific, regional and local trends are taken into account. It is the task of the subgroups and strategic business entities to make use of strategic opportunities arising in their respective markets. The strategic framework necessary for them to do this is set, and the necessary financing and liquidity ensured, at the Group level. Opportunity-based projects involving more than one subgroup are centrally coordinated and accounted for.

The principles of the Bayer Group's risk management system are set forth in a directive published on the Group-wide intranet. The directive explains the fundamentals of risk management in compliance with the German Law on Corporate Supervision and Transparency and includes the principles for the early identification, communication and addressing of risks. These principles relate to the areas of statutory requirements, risk management policies at Bayer and risk management activities.

Risk assessment based on the extent of possible damage and probability of occurrence

In the Bayer Group, risks are systematically and continuously identified, analyzed and documented in a database. Risks are defined as events and possible developments within or outside of the company that could jeopardize a sustained increase in enterprise value. Risk-relevant information is compiled at least quarterly and also on an ad hoc basis where necessary.

The documentation contains a description of the risk, an assessment of the extent of possible damage and the probability of occurrence, along with measures to monitor and counteract the risk.

Materiality limits for the subgroups and service companies are defined by the Bayer Group in consultation with the respective units. To transparently present risk issues at an early stage and allow potential risks to be countered in a timely manner, the risk documentation prescribes action thresholds that are well below the materiality limits.

The members of the Group Leadership Circle have unrestricted access to the risk database, which is mapped to the management information system.

Risk management at the Group level is assigned to the Chief Financial Officer. The subgroups, service companies and the units of the holding company have nominated persons responsible for risk management at the upper managerial level as well as risk management coordinators to ensure that an effective system for the early identification of risks is implemented and maintained. The risk management coordinators and specialists in the organizational units are responsible for the risk inventory, including the identification, evaluation and documentation of risks, and for explain-

Clear organizational structure for risk management

ing the risk strategy. The annual risk report to the Supervisory Board covers the risk management system, legal risks, compliance issues, the reports by Corporate Auditing and the report on the internal control system.

Corporate Auditing is responsible for coordinating the identification and documentation of risk areas throughout the Group and for enhancing the risk management system.

The effectiveness of the risk management system is monitored by Corporate Auditing at regular intervals. Corporate Auditing adopts a risk-based approach to audit planning. In addition, the external auditor assesses the early warning system as part of the annual financial statements audit and informs the Group Management Board and the Supervisory Board of the findings. These findings are taken into account as part of the continuous enhancement of our risk management system. The risk management system is monitored by the Supervisory Board, especially its Audit Committee.

11.1.2 Internal Control and Risk Management System for (Group) Accounting and Financial Reporting

(report pursuant to Sections 289 Paragraph 5 and 315 Paragraph 2 No. 5 of the German Commercial Code (HGB))

Bayer has an internal control and risk management system in place under which appropriate structures and processes for (Group) accounting and financial reporting are defined and implemented throughout the organization. This system is designed to guarantee timely, uniform and accurate accounting for all business processes and transactions. It ensures compliance with statutory regulations, accounting and financial reporting standards and the internal accounting directive, which is binding upon all the companies included in the consolidated financial statements. The relevance and consequences for the consolidated financial statements of any amendments to laws, accounting or financial reporting standards or other pronouncements are continually analyzed, and the Group directives and systems are updated accordingly.

Apart from defined control mechanisms such as system-based and manual reconciliation processes, the fundamental principles of the internal control system include the separation of functions and compliance with directives and operating procedures. The accounting and financial reporting process for the Bayer Group is managed by the Group Accounting and Controlling department of Bayer AG.

The Group companies prepare their financial statements either locally or using the Group's shared service centers and transmit them with the aid of a data model that is standardized throughout the Group and based on the Group accounting directive. The Group companies are responsible for their compliance with the directives and procedures applicable throughout the Group and for the proper and timely operation of their accounting-related processes and systems. The employees involved in the accounting and financial reporting process for the consolidated financial statements of the Bayer Group and the financial statements of Bayer AG receive regular training, and the Group companies are supported by headquarters personnel throughout the process. As part of the process, measures are implemented that are designed to ensure the regulatory compliance of the consolidated financial statements. These measures serve to identify and evaluate risks, and to limit and monitor any risks that may be identified. For example, material new contractual relationships are systematically tracked and analyzed.

The consolidated financial statements are prepared centrally on the basis of the data supplied by the included subsidiaries. The consolidation, certain reconciliation operations and monitoring of the related time schedules and procedures are performed by a dedicated Group Financial Statements department. System-based controls are monitored by personnel and supplemented by manual inspection. At least one additional check by a second person is carried out at every level. Defined approval procedures must be observed at all stages in the accounting process. There is also a dedicated unit, separate from the financial statements preparation process, for clarification of specific accounting-related questions or particularly complex issues.

Bayer's internal control system for financial reporting is based on the framework issued by COSO (Committee of the Sponsoring Organizations of the Treadway Commission). For IT processes, the COBIT (Control Objectives for Information and Related Technology) framework is used accordingly. The standards for the mandatory Group-wide internal control system (ICS) were derived from these frameworks, defined centrally and implemented by the Group companies. The management of each company is responsible for the implementation and oversight of the local ICS. All ICS-relevant business processes, together with the related risks and controls, are documented in a uniform and audit-proof manner in a Group-wide system and clearly mapped in a central IT system at the Group level.

The role of Corporate Auditing includes verifying the accuracy of the accounting at German and foreign companies, especially with regard to the following aspects:

- compliance with statutory regulations, directives of the Board of Management, and other internal regulations and procedures
- formal and substantial correctness of accounting and the corresponding reporting
- functioning and effectiveness of the internal control system to protect the company against financial loss
- correctness of working procedures and adherence to economic principles.

Bayer AG has a standardized, Group-wide procedure to monitor the efficacy of the accounting-related internal control system. This procedure is systematically aligned to the potential risks of misreporting in the consolidated financial statements and is based on the strict requirements of the U.S. capital market set forth in Section 404 of the Sarbanes-Oxley Act.

The appraisal of the effectiveness of the accounting-related ICS is based on a cascaded self-assessment system that starts with the persons directly involved in the process, then involves the principal responsible managers and ends with the Group Management Board. Corporate Auditing performs an independent review of random samples of these self-assessments.

Internal control system for accounting and financial reporting based on COSO framework

The Group Management Board has examined the effectiveness of the internal control system for accounting and financial reporting on the basis of the COSO framework and its criteria. The examination confirmed the functionality of this internal control system for fiscal 2010. The effectiveness of the internal control system is monitored by the Audit Committee of the Bayer AG Supervisory Board in compliance with the German Accounting Law Modernization Act, which came into effect in May 2009. However, it should be noted that an internal control system, irrespective of its design, cannot provide absolute assurance that material misstatements in the accounting will be avoided or identified.

11.1.3 Opportunities

As an international enterprise, Bayer is exposed to a wide variety of developments in the various national and international markets in which it operates in its three business areas. Different potential risks and opportunities arise within the existing operational framework according to the business performance described in this report and the company's overall situation.

We aim to take maximum advantage of the opportunities that present themselves in our various fields of activity. We continuously evaluate potential additional opportunities in all areas as an integral part of our strategy, which is described in detail in Chapter 11.2 "Strategy."

Research and development present major opportunities, and we are working continuously to find new products and improve existing ones. These activities are presented in detail in Chapter 8 "Research and Development."

Various risks described in the following – particularly financial risks – are counterbalanced by the opportunities that could result from positive trends.

11.1.4 Risks

RISK EXPOSURE

As a global company with a diverse business portfolio, the Bayer Group is exposed to numerous risks. We have purchased insurance coverage – where it is available on economically acceptable terms – in order to minimize related financial impacts. The level of this coverage is continuously re-examined.

Significant risks for the Bayer Group are outlined in the following sections. The order in which the risks are listed is not intended to imply any assessment as to the likelihood of their materialization or the extent of any resulting damages.

LEGAL RISKS

We are exposed to numerous legal risks from legal disputes or proceedings to which we are currently a party or which could arise in the future, particularly in the areas of product liability, competition and antitrust law, patent disputes, tax assessments and environmental matters. The outcome of any current or future proceedings cannot be predicted. It is therefore possible that legal or regulatory judgments could give rise to expenses that are not covered, or not fully covered, by insurers' compensation payments and could significantly affect our revenues and earnings.

Legal proceedings currently considered to involve material risks are described in Note [32] to the consolidated financial statements.

INDUSTRY-SPECIFIC RISKS

Pharmaceutical product prices are subject to regulatory controls in many markets. Some governments intervene directly in setting prices. In addition, in some markets major purchasers of pharmaceutical products have the economic power to exert substantial pressure on prices. Price controls, as well as price pressure from generic manufacturers as a result of government reimbursement systems favoring less expensive generic pharmaceuticals over brand-name products, diminish earnings from our pharmaceutical products and could potentially render the market introduction of a new product unprofitable. We expect the current extent of regulatory controls and market pressures on pricing to persist or increase.

Regulatory changes are continuously monitored, especially in our key markets. If necessary, we adjust our business plans according to the significance of governmental intervention.

Sales of the Bayer Group are subject to seasonal fluctuations. This applies particularly in the CropScience business, which is also affected by factors such as weather conditions. The performance of our MaterialScience subgroup is affected by cyclicality in customer industries. A downturn in the business cycle, characterized by weak demand and overcapacities, may lead to price pressure and more intense competition.

Holistic portfolio management

The early identification of trends in the economic or regulatory environment and active portfolio management are important elements of our business management. Our analyses of the global economy and forecasts of medium-term economic development are documented in detail on a quarterly basis and used to support operational business planning. However, even our detailed analyses may not ensure that a massive economic downturn of the kind that occurred in 2008 and 2009 can be predicted.

For a summary forecast, see Chapter 11.3 "Economic Outlook."

Where it appears strategically advantageous, we may acquire a company or part of a company and combine it with our existing business. The amount of goodwill and other intangible assets reflected in the Bayer Group's consolidated statement of financial position has increased significantly in recent years as a result of acquisitions. Failure to successfully integrate a newly acquired business or unexpectedly high integration costs could jeopardize the achievement of quantitative or qualitative targets, such as synergies, and adversely impact earnings.

The integration processes associated with our acquisitions are steered by integration teams. Appropriate resources are provided to support the integration processes.

PRODUCT DEVELOPMENT RISKS

The Bayer Group's competitive position, sales and earnings depend significantly on the development of commercially viable new products and production technologies. We therefore devote substantial resources to research and development. Because of the lengthy development processes, technological challenges, regulatory requirements and intense competition, we cannot assure that all of the products we will develop in the future or are currently developing will actually reach the market and achieve commercial success as scheduled or at all.

Furthermore, adverse effects of our products that may be discovered after regulatory approval or registration despite thorough prior testing may lead to a partial or complete withdrawal from the market, due either to regulatory actions or our voluntary decision to stop marketing a product. Also litigations and associated claims for damages due to negative effects of our products may materially diminish our earnings.

To ensure an effective and efficient use of resources in research and development, the Bayer Group has implemented an organizational structure and process organization comprising functional departments, working groups and reporting systems that monitor development projects.

REGULATORY RISKS

Our life science businesses, in particular, are subject to strict regulatory regimes relating to the testing, manufacturing and marketing of many of our products. In some countries regulatory controls have become increasingly demanding. We expect this trend to continue, particularly in the United States and the European Union. Increasing regulatory requirements, such as those governing clinical or (eco-)toxicological studies, may increase product development costs and/or delay product (re-)registration.

To counter risks arising from legal or other requirements, we make our decisions and engineer our business processes on the basis of comprehensive legal advice provided both by our own experts and by acknowledged external specialists. Projects have been initiated to coordinate the implementation of new regulatory controls and mitigate any negative implications for the business.

Increased competitive pressure following patent expiration

PATENT RISKS

A large proportion of our products, mainly in our life science businesses, is protected by patents. We are currently involved in lawsuits to enforce patent rights in our products. Generic manufacturers and others attempt to contest patents prior to their expiration. Sometimes a generic version of a product may even be launched "at-risk" prior to the issuance of a final patent decision.

When a patent defense is unsuccessful, or if one of our patents expires, our prices are likely to come under pressure because of increased competition from generic products entering the market. Details of related litigation are provided as part of the description of legal risks in Note [32] to the consolidated financial statements.

In some areas of activity we may also be required to defend ourselves against charges that products infringe patent or proprietary rights of third parties. This could impede or even halt the development or manufacturing of certain products or require us to pay monetary damages or royalties to third parties.

Our life science businesses, in particular, have a comprehensive product life-cycle management system in place. In addition, our legal department, in conjunction with the relevant functional departments, regularly reviews the patent situation. Potential infringements of our patents by other companies are carefully monitored so that legal action can be taken if necessary.

PRODUCTION, PROCUREMENT MARKET AND ENVIRONMENTAL RISKS

Production capacities at some of our manufacturing facilities could be adversely affected by, for instance, technical failures, natural disasters, regulatory rulings or disruptions to supplies of key raw materials or intermediates, as in the case of dependence on a single source for critical materials. This applies particularly to our biotech products because of the highly complex manufacturing processes. If in such cases we are unable to meet demand by shifting sufficient production to other plants or drawing on our inventories, we may suffer declines in sales revenues.

The supply of strategically important raw materials is ensured wherever possible through long-term contracts and/or by purchasing from multiple suppliers. Furthermore, all stages of our production processes and our material inputs are continuously monitored by the respective expert function within the company.

Long-term supply contracts to hedge against raw material price risks

Moreover, the manufacturing of chemical products is subject to risks associated with the production, filling, storage and transportation of raw materials, products and wastes. These risks may result in personal injury, property damage, environmental contamination or business interruptions and liability for compensation payments.

Furthermore, the possibility of accidental cross-contamination among our crop protection products or the presence of unintended trace amounts of genetically modified organisms in agricultural products and/or foodstuffs cannot be completely excluded.

We address product and environmental risks by way of suitable quality assurance measures. An integrated quality, health, environmental and safety management system ensures process stability. In addition, we are committed to the international Responsible Care initiative of the chemical industry, are driving forward our sustainable development and climate program and report regularly on our sustainability management, which also covers the areas of environmental protection and safety.

IT RISKS

Business and production processes and the internal and external communications of the Bayer Group are increasingly dependent on information technology systems. Major disruptions or failure of global or regional business systems may result in loss of data and/or impairment of business and production processes.

The foundations for a continuous and sustainable IT risk management system have been laid by establishing a comprehensive organization, issuing regulations that define the relevant roles and responsibilities, and implementing a periodic reporting system. For this purpose a committee has been established at the Group level to resolve upon the basic strategy, architecture and IT security features, which are implemented accordingly by the subgroups and service companies in consultation with this central organization. Technical precautions such as data recovery and continuity plans have been established together with our internal IT service provider to address this risk.

RISK TO PENSION OBLIGATIONS FROM CAPITAL MARKET DEVELOPMENTS

The Bayer Group has obligations to current and former employees related to pensions and other post-employment benefits. Changes in relevant valuation parameters such as interest rates, mortality and rates of increases in compensation may raise the present value of our pension obligations. This may lead to increased pension costs or diminish stockholders' equity due to actuarial losses being recognized directly in equity. A large proportion of our pension and other post-employment benefit obligations is covered by plan assets including fixed-income securities, shares, real estate and other investments. Declining or even negative returns on these investments may adversely affect the future fair value of plan assets. This in turn may diminish equity, and/or it may necessitate additional contributions by the company. Further details are given in Note [25] to the consolidated financial statements.

We address the risk of market-related fluctuations in the fair value of our plan assets through prudent strategic investment, and we constantly monitor investment risks in regard to our global pension obligations.

FINANCIAL RISKS

Management of financial and commodity price risks

As a global enterprise, Bayer is exposed in the normal course of business to credit risks, liquidity risks and various market price risks that could materially affect its net assets, financial position and results of operations.

It is company policy to use derivatives to minimize or eliminate the market price risks associated with operating activities and the resulting financing requirements. Derivatives are used almost exclusively to hedge realized or forecasted transactions. The use of derivatives is subject to strict internal controls based on centrally defined mechanisms and uniform guidelines. The derivatives used are mainly over-the-counter instruments, particularly forward exchange contracts, foreign currency options, interest rate swaps, cross-currency interest rate swaps, commodity swaps and commodity option contracts concluded with banks. We set counterparty limits for such banks depending on their creditworthiness.

The various risks associated with financial instruments are outlined below together with the relevant risk management systems.

Credit risks

Credit risks arise from the possibility of the value of receivables or other financial assets being impaired because counterparties cannot meet their payment or other performance obligations. Since the Bayer Group does not conclude master netting arrangements with its customers, the total of financial assets represents the maximum credit risk exposure.

To effectively manage the credit risks from trade receivables, Bayer has put in place a standardized risk management system, which is the subject of a Group directive. Customers' creditworthiness is regularly analyzed; these receivables are partly secured. Credit limits are set for all customers. All credit limits for debtors where total exposure is €10 million or more are evaluated by our operational credit management and submitted to the Group's Central Financial Risk Committee.

To minimize credit risks, financial transactions are only conducted with banks and other partners of first-class credit standing in line with predefined exposure limits. All risk limits are based on methodical models. Adherence to the risk limits is continuously monitored.

Country risks relating to trade receivables and intra-Group loans are continuously monitored, systematically evaluated and centrally managed.

Liquidity risks

Liquidity risks – those arising from the possibility of not being able to meet current or future payment obligations because insufficient cash is available – are centrally managed in the Bayer Group. Sufficient liquid assets are held to meet all of the Group's payment obligations when they fall due, thereby ensuring solvency at all times. Payment obligations result both from operating cash flows and from changes in current financial liabilities. In addition, a reserve is maintained for unbudgeted shortfalls in cash receipts or unexpected disbursements. For this purpose, budget deviation analyses are performed on the basis of historical time series, adjusted for variations in business structure. The liquidity reserve is then determined which, with a defined probability, will cover a negative deviation from budgeted cash flows. The size of this reserve is regularly reviewed and adjusted as necessary to current conditions. Liquid assets are kept mainly in the form of overnight and term deposits. Credit facilities also exist with banks. These include, in particular, a €3.5 billion syndicated credit facility, which is undrawn.

We intend to service the bonds maturing in 2011 out of liquidity and free operating cash flow.

Market risks

Market risks relate to the possibility that the fair value or future cash flows of financial instruments may fluctuate due to variations in market prices. Market risks include currency, interest rate and other price risks, especially commodity price risks.

Sensitivity analysis is a widely used risk measurement tool that allows our management to make judgments regarding the potential loss in future earnings, fair values or cash flows of market-risk-sensitive instruments resulting from one or more selected hypothetical changes in interest rates, foreign currency exchange rates, commodity prices or other relevant market rates or prices over a selected period of time. We use sensitivity analysis because it provides reasonable risk estimates using straightforward assumptions (for example, an increase in interest rates). The risk estimates we provide below assume:

- a simultaneous, parallel shift in foreign exchange rates in which the euro depreciates against all currencies by 10%,
- a parallel shift of 100 basis points in the interest rate yield curves of all currencies, and
- a simultaneous 20% decline in the prices of all the commodities underlying the derivatives we hold.

We use market information and additional analytics to manage our risk exposure and mitigate the limitations of our sensitivity analysis. We have found sensitivity analysis to be a useful tool in achieving some of our specific risk management objectives. Sensitivity analysis offers an easy-to-understand risk exposure estimate that allows an approximation of the effect that changing market conditions could have on our business. It also allows our management to take the necessary steps to address such risks.

We continually refine our risk measurement and reporting procedures. This includes periodically re-examining the underlying assumptions and parameters utilized.

The sensitivity analyses included in the following sections of this Risk Report present the hypothetical loss in cash flows of financial instruments and derivatives that we held as of December 31, 2010 and December 31, 2009. The range of sensitivities that we chose for these analyses reflects our view of the changes in foreign exchange rates, commodity prices and interest rates that are reasonably possible over a one-year period.

Currency risks

Since the Bayer Group conducts a significant portion of its operations outside the eurozone, fluctuations in currency exchange rates can materially affect earnings. Currency risks from financial instruments exist with respect to receivables, payables, cash and cash equivalents that are not denominated in a company's functional currency. In the Bayer Group these risks are particularly significant for the U.S. dollar, the Japanese yen, the Canadian dollar and the Chinese renminbi.

Currency risks are identified, analyzed and managed centrally and systematically. The scope of hedging is evaluated regularly and defined in a corporate directive. Recorded foreign currency operating items, receivables and payables are normally fully hedged.

The anticipated foreign currency exposure from forecasted transactions in the next twelve months is hedged on a basis agreed between the Group Management Board, the central finance department and the operating units. A significant proportion of contractual and foreseeable currency risks is hedged, mainly through forward exchange contracts and currency options.

The Group Management Board has provided clear guidance on how to limit and monitor cash flow risks that result from this approach.

We applied a hypothetical adverse scenario in which the euro simultaneously depreciates by 10% against all other currencies compared with the year-end exchange rates. Under this scenario the estimated hypothetical loss of cash flows from derivatives and non-derivatives as of December 31, 2010 would be €279 million (2009: €188 million). Of this €279 million, €120 million is related to the U.S. dollar, €41 million to the Japanese yen, €30 million to the Canadian dollar, €34 million to the Chinese renminbi and €54 million to other currencies. Of the €279 million estimated hypothetical loss of cash flow, €296 million results from derivatives used to hedge anticipated exposure from planned sales denominated in foreign currencies. Such transactions qualify for hedge accounting, and the respective changes in value are recognized in equity under other comprehensive income (OCI). The offsetting position of €17 million is primarily attributable to account balances in foreign currencies and unhedged currency derivatives embedded in supply contracts. The impact of exchange-rate fluctuations on our anticipated sales in foreign currencies is not included in this calculation.

Interest rate risks

The Bayer Group's interest rate risks arise primarily from financial assets and liabilities with maturities exceeding one year. In the case of fixed-rate financial instruments, such as fixed-rate bonds, the risk of fluctuations in capital-market interest rates results in a fair value risk because the fair values fluctuate as a function of interest rates. In the case of floating-rate instruments, a cash flow risk exists because interest payments could increase in the future.

Interest rate risks in the Bayer Group are analyzed centrally and managed by the central finance department. This is done in line with the duration set by the Board of Management, which implicitly also includes the ratio of fixed-rate to floating-rate debt. The duration is subject to regular review. Derivatives – mainly interest rate swaps, cross-currency interest rate swaps and interest options – are employed to preserve the target structure of the portfolio.

Financial debt including derivatives amounted to €11,767 million as of December 31, 2010 (December 31, 2009: €12,858 million). The sensitivity analysis was performed on the basis of our floating-rate debt position at year end 2010, taking into account the interest rates relevant to our liabilities in all principal currencies. A hypothetical increase of 100 basis points, or 1 percentage point per annum, in these interest rates (assuming constant currency exchange rates) as of January 1, 2010 would have raised our interest expense for the year ended December 31, 2010 by €45 million (2009 based on liabilities at year end 2009: €58 million).

Other price risks (especially commodity price risks)
The Bayer Group requires significant quantities of petrochemical feedstocks and energy for its various production processes. The prices of these inputs may fluctuate considerably depending on market conditions. As in the past, there may be times when it is not possible for us to pass on increased raw material costs to customers through price adjustments. This applies particularly to our MaterialScience business.

We have addressed this risk by concluding long-term contracts with multiple suppliers. The procurement departments of the subgroups are responsible for managing these price risks on the basis of internal directives and centrally determined limits, which are subject to constant review. The operation of our production facilities requires large amounts of energy, mostly in the form of electricity and steam. To minimize our exposure to energy price fluctuations, we aim for a balanced diversification of fuels for steam production and a mix of external procurement and captive production for power generation.

We applied a hypothetical adverse scenario in which all commodity and energy prices simultaneously decrease by 20%. Under this scenario the estimated hypothetical loss of cash flows from derivatives as of December 31, 2010 would be €8 million (2009: €31 million). Of this €8 million, €0 million would be directly disclosed in the income statement and €8 million would be recognized as a value adjustment in equity under other comprehensive income (OCI) according to hedge accounting rules. In considering sensitivities for commodity futures and commodity option contracts, we have made a small allowance for the fact that forward rates are less volatile than spot rates. The stated long-term contract volumes are therefore based on somewhat smaller price changes. The derivatives used by the Bayer Group to mitigate the risk of changes in exchange rates, interest rates and commodity prices are described in Note [30.3] to the consolidated financial statements.

Assessment of the overall risk situation
Compared with the previous year, the overall risk situation did not change significantly in the reporting period. The overall risk assessment is based on a consolidated view of all significant individual risks. At present, no potential risks have been identified that either individually or in combination could endanger the continued existence of the Bayer Group.

No risks that could endanger the company's existence

11.2 Strategy

BUSINESS STRATEGY
The Bayer Group focuses on the rapidly growing, innovation-driven health care, nutrition and high-tech materials businesses in line with its mission statement "Bayer: Science For A Better Life." Our strategic alignment toward these attractive markets and our concentration on core competencies enable us to invest in growth areas and innovative technologies. We aim to continue playing leadership roles and to steadily expand our already strong market positions. We will also continue our efforts to contain costs and improve efficiency in order to further increase the company's value. We are pursuing a long-term growth strategy, mindful of the need to manage the business sustainably.

To facilitate investment in further growth, annual cost savings of €800 million are planned by 2013. About half of this amount is to be reinvested. By the end of 2012 the company is likely to take one-time charges in the region of €1 billion, part of this amount having already been incurred in the fourth quarter of 2010. In connection with this program, it is planned to reduce the global headcount of 111,400 by an aggregate of about 2,000 by the end of 2012. Approximately 4,500 positions – including roughly 1,700 in Germany – are to be cut, while some 2,500 new jobs will be created over the same period, particularly in the emerging markets.

HEALTHCARE

HealthCare continues to aim for a market or above-market rate of growth in all of its businesses. We aim to further strengthen this subgroup and grow it into a world-leading diversified health care company. For example, we plan to continue strengthening our Consumer Health segment for the long term, sharpen our focus in the Pharmaceuticals segment on specialty pharmaceuticals, further increase the overall productivity of research and development and place even greater importance on the emerging markets. This will require a high level of investment in the coming years. Among the ways we will raise the funds needed for this expansion are by carefully redistributing resources and introducing efficiency and cost saving measures. For this reason, we plan to cut the number of positions at HealthCare by around 1,800 by the end of 2012. Most of the reductions will be in our Pharmaceuticals Division, the Medical Care Division in the United States and in the platform functions within HealthCare. However, we will create 1,500 new positions in the emerging markets and in connection with product launches.

Activities in our strongest segment – Pharmaceuticals – are focused on medicines prescribed mainly by specialist physicians in the areas of women's healthcare, cardiology, oncology, hematology, diagnostic imaging and multiple sclerosis. Our portfolio also includes drug products that are usually prescribed by general practitioners.

We will maintain our focus on diseases where there is a high unmet medical need and major potential exists for improving diagnosis and therapy. Research and development is thus an important growth engine for our Pharmaceuticals segment, which consequently accounts for the largest share of the R&D budget. Here we also aim to strengthen our portfolio and supplement our own research and development activities with inlicensing, alliances and collaborations. An example in 2010 was the discovery, development and commercialization agreement signed with Californian company OncoMed Pharmaceuticals, Inc. in the area of novel therapeutics to target cancer stem cells.

We already hold leading positions in the pharmaceuticals markets of many emerging countries, particularly China and Russia. A key element of our pharmaceuticals strategy is the selective expansion of business in the emerging markets. An example in 2010 was the market launch of Betaferon® in China to treat the relapsing-remitting form of multiple sclerosis (MS).

Our Consumer Health segment includes non-prescription medicines, dermatology products, blood glucose meters, medical devices and the animal health business.

Expansion in fast-growing regions

The goal of the Consumer Care Division is to build on our position in the global over-the-counter (OTC) medicines market. The division's strategy is aimed at fully leveraging the growth potential of proven brands such as Aspirin®. We are pursuing a clear course of expansion in fast-growing regions such as central and eastern Europe and Asia/Pacific and aim to further strengthen our business in areas with potential for growth. We will continue to take advantage of external growth opportunities in the form of strategically relevant acquisitions or inlicensing. One such growth opportunity is provided by the exclusive licensing agreement with AstraZeneca PLC for the marketing of omeprazole under the Losec® Pro, Antra® or Mopralpro® trademarks as an OTC medication to treat heartburn. Currently this product has been introduced in seven markets, and launches are planned in additional countries.

The strategy of the Medical Care Division is to build on its competitive positions in the fields of blood glucose monitoring, diabetes management, injection systems for contrast agents, and vascular intervention systems such as thrombectomy systems for treating constricted or blocked blood vessels. We also plan to continue expanding our portfolio by investing in additional business areas and geographic regions and entering into strategic partnerships. It is our intention to steadily improve our products, reduce costs and deploy resources even more efficiently. We are aiming to expand our product range by developing new blood glucose monitoring systems and innovative solutions that help people with diabetes to better manage the disease. In the medical equipment business, we are continuing to develop our core radiology portfolio of contrast agent injection and thrombectomy systems. We are also developing new software products and IT-based service solutions to optimize both contrast media dosage and the clinical workflows involved in processing diagnostic data and images.

In the Animal Health Division, we aim to build on our strong positions in the companion animals and livestock markets. Our strategy is directed toward achieving organic growth by focusing on countries and markets with long-term sales potential and successfully managing the life cycles of existing core brands. In addition, we are pursuing external growth opportunities through acquisitions and inlicensing. For example, in 2010 we acquired an innovative, oral administration technology for animal health products from the U.S. company Piedmont Pharmaceuticals, LLC. Our acquisition of the New Zealand-based Bomac Group, an innovative manufacturer of animal health products used mainly in livestock, is aimed at strengthening our business, particularly in the Asia/Pacific region. We aim to step up the development of new proprietary products to safeguard our long-term success.

CROPSCIENCE

CropScience, one of the leading innovation-driven companies in its industry, aligns its corporate planning to long-term trends in agricultural markets. It aims to offer products and customer-oriented solutions for the production of affordable, high-quality food, feed, fiber and energy crops. Against a background of limited arable land, advancing climate change and a steadily increasing global population, it is essential to safeguard and further increase crop yields. We manage our business responsibly, in keeping with our commitment to sustainable development and our goal of achieving long-term growth and attractive returns.

We are committed to offering our customers comprehensive, single-source solutions and therefore evolve coordinated and sustainable concepts – from seed to harvest – for specific crops in different regions. Our customer-oriented approach comprises seed, optimized plant traits and crop protection products as well as related services and partnerships along the food value chain.

Innovation forms the basis for value creation

Innovation is the basis for value creation at CropScience. The development of new active ingredients and formulations and high-quality seed enables us to replace older products and technologies with those that offer superior performance properties, environmental compatibility and user safety along with higher added value for the customer. Our new products are crucial to increasing sales and achieving attractive margins. In November 2010 we announced a package of measures, to be largely implemented by 2012, which will make necessary funds available for further investment and optimize our cost structures. We will make a net cut of approximately 600 positions at CropScience by 2012, mainly in Germany and the United States. The measures are aimed at making CropScience more efficient in all areas so that freed-up resources can be invested in our BioScience business, the commercialization of new products and the expansion of strategic growth markets while we continue to defend our positions in the well developed markets.

In the Crop Protection segment, CropScience aims to safeguard and expand the market-leading positions of its Herbicides, Fungicides, Insecticides and Seed Treatment business units by maintaining a broad regional presence and offering innovative, highly effective products. To achieve this strategic goal, we are steadily enhancing our product mix by launching new active ingredients and products from our research and development pipeline as well as successfully managing product life cycles while also engaging in complementary research activities in breeding, plant traits and new growth areas. For example, we are currently working on new integrated methods and solutions in the areas of plant health and quality, stress tolerance, nutrient uptake, diagnostics and biological pest control.

Our Environmental Science business unit primarily relies on the development and production capacities of Crop Protection and its innovative active ingredient portfolio and pipelines. Our strategy is to build on our leading market positions by developing and commercializing innovative solutions that are tailored to the specific needs of consumers and professional users and are designed to be easy to use and safe to handle. The Environmental Science business unit has growth potential, particularly in the emerging markets. Our strategic alignment also emphasizes systematic customer orientation, including the expansion of marketing activities, and the continued development of specific market segments such as forestry or industrial vegetation management.

The BioScience business unit researches, develops and commercializes seeds and technology based on modern breeding methods. We aim to continue expanding our activities in seeds and plant traits with the aim of raising BioScience sales to about €1.4 billion by 2018 while increasing the share of our research and development expenditures allocated to BioScience. Our seed business has traditionally focused on four rapidly expanding core crops: cotton, vegetables, canola and rice. We aim to build on our strong market positions in these crops by introducing new varieties and expanding into new regional markets. Since 2009 we have been conducting research into improved cereal varieties, with soybeans defined as an additional area of research focus. The goals of our Bioscience research include increasing yields and making plants more resistant to adverse weather conditions and certain insect pests. We are also conducting research into sugarcane with a higher sugar content. We not only market our technologies in our own seed products, but also increasingly outlicense them for other crops.

CropScience markets its products in more than 120 countries worldwide. In the coming years we intend to continue expanding our business, particularly in fast-growing markets such as Brazil, India, China, Russia and eastern Europe. In these countries there is major potential for the agriculture industry to react to the increasing global demand for high-quality food and feed by deploying innovative, leading-edge technologies. In this environment we aim to steadily expand our business and help farmers raise productivity by providing them with comprehensive solutions from seed to harvest.

MATERIALSCIENCE

Focus on increasing enterprise value at MaterialScience

The strategy of MaterialScience is directed primarily toward safeguarding existing competitive positions in its traditional markets, adding innovative new businesses to the portfolio and achieving profitable and sustainable growth in the emerging markets. In this way we plan to ensure high profitability and contribute to a long-term increase in enterprise value. Our products are intended to provide long-term solutions for conserving global energy resources and protecting the climate. They are also designed to help in improving the quality of life for as many people as possible. The above-average growth of the Asian markets represents a major challenge in this respect, at the same time offering a business potential that we plan to develop. Our capital expenditure policy, which is aligned to medium- and long-term market trends, remains in keeping with this. We also aim to continuously improve the efficiency of our production processes.

In the Polyurethanes business unit (PUR), we intend to expand our global market leadership in isocyanates, a key precursor particularly for rigid and flexible foams. It remains our goal to achieve cost leadership in these areas in the long term. We also want to expand our distribution channels and global competence networks.

We expect our new large-scale plant for toluene diisocyanate (TDI) in Shanghai, China, with an annual capacity of 250,000 tons, to support sustained growth in Asia. Mechanical completion of the facility will take place in sections in the first quarter of 2011, with commercial production due to start in the second half of 2011. In Europe, MaterialScience plans to erect a new "world-scale" TDI production facility in Dormagen, Germany, with a permitted capacity of 300,000 tons per year and bring it on stream in 2014. The company's European production activities for TDI will then be concentrated in Dormagen. MaterialScience's innovative, patented TDI process technology, which will be used in both facilities, sets new global standards for efficient, climate-friendly production. A facility based on the new technology saves substantial amounts of energy and solvents, reduces CO_2 emissions by up to 60,000 tons per year compared with a conventional plant of the same size, and costs about 15% less to build.

In the diphenylmethane diisocyanate (MDI) product group, we aim to achieve sustained growth thanks to the increasing demand for insulating materials from key customer industries. The need for thermal insulation of buildings is expected to boost demand in the construction and other sectors. To meet this growing demand, Bayer plans to increase MDI capacity at the site in Shanghai, China, to 1,000,000 tons per year.

Polyether polyols will mainly support growth in the isocyanates business, complementing our system solutions. Our systems houses facilitate growth in the isocyanates business by providing an important distribution channel to serve specific customer needs.

Relocation of PCS headquarters to Shanghai, China

We are currently experiencing strong demand in the world market for the products of our Polycarbonates (PCS) business unit. Demand for polycarbonates in Asia, especially China, is substantial, and the region currently accounts for more than 60% of the global market. We are responding by enlarging our manufacturing capacities for polycarbonate. In Shanghai we plan to raise annual capacity to 500,000 tons as we continue to exploit the efficiency of our world-scale production facilities. We also plan to relocate the headquarters of this business unit to Shanghai in order to steer the business in close proximity to the markets in light of the region's growing importance. At the same time, as a leading development and technology partner, we offer customers individual solutions for various polycarbonate applications. Among our objectives is to expand our network of "Color Competence and Design Centers" for customized plastics compounding.

In the field of semi-finished products, substantial market potential lies in the use of polycarbonate diffuser sheets in liquid-crystal displays for large-format flat screens. Growth in demand for polycarbonates is also being driven by the trend in the automotive industry toward lightweight components such as for glazing.

The Coatings, Adhesives, Specialties (CAS) business unit seeks to defend and selectively expand its current market position in basic and modified isocyanates. We will therefore raise our production capacities in Europe and the Asia/Pacific growth region to meet rising demand. It is planned to expand production of hexamethylene diisocyanate (HDI) in Shanghai, including the construction there of an additional facility with a capacity of 50,000 tons per year. We also intend to build a multi-purpose facility in Leverkusen for the production of HDI and isophorone diisocyanate (IPDI). In addition, we aim to improve profitability by sharpening the focus of our portfolio on modern coating and adhesive raw material systems.

We are developing functional films, carbon nanotubes, and products for medical applications with the aim of opening up new business opportunities and positioning ourselves as a focused technology leader in these areas.

We also generate innovative business ideas by looking at our materials more from an application-technology perspective. For example, high-quality components combining polyurethane with polycarbonate can be produced by a one-step injection molding process known as "DirectSkinning."

MaterialScience also uses novel processes for its own production. The efficiency of chlorine production, for example, can be greatly increased using oxygen depolarized cathode technology. This technology enables energy savings of some 30% compared to a membrane process, along with a corresponding indirect reduction in greenhouse gas emissions.

FINANCIAL STRATEGY

The financial management of the Bayer Group is conducted by the strategic management holding company Bayer AG. Capital is a global resource, generally procured centrally and distributed within the Group. The foremost objectives of our financial management are to help bring about a sustained increase in corporate value and to ensure the Group's liquidity and creditworthiness. This involves optimizing the capital structure and effectively managing risks. The management of currency, interest rate, raw material price and default risks helps to reduce the volatility of our earnings.

The contracted rating agencies assess Bayer as follows:

Rating [Table 3.40]

	Long-term rating	Outlook	Short-term rating
Standard & Poor's	A-	negative	A-2
Moody's	A3	stable	P-2

These credit ratings reflect the company's high solvency and ensure access to a broad investor base for financing purposes. It remains our goal to achieve and maintain financial ratios that support an A rating in order to maintain our financial flexibility. Accordingly, we plan to use part of our operating cash flows to reduce net financial debt.

We pursue a prudent debt management strategy to ensure flexibility, drawing on a balanced financing portfolio. Chief among these resources are a multi-currency Euro Medium Term Notes program, syndicated credit facilities, bilateral loan agreements and a global commercial paper program.

We use financial derivatives to hedge against risks arising from business operations or financial transactions, but do not employ contracts in the absence of an underlying transaction. It is our policy to diminish default risks by selecting trading partners with a high credit standing. We closely monitor the execution of all transactions, which are conducted in accordance with Group directives.

Further details of our risk management objectives and the ways in which we account for all the major types of hedged transactions – along with price, credit and liquidity risks as they relate to the use of financial instruments – are given in Chapter 11.1 "Opportunity and Risk Report."

11.3 Economic Outlook

GLOBAL ECONOMY

We expect the global economic recovery to continue in 2011. However, the pace of expansion is likely to be slower than in 2010. Many countries will retain expansionary monetary policies that will buoy their economies, while most countries' fiscal policies are not expected to provide any further growth stimulus. Renewed tension on the financial markets and sharp rises in the prices of oil and raw materials could pose a risk to economic development in 2011. At the end of 2010, however, these downside risks appeared comparatively slight.

The emerging markets are again expected to greatly stimulate the economic recovery in 2011. We anticipate that growth rates in the emerging markets will decline in the coming months but generally remain at a high level. The major emerging economies, especially China, appear set to continue driving global economic growth in 2011. We expect that the economic recovery in the industrialized countries will continue at a slow pace overall, though with considerable differences from one country to another. The prospects for the U.S. economy brightened considerably around the turn of the year 2010/2011, although the anticipated economic expansion is unlikely to significantly improve the situation on the employment market for the time being. Growth perspectives for Japan are more moderate. The eurozone economy in 2011 is likely to remain weighed down by the debt crisis in some countries. We therefore foresee only moderate growth overall. In the more dynamically performing E.U. countries – especially Germany – the economy should strengthen due to a recovery in domestic demand. In other eurozone countries, however, the consolidation measures triggered by public debt crises will continue to markedly dampen domestic demand.

HEALTHCARE

We expect the growth rate for the **pharmaceutical market** in 2011 to be in the mid-single digits. This expansion is likely to be driven increasingly by countries such as China, Brazil, Mexico, South Korea, India and Russia. However, we foresee only low-single-digit growth rates in the traditional markets such as the United States and the major European countries due to patent expirations for major products of various pharmaceutical companies, a decline in new product launches and the increasing cost pressure being exerted by health organizations.

In 2011 we expect the **consumer care market** to grow more rapidly than in 2010 as a result of greater market penetration in eastern Europe and North America. The **diabetes care market** will probably see only very slight growth in 2011 due to continuing pressure on prices in the United States. We expect the **animal health market**, on the other hand, to again grow at an above-average rate in 2011.

CROPSCIENCE

We foresee a positive trend for the global **seed and crop protection market** in 2011. Assuming normal weather patterns, we anticipate robust market growth for agrochemicals as well as for seed and traits. This growth is likely to come mainly from higher volumes.

Despite the fluctuations in global agricultural markets, the substantially higher prices for agricultural raw materials mean we are now operating in an increasingly conducive market environment. Given the limited availability of arable land, this is mainly due to steadily rising demand for food and feed products and plant-based energy raw materials.

The positive overall conditions are likely to stimulate demand for high-quality seed and thus for crop protection products, and spur farmers toward more intensive production.

In regional terms, we expect the largest growth stimulus to come from Latin America, where soybean cultivation in particular should further increase compared with 2010. Crop production is also expected to increase in the Asia/Pacific region. This applies particularly to rice, cereals and cotton, and also to specialty crops such as fruit and vegetables. By contrast, we again see only limited potential for market growth in the industrialized regions of the northern hemisphere in 2011.

MATERIALSCIENCE

For 2011 MaterialScience expects a further strengthening of its main customer industries worldwide. We will focus particularly on the rapidly expanding markets of Asia, such as China and India. At the same time, we are counting on an ongoing recovery in demand in North America and Europe.

The **automotive industry** will remain on a path of recovery. New car sales in 2011 are likely to exceed 60 million – an all-time high. In nearly all markets except western Europe, demand and production are expected to increase considerably faster than experts predicted just a few months ago. China will remain the most important production base worldwide, with automakers planning to step up capacities again in 2012 to 17 million vehicles – more than are made in the entire European Union.

We anticipate robust expansion in the global **electrical/electronics industry**, where China and India will remain the principal growth drivers in 2011. The industrialized countries will also continue to benefit from the global economic recovery, however, carrying some of the many orders remaining from 2010 into 2011.

We predict a distinct recovery in the **construction industry** in 2011. Continuing strong growth in the emerging markets, coupled with a return to positive growth rates in mature markets such as Europe and North America, will likely lead to a gratifying global trend overall.

We believe that the market for the **furniture industry** will continue to brighten as it already did in 2010. The major growth regions in Asia will probably show a positive trend once again, benefiting not only from rising domestic demand, but also from an increasing recovery in global consumption. In the emerging markets of eastern Europe, the Middle East and Latin America, too, an upward trend in incomes should open up added sales potential for the furniture industry.

11.4 Sales and Earnings Forecast

The following forecasts are based on the business performance described in this report, taking into account the potential risks and opportunities.

BAYER GROUP

The Bayer Group is confident for 2011. Provided that the economy continues to improve, we expect to see growth in sales and EBITDA before special items in all subgroups. For the full year 2011, we are targeting a currency- and portfolio-adjusted sales increase of between 4% and 6%. Based on our currency assumptions – including a rate of US$1.40 (2010 average: US$1.32) to the euro – we therefore expect to report Group sales of between €35 billion and €36 billion.

We aim to increase EBITDA before special items toward €7.5 billion. Core earnings per share (calculated as explained in Chapter 4.3) are expected to improve by about 10%. We anticipate taking special charges of about €0.5 billion for ongoing restructuring programs.

We are planning capital expenditures of €1.5 billion for property, plant and equipment and €0.3 billion for intangible assets. Depreciation and amortization are expected to total about €2.5 billion, including €1.3 billion in amortization of intangible assets. We expect our research and development expenditures to match the record level of 2010 (€3.1 billion).

We can confirm our targets for 2012. If the economic environment remains positive, we continue to expect Bayer Group sales to grow by approximately 5% – after adjusting for currency and portfolio changes – in 2012. We plan to achieve EBITDA before special items in 2012 of approximately €8 billion and core earnings per share of around €5.

HEALTHCARE

In 2011 HealthCare plans to increase sales by a low- to mid-single-digit percentage after adjusting for currency and portfolio effects and to achieve a small improvement in EBITDA before special items.

In the Pharmaceuticals segment, we do not yet expect sales to resume growing with the market in 2011. We plan to increase sales by a low- to mid-single-digit percentage after adjusting for currency and portfolio effects and to raise the EBITDA margin before special items.

In the Consumer Health segment, we anticipate above-market growth in sales after adjusting for currency and portfolio effects. We expect sales and EBITDA before special items to increase by mid-single-digit percentages.

In 2012 we aim to accelerate the pace of growth, especially in Pharmaceuticals, thanks to our new products and to improve EBITDA before special items in both HealthCare segments.

CROPSCIENCE

Following a difficult year in 2010, we now anticipate more favorable market conditions for CropScience and are therefore optimistic for 2011. We expect to improve sales in both CropScience segments on a currency- and portfolio-adjusted basis and to grow by at least a mid-single-digit percentage overall. We intend to further reinforce our market positions in Environmental Science, BioScience, and we expect to at least maintain our existing position in Crop Protection. We plan to expand EBITDA before special items at a higher rate than sales.

In 2012 we again aim to grow sales at least with the market and further improve EBITDA before special items.

MATERIALSCIENCE

We expect that the business environment for MaterialScience will continue to recover. Against this background we plan to raise sales in 2011 by a mid-single-digit percentage on a currency- and portfolio-adjusted basis, and to increase EBITDA before special items at a higher rate than sales.

We expect sales in the first quarter of 2011 to be roughly in line with the fourth quarter of 2010 on a currency- and portfolio-adjusted basis. Despite higher raw material prices, we expect EBITDA before special items in the first quarter of 2011 to exceed the level of the fourth quarter of 2010.

Provided that the market environment remains favorable, we plan to further increase sales and EBITDA before special items in 2012.

BAYER AG

As the holding company for the Bayer Group, Bayer AG derives most of its income from its subsidiaries. Under profit and loss transfer agreements with the major operating subsidiaries in Germany, their earnings are transferred directly to Bayer AG. The positive expectations for the Group’s business development outlined above are also likely to be reflected in the earnings of Bayer AG. In addition, the net interest position should continue to improve in light of the reduction in financial debt. We therefore expect to maintain a level of after-tax income that allows the payment of an appropriate dividend.

Consolidated Financial Statements of the Bayer Group

Bayer Group Consolidated Income Statements

[Table 4.1]

	Note	2009	2010
		€ million	€ million
Net sales	[7]	**31,168**	**35,088**
Cost of goods sold		(15,135)	(17,103)
Gross profit		**16,033**	**17,985**
Selling expenses	[8]	(7,923)	(8,803)
Research and development expenses	[9]	(2,746)	(3,053)
General administration expenses		(1,623)	(1,647)
Other operating income	[10]	922	714
Other operating expenses	[11]	(1,657)	(2,466)
Operating result [EBIT]		**3,006**	**2,730**
Equity-method loss	[13.1]	(48)	(56)
Non-operating income		789	384
Non-operating expenses		(1,877)	(1,337)
Non-operating result	[13]	**(1,136)**	**(1,009)**
Income before income taxes		**1,870**	**1,721**
Income taxes	[14]	(511)	(411)
Income after taxes		**1,359**	**1,310**
of which attributable to non-controlling interest	[15]	-	9
of which attributable to Bayer AG stockholders (net income)		**1,359**	**1,301**
		€	€
Earnings per share	[16]		
Basic*		1.70	1.57
Diluted*		1.70	1.57

*The ordinary shares that resulted from conversion of the mandatory convertible bond were treated as already issued shares since the issuance of the bond.

Bayer Group Consolidated Statements of Comprehensive Income

[Table 4.2]

	Note	2009	2010
		€ million	€ million
Income after taxes		**1,359**	**1,310**
of which attributable to non-controlling interest	[15]	*-*	*9*
of which attributable to Bayer AG stockholders		*1,359*	*1,301*
Changes in fair values of derivatives designated as cash flow hedges	[30.3]	89	(108)
Recognized in profit or loss		10	18
Income taxes	[14]	(38)	27
Changes recognized outside profit or loss (cash flow hedges)		**61**	**(63)**
Changes in fair values of available-for-sale financial assets	[20]	11	8
Recognized in profit or loss		-	(2)
Income taxes	[14]	(2)	(3)
Changes recognized outside profit or loss (available-for-sale financial assets)		**9**	**3**
Changes in actuarial gains/losses on defined benefit obligations for pensions and other post-employment benefits and effects of the limitation on pension plan assets	[25]	(437)	(966)
Income taxes	[14]	117	258
Changes recognized outside profit or loss (actuarial gains/losses on defined benefit obligations for pensions and other post-employment benefits and effects of the limitation on pension plan assets)		**(320)**	**(708)**
Exchange differences on translation of operations outside the eurozone		284	627
Recognized in profit or loss		-	3
Changes recognized outside profit or loss (exchange differences)		**284**	**630**
Effects of changes in liabilities from non-controlling interest in partnerships on other comprehensive income	[29]	**15**	**18**
Effects of changes in scope of consolidation		**(1)**	**-**
Total changes recognized outside profit or loss		**48**	**(120)**
of which attributable to non-controlling interest		*2*	*6*
of which attributable to Bayer AG stockholders		*46*	*(126)*
Total comprehensive income		**1,407**	**1,190**
of which attributable to non-controlling interest		*2*	*15*
of which attributable to Bayer AG stockholders		*1,405*	*1,175*

Bayer Group Consolidated Statements of Financial Position

[Table 4.3]

	Note	Dec. 31, 2009	Dec. 31, 2010
		€ million	€ million
Noncurrent assets			
Goodwill	[17]	8,704	9,002
Other intangible assets	[17]	12,842	11,161
Property, plant and equipment	[18]	9,409	9,835
Investments accounted for using the equity method	[19]	395	354
Other financial assets	[20]	1,200	1,164
Other receivables	[23]	549	498
Deferred taxes	[14]	950	1,174
		34,049	**33,188**
Current assets			
Inventories	[21]	6,091	6,104
Trade accounts receivable	[22]	6,106	6,668
Other financial assets	[20]	367	1,008
Other receivables	[23]	1,357	1,336
Claims for income tax refunds		347	362
Cash and cash equivalents	[36]	2,725	2,840
		16,993	**18,318**
Total assets		**51,042**	**51,506**
Equity	[24]		
Capital stock of Bayer AG		2,117	2,117
Capital reserves of Bayer AG		6,167	6,167
Other reserves		10,613	10,549
Equity attributable to Bayer AG stockholders		**18,897**	**18,833**
Equity attributable to non-controlling interest		54	63
		18,951	**18,896**
Noncurrent liabilities			
Provisions for pensions and other post-employment benefits	[25]	6,517	7,305
Other provisions	[26]	1,516	1,478
Financial liabilities	[27]	11,460	9,944
Other liabilities	[29]	415	471
Deferred taxes	[14]	3,210	2,577
		23,118	**21,775**
Current liabilities			
Other provisions	[26]	3,089	3,870
Financial liabilities	[27]	1,489	1,889
Trade accounts payable	[28]	2,735	3,497
Income tax liabilities	[26.1]	93	62
Other liabilities	[29]	1,567	1,517
		8,973	**10,835**
Total equity and liabilities		**51,042**	**51,506**

Statement of Financial Position Jan. 1, 2010 restated, see Note [4]

Bayer Group Consolidated Statements of Cash Flows

[Table 4.4]

	Note	2009	2010
		€ million	€ million
Income after taxes		1,359	1,310
Income taxes		511	411
Non-operating result		1,136	1,009
Income taxes paid or accrued		(636)	(897)
Depreciation and amortization		2,809	3,556
Change in pension provisions		(366)	(590)
(Gains) losses on retirements of noncurrent assets		(155)	(28)
Gross cash flow		**4,658**	**4,771**
Decrease (increase) in inventories		604	211
Decrease (increase) in trade accounts receivable		(28)	(153)
(Decrease) increase in trade accounts payable		235	566
Changes in other working capital, other non-cash items		(94)	378
Net cash provided by (used in) operating activities (net cash flow)	[33]	**5,375**	**5,773**
Cash outflows for additions to property, plant, equipment and intangible assets		(1,575)	(1,514)
Cash inflows from sales of property, plant, equipment and other assets		98	61
Cash inflows from (outflows for) divestitures		70	101
Cash inflows from (outflows for) noncurrent financial assets		169	(461)
Cash outflows for acquisitions less acquired cash		(308)	(31)
Interest and dividends received		56	53
Cash inflows from (outflows for) current financial assets		(11)	(623)
Net cash provided by (used in) investing activities	[34]	**(1,501)**	**(2,414)**
Dividend payments and withholding tax on dividends		(973)	(1,160)
Issuances of debt		2,798	965
Retirements of debt		(4,240)	(2,509)
Interest paid including interest rate swaps		(1,206)	(915)
Interest received from interest rate swaps		421	398
Cash outflows for the purchase of additional interests in subsidiaries		(46)	(9)
Net cash provided by (used in) financing activities	[35]	**(3,246)**	**(3,230)**
Change in cash and cash equivalents due to business activities		**628**	**129**
Cash and cash equivalents at beginning of year		**2,094**	**2,725**
Change in cash and cash equivalents due to changes in scope of consolidation		3	-
Change in cash and cash equivalents due to exchange rate movements		-	(14)
Cash and cash equivalents at end of year	[36]	**2,725**	**2,840**

2009 figures restated

Bayer Group Consolidated Statements of Changes in Equity

	Capital stock of Bayer AG	Capital reserves of Bayer AG	Retained earnings incl. net income	Exchange differences
	€ million	€ million	€ million	€ million
Dec. 31, 2008	**1,957**	**4,028**	**13,014**	**(2,733)**
Equity transactions with owners				
Capital increase/decrease	160	2,139		
Dividend payments			(1,070)	
Other changes			6	
Changes recognized outside profit or loss***			(306)	282
Net income 2009			1,359	
Dec. 31, 2009	**2,117**	**6,167**	**13,003**	**(2,451)**
Restatement**			(77)	
Equity transactions with owners				
Capital increase/decrease				
Dividend payments			(1,158)	
Other changes			(34)	
Changes recognized outside profit or loss***			(690)	624
Net income 2010			1,301	
Dec. 31, 2010	**2,117**	**6,167**	**12,345**	**(1,827)**

* OCI = other comprehensive income
** equity Jan. 1, 2010 restated, see Note [4]
*** net of tax

[Table 4.5]

Accumulated Other Comprehensive Income					
Fair-value measurement of securities	Cash flow hedges	Revaluation surplus	Equity attributable to Bayer AG stockholders	Equity attributable to non-controlling interest incl. OCI*	Equity
€ million	€ million	€ million	€ million	€ million	€ million
10	**(71)**	**58**	**16,263**	**77**	**16,340**
			2,299		2,299
			(1,070)	(4)	(1,074)
		(6)	-	(21)	(21)
9	61		46	2	48
			1,359		1,359
19	**(10)**	**52**	**18,897**	**54**	**18,951**
			(77)		(77)
			(1,158)	(3)	(1,161)
	35	(5)	(4)	(3)	(7)
3	(63)		(126)	6	(120)
			1,301	9	1,310
22	**(38)**	**47**	**18,833**	**63**	**18,896**

Notes to the Consolidated Financial Statements of the Bayer Group

1. Key data by segment and region

Key Data by Segment

	HealthCare			
	Pharmaceuticals		Consumer Health	
	2009	2010	2009	2010
	€ million	€ million	€ million	€ million
Net sales (external)	10,467	10,908	5,521	6,005
Change	+4.4%	+4.2%	+2.7%	+8.8%
Currency-adjusted change	+3.3%	−0.2%	+3.2%	+3.5%
Intersegment sales	149	71	17	8
Net sales	10,616	10,979	5,538	6,013
Other operating income	400	226	41	55
Operating result (EBIT)	1,696	884	944	977
EBIT before special items	2,018	2,024	994	1,006
EBITDA before special items	3,193	3,100	1,275	1,305
Gross cash flow	2,186	1,983	967	965
Capital invested	17,379	16,654	5,870	6,140
CFROI	12.6%	11.7%	16.5%	16.1%
Net cash flow	2,280	2,272	1,151	1,048
Equity-method income (loss)	-	-	-	-
Equity-method investments	-	-	-	-
Assets	20,844	19,365	6,432	6,586
Capital expenditures	428	413	137	192
Additions to noncurrent assets from acquisitions	5	-	55	-
Depreciation, amortization and impairment losses	1,216	1,950	292	305
of which impairment losses	48	905	36	44
Liabilities	3,839	4,314	1,554	1,774
Research and development expenses	1,572	1,751	275	315
Number of employees (as of Dec. 31)	38,000	38,000	17,800	17,700

2009 figures restated

Key Data by Region

	Europe		North America	
	2009	2010	2009	2010
	€ million	€ million	€ million	€ million
Net sales (external) – by market	12,968	13,751	7,705	8,228
Change	−10.9%	+6.0%	−4.0%	+6.8%
Currency-adjusted change	−8.8%	+5.0%	−8.1%	+0.7%
Net sales (external) – by point of origin	14,189	15,303	7,638	8,241
Change	−10.5%	+7.9%	−4.3%	+7.9%
Currency-adjusted change	−8.6%	+6.9%	−8.6%	+1.6%
Interregional sales	5,756	6,524	2,372	3,015
Other operating income	545	350	193	75
Operating result [EBIT]	1,981	1,410	583	337
Assets	32,450	30,224	8,934	9,778
Capital expenditures	894	840	295	319
Depreciation, amortization and impairment losses	1,943	2,677	460	427
Liabilities	19,906	19,649	4,449	5,321
Research and development expenses	2,080	2,246	507	612
Number of employees (as of Dec. 31)	54,600	54,300	16,600	16,400

2009 figures restated

[Table 4.6]

CropScience				MaterialScience		Reconciliation					
Crop Protection		Environmental Science, BioScience		MaterialScience		All Other Segments		Corporate Center and Consolidation		Group	
2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
5,424	5,493	1,086	1,337	7,520	10,154	1,139	1,180	11	11	31,168	35,088
+1.6%	+1.3%	+4.1%	+23.1%	−22.8%	+35.0%	−17.5%	+3.6%	-	-	−5.3%	+12.6%
+2.3%	−4.7%	+4.1%	+16.5%	−24.4%	+30.1%	−17.4%	+2.5%	-	-	−5.9%	+7.7%
40	44	12	10	55	64	1,647	1,730	(1,920)	(1,927)	-	-
5,464	5,537	1,098	1,347	7,575	10,218	2,786	2,910	(1,909)	(1,916)	31,168	35,088
187	239	19	36	88	101	37	23	150	34	922	714
713	600	85	(339)	(266)	780	32	47	(198)	(219)	3,006	2,730
875	600	142	187	(126)	780	63	47	(194)	(192)	3,772	4,452
1,301	1,025	207	268	446	1,356	189	188	(139)	(141)	6,472	7,101
924	743	119	(197)	319	1,058	241	307	(98)	(88)	4,658	4,771
7,633	7,395	1,754	1,595	9,202	9,976	587	623	1,269	1,167	43,694	43,550
12.6%	9.9%	7.2%	(11.8)%	3.4%	11.0%	-	-	-	-	10.7%	10.9%
591	1,079	154	320	849	763	261	356	89	(65)	5,375	5,773
-	-	-	-	(48)	(56)	-	-	-	-	(48)	(56)
-	-	-	-	395	354	-	-	-	-	395	354
7,383	7,220	1,978	2,183	7,291	8,005	1,170	1,156	5,944	6,991	51,042	51,506
282	274	64	92	512	505	206	140	40	5	1,669	1,621
12	-	351	2	28	31	4	1	-	-	455	34
448	425	65	81	607	576	126	141	55	78	2,809	3,556
21	1	1	-	41	7	2	1	-	27	149	985
2,388	2,675	598	1,111	1,947	2,285	1,969	2,214	19,796	18,237	32,091	32,610
482	476	171	246	207	231	34	34	5	-	2,746	3,053
16,900	16,900	3,600	3,800	14,600	14,700	19,400	19,600	700	700	111,000	111,400

[Table 4.7]

Asia/Pacific		Latin America/ Africa/Middle East		Reconciliation		Total	
2009	2010	2009	2010	2009	2010	2009	2010
€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
5,712	7,481	4,783	5,628	-	-	31,168	35,088
+6.1%	+31.0%	−3.5%	+17.7%	-	-	−5.3%	+12.6%
+0.3%	+19.3%	−0.6%	+12.5%	-	-	−5.9%	+7.7%
5,486	7,118	3,855	4,426	-	-	31,168	35,088
+5.8%	+29.7%	−1.3%	+14.8%	-	-	−5.3%	+12.6%
−0.1%	+17.6%	+2.6%	+8.6%	-	-	−5.9%	+7.7%
334	462	360	414	(8,822)	(10,415)	-	-
53	79	131	210	-	-	922	714
367	807	273	395	(198)	(219)	3,006	2,730
5,255	6,367	3,246	3,729	1,157	1,408	51,042	51,506
357	336	123	126	-	-	1,669	1,621
268	294	83	80	55	78	2,809	3,556
3,288	3,655	1,239	1,390	3,209	2,595	32,091	32,610
131	160	28	35	-	-	2,746	3,053
23,000	24,600	16,800	16,100	-	-	111,000	111,400

2. General information

The consolidated financial statements of the Bayer Group as of December 31, 2010, were prepared by Bayer AG according to the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), London, as endorsed by the European Union and in effect at the closing date; the Interpretations of the IFRS Interpretations Committee; and the applicable further requirements of Section 315a of the German Commercial Code.

Bayer Aktiengesellschaft (Bayer AG) is a global enterprise based in Germany. Its registered office is at Kaiser-Wilhelm-Allee 1, 51368 Leverkusen. Its material business activities in the fields of health care, nutrition and high-tech materials take place in the HealthCare, CropScience and MaterialScience subgroups, respectively. The activities of the various segments are outlined in Note [5].

A Declaration of Compliance with the German Corporate Governance Code has been issued pursuant to Section 161 of the German Stock Corporation Act and made available to stockholders.

The Board of Management of Bayer AG prepared the consolidated financial statements of the Bayer Group on February 15, 2011. They were discussed by the Audit Committee of the Supervisory Board of Bayer AG at its meeting on February 24, 2011, and approved by the Supervisory Board at its plenary meeting the same day.

In the income statement and statement of comprehensive income, statement of financial position, statement of cash flows and statement of changes in equity, certain items are combined for the sake of clarity. These are explained in the Notes. The income statement is prepared using the cost-of-sales method. Assets and liabilities are classified by maturity. They are regarded as current if they mature within one year or within the normal business cycle of the company or the Group, or are held for sale. The normal business cycle is defined for this purpose as beginning with the procurement of the resources necessary for the production process and ending with the receipt of cash or cash equivalents as consideration for the sale of the goods or services produced in that process. Trade accounts receivable and payable and inventories are always presented as current items, deferred tax assets and liabilities and pension provisions as noncurrent items.

The consolidated financial statements of the Bayer Group are drawn up in euros. Amounts are stated in millions of euros (€ million) except where otherwise indicated. In some cases, the sum of the figures given in this report may not precisely equal the stated totals and percentages may not be exact due to rounding.

The financial statements of the individual consolidated companies are prepared as of the closing date of the Group financial statements.

3. Effects of new accounting pronouncements

ACCOUNTING STANDARDS APPLIED FOR THE FIRST TIME IN 2010

In 2010, the following accounting standards and interpretations were applied for the first time. These new standards had no impact, or no material impact, on the presentation of the Group's financial position or results of operations, or on earnings per share.

In January 2008, the IASB published the revised standards IFRS 3 (Business Combinations) and IAS 27 (Consolidated and Separate Financial Statements). Significant changes required by IFRS 3 (revised 2008) include:

- In future, a non-controlling interest may be measured either at fair value (i.e. including goodwill) or at the proportionate share of the identifiable net assets of the entity in which the non-controlling interest is held.
- In the case of a step acquisition, the acquirer must remeasure its previously held interest at fair value on the date on which it gains control of the acquiree and recognize the resulting gain or loss in income. The difference between the (remeasured) carrying amount of the interest in the subsidiary and the acquirer's remeasured proportionate share of the net assets of the subsidiary must be recognized as goodwill.
- Liabilities recognized as of the acquisition date for the purpose of future purchase price adjustments in light of future events can no longer be offset against goodwill in subsequent periods.
- Ancillary acquisition costs must be recognized in income.

The principal changes required by IAS 27 (revised 2008) are:

- A reduction in the equity interest held in a subsidiary that does not result in a loss of control by the parent is to be accounted for in future as an equity transaction outside profit or loss.
- If a reduction in the equity interest held in a subsidiary involves a loss of control, the assets and liabilities of the subsidiary must be derecognized in their entirety. The remaining interest in the company is to be recognized at fair value. The difference between the remaining carrying amounts and the fair values must be recognized in income.
- Non-controlling interests that become negative due to incurred losses must be recognized at their net negative amounts.

The amendments to IAS 39 (Financial Instruments: Recognition and Measurement) issued in July 2008 deal with one-sided risk hedging using options and with inflation hedging. They clarify the circumstances in which a hedged risk or portion of cash flows is eligible for hedge accounting.

In April 2009 the IASB issued amendments to a number of standards as part of its annual project "Improvements to IFRSs." The amendments address details of the recognition, measurement and disclosure of business transactions and serve to standardize terminology. They consist mainly of editorial changes to existing standards. As part of the project, IAS 17 (Leases) was amended to the effect that land leases (such as heritable building rights) must be assessed according to the general leasing criteria and may have to be capitalized by the lessee. The previous assumption that a land lease is normally to be classified as an operating lease was abolished.

In June 2009 amendments were issued to IFRS 2 (Share-based Payment) that clarify the accounting for group cash-settled share-based payment transactions. The amendments specify how an individual subsidiary in a group should account for certain share-based payment arrangements in its own financial statements, and also incorporate the rules previously included in IFRIC 8 (Scope of IFRS 2) and IFRIC 11 (IFRS 2 – Group and Treasury Share Transactions).

IFRIC 17 (Distributions of Non-cash Assets to Owners) was issued in November 2008. The interpretation addresses the recognition and measurement of liabilities related to non-cash dividends. It clarifies when an obligation to distribute a non-cash dividend is to be recognized, that it must be measured at fair value, and that the difference between the obligation to distribute and the carrying amount of the net assets distributed must be recognized in profit or loss at the distribution date.

PUBLISHED ACCOUNTING STANDARDS THAT HAVE NOT YET BEEN APPLIED

The IASB and the IFRS Interpretations Committee have issued the following standards, amendments to standards, and interpretations whose application was not yet mandatory for the 2010 fiscal year and is conditional upon their endorsement by the European Union.

An amendment to IAS 32 (Financial Instruments: Presentation) was issued in October 2009. The amendment clarifies that rights issues, options and warrants denominated in a currency other than the issuer's functional currency and offered on a pro-rata basis to all owners of the same class of equity must be classified as equity. Such rights issues have so far been accounted for as liabilities. The change relates only to issues of a fixed number of shares at a fixed foreign-currency exercise price. The amendment is to be applied for annual periods beginning on or after February 1, 2010. It will not have a material impact on the presentation of the Group's financial position or results of operations.

In November 2009 the IASB issued the revised standard IAS 24 (Related Party Disclosures), which simplifies the reporting requirements of companies in which a government owns an interest. Under the revised standard, certain kinds of related-party transactions resulting from government ownership of private companies are exempt from some of the disclosure requirements. In addition, the definition of related parties was amended in several respects. The revised standard applies for annual periods beginning on or after January 1, 2011. The changes will not have a material impact on the presentation of the Group's financial position or results of operations.

In November 2009 the IASB issued IFRS 9 (Financial Instruments), which addresses the classification and measurement of financial assets. Publication of IFRS 9 marks the completion of the first part of a three-part project to completely revise the accounting treatment of financial instruments. The new standard defines two instead of four measurement categories for financial assets, with classification to be based partly on the company's business model and partly on the characteristics of the contractual cash flows from the respective financial asset. An embedded derivative in a structured product will no longer have to be assessed for possible separate accounting treatment unless the host is a non-financial contract. A hybrid contract that includes a financial host must be classified and measured in its entirety. Application of IFRS 9 is mandatory for annual periods beginning on or after January 1, 2013. It has not yet been endorsed by the European Union. The new standard will not have a material impact on the presentation of the Group's financial position or results of operations.

In May 2010 the IASB issued a third collection of amendments as part of its annual project "Improvements to IFRSs." The amendments address details of the recognition, measurement and disclosure of business transactions and serve to standardize terminology. They consist mainly of editorial changes to existing standards. Some of the amendments are to be applied for annual periods beginning on or after January 1, 2011, and the others for annual periods beginning on or after July 1, 2011. They have not yet been endorsed by the European Union. The changes probably will not have a material impact on the presentation of the Group's financial position or results of operations.

In October 2010 the IASB published amendments to IFRS 7 (Financial Instruments: Disclosures). These amendments require additional disclosures about transactions that transfer financial assets, partly to provide insight into the possible effects of any risks remaining with the transferring entity. Additional disclosures are also required if a disproportionately large number of such transactions is undertaken around the end of a reporting period. The changes are to be applied for annual periods beginning on or after July 1, 2011. They have not yet been endorsed by the European Union. These changes will not have a material impact on the presentation of the Group's financial position or results of operations.

In December 2010, the IASB issued an amendment to IAS 12 (Income Taxes). This amendment introduces a rebuttable presumption that the carrying amount of an asset will normally be recovered through sale rather than use. The change is particularly relevant in countries where the income tax rates on gains from divestments differ from those on regular rental income, for example. In this connection, SIC 21 (Income Taxes – Recovery of Revalued Non-Depreciable Assets) was integrated into IAS 12 (Income Taxes), except where it related to real estate held as investment property. The revised standard is to be applied retrospectively for annual periods beginning on or after January 1, 2012. The amendments have not yet been endorsed by the European Union. The Bayer Group is currently evaluating the impact that the change will have on the presentation of its financial position and results of operations.

IFRIC 19 (Extinguishing Financial Liabilities with Equity Instruments) was issued in November 2009. The interpretation addresses the accounting treatment in cases where a company settles all or part of a financial liability by issuing equity instruments to the creditor. It is to be applied for annual periods beginning on or after July 1, 2010. Its impact on the presentation of the Group's financial position and results of operations will depend on the extent to which financial liabilities are settled with equity instruments in the future.

In November 2009 an amendment was issued to IFRIC 14 (IAS 19 – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction), an interpretation of IAS 19 (Employee Benefits). The amendment applies when a company is subject to minimum pension plan funding requirements. It enables prepayment of the respective contributions to be recognized as an asset. The amendment is to be applied for annual periods beginning on or after January 1, 2011. It will not have a material impact on the presentation of the Group's financial position or results of operations.

4. Basic principles, methods and critical accounting estimates

The financial statements of the consolidated companies are prepared according to uniform accounting policies and valuation principles.

The consolidated financial statements of the Group are based on the principle of the historical cost of acquisition, construction or production, with the exception of the items reflected at fair value, such as available-for-sale financial assets and derivatives.

In preparing the consolidated financial statements, the management has to make certain assumptions and estimates that may substantially impact the presentation of the Group's financial position and/or results of operations.

Such estimates, assumptions or the exercise of discretion mainly relate to the useful life of non-current assets, the discounted cash flows used for impairment testing and purchase price allocations, and the recognition of provisions, including those for litigation-related expenses, pensions and other benefits, taxes, environmental compliance and remediation costs, sales allowances, product liability and guarantees. Essential estimates and assumptions that may affect reporting in the various item categories of the financial statements are described in the following sections of this note. Estimates are based on historical experience and other assumptions that are considered reasonable under given circumstances. They are continually reviewed but may vary from the actual values.

Changes in accounting policies or measurement principles in light of new or revised standards are applied retrospectively, except as otherwise provided in the respective standard. The income statement for the previous year and the opening statement of financial position for that year are adjusted as if the new accounting policies and/or measurement principles had always been applied.

The introduction of a new, more accurate method of eliminating intercompany profits on intra-Group transactions resulted in one-time effects on Group inventories. The statement of financial position was retrospectively adjusted as of January 1, 2010 in compliance with IAS 8 (Accounting Policies, Changes in Accounting Estimates and Errors). The adjustment also affected deferred taxes and equity. Since it was not possible to adjust the income statement or the statement of cash flows for 2009 on the basis of the data available prior to December 31, 2009, earnings per share for that year are unaffected.

Its impact on the relevant items of the statement of financial position as of January 1, 2010 was as follows:

Restatement [Table 4.8]

	Jan. 1, 2010
	€ million
Assets	
Inventories	(111)
Deferred tax assets	34
Equity and liabilities	
Other reserves	(77)

In the statement of cash flows, interest received on interest rate swaps, and cash outflows for the purchase of additional interests in subsidiaries, are included in financing cash flow starting in 2010. The prior-year figures are restated accordingly.

CONSOLIDATION

The consolidated financial statements include subsidiaries, joint ventures and associates.

Subsidiaries are those companies in which Bayer AG directly or indirectly has a majority of the voting rights or from which it is able to derive the greater part of the economic benefit and bears the greater part of the risk by virtue of its power to govern corporate financial and operating policies, generally through an ownership interest of more than 50%. Subsidiaries and special purpose entities (SPEs) in which the Bayer Group holds 50% or less of the voting rights or shares are consolidated if the substance of the economic relationship indicates that they are controlled by the Bayer Group. Inclusion of an entity's accounts in the consolidated financial statements begins when the Bayer Group is able to exercise control over the company and ceases when it is no longer able to do so.

The carrying amounts of subsidiaries are offset against their underlying equity. Equity of subsidiaries is valued according to the purchase method at the respective acquisition dates, recognizing identifiable assets and liabilities (including contingent liabilities) at their fair values along with attributable deferred tax assets and liabilities. Any remaining difference to the purchase price is recognized as goodwill. The purchase prices of acquired companies domiciled outside the euro-zone are translated at the exchange rates in effect at the respective dates of acquisition.

The purchase of shares from non-controlling stockholders is presented as an equity transaction. Any amount by which the purchase price of additional interests exceeds the equity attributable to non-controlling stockholders is therefore accounted for as a reduction in equity.

Joint ventures are companies over which the Bayer Group exercises joint control with a third party. A company is generally deemed a joint venture if voting rights are divided equally between two stockholders or the company is established on the basis of a joint venture agreement. Joint ventures are included by proportionate consolidation according to the principles followed for subsidiaries.

Associates over which Bayer AG exerts significant influence, generally through an ownership interest between 20% and 50%, are accounted for using the equity method. The cost of acquisition of a company accounted for using the equity method is adjusted annually by a percentage of any change in its equity corresponding to Bayer's percentage interest in the company. Differences arising upon first-time inclusion using the equity method are accounted for according to full-consolidation principles. Bayer's share of changes in these companies' equities that are recognized in their income statements – including impairment losses recognized on goodwill – are reflected in the non-operating result. Intercompany profits and losses for these companies were not material in either 2010 or 2009.

Subsidiaries that do not have a material impact on the Group's financial position or results of operations, either individually or in aggregate, are recognized in the consolidated financial statements at amortized cost.

Profits and losses, sales revenues, and income and expenses arising from transactions among the consolidated companies, along with receivables and payables existing between them, are eliminated. Deferred income tax effects are reflected in consolidation.

FOREIGN CURRENCY TRANSLATION

The financial statements of the individual companies for inclusion in the consolidated financial statements are prepared in their respective functional currencies. A company's functional currency is that of the economic environment in which it primarily generates and expends cash. The majority of consolidated companies carry out their activities autonomously from a financial, economic and organizational point of view, and their functional currencies are therefore the respective local currencies.

In the financial statements of the individual consolidated companies, receivables and payables in currencies other than the respective functional currency are translated at closing rates, irrespective of whether they are exchange-hedged. Exchange rate differences from valuation of balances in foreign currencies are recognized in income.

In the consolidated financial statements, the assets and liabilities of companies outside the eurozone at the start and end of the year are translated into euros at closing rates. All changes occurring during the year and all income and expense items and cash flows are translated into euros at average monthly rates. Components of stockholders' equity are translated at the historical exchange rates prevailing at the respective dates of their first-time recognition in Group equity.

The exchange differences arising between the resulting amounts and those obtained by translating at closing rates are reported separately as "Exchange differences on translation of operations outside the eurozone" or as "Exchange differences." When a company is deconsolidated, such exchange differences are removed from equity and recognized in the income statement.

The exchange rates for major currencies against the euro varied as follows:

Exchange Rates for Major Currencies [Table 4.9]

€1/		Closing rate		Average rate	
		2009	2010	2009	2010
ARS	Argentina	5.47	5.31	5.20	5.18
BRL	Brazil	2.51	2.23	2.77	2.33
CAD	Canada	1.51	1.33	1.59	1.36
CHF	Switzerland	1.48	1.25	1.51	1.38
CNY	China	9.84	8.82	9.52	8.96
GBP	United Kingdom	0.89	0.86	0.89	0.86
JPY	Japan	133.16	108.65	130.31	116.04
MXN	Mexico	18.92	16.55	18.79	16.72
USD	United States	1.44	1.34	1.39	1.32

Subsidiaries whose functional currencies have experienced a cumulative inflation rate of more than 100% over the past three years applied the rules of IAS 29 (Financial Reporting in Hyperinflationary Economies).

NET SALES AND OTHER OPERATING INCOME

All revenues derived from the selling of products or rendering of services or from licensing agreements are recognized as sales. Other operational revenues are recognized as other operating income. Sales are recognized in the income statement when the significant risks and rewards of ownership of the goods have been transferred to the customer, the company retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold, the amount of revenue and costs incurred or to be incurred can be measured reliably, and it is sufficiently probable that the economic benefits associated with the transaction will flow to the company.

Sales are stated net of sales taxes, other taxes and sales deductions at the fair value of the consideration received or to be received. Sales deductions are estimated amounts for rebates, cash discounts and product returns. They are deducted at the time the sales are recognized, and appropriate provisions are recorded. Sales deductions are estimated primarily on the basis of historical experience, specific contractual terms and future expectations of sales development. It is unlikely that factors other than these could materially affect sales deductions in the Bayer Group. Adjustments to provisions made in prior periods for rebates, cash discounts or product returns were of secondary importance for income before income taxes in the years under report.

Provisions for rebates in 2010 amounted to 1.9% of total net sales (2009: 1.8%). In addition to rebates, Group companies offer cash discounts for prompt payment in some countries. Provisions for cash discounts as of December 31, 2010 and December 31, 2009 were less than 0.1% of total net sales for the respective year.

Sales are reduced by the amount of the provisions for expected returns of defective goods or of saleable products that may be returned under contractual arrangements. The net sales are reduced on the date of sale or on the date when the amount of future returns can be reasonably estimated. Provisions for product returns amounted to 0.2% of total net sales for 2010, as in the previous year. If future product returns cannot be reasonably estimated and are significant to a sales transaction, the revenues and the related cost of sales are deferred until a reasonable estimate can be made or the right to return the goods has expired.

Some of the Bayer Group's revenues are generated on the basis of licensing agreements under which third parties are granted rights to products and technologies. Payments received, or expected to be received, that relate to the sale or outlicensing of technologies or technological expertise are recognized in income as of the effective date of the respective agreement if all rights relating to the technologies and all obligations resulting from them have been relinquished under the contract terms. However, if rights to the technologies continue to exist or obligations resulting from them have yet to be fulfilled, the payments received are deferred accordingly. Upfront payments and similar non-refundable payments received under these agreements are recorded as other liabilities and recognized in income over the estimated performance period stipulated in the agreement.

License or research and development collaboration agreements may consist of multiple elements and provide for varying consideration terms, such as upfront payments and milestone or similar payments. They therefore have to be assessed to determine whether sales revenues should be recognized for individually delivered elements of such arrangements, i. e. for more than one unit of account. The delivered elements are separated if they have value to the customer on a stand-alone basis, there is objective and reliable evidence of the fair value of the undelivered element(s) and the arrangement includes a general right of return relative to the delivered element(s) and delivery or performance of the as yet undelivered element(s) is probable and substantially within the control of the company. If all three criteria are fulfilled, the appropriate revenue recognition rule is then applied to each separate unit of account.

Other operating income may also arise from the exchange of intangible assets. The amount recognized is generally based on the fair value of the assets given up, which is generally calculated using the discounted cash flow method. If the assets given up are internally generated, the gain from the exchange normally equals their fair value.

RESEARCH AND DEVELOPMENT EXPENSES

A substantial proportion of the Bayer Group's financial resources is invested in research and development. In addition to in-house research and development activities, especially in HealthCare, various research and development collaborations and alliances are maintained with third parties.

For accounting purposes, research expenses are defined as costs incurred for current or planned investigations undertaken with the prospect of gaining new scientific or technical knowledge and understanding. Development expenses are defined as costs incurred for the application of research findings or specialist knowledge to production, production methods, services or goods prior to the commencement of commercial production or use.

Research costs cannot be capitalized. The conditions for capitalization of development costs are closely defined: an intangible asset must be recognized if, and only if, there is a reasonable certainty of receiving future cash flows that will cover an asset's carrying amount. Since our own development projects are often subject to regulatory approval procedures and other uncertainties, the conditions for the capitalization of costs incurred before receipt of approvals are not normally satisfied.

Research and development expenses mainly comprise the costs for active ingredient discovery, clinical studies, and research and development activities in the areas of application technology and engineering. They also include non-allocable costs for regulatory approvals, approval extensions and field trials.

In the case of research and development collaborations, it is necessary to assess whether payments on contract signature, upfront payments, milestone payments or license payments constitute funding of research and development work or consideration for the acquisition of assets. Factors considered in reaching this determination are the reason for the payment (for example, whether it is related to a regulatory approval, the attainment of a sales target or outsourced research and development activities), and the ratio of the fair value of the planned research and development activities to the total amount of the payment.

According to IAS 38 (Intangible Assets), payments made to acquire an intangible asset must be capitalized even if uncertainties exist as to whether the research and development will ultimately succeed in producing a saleable product.

GOODWILL AND OTHER INTANGIBLE ASSETS

Intangible assets are recognized at the cost of acquisition or generation. Those with a determinable useful life are amortized accordingly on a straight-line basis over a period of up to 30 years, except where their actual depletion demands a different amortization pattern. Determination of the expected useful lives of such assets and the amortization patterns is based on estimates of the period for which they will generate cash flows and the temporal distribution of the cash flows within this period.

Goodwill, other intangible assets with an indefinite life, and intangible assets not yet available for use (such as research and development projects) are tested annually for impairment. The remaining intangible assets are tested for impairment if there is an indication of possible impairment. Details of the annual impairment tests are given under “Procedure used in global impairment testing and its impact.”

Impairment losses are recognized in income. If the reasons for previously recognized impairment losses no longer apply, the impairment losses are reversed provided that the reversals do not cause the carrying amounts to exceed the amortized cost of acquisition. Once an impairment loss has been recognized on goodwill, it is not reversed in subsequent periods.

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment is carried at the cost of acquisition or construction depreciated over its estimated useful life. An impairment loss is recognized in addition if an asset’s recoverable amount falls below its carrying amount.

The cost of acquisition comprises the acquisition price plus ancillary and subsequent acquisition costs, less any reduction received on the acquisition price. The cost of self-constructed property, plant and equipment comprises the direct cost of materials, direct manufacturing expenses, and appropriate allocations of material and manufacturing overheads. Where an obligation exists to dismantle or remove an asset or restore a site to its former condition at the end of its useful life, the present value of the related future payments is capitalized along with the cost of acquisition or construction upon completion and a corresponding liability is recognized.

If the construction phase of property, plant or equipment extends over a long period, the interest incurred on borrowed capital up to the date of completion is capitalized as part of the cost of acquisition or construction in accordance with IAS 23 (Borrowing Costs).

Expenses for the repair of property, plant and equipment, such as ongoing maintenance costs, are normally recognized in income. The cost of acquisition or construction is capitalized if a repair (such as a complete overhaul of technical equipment) will result in future economic benefits.

Property, plant and equipment is depreciated by the straight-line method, except where depreciation based on actual depletion is more appropriate. Significant asset components with different useful lives are accounted for and depreciated separately.

The following depreciation periods, based on the estimated useful lives of the respective assets, are applied throughout the Group:

Useful Life of Property, Plant and Equipment [Table 4.10]

Buildings	20 to 50 years
Outdoor infrastructure	10 to 20 years
Storage tanks and pipelines	10 to 20 years
Plant installations	6 to 20 years
Machinery and equipment	6 to 12 years
Furniture and fixtures	4 to 10 years
Vehicles	4 to 8 years
Computer equipment	3 to 5 years
Laboratory and research facilities	3 to 5 years

Impairment losses are recognized for declines in value that go beyond regular depreciation. If the reasons for previously recognized impairment losses no longer apply, the impairment losses are reversed provided that the reversals do not cause the carrying amounts to exceed the amortized cost of acquisition or construction.

When assets are sold, closed down or scrapped, the difference between the net proceeds and the net carrying amount of the assets is recognized as a gain or loss in other operating income or expenses, respectively.

LEASING

A lease is an agreement whereby the lessor assigns to the lessee the right to use an asset for an agreed period of time in return for a payment or series of payments. Leases are classified as either finance or operating leases. Leasing transactions that transfer substantially all the risks and rewards incidental to ownership of the leased asset to the lessee are classified as finance leases. All other leasing agreements are classified as operating leases.

Where the Bayer Group is the lessee in a finance lease, the leased asset is capitalized at the lower of the fair value or present value of the minimum lease payments at the beginning of the lease term and simultaneously recognized under financial liabilities. The minimum lease payments essentially comprise financing costs and the principal portion of the remaining obligation. These are determined using the effective-interest method. The leased asset is depreciated by the straight-line method over the shorter of its estimated useful life or the lease term.

Where the Bayer Group is the lessor in a finance lease, the net investment in the lease is reflected in sales and a leasing receivable is recognized. The lease payments received are divided into the principal portion and the interest income using the effective-interest method.

Where the Bayer Group is the lessee in an operating lease, the lease payments are expensed. Where it is the lessor, the lease payments received are recognized in income. The leased asset continues to be recognized under property, plant and equipment in the lessor’s statement of financial position.

FINANCIAL ASSETS

Financial assets comprise loans and receivables, acquired equity and debt instruments, cash and cash equivalents, and derivatives with positive fair values.

They are recognized and measured in accordance with IAS 39 (Financial Instruments: Recognition and Measurement). Accordingly, financial assets are recognized in the consolidated financial statements if the Bayer Group has a contractual right to receive cash or other financial assets from another entity. Regular way purchases and sales of financial assets are generally posted on the settlement date. Financial assets are initially recognized at fair value plus transaction costs. The transaction costs incurred for the purchase of financial assets held at fair value through profit or loss are expensed immediately. Interest-free or low-interest receivables are initially reflected at the present value of the expected future cash flows. For purposes of subsequent measurement, financial assets are allocated to the following categories according to IAS 39, with different measurement rules applying to each category:

Financial assets held at fair value through profit or loss comprise those financial assets that are held for trading. These assets are included in other financial assets and also comprised receivables from forward commodity contracts and receivables from other derivatives, except where hedge accounting is used. Changes in the fair value of financial assets in this category are recognized in the income statement when the increase or decrease in value occurs.

Loans and receivables are non-derivative financial assets that are not quoted in an active market. They are accounted for at amortized cost using the effective-interest method. This category comprises trade accounts receivable, the financial receivables and loans included in other financial assets, the additional financial receivables and loans reflected in other receivables, and cash and cash equivalents. Interest income from items assigned to this category is determined using the effective-interest method, insofar as such items are not classified as current receivables and the effect of discounting interest is not material.

Held-to-maturity financial assets are non-derivative financial assets, with fixed or determinable payments, that are to be held to maturity. They are accounted for at amortized cost using the effective-interest method. Held-to-maturity financial investments are recognized in other financial assets.

Available-for-sale financial assets are those non-derivative financial assets that are not assigned to any of the above categories. They mainly include equity instruments, such as shares, and debt instruments not to be held to maturity, which are included in other financial assets. Changes in the fair value of available-for-sale financial assets are recognized in equity and not amortized to income until the assets are sold. If the fair value is substantially below the amortized cost and/or remains below the amortized cost for a prolonged period, a write-down is recorded and amortized to income. Where possible, a fair value for equity and debt securities is derived from market data. Financial assets for which no market price is available and whose fair value cannot be reasonably estimated are carried at cost less any write-downs.

If there are substantial, objective indications of a decline in the value of loans and receivables, held-to-maturity financial assets or available-for-sale financial assets, their carrying amounts are compared to the present values of the expected future cash flows, discounted by the current market rate of return on comparable financial assets. If a decline in value is confirmed, the assets are written down by the difference between the two amounts. Indications that a write-down is necessary include the fact that a company has been making an operating loss for several years, a reduction in market value, a significant deterioration in credit standing, a material breach of contract, a high probability of insolvency or other financial restructuring of the debtor, or the disappearance of an active market for the asset.

If the reasons for previous write-downs no longer apply, the assets are written back provided that this does not cause the carrying amounts to exceed the amortized cost of acquisition. Available-for-sale equity instruments, however, are not written back.

Financial assets are derecognized when contractual rights to receive cash flows from the financial assets expire or the financial assets are transferred together with all material risks and benefits.

DERIVATIVES

The Bayer Group uses derivatives to mitigate the risk of changes in exchange rates, interest rates and commodity prices. Hedge accounting is applied for these derivatives where appropriate.

Contracts concluded in order to receive or deliver non-financial goods for the company's own purposes are not accounted for as derivatives but treated as pending transactions. Where embedded derivatives are identified that are required to be separated from the pending transactions, they are accounted for separately. To take advantage of market opportunities or cover possible peak demand, a non-material volume of transactions may be entered into for which the possibility of immediate resale cannot be excluded. Such transactions are allocated to separate portfolios upon acquisition and accounted for as derivatives according to IAS 39. Changes in the fair values of these derivatives are recognized directly in the income statement.

Changes in the values of forward exchange contracts and currency options serving as hedges of items in the statement of financial position are reflected in exchange gains and losses, while changes in the values of interest-rate swaps and interest-rate options are recognized in interest income and expense. Changes in the fair values of commodity futures and options, and of forward exchange contracts used to hedge forecasted transactions in foreign currencies, are recognized in other operating income and expenses.

The fair values of derivatives either correspond to market data or they are measured by the usual methods in light of the market data available at the measurement date. Currency and commodity contracts are measured individually at their forward rates or forward prices on the closing date. These depend on spot rates or prices including time spreads. The fair values of interest-rate hedging instruments are determined by discounting future cash flows over the remaining terms of the instruments at market rates of interest. The present value of each interest-rate or cross-currency interest-rate swap transaction is measured individually as of the closing date. Interest income is recognized in the income statement at the date of payment or, in case of accrual, at the closing date.

Changes in the fair values of derivatives designated as fair value hedges and the adjustments in the carrying amounts of the underlying transactions are recognized in the income statement. Changes in the fair values of the effective portion of derivatives designated as cash flow hedges are initially recognized not in the income statement, but in equity (under accumulated other comprehensive income). They are released to the income statement when the underlying transaction is realized. If such a derivative is sold or ceases to qualify for hedge accounting, the change in its value continues to be recognized in accumulated other comprehensive income until the forecasted transaction is realized. If the forecasted transaction is no longer probable, the amount previously recognized in accumulated other comprehensive income is released to the income statement.

The income and expense reflected in the non-operating result pertaining to the derivatives and the underlying transactions are shown separately. Income and expense are not offset.

INVENTORIES

In accordance with IAS 2 (Inventories), inventories encompass assets held for sale in the ordinary course of business (finished goods and goods purchased for resale), in the process of production for such sale (work in process) or in the form of materials or supplies to be consumed in the production process or in the rendering of services (raw materials and supplies). Inventories are recognized at their cost of acquisition or production – calculated by the weighted-average method – or at their net realizable value, whichever is lower. The net realizable value is the achievable sale proceeds under normal business conditions less estimated cost to complete and selling expenses.

TAXES

Income taxes comprise the taxes levied on taxable income in the individual countries and the changes in deferred tax assets and liabilities. The income taxes recognized are reflected at the amounts likely to be payable under the statutory regulations in force, or already enacted in relation to future periods, as of the closing date.

The remaining taxes, such as property, electricity and other energy taxes, are included in the functional cost items.

In compliance with IAS 12 (Income Taxes), deferred taxes are recognized for temporary differences between the carrying amounts of assets and liabilities in the statement of financial position prepared according to IFRS and those in the statement of financial position drawn up for tax purposes. Deferred taxes are also recognized for consolidation measures and for tax loss carryforwards likely to be realizable.

Deferred tax assets relating to deductible temporary differences, tax credits and tax loss carryforwards are recognized where it is sufficiently probable that taxable income will be available in the future to enable the tax loss carryforwards to be utilized. Deferred tax liabilities are recognized on temporary differences taxable in the future. Deferred taxes are calculated at the rates which – on the basis of the statutory regulations in force, or already enacted in relation to future periods, as of the closing date – are expected to apply in the individual countries at the time of realization. Deferred tax assets and deferred tax liabilities are offset if they relate to income taxes levied by the same taxation authority. The effects of changes in tax rates or tax law on deferred tax assets and liabilities are generally accounted for in the period in which the changes are substantively enacted. Such effects are normally recognized in the income statement. Effects on deferred taxes previously recognized in other comprehensive income are reflected in equity.

Where gains or losses are recognized directly in equity, this also applies to the related deferred tax assets or liabilities.

The probability that deferred tax assets resulting from temporary differences or loss carryforwards can be utilized in the future is the subject of forecasts by the individual consolidated companies regarding their future earnings situation and other parameters.

Deferred tax liabilities are recognized on planned dividend payments by subsidiaries. Where a dividend payment is not planned for the long term, no deferred tax liability is recognized on the difference between the proportionate net assets according to IFRS and the tax base of the investment in the subsidiary.

PROVISIONS FOR PENSIONS AND OTHER POST-EMPLOYMENT BENEFITS

Group companies provide retirement benefits for most of their employees, either directly or by contributing to privately or publicly administered funds. The way these benefits are provided varies according to the legal, fiscal and economic conditions of each country, the benefits generally being based on employee compensation and years of service. The obligations relate both to existing retirees' pensions and to pension entitlements of future retirees.

Group companies provide retirement benefits under defined contribution and/or defined benefit plans. In the case of defined contribution plans, the company pays contributions to publicly or privately administered pension schemes on a mandatory, contractual or voluntary basis. Once the contributions have been paid, the company has no further payment obligations. The regular contributions constitute expenses for the year in which they are due and as such are included in the functional cost items, and thus in the operating result (EBIT). All other retirement benefit systems are defined benefit plans, which may be either unfunded, i.e. financed by provisions, or funded, i.e. financed through pension funds. All income and expenses relating to defined benefit plans other than from interest cost and the expected return on plan assets are recognized in the operating result (EBIT). Interest cost and the expected return on plan assets are reflected in the non-operating result under other non-operating income and expense. Actuarial gains and losses from defined benefit plans and deductions in connection with asset limitation are reported net of taxes in the statement of comprehensive income without affecting the income statement and reflected in the statement of changes in equity, as well as being recognized in full in the respective provision. Early-retirement and certain other benefits to retirees are also included in the provisions for pensions, since these obligations are similar in character to pension obligations.

The present value of provisions for defined benefit plans and the resulting expense are calculated in accordance with IAS 19 (Employee Benefits) by the projected unit credit method. The future benefit obligations are valued by actuarial methods on the basis of specific assumptions regarding beneficiary structure and the economic environment. These relate mainly to the discount rate, the expected return on plan assets, the rate of future compensation increases, variations in health care costs, and attrition and mortality rates.

The discount rates used are calculated from the yields of high-quality corporate bond portfolios in specific currencies with cash flows approximately equivalent to the expected disbursements from the pension plans. The uniform discount rate derived from this interest-rate structure is thus based on the yields, at the closing date, of a portfolio of AA-rated corporate bonds whose weighted residual maturities approximately correspond to the duration necessary to cover the entire benefit obligation. If there are no AA-rated corporate bonds of equal duration, the obligations are discounted at the interest rate for government bonds or interest-rate swaps in effect at the closing date. This is adjusted in line with the credit spread for corporate bonds.

The expected long-term return on plan assets, determined on the basis of published and internal capital market reports and forecasts for each asset class, is applied to the fair value of plan assets at each year end.

The effects of changes in important parameters are explained in Note [25].

According to the projected unit credit method, benefit expense is spread over each employee's entire period of employment, already allowing for future increases in compensation.

The fair value of plan assets is deducted from the present value of the defined benefit obligation for pensions and other post-employment benefits. The obligations and plan assets are valued at regular intervals of not more than three years. Comprehensive actuarial valuations for all major plans are performed annually as of December 31. The difference between the defined benefit obligation – after deducting the fair value of plan assets – and the net liability recognized in the statement of financial position is attributable to unrecognized past service cost. Plan assets in excess of the benefit obligation are reflected in other receivables, subject to the asset limitation specified in IAS 19 (Employee Benefits).

Because of changing market and economic conditions, the expenses and the obligations actually arising under the plans in the future may differ materially from the estimates made on the basis of these actuarial assumptions. The plan assets are mainly comprised of equity and fixed-income instruments. Therefore, declining returns on equity markets and markets for fixed-income instruments could necessitate additional contributions to the plans in order to cover current and future pension obligations. Higher or lower rates of employee fluctuation or longer or shorter lives of participants may also affect the amounts of pension income or expense recorded in the future.

OTHER PROVISIONS

Other provisions are recognized for present legal and constructive obligations arising from past events that will probably give rise to a future outflow of resources, provided that a reliable estimate can be made of the amount of the obligations.

Other provisions are measured in accordance with IAS 37 (Provisions, Contingent Liabilities and Contingent Assets) or, where applicable, IAS 19 (Employee Benefits). Where the cash outflow to settle an obligation is expected to occur after one year, the provision is recognized at the present value of the expected cash outflow. Claims for reimbursements from third parties are capitalized separately if their realization is virtually certain.

If the projected obligation declines as a result of a change in the estimate, the provision is reversed by the corresponding amount and the resulting income recognized in the operating expense item(s) in which the original charge was recognized.

To enhance the information content of the estimates, certain provisions that could have a material effect on the financial position or results of operations of the Group are selected and tested for their sensitivity to changes in the underlying parameters. To reflect uncertainty about the likelihood of the assumed events actually occurring, the impact of a 5% change in the probability of occurrence is examined in each case. This analysis has not shown other provisions to be materially sensitive.

Uncertainties exist with respect to the interpretation of complex tax regulations and the amount and timing of future taxable income. Given the wide range of international business relationships and the long-term nature and complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate adjustments to tax income and expense in future periods. The Group establishes **provisions for taxes**, based on reasonable estimates, for liabilities to the tax authorities of the respective countries that are uncertain as to their amount and the probability of their occurrence. The amount of such provisions is based on various factors, such as experience with previous tax audits and differing legal interpretations by the taxable entity and the responsible tax authority.

Provisions for environmental protection are recorded if future cash outflows are likely to be necessary to ensure compliance with environmental regulations or to carry out remediation work, such costs can be reliably estimated and no future benefits are expected from such measures.

Estimating the future costs of environmental protection and remediation involves many uncertainties, particularly with regard to the status of laws, regulations and the information available about conditions in the various countries and at the individual sites. Significant factors in estimating the costs include previous experiences in similar cases, the conclusions in expert opinions obtained regarding the Group's environmental programs, current costs and new developments affecting costs, management's interpretation of current environmental laws and regulations, the number and financial position of third parties that may become obligated to participate in any remediation costs on the basis of joint liability, and the remediation methods likely to be deployed. Changes in these assumptions could impact future reported results.

Taking into consideration experience gained to date regarding environmental matters of a similar nature, provisions are believed to be adequate based upon currently available information. There were no significant changes in assumptions or estimates that would have impacted the income statement in prior years. However, given the difficulties inherent in estimating liabilities in the businesses in which the Group operates, especially those for which the risk of environmental damage is greater in relative terms (CropScience and MaterialScience), it remains possible that material additional costs will be incurred beyond the amounts accrued. It may transpire during remediation work that additional expenditures are necessary over an extended period and that these exceed existing provisions and cannot be reasonably estimated. Management nevertheless believes that such additional amounts, if any, would not have a material adverse effect on the Group's financial position or results of operations.

Provisions for restructuring only cover expenses that arise directly from restructuring measures, are necessary for restructuring and are not related to future business operations. Such expenses include severance payments to employees and rentals for property that is no longer utilized.

Restructuring measures may include the sale or termination of business units, site closures, relocations of business activities, changes in management structure or fundamental reorganizations of business units.

The respective provisions are established when a detailed restructuring plan has been drawn up, resolved upon by the responsible decision-making level of management and communicated to the employees and/or their representatives. Provisions for restructuring are established at the present value of future disbursements.

Trade-related provisions are recorded mainly for the granting of rebates or discounts, product returns, or obligations in respect of goods or services already received but not yet invoiced.

As a global company with a diverse business portfolio, the Bayer Group is exposed to numerous legal risks, particularly in the areas of product liability, competition and antitrust law, patent disputes, tax assessments and environmental matters. **Provisions for litigations** are recorded in the statement of financial position in respect of pending or future litigations, subject to a case-by-case examination. Such legal proceedings are evaluated on the basis of the available information, including that from legal counsel acting for the Group, to assess potential outcomes. Where it is more likely than not that a present obligation arising out of legal proceedings will result in an outflow of resources, a provision is recorded in the amount of the present value of the expected cash outflows if these are considered to be reliably measurable. These provisions cover the estimated payments to plaintiffs, court fees, attorney costs and the cost of potential settlements. The evaluation is based on the current status of the litigations as of each closing date and includes an assessment of whether the criteria for recording a provision are met and, if so, the amount of the provision to be recorded.

Litigation and other judicial proceedings generally raise complex issues and are subject to many uncertainties and complexities including, but not limited to, the facts and circumstances of each particular case, the jurisdiction in which each suit is brought and differences in applicable law. The outcome of currently pending and future proceedings therefore cannot be predicted. As a result of a judgment in court proceedings or the conclusion of a settlement, the Bayer Group may incur charges in excess of presently established provisions and related insurance coverage.

Personnel-related provisions are mainly those recorded for annual bonus payments, variable one-time payments, individual performance awards, long-service awards, surpluses on long-term accounts and other personnel costs. Obligations under stock-based compensation programs that provide for awards payable in cash are also included here.

FINANCIAL LIABILITIES

Financial liabilities comprise primary financial liabilities and negative fair values of derivatives.

Primary financial liabilities are recognized in the statement of financial position if the Bayer Group has a contractual obligation to transfer cash or other financial assets to another party. Such liabilities are initially recognized at the fair value of the consideration received or the value of payments received less any transaction costs. In subsequent periods, primary financial liabilities are measured at amortized cost using the effective-interest method.

Financial liabilities are derecognized when the contractual obligation is discharged or canceled, or has expired.

Under IAS 32 (Financial Instruments: Presentation), puttable financial instruments may only be classified as equity under certain conditions. Where other stockholders of subsidiaries are contractually entitled to terminate their participation and at the same time claim repayment of their capital contribution, such capital is recognized as a liability even if it is classified as equity in the respective jurisdiction. The redeemable capital of a non-controlling stockholder is recognized at the amount of such stockholder's pro-rated share of the subsidiary's net assets.

OTHER RECEIVABLES AND LIABILITIES

Accrued items and other non-financial assets and liabilities are carried at amortized cost. They are amortized to income by the straight-line method or according to performance of the underlying transaction.

In accordance with IAS 20 (Accounting for Government Grants and Disclosure of Government Assistance), grants and subsidies from third parties that serve to promote investment are reflected in the statement of financial position under other liabilities and amortized to income over the useful lives of the respective assets.

ACQUISITION ACCOUNTING

Acquired businesses are accounted for using the acquisition method, which requires that the assets acquired and liabilities assumed be recorded at their respective fair values on the date Bayer gains control.

The application of the acquisition method requires certain estimates and assumptions to be made, especially concerning the fair values of the acquired intangible assets, property, plant and equipment and the liabilities assumed at the acquisition date, and the useful lives of the acquired intangible assets, property, plant and equipment.

Measurement is based to a large extent on anticipated cash flows. If actual cash flows vary from those used in calculating fair values, this may materially affect the Group's future results of operations. In particular, the estimation of discounted cash flows from intangible assets under development, patented and non-patented technologies and brands is based on assumptions concerning, for example:

- the outcomes of research and development activities regarding compound efficacy, results of clinical trials etc.,
- the probability of obtaining regulatory approvals in individual countries,
- long-term sales trends,
- possible selling price erosion due to generic competition in the market following patent expirations,
- the behavior of competitors (launch of competing products, marketing initiatives etc.).

For significant acquisitions, the purchase price allocation is carried out with assistance from independent third-party valuation specialists. The valuations are based on the information available at the acquisition date.

When an acquisition is made in several stages, the existing interest held is completely remeasured at the date on which the acquirer obtains control of the acquiree and recognized at fair value in compliance with IFRS 3 (Business Combinations). If the new fair value of the existing interest already held by the acquirer is higher or lower than its carrying amount, this carrying amount must be adjusted accordingly. This adjustment is recognized in the income statement.

PROCEDURE USED IN GLOBAL IMPAIRMENT TESTING AND ITS IMPACT

Impairment tests are performed not only on individual items of intangible assets, property, plant and equipment, but also at the level of cash-generating units. A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. The Bayer Group regards its strategic business entities and some individual product families as cash-generating units and subjects them to global impairment testing. The strategic business entities constitute the second financial reporting level below the segments.

Cash-generating units are globally tested if there is an indication of possible impairment. Those to which goodwill is allocated are tested at least annually.

Impairment testing involves comparing the carrying amount of each cash-generating unit or item of intangible assets, property, plant or equipment to the recoverable amount, which is the higher of its fair value less costs to sell or value in use. If the carrying amount exceeds the recoverable amount, the asset is impaired by the amount of the difference. If a strategic business entity is found to be impaired, an impairment loss is first recognized on any goodwill allocated to it. Any remaining impairment amount is then allocated among the other assets of the strategic business entity, and pro-rata impairment losses are recognized on the carrying amounts of these assets. The impairments are recognized in the income statement, generally under other operating expenses.

For the purpose of calculating the recoverable amount, both the fair value less costs to sell and the value in use are determined from the present value of the future net cash flows. These are forecast on the basis of the Bayer Group's current planning, the planning horizon normally being three to five years. Forecasting involves making assumptions, especially regarding future selling prices, sales volumes and costs. Where the recoverable amount is the fair value less costs to sell, the cash-generating unit is measured from the viewpoint of an independent market participant. Where the recoverable amount is the value in use, the cash-generating unit or individual asset is measured as currently used. In either case, net cash flows beyond the planning period are determined on the basis of long-term business expectations using individual growth rates derived from the respective market information.

The net cash inflows are discounted at a rate equivalent to the weighted average cost of equity and debt capital. To allow for the different risk and return profiles of the Bayer Group's principal businesses, the after-tax cost of capital is calculated separately for each subgroup and a subgroup-specific capital structure is defined by benchmarking against comparable companies in the same industry sector. The cost of equity corresponds to the return expected by stockholders, while the cost of debt is based on the conditions on which comparable companies can obtain long-term financing. Both components are derived from capital market information.

The growth rates applied for impairment testing in 2010 and 2009 and the capital cost factors used to discount the expected cash flows are shown in the following table:

Impairment Testing Parameters [Table 4.11]

	HealthCare		CropScience		MaterialScience	
	2009	2010	2009	2010	2009	2010
	%	%	%	%	%	%
Growth rate	0-1.8	-2.0-0.0	1.4-4.0	1.5-4.0	0.5	0.5
After-tax capital cost factor	6.9	5.7	7.0	6.5	6.7	6.3
Pre-tax capital cost factor	8.5-9.9	7.3-9.0	8.5-12.0	7.6-11.7	8.4-9.7	8.0-10.0

As in the previous year, a risk premium of 3.5 percentage points was added to the discount rate for the strategic business entity Crop Improvement, which is part of the Environmental Science, BioScience reporting segment.

The sensitivity analysis for cash-generating units to which goodwill is allocated was based on a 10% decline in future cash flows and a 10% increase in the weighted average cost of capital because changes up to this magnitude are reasonably possible, especially in the long term. Although greater changes than this were observed due to the global economic and financial crisis in the previous year, we do not believe these will be sustained, and such changes therefore remain likely only in the short term. We therefore concluded that there is no indication of potential goodwill impairment in any of the cash-generating units. In 2010, as in 2009, no impairment losses were recorded on the basis of the global annual impairment testing of the cash-generating units. The impairment losses recognized on intangible assets, property, plant and equipment – amounting to €989 million (2009: €149 million) – are explained in Notes [17] and [18].

Although the estimates of the useful lives of certain assets, assumptions concerning the macroeconomic environment and developments in the industries in which the Bayer Group operates, and estimates of the discounted future cash flows are believed to be appropriate, changes in assumptions or circumstances could require changes in the analysis. This could lead to additional impairment losses in the future or – except in the case of goodwill – to reversals of impairment losses.

5. Segment reporting

At Bayer the Board of Management, as the chief operating decision maker, allocates resources to the operating segments and assesses their performance. The reportable segments and regions are identified, and the disclosures selected, in line with the internal financial reporting system (management approach) and based on the Group accounting policies outlined in Note [4].

As of December 31, 2010, the Bayer Group comprised three subgroups, with operations subdivided into strategic business entities known as divisions (HealthCare) or business units (CropScience and MaterialScience). Their activities are aggregated into the five reportable segments listed below according to economic characteristics, products, production processes, customer relationships, methods of distribution and regulatory environment.

The segments' activities are as follows:

Activities of the Segments [Table 4.12]

Subgroup/Segment	Activities
HealthCare	
Pharmaceuticals	Development, production and marketing of prescription pharmaceuticals, such as for the treatment of hypertension, cardiovascular diseases, infectious diseases, cancer, multiple sclerosis, and for contraception; contrast media for use in diagnostic imaging
Consumer Health	Development, production and marketing of over-the-counter medications, dermatology products, nutritional supplements for humans and animals, veterinary medicines and grooming products for animals; diagnostic systems such as blood glucose meters; medical equipment such as injection systems for diagnostic procedures
CropScience	
Crop Protection	Development, production and marketing of a comprehensive portfolio of fungicides, herbicides, insecticides and seed treatment products to meet a wide range of regional requirements
Environmental Science, BioScience	Development, production and marketing of a wide range of products for the green industry, garden care, non-agricultural pest and weed control as well as seeds and traits
MaterialScience	
MaterialScience	Development, production and marketing of high-tech materials in the field of polyurethanes, polycarbonates, coating and adhesive raw materials and functional films; production and marketing of selected inorganic basic chemicals

Business activities that cannot be allocated to any other segment are reported under "All other segments." These include primarily the services of the service companies: Business Services, Technology Services and Currenta.

Holding companies' activities and the elimination of intersegment sales are presented in our segment reporting as "Corporate Center and Consolidation."

The reconciliation in the region table eliminates interregional items and transactions and reflects income, expenses, assets and liabilities not allocable to geographical areas, particularly those relating to the Corporate Center.

The segment data are calculated as follows:

- The intersegment sales reflect intra-Group transactions effected at transfer prices fixed on an arm's-length basis.
- Although EBIT before special items and EBITDA before special items are not defined in the International Financial Reporting Standards, they represent key performance indicators for the Bayer Group. The special items comprise effects that are non-recurring or do not regularly recur or attain similar magnitudes. EBITDA is the EBIT as reported in the income statement plus amortization and impairment losses on intangible assets and depreciation and impairment losses on property, plant and equipment, minus impairment loss reversals.
- The gross cash flow comprises income after taxes, plus income taxes, plus non-operating result, minus income taxes paid or accrued, plus depreciation, amortization and impairment losses, minus impairment loss reversals, plus/minus changes in pension provisions, minus gains/plus losses on retirements of noncurrent assets, minus gains from the remeasurement of already held assets in step acquisitions. The change in pension provisions includes the elimination of non-cash components of the operating result (EBIT). It also contains benefit payments during the year.
- The net cash flow is the cash flow from operating activities as defined in IAS 7 (Statement of Cash Flows).
- The capital invested and the assets include all assets serving the respective segment that are required to yield a return on their cost of acquisition. Starting in 2010 they also include material participating interests of direct relevance to business operations. The figures for 2009 are restated accordingly. Intangible assets, property plant and equipment are included in the capital invested at cost of acquisition or construction throughout their useful lives because the calculation of cash flow return on investment (CFROI) requires that depreciation and amortization be excluded. Interest-free liabilities are deducted. The capital invested is stated as of December 31 of the respective year.
- The CFROI is the ratio of the gross cash flow to the average capital invested for the year and is thus a measure of the return on capital employed.
- The equity items reflect the earnings and carrying amounts of companies accounted for using the equity method.
- Since financial management of Group companies is carried out centrally by Bayer AG, financial liabilities are not directly allocated among the segments. Consequently, the liabilities shown for the individual segments do not include financial liabilities. These are included in the reconciliation.
- The number of employees on either permanent or fixed-term contracts is stated in full-time equivalents (FTE), with part-time employees included in proportion to their contractual working hours. By contrast to the previous year, the figures include fixed-term employees but not trainees. The figures for 2009 are restated accordingly.

The reconciliations of the operating result (EBIT), assets and liabilities of the segments to the pre-tax income, assets and liabilities of the Group are given in the following tables:

Reconciliation of Segments' Operating Result to Group Income Before Income Taxes [Table 4.13]

	2009	2010
	€ million	€ million
Operating result of segments	3,204	2,949
Operating result of Corporate Center	(198)	(219)
Operating result [EBIT]	**3,006**	**2,730**
Non-operating result	(1,136)	(1,009)
Income before income taxes	**1,870**	**1,721**

Reconciliation of Segments' Assets to Group Assets [Table 4.14]

	2009	2010
	€ million	€ million
Assets of the operating segments	**45,098**	**44,515**
Corporate Center assets	1,222	1,016
Non-allocated assets	4,722	5,975
Total assets	**51,042**	**51,506**

2009 figures restated

Reconciliation of Segments' Liabilities to Group Liabilities [Table 4.15]

	2009	2010
	€ million	€ million
Liabilities of the operating segments	**12,295**	**14,373**
Corporate Center liabilities	3,204	3,382
Non-allocated liabilities	16,592	14,855
Total liabilities	**32,091**	**32,610**

The reconciliation of segment sales to Group sales is apparent from the table of key data by segment in Note [1].

INFORMATION ON GEOGRAPHICAL AREAS

The following table provides a regional breakdown of external sales by market and of intangible assets, property, plant and equipment:

Information on Geographical Areas [Table 4.16]

	Net sales (external) by market		Intangible assets and property, plant and equipment	
	2009	2010	2009	2010
	€ million	€ million	€ million	€ million
Germany	4,147	4,432	15,944	14,425
United States	6,753	7,109	5,333	5,633
China	1,741	2,418	1,966	2,230
Other	18,527	21,129	7,712	7,710
Total	**31,168**	**35,088**	**30,955**	**29,998**

INFORMATION ON MAJOR CUSTOMERS

Revenues from transactions with a single customer in no case exceeded 10% of Bayer Group sales in 2010 or 2009.

6. Scope of consolidation; subsidiaries and affiliates

6.1 Changes in the scope of consolidation

Changes in the scope of consolidation in 2010 were as follows:

Change in Number of Consolidated Companies [Table 4.17]

	Germany	Other Countries	Total
Bayer AG and consolidated companies			
December 31, 2009	59	243	**302**
Changes in scope of consolidation	0	1	**1**
Additions	1	6	**7**
Retirements	0	(19)	**(19)**
December 31, 2010	**60**	**231**	**291**

The decrease in the number of fully consolidated companies in 2010 is primarily due to mergers between Group companies.

The figure for December 31, 2010 in the above table includes three joint ventures (2009: four joint ventures) that were included by proportionate consolidation in compliance with IAS 31 (Interests in Joint Ventures). In 2010 Bayer acquired the whole of the remaining interest in a company that was included by proportionate consolidation in 2009. The joint ventures affected the Group statement of financial position and income statement as follows:

Assets, Liabilities and Results of Operations of Joint Ventures [Table 4.18]

	2010		2010
	€ million		€ million
Current assets	28	Income	54
Noncurrent assets	77	Expenses	(52)
Current liabilities	(22)		
Noncurrent liabilities	(14)		
Net assets	**69**	**Income after taxes**	**2**

Also included in the consolidated financial statements are five associates – the same number as in 2009 – which are accounted for by the equity method. Details of their impact on the income statement and the statement of financial position are shown in Note [19].

A total of 78 subsidiaries and 18 associates or joint ventures that in aggregate are immaterial to the Bayer Group's financial position and results of operations are not consolidated but recognized at amortized cost. The immaterial subsidiaries account for less than 0.2% of Group sales, less than 0.4% of equity and less than 0.3% of total assets.

The following details of subsidiary and affiliated companies are provided pursuant to Section 313 of the German Commercial Code.

The companies fully consolidated in the financial statements of the Bayer Group are listed in the following table:

Fully Consolidated Subsidiaries [Table 4.19]

Company Name	Place of Business	Bayer's interest %
Europe		
Alcafleu Management GmbH & Co. KG	Schönefeld, Germany	99.9
Bayer (Schweiz) AG	Zurich, Switzerland	100
Bayer 04 Immobilien GmbH	Leverkusen, Germany	100
Bayer 04 Leverkusen Fußball GmbH	Leverkusen, Germany	100
Bayer A/S	Lyngby, Denmark	100
Bayer AB	Stockholm, Sweden	100
Bayer AEH Limited	Cambridge, U.K.	100
Bayer AGCO Limited	Cambridge, U.K.	100
Bayer Agriculture Limited	Cambridge, U.K.	100
Bayer Altersversorgung GmbH	Leverkusen, Germany	100
Bayer Animal Health GmbH	Leverkusen, Germany	100
Bayer Antwerpen N. V.	Antwerp, Belgium	100
Bayer AS	Oslo, Norway	100
Bayer Austria Gesellschaft m.b.H.	Vienna, Austria	100
Bayer B.V.	Mijdrecht, Netherlands	100
Bayer Beteiligungsverwaltung Goslar GmbH	Leverkusen, Germany	100
Bayer Beteiligungsverwaltungsgesellschaft mbH	Leverkusen, Germany	100
Bayer BioScience N.V.	Ghent, Belgium	100
Bayer Bitterfeld GmbH	Bitterfeld-Wolfen, Germany	100
Bayer Bulgaria EOOD	Sofia, Bulgaria	100
Bayer Business Services GmbH	Leverkusen, Germany	100
Bayer Capital Corporation B.V.	Mijdrecht, Netherlands	100
Bayer Chemicals AG	Leverkusen, Germany	100
Bayer Consumer Care AG	Basel, Switzerland	100
Bayer CropScience (Portugal)-Produtos para a Agricultura, Lda.	Carnaxide, Portugal	100
Bayer CropScience 1272	Lyon, France	100
Bayer CropScience AG	Monheim, Germany	100
Bayer CropScience B.V.	Mijdrecht, Netherlands	100
Bayer CropScience Beteiligungsgesellschaft mbH	Frankfurt am Main, Germany	100
Bayer CropScience Deutschland GmbH	Langenfeld, Germany	100
Bayer CropScience Holding SA	Lyon, France	100
Bayer CropScience Holdings Limited	Cambridge, U.K.	100
Bayer CropScience Investments B.V.	Mijdrecht, Netherlands	100
Bayer CropScience Limited	Cambridge, U.K.	100
Bayer CropScience Norwich Limited	Cambridge, U.K.	100
Bayer CropScience S.r.l.	Milan, Italy	100
Bayer CropScience SA-NV	Diegem, Belgium	100
Bayer CropScience, S.L.	Valencia, Spain	100
Bayer CropScience Vermögensverwaltungs-gesellschaft mbH	Leverkusen, Germany	100
Bayer d.o.o.	Belgrade, Serbia	100
Bayer d.o.o.	Ljubljana, Slovenia	100
Bayer d.o.o.	Zagreb, Croatia	100
Bayer Direct Services GmbH	Leverkusen, Germany	100
Bayer Foreign Investments B.V.	Mijdrecht, Netherlands	100
Bayer Gastronomie GmbH	Leverkusen, Germany	100
Bayer Gesellschaft für Beteiligungen mbH	Leverkusen, Germany	100
Bayer Global Investments B.V.	Mijdrecht, Netherlands	100

Fully Consolidated Subsidiaries [Table 4.19 (continued)]

Company Name	Place of Business	Bayer's interest %
Bayer HealthCare AG	Leverkusen, Germany	100
Bayer HealthCare Manufacturing S.r.l.	Milan, Italy	100
Bayer Hellas AG	Athens, Greece	100
Bayer Hispania, S.L.	Sant Joan Despi, Spain	100
Bayer Hungaria Kft.	Budapest, Hungary	100
Bayer Innovation GmbH	Düsseldorf, Germany	100
Bayer International Investments B.V.	Mijdrecht, Netherlands	100
Bayer International S.A.	Fribourg, Switzerland	100
Bayer Limited	Dublin, Ireland	100
Bayer Ltd.	Kiev, Ukraine	100
Bayer MaterialScience AG	Leverkusen, Germany	100
Bayer MaterialScience Customer Services GmbH	Leverkusen, Germany	100
Bayer MaterialScience S.r.l.	Milan, Italy	100
Bayer MaterialScience, S.L.	Sant Joan Despi, Spain	100
Bayer Oy	Turku, Finland	100
Bayer Pharma Investments B.V.	Mijdrecht, Netherlands	100
Bayer Polyols S.N.C.	Puteaux, France	100
Bayer Polyurethanes B.V.	Mijdrecht, Netherlands	100
Bayer Portugal S.A.	Lisbon, Portugal	100
Bayer Public Limited Company	Newbury, U.K.	100
Bayer Real Estate GmbH	Leverkusen, Germany	100
Bayer S.A.S.	Puteaux, France	100
Bayer S.p.A.	Milan, Italy	100
Bayer s.r.o.	Prague, Czech Republic	100
Bayer Santé Familiale SAS	Gaillard, France	100
Bayer Santé SAS	Loos, France	100
Bayer SA-NV	Diegem, Belgium	100
Bayer Schering Pharma AG	Berlin, Germany	100
Bayer Sheet Europe GmbH	Darmstadt, Germany	100
Bayer Sheet Europe N.V.	Tielt, Belgium	100
Bayer Sheet Europe S.p.A.	Milan, Italy	90
Bayer Sp. z o.o.	Warsaw, Poland	100
Bayer, spol. s.r.o.	Bratislava, Slovakia	100
Bayer Technology Services GmbH	Leverkusen, Germany	100
Bayer Verwaltungsgesellschaft für Anlagevermögen m.b.H.	Leverkusen, Germany	100
Bayer Vital GmbH	Leverkusen, Germany	100
Bayer-Handelsgesellschaft mit beschränkter Haftung	Leverkusen, Germany	100
Bayfin GmbH	Leverkusen, Germany	100
BaySystems B.V.	Foxhol, Netherlands	100
BaySystems GmbH & Co. KG	Oldenburg, Germany	100
Berlimed, S.A.	Madrid, Spain	100
Berlis AG	Zurich, Switzerland	100
Biogenetic Technologies B.V.	Rotterdam, Netherlands	100
Chemie-Beteiligungsaktiengesellschaft	Glarus, Switzerland	100
Chemion Logistik GmbH	Leverkusen, Germany	100
Currenta GmbH & Co. OHG	Leverkusen, Germany	60
Drugofa GmbH	Cologne, Germany	100
Dynevo GmbH	Leverkusen, Germany	100
Epurex Films GmbH & Co. KG	Bomlitz, Germany	100
Erste K-W-A Beteiligungsgesellschaft mbH	Leverkusen, Germany	100
Euroservices Bayer GmbH	Leverkusen, Germany	100
Euroservices Bayer S.L.	Sant Joan Despi, Spain	100

Fully Consolidated Subsidiaries [Table 4.19 (continued)]

Company Name	Place of Business	Bayer's interest
		%
Generics Holding GmbH	Leverkusen, Germany	100
GP Grenzach Produktions GmbH	Grenzach-Wyhlen, Germany	100
Hild Samen GmbH	Marbach am Neckar, Germany	100
Icon Genetics GmbH	Munich, Germany	100
Intendis Austria Handels GesmbH	Vienna, Austria	100
Intendis GmbH	Berlin, Germany	100
Intendis Manufacturing S.p.A.	Milan, Italy	100
Intendis S.p.A.	Milan, Italy	100
Intraserv GmbH & Co. KG	Schönefeld, Germany	100
Jenapharm GmbH & Co. KG	Jena, Germany	100
KOSINUS Grundstücks-Verwaltungsgesellschaft mbH & Co. Gamma OHG	Berlin, Germany	100
KVP Pharma+Veterinär Produkte GmbH	Kiel, Germany	100
Marotrast GmbH	Jena, Germany	100
Mediwest Norway AS	Oslo, Norway	100
Medrad Belgium BVBA	Antwerp, Belgium	100
Medrad Denmark ApS	Glostrup, Denmark	100
Medrad Europe B.V.	Maastricht, Netherlands	100
Medrad France S.A.R.L.	Rungis Cedex, France	100
Medrad Italia S.r.l.	Cava Manara, Italy	100
Medrad Medizinische Systeme GmbH	Volkach, Germany	100
Medrad Sweden AB	Mölndal, Sweden	100
Medrad UK Limited	Ely, U.K.	100
MENADIER Heilmittel GmbH	Berlin, Germany	100
Nunhems B.V.	Nunhem, Netherlands	100
Nunhems France S.A.R.L.	Soucelles, France	100
Nunhems Hungary Kft.	Szolnok, Hungary	100
Nunhems Italy S.r.l.	St. Agata Bolognes, Italy	100
Nunhems Netherlands B.V.	Nunhem, Netherlands	100
Nunhems Poland Sp. z o.o.	Poznan, Poland	100
Nunhems Spain, S.A.	Valencia, Spain	100
Pallas Versicherung AG	Leverkusen, Germany	100
pbi Home&Garden Limited	Cambridge, U.K.	100
PGS International N.V.	The Hague, Netherlands	100
Pharma-Verlagsbuchhandlung GmbH	Berlin, Germany	100
SC Bayer SRL	Bucharest, Romania	100
Schering AG	Berlin, Germany	100
Schering Agrochemicals Holdings	Burgess Hill, U.K.	100
Schering GmbH und Co. Produktions KG	Weimar, Germany	100
Schering Health Care Limited	Burgess Hill, U.K.	100
Schering Holdings Ltd.	Burgess Hill, U.K.	100
Schering Industrial Products	Burgess Hill, U.K.	100
Schering International Holding GmbH	Berlin, Germany	100
Schering-Kahlbaum Gesellschaft mit beschränkter Haftung	Berlin, Germany	100
TECTRION GmbH	Leverkusen, Germany	100
TOO Bayer KAZ	Astana, Kazakhstan	100
TravelBoard GmbH	Leverkusen, Germany	100
UAB Bayer	Vilnius, Lithuania	100
Viverso GmbH	Bitterfeld-Wolfen, Germany	100
ZAO Bayer	Moscow, Russia	100
Zweite K-W-A Beteiligungsgesellschaft mbH	Leverkusen, Germany	100

Fully Consolidated Subsidiaries [Table 4.19 (continued)]

Company Name	Place of Business	Bayer's interest %
North America		
Athenix Corp.	Research Triangle Park, U.S.A.	100
Bayer Business and Technology Services LLC	Pittsburgh, U.S.A.	100
Bayer Canadian Holdings Inc.	Toronto, Canada	100
Bayer Corporation	Pittsburgh, U.S.A.	100
Bayer Cotton Seed International Inc.	Research Triangle Park, U.S.A.	51
Bayer CropScience Holding Inc.	Research Triangle Park, U.S.A.	100
Bayer CropScience Holdings Inc.	Calgary, Canada	100
Bayer CropScience Inc.	Calgary, Canada	100
Bayer CropScience Inc.	Research Triangle Park, U.S.A.	100
Bayer CropScience LLC	Research Triangle Park, U.S.A.	100
Bayer CropScience LP	Research Triangle Park, U.S.A.	100
Bayer HealthCare LLC	Tarrytown, U.S.A.	100
Bayer HealthCare Pharmaceuticals Inc.	Pine Brook, U.S.A.	100
Bayer HealthCare Pharmaceuticals LLC	Seattle, U.S.A.	100
Bayer Inc.	Toronto, Canada	100
Bayer MaterialScience LLC	Pittsburgh, U.S.A.	100
Bayer Pharma Chemicals Inc.	Pine Brook, U.S.A.	100
Bayer Puerto Rico Inc.	San Juan, Puerto Rico	100
BayOne Urethane Systems LLC	St. Louis, U.S.A.	100
Baypo I LLC	New Martinsville, U.S.A.	100
Baypo II LLC	New Martinsville, U.S.A.	100
BAYPO Limited Partnership	New Martinsville, U.S.A.	100
BIPPO Corporation	New Martinsville, U.S.A.	100
Collateral Therapeutics Inc.	San Diego, U.S.A.	100
Cooper Land Company of New Jersey Inc.	Tarrytown, U.S.A.	100
Guidance Interactive Healthcare Inc.	Tarrytown, U.S.A.	100
Intendis Inc.	Morristown, U.S.A.	100
iSense Corporation	Wilsonville, U.S.A.	100
iSense Development Corporation	Wilsonville, U.S.A.	100
Medrad, Inc.	Indianola, U.S.A.	100
MTFP Inc.	Wilmington, U.S.A.	100
NippoNex Inc.	Springfield, U.S.A.	100
NOR-AM Agro LLC	Pine Brook, U.S.A.	100
NOR-AM Land Company	Pine Brook, U.S.A.	100
Nunhems USA, Inc.	Morgan Hill, U.S.A.	100
Pallas North America Insurance Company, Inc.	Burlington, U.S.A.	100
SB Capital Corporation	Pine Brook, U.S.A.	100
Schering Berlin Inc.	Pine Brook, U.S.A.	100
Schering Berlin Venture Corporation	Pine Brook, U.S.A.	100
Stoneville Pedigreed Seed Company	St. Louis, U.S.A.	100
STWB Inc.	Pittsburgh, U.S.A.	100
Texas Brine Company LLC	Houston, U.S.A.	0*
Asia / Pacific		
Bayer (Beijing) Sheet Company Limited	Beijing, China	100
Bayer (China) Limited	Beijing, China	100
Bayer (Malaysia) Sdn. Bhd.	Petaling Jaya, Malaysia	100
Bayer (Sichuan) Animal Health Co., Ltd.	Chengdu, China	100
Bayer (South East Asia) Pte Ltd.	Singapore	100
Bayer Australia Limited	Pymble, Australia	100
Bayer BioScience Pvt. Ltd.	Hyderabad, India	100
Bayer Co. (Malaysia) Sdn Bhd.	Petaling Jaya, Malaysia	100

* fully consolidated special-purpose entity according to IAS 27 in conjunction with SIC 12

Fully Consolidated Subsidiaries [Table 4.19 (continued)]

Company Name	Place of Business	Bayer's interest
		%
Bayer CropScience (China) Company Ltd.	Hangzhou, China	100
Bayer CropScience (Private) Limited	Karachi, Pakistan	100
Bayer CropScience Holdings Pty Ltd.	East Hawthorn, Australia	100
Bayer CropScience K.K.	Tokyo, Japan	100
Bayer CropScience Limited	Mumbai, India	71.1
Bayer CropScience Ltd.	Seoul, South Korea	100
Bayer CropScience Pty Limited	East Hawthorn, Australia	100
Bayer CropScience, Inc.	Laguna, Philippines	100
Bayer Far East Service Co. Ltd.	Hong Kong, China	100
Bayer Healthcare Co. Ltd.	Beijing, China	100
Bayer HealthCare Limited	Hong Kong, China	100
Bayer Holding Ltd.	Tokyo, Japan	100
Bayer Jinling Polyurethane Co., Ltd.	Nanjing, China	55
Bayer Korea Ltd.	Seoul, South Korea	100
Bayer MaterialScience (China) Company Limited	Shanghai, China	100
Bayer MaterialScience Limited	Hong Kong, China	100
Bayer MaterialScience Ltd.	Tokyo, Japan	100
Bayer MaterialScience Private Limited	Mumbai, India	100
Bayer MaterialScience Pty Ltd.	Pymble, Australia	100
Bayer New Zealand Limited	Auckland, New Zealand	100
Bayer Pakistan (Private) Limited	Karachi, Pakistan	100
Bayer Pharmaceuticals Private Limited	Mumbai, India	100
Bayer Philippines, Inc.	Makati City, Philippines	100
Bayer Polyurethanes Taiwan Ltd.	Taipeh, Taiwan	94.9
Bayer Sheet Korea Ltd.	Kimhae City, South Korea	100
Bayer Taiwan Company Ltd.	Taipei, Taiwan	100
Bayer Technology and Engineering (Shanghai) Company Limited	Shanghai, China	100
Bayer Thai Co., Ltd.	Bangkok, Thailand	100
Bayer TPU (Shenzhen) Co. Ltd.	Shenzhen, China	100
Bayer Uretech Ltd.	Yu Pu Village, Taiwan	100
Bayer Vietnam Ltd.	Bien Hoa City (Amata), Vietnam	100
Bayer Yakuhin Ltd.	Osaka, Japan	100
Bilag Industries Private Ltd.	Vapi, India	100
Guangzhou Bayer MaterialScience Company Limited	Guangzhou, China	100
Imaxeon Pty. Ltd.	Rydalmere, Australia	100
Medipharm (Pvt) Ltd.	Lahore, Pakistan	100
Medrad Asia Pte. Ltd.	Singapore	100
Medrad Medical Equipment Trading Company	Beijing, China	100
Nihon Medrad K.K.	Osaka, Japan	100
Nunhems Beijing Seeds Co. Ltd.	Beijing, China	95
Nunhems India Private Limited	Haryana, India	100
PT. Bayer Indonesia	Jakarta, Indonesia	99.8
PT. Bayer MaterialScience Indonesia	Jakarta, Indonesia	99.9
Sumika Bayer Urethane Co., Ltd.	Osaka, Japan	60
UIM Agrochemicals (Aust) Pty Ltd.	East Hawthorn, Australia	100
Latin America / Africa / Middle East		
AgrEvo South Africa (Pty) Ltd.	Isando, South Africa	100
Alimtec S.A.	Santiago, Chile	40*
Bayer (Proprietary) Limited	Isando, South Africa	100
Bayer Boliviana Ltda.	Santa Cruz De La Sierra, Bolivia	100
Bayer Central America Sociedad Anonima	San Jose, Costa Rica	100
Bayer Cropscience S.A.	Bogota, Colombia	100

* fully consolidated special-purpose entity according to IAS 27 in conjunction with SIC 12

Fully Consolidated Subsidiaries [Table 4.19 (continued)]

Company Name	Place of Business	Bayer's interest %
Bayer de Mexico, S.A. de C.V.	Mexico City, Mexico	100
Bayer East Africa Ltd.	Nairobi, Kenya	55
Bayer Israel Ltd.	Hod Hasharon, Israel	100
Bayer Middle East FZE	Dubai, United Arab Emirates	100
Bayer S.A.	Asuncion, Paraguay	100
Bayer S.A.	Bogota, Colombia	100
Bayer S.A.	Buenos Aires, Argentina	100
Bayer S.A.	Caracas, Venezuela	100
Bayer S.A.	Casablanca, Morocco	100
Bayer S.A.	Colón, Panama	100
Bayer S.A.	Guatemala City, Guatemala	100
Bayer S.A.	Lima, Peru	89.3
Bayer S.A.	Managua, Nicaragua	100
Bayer S.A.	Quito, Ecuador	100
Bayer S.A.	San Jose, Costa Rica	100
Bayer S.A.	Santiago, Chile	100
Bayer S.A.	Santo Domingo, Dominican Republic	100
Bayer S.A.	Sao Paulo, Brazil	100
Bayer S.A. de C.V.	Tegucigalpa, Honduras	100
Bayer S.A.	Montevideo, Uruguay	100
Bayer, S.A.	San Salvador, El Salvador	100
Bayer Türk Kimya Sanayi Limited Sirketi	Istanbul, Turkey	100
BaySystems Pearl FZCO	Dubai, United Arab Emirates	51
BaySystems Pearl Limited Liability Company	Dubai, United Arab Emirates	49*
Corporación Bonima S.A. de C.V.	Ilopango, El Salvador	99.8
CROPSA S.A.C.	Lima, Peru	100
Intendis Ilac Ticaret Limited Sirketi	Istanbul, Turkey	100
Mediterranean Seeds Ltd.	Einat, Israel	100
Medrad do Brasil Ltda.	Sao Paulo, Brazil	100
Medrad Mexicana S. de R.L. de CV	Mexico City, Mexico	100
Nunhems Chile S.A.	Santiago, Chile	100
Nunhems do Brasil Comercio de Sementes Ltda.	Campinas, Brazil	100
Nunhems Mexico S.A. de C.V.	Queretaro, Mexico	100
Nunhems Tohumculuk Limited Sirketi	Antalya, Turkey	100
PROQUINA Productos Quimicos Naturales, S.A. de C.V.	Orizaba, Mexico	100
Schering (Pty) Ltd.	Midrand, South Africa	100
Schering do Brasil Quimica e Farmaceutica Ltda.	Sao Paulo, Brazil	100

* fully consolidated subsidiary according to IAS 27.4 in conjunction with IAS 27.13

The following three joint ventures were included in the financial statements of the Bayer Group by proportionate consolidation:

Joint Ventures [Table 4.20]

Company Name	Place of Business	Bayer's interest
		%
Baulé S.A.S.	Romans-sur-Isere, France	50
Bayer IMSA, S.A. de C.V.	Nuevo Leon, Mexico	50
Indurisk Rückversicherung AG	Luxembourg, Luxembourg	50

The following associates were accounted for in the consolidated financial statements using the equity method:

Associated Companies [Table 4.21]

Company Name	Place of Business	Bayer's interest
		%
DIC Bayer Polymer Ltd.	Tokyo, Japan	50
Lyondell Bayer Manufacturing Maasvlakte VOF	Rotterdam, Netherlands	50
Paltough Industries (1998) Ltd.	Kibbutz Ramat Yochanan, Israel	25
PO JV, LP	Wilmington, U.S.A.	41.3
Polygal Plastics Industries Ltd.	Kibbutz Ramat Yochanan, Israel	25.8

The following subsidiaries were reflected in the consolidated financial statements at amortized cost due to their immateriality:

Immaterial Subsidiaries [Table 4.22]

Company Name	Place of Business	Bayer's interest
		%
Europe		
1. BCrSV GmbH	Leverkusen, Germany	100
Agreva GmbH	Frankfurt am Main, Germany	100
AgrEvo Verwaltungsgesellschaft mbH	Frankfurt am Main, Germany	100
Ausbildungsinitiative Rheinland GmbH	Leverkusen, Germany	100
Bayer 04 Leverkusen Sportförderung gGmbH	Leverkusen, Germany	100
Bayer 04 Marketing GmbH	Leverkusen, Germany	100
Bayer Animal Health Studies GmbH	Leverkusen, Germany	100
Bayer BioScience GmbH	Monheim, Germany	100
Bayer d.o.o. Sarajevo	Sarajevo, Bosnia & Herzegovina	100
Bayer Healthcare S.r.l.	Milan, Italy	100
Bayer Immobilier SAS	Puteaux, France	100
Bayer Innovation Ventures GmbH	Düsseldorf, Germany	100
Bayer OÜ	Tallinn, Estonia	100
Bayer UK Limited	Newbury, U.K.	100
Bayer-Unterstützungskasse GmbH	Leverkusen, Germany	100
Bayhealth Comercializacao de Produtos Farmaceuticos Unipessoal Lda.	Lisbon, Portugal	100
Bayhealth, S.L.	Sant Joan Despi, Spain	100
BayInvest GmbH	Leverkusen, Germany	100
BaySystems a.s.	Prague, Czech Republic	100
BaySystems Northern Europe A/S	Otterup, Denmark	100

Immaterial Subsidiaries [Table 4.22 (continued)]

Company Name	Place of Business	Bayer's interest %
BaySystems Verwaltungs-GmbH	Oldenburg, Germany	100
Berlex Especialidades Farmaceuticas Lda.	Carnaxide, Portugal	100*
Berlifarma Lda.	Carnaxide, Portugal	100*
Berlimed-Especialidades Farmaceuticas Lda.	Carnaxide, Portugal	100*
Berlipharm B.V.	Weesp, Netherlands	100
CENTROFARMA-Industria e Comercio de Prod. Farmaceuticos, Lda.	Coimbra, Portugal	100
CIS (U.K.) Limited	Burgess Hill, U.K.	100
Currenta Geschäftsführungs-GmbH	Leverkusen, Germany	100
Ehrfeld Mikrotechnik BTS GmbH	Wendelsheim, Germany	100
Epurex Films Geschäftsführungs-GmbH	Bomlitz, Germany	100
GENUS Grundstücks-Vermietungsgesellschaft mbH & Co. KG	Düsseldorf, Germany	100
HTV Gesellschaft für Hochtemperaturverbrennung mbH	Bergkamen, Germany	100
Intendis Derma, S.L.	Sant Joan Despi, Spain	100
Intraserv Verwaltungs-GmbH	Schönefeld, Germany	100
KOSINUS Grundstücks-Verwaltungsgesellschaft mbH	Berlin, Germany	100
Lilienthalstraße Nr. 4 GmbH	Schönefeld, Germany	100
Lusal Producao Quimico Farmaceutica Luso-Alema, Lda.	Carnaxide, Portugal	100
Lusalfarma-Especialidades Farmaceuticas, Lda.	Carnaxide, Portugal	100*
Schering Industrial Products Holdings	Burgess Hill, U.K.	100
Schering Verwaltungsgesellschaft mbH	Weimar, Germany	100
Sechste Bayer VV GmbH	Leverkusen, Germany	100
SIA Bayer	Riga, Latvia	100
Siebte Bayer VV GmbH	Leverkusen, Germany	100
Sportrechte Vermarktungs- und Verwertungs-GmbH & Co. oHG	Leverkusen, Germany	100
TecArena+ GmbH	Leverkusen, Germany	100
ZAO Rhone-Poulenc AO	Moscow, Russia	100
North America		
Artificial Muscle, Inc.	Sunnyvale, U.S.A.	100
Bayer International Trade Services Corporation	Weirton, U.S.A.	100
BayOne Canada, Inc.	Niagara Falls, Canada	100
Berlex Canada, Inc.	Pointe-Claire, Canada	100
BHCP Holdings LLC	Wilmington, U.S.A.	100
Delinting and Seed Treating Company	Maricopa, U.S.A.	100
ICON Genetics, Inc.	Montmouth Junction, U.S.A.	100
NippoNex Holdings LLC	Pittsburgh, U.S.A.	100
The SDI Divestiture Corporation	Cincinnati, U.S.A.	100
Viterion TeleHealthcare LLC	Tarrytown, U.S.A.	100
Asia / Pacific		
Bayer Business Services Private Limited	Powai, India	100
Bayer CropScience (OHQ) (Malaysia) Sdn Bhd.	Kuala Lumpur, Malaysia	100
Bayer CropScience (Thailand) Company Limited	Bangkok, Thailand	100
Bayer CropScience Ltd.	Dhaka, Bangladesh	60
Bayer Malibu Polymers Private Limited	Mumbai, India	51
Bayer MaterialScience (Qingdao) Co. Ltd.	Qingdao, China	100
Chemdyes Pakistan (Private) Limited	Karachi, Pakistan	100
Myanmar Aventis CropScience Ltd.	Yangon, Myanmar	100
Schering Pty. Limited	Alexandria, Australia	100

* including a 10% interest held by a non-consolidated subsidiary

Immaterial Subsidiaries [Table 4.22 (continued)]

Company Name	Place of Business	Bayer's interest
		%
Latin America / Africa / Middle East		
Bayer Algerie S.P.A.	Algiers, Algeria	100
Bayer Distribuidora de Produtos Quimicos e Farmaceuticos Ltda.	Sao Paulo, Brazil	100
Bayer Parsian AG	Tehran, Iran	100
Bayer Schering Pharma Mocambique, Lda.	Maputo, Mozambique	100*
Bayer Zimbabwe (Private) Limited	Harare, Zimbabwe	100
Centro Estrategico Canada Latinoamerica S.A. de C.V.	Mexico City, Mexico	100
Comercial Interamericana, S.A.	Guatemala City, Guatemala	100
Farmaco Ltda.	Sao Paulo, Brazil	100
Industrias Gustafson, S.A. de C.V.	Mexico City, Mexico	100
Laboratorio Berlimed S.A.	Santiago, Chile	100
Miles, S.A. Guatemala Branch	Guatemala City, Guatemala	100
Quimicas Unidas S.A.	Havana, Cuba	100
Schering Peruana S.A.	Lima, Peru	100

* including a 10% interest held by a non-consolidated subsidiary

The following associates and joint ventures were accounted for at amortized cost due to their immateriality:

Immaterial Associates and Joint Ventures [Table 4.23]

Company Name	Place of Business	Bayer's interest
		%
Europe		
Axxam S.p.A.	Milan, Italy	24.5
BaySecur GmbH	Leverkusen, Germany	49
BaySports-Travel GmbH	Leverkusen, Germany	50
BBB Management GmbH Campus Berlin-Buch	Berlin, Germany	20
Disalfarm, S.A.	Barcelona, Spain	33.3
EMP-Estrusione Materiali Plastici S.A.	Stabio, Switzerland	42.1
Faserwerke Hüls GmbH	Marl, Germany	50
INVITE GmbH	Leverkusen, Germany	50
PYCO SA	Mont de Marsan, France	47
Sauerstoff- und Stickstoffrohrleitungsgesellschaft mbH	Krefeld, Germany	50
North America		
Schein Pharmaceutical Canada, Inc.	Toronto, Canada	50
Technology JV, L.P.	Wilmington, U.S.A.	33.3
Asia / Pacific		
Cotton Growers Services Pty. Limited	Wee Waa, Australia	50
Teijin-Bayer Polytec Ltd.	Tokyo, Japan	50
Latin America / Africa / Middle East		
Bayer Middle East Limited Liability Company	Dubai, United Arab Emirates	49
Coopers Environmental Health Pty Ltd.	Pomona Gardens, South Africa	26
Polygal (Management) 1998 Ltd.	Megiddo, Israel	25.7
Polygal (Marketing) Ltd. Limited Partnership	Megiddo, Israel	25

The Bayer Group held between 5% and 20% of the voting rights of the following "large limited liability companies" as defined in Section 267 Paragraph 3 of the German Commercial Code:

Other Interests in Large Limited Liability Companies [Table 4.24]

Company Name	Place of Business	Bayer's interest
		%
Hokusan Co. Ltd.	Tokyo, Japan	19.8
Salzgewinnungsgesellschaft Westfalen mbH & Co. KG	Ahaus, Germany	10

The following domestic subsidiaries availed themselves in 2010 of certain exemptions granted under Section 264 Paragraph 3 and Section 264b of the German Commercial Code regarding the preparation, auditing and publication of financial statements:

German Exempt Subsidiaries [Table 4.25]

Company Name	Place of Business	Bayer's interest
		%
Bayer 04 Immobilien GmbH	Leverkusen, Germany	100
Bayer 04 Leverkusen Fußball GmbH	Leverkusen, Germany	100
Bayer Altersversorgung GmbH	Leverkusen, Germany	100
Bayer Animal Health GmbH	Leverkusen, Germany	100
Bayer Beteiligungsverwaltungsgesellschaft mbH	Leverkusen, Germany	100
Bayer Bitterfeld GmbH	Bitterfeld-Wolfen, Germany	100
Bayer Business Services GmbH	Leverkusen, Germany	100
Bayer Chemicals AG	Leverkusen, Germany	100
Bayer CropScience AG	Monheim, Germany	100
Bayer Direct Services GmbH	Leverkusen, Germany	100
Bayer Gastronomie GmbH	Leverkusen, Germany	100
Bayer Gesellschaft für Beteiligungen mbH	Leverkusen, Germany	100
Bayer HealthCare AG	Leverkusen, Germany	100
Bayer Innovation GmbH	Düsseldorf, Germany	100
Bayer MaterialScience AG	Leverkusen, Germany	100
Bayer MaterialScience Customer Services GmbH	Leverkusen, Germany	100
Bayer Real Estate GmbH	Leverkusen, Germany	100
Bayer Schering Pharma AG	Berlin, Germany	100
Bayer Technology Services GmbH	Leverkusen, Germany	100
Bayer Verwaltungsgesellschaft für Anlagevermögen m.b.H.	Leverkusen, Germany	100
Bayer Vital GmbH	Leverkusen, Germany	100
Bayer-Handelsgesellschaft mit beschränkter Haftung	Leverkusen, Germany	100
Bayfin GmbH	Leverkusen, Germany	100
BaySystems GmbH & Co. KG	Oldenburg, Germany	100
Chemion Logistik GmbH	Leverkusen, Germany	100
Currenta GmbH & Co. OHG	Leverkusen, Germany	60
Drugofa GmbH	Cologne, Germany	100
Dynevo GmbH	Leverkusen, Germany	100
Epurex Films GmbH & Co. KG	Bomlitz, Germany	100
Erste K-W-A Beteiligungsgesellschaft mbH	Leverkusen, Germany	100
Euroservices Bayer GmbH	Leverkusen, Germany	100
Generics Holding GmbH	Leverkusen, Germany	100
GP Grenzach Produktions GmbH	Grenzach-Wyhlen, Germany	100
Hild Samen GmbH	Marbach am Neckar, Germany	100
Icon Genetics GmbH	Munich, Germany	100
Intendis GmbH	Berlin, Germany	100
Intraserv GmbH & Co. KG	Schönefeld, Germany	100

German Exempt Subsidiaries [Table 4.25 (continued)]

Company Name	Place of Business	Bayer's interest
		%
Jenapharm GmbH & Co. KG	Jena, Germany	100
KOSINUS Grundstücks-Verwaltungsgesellschaft mbH & Co. Gamma OHG	Berlin, Germany	100
KVP Pharma+Veterinär Produkte GmbH	Kiel, Germany	100
Marotrast GmbH	Jena, Germany	100
MENADIER Heilmittel GmbH	Berlin, Germany	100
Pharma-Verlagsbuchhandlung GmbH	Berlin, Germany	100
Schering AG	Berlin, Germany	100
Schering GmbH und Co. Produktions KG	Weimar, Germany	100
Schering International Holding GmbH	Berlin, Germany	100
Schering-Kahlbaum Gesellschaft mit beschränkter Haftung	Berlin, Germany	100
TECTRION GmbH	Leverkusen, Germany	100
TravelBoard GmbH	Leverkusen, Germany	100
Viverso GmbH	Bitterfeld-Wolfen, Germany	100
Zweite K-W-A Beteiligungsgesellschaft mbH	Leverkusen, Germany	100

6.2 Business combinations and other acquisitions

Acquisitions are accounted for by the purchase method, the results of the acquired businesses therefore being included in the consolidated financial statements as from the respective dates of acquisition. The purchase prices of acquired companies domiciled outside the eurozone were translated at the exchange rates in effect at the respective dates of acquisition. The revised version of IFRS 3, published in January 2008, was applied for the first time in 2010. The main changes compared to the previous version of IFRS 3 are described in Note [3].

Acquisition costs in 2010 amounted to €43 million (2009: €404 million). The purchase prices of the acquired companies or businesses were settled mainly in cash. Total goodwill of €12 million (2009: €177 million) arose on these acquisitions. It related principally to the following transactions:

Artificial Muscle, Inc. of Sunnyvale, California, United States, a technology leader in the field of electroactive polymers for the consumer electronics industry, was acquired on March 9, 2010. The purchase price of €21 million pertained mainly to patented technologies and goodwill.

The remaining 50% interest in BayOne Urethane Systems LLC was acquired on November 30, 2010. BayOne was previously a marketing joint venture between Bayer MaterialScience LLC and PolyOne Corp., headquartered in St. Louis, Missouri, United States, which specializes in customized formulations of polyurethane foams and elastomers. The purchase price of €15 million pertained mainly to customer relationships, which are reflected in other rights, and to goodwill. The remeasurement of the already held 50% equity interest to fair value resulted in a €12 million gain, which was recognized in other operating income. The effect of remeasurement was allocated among other rights (€6 million), production rights (€2 million) and goodwill (€4 million). The fair value of the already held interest at the acquisition date was €14 million. Since the purchase price allocation has not yet been completed, changes may yet be made in the allocation of the purchase price to the individual assets.

The acquired businesses named above contributed €1 million to Bayer Group sales in 2010. These portfolio changes had an effect of €6 million on the operating result (EBIT) for 2010. A total after-tax result of €5 million was recorded for the acquired businesses since the respective dates of their first-time consolidation. This included the financing costs incurred since the dates of acquisition and the remeasurement gain explained above.

If these acquisitions had already been made as of January 1, 2010, the Bayer Group would have had total sales of €35,108 million in 2010. Income after taxes would have amounted to €1,308 million, taking into account the effects of the remeasurement of the acquired net assets and hypothetical financing costs for the full year. Earnings per share would not have been materially affected.

The effects of these acquisitions, some minor other transactions and purchase price adjustments related to transactions effected in 2009 on the Group's assets and liabilities as of the respective acquisition dates are shown in the table. Net of acquired cash and cash equivalents, they resulted in the following cash outflow:

Acquired Assets and Assumed Liabilities [Table 4.26]

	Pre-acquisition carrying amount	Fair-value adjustment	Fair value at the acquisition date
	€ million	€ million	€ million
Goodwill	-	12	12
Patents	-	11	11
R&D projects	-	1	1
Production rights	-	2	2
Other rights	-	5	5
Other noncurrent assets	-	3	3
Other current assets	3	-	3
Cash and cash equivalents	1	-	1
Other liabilities	(2)	-	(2)
Deferred taxes	-	1	1
Net assets	**2**	**35**	**37**
Non-controlling interest	-	-	3
Changes in non-controlling interest	-	-	3
Purchase prices			**43**
Acquired cash and cash equivalents			1
Liabilities for future payments			2
Net cash outflow for acquisitions			**40**

The fair-value adjustment reflected the differences between the carrying amounts of the assets and liabilities in the acquiree's statement of financial position prior to their acquisition and the fair values in the acquirer's statement of financial position at the acquisition date.

In 2009 the following acquisitions were accounted for in accordance with IFRS 3:

The remaining 10% of the shares of Bayer Polymers (Shanghai) Co. Ltd., China, was acquired on June 25, 2009, for €24 million. The difference between the carrying amount of this 10% interest and the purchase price was recognized as goodwill.

Two dermatology product lines were acquired from SkinMedica, Inc., Carlsbad, California, United States, on October 1, 2009, for €43 million. These prescription medications, Desonate® and Neo-Benz® Micro, are marketed in the United States. The main components of the difference between the carrying amount of the acquired net assets and the purchase price were €37 million pertaining to production rights and trademarks for the two product lines and €5 million of goodwill.

Athenix Corporation, a privately held biotechnology company headquartered in Research Triangle Park, North Carolina, United States, was acquired on November 2, 2009, for €286 million. The purchase price included future milestone payments of approximately €24 million that will fall due upon the achievement of certain development goals. Athenix has an extensive herbicide tolerance and insect control trait development platform, particularly for corn and soybeans. The main components of the difference between the carrying amount of the acquired net assets and the purchase price were €217 million that pertained to development technologies and were reflected in other rights, €69 million in deferred taxes and €132 million of goodwill. The goodwill relates mainly to the anticipated synergies from an increase in our ability to provide farmers worldwide with new technologies and complete agricultural solutions from seed to harvest.

The effects of these and other, smaller acquisitions made in 2009 on the Group's assets and liabilities in that year as of the respective acquisition dates are shown in the table. Net of acquired cash and cash equivalents, they resulted in the following cash outflow:

Acquired Assets and Assumed Liabilities (Previous Year) [Table 4.27]

	Pre-acquisition carrying amount	Fair value adjustment	Fair value at the acquisition date
	€ million	€ million	€ million
Goodwill	-	177	177
Patents	-	1	1
Trademarks	-	3	3
R&D projects	-	4	4
Marketing rights	-	2	2
Production rights	-	34	34
Other rights	3	226	229
Property, plant and equipment	5	-	5
Inventories	-	1	1
Cash and cash equivalents	12	-	12
Financial liabilities	(1)	-	(1)
Other liabilities	(7)	-	(7)
Deferred taxes	-	(71)	(71)
Net assets	**12**	**377**	**389**
Non-controlling interest	-	-	15
Purchase prices			**404**
of which ancillary acquisition costs			2
Acquired cash and cash equivalents			12
Liabilities for future payments			38
Net cash outflow for acquisitions			**354**

ACQUISITIONS AFTER THE CLOSING DATE
The New Zealand company Bomac, which offers a wide range of animal health products for the livestock sector, was acquired on January 7, 2011. Bomac focuses particularly on the treatment of mastitis in dairy cattle and on parasiticides for sheep. The purchase price of €85 million pertained mainly to customer relationships and goodwill.

On January 28, 2011, we signed an agreement with the Indian pharmaceutical company Zydus Cadila to form a joint venture that will enhance our presence in India's fast-growing pharmaceuticals market. The new marketing and sales company will be headquartered in Mumbai, India. Closing of the transaction is currently expected by mid-2011.

6.3 Divestitures

There were no divestitures in 2010. The effects of the previous year's divestitures were as follows:

At the end of May 2009, we implemented the strategic alliance with Genzyme Corp., United States, announced on March 31, 2009. The products from our hematological oncology portfolio were transferred to Genzyme in accordance with the agreement. For Bayer this resulted in a net cash inflow of €93 million in 2010, comprising the balance of revenue-based payments received from Genzyme and taxes paid. After a write-down of €56 million, the receivable in the amount of the present value of the expected future revenue-based payments as of December 31, 2010, was €228 million.

In May 2009 Bayer sold its 51% share of Justesa Imagen, S.A., Spain, to Juste S.A. Química Farmacéutica for €16 million. A payment of €3 million was received in 2009 and a receivable for the remaining amount was therefore recognized in the statement of financial position. A further €8 million of this receivable was settled in 2010.

The impact of these divestitures in 2010 was as follows:

Divestitures [Table 4.28]

	2010
	€ million
Divested assets and liabilities	-
Net cash inflow from divestitures	101
Future cash payments receivable	(181)
Utilization of tax provisions	24
Deferred net gain	8
Net loss from divestitures (before taxes)	**(48)**

Notes to the Income Statements

7. Net sales

Net sales are derived primarily from product deliveries. Total reported net sales increased by €3,920 million, or 12.6%, from 2009 to €35,088 million in 2010. The increase resulted from the following factors:

Factors in Sales Development [Table 4.29]

	2010	
	€ million	%
Volume	2,073	+6.7
Price	413	+1.3
Portfolio	(92)	-0.3
Currency	1,526	+4.9
Total	**3,920**	**+12.6**

Breakdowns of net sales by segment and by region are given in the table in Note [1].

8. Selling expenses

Selling expenses comprise all expenses incurred in the reporting period for the sale, storage and transportation of saleable products, advertising, the provision of advice to customers, and market research. They mainly included €4,063 million (2009: €3,755 million) for the internal and external sales force, €2,032 million (2009: €1,860 million) for advertising and customer advice, €1,119 million (2009: €952 million) for the physical distribution and warehousing of finished products, €566 million (2009: €514 million) in commission and licensing expenses, and €1,023 million (2009: €842 million) in other selling expenses.

9. Research and development expenses

Research and development expenses and their accounting treatment are defined in Note [4]. Breakdowns of research and development expenses by segment and region are given in Note [1].

10. Other operating income

Other operating income was comprised as follows:

Other Operating Income [Table 4.30]

	2009	2010
	€ million	€ million
Gains from sales of intangible assets, property, plant and equipment and from divestitures	181	100
Write-backs of receivables	61	53
Reversals of unutilized provisions	65	45
Recognition of hedges	174	63
Miscellaneous operating income	441	453
Total	**922**	**714**
of which special items	138	-

The gains from sales of intangible assets, property, plant and equipment and from divestitures included income totaling €40 million in the CropScience subgroup from exchanges of licensing rights with BASF SE and Syngenta AG. A further gain of €23 million was recorded in the Crop Protection segment on the sale of the insecticidal active ingredients fenamiphos, ethoprophos and tebupirimphos to Amvac Chemical Corp.

The miscellaneous operating income included a €68 million gain from the settlement of a patent dispute concerning YAZ® and a €12 million gain from the remeasurement of our already held interest in BayOne Urethane Systems LLC when we acquired the other 50% interest. The remaining amount of miscellaneous operating income is composed of a large number of individually immaterial items at the subsidiaries.

11. Other operating expenses

Other operating expenses were comprised as follows:

Other Operating Expenses [Table 4.31]

	2009	2010
	€ million	€ million
Losses from sales of intangible assets, property, plant and equipment and from divestitures	(26)	(83)
Write-downs of receivables	(106)	(85)
Expenses related to significant legal risks	(225)	(703)
Recognition of hedges	(212)	(239)
Miscellaneous operating expenses	(1,088)	(1,356)
Total	**(1,657)**	**(2,466)**
of which special items	(904)	(1,722)

Details of special items, which mainly comprised expenses related to significant legal risks and miscellaneous operating expenses, are given on a net basis in the management report in Table 3.16.

Information on the restructuring expenses reported in Table 3.16 is provided in Note [26.3].

The following table provides a breakdown of the special items included in other operating expenses by the function to which they relate:

Breakdown of Special Items by Function [Table 4.32]

	2009	2010
	€ million	€ million
Production-related	(305)	(250)
Marketing- and distribution-related	(148)	(24)
Research- and development-related	(37)	(231)
General-administration-related	(125)	(20)
Other	(289)	(1,197)
Total	**(904)**	**(1,722)**

12. Personnel expenses and employee numbers

Personnel expenses increased in 2010 by €323 million to €8,099 million (2009: €7,776 million). Changes in exchange rates raised personnel expenses by €254 million.

Personnel Expenses [Table 4.33]

	2009	2010
	€ million	€ million
Wages and salaries	6,286	6,476
Social expenses and expenses for pensions and other benefits	1,490	1,623
of which for defined contribution pension plans	495	462
of which for defined benefit pension plans	164	228
Total	**7,776**	**8,099**

The personnel expenses shown here do not contain the interest portion of the allocation to personnel-related provisions, especially provisions for pensions and other post-employment benefits, which is included in the non-operating result under other non-operating expenses (Note [13.3]).

The average numbers of employees, classified by corporate functions, were as shown in the table below:

Employees [Table 4.34]

	2009	2010
Production	49,485	47,728
Marketing and distribution	39,949	40,827
Research and development	12,539	13,110
General administration	9,681	9,649
Total	**111,654**	**111,314**
Trainees	2,665	2,540

2009 figures restated

The employees of joint ventures are included in the above figures in proportion to Bayer's interests in the respective companies. The total number of people employed by joint ventures in 2010 was 57 (2009: 55).

The number of employees on either permanent or fixed-term contracts is stated in full-time equivalents, with part-time employees included on a pro-rata basis in line with their contractual working hours. By contrast to the previous year, the figures in the above table include fixed-term employees but not trainees.

13. Non-operating result

The non-operating result for 2010 was minus €1,009 million (2009: minus €1,136 million), comprising an equity-method loss of €56 million (2009: €48 million), non-operating expenses of €1,337 million (2009: €1,877 million) and non-operating income of €384 million (2009: €789 million). Details of the components of the non-operating result are provided below.

13.1 Income (loss) from investments in affiliated companies

The net loss from investments in affiliated companies was comprised as follows:

Income (Loss) from Investments in Affiliated Companies [Table 4.35]

	2009	2010
	€ million	€ million
Net loss from investments accounted for using the equity method (equity-method loss)	(48)	(56)
Expenses		
Write-downs of investments in affiliated companies	(15)	(11)
Losses from the sale of investments in affiliated companies	(11)	(2)
Income		
Dividends from affiliated companies and income from profit and loss transfer agreements (net)	5	6
Gains from the sale of investments in affiliated companies	10	4
Total	**(59)**	**(59)**

The income from investments in affiliated companies mainly comprised an equity-method loss of €49 million (2009: €49 million) from two production joint ventures with Lyondell.

Further details of the companies accounted for using the equity method are given in Note [19].

13.2 Net interest expense

The net interest expense was comprised as follows:

Net Interest Expense [Table 4.36]

	2009	2010
	€ million	€ million
Expenses		
Interest and similar expenses	(815)	(690)
Interest expenses for derivatives (held for trading)	(490)	(180)
Income		
Interest and similar income	267	219
Interest income from derivatives (held for trading)	490	152
Total	**(548)**	**(499)**

The expenses included interest expense of €54 million (2009: €20 million) relating to non-financial liabilities. Income included interest income of €40 million (2009: €77 million) from non-financial assets.

The portion of net income or loss attributable to non-controlling interest to which the company has a repayment obligation out of total assets is reflected in net interest expense. Pro-rated income of €15 million (2009: €14 million) was recognized as interest expense in this context.

13.3 Other non-operating income and expenses

Other non-operating income and expenses were comprised as follows:

Other Non-Operating Income and Expenses [Table 4.37]

	2009	2010
	€ million	€ million
Expenses		
Interest portion of interest-bearing provisions	(436)	(372)
Exchange loss	(92)	(70)
Miscellaneous non-operating expenses	(16)	(11)
Income		
Miscellaneous non-operating income	15	2
Total	**(529)**	**(451)**

The interest portion of noncurrent interest-bearing provisions mainly related to pension provisions.

14. Income taxes

The breakdown of income taxes by origin was as follows:

Income Tax Expense by Origin [Table 4.38]

	2009	2010
	€ million	€ million
Income taxes paid or accrued		
Germany	(186)	(118)
other countries	(476)	(779)
	(662)	**(897)**
Deferred taxes		
from temporary differences	430	534
from interest carryforwards	(11)	-
from tax loss carryforwards	(291)	(33)
from tax credits	23	(15)
	151	**486**
Total	**(511)**	**(411)**

The deferred tax assets and liabilities were allocable to the following items in the statement of financial position:

Deferred Tax Assets and Liabilities [Table 4.39]

	Dec.31, 2009		Dec.31, 2010	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
	€ million	€ million	€ million	€ million
Intangible assets	459	3,645	386	3,080
Property, plant and equipment	59	793	48	800
Financial assets	48	226	55	193
Inventories	357	51	470	45
Receivables	42	301	54	322
Other assets	101	36	51	9
Provisions for pensions and other post-employment benefits	1,229	570	1,468	775
Other provisions	464	36	669	48
Liabilities	408	37	468	45
Tax loss carryforwards	156	-	139	-
Tax credits	112	-	106	-
	3,435	**5,695**	**3,914**	**5,317**
of which noncurrent	2,573	5,218	2,762	4,667
Set-off	(2,485)	(2,485)	(2,740)	(2,740)
Total	**950**	**3,210**	**1,174**	**2,577**

Deferred tax assets from actuarial gains and losses, recognized outside profit or loss, on defined benefit obligations for pensions and other post-employment benefits increased equity by €258 million (2009: €117 million). Changes in fair values of available-for-sale financial assets and derivatives designated as hedges, recognized outside profit or loss, resulted in deferred tax assets that increased equity by €25 million (2009: deferred tax liabilities that diminished equity by €36 million). These effects on equity are reflected in the statement of comprehensive income.

The utilization of tax loss carryforwards reduced the income taxes paid or accrued in 2010 by €102 million (2009: €260 million). The utilization of tax credits reduced income taxes paid or accrued by €12 million (2009: €6 million).

Of the total tax loss carryforwards of €929 million in 2010 (2009: €1,047 million), an amount of €670 million (2009: €579 million) can probably be utilized within a reasonable period. Deferred tax assets of €139 million (2009: €156 million) were recognized on this amount. The deferred tax assets included €6 million (2009: €13 million) that resulted from purchase price allocations and was recognized outside profit or loss.

The utilization of €259 million (2009: €468 million) of tax loss carryforwards was subject to legal or economic restrictions. Consequently, no deferred tax assets were recognized for this amount. If it had been probable that these tax loss carryforwards could be utilized, deferred tax assets of €67 million (2009: €137 million) would have had to be recognized.

Tax credits of €106 million (2009: €112 million) were recognized as deferred tax assets, including €0 million (2009: €1 million) outside profit or loss. The utilization of €51 million (2009: €32 million) of tax credits was subject to legal or economic restrictions. Consequently, no deferred tax assets were recognized for this amount.

Unusable tax credits and tax loss carryforwards expired as follows:

Expiration of Unusable Tax Credits and Tax Loss Carryforwards [Table 4.40]

	Tax credits		Tax loss carryforwards	
	Dec. 31, 2009	Dec. 31, 2010	Dec. 31, 2009	Dec. 31, 2010
	€ million	€ million	€ million	€ million
One year	-	-	-	-
Two years	-	2	23	-
Three years	-	22	28	-
Four years	-	-	39	-
Five years	-	-	123	10
Thereafter	32	27	255	249
Total	**32**	**51**	**468**	**259**

In 2010, subsidiaries that reported losses for 2010 or 2009 recognized net deferred tax assets totaling €268 million (2009: €40 million) on temporary differences and tax loss carryforwards. These assets were considered to be unimpaired because the companies concerned were expected to generate taxable income in the future.

Deferred tax liabilities of €14 million were recognized in 2010 (2009: €14 million) for planned dividend payments by subsidiaries. Deferred tax liabilities were not recognized for temporary differences on €9,687 million (2009: €8,054 million) of retained earnings of subsidiaries and associates because the Bayer Group is able to control the timing of the difference reversal and the temporary differences will not reverse in the foreseeable future.

The reported tax expense of €411 million for 2010 (2009: €511 million) differed by €32 million (2009: €36 million) from the expected tax expense of €443 million (2009: €547 million) that would have resulted from applying an expected weighted average tax rate to the pre-tax income of the Group. This average rate was derived from the expected tax rates of the individual Group companies and was 25.7% in 2010 (2009: 29.3%). The effective tax rate was 23.9% (2009: 27.3%).

The reconciliation of expected to reported income tax expense and of the expected to the effective tax rate for the Group was as follows:

Reconciliation of Expected to Actual Income Tax Expense [Table 4.41]

	2009		2010	
	€ million	%	€ million	%
Expected income tax expense (income) and expected tax rate	**547**	**29.3**	**443**	**25.7**
Reduction in taxes due to tax-free income				
Income from affiliated companies and divestiture proceeds	(9)	(0.5)	(10)	(0.6)
Other	(41)	(2.2)	(41)	(2.4)
First-time recognition of previously unrecognized deferred tax assets on tax loss carryforwards	(2)	(0.1)	(27)	(1.6)
Use of tax loss carryforwards on which deferred tax assets were not previously recognized	(1)	(0.1)	(13)	(0.8)
Increase in taxes due to non-tax-deductible expenses				
Write-downs of investments in affiliated companies	5	0.3	1	0.1
Expenses related to litigations	1	0.1	2	0.1
Other	103	5.5	80	4.7
New tax loss carryforwards unlikely to be usable	10	0.5	43	2.5
Existing tax loss carryforwards on which deferred tax assets were previously recognized but which are unlikely to be usable	23	1.2	4	0.2
Tax income and expenses relating to other periods	(129)	(6.9)	3	0.2
Tax effects of changes in tax rates	(18)	(1.0)	(2)	(0.1)
Other tax effects	22	1.2	(72)	(4.1)
Actual income tax expense (income) and effective tax rate	**511**	**27.3**	**411**	**23.9**

15. Income/losses attributable to non-controlling interest

Income attributable to non-controlling interest amounted to €11 million (2009: €11 million), while losses attributable to non-controlling interest amounted to €2 million (2009: €11 million).

16. Earnings per share

Earnings per share are determined according to IAS 33 (Earnings Per Share) by dividing net income by the weighted average number of shares.

The number of ordinary shares in issue is 826,947,808.

Prior to June 1, 2009, the conversion date of the mandatory convertible bond issued in April 2006, the potential shares to be issued upon conversion of this bond were also taken into account. Basic and diluted earnings per share were therefore identical. The financing expenses for the mandatory convertible bond were added back to net income.

Earnings per Share [Table 4.42]

	2009	2010
	€ million	€ million
Income after taxes	1,359	1,310
of which attributable to non-controlling interest	-	9
of which attributable to Bayer AG stockholders (net income)	1,359	1,301
Financing expenses for the mandatory convertible bond, net of tax effects	47	-
Adjusted net income	1,406	1,301
	Shares	Shares
Weighted average number of issued ordinary shares	801,050,237	826,947,808
(Potential) shares (to be) issued upon conversion of the mandatory convertible bond	24,955,936	-
Adjusted weighted average total number of issued and potential ordinary shares	826,006,173	826,947,808
	€	€
Basic earnings per share	1.70	1.57
Diluted earnings per share	1.70	1.57

Notes to the Statements of Financial Position

17. Goodwill and other intangible assets

Changes in intangible assets in 2010 were as follows:

Changes in Intangible Assets [Table 4.43]

	Acquired goodwill	Technologies	Trademarks	Marketing and distribution rights	Production rights	R&D projects	Other rights and advance payments	Total
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Cost of acquisition or generation, December 31, 2009	**8,704**	**10,240**	**3,966**	**966**	**2,169**	**1,138**	**2,296**	**29,479**
Changes in scope of consolidation	-	-	-	-	-	-	(1)	(1)
Acquisitions	12	11	-	-	2	1	5	31
Capital expenditures	-	17	2	58	-	127	205	409
Retirements	-	(13)	(5)	(2)	(11)	(5)	(79)	(115)
Transfers	-	81	-	(9)	1	(115)	45	3
Transfers (IFRS 5)	-	-	-	-	-	-	-	-
Inflation adjustment (IAS 29)	7	-	-	1	-	-	-	8
Remeasurement (IFRS 3)	4	-	-	-	2	-	5	11
Exchange differences	275	40	65	46	6	25	136	593
December 31, 2010	**9,002**	**10,376**	**4,028**	**1,060**	**2,169**	**1,171**	**2,612**	**30,418**
Accumulated amortization and impairment losses, December 31, 2009	**-**	**3,615**	**1,004**	**455**	**1,315**	**1**	**1,543**	**7,933**
Changes in scope of consolidation	-	-	-	-	-	-	(1)	(1)
Retirements	-	(11)	(3)	(2)	(7)	(5)	(78)	(106)
Amortization and impairment losses in 2010	-	1,010	592	90	182	237	168	2,279
Amortization	-	797	163	80	151	-	156	1,347
Impairment losses	-	213	429	10	31	237	12	932
Impairment loss reversals	-	-	-	-	-	-	-	-
Transfers	-	-	-	4	-	-	(4)	-
Transfers (IFRS 5)	-	-	-	-	-	-	-	-
Exchange differences	-	17	15	19	3	-	96	150
December 31, 2010	**-**	**4,631**	**1,608**	**566**	**1,493**	**233**	**1,724**	**10,255**
Carrying amounts, December 31, 2010	**9,002**	**5,745**	**2,420**	**494**	**676**	**938**	**888**	**20,163**
Carrying amounts, December 31, 2009	**8,704**	**6,625**	**2,962**	**511**	**854**	**1,137**	**753**	**21,546**

Other rights and advance payments include internally generated software. Costs of €31 million for internally generated software incurred during the application development phase were capitalized in 2010 (2009: €56 million). The carrying amount of internally generated software was €93 million (2009: €79 million).

The research and development projects include €94 million relating to the active ingredient alemtuzumab for the treatment of multiple sclerosis (MS). Bayer has returned the worldwide distribution and development rights for alemtuzumab to Genzyme Corp., United States. Bayer is continuing to co-develop this drug. If it is approved in the MS indication, Bayer will have global co-promotion rights and will be entitled to royalties and revenue-based milestone payments.

Impairment losses on intangible assets totaled €932 million. The "Schering" brand was capitalized in the amount of €405 million following the acquisition of Schering AG, Berlin, Germany, in 2006. As part of our new brand strategy we plan to focus increasingly on the "Bayer" umbrella brand. A €405 million impairment loss was therefore recognized on the intangible asset represented by the "Schering" brand. The research and development project for sagopilone to treat lung cancer was discontinued on account of an adverse side-effect profile. Another development project for cancer treatment, Bonefos®, also was considered to be no longer of value due to heavy competitive pressure. Impairment losses totaling €202 million were therefore recognized on the respective intangible assets. A reappraisal of the market potential for the cancer drug Zevalin® led to the recognition of a €132 million impairment loss. Further impairment losses totaling €135 million were recorded on trademark and production rights for three product families in the Women's Healthcare and General Medicine business unit. Impairment losses were also recognized on intangible assets in the Pharmaceuticals (€14 million), Consumer Health (€39 million) and MaterialScience (€4 million) segments, as well as in "Other Segments" (€1 million).

Details of acquisitions and divestitures are contained in Notes [6.2] and [6.3]. Details of the impairment testing procedure for goodwill and other intangible assets are given in Note [4].

Changes in intangible assets in 2009 were as follows:

Changes in Intangible Assets (Previous Year) [Table 4.44]

	Acquired goodwill	Technologies	Trademarks	Marketing and distribution rights	Production rights	R&D projects	Other rights and advance payments	Total
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Cost of acquisition or generation, December 31, 2008	**8,647**	**10,265**	**3,985**	**1,004**	**2,142**	**1,359**	**1,925**	**29,327**
Changes in scope of consolidation	-	-	-	-	-	-	1	1
Acquisitions	177	1	3	2	34	4	229	450
Capital expenditures	-	14	-	13	6	162	132	327
Retirements	-	(5)	-	(2)	-	(172)	(41)	(220)
Transfers	-	201	2	(53)	7	(201)	44	-
Transfers (IFRS 5)	(92)	(225)	-	-	(20)	(5)	(2)	(344)
Inflation adjustment (IAS 29)	-	-	-	-	-	-	-	-
Remeasurement (IFRS 3)	-	-	-	-	-	-	-	-
Exchange differences	(28)	(11)	(24)	2	-	(9)	8	(62)
December 31, 2009	**8,704**	**10,240**	**3,966**	**966**	**2,169**	**1,138**	**2,296**	**29,479**
Accumulated amortization and impairment losses, December 31, 2008	**-**	**2,766**	**833**	**386**	**1,166**	**173**	**1,405**	**6,729**
Changes in scope of consolidation	-	-	-	-	-	-	-	-
Retirements	-	(5)	-	-	-	(172)	(39)	(216)
Amortization and impairment losses in 2009	-	938	171	121	151	-	156	1,537
Amortization	-	938	167	88	151	-	132	1,476
Impairment losses	-	-	4	33	-	-	24	61
Impairment loss reversals	-	-	-	-	-	-	-	-
Transfers	-	(5)	4	(53)	-	-	54	-
Transfers (IFRS 5)	-	(75)	-	-	(2)	-	-	(77)
Exchange differences	-	(4)	(4)	1	-	-	(33)	(40)
December 31, 2009	**-**	**3,615**	**1,004**	**455**	**1,315**	**1**	**1,543**	**7,933**
Carrying amounts, December 31, 2009	**8,704**	**6,625**	**2,962**	**511**	**854**	**1,137**	**753**	**21,546**
Carrying amounts, December 31, 2008	**8,647**	**7,499**	**3,152**	**618**	**976**	**1,186**	**520**	**22,598**

Changes in the carrying amounts of goodwill for the operating segments in 2010 and 2009 were as follows:

Goodwill by Reporting Segment [Table 4.45]

	Pharma-ceuticals	Consumer Health	HealthCare	Crop Protection	Environ-mental Science, BioScience	Crop-Science
	€ million	€ million	€ million	€ million	€ million	€ million
Carrying amounts, January 1, 2009	**5,553**	**1,323**	**6,876**	**1,088**	**506**	**1,594**
Changes in scope of consolidation	-	-	-	-	-	-
Acquisitions	4	17	21	-	132	132
Capital expenditures	-	-	-	-	-	-
Retirements	-	-	-	-	-	-
Amortization and impairment losses in 2009	-	-	-	-	-	-
Transfers	-	-	-	-	-	-
Transfers (IFRS 5)	(92)	-	(92)	-	-	-
Inflation adjustment (IAS 29)	-	-	-	-	-	-
Remeasurement (IFRS 3)	-	-	-	-	-	-
Exchange differences	(5)	(12)	(17)	9	(13)	(4)
Carrying amounts, December 31, 2009	**5,460**	**1,328**	**6,788**	**1,097**	**625**	**1,722**
Changes in scope of consolidation	-	-	-	-	-	-
Acquisitions	-	-	-	-	2	2
Capital expenditures	-	-	-	-	-	-
Retirements	-	-	-	-	-	-
Amortization and impairment losses in 2010	-	-	-	-	-	-
Transfers	1	-	1	(3)	2	(1)
Transfers (IFRS 5)	-	-	-	-	-	-
Inflation adjustment (IAS 29)	-	7	7	-	-	-
Remeasurement (IFRS 3)	-	-	-	-	-	-
Exchange differences	122	80	202	27	41	68
Carrying amounts, December 31, 2010	**5,583**	**1,415**	**6,998**	**1,121**	**670**	**1,791**

Goodwill by Reporting Segment [Table 4.45]

	MaterialScience	Reconciliation	Bayer Group
	€ million	€ million	€ million
Carrying amounts, January 1, 2009	**177**	**-**	**8,647**
Changes in scope of consolidation	-	-	-
Acquisitions	24	-	177
Capital expenditures	-	-	-
Retirements	-	-	-
Amortization and impairment losses in 2009	-	-	-
Transfers	-	-	-
Transfers (IFRS 5)	-	-	(92)
Inflation adjustment (IAS 29)	-	-	-
Remeasurement (IFRS 3)	-	-	-
Exchange differences	(7)	-	(28)
Carrying amounts, December 31, 2009	**194**	**-**	**8,704**
Changes in scope of consolidation	-	-	-
Acquisitions	10	-	12
Capital expenditures	-	-	-
Retirements	-	-	-
Amortization and impairment losses in 2010	-	-	-
Transfers	-	-	-
Transfers (IFRS 5)	-	-	-
Inflation adjustment (IAS 29)	-	-	7
Remeasurement (IFRS 3)	4	-	4
Exchange differences	5	-	275
Carrying amounts, December 31, 2010	**213**	**-**	**9,002**

Goodwill and other intangible assets with an indefinite useful life that are of material significance for the Bayer Group are allocated to the following strategic business entities or cash-generating units:

Intangible Assets with Indefinite Useful Life [Table 4.46]

Reporting segment	Cash-generating unit	Goodwill	Intangible assets with indefinite useful life
		€ million	€ million
Pharmaceuticals	Women's Healthcare	2,890	156
Pharmaceuticals	Specialized Therapeutics	1,229	198
Consumer Health	OTC	982	22
Pharmaceuticals	Diagnostic Imaging	939	16
Pharmaceuticals	Oncology	378	115
Consumer Health	Medrad business	302	523

Since it is uncertain whether acquired or inlicensed research and development projects will eventually result in the production of saleable products, the period over which the corresponding capitalized asset is expected to generate an economic benefit for the company cannot be determined. Development projects were capitalized in a total amount of €938 million as of the end of 2010 (2009: €1,137 million).

The Bayer Cross, which was reacquired for the North America region in 1994, having been awarded to the United States and Canada under the reparations agreements at the end of the First World War, is recognized as an intangible asset with an indefinite useful life. The company name "Medrad," which passed to Bayer with the acquisition of Schering AG, Berlin, Germany, in 2006, also has an indefinite useful life. The period for which the Bayer Group will derive an economic benefit from this name cannot be determined as Bayer intends to make continuous use of it. The Bayer Cross is capitalized at €107 million, the "Medrad" name at €305 million.

TECHNOLOGIES

The Bayer Group endeavors to obtain patent protection for its products and technologies in the major markets. Depending on the jurisdiction, patent protection may be available for:

- individual active ingredients,
- specific compounds, formulations and combinations containing active ingredients,
- manufacturing processes,
- working methods,
- equipment,
- intermediates for the manufacture of active ingredients and products,
- isolated genes or proteins,
- new uses for existing active ingredients or products,
- material combinations and
- semi-finished products.

The protection that a patent provides varies from country to country, depending on the type of claim granted, the scope of the claim's coverage and the legal remedies available for enforcement.

The Bayer Group currently owns some 78,000 patents or patent applications. Although in our Pharmaceuticals segment the patents on Avalox®/Avelox®, Betaferon®/Betaseron®, Kogenate®, Levitra®, Magnevist®, Mirena®, Nexavar®, Xarelto®, YAZ®, Yasmin® and Yasminelle® are particularly important to our business, we believe that no single patent (or group of related patents) is crucial to our business as a whole.

TERM AND EXPIRATION OF PATENTS

Patents are valid for varying periods, depending on the laws of the jurisdiction granting the patent. In some jurisdictions, patent protection begins from the date a patent application was filed; in others, it begins on the date the patent is granted.

The European Union member countries as well as the United States, Japan and certain other countries extend patent terms or issue supplementary protection certificates to compensate for patent term loss due to regulatory review and for the substantial investments in product research and development. We endeavor to obtain such patent term extensions or supplementary certificates wherever possible. Apart from substance and product patents, we continue to seek

- patents on processes and intermediates used in manufacturing an active ingredient,
- patents relating to specific uses for an active ingredient,
- patents relating to novel compositions and formulations, and
- market exclusivity in countries where this is possible (such as the United States).

The following table sets forth the expiration dates in our major markets of the most important patents covering Avalox®/Avelox®, Betaferon®/Betaseron®, Kogenate®, Levitra®, Magnevist®, Mirena®, Nexavar®, Xarelto®, YAZ®, Yasmin® and Yasminelle®.

Expiration Dates of Most Important Patents [Table 4.47]

	Market							
	Germany	France	U.K.	Italy	Spain	Japan	U.S.A.	Canada
Products								
Avalox®/Avelox®								
Active ingredient	2014	2014	2014	2014	2014	2014	2014	2015
Active ingredient monohydrate	2016	2016	2016	2016	2016	2016	2016	2016
Tablets	2019	2019	2019	2019	2019	2019	2019	2019
Betaferon®/Betaseron®								
Active ingredient	-	-	-	-	-	-	-	2016
Kogenate®								
Active ingredient	-	-	-	-	-	-	2014	2019
Formulation	2017	2017	2017	2017	2017	2017	2017	2017
Levitra®								
Active ingredient	2018	2018	2018	2018	2018	2020	2018	2018
Magnevist®								
Active ingredient	-	-	-	-	-	-	2011	-
Formulation	-	-	-	-	-	-	-	2010
Process	-	-	-	-	-	-	2013	-
Mirena®								
Applicator	2015	2015	2015	2015	2015	-	2015	2015
Process	2013	2013	2013	2013	2013	2013	2013	2013
Nexavar®								
Active ingredient	2020[a]	2021	2021	2021	2021	2020[a]	2020	2020
Xarelto®								
Active ingredient	2020[e]	2023	2020[e]	2023	2023[d]	2020	2021	2020
YAZ®								
Formulation	2020[e]	2020[e]	2020[e]	2022	2023[d]	2020[e]	-[c]	2020
Dosage regimen	-[f]	-[f]	-[f]	-[f]	-[f]	2014[b]	2014	2014
Production process	2025	2025	2025	2025	2025	2026[b]	2025	2026[b]
Yasmin®								
Formulation	2020	2020	2020	2020	2020	2020	-[c]	2020
Production process	2025	2025	2025	2025	2025	2026[b]	2025	2026[b]
Yasminelle®								
Formulation	2020	2020	2020	2020	2020	2020	-[c]	2020
Production process	2025	2025	2025	2025	2025	2026[b]	2025	2026[b]

a Current patent expiration. An application has been submitted to extend patent protection through 2021.
b Patent pending
c The patent was invalidated in the first instance in March 2008. In August 2009, the U.S. Court of Appeals for the Federal Circuit affirmed this decision. Bayer filed a petition for review in the U.S. Supreme Court. The petition was rejected in May 2010.
d Patent expiration updated
e Current patent expiration. An application has been submitted to extend patent protection.
f The patent was revoked by a Technical Board of Appeal of the European Patent Office in October 2010.

Information on specific patent disputes is given in Note [32].

TRADEMARKS

We seek to obtain extensive trademark protection for our products in all jurisdictions in which they are marketed or are to be marketed in the near future. As well as product names, we also register particularly distinctive slogans, logos, graphic elements and designs as global trademarks.

Wherever possible, trademarks are registered through supranational trademark protection systems, for example as European Community Trademarks or international trademarks, and additionally with the national trademark registration offices. The protection actually provided by a trademark may vary considerably from one country to another depending on the distinctiveness of the trademark.

Our trademarks include:

HealthCare: Adalat®, Advantage®, Aleve®/Flanax®/Apronax®, Alka-Seltzer®, Aspirin®, Avalox®/Avelox®, Baytril®, Bepanthen®/Bepanthol®, Berocca®, Betaferon®/Betaseron®, Canesten®, Ciprobay®/Ciproxin®/Baycip®/Cipro®, Contour®, Kogenate®, Levitra®, Magnevist®, Mirena®, Nexavar®, One A Day®, Redoxon®, Rennie®, Supradyn®, Ultravist®, Xarelto®, YAZ®, Yasmin® and Yasminelle®.

CropScience: Basta®/Liberty®/Ignite®, Confidor®/Gaucho®/Admire®/Merit®, Flint®/Stratego®/Sphere®/Nativo®, Invigor® and Proline®/Input®/Prosaro®.

MaterialScience: Bayblend®, BaySystems®, Desmodur®, Desmopan®, Desmophen®, Makrolon® and Vulkollan®.

We currently have more than 63,000 national trademark registrations or pending registrations, along with over 750 Community Trade Marks, which are valid throughout the European Union, and some 2,000 international trademarks, which provide protection in various countries. Trademarks are particularly important for those products that are not protected by patents and are exposed to strong competitive pressure from generic products. However, with the exception of the company name “Bayer” and the “Bayer Cross” logo, we do not believe that any single trademark is crucial to our business as a whole.

18. Property, plant and equipment

Changes in property, plant and equipment in 2010 were as follows:

Changes in Property, Plant and Equipment [Table 4.48]

	Land and buildings	Plant installations and machinery	Furniture, fixtures and other equipment	Construction in progress and advance payments	Total
	€ million	€ million	€ million	€ million	€ million
Cost of acquisition or construction, December 31, 2009	**7,747**	**14,163**	**1,583**	**1,042**	**24,535**
Changes in scope of consolidation	3	(1)	(2)	-	-
Acquisitions	-	-	-	-	-
Capital expenditures	70	262	140	740	1,212
Retirements	(79)	(337)	(118)	(3)	(537)
Transfers	144	393	18	(558)	(3)
Transfers (IFRS 5)	-	-	-	-	-
Inflation adjustment (IAS 29)	6	1	-	-	7
Remeasurement (IFRS 3)	-	-	-	-	-
Exchange differences	301	598	79	70	1,048
December 31, 2010	**8,192**	**15,079**	**1,700**	**1,291**	**26,262**
Accumulated depreciation and impairment losses, December 31, 2009	**3,969**	**10,015**	**1,114**	**28**	**15,126**
Changes in scope of consolidation	3	(1)	(2)	-	-
Retirements	(57)	(317)	(109)	(3)	(486)
Depreciation and impairment losses in 2010	293	774	185	-	1,252
Depreciation	247	763	185	-	1,195
Impairment losses	46	11	-	-	57
Impairment loss reversals	(3)	(1)	-	-	(4)
Transfers	1	16	(6)	(11)	-
Transfers (IFRS 5)	-	-	-	-	-
Exchange differences	127	358	53	1	539
December 31, 2010	**4,333**	**10,844**	**1,235**	**15**	**16,427**
Carrying amounts, December 31, 2010	**3,859**	**4,235**	**465**	**1,276**	**9,835**
Carrying amounts, December 31, 2009	**3,778**	**4,148**	**469**	**1,014**	**9,409**

Impairment losses recognized on property, plant and equipment totaled €53 million, net of €4 million in impairment loss reversals, with €27 million pertaining to assets of the Corporate Center.

Further capital expenditures were made for the expansion of production capacities in China. The total capital expenditures of €1,212 million for property, plant and equipment included €224 million in China.

In 2010, borrowing costs of €31 million (2009: €14 million) were capitalized as components of the cost of acquisition or construction of qualifying assets, applying an average interest rate of 4.5% (2009: 4.9%).

Capitalized property, plant and equipment included assets with a total net value of €464 million (2009: €469 million) held under finance leases. The cost of acquisition and construction of these assets as of the closing date totaled €1,128 million (2009: €1,038 million). They comprised plant installations and machinery with a carrying amount of €232 million (2009: €240 million), buildings with a carrying amount of €139 million (2009: €143 million) and other assets with a carrying amount of €93 million (2009: €86 million). For information on the liabilities arising from finance leases see Note [27].

In 2010, rental payments of €216 million (2009: €203 million) were made for assets leased under operating leases as defined in IAS 17 (Leases).

Lease payments of €5 million are expected to be received in 2011 from operating leases – as defined in IAS 17 (Leases) – pertaining to property, plant and equipment.

In 2008, Bayer sold a registered usufructuary right to real estate to a leasing company and leased it back immediately under an agreement that includes a right of repurchase upon expiration of the lease. The carrying amount of the real estate in 2010 was €153 million (2009: €159 million). This transaction, which was accounted for as a secured loan, does not restrict the operational use of the real estate.

Changes in property, plant and equipment in 2009 were as follows:

Changes in Property, Plant and Equipment (Previous Year) [Table 4.49]

	Land and buildings	Plant installations and machinery	Furniture, fixtures and other equipment	Construction in progress and advance payments	Total
	€ million	€ million	€ million	€ million	€ million
Cost of acquisition or construction, December 31, 2008	**7,471**	**13,612**	**1,534**	**1,310**	**23,927**
Changes in scope of consolidation	1	(2)	(4)	1	(4)
Acquisitions	1	1	3	-	5
Capital expenditures	203	357	147	635	1,342
Retirements	(144)	(324)	(153)	(10)	(631)
Transfers	233	607	47	(887)	-
Transfers (IFRS 5)	8	-	-	-	8
Inflation adjustment (IAS 29)	-	-	-	-	-
Remeasurement (IFRS 3)	-	-	-	-	-
Exchange differences	(26)	(88)	9	(7)	(112)
December 31, 2009	**7,747**	**14,163**	**1,583**	**1,042**	**24,535**
Accumulated depreciation and impairment losses, December 31, 2008	**3,809**	**9,538**	**1,069**	**19**	**14,435**
Changes in scope of consolidation	2	(1)	(4)	-	(3)
Retirements	(98)	(305)	(141)	(2)	(546)
Depreciation and impairment losses in 2009	253	812	184	23	1,272
Depreciation	238	764	182	-	1,184
Impairment losses	15	48	2	23	88
Impairment loss reversals	-	-	-	-	-
Transfers	3	9	-	(12)	-
Transfers (IFRS 5)	4	-	-	-	4
Exchange differences	(4)	(38)	6	-	(36)
December 31, 2009	**3,969**	**10,015**	**1,114**	**28**	**15,126**
Carrying amounts, December 31, 2009	**3,778**	**4,148**	**469**	**1,014**	**9,409**
Carrying amounts, December 31, 2008	**3,662**	**4,074**	**465**	**1,291**	**9,492**

The following table provides an overview of the main sites operated by each subgroup:

Principal Subgroup Sites [Table 4.50]

Location	Main activities
HealthCare	
Leverkusen, Germany	HealthCare headquarters, administration, formulation and packaging of pharmaceutical products
Bergkamen, Germany	Active ingredient production
Berlin, Germany	Production and packaging of contrast media, packaging of solids, research and development, administration
Bitterfeld-Wolfen, Germany	Formulation and packaging of Consumer Care products
Wuppertal, Germany	Production of active ingredients for pharmaceutical products, research and development
Turku, Finland	Production of gynecological and andrological products, solids (oncology), research and development
Berkeley, U.S.A.	Production, formulation and packaging of recombinant Factor VIII
Emeryville, U.S.A.	Production and formulation of Betaferon®/Betaseron®
Mishawaka, U.S.A.	Production of instruments and test strips (Medical Care Division)
Myerstown, U.S.A.	Formulation and packaging of Consumer Care products
CropScience	
Monheim, Germany	CropScience headquarters, administration, research and development for fungicides and insecticides
Dormagen, Germany	Development of new production processes and manufacture of products for Crop Protection and Environmental Science
Frankfurt a. M., Germany	Research and development for herbicides, manufacture of products for Crop Protection and Environmental Science
Ghent, Belgium	Research and development for seeds and agricultural crop traits
Haelen, Netherlands	Research, development and production of vegetable seeds in the BioScience business unit
Institute, U.S.A.	Manufacture of products for Crop Protection and Environmental Science
Kansas City, U.S.A.	Manufacture of products for Crop Protection and Environmental Science
Research Triangle Park, U.S.A.	CropScience North America headquarters, research and development for seeds and traits of agricultural crops
Vapi, India	Development of new production processes and manufacture of products for Crop Protection and Environmental Science
MaterialScience	
Leverkusen, Germany	MaterialScience headquarters, administration, production of base and modified isocyanates, chlorine, sodium hydroxide solution, hydrogen and hydrochloric acid
Brunsbüttel, Germany	Production of diphenylmethane diisocyanate, toluene diisocyanate, chlorine, hydrogen and hydrochloric acid
Dormagen, Germany	Production of modified isocyanates, coating resins, polycarbonate films, toluene diisocyanates, polyether, thermoplastic polyurethanes, chlorine, sodium hydroxide solution, hydrogen and hydrochloric acid
Krefeld, Germany	Production of polycarbonates, diphenylmethane diisocyanate, chlorine, sodium hydroxide solution, hydrochloric acid and hydrogen
Antwerp, Belgium	Production of polycarbonates, polyether, aniline and nitrobenzene
Tarragona, Spain	Production of diphenylmethane diisocyanate and hydrochloric acid
Baytown, U.S.A.	Production of base and modified isocyanates, polycarbonates, diphenylmethane diisocyanate, toluene diisocyanate, chlorine, sodium hydroxide solution, hydrochloric acid and hydrogen
Map Ta Phut, Thailand	Production of polycarbonates and polycarbonate films
Shanghai, China	Production of base and modified isocyanates, polycarbonates, diphenylmethane diisocyanate, toluene diisocyanates (under construction), chlorine and hydrochloric acid

19. Investments accounted for using the equity method

Changes in the carrying amounts of the Group's interests in associates accounted for using the equity method were as follows:

Changes in Carrying Amounts of Investments Accounted for Using the Equity Method [Table 4.51]

	2009	2010
	€ million	€ million
Carrying amounts, January 1	**450**	**395**
Acquisitions	-	-
Other additions	1	-
Divestitures	-	-
Miscellaneous retirements	-	(3)
Equity-method loss after taxes	(48)	(56)
Exchange differences	(8)	18
Carrying amounts, December 31	**395**	**354**

These interests relate exclusively to the MaterialScience subgroup, which holds them for strategic reasons.

In 2000, Bayer acquired the polyols business and parts of the propylene oxide (PO) production operations of Lyondell Chemicals with the objective of ensuring access to patented technologies and safeguarding the long-term supply of PO, a starting product for polyurethane, at reasonable prices. As part of this strategy, two joint ventures were established to produce PO (PO JV Delaware, United States, in which Bayer holds a 41% interest, and Lyondell Bayer Manufacturing Maasvlakte VOF, Netherlands, in which Bayer holds a 50% interest). The production facilities of both companies are operated by Lyondell. Bayer benefits from fixed long-term supply quotas/volumes of PO based on fixed price components.

The following tables present a summary of the aggregated items of the income statements and statements of financial position of the associates that are accounted for using the equity method in the consolidated financial statements of the Bayer Group.

Aggregated Income Statement Data of Investments Accounted for Using the Equity Method [Table 4.52]

	2009	2010
	€ million	€ million
Net sales	648	1,133
Gross profit	(27)	(16)
Net loss	(95)	(93)
Share of pre-tax loss	(48)	(45)
Pre-tax loss from investments accounted for using the equity method	**(48)**	**(45)**
Pre-tax loss from write-downs/derecognition of other interests	-	(11)
Recognized pre-tax loss from investments accounted for using the equity method (equity-method loss)	**(48)**	**(56)**

Aggregated Data from the Statements of Financial Position of Investments Accounted for Using the Equity Method [Table 4.53]

	Dec. 31, 2009	Dec. 31, 2010
	€ million	€ million
Noncurrent assets	863	765
Current assets	193	237
Noncurrent liabilities	10	13
Current liabilities	171	165
Equity	875	824
Share of equity	377	348
Other	18	6
Carrying amount of investments accounted for using the equity method	**395**	**354**

The item “Other” mainly comprised differences arising from adjustments of data to Bayer’s uniform accounting policies, purchase price allocations and their amortization in income.

20. Other financial assets

Other financial assets were as follows:

Other Financial Assets [Table 4.54]

	Dec. 31, 2009		Dec. 31, 2010	
	Total	Of which current	Total	Of which current
	€ million	€ million	€ million	€ million
Loans and receivables	603	95	783	129
Available-for-sale financial assets	212	14	758	577
of which debt instruments	63	13	629	577
of which equity instruments	149	1	129	-
Held-to-maturity financial investments	107	13	101	8
Receivables from forward commodity contracts	36	34	21	19
Receivables from other derivatives	584	210	476	274
Receivables under lease agreements	25	1	33	1
Total	**1,567**	**367**	**2,172**	**1,008**

Loans mainly comprised capital of €410 million (2009: €310 million) provided to Bayer-Pensionskasse VVaG (Bayer-Pensionskasse) for its effective initial fund and jouissance right capital (Genussrechtskapital) of €150 million (2009: €150 million).

The debt instruments reported as available-for-sale financial assets mainly comprised investments in money market funds totaling €300 million (2009: €0 million) and U.S. treasury bills in the amount of €224 million (2009: €0 million).

The equity instruments reported as available-for-sale financial assets included €54 million (2009: €58 million) in instruments whose fair value could not be determined from a stock exchange or other market price or by discounting reliably determinable future cash flows. These equity instruments were recognized at amortized cost.

In 2010, loans and receivables were written down by €0 million (2009: €1 million) and available-for-sale financial assets by €11 million (2009: €15 million). Other financial assets of €4 million (2009: €13 million) on which no write-downs had been made were overdue on the closing date.

Further information on the accounting for receivables from derivatives is given in Note [30].

Receivables under lease agreements relate to finance leases where Bayer is the lessor and the lessee is the economic owner of the leased assets. These receivables comprised expected lease payments of €77 million (2009: €30 million), including €44 million (2009: €5 million) in interest. Of the expected lease payments, €3 million (2009: €2 million) is due within one year, €30 million (2009: €28 million) within the following four years and €44 million (2009: €0 million) in subsequent years.

21. Inventories

Inventories were as follows:

Inventories [Table 4.55]

	Dec. 31, 2009	Dec. 31, 2010
	€ million	€ million
Raw materials and supplies	1,130	1,064
Work in process, finished goods and goods purchased for resale	4,953	5,033
Advance payments	8	7
Total	**6,091**	**6,104**

Write-downs of inventories were reflected in the cost of goods sold. In 2009, some of them were included as special items in other operating expenses. They were comprised as follows:

Write-Downs of Inventories [Table 4.56]

	2009	2010
	€ million	€ million
Accumulated write-downs, January 1	**(368)**	**(331)**
Changes in scope of consolidation	-	-
Additions expensed in the reporting period	(150)	(136)
Deductions due to reversal or utilization	193	112
Exchange differences	(6)	(19)
Accumulated write-downs, December 31	**(331)**	**(374)**

22. Trade accounts receivable

Trade accounts receivable less write-downs amounted to €6,668 million (2009: €6,106 million) on the closing date, including €6,655 million (2009: €6,098 million) maturing within one year and €13 million (2009: €8 million) maturing in subsequent years.

Changes in write-downs of trade accounts receivable were as follows:

Write-Downs of Trade Accounts Receivable [Table 4.57]

	2009	2010
	€ million	€ million
Accumulated write-downs, January 1	**(256)**	**(271)**
Changes in scope of consolidation	-	-
Additions expensed in the reporting period	(85)	(76)
Deductions due to write-backs or utilization	96	94
Exchange differences	(26)	(25)
Accumulated write-downs, December 31	**(271)**	**(278)**

Trade accounts receivable amounting to €6,541 million (2009: €5,938 million) had not been individually written down. Of this amount, €920 million (2009: €1,057 million) was overdue or due immediately on the closing date.

The amounts of written-down and overdue trade accounts receivable are summarized in the following table:

Written-Down and Overdue Trade Accounts Receivable [Table 4.58]

	Carrying amount	Of which neither written down nor overdue at the closing date	Of which not written down but overdue at the closing date				Of which written down at the closing date
			up to 3 months*	3–6 months	6–12 months	more than 12 months	
	€ million	€ million	€ million	€ million	€ million	€ million	€ million
December 31, 2010	6,668	5,621	583	108	101	128	127
December 31, 2009	6,106	4,881	617	136	137	167	168

* The figures in the column "up to 3 months" include receivables due immediately.

The receivables that had not been written down were deemed to be collectible on the basis of established credit management processes and individual assessments of customer risks. The write-downs included an appropriate allowance for default risk. Selected credit portfolios were covered by credit insurance. In addition, a small amount of receivables was collateralized by liens on land or buildings.

23. Other receivables

Other receivables, after write-downs of €64 million (2009: €11 million), are comprised as follows:

Other Receivables [Table 4.59]

	Dec. 31, 2009		Dec. 31, 2010	
	Total	Of which current	Total	Of which current
	€ million	€ million	€ million	€ million
Benefit plan assets in excess of obligation	100	-	76	-
Receivables from employees	42	41	55	54
Other tax receivables	354	352	422	355
Deferred charges	200	171	233	202
Miscellaneous receivables	1,210	793	1,048	725
Total	**1,906**	**1,357**	**1,834**	**1,336**

The miscellaneous receivables included claims of €159 million (2009: €181 million) for insurance payments. A miscellaneous receivable of €228 million (2009: €363 million) also existed from the sale of the hematological oncology portfolio – Campath®/ MabCampath®, Fludara® and Leukine® – to Genzyme Corp., United States. The decrease in the amount of this receivable was mainly due to revenue-based payments received during the year and also to a €56 million write-down.

Of the €823 million (2009: €970 million) in financial receivables included in other receivables, €588 million (2009: €958 million) had not been written down. Of this amount, €138 million (2009: €130 million) was overdue or due immediately on the closing date.

The amounts of written-down and overdue financial receivables included in other receivables are summarized in the following table:

Written-Down and Overdue Other Financial Receivables [Table 4.60]

	Carrying amount	Of which neither written down nor overdue at the closing date	Of which not written down but overdue at the closing date: up to 3 months*	3–6 months	6–12 months	more than 12 months	Of which written down at the closing date
	€ million	€ million	€ million	€ million	€ million	€ million	€ million
December 31, 2010	823	450	100	8	11	19	235
December 31, 2009	970	828	88	10	12	20	12

* The figures in the column "up to 3 months" include receivables due immediately.

24. Equity

The foremost objectives of our financial management are to help bring about a sustained increase in the value of the Bayer Group for the benefit of all stakeholders, and to ensure the Group's creditworthiness and liquidity. The pursuit of these goals means reducing our cost of capital, optimizing our capital structure, improving our financing cash flow and effectively managing risk.

The rating agencies commissioned by Bayer assess the financial risks of the Bayer Group as follows:

Rating [Table 4.61]

	Long-term rating	Outlook	Short-term rating
Standard & Poor's	A-	negative	A-2
Moody's	A3	stable	P-2

These investment-grade ratings reflect the company's good creditworthiness and ensure access to a broad investor base for financing purposes. Bayer's capital management strategy is based on the debt ratios published by the rating agencies, which – by somewhat differing methods – look at the cash flow for a given period in relation to debt. The financial strategy of the Bayer Group focuses on an "A" rating and on preserving our financial flexibility. Apart from utilizing cash inflows from our operating business to reduce net financial debt, we are implementing our financial strategy by way of vehicles such as the subordinated hybrid bond issued in July 2005, the authorized and conditional capital amounts created by resolutions of the Annual Stockholders' Meeting, and a potential share buyback program. Bayer's Articles of Incorporation do not stipulate capital ratios.

The changes in the various components of equity during 2009 and 2010 are shown in the Bayer Group statement of changes in equity.

CAPITAL STOCK

The capital stock of Bayer AG on December 31, 2010 amounted to €2,117 million (2009: €2,117 million), divided into 826,947,808 (2009: 826,947,808) registered shares, and was fully paid in. Each share confers one voting right.

AUTHORIZED CAPITAL

The Authorized Capital I amounting to €465 million was rescinded because it would have expired on April 27, 2011, prior to the planned date of the 2011 Annual Stockholders' Meeting.

New authorized capital of €530 million was approved by the Annual Stockholders' Meeting on April 30, 2010. It expires on April 29, 2015. It can be used to increase the capital stock by issuing new no-par registered shares against cash contributions and/or contributions in kind, but capital increases against contributions in kind may not exceed a total of €423 million (Authorized Capital I).

Stockholders must normally be granted subscription rights. However, subject to the approval of the Supervisory Board, the Board of Management is authorized to exclude subscription rights for the stockholders with respect to any excess shares remaining after rights have been allocated (fractional amounts) and also to the extent necessary to grant subscription rights for new shares to holders of bonds with optional or mandatory warrants or conversion rights issued by Bayer AG or its Group companies who would be entitled to subscription rights upon the exercise of such optional or mandatory warrants or conversion rights. In addition, the Board of Management is authorized to exclude stockholders' subscription rights, subject to the approval of the Supervisory Board, in cases where an increase in capital against contributions in kind is carried out for the purpose of acquiring companies, parts of companies, participating interests in companies or other assets. The amount of capital stock represented by shares issued in the above cases against cash contributions and/or contributions in kind without granting subscription rights to the stockholders must not exceed a total of 20% of the capital stock that existed on the date the authorized capital was approved by the Annual Stockholders' Meeting.

The Authorized Capital II amounting to €195 million, which would have expired on April 26, 2012, was rescinded because, following the increase in the capital stock through the issuance of new shares, it amounted to less than 10% of the capital stock. Therefore it would not have been possible to issue new shares that raise the capital stock by the full amount of 10% of the existing capital stock for which stockholders' subscription rights can be excluded when new shares are issued at a price not significantly below the market price pursuant to Section 186 Paragraph 3 Sentence 4 of the German Stock Corporation Act.

It was replaced by new authorized capital approved by the Annual Stockholders' Meeting on April 30, 2010. The Board of Management is authorized until April 29, 2015 to increase the capital stock, subject to the approval of the Supervisory Board, by a total amount of up to €212 million by issuing new no-par registered shares against cash contributions (Authorized Capital II). Under the resolution adopted by the Annual Stockholders' Meeting, stockholders must normally be granted subscription rights. However, the Board of Management is authorized to exclude subscription rights for stockholders with respect to one or more capital increases out of the Authorized Capital II, subject to the approval of the Supervisory Board, provided that such capital increase or the total of such capital increases does not exceed 10% of the capital stock existing at the time this authorization becomes effective or the time it is exercised, for purposes of issuing new shares against cash contributions at a price that is not significantly below the market price of the company's shares of the same category that are already listed on the stock exchange on the date the issue price is finally determined. Any treasury shares acquired on the basis of an authorization of the Stockholders' Meeting and sold pursuant to Section 71 Paragraph 1 No. 8 Sentence 5 of the German Stock Corporation Act in conjunction with Section 186 Paragraph 3 Sentence 4 of the German Stock Corporation Act during the term of this authorization shall count toward the above 10% limit. Shares issued or to be issued to service bonds with optional or mandatory warrants or conversion rights shall also count toward this limit where such bonds were issued during the term of this authorization and stockholders' subscription rights were excluded by application of Section 186 Paragraph 3 Sentence 4 of the German Stock Corporation Act.

Neither of these authorized capital amounts has been utilized so far.

CONDITIONAL CAPITAL

The two existing amounts of conditional capital approved by the Annual Stockholders' Meetings of April 28, 2006 and April 27, 2007 were rescinded.

The Annual Stockholders' Meeting on April 30, 2010 approved the creation of Conditional Capital 2010, authorizing a conditional increase of up to €212 million in the capital stock through the issuance of up to 82,694,750 shares. This conditional capital increase may be used to grant registered shares to the holders of warrant bonds, convertible bonds, jouissance rights (Genussrechte) or profit participation bonds (or combinations of these instruments) with optional or mandatory warrants or conversion rights, issued by Bayer AG or a Group company in which Bayer AG holds a direct or indirect interest of at least 90% on or before April 29, 2015 in accordance with authorizations granted by the Annual Stockholders' Meeting of April 30, 2010. The authorization to issue such instruments is limited to a total nominal amount of €6 billion. In principle, stockholders have a statutory right to be granted subscription rights to such instruments. However, the Board of Management is authorized to exclude subscription rights, subject to the approval of the Supervisory Board, if the instruments are issued at a price that is not significantly below the market price. The limit of 10% of the capital stock for the exclusion of stockholders' subscription rights in analogous application of Section 186 Paragraph 3 Sentence 4 of the German Stock Corporation Act may not be exceeded. Both shares and other such instruments shall count toward this limit if they were issued without granting subscription rights to the stockholders in direct or analogous application of Section 186 Paragraph 3 Sentence 4 of the German Stock Corporation Act.

Absent a further resolution of the Annual Stockholders' Meeting on the exclusion of stockholders' subscription rights, the Board of Management will only use the existing authorizations to increase the capital stock out of the Authorized Capital or the Conditional Capital – without granting subscription rights to the stockholders – up to a total amount of 20% of the capital stock that existed when the respective resolutions were adopted by the Annual Stockholders' Meeting on April 30, 2010. This 20% limit includes all issuances or sales of shares or of bonds with optional or mandatory warrants or conversion rights that are effected without granting subscription rights to the stockholders.

RETAINED EARNINGS

The retained earnings comprise prior years' undistributed income of consolidated companies and all actuarial gains and losses related to defined benefit pension plans that are not recognized in income.

ACCUMULATED OTHER COMPREHENSIVE INCOME

Accumulated other comprehensive income comprises exchange differences, the changes in fair values of cash flow hedges and available-for-sale financial assets, and the revaluation surplus. The latter results from the acquisition in 2005 of the remaining 50% interest in an OTC joint venture with Roche in the United States that was established in 1996 and the acquisition of the remaining 50% interest in BaySystems GmbH & Co. KG, Oldenburg, Germany, in 2008. An amount of €5 million (2009: €6 million) that constitutes scheduled amortization/depreciation of the respective assets and is recognized in income was transferred in 2010 from the revaluation surplus to retained earnings.

DIVIDEND

Under the German Stock Corporation Act (AktG), the dividend payment is determined by the distributable profit reported in the annual financial statements of Bayer AG, which are prepared according to the German Commercial Code. Retained earnings were diminished by payment of the dividend of €1.40 per share for 2009. The proposed dividend for the 2010 fiscal year is €1.50 per share, which would result in a total dividend payment of €1,240 million. Payment of the proposed dividend is contingent upon approval by the stockholders at the Annual Stockholders' Meeting and has not been recognized as a liability in the consolidated financial statements of the Bayer Group.

NON-CONTROLLING INTEREST

The changes in the non-controlling interest in Group equity during 2010 and 2009 are shown in the following table:

Components of Non-Controlling Interest in Equity [Table 4.62]

	2009	2010
	€ million	€ million
January 1	**77**	**54**
Changes in equity not recognized in net income		
Changes in fair value of securities and cash flow hedges	-	-
Changes in actuarial gains/losses on defined benefit obligations for pensions and other post-employment benefits	-	-
Exchange differences on translation of operations outside the eurozone	2	6
Deferred taxes on valuation adjustments recognized directly in equity	-	-
Other changes in equity	(21)	(3)
Dividend payments	(4)	(3)
Changes in equity recognized in net income	**-**	**9**
December 31	**54**	**63**

Non-controlling interests mainly comprise the equity of Bayer CropScience Limited, India; Sumika Bayer Urethane Co. Ltd., Japan; Bayer East Africa Ltd., Kenya; Bayer Jinling Polyurethane Co. Ltd., China; BaySystems Pearl FZCO, United Arab Emirates; and Bayer S.A., Peru.

25. Provisions for pensions and other post-employment benefits

The provisions for pensions and other post-employment benefits in Germany and other countries as of the closing date were as shown in the following table:

Provisions for Pensions and Other Post-Employment Benefits [Table 4.63]

	Pensions		Other post-employment benefits		Total	
	Dec. 31, 2009	Dec. 31, 2010	Dec. 31, 2009	Dec. 31, 2010	Dec. 31, 2009	Dec. 31, 2010
	€ million	€ million	€ million	€ million	€ million	€ million
Germany	4,866	5,632	71	67	4,937	5,699
Other countries	1,130	1,143	450	463	1,580	1,606
Total	**5,996**	**6,775**	**521**	**530**	**6,517**	**7,305**

The expenses for defined benefit pension plans and other post-employment benefit obligations were comprised as follows:

Expenses for Defined Benefit Pension Plans [Table 4.64]

	Germany		Other countries		Total	
	2009	2010	2009	2010	2009	2010
	€ million	€ million	€ million	€ million	€ million	€ million
Current service cost	108	144	47	49	155	193
Past service cost	(14)	(2)	(2)	-	(16)	(2)
Interest cost	611	593	240	257	851	850
Expected return on plan assets	(300)	(305)	(200)	(248)	(500)	(553)
Plan curtailments	-	-	2	2	2	2
Plan settlements	-	-	(1)	-	(1)	-
Total	**405**	**430**	**86**	**60**	**491**	**490**

Expenses for Other Post-Employment Benefit Obligations [Table 4.65]

	Germany		Other countries		Total	
	2009	2010	2009	2010	2009	2010
	€ million	€ million	€ million	€ million	€ million	€ million
Current service cost	6	11	18	22	24	33
Past service cost	-	-	1	-	1	-
Interest cost	3	8	47	49	50	57
Expected return on plan assets	-	-	(21)	(26)	(21)	(26)
Plan curtailments	-	-	(1)	2	(1)	2
Plan settlements	-	-	-	-	-	-
Total	**9**	**19**	**44**	**47**	**53**	**66**

The unfunded and funded defined benefit obligations developed as follows:

Status of Unfunded and Funded Defined Benefit Obligations

	Germany			
	Pension obligations		Other post-employment benefit obligations	
	2009	2010	2009	2010
	€ million	€ million	€ million	€ million
Defined benefit obligation as of January 1	**10,319**	**10,937**	**109**	**71**
Divestitures/changes in scope of consolidation	25	(2)	-	-
Current service cost	108	144	6	11
Interest cost	611	593	3	8
Employee contributions	25	34	-	-
Past service cost	(14)	(2)	-	-
Plan settlements	-	-	-	-
Net actuarial (gain) loss	432	834	-	-
Benefits paid	(569)	(585)	(47)	(23)
Plan curtailments	-	-	-	-
Exchange differences	-	-	-	-
Defined benefit obligation as of December 31	**10,937**	**11,953**	**71**	**67**
Fair value of plan assets as of January 1	**6,032**	**6,092**	**-**	**-**
Divestitures/changes in scope of consolidation	15	-	-	-
Expected return on plan assets	300	305	-	-
Net actuarial gain (loss)	(14)	(14)	-	-
Plan settlements	-	-	-	-
Employer contributions	303	510	47	23
Employee contributions	25	34	-	-
Benefits paid	(569)	(585)	(47)	(23)
Exchange differences	-	-	-	-
Fair value of plan assets as of December 31	**6,092**	**6,342**	**-**	**-**
Funded status as of December 31	**(4,845)**	**(5,611)**	**(71)**	**(67)**
Unrecognized past service cost	-	-	-	-
Asset limitation due to uncertainty of obtaining future benefits	-	-	-	-
Net recognized liability as of December 31	**(4,845)**	**(5,611)**	**(71)**	**(67)**
Amounts recognized in the statement of financial position				
Benefit plan assets in excess of obligation	21	21	-	-
Provisions for pensions and other post-employment benefits	(4,866)	(5,632)	(71)	(67)
Net recognized liability as of December 31	**(4,845)**	**(5,611)**	**(71)**	**(67)**

[Table 4.66]

	Other Countries				Total			
	Pension obligations		Other post-employment benefit obligations		Pension obligations		Other post-employment benefit obligations	
	2009	2010	2009	2010	2009	2010	2009	2010
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
	3,752	**4,173**	**730**	**750**	**14,071**	**15,110**	**839**	**821**
	-	-	-	-	25	(2)	-	-
	47	49	18	22	155	193	24	33
	240	257	47	49	851	850	50	57
	4	5	-	-	29	39	-	-
	(2)	4	1	-	(16)	2	1	-
	(1)	(2)	-	-	(1)	(2)	-	-
	309	335	4	(48)	741	1,169	4	(48)
	(209)	(224)	(42)	(39)	(778)	(809)	(89)	(62)
	2	2	(1)	2	2	2	(1)	2
	31	281	(7)	63	31	281	(7)	63
	4,173	**4,880**	**750**	**799**	**15,110**	**16,833**	**821**	**866**
	2,651	**3,137**	**251**	**304**	**8,683**	**9,229**	**251**	**304**
	-	-	-	-	15	-	-	-
	200	248	21	26	500	553	21	26
	280	153	38	15	266	139	38	15
	(2)	(2)	-	-	(2)	(2)	-	-
	141	276	45	9	444	786	92	32
	4	5	-	-	29	39	-	-
	(209)	(224)	(42)	(39)	(778)	(809)	(89)	(62)
	72	212	(9)	24	72	212	(9)	24
	3,137	**3,805**	**304**	**339**	**9,229**	**10,147**	**304**	**339**
	(1,036)	**(1,075)**	**(446)**	**(460)**	**(5,881)**	**(6,686)**	**(517)**	**(527)**
	(1)	2	(4)	(3)	(1)	2	(4)	(3)
	(14)	(15)	-	-	(14)	(15)	-	-
	(1,051)	**(1,088)**	**(450)**	**(463)**	**(5,896)**	**(6,699)**	**(521)**	**(530)**
	79	55	-	-	100	76	-	-
	(1,130)	(1,143)	(450)	(463)	(5,996)	(6,775)	(521)	(530)
	(1,051)	**(1,088)**	**(450)**	**(463)**	**(5,896)**	**(6,699)**	**(521)**	**(530)**

Of the defined benefit obligation for pensions, €5,487 million (2009: €5,006 million) related to unfunded benefit obligations and €11,346 million (2009: €10,104 million) to funded benefit obligations. Of the defined benefit obligation for other post-employment benefits, €190 million (2009: €176 million) related to unfunded benefit obligations and €676 million (2009: €645 million) to funded benefit obligations.

Total overfunding of individual funded pension plans amounted to €92 million (2009: €111 million), underfunding to €1,291 million (2009: €986 million). Individual funded plans for other post-employment benefits were underfunded by a total of €337 million (2009: €341 million). Other unfunded post-employment benefit obligations related mainly to early retirement benefits in Germany.

The Bayer Group has set up funded pension plans for its employees in many countries. Since the legal and tax requirements and economic conditions may vary considerably between countries, assets are managed according to country-specific principles. For plan assets, stress scenarios are simulated and other risk analyses (such as value at risk) undertaken with the aid of risk management systems. Other determinants are risk diversification, portfolio efficiency and a country-specific and global balance of opportunity and risk designed primarily to ensure the payment of all future benefits.

Bayer-Pensionskasse VVaG (Bayer-Pensionskasse) in Germany is by far the most significant of the pension funds. This legally independent fund is a private insurance company and is therefore subject to the German Law on the Supervision of Private Insurance Companies. Under the German law on secondary liability, Bayer guarantees the pension entitlements of employees who are members of benefit plans in Germany. Bayer-Pensionskasse is classified as a defined benefit plan for IFRS purposes.

The investment policy of Bayer-Pensionskasse is geared to compliance with regulatory provisions and to the risk structure resulting from its obligations. In light of capital market movements, Bayer-Pensionskasse has therefore developed a strategic target investment portfolio aligned to its risk structure. Its investment strategy is focused primarily on stringently managing downside risks rather than on maximizing absolute returns. It is anticipated that with this investment policy, Bayer-Pensionskasse can generate a return that enables it to meet its long-term commitments.

A large proportion of the benefit obligations of Bayer Schering Pharma AG, Berlin, Germany, which was acquired in 2006, is covered by Schering Altersversorgung Treuhand Verein. Here too, the investment strategy is geared to the structure of the corresponding obligations. It permits the use of derivatives. Nearly all currency risks are fully hedged.

For plan assets in other countries as well, the key investment strategy criteria are the structure of the benefit obligations and the risk profile.

The weighted parameters used to value the plan assets to cover pensions and other post-employment benefit obligations were allocated as follows at year end:

Plan Assets to Cover Pension Obligations as of December 31 [Table 4.67]

	Germany		Other countries	
	2009	2010	2009	2010
	%	%	%	%
Equity securities	19.54	19.42	42.60	39.11
Debt securities	59.97	59.82	46.61	48.97
Real estate and special real estate funds	9.08	8.29	1.43	1.74
Other	11.41	12.47	9.36	10.18
Total	**100.00**	**100.00**	**100.00**	**100.00**

Plan Assets to Cover Other Post-Employment Benefit Obligations as of December 31 [Table 4.68]

	Germany		Other countries	
	2009	2010	2009	2010
	%	%	%	%
Equity securities	-	-	45.20	36.60
Debt securities	-	-	35.18	40.03
Real estate and special real estate funds	-	-	-	-
Other	-	-	19.62	23.37
Total	**-**	**-**	**100.00**	**100.00**

The fair value of the plan assets included real estate leased by Bayer, recognized at a fair value of €74 million (2009: €78 million), and Bayer shares held through investment funds, recognized at their market value of €24 million (2009: €30 million). The other plan assets principally comprise mortgage loans granted, other receivables, fixed-term deposits and cash and cash equivalents.

The following weighted parameters were used to value the pension obligations as of December 31 and the expense for pensions and other post-employment benefits in the respective year:

Parameters for Benefit Obligations [Table 4.69]

	Germany		Other countries		Total	
	2009	2010	2009	2010	2009	2010
	%	%	%	%	%	%
Pension obligations						
Discount rate	5.50	4.90	5.90	5.40	5.60	5.05
Projected future remuneration increases	2.50	3.00	4.15	4.25	2.95	3.35
Projected future benefit increases	1.75	1.75	3.50	3.50	2.25	2.25
Other post-employment benefit obligations						
Discount rate	3.10	3.10	6.20	5.70	5.95	5.50

Parameters for Benefit Expense [Table 4.70]

	Germany		Other countries		Total	
	2009	2010	2009	2010	2009	2010
	%	%	%	%	%	%
Pension obligations						
Discount rate	6.00	5.50	6.30	5.90	6.10	5.60
Projected future remuneration increases	3.00	2.50	4.00	4.15	3.25	2.95
Projected future benefit increases	2.00	1.75	2.95	3.50	2.25	2.25
Expected return on plan assets	5.00	4.60	7.50	7.25	5.85	5.60
Other post-employment benefit obligations						
Discount rate	6.40	3.10	6.45	6.20	6.45	5.95
Expected return on plan assets	-	-	8.25	7.95	8.25	7.95

The discount rate for pension obligations in other countries was influenced mainly by the rates of 5.2% (2009: 5.8%) and 5.5% (2009: 5.7%) applicable for the United States and the United Kingdom, respectively.

Altering individual parameters by 0.5 percentage points while leaving the other parameters unchanged would have impacted pension and other post-employment benefit obligations as of year end 2010 as follows:

Sensitivity of Benefit Obligations [Table 4.71]

	Germany		Other countries		Total	
	0.5 percentage point increase	0.5 percentage point decrease	0.5 percentage point increase	0.5 percentage point decrease	0.5 percentage point increase	0.5 percentage point decrease
	€ million	€ million	€ million	€ million	€ million	€ million
Pension obligations						
Change in discount rate	(787)	885	(299)	333	(1,086)	1,218
Change in projected future remuneration increases	57	(55)	39	(37)	96	(92)
Change in projected future benefit increases	568	(524)	93	(77)	661	(601)
Other post-employment benefit obligations						
Change in discount rate	(1)	1	(43)	47	(44)	48

Altering individual parameters by 0.5 percentage points while leaving the other parameters unchanged would impact benefit expense in 2011 as follows:

Sensitivity of Benefit Expense [Table 4.72]

	Germany		Other countries		Total	
	0.5 percentage point increase	0.5 percentage point decrease	0.5 percentage point increase	0.5 percentage point decrease	0.5 percentage point increase	0.5 percentage point decrease
	€ million	€ million	€ million	€ million	€ million	€ million
Pension obligations						
Change in discount rate	(4)	4	(14)	14	(18)	18
Change in projected future remuneration increases	6	(6)	5	(4)	11	(10)
Change in projected future benefit increases	35	(32)	4	(2)	39	(34)
Change in expected return on plan assets	(31)	31	(19)	19	(50)	50
Other post-employment benefit obligations						
Change in discount rate	-	-	-	-	-	-
Change in expected return on plan assets	-	-	(2)	2	(2)	2

Provisions are also set up for the obligations, mainly of U.S. subsidiaries, to provide post-employment benefits in the form of health care cost payments to retirees. The valuation of health care costs was based on the assumption that they will increase at a rate of 9% (assumption in 2009: 10%), which should gradually decline to 5% by 2018 (assumption in 2009: 5% by 2017). The following table shows the impact on other post-employment benefit obligations and total benefit expense of a one-percentage-point change in the assumed cost increase rates:

Sensitivity to Health Care Cost Increases [Table 4.73]

	Increase of one percentage point	Decrease of one percentage point
	€ million	€ million
Impact on other post-employment benefit obligations	86	(73)
Impact on benefit expense	8	(7)

The following payments were made in 2010 and 2009, and are expected to be made in 2011, for employer contributions to funded and unfunded pension plans that provide pensions and other post-employment benefits:

Employer Contributions Paid or Expected [Table 4.74]

	Germany			Other countries		
	2009	2010	2011 expected	2009	2010	2011 expected
	€ million	€ million	€ million	€ million	€ million	€ million
Pension obligations	303	510	395	141	276	412
Other post-employment benefit obligations	47	23	24	45	9	19
Total	**350**	**533**	**419**	**186**	**285**	**431**

Pensions and other post-employment benefits payable in the future are estimated as follows:

Future Benefit Obligations [Table 4.75]

	Germany		Other countries		Total	
	Pension obligations	Other post-employment benefit obligations	Pension obligations	Other post-employment benefit obligations	Pension obligations	Other post-employment benefit obligations
	€ million	€ million	€ million	€ million	€ million	€ million
2011	627	24	238	44	865	68
2012	640	17	235	45	875	62
2013	643	8	238	47	881	55
2014	649	6	248	50	897	56
2015	657	4	257	52	914	56
2016–2020	3,499	8	1,468	292	4,967	300

The actuarial gains and losses related to defined benefit obligations and plan assets, reflected in the statement of changes in equity and recognized in the statement of comprehensive income, were as follows:

Changes in Accumulated Actuarial Gains and Losses Related to Defined Benefit Obligations and Plan Assets

	Pension obligations Germany					Pension obligations Other countries				
	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Defined benefit obligation	11,357	10,458	10,319	10,937	11,953	4,348	3,705	3,752	4,173	4,880
Fair value of plan assets	6,053	6,165	6,032	6,092	6,342	3,804	3,568	2,651	3,137	3,805
Funded status	**(5,304)**	**(4,293)**	**(4,287)**	**(4,845)**	**(5,611)**	**(544)**	**(137)**	**(1,101)**	**(1,036)**	**(1,075)**
Accumulated actuarial gains (losses) relating to benefit obligation as of										
January 1	**(2,842)**	**(2,293)**	**(1,197)**	**(910)**	**(1,342)**	**(692)**	**(657)**	**(403)**	**(513)**	**(822)**
Changes due to divestitures and changes in scope of consolidation	1	1	-	-	-	-	-	-	-	-
Newly arisen during the year due to changes in actuarial parameters	441	1,097	450	(396)	(892)	46	299	40	(368)	(311)
Newly arisen during the year due to experience adjustments	46	(2)	(163)	(36)	58	(45)	(29)	(178)	59	(24)
Allocations to discontinued operations	61	-	-	-	-	34	-	-	-	-
Exchange differences	-	-	-	-	-	-	(16)	28	-	-
December 31	**(2,293)**	**(1,197)**	**(910)**	**(1,342)**	**(2,176)**	**(657)**	**(403)**	**(513)**	**(822)**	**(1,157)**
Accumulated actuarial gains (losses) relating to plan assets as of										
January 1	**(693)**	**(846)**	**(920)**	**(1,133)**	**(1,147)**	**(125)**	**15**	**7**	**(886)**	**(606)**
Changes due to divestitures and changes in scope of consolidation	-	4	-	-	-	-	-	-	-	-
Newly arisen during the year	(154)	(78)	(213)	(14)	(14)	159	(9)	(893)	280	153
Allocations to discontinued operations	1	-	-	-	-	(19)	-	-	-	-
Exchange differences	-	-	-	-	-	-	1	-	-	-
December 31	**(846)**	**(920)**	**(1,133)**	**(1,147)**	**(1,161)**	**15**	**7**	**(886)**	**(606)**	**(453)**

In Germany, no unrealized gains/losses exist in relation to other post-employment benefit obligations.

[Table 4.76]

	Other post-employment benefit obligations Other countries					Pension obligations Total					Other post-employment benefit obligations Total				
	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
	864	718	730	750	799	15,705	14,163	14,071	15,110	16,833	1,003	859	839	821	866
	357	339	251	304	339	9,857	9,733	8,683	9,229	10,147	357	339	251	304	339
	(507)	**(379)**	**(479)**	**(446)**	**(460)**	**(5,848)**	**(4,430)**	**(5,388)**	**(5,881)**	**(6,686)**	**(646)**	**(520)**	**(588)**	**(517)**	**(527)**
	(259)	**(311)**	**(221)**	**(195)**	**(199)**	**(3,534)**	**(2,950)**	**(1,600)**	**(1,423)**	**(2,164)**	**(259)**	**(311)**	**(221)**	**(195)**	**(199)**
	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-
	(71)	33	(10)	(8)	19	487	1,396	490	(764)	(1,203)	(71)	33	(10)	(8)	19
	17	64	36	4	29	1	(31)	(341)	23	34	17	64	36	4	29
	-	-	-	-	-	95	-	-	-	-	-	-	-	-	-
	2	(7)	-	-	-	-	(16)	28	-	-	2	(7)	-	-	-
	(311)	**(221)**	**(195)**	**(199)**	**(151)**	**(2,950)**	**(1,600)**	**(1,423)**	**(2,164)**	**(3,333)**	**(311)**	**(221)**	**(195)**	**(199)**	**(151)**
	(41)	**(24)**	**(25)**	**(162)**	**(124)**	**(818)**	**(831)**	**(913)**	**(2,019)**	**(1,753)**	**(41)**	**(24)**	**(25)**	**(162)**	**(124)**
	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-
	17	(1)	(137)	38	15	5	(87)	(1,106)	266	139	17	(1)	(137)	38	15
	-	-	-	-	-	(18)	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
	(24)	**(25)**	**(162)**	**(124)**	**(109)**	**(831)**	**(913)**	**(2,019)**	**(1,753)**	**(1,614)**	**(24)**	**(25)**	**(162)**	**(124)**	**(109)**

26. Other provisions

Changes in the various provision categories in 2010 were as follows:

Changes in Other Provisions [Table 4.77]

	Taxes	Environmental protection	Restructuring	Trade-related commitments	Litigations	Personnel commitments	Miscellaneous	Total
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
December 31, 2009	**812**	**285**	**203**	**829**	**439**	**1,646**	**391**	**4,605**
Changes in scope of consolidation	(24)	-	(5)	-	-	-	4	(25)
Additions	454	25	60	844	760	1,138	165	3,446
Utilization	(306)	(32)	(95)	(654)	(282)	(1,064)	(175)	(2,608)
Reversal	(61)	(16)	(41)	(52)	(30)	(78)	(37)	(315)
Interest cost	-	2	-	-	3	37	-	42
Exchange differences	28	17	7	61	17	50	23	203
December 31, 2010	**903**	**281**	**129**	**1,028**	**907**	**1,729**	**371**	**5,348**

The provisions recognized in the statement of financial position as of December 31, 2010 were expected to be utilized as follows:

Expected Utilization of Other Provisions [Table 4.78]

	Taxes	Environmental protection	Restructuring	Trade-related commitments	Litigations	Personnel commitments	Miscellaneous	Total
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
2011	611	86	76	1,024	655	1,170	248	3,870
2012	2	18	21	4	106	106	26	283
2013	44	32	11	-	18	75	4	184
2014	-	4	4	-	-	75	-	83
2015	92	2	4	-	3	98	20	219
2016 or later	154	139	13	-	125	205	73	709
Total	**903**	**281**	**129**	**1,028**	**907**	**1,729**	**371**	**5,348**

The provisions were partly offset by claims for refunds in the amount of €137 million (2009: €135 million), which are recognized as receivables. They related principally to claims for refunds in connection with product liability and to environmental measures.

26.1 Taxes

Provisions for taxes comprised provisions for income taxes amounting to €772 million (2009: €686 million) and provisions for other types of taxes amounting to €130 million (2009: €126 million).

Further income tax commitments according to IAS 12 existed at year end in the amount of €62 million (2009: €93 million) recognized in the statement of financial position as income tax liabilities.

26.2 Environmental protection

Provisions for environmental protection mainly relate to the rehabilitation of contaminated land, recultivation of landfills, and redevelopment and water protection measures.

26.3 Restructuring

Provisions for restructuring included €109 million (2009: €166 million) for severance payments and €20 million (2009: €37 million) for other expenses, which mainly comprised demolition and other costs related to the closure of production facilities.

A restructuring program was launched in the HealthCare subgroup in November 2010 to improve its efficiency for the long term. The measures, which relate to all functional areas, are intended to produce sustained cost savings and ensure a shift in the subgroup’s activities from the saturated markets toward the growth economies. In addition, the restructuring carried out as part of the integration of Schering AG, Berlin, Germany, led to further disbursements in 2010. Significant individual restructuring measures took place in the United States and Germany in 2010. Provisions for the above and other restructuring measures as of December 31, 2010, amounted to €77 million. Of this amount, severance payments accounted for €68 million and other restructuring expenses for €9 million.

Restructuring measures also proceeded in the CropScience subgroup, particularly in France, where several companies were merged to enable cost structures to be optimized and the efficiency of administrative functions improved. Provisions for restructuring as of December 31, 2010 amounted to €26 million, including €21 million for severance payments and €5 million for other restructuring expenses.

The restructuring measures carried out in the MaterialScience subgroup related mainly to the optimization of the production site in New Martinsville, West Virginia, United States. Provisions for restructuring as of December 31, 2010 amounted to €14 million, including €9 million for severance payments and €5 million for other restructuring expenses.

26.4 Trade-related commitments

Provisions for trade-related commitments comprise provisions for rebates, discounts and other price adjustments, product returns, outstanding invoices, pending losses and onerous contracts.

26.5 Litigations

The legal risks currently considered to be material are described in Note [32].

26.6 Personnel commitments

Provisions for personnel commitments mainly include those for variable and individual one-time payments, credit balances on long-term accounts, service awards, early retirements, pre-retirement part-time working arrangements and other personnel costs. Also reflected here are the obligations under the stock-based compensation programs.

The Bayer Group offers stock-based compensation programs collectively to different groups of employees. As required by IFRS 2 (Share-based Payment) for compensation systems involving cash settlement, awards to be made under the stock-based programs are covered by provisions in the amount of the fair value of the obligations existing as of the date of the financial statements vis-à-vis the respective employee group. All resulting valuation adjustments are recognized in the income statement.

The following table shows the changes in provisions for the various programs:

Changes in Provisions for Stock-Based Compensation Programs [Table 4.79]

	Stock Incentive Program	Stock Participation Program	Aspire I Three-Year Program	Aspire II Three-Year Program	Aspire I Four-Year Program	Aspire II Four-Year Program	Total
	€ million	€ million	€ million	€ million	€ million	€ million	€ million
December 31, 2009	**4**	**15**	**59**	**60**	**-**	**-**	**138**
Additions	-	3	14	13	5	7	42
Utilization	(1)	(6)	(36)	(40)	-	-	(83)
Reversal	(1)	(2)	(9)	(5)	-	-	(17)
Exchange differences	-	-	1	2	-	-	3
December 31, 2010	**2**	**10**	**29**	**30**	**5**	**7**	**83**

Total expense for all stock-based compensation programs in 2010 was €42 million (2009: €124 million).

The fair value of obligations under the standard stock-based compensation programs has been calculated using the Monte Carlo simulation method based on the following key parameters:

Parameters for Monte Carlo Simulation [Table 4.80]

	2009	2010
Dividend yield	2.49%	2.69%
Risk-free interest rate	1.57%	1.12%
Volatility of Bayer stock	34.93%	34.43%
Volatility of the EURO STOXX 50	29.46%	31.09%
Correlation between Bayer stock price and the EURO STOXX 50	0.68	0.69

LONG-TERM INCENTIVE PROGRAM FOR MEMBERS OF THE BOARD OF MANAGEMENT AND OTHER SENIOR EXECUTIVES (ASPIRE I)

Since 2005, members of the Board of Management and other senior executives have been entitled to participate in Aspire I on the condition that they purchase a certain number of Bayer shares – determined for each individual according to specific guidelines – and retain them for the full term of the program. A percentage of the executive's annual base salary – based on his/her position – is defined as a target for variable payments (Aspire target opportunity). Depending on the performance of Bayer stock, both in absolute terms and relative to the Dow Jones EURO STOXX 50 benchmark index during a three-year performance period (or, starting with the regular 2010 tranche, a four-year performance period), participants are granted an award of up to 300% of their individual Aspire target opportunity for four-year tranches, or 200% for three-year tranches, at the end of the program. In 2010 a final tranche with a three-year performance period was issued in addition.

LONG-TERM INCENTIVE PROGRAM FOR MIDDLE MANAGEMENT (ASPIRE II)

Also since 2005, other senior managers and middle managers have been offered Aspire II, a variant of Aspire I that does not require a personal investment in Bayer shares. In this case, the amount of the award is based entirely on the absolute performance of Bayer stock. The maximum award is 250% of each manager's Aspire target opportunity for four-year tranches, or 150% for three-year tranches.

BAYSHARE 2010

All management levels and non-managerial employees are offered an annual stock participation program known as "BayShare," under which Bayer subsidizes their personal investments in the company's stock. The discount under this program is set separately each year. In 2010 it was 20% (2009: 20%) of the subscription amount. Employees stated a fixed amount that they wished to invest in shares. The maximum subscription amount was set at €2,500 (2009: €2,500) or €5,000 (2009: €5,000) depending on the employee's position. The shares thus acquired are held in a special share deposit account and must be retained until December 31 of the year following the year of purchase.

In 2010 employees purchased a total of about 405,000 shares (2009: 395,000 shares) under the BayShare program.

STOCK-BASED COMPENSATION PROGRAMS 2000 – 2004

The stock-based compensation programs offered to the different employee groups in 2000 through 2004 all had similar basic structures. Changes in the obligations under these programs are reflected in the financial statements at fair value through profit or loss. Entitlements to awards under these programs are conditioned on retention of the Bayer shares for a certain time period. The tranches issued in 2000 expired in 2010 and resulted in payments.

The following table shows the programs issued through 2004 and still ongoing:

Stock-Based Compensation Programs 2001 – 2004 [Table 4.81]

	Stock Incentive Program	Stock Participation Program
Year of issue	2001 – 2004	2001 – 2004
Original term in years	10	10
Retention period/distribution date in years from issue date	2 / 6 / 10	2 / 6 / 10
Reference price	0	0
Performance criteria	yes	no

STOCK INCENTIVE PROGRAM

A Stock Incentive Program was offered to middle management until 2004. Participants receive a cash payment equivalent to a defined number of Bayer shares on certain dates during the ten-year duration of the program. For every ten shares held in a special account (personal investment), they receive the cash equivalent of two shares after two years, and the cash equivalent of a further four shares after six and ten years, respectively. To qualify for these payments, they must still hold the personal investment on the incentive payment dates and the percentage rise in the price of Bayer stock by the payment date must be above the performance of the Dow Jones EURO STOXX 50 since the start of the program. Participants may sell their shares during the term of the program. However, the shares sold do not qualify for incentive payments on subsequent distribution dates. The number of shares that each employee could transfer to the program was equivalent to half of his or her performance-related bonus for the preceding fiscal year.

STOCK PARTICIPATION PROGRAM

The structure of this program, which was offered to the other employee groups until 2004, is similar to the Stock Incentive Program. However, the incentive payments are based exclusively on the period for which employees hold their personal investment in Bayer shares. Incentive payments are half those allocated under the Stock Incentive Program. After two years, participants are entitled to receive the cash equivalent of one Bayer share for every ten shares held. After six and again after ten years they are entitled to receive the cash equivalent of two Bayer shares for every ten shares held on the respective dates.

26.7 Miscellaneous

Miscellaneous provisions comprise those for guarantees, product liability, asset retirement obligations (other than those included in provisions for environmental protection), contingent liabilities relating to acquisitions, and provisions for miscellaneous liabilities.

27. Financial liabilities

Financial liabilities were as follows:

Financial Liabilities [Table 4.82]

	Dec. 31, 2009		Dec. 31, 2010	
	Total	Of which current	Total	Of which current
	€ million	€ million	€ million	€ million
Bonds and notes/promissory notes	8,301	375	8,209	650
Liabilities to banks	3,251	807	2,271	760
Liabilities under finance leases	550	44	562	50
Liabilities from forward commodity contracts	91	46	66	55
Liabilities from other derivatives	578	113	529	240
Other financial liabilities	178	104	196	134
Total	**12,949**	**1,489**	**11,833**	**1,889**

The maturities of financial liabilities were as follows:

Maturities of Financial Liabilities [Table 4.83]

Maturity	Dec. 31, 2009	Maturity	Dec. 31, 2010
	€ million		€ million
2010	1,489	2011	1,889
2011	1,867	2012	2,893
2012	2,793	2013	1,513
2013	1,430	2014	1,770
2014	1,785	2015	815
2015 or later	3,585	2016 or later	2,953
Total	**12,949**	**Total**	**11,833**

The Bayer Group's financial liabilities are mostly unsecured and – with the exception of the subordinated €1,300 million hybrid bond – are of equal priority.

In addition to promissory notes in the amount of €620 million (2009: €620 million), the Bayer Group has issued the following bonds and notes:

Bonds and Notes [Table 4.84]

Effective interest rate	Stated rate		Nominal volume	Dec. 31, 2009	Dec. 31, 2010
				€ million	€ million
		Bayer AG			
6.075%	6.000%	EMTN bond 2002/2012	EUR 2,000 million	2,044	2,030
5.155%	5.000%	Hybrid bond 2005/2105 (2015)	EUR 1,300 million	1,267	1,303
4.621%	4.500%	EMTN bond 2006/2013	EUR 1,000 million	996	1,003
5.774%	5.625%	EMTN bond 2006/2018	GBP 250 million	277	287
5.541%	5.625%	EMTN bond 2006/2018 (increase)	GBP 100 million	113	117
Floating	Floating	EMTN bond 2007/2010	EUR 300 million	300	-
4.464%	4.375%	EMTN bond 2007/2011	EUR 200 million	200	200
4.038%	4.000%	EMTN bond 2008/2011	EUR 200 million	200	200
		Bayer Capital Corporation B.V.			
4.750%	4.625%	EMTN bond 2009/2014	EUR 1,300 million	1,291	1,293
		Bayer Corporation			
7.180%	7.125%	Notes 1995/2015	US$ 200 million	153	162
6.670%	6.650%	Notes 1998/2028	US$ 350 million	241	260
		Bayer Holding Ltd.			
1.654%	1.585%	EMTN bond 2007/2010	JPY 10 billion	75	-
2.006%	1.955%	EMTN bond 2007/2012	JPY 15 billion	112	138
Floating	Floating	EMTN bond 2007/2012	JPY 30 billion	225	275
Floating	Floating	EMTN bond 2008/2013	JPY 10 billion	75	92
3.654%	3.575%	EMTN bond 2008/2018	JPY 15 billion	112	137
1.459%	1.459%	EMTN bond 2010/2017	JPY 10 billion	-	92
		Total		**7,681**	**7,589**

In June 2010, Bayer Holding Ltd. issued a corporate bond under the multi-currency Euro Medium Term Notes (EMTN) program with a nominal volume of JPY 10 billion and a coupon of 1.459%. The bond has a maturity of seven years.

In March 2009, Bayer Capital Corporation B.V. issued a corporate bond under the EMTN program with a nominal volume of €1,300 million and a maturity of five and a half years. The bond bears a coupon of 4.625%.

In December 2008 Bayer AG issued a bond under the EMTN program with a nominal volume of €200 million and a 4% coupon. It was redeemed at maturity on January 27, 2011.

In June 2008 Bayer Holding Ltd. issued a floating-rate bond with a nominal volume of JPY 10 billion under the EMTN program. The bond has a maturity of five years and a variable coupon comprising the three-month JPY LIBOR plus 56 basis points. In December 2008, Bayer Holding Ltd. also issued a bond with a nominal volume of JPY 15 billion under this program. This bond has a coupon of 3.575% and matures on December 19, 2018.

In June 2007 Bayer Holding Ltd. launched bond issues under the EMTN program. These included a five-year bond with a nominal volume of JPY 15 billion and a coupon of 1.955% and a floating-rate note with a nominal volume of JPY 30 billion. The latter has a maturity of five years and a coupon comprising the three-month JPY LIBOR plus 26 basis points. A further bond with a three-year term, a nominal volume of JPY 10 billion and a coupon of 1.585% was redeemed at maturity in June 2010.

In April 2007, Bayer AG issued a four-year bond under the EMTN program with a nominal volume of €200 million and a coupon of 4.375%. At the same time a floating-rate bond was issued having a maturity of three years and a nominal volume of €300 million. The coupon was the three-month EURIBOR rate plus 10 basis points. The latter bond was redeemed at maturity in April 2010.

In May 2006 Bayer AG launched a bond with a nominal volume of €1,000 million, a maturity of seven years and a coupon of 4.5% along with a sterling (GBP) bond with a nominal volume of GBP 250 million under its multi-currency EMTN program as part of the financing of the Schering acquisition. A second tranche of the latter bond in the amount of GBP 100 million was issued in the same year. The sterling bond has a coupon of 5.625% and matures in 2018. The entire issue has been swapped into euros.

In July 2005, Bayer AG issued a 100-year subordinated hybrid bond with a volume of €1,300 million. This issue matures in 2105 and has a fixed coupon of 5% in the first ten years. Thereafter, interest is calculated quarterly at a floating rate (three-month EURIBOR plus 280 basis points). After the first ten years, Bayer AG has a quarterly option to redeem the bonds at face value. The coupon is payable in arrears. This bond is treated as 75% equity by Moody's and as 50% equity by Standard & Poor's and therefore improves the Bayer Group's rating-specific debt indicators.

In April 2002, Bayer AG issued a ten-year bond with a nominal volume of €2,000 million and a fixed coupon of 6% under the EMTN program. Interest is paid annually in arrears.

In February 1998, Bayer Corporation issued notes with a nominal volume of US$350 million to eligible institutional investors. The notes have a maturity of 30 years and a coupon of 6.65%. Interest is paid semi-annually. In September 1995, Bayer Corporation issued notes with a nominal volume of US$200 million and a 7.125% coupon. These 20-year notes mature in October 2015. Interest is paid semi-annually in April and October.

Bayer AG guarantees all the bonds issued by its subsidiaries.

The long-term liabilities to banks principally comprised bank loans to foreign subsidiaries. The €0.9 billion of the syndicated loan raised in 2006 in connection with the acquisition of Schering AG, Berlin, Germany, that remained outstanding as of December 31, 2009, was repaid in full in September 2010.

As of December 31, 2010, the Group had credit facilities at its disposal totaling €6.6 billion (2009: €7.2 billion), of which €2.3 billion (2009: €3.3 billion) was used and €4.3 billion (2009: €3.9 billion) was unused and thus available for borrowing on an unsecured basis.

Lease payments totaling €704 million (2009: €704 million), including €142 million (2009: €154 million) in interest, are to be made under finance leases to the respective lessors in future years.

The liabilities under finance leases mature as follows:

Leasing Liabilities [Table 4.85]

	Dec. 31, 2009				Dec. 31, 2010		
Maturity	Lease payments	Interest component	Liabilities under finance leases	Maturity	Lease payments	Interest component	Liabilities under finance leases
	€ million	€ million	€ million		€ million	€ million	€ million
2010	71	27	44	2011	79	29	50
2011	67	25	42	2012	66	25	41
2012	58	23	35	2013	236	20	216
2013	217	18	199	2014	40	12	28
2014	36	11	25	2015	34	11	23
2015 or later	255	50	205	2016 or later	249	45	204
Total	**704**	**154**	**550**	**Total**	**704**	**142**	**562**

Further information on the accounting for liabilities from derivatives is given in Note [30].

28. Trade accounts payable

Trade accounts were payable mainly to third parties. As of December 31, 2010, they included €3,461 million (2009: €2,720 million) due within one year and €36 million (2009: €15 million) due after one year.

29. Other liabilities

Other liabilities comprised:

Other Liabilities [Table 4.86]

	Dec. 31, 2009		Dec. 31, 2010	
	Total	Of which current	Total	Of which current
	€ million	€ million	€ million	€ million
Accrued interest on liabilities	255	242	257	246
Liabilities to employees	160	132	143	120
Liabilities for social expenses	214	191	174	152
Other tax liabilities	271	271	264	264
Liabilities to non-controlling interest	78	-	67	-
Deferred income	345	172	341	103
Miscellaneous liabilities	659	559	742	632
Total	**1,982**	**1,567**	**1,988**	**1,517**

Liabilities for social expenses included, in particular, social insurance contributions that had not been paid by the closing date.

The €67 million (2009: €78 million) in liabilities to non-controlling interest included the third-party share of the equity of Currenta GmbH & Co. OHG and its subsidiaries Chemion Logistik GmbH and TECTRION GmbH.

The deferred income included €77 million (2009: €63 million) in grants and subsidies received from governments, of which €9 million (2009: €12 million) was reversed and recognized in income.

30. Financial instruments

The system used by the Bayer Group to manage credit risk, liquidity risk and the various types of market risks (interest-rate risk, currency risk and other price risks), together with its objectives, methods and procedures, is outlined in the Risk Report, which forms part of the Management Report.

30.1 Information on financial instruments by category

The following table shows the carrying amounts and fair values of financial assets and liabilities by category of financial instrument and a reconciliation to the corresponding line item in the statements of financial position. Since the line items “Other receivables,” “Trade accounts payable” and “Other liabilities” contain both financial instruments and non-financial assets or liabilities (such as other tax receivables or advance payments for services to be received in the future), the reconciliation is shown in the column headed “Non-financial assets/liabilities.”

Carrying Amounts and Fair Values of Financial Instruments

	Dec. 31, 2009						
	Carried at amortized cost		Carried at fair value			Non-financial assets/ liabilities	
			Based on quoted prices	Based on market-derived data	Based on individual valuation parameters		
	Carrying amount Dec. 31, 2009	Fair value (for information)	Carrying amount	Carrying amount	Carrying amount	Carrying amount	Carrying amount in the statement of financial position
	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Trade accounts receivable	6,106						6,106
Loans and receivables	6,106	6,106					6,106
Other financial assets	793		127	605	42		1,567
Loans and receivables	628	700					628
Available-for-sale financial assets	58		127		27		212
Held-to-maturity financial assets	107	111					107
Derivatives that qualify for hedge accounting				218			218
Derivatives that do not qualify for hedge accounting				387	15		402
Other receivables	970					936	1,906
Loans and receivables	970	971					970
Non-financial assets						936	936
Cash and cash equivalents	2,725						2,725
Loans and receivables	2,725	2,725					2,725
Total financial assets	**10,594**		**127**	**605**	**42**		**11,368**
of which loans and receivables	10,429						10,429
Financial liabilities	12,280			669			12,949
Carried at amortized cost	12,280	13,072					12,280
Derivatives that qualify for hedge accounting				235			235
Derivatives that do not qualify for hedge accounting				434			434
Trade accounts payable	2,571					164	2,735
Carried at amortized cost	2,571	2,571					2,571
Non-financial liabilities						164	164
Other liabilities	1,033			45	4	900	1,982
Carried at amortized cost	1,033	1,033					1,033
Derivatives that qualify for hedge accounting				37			37
Derivatives that do not qualify for hedge accounting				8	4		12
Non-financial liabilities						900	900
Total financial liabilities	**15,884**			**714**	**4**		**16,602**
of which carried at amortized cost	15,884						15,884
of which derivatives that qualify for hedge accounting				272			272
of which derivatives that do not qualify for hedge accounting				442	4		446

[Table 4.87]

Dec.31, 2010						
Carried at amortized cost		Carried at fair value			Non-financial assets/ liabilities	
Carrying amount Dec. 31, 2010	Fair value (for information)	Based on quoted prices Carrying amount	Based on market-derived data Carrying amount	Based on individual measurement parameters Carrying amount	Carrying amount	Carrying amount in the statement of financial position
€ million	€ million	€ million	€ million	€ million	€ million	€ million
6,668						6,668
6,668	6,668					6,668
971		701	476	24		2,172
816	821					816
54		701		3		758
101	105					101
			201			201
			275	21		296
823					1,011	1,834
823	823					823
					1,011	1,011
2,840						2,840
2,840	2,840					2,840
11,302		**701**	**476**	**24**		**12,503**
11,147						11,147
11,238			595			11,833
11,238	12,061					11,238
			252			252
			343			343
3,165					332	3,497
3,165	3,165					3,165
					332	332
1,029			111	5	843	1,988
1,029	1,029					1,029
			86			86
			25	5		30
					843	843
15,432			**706**	**5**		**16,143**
15,432						15,432
			338			338
			368	5		373

Loans and receivables and liabilities carried at amortized cost also include receivables and liabilities under finance leases where Bayer is the lessor or lessee and which therefore have to be measured in accordance with IAS 17.

The fair value stated for receivables, loans, held-to-maturity financial investments and primary liabilities is the present value of the respective future cash flows. This is determined by discounting the cash flows at a closing-date interest rate that takes into account the term of the assets or liabilities and the creditworthiness of the counterparty. If a market price is available, however, this is deemed to be the fair value.

Because of the short maturities of most trade accounts receivable and payable, other receivables and liabilities, and cash and cash equivalents, their carrying amounts at the closing date do not differ significantly from the fair values.

Income, expense, gains and losses on financial instruments can be assigned to the following categories:

Income, Expense, Gains and Losses on Financial Instruments [Table 4.88]

	2010					
	Loans and receivables	Held-to-maturity financial investments	Available-for-sale financial assets	Held for trading (derivatives only)	Liabilities carried at amortized cost	Total
	€ million	€ million	€ million	€ million	€ million	€ million
Interest income	56	3	1	152	119	331
Interest expense	-	-	-	(180)	(636)	(816)
Income from affiliated companies	-	-	6	-	-	6
Changes in fair value	-	-	-	(16)	-	(16)
Expenses from write-downs	(141)	-	(11)	-	-	(152)
Income from write-backs	53	-	-	-	-	53
Gains/losses from retirements	-	-	2	-	-	2
Other non-operating income and expenses	(1)	-	-	-	(3)	(4)
Net result	**(33)**	**3**	**(2)**	**(44)**	**(520)**	**(596)**

Income, Expense, Gains and Losses on Financial Instruments (Previous Year) [Table 4.89]

	2009					
	Loans and receivables	Held-to-maturity financial investments	Available-for-sale financial assets	Held for trading (derivatives only)	Liabilities carried at amortized cost	Total
	€ million	€ million	€ million	€ million	€ million	€ million
Interest income	58	3	1	490	128	680
Interest expense	-	-	-	(490)	(795)	(1,285)
Income from affiliated companies	-	-	5	-	-	5
Changes in fair value	-	-	-	(62)	-	(62)
Expenses from write-downs	(107)	-	(15)	-	-	(122)
Income from write-backs	63	-	-	-	-	63
Gains/losses from retirements	-	-	(1)	-	-	(1)
Other non-operating income and expenses	2	-	(2)	-	(5)	(5)
Net result	**16**	**3**	**(12)**	**(62)**	**(672)**	**(727)**

The column headed "Held for trading" consisted almost entirely of interest income and expenses relating to interest-rate and cross-currency interest-rate hedges that did not qualify for hedge accounting.

The net amount of financial assets and liabilities recognized at fair value based on individual measurement parameters at the beginning of 2010 was €38 million (2009: €56 million). The carrying amount in the statement of financial position at the end of 2010 was €19 million (2009: €38 million), following €5 million (2009: €1 million) in fair value changes recognized in the income statement, €28 million (2009: €18 million) in retirements and €4 million (2009: minus €1 million) in value changes recognized outside profit or loss. Of the value changes recognized in income, €6 million (2009: €10 million) related to assets or liabilities still recognized in the statement of financial position at the end of the year, and minus €1 million (2009: minus €9 million) to retired assets and liabilities. There were also divestment gains of €2 million (2009: €4 million).

30.2 Maturity analysis

As of the closing date, the liquidity risk to which the Bayer Group was exposed from its financial instruments comprised obligations relating to future interest and repayment installments for financial liabilities and the liquidity risk arising from derivatives, as shown in the table in Note [30.3].

There was also a liquidity risk from an as yet unpaid €390 million (2009: €490 million) portion of the effective initial fund of Bayer-Pensionskasse, which may result in further payments by Bayer AG in subsequent years. This amount was reported under loan commitments.

Maturity Analysis of Financial Instruments

	Dec. 31, 2010	Cash flows January–March 2011		Cash flows April–December 2011	
	Carrying amount	Interest	Repayment	Interest	Repayment
	€ million	€ million	€ million	€ million	€ million
Financial liabilities					
Bonds and notes/promissory notes*	8,209	4	200	176	450
Liabilities to banks	2,271	9	254	40	506
Remaining liabilities	758	13	140	20	44
Trade accounts payable	3,165	-	2,984	-	162
Other liabilities					
Accrued interest on liabilities	257	60	-	186	-
Remaining liabilities	772	7	576	1	64
Liabilities from derivatives					
Derivatives that qualify for hedge accounting	338	-	53	13	73
Derivatives that do not qualify for hedge accounting	373	(8)	146	76	47
Receivables from derivatives					
Derivatives that qualify for hedge accounting	201	(10)	13	74	52
Derivatives that do not qualify for hedge accounting	296	(7)	33	67	75
Loan commitments	-	-	-	-	390
Financial guarantees	-	-	12	-	103

*Repayment of the €1,300 million 100-year hybrid bond is reflected at the earliest possible repayment date in 2015.

	Dec. 31, 2009	Cash flows January–March 2010		Cash flows April–December 2010	
	Carrying amount	Interest	Repayment	Interest	Repayment
	€ million	€ million	€ million	€ million	€ million
Financial liabilities					
Bonds and notes/promissory notes	8,301	4	-	171	375
Liabilities to banks	3,251	24	367	76	439
Remaining liabilities	728	9	107	18	41
Trade accounts payable	2,571	-	2,435	-	122
Other liabilities					
Accrued interest on liabilities	255	57	-	186	-
Remaining liabilities	778	2	540	2	73
Liabilities from derivatives					
Derivatives that qualify for hedge accounting	272	37	23	1	12
Derivatives that do not qualify for hedge accounting	446	14	50	29	50
Receivables from derivatives					
Derivatives that qualify for hedge accounting	218	(9)	38	93	68
Derivatives that do not qualify for hedge accounting	402	(9)	22	23	27
Loan commitments	-	-	-	-	490
Financial guarantees	-	-	12	-	-

2009 figures restated

[Table 4.90]

	Cash flows 2012		Cash flows 2013		Cash flows 2014		Cash flows 2015		Cash flows 2016-2020		Cash flows after 2020	
	Interest	Repayment	Interest	Repayment	Interest	Repayment	Interest	Repayment	Interest	Repayment	Interest	Repayment
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
	368	2,414	246	1,092	199	1,550	126	1,450	187	757	124	262
	45	266	47	192	41	131	35	616	19	307	-	-
	25	42	20	218	12	61	11	43	34	109	10	106
	-	12	-	6	-	1	-	-	-	-	-	-
	2	-	1	-	1	-	1	-	6	-	-	-
	1	31	-	10	-	5	-	6	-	9	-	71
	5	40	1	3	1	36	3	-	9	110	-	-
	76	10	13	1	7	-	8	-	-	1	-	-
	52	2	20	-	5	-	-	-	-	-	-	-
	70	23	12	2	6	3	7	2	-	8	-	4
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-

	Cash flows 2011		Cash flows 2012		Cash flows 2013		Cash flows 2014		Cash flows 2015–2019		Cash flows after 2019	
	Interest	Repayment	Interest	Repayment	Interest	Repayment	Interest	Repayment	Interest	Repayment	Interest	Repayment
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
	392	650	364	2,338	243	1,075	195	1,550	282	2,066	137	243
	42	1,113	52	160	48	152	43	181	42	837	-	-
	26	77	23	37	18	201	11	56	39	145	15	69
	-	4	-	10	-	-	-	1	-	-	-	-
	-	-	12	-	-	-	-	-	-	-	-	-
	2	18	1	47	-	4	-	2	-	2	-	93
	20	28	15	29	4	4	13	-	14	123	-	-
	166	28	86	3	12	-	7	-	16	1	-	-
	29	-	30	-	2	-	(13)	-	(7)	-	-	-
	162	62	85	2	11	2	4	1	11	6	-	3
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-

30.3 Information on derivatives

Interest rate swaps are used to eliminate the risk of fluctuations in the market value of certain fixed-interest borrowings and to obtain a variable interest rate. The principal borrowings concerned are the €2 billion bond issued in 2002, the €1.3 billion bond issued in 2005 and the €1 billion bond issued in 2006. Hedge accounting is applied to the respective borrowings and hedging instruments (fair value hedge).

Gains of €25 million (2009: €45 million) were recorded on fair value hedging instruments in 2010. Losses of €25 million (2009: €44 million) were recorded on the underlying hedged items.

Fluctuations in future cash flows resulting from forecasted foreign currency transactions are avoided partly through derivative contracts, most of which are designated as cash flow hedges. Hedging contracts, some of which are designated as cash flow hedges, are also used to partly reduce exposure to fluctuations in future cash flows resulting from price changes on procurement markets. The notional volumes in these two categories are €4,399 million and €173 million (2009: €3,523 million and €323 million), respectively.

Accumulated other comprehensive income decreased by €75 million after taxes in 2010 due to negative changes in the fair values of derivatives designated as cash flow hedges (2009: increased by €55 million due to positive changes). In 2010, an amount of €18 million (2009: €10 million), representing fair value changes of derivatives designated as cash flow hedges, which originally had been recognized in accumulated other comprehensive income, was expensed to the income statement. Similarly, pro-rated deferred taxes of €6 million (2009: €4 million) previously reflected in accumulated other comprehensive income were recognized as tax income. No material ineffective portions of hedges had to be recognized in the income statement in 2010 or 2009.

The market values of contracts existing at year end in the major categories were as follows:

Fair Values of Derivatives [Table 4.91]

	Dec. 31, 2009			Dec. 31, 2010		
		Fair value			Fair value	
	Notional amount*	Positive fair value	Negative fair value	Notional amount*	Positive fair value	Negative fair value
	€ million	€ million	€ million	€ million	€ million	€ million
Currency hedging of recorded transactions	**7,652**	**58**	**(294)**	**8,759**	**56**	**(363)**
Forward exchange contracts	5,868	43	(88)	6,251	47	(107)
of which fair value hedges	-	-	-	-	-	-
of which cash flow hedges	384	-	(5)	371	7	-
Cross-currency interest rate swaps	1,784	15	(206)	2,508	9	(256)
of which fair value hedges	-	-	-	-	-	-
of which cash flow hedges	1,512	15	(175)	2,173	9	(240)
Currency hedging of forecasted transactions	**3,523**	**136**	**(45)**	**4,399**	**68**	**(93)**
Forward exchange contracts	3,245	129	(44)	3,631	59	(86)
of which fair value hedges	-	-	-	-	-	-
of which cash flow hedges	2,451	104	(37)	3,631	59	(86)
Currency options	278	7	(1)	768	9	(7)
of which fair value hedges	-	-	-	-	-	-
of which cash flow hedges	239	7	-	-	-	-
Interest rate hedging of recorded transactions	**12,612**	**368**	**(284)**	**8,169**	**275**	**(166)**
Interest rate swaps	10,612	368	(284)	8,169	275	(166)
of which fair value hedges	2,467	92	-	3,467	126	-
of which cash flow hedges	-	-	-	1	-	-
Interest rate options	2,000	-	-	-	-	-
of which fair value hedges	-	-	-	-	-	-
of which cash flow hedges	-	-	-	-	-	-
Commodity price hedging	**323**	**36**	**(91)**	**173**	**21**	**(66)**
Forward commodity contracts	167	13	(68)	138	4	(52)
of which fair value hedges	-	-	-	-	-	-
of which cash flow hedges	85	-	(55)	19	-	(12)
Commodity option contracts	156	23	(23)	35	17	(14)
of which fair value hedges	-	-	-	-	-	-
of which cash flow hedges	-	-	-	-	-	-
Total	**24,110**	**598**	**(714)**	**21,500**	**420**	**(688)**
of which short-term derivatives	10,922	239	(204)	11,072	237	(380)
for currency hedging	8,259	179	(126)	10,906	105	(258)
for interest rate hedging**	2,400	26	(32)	-	113	(67)
for commodity hedging	263	34	(46)	166	19	(55)

* The notional amount is reported as gross volume, which also contained economically closed positions.
** The interest rate swaps as of December 31, 2010 had to be classified as noncurrent. The fair value resulting from current interest payments was classified as short-term.

31. Contingencies and other financial commitments

Contingent liabilities relate to potential future events which, although regarded as improbable on the reporting date, cannot be ruled out and would create an obligation if they occurred.

Contingent liabilities resulted entirely from commitments given to third parties and comprised:

Contingent Liabilities [Table 4.92]

	Dec. 31, 2009	Dec. 31, 2010
	€ million	€ million
Warranties	74	53
Unpaid portion of the effective initial fund of Bayer-Pensionskasse	490	390
Miscellaneous	111	247
Total	**675**	**690**

In addition to provisions, other liabilities and contingent liabilities, there are also other financial commitments. These mainly related to leasing agreements and long-term rentals.

The non-discounted minimum future payments relating to operating leases totaled €595 million (2009: €606 million). The maturities of the respective payment obligations were as follows:

Operating Leases [Table 4.93]

Maturing in	Dec. 31, 2009	Maturing in	Dec. 31, 2010
	€ million		€ million
2010	166	2011	182
2011	132	2012	132
2012	99	2013	94
2013	72	2014	71
2014	59	2015	49
2015 or later	78	2016 or later	67
Total	**606**	**Total**	**595**

Financial commitments resulting from orders already placed under purchase agreements related to planned or ongoing capital expenditure projects totaled €231 million (2009: €441 million).

In addition, the Group has entered into research agreements with a number of third parties under which Bayer has agreed to fund various research projects or has assumed other payment obligations based on the achievement of certain milestones or other specific conditions. The total amount of such funding and other commitments was €1,132 million (2009: €661 million). As of December 31, 2010, the remaining payments expected to be made to these parties, assuming the milestones are reached or the other agreed conditions are met in the respective years, were as follows:

Other Commitments [Table 4.94]

Maturing in	Dec. 31, 2009	Maturing in	Dec. 31, 2010
	€ million		€ million
2010	154	2011	119
2011	114	2012	235
2012	83	2013	154
2013	39	2014	200
2014	43	2015	120
2015 or later	228	2016 or later	304
Total	**661**	**Total**	**1,132**

32. Legal risks

As a global company with a diverse business portfolio, the Bayer Group is exposed to numerous legal risks, particularly in the areas of product liability, competition and antitrust law, patent disputes, tax assessments and environmental matters. The outcome of any current or future proceedings cannot be predicted. It is therefore possible that legal or regulatory judgments or future settlements could give rise to expenses that are not covered, or not fully covered, by insurers' compensation payments and could significantly affect our revenues and earnings.

Legal proceedings currently considered to involve material risks are outlined below. The legal proceedings referred to do not represent an exhaustive list.

HealthCare

PRODUCT-RELATED LITIGATION

Magnevist®: As of February 1, 2011, there were approximately 230 lawsuits pending and served upon Bayer in the United States involving the gadolinium-based contrast agent Magnevist®. Three other manufacturers of gadolinium-based contrast agents in the United States also have been named party to the same or similar lawsuits.

In the lawsuits, plaintiffs allege that patients developed nephrogenic systemic fibrosis (NSF) as a result of the use of Magnevist® during medical imaging procedures. NSF is a rare, severe condition that can be debilitating and in some cases fatal. Plaintiffs seek compensatory and punitive damages under various theories, including strict liability and negligence and/or breach of warranty, claiming, among other things, that the product is defective and unreasonably dangerous and that Bayer knew, or should have known, of the risks associated with Magnevist® and failed to disclose them or adequately warn its users.

All cases pending in federal courts have been consolidated in a multidistrict litigation (MDL) proceeding for common pre-trial management. As of February 1, 2011, Bayer had reached agreements, without admission of liability, with approximately 220 plaintiffs in the United States to settle their claims. Bayer will continue to consider the option of settling individual lawsuits on a case-by-case basis. However, Bayer believes it has meritorious defenses and will continue to defend itself vigorously against all claims that are not considered for settlement. Bayer has taken appropriate accounting measures.

Trasylol® (aprotinin) is a drug approved for use in managing bleeding in patients undergoing coronary artery bypass graft surgery. As of February 1, 2011, there were approximately 1,100 lawsuits pending in the United States and served upon Bayer on behalf of persons alleging, in particular, personal injuries, including renal failure and death, and economic loss from the use of Trasylol®. Bayer also has been served with three class actions in Canada. Plaintiffs in both the United States and the Canadian cases seek compensatory and punitive damages, claiming, among other things, that Bayer knew, or should have known, of these risks and should be held liable for having failed to disclose them or adequately warn users of Trasylol®. All cases pending in U.S. federal courts have been consolidated in a multidistrict litigation (MDL) proceeding for common pre-trial management.

As of February 1, 2011, Bayer had reached agreements, without admission of liability, with approximately 440 plaintiffs. Bayer will continue to consider the option of settling individual lawsuits on a case-by-case basis. However, Bayer believes it has meritorious defenses and will continue to defend itself vigorously against all claims that are not considered for settlement. Bayer has taken appropriate accounting measures.

Yasmin®/YAZ®: As of February 1, 2011, there were about 6,850 lawsuits pending in the United States served upon Bayer on behalf of persons alleged to have suffered personal injuries, some of them fatal, from the use of Bayer's oral contraceptive products Yasmin® and/or YAZ® or from the use of Ocella® and/or Gianvi®, generic versions of Yasmin® and YAZ®, respectively, marketed by Barr Laboratories, Inc. in the United States. (For details on the generic versions of Yasmin® and YAZ®, please refer to the section on "Patent disputes" below.) Pursuant to agreements in 2008 and 2010, Bayer manages product liability litigation for Ocella® and Gianvi®, Bayer retains product liability for Ocella® product supplied by Bayer with certain exceptions, and the parties have allocated potential future product liability relating to Gianvi® product supplied by Bayer. Plaintiffs seek compensatory and punitive damages, claiming, in particular, that Bayer knew, or should have known, of the alleged risks and should be held liable for having failed to disclose them or adequately warn users of Yasmin® and/or YAZ®. Bayer has also been served with three putative class actions claiming economic loss, one of them also claiming personal injuries. One of these class actions, brought in federal court on behalf of all private health insurers in the United States, was dismissed with prejudice. Plaintiffs did not appeal. All cases pending in U.S. federal courts have been consolidated in a multidistrict litigation (MDL) proceeding for common pre-trial management. In addition, 13 Canadian class actions have been served upon Bayer as of February 1, 2011. Additional lawsuits are anticipated. Bayer believes that it has meritorious defenses and intends to defend itself vigorously. Based on the information currently available, Bayer has taken accounting measures for anticipated defense costs.

In connection with the above matters concerning Magnevist®, Trasylol® and Yasmin®/YAZ®, Bayer is insured against product liability risks to the extent customary in the industry.

COMPETITION LAW PROCEEDINGS

Cipro®: Approximately 40 putative class action lawsuits and one individual lawsuit against Bayer involving Cipro®, a medication used in the treatment of infectious diseases, have been pending in the United States since 2000. The plaintiffs are suing Bayer and other companies also named as defendants, alleging that a settlement to end patent litigation reached in 1997 between Bayer and Barr Laboratories, Inc. violated antitrust regulations. The plaintiffs claim the alleged violation prevented the marketing of generic ciprofloxacin as of 1997. In particular, they are seeking triple damages under U.S. law. After the settlement with Barr, the patent was the subject of a successful re-examination by the U.S. Patent and Trademark Office and of successful defenses in U.S. federal courts. It has since expired.

All the actions pending in federal courts were consolidated in federal district court in New York in a multidistrict litigation (MDL) proceeding. The Court of Appeals for the Federal Circuit in Washington D.C. affirmed a 2005 ruling of the federal district court in New York dismissing all lawsuits filed in federal court. No further avenues of appeal now remain in these federal indirect purchasers' cases. In 2010, the United States Court of Appeals for the Second Circuit (New York) also affirmed the dismissal of lawsuits brought by direct purchasers of Cipro®. The Second Circuit also has denied plaintiffs' request for rehearing en banc. Plaintiffs seek certiorari before the United States Supreme Court. Further cases are pending before various state courts. Bayer believes that it has meritorious defenses and intends to defend itself vigorously.

PATENT DISPUTES

Yasmin®: In 2005, Bayer filed suit against Barr Pharmaceuticals, Inc. and Barr Laboratories, Inc. in U.S. federal court alleging patent infringement by Barr for the intended generic version of Bayer's Yasmin® oral contraceptive product in the United States. In 2008, the U.S. federal court invalidated Bayer's '531 patent for Yasmin®. In 2009, the U.S. Court of Appeals for the Federal Circuit affirmed this decision. In May 2010, the U.S. Supreme Court rejected Bayer's petition for review.

In 2008, Bayer and Barr Laboratories, Inc. signed a supply and licensing agreement for the supply of a generic version of Yasmin® which Barr markets solely in the United States under the Ocella® brand. Barr pays Bayer a fixed percentage of the revenues from the product sold by Barr. The agreement is under investigation by the U.S. Federal Trade Commission (FTC).

In 2008 Bayer received two and in 2010 another three notices of an Abbreviated New Drug Application with a Paragraph IV certification (an "ANDA IV") pursuant to which Watson Laboratories Inc., Sandoz Inc., Lupin Ltd., Famy Care Ltd. and Sun Pharma Global FZE each seek approval to market a generic version of Bayer's oral contraceptive Yasmin® in the United States. Bayer has filed suit against Watson, Sandoz and Lupin in U.S. federal court alleging patent infringement for the intended generic version of Yasmin®. In reply, Watson and Sandoz have filed counterclaims alleging, among other things, the invalidity of various Bayer patents. Sandoz has further alleged that Bayer and Barr have made arrangements that are anticompetitive and violate antitrust and unfair competition laws. In September 2010, the U.S. federal court granted a motion to dismiss Bayer's infringement claims against Watson and Sandoz. Bayer will appeal.

YAZ®: In 2007 and 2008, Bayer received notices from Barr Laboratories, Inc., Watson Laboratories Inc. and Sandoz Inc., and in 2010 Bayer received notices from Lupin Ltd. and Sun Pharma Global FZE, that each company has filed an ANDA IV seeking approval of a generic version of Bayer's YAZ® oral contraceptive in the United States. Bayer has filed patent infringement suits against Watson, Sandoz, Lupin and Sun Pharma Global in U.S. federal court claiming that certain of Bayer's patents have been infringed. In its defense statement, Sandoz has alleged, among other things, that Bayer and Barr have made arrangements that are anticompetitive and violate antitrust and unfair competition laws.

In 2008, Bayer and Barr agreed that Bayer will grant Barr a license to market a generic version of YAZ® in the United States starting July 2011 and will supply Barr with the product for this purpose. Barr agreed to pay Bayer a fixed percentage of the revenues from the product sold by Barr. In December 2008, Barr was acquired by Teva Pharmaceutical Industries Ltd. In June 2010, Teva announced that it had commercially launched Gianvi®, a generic version of YAZ®, in the United States. Litigation between Bayer and Teva/Barr in several U.S. federal courts on infringement of certain of Bayer's patents by the distribution of Gianvi® was settled in December 2010. Bayer and Barr amended the aforementioned licensing and supply agreement of 2008, which is also under investigation by the FTC, and Bayer has supplied Barr with the product for Gianvi® since December 2010.

Blood glucose monitoring devices: In 2005, Abbott Laboratories commenced a lawsuit in the United States against Bayer and another party alleging infringement of two of Abbott's patents relating to blood glucose monitoring devices. The devices concerned are sold by Bayer as part of its Ascensia® Contour® system and its DEX® and Autodisc® system. The Ascensia® Contour® system is supplied to Bayer by a Japanese manufacturer, who originally designed the product and is contractually obligated to indemnify Bayer. In 2006, Abbott added a separate claim of infringement against the devices sold by Bayer as part of its DEX® and Autodisc® system. Bayer is not entitled to indemnification on this separate claim. The court and, thereafter, the U.S. Court of Appeals for the Federal Circuit held in favor of Bayer but, on one aspect of the decision with respect to one of the patents, the Court of Appeals granted a rehearing which took place in November 2010. Bayer is waiting for the court decision.

In 2007, Roche Diagnostics Operations and Corange International commenced a lawsuit in the United States against Bayer and several other parties alleging infringement of two of Roche's patents relating to blood glucose monitoring devices. Two of the accused devices are sold by Bayer as part of its Breeze® 2 and Contour® systems. Bayer believes that these patents are covered by an existing license agreement between the parties, and the litigation has been dismissed in favor of an arbitration under this earlier license agreement. Roche has added to the arbitration four additional patents which Roche alleges the Bayer Contour® systems infringe. Bayer is awaiting the arbitrators' decision.

Betaferon®/Betaseron®: In May 2010, Bayer filed a complaint against Biogen Idec MA Inc. in U.S. federal court seeking a declaration by the court that a patent issued to Biogen in 2009 is invalid and not infringed by Bayer's production and distribution of Betaseron®, Bayer's drug product for the treatment of multiple sclerosis. Biogen is alleging patent infringement by Bayer through Bayer's production and distribution of Betaseron® and Extavia® and has sued Bayer accordingly. Betaseron® is manufactured and distributed in the United States by Bayer. Extavia® is also a drug product for the treatment of multiple sclerosis; it is manufactured by Bayer, but distributed in the United States by Novartis Pharmaceuticals Corporation, another defendant in the lawsuit.

Levitra®: In 2009, Bayer filed a patent infringement suit in U.S. federal court against Teva Pharmaceuticals USA, Inc. and Teva Pharmaceutical Industries Ltd. Earlier that year, Bayer had received notice of an ANDA IV pursuant to which Teva seeks approval to market a generic version of Levitra®, Bayer's therapy for the treatment of erectile dysfunction, prior to patent expiration in the United States. Bayer intends to pursue its rights vigorously.

Bayer believes it has meritorious defenses in the above patent disputes and intends to defend itself vigorously.

FURTHER LEGAL PROCEEDINGS

Wholesale prices in the U.S.: Bayer and a number of pharmaceutical companies in the United States are defendants in pending lawsuits in which plaintiffs, including states, are alleging manipulation in the reporting of wholesale prices and/or best prices for their prescription pharmaceutical products. The plaintiffs seek damages, including disgorgement of profits and punitive damages. Bayer believes it has meritorious defenses and intends to defend itself vigorously. In appropriate cases Bayer has agreed to settlements and will continue to consider this option in the future.

Bayer Schering Pharma AG former shareholder litigation: In 2008, the squeeze-out of the former minority shareholders of Bayer Schering Pharma AG became effective. As usual in such cases, several shareholders have initiated special court proceedings to review the adequacy of the compensation payments made by Bayer for the transfer of the shares in the squeeze-out. The adequacy of the compensation and the guaranteed dividend paid by Bayer in connection with the Bayer Schering Pharma AG profit and loss transfer agreement made in 2006 is also being reviewed by the courts. (Please note that Bayer Schering Pharma AG and the former Schering-Plough Corporation, New Jersey, are unaffiliated companies that have been independent of each other for many years. The names "Bayer Schering Pharma" or "Schering" as used in this Annual Report always refer to Bayer Schering Pharma AG, Berlin, Germany, or its predecessor, Schering AG, Berlin, Germany, respectively).

Regorafenib: In 2009, Onyx Pharmaceuticals, Inc. filed a complaint in the U.S. District Court for Northern California alleging that the compound regorafenib, which is under development by Bayer in cancer indications, is a compound to which Onyx has rights under a collaboration agreement that was originally concluded in 1994. Under this agreement, the parties jointly developed Nexavar®, a drug product to treat kidney and liver cancer. In addition, Onyx also claims damages to Nexavar®. Bayer believes it has meritorious defenses and intends to defend itself vigorously. Trial is presently scheduled for June 2011.

Compliance investigation: Bayer is conducting an internal investigation into compliance by a former operating unit of one of its U.S. subsidiaries with the United States Foreign Corrupt Practices Act. That statute prohibits, among other things, corrupt payments by U.S. persons to governmental officials outside the United States. The unit, which conducted Bayer's plasma-derived products business, was sold in 2005. The initial focus of the internal investigation has been on sales by that unit to certain eastern European and Middle Eastern countries. In order to evaluate Bayer's compliance efforts, Bayer is also reviewing sales practices in other units and countries. Bayer has voluntarily advised the United States government of the internal investigation. The United States government has not indicated what action it may take, if any, against Bayer or any individual, or whether it may conduct its own investigation. Because the internal investigation is ongoing, no statements on its outcome, or on any disadvantages for Bayer that may result therefrom, can be made at this point in time.

CropScience

Proceedings involving genetically modified rice: As of February 1, 2011, Bayer was aware of a total of approximately 570 lawsuits, involving about 11,300 plaintiffs, pending in U.S. federal and state courts against several Bayer Group companies in connection with genetically modified rice in the United States. The number of plaintiffs is calculated by totaling the number of plaintiffs identified in the complaints. However, the number of plaintiffs does not allow any conclusions on the number of farming operations involved. U.S. rice farmers often have a number of entities associated with their operations. In some cases just an individual sued, in others all the entities sued. In addition, a partnership and its individual partners are counted separately if they are listed as plaintiffs in the complaints.

Plaintiffs allege that they have suffered economic losses after traces of genetically modified rice were identified in samples of conventional long-grain rice grown in the U.S. All the actions pending in federal court were consolidated in 2006 in federal district court in St. Louis, Missouri, in a multidistrict litigation (MDL) proceeding. In 2008, this court denied plaintiffs' request to certify a class action. Plaintiffs' subsequent request for interim appeal was denied by the appellate court.

In development of the genetically modified rice, field testing was conducted in the United States in cooperation with third parties from 1998 to 2001. The genetically modified rice was never commercialized. The USDA and the FDA have stated that the genetically modified rice does not present a health risk and is safe for use in food and feed and for the environment. Additionally, in 2007, the USDA released its report concerning its investigation into how the genetically modified rice entered the commercial rice supply. The USDA was unable to determine a cause and indicated it would not pursue any enforcement actions against Bayer or any other party.

Bayer tried six cases in front of U.S. juries between December 2009 and July 2010, three in the federal MDL court and three in different state courts in Arkansas. These six cases involved a total of 23 farming operations comprising 91 plaintiffs from Missouri, Louisiana, Mississippi and Arkansas and were tried based on the respective applicable laws of these four states. Plaintiffs claimed various commercial damages, including a decline in the commodity price for long-grain rice, costs associated with restrictions on imports and exports, and costs to secure alternative supplies. The juries found Bayer should pay compensatory damages totaling approx. US$11.5 million. In two of the Arkansas state court trials, the juries also awarded punitive damages (approximately US$0.5 million in one trial and approximately US$42 million in the other). In a federal MDL trial in July 2010 involving plaintiffs from Louisiana, punitive damages were not available under the applicable laws. The other three juries rejected the farmers' claims for punitive damages.

Bayer disagrees with the present findings of liability and the awards of compensatory and punitive damages. To the extent it has not already done so, Bayer will appeal the adverse findings.

One trial originally scheduled for September 2010 in a state court in Arkansas has been continued indefinitely for procedural reasons. Additionally, one federal MDL trial scheduled for 2010, involving three farming operations comprising eight plaintiffs from Texas, was settled in October 2010. The settlement calls for the plaintiffs to receive US$290,000 collectively. The first federal MDL trial scheduled for 2011 was also settled, with four farming operations comprising 18 plaintiffs from Mississippi to receive US$873,000 collectively. In February 2011, Bayer also reached an agreement with several farming operations and/or landlord holdings comprising 33 plaintiffs from Arkansas. The settlement calls for the plaintiffs to receive a total of approximately US$4 million. This trial, however, will go forward with regard to a claim by Riceland Foods, Inc., a rice mill from Arkansas. Additional trials have been scheduled for the year 2011, in both the federal MDL and the state court actions.

The facts and the types and amounts of damages claimed differ significantly from case to case. Management believes that the outcomes of these first trials do not allow any direct conclusions on the outcomes of the other cases. The company is willing to discuss with rice growers and other plaintiffs reasonable compensation for economic losses associated with its genetically modified rice without acknowledging liability, but intends to continue to defend itself vigorously in all cases in which resolutions on that basis are not possible.

Without acknowledging liability, Bayer also settled the claims brought forward by five European rice importers, one U.S. rice exporter and one U.S. rice mill at a total settlement value of US$51.6 million.

Bayer has established appropriate provisions, mainly for legal and defense costs and an intended settlement program.

Asbestos: A further risk may arise from asbestos litigation in the United States. In many cases, the plaintiffs allege that Bayer and co-defendants employed third parties on their sites in past decades without providing them with sufficient warnings or protection against the known dangers of asbestos. Additionally, a Bayer affiliate in the United States is the legal successor to companies that sold asbestos products until 1976. Union Carbide has agreed to indemnify Bayer for this liability. Bayer believes it has meritorious defenses and intends to defend itself vigorously.

MaterialScience

ANTITRUST PROCEEDINGS IN CONNECTION WITH RUBBER PRODUCTS

Companies of the Bayer Group are subject to civil damage claims in Europe and Australia based on alleged violations of applicable competition laws concerning rubber products that were subject to investigations by regulatory authorities. All of these investigations have been closed.

Since 2008, a group of plaintiffs who are primarily producers of tires have brought actions for damages before the High Court of Justice in London, U.K., against Bayer and other producers of butadiene rubber and emulsion styrene butadiene rubber. The plaintiffs claim damages resulting from alleged violations of E.U. competition law in the markets for butadiene rubber and emulsion styrene butadiene rubber. Proceedings brought to establish non-liability before a court in Milan to which Bayer joined as intervener were dismissed; Bayer is appealing. The High Court has taken jurisdiction over the actions and the main proceedings are at an early stage of the disclosure process.

Previously, Bayer reported a claim by The Goodyear Tire & Rubber Company alleging that Bayer violated antitrust law in the area of butadiene rubber and styrene butadiene rubber. In March 2010, the case was settled by agreement of the parties and without Bayer admitting liability.

In Australia, a class action alleging antitrust violations in connection with rubber chemicals products was filed in 2007. The case is at an early stage of the disclosure process.

Bayer is defending itself in the European and Australian litigations. The financial risk from these proceedings cannot currently be quantified. Therefore, Bayer is unable to take any accounting measures in this regard.

It remains possible that further civil damage claims may be filed in connection with public antitrust investigations reported on previously and now closed.

PERSONAL INJURY LITIGATION

MDI: In the United States, Bayer, together with other manufacturers, resellers and applicators, is a defendant in multiple cases that seek damages for personal injuries allegedly resulting from exposure to MDI based products used in coal mines. In one case the plaintiffs allege that they were also exposed to TDI and HDI based products. In August 2010, the parties to all but one lawsuit reached an agreement in principle to settle all claims – without Bayer admitting liability – on mutually acceptable terms. Final release agreements have not yet been fully executed. Bayer has taken appropriate accounting measures. The remaining case is no longer considered to be material.

Notes to the Statements of Cash Flows

The statement of cash flows shows how cash inflows and outflows during the year affected the cash and cash equivalents (liquidity) of the Bayer Group as of the closing date. The effects of changes in the scope of consolidation are stated separately. Cash flows are classified by operating, investing and financing activities in accordance with IAS 7 (Statement of Cash Flows).

The amounts reported by consolidated companies outside the eurozone are translated at average monthly exchange rates, with the exception of cash and cash equivalents, which are translated at closing rates as in the statement of financial position. The effect of changes in exchange rates on cash and cash equivalents is shown separately.

The amounts corresponding to the components of the net operating cash flow are shown both in the statement of financial position and in the income statement. This applies, for example, to the amounts of inventories, receivables and payables recognized in the statement of financial position that determine the changes in working capital shown in the statement of cash flows. The income after taxes forms the starting point for the statement of cash flows.

33. Net cash provided by (used in) operating activities

The gross cash flow for 2010 of €4,771 million (2009: €4,658 million) is the cash surplus from operating activities before any changes in working capital. The cash flows by segment are shown in Note [1].

The net operating cash flow of €5,773 million (2009: €5,375 million) takes into account the changes in working capital and other non-cash transactions.

The net operating cash flow for 2010 included an income-tax-related net cash outflow of €838 million (2009: €500 million). The changes in income tax liabilities, income tax provisions and claims for reimbursement of income taxes are shown in the line “Changes in other working capital, other non-cash items.”

34. Net cash provided by (used in) investing activities

Net cash outflow for investing activities in 2010 amounted to €2,414 million (2009: €1,501 million).

Additions to property, plant and equipment and intangible assets in 2010 resulted in a cash outflow of €1,514 million (2009: €1,575 million). Disbursements for property, plant and equipment and intangible assets included those for the expansion of the production site for polymer products in Shanghai, China, and for marketing rights in the Pharmaceuticals segment. Cash inflows from sales of property, plant and equipment and other assets amounted to €61 million (2009: €98 million).

In addition, acquisitions resulted in cash outflows of €31 million (2009: €308 million). Included here was the acquisition of Artificial Muscle, Inc., United States, for which disbursements of €16 million were made, net of acquired cash. The prior-year figure comprised mainly the acquisition of Athenix Corp., United States. Disbursements for this purchase amounted to €247 million, net of acquired cash. Further details of acquisitions and divestitures are given in Notes [6.2] and [6.3], respectively.

35. Net cash provided by (used in) financing activities

In 2010 there was a net cash outflow of €3,230 million (2009: €3,246 million) for financing activities. Net loan repayments amounted to €1,544 million (2009: €1,442 million).

Cash outflows for dividend payments amounted to €1,160 million (2009: €973 million). The prior-year figure included €101 million in refunds of withholding tax on intra-Group dividends. Interest payments – including those paid on interest-rate swaps – decreased to €915 million (2009: €1,206 million), while interest received from interest-rate swaps amounted to €398 million (2009: €421 million).

36. Cash and cash equivalents

Cash and cash equivalents comprise cash, checks and balances with banks. In accordance with IAS 7 (Statement of Cash Flows) this item also includes securities with original maturities of up to three months, reflecting their high liquidity. Cash and cash equivalents as of December 31, 2010 amounted to €2,840 million (2009: €2,725 million).

Other Information

37. Audit fees

The following fees for the services of PricewaterhouseCoopers Aktiengesellschaft Wirtschaftsprüfungsgesellschaft were recognized as expenses:

Audit Fees [Table 4.95]

	2009	2010
	€ million	€ million
Financial statements audit services	5	5
Other assurance services	2	2
Tax advisory services	-	-
Other services	-	1
Total	**7**	**8**

The fees for the auditing of financial statements mainly comprise those for the audits of the consolidated financial statements of the Bayer Group and the financial statements of Bayer AG and its German subsidiaries. Fees for other assurance services primarily relate to audits of the internal control system, including project audits in connection with the implementation of new IT systems, and to reviews of interim financial statements.

38. Related parties

Related parties as defined in IAS 24 (Related Party Disclosures) are those legal entities and natural persons that are able to exert influence on Bayer AG and its subsidiaries or over which Bayer AG or its subsidiaries exercise control or have a significant influence. They include, in particular, non-consolidated subsidiaries, joint ventures, associates and post-employment benefit plans, as well as the corporate officers of Bayer AG whose compensation is reported in Note [39] and in the Compensation Report, which forms part of the Management Report.

Transactions with non-consolidated subsidiaries, joint ventures, associates and post-employment benefit plans are carried out on an arm's-length basis.

The following table shows the volume of transactions with related parties that are included in the consolidated financial statements of the Bayer Group at amortized cost, by proportionate consolidation or using the equity method, and with post-employment benefit plans:

Related Parties [Table 4.96]

	2009			2010		
	Income	Receivables	Liabilities	Income	Receivables	Liabilities
	€ million	€ million	€ million	€ million	€ million	€ million
Non-consolidated subsidiaries	19	13	(33)	12	8	(37)
Joint ventures	32	3	(1)	35	2	-
Associates	24	10	(25)	31	10	(37)
Post-employment benefit plans	-	460	(89)	-	560	(84)

Bayer AG has undertaken to provide jouissance right capital (Genussrechtskapital) in the form of an interest-bearing loan totaling €150 million for the Bayer-Pensionskasse. The entire amount remained drawn as of December 31, 2010. Loan capital was first provided to Bayer-Pensionskasse in 2008 for its effective initial fund. This capital amounted to €410 million as of December 31, 2010 (2009: €310 million).

No write-downs were made in 2010 or 2009 on receivables from related parties.

39. Total compensation of the Board of Management and the Supervisory Board and loans

The following table shows the compensation of the Board of Management according to IFRS. In addition to the directly effected compensation, this includes the fair value of the STI-based, stock-price-indexed compensation amounting to 50% of the STI award for 2010. Unlike the aggregate compensation according to the German Commercial Code, the aggregate compensation according to IFRS does not include the fair value of newly granted stock-based compensation, but rather the stock-based compensation entitlements earned in the respective year plus the change in the value of stock-based compensation entitlements from previous years that have not yet been paid out. It also contains the current service cost for pension entitlements.

Board of Management Compensation according to IFRS [Table 4.97]

	2009	2010
	€ thousand	€ thousand
Directly effected compensation	8,830	10,019
Fair value of stock-price-indexed compensation based on the short-term incentive	-	2,621
Long-term incentive (stock-based compensation entitlements earned in the respective year)	1,623	1,079
Change in value of existing entitlements	1,079	(226)
Current service cost for pension entitlements earned in the respective year	1,364	2,847
Aggregate compensation (according to IFRS)	**12,896**	**16,340**

Further details are provided in the Compensation Report, which forms part of the Management Report.

Pension payments to former members of the Board of Management and their surviving dependents amounted to €13,351 thousand (2009: €11,273 thousand). The figure for 2010 included expenses of €1,850 thousand from the entitlement of a former member of the Board of Management to pre-retirement leave. Pension provisions for former members of the Board of Management and their surviving dependents amounted to €131,599 thousand (2009: €107,223 thousand).

The compensation of the Supervisory Board amounted to €2,290 thousand (2009: €2,295 thousand), including €763 thousand (2009: €765 thousand) in variable components.

There were no loans to members of the Board of Management or the Supervisory Board outstanding as of December 31, 2010, nor any repayments of such loans during the year.

Leverkusen, February 15, 2011
Bayer Aktiengesellschaft

The Board of Management

Management's Statement of Responsibility for Financial Reporting

The consolidated financial statements of the Bayer Group have been prepared by the management, which is responsible for the substance and objectivity of the information contained therein. The same applies to the Group management report, which is consistent with the consolidated financial statements and is combined with the management report of Bayer AG.

Our financial reporting takes place according to the rules issued by the International Accounting Standards Board, London, as endorsed by the European Union.

Effective internal monitoring procedures instituted by Group management at the consolidated companies along with appropriate staff training ensure the propriety of our reporting and its compliance with legal provisions. Integrity and social responsibility form the basis of our corporate principles and of their application in areas such as environmental protection, quality, product safety, plant safety and adherence to local laws and regulations. The worldwide implementation of these principles and the reliability and effectiveness of the monitoring procedures are continuously verified by our Corporate Auditing Department.

The Board of Management conducts the business of the Group in the interests of the stockholders and in awareness of its responsibilities toward employees, communities and the environment in all the countries in which we operate. Our declared aim is to deploy the resources entrusted to us in order to increase the value of the Bayer Group as a whole.

In accordance with the resolution of the Annual Stockholders' Meeting, the Supervisory Board appointed PricewaterhouseCoopers Aktiengesellschaft Wirtschaftsprüfungsgesellschaft as the independent auditor of the consolidated financial statements, which were prepared according to the International Financial Reporting Standards – as endorsed by the European Union – pursuant to Section 315a of the German Commercial Code, and of the additional requirements of German commercial law and the combined management report. The scope of the auditor's unqualified report also includes Bayer's risk management system, audited in light of the German Law on Corporate Supervision and Transparency. The consolidated financial statements, the combined management report and the auditor's report were discussed in detail, in the presence of the auditor, by the Audit Committee of the Supervisory Board and at a plenary meeting of the Supervisory Board. The Supervisory Board reports on this separately in the Report of the Supervisory Board in the Bayer Annual Report 2010.

The Board of Management

Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles for financial reporting, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Bayer Group, and the combined management report includes a fair review of the development and performance of the business and the position of the Bayer Group and Bayer AG, together with a description of the principal opportunities and risks associated with the expected development of the Bayer Group and Bayer AG.

Leverkusen, February 15, 2011
Bayer Aktiengesellschaft

The Board of Management

Dr. Marijn Dekkers
Chairman

Werner Baumann

Dr. Wolfgang Plischke

Dr. Richard Pott

Auditor's Report

We have audited the consolidated financial statements prepared by Bayer Aktiengesellschaft, Leverkusen, comprising the income statement and statement of comprehensive income, statement of financial position, statement of cash flows, statement of changes in equity and the notes to the consolidated financial statements, together with the group management report of Bayer Aktiengesellschaft for the business year from January 1, 2010 to December 31, 2010, which is combined with the management report of the company. The preparation of the consolidated financial statements and the combined management report in accordance with the IFRS, as adopted by the E.U., and the additional requirements of German commercial law pursuant to § (Article) 315a Abs. (paragraph) 1 HGB ("Handelsgesetzbuch": German Commercial Code) are the responsibility of the parent Company's Board of Management. Our responsibility is to express an opinion on the consolidated financial statements and on the combined management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with § 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany) (IDW) and additionally observed the International Standards on Auditing (ISA). 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 combined 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 combined 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 the entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by the Company's Board of Management, as well as evaluating the overall presentation of the consolidated financial statements and the combined 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 the IFRS as adopted by the E.U. and with the additional requirements of German commercial law pursuant to § 315a Abs. 1 HGB and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The combined 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.

Essen, February 24, 2011

PricewaterhouseCoopers
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

Armin Slotta Wirtschaftsprüfer	Anne Böcker Wirtschaftsprüferin

Further Information

Governance Bodies

HERMANN JOSEF STRENGER
Honorary Chairman of the Supervisory Board of Bayer AG, Leverkusen

Supervisory Board

Members of the Supervisory Board held offices as members of the supervisory board or a comparable supervising body of the corporations listed (as at December 31, 2010 or the date on which they ceased to be members of the Supervisory Board of Bayer AG):

DR. MANFRED SCHNEIDER
Cologne, Germany
born December 21, 1938

Chairman of the Supervisory Board
effective April 2002

- Daimler AG
- Linde AG (Chairman)
- RWE AG (Chairman)
- TUI AG

THOMAS DE WIN
Cologne, Germany
born November 21, 1958

Vice Chairman of the Supervisory Board, Member of the Supervisory Board effective April 2002

Chairman of the Bayer Group Works Council

Chairman of the Bayer Central Works Council

- Bayer MaterialScience AG

DR. PAUL ACHLEITNER
Munich, Germany
born September 28, 1956

Member of the Supervisory Board
effective April 2002

Member of the Board of Management of Allianz SE

- Allianz Deutschland AG (until the end of June 2010)
- Allianz Global Investors AG
- Allianz Investment Management SE, Chairman of the Board of Directors
- Daimler AG (effective April 2010)
- RWE AG
- Henkel AG & Co. KGaA, Shareholders' Committee

ANDRÉ AICH
Berlin, Germany
born February 17, 1969

Member of the Supervisory Board
effective April 2007

Member of the Works Council of Bayer Schering Pharma AG*

WILLY BEUMANN
Wuppertal, Germany
born April 12, 1956

Member of the Supervisory Board
effective February 2007

Chairman of the Works Council of the Wuppertal site of Bayer

- Bayer Schering Pharma AG*

DR. CLEMENS BÖRSIG
Frankfurt am Main, Germany
born July 27, 1948

Member of the Supervisory Board
effective April 2007

Chairman of the Supervisory Board of Deutsche Bank AG

- Daimler AG
- Deutsche Bank AG (Chairman)
- Emerson Electric Co.
- Linde AG

DR.-ING. THOMAS FISCHER
Krefeld, Germany
born August 27, 1955

Member of the Supervisory Board
effective October 2005

Chairman of the Group Managerial Employees' Committee of Bayer

- Bayer MaterialScience AG

PETER HAUSMANN
Winsen an der Aller, Germany
born February 13, 1954

Member of the Supervisory Board
effective April 2006

Member of the Executive Committee of the German Mining, Chemical and Energy Industrial Union

- Evonik Services GmbH

PROF. DR.-ING. E.H. HANS-OLAF HENKEL
Berlin, Germany
born March 14, 1940

Member of the Supervisory Board
effective April 2002

Honorary Professor at the University of Mannheim

- Continental AG
- Daimler Luft- und Raumfahrt Holding AG
- Heliad Equity Partners GmbH & Co. KGaA
- Ringier AG
- SMS GmbH

REINER HOFFMANN
Brussels, Belgium
born May 30, 1955

Member of the Supervisory Board
effective October 2006

North Rhine District Secretary of the German Mining, Chemical and Energy Industrial Union

- Evonik Services GmbH (effective September 2010)
- SASOL Germany GmbH

DR. RER. POL. KLAUS KLEINFELD
New York, U.S.A.
born November 6, 1957

Member of the Supervisory Board
effective April 2005

Chairman and Chief Executive Officer of ALCOA Inc.

PETRA KRONEN
Krefeld, Germany
born August 22, 1964

Member of the Supervisory Board
effective July 2000

Chairman of the Works Council of the Uerdingen site of Bayer

- Bayer MaterialScience AG (Vice Chairman)

* company to be renamed Bayer Pharma AG

DR. RER. NAT. HELMUT PANKE
Munich, Germany
born August 31, 1946

Member of the Supervisory Board
effective April 2007

Member of various supervisory boards

- Microsoft Corporation
- Singapore Airlines Limited
- UBS AG

HUBERTUS SCHMOLDT
Soltau, Germany
born January 14, 1945

Member of the Supervisory Board
effective January 1995

Member of various supervisory boards

- BP Europe SE (formerly Deutsche BP AG) (Vice Chairman until May 2010)
- Dow Olefinverbund GmbH (Vice Chairman)
- E.ON AG
- RAG AG (Vice Chairman)
- RAG Deutsche Steinkohle AG (Vice Chairman)

DR.-ING. EKKEHARD D. SCHULZ
Krefeld, Germany
born July 24, 1941

Member of the Supervisory Board
effective April 2005

Chairman of the Executive Board of ThyssenKrupp AG

- AXA Konzern AG
- MAN SE (Vice Chairman)
- RWE AG
- ThyssenKrupp Elevator AG (Chairman)
- ThyssenKrupp Steel Europe AG (Chairman)

DR. KLAUS STURANY**
Dortmund, Germany
born October 23, 1946

Member of the Supervisory Board
effective April 2007

Member of various supervisory boards

- Hannover Rückversicherung AG
- Heidelberger Druckmaschinen AG
- Österreichische Industrieholding AG
- Sulzer AG

ROSWITHA SÜSSELBECK
Leichlingen, Germany
born March 19, 1954

Member of the Supervisory Board
effective July 2010

Vice Chairman of the Works Council of the Leverkusen site of Bayer

- Bayer CropScience AG (Vice Chairman effective December 2010)

DIPL.-ING. DR.-ING. E.H. JÜRGEN WEBER
Hamburg, Germany
born October 17, 1941

Member of the Supervisory Board
effective April 2003

Chairman of the Supervisory Board of Deutsche Lufthansa AG

- Allianz Lebensversicherungs-AG
- Deutsche Lufthansa AG (Chairman)
- Loyalty Partner GmbH (Chairman)
- Tetra Laval Group
- Voith GmbH
- Willy Bogner GmbH & Co. KGaA (Chairman)

PROF. DR. DR. H.C. ERNST-LUDWIG WINNACKER
Munich, Germany
born July 26, 1941

Member of the Supervisory Board
effective April 1997

Secretary General of the Human Frontier Science Program, Strasbourg

- Medigene AG (Chairman)
- Wacker Chemie AG

** independent expert member pursuant to Section 100 Paragraph 5 of the German Stock Corporation Act (AktG)

OLIVER ZÜHLKE
Solingen, Germany
born December 11, 1968

Member of the Supervisory Board
effective April 2007

Chairman of the Works Council of the Leverkusen site of Bayer

Chairman of the Bayer European Forum

KARL-JOSEF ELLRICH
Dormagen, Germany
born October 5, 1949

Member of the Supervisory Board
until the end of June 2010

Chairman of the Bayer Group Works Council (until the end of May 2010)

Chairman of the Works Council of the Dormagen site of Bayer (until January 2010)

- Bayer CropScience AG (Vice Chairman until the end of June 2010)

Standing committees of the Supervisory Board of Bayer AG (as at Dec. 31, 2010)

PRESIDIAL COMMITTEE/ MEDIATION COMMITTEE
Schneider (Chairman), Achleitner, Schmoldt, de Win

AUDIT COMMITTEE
Sturany (Chairman), Fischer, Hausmann, Henkel, Schneider, de Win

HUMAN RESOURCES COMMITTEE
Schneider (Chairman), Beumann, Kronen, Weber

NOMINATIONS COMMITTEE
Schneider (Chairman), Achleitner

Board of Management

Members of the Board of Management held offices as members of the supervisory board or a comparable supervising body of the corporations listed (as at December 31, 2010 or the date on which they ceased to be members of the Board of Management):

DR. MARIJN DEKKERS
born September 22, 1957
Chairman (effective October 1, 2010)
Member of the Board of Management effective January 1, 2010, appointed until December 31, 2014

WERNER BAUMANN
born October 6, 1962
Member of the Board of Management effective January 1, 2010, appointed until December 31, 2012

- Bayer Business Services GmbH (Chairman effective May 1, 2010)
- Bayer CropScience AG (Chairman effective May 1, 2010)

DR. WOLFGANG PLISCHKE
born September 15, 1951
Member of the Board of Management effective March 1, 2006, appointed until February 28, 2014

- ARK Therapeutics, Non-Executive Director (until August 16, 2010)
- Bayer MaterialScience AG (Chairman)
- Bayer Technology Services GmbH (Chairman)
- Bayer Innovation GmbH, Shareholders' Committee (Chairman)
- Bayer Real Estate GmbH, Shareholders' Committee (Chairman)

DR. RICHARD POTT
born May 11, 1953
Member of the Board of Management effective May 1, 2002, appointed until April 30, 2012
Labor Director

- Bayer Chemicals AG (Chairman)
- Bayer HealthCare AG (Chairman)
- Bayer Schering Pharma AG* (Chairman)
- Currenta Geschäftsführungs-GmbH (Chairman)
- Bayer Innovation GmbH, Shareholders' Committee

KLAUS KÜHN
born February 11, 1952
Member of the Board of Management until April 30, 2010

- Bayer Business Services GmbH (Chairman until April 30, 2010)
- Bayer CropScience AG (Chairman until April 30, 2010)

WERNER WENNING
born October 21, 1946
Member of the Board of Management (Chairman) until September 30, 2010

- Deutsche Bank AG
- E.ON AG
- HDI V.a.G
- Talanx AG
- Henkel AG & Co. KGaA, Shareholders' Committee

* company to be renamed Bayer Pharma AG

Organization Chart

as of March 1, 2011

[Graphic 5.1]

BAYER AG (HOLDING COMPANY)

Group Management Board

Marijn Dekkers
Chairman

Werner Baumann
Finance

Wolfgang Plischke
Technology, Innovation & Environment

Richard Pott*
Strategy & Human Resources

Corporate Center

Corporate Office
J. Krell

Communications
M. Schade

Investor Relations
A. Rosar

Corporate Auditing
R. Meyer

Corporate Human Resources & Organization
H.-U. Groh

Finance
J. Dietsch

Corporate Development
A. Moscho

Law & Patents, Insurance
R. Hartwig

Environment & Sustainability
W. Grosse Entrup

Group Accounting & Controlling
U. Hauck

Regional Coordination
I. Paterson

BUSINESS AREAS

Bayer HealthCare

J. Reinhardt (photo)
Chairman

J.-L. Lowinski
Animal Health

G. Balkema**
Consumer Care

A. Main
Medical Care

A. Fibig
Pharmaceuticals

A. Busch
Global Drug Discovery

K. Malik
Global Development

M. Vehreschild
Chief Administration Officer

H. Klusik*
Product Supply

A. Bey
General Counsel

A. Günther
Human Resources

M. Pickel
Communications

N.N.
Business Development & Licensing

Bayer CropScience

S. E. Peterson (photo)
Chairman

L. van der Broek
Chief Operating Officer

M. Haug
Human Resources

A. Klausener
Research

S. Kurzawa
Communications

G. Marchand
General Counsel

A. Noack
Industrial Operations

F. J. Placke
Development

G. Riemann
Environmental Science

R. Scheitza*
Strategy & Business Management

D. Suwelack
Business Planning & Administration

Bayer MaterialScience

P. Thomas (photo)
Chairman

A. Steiger-Bagel
Administration

T. Van Osselaer*
Industrial Operations

G. Hilken
Polycarbonates

P. Vanacker
Polyurethanes

J. Wolff
Coatings, Adhesives, Specialties

* Labor Director
** E. L. Mann effective March 14, 2011

SERVICE AREAS

Bayer Business Services

Executive Board

D. Hartert (photo)
Chairman

N. Fieseler*

Bayer Technology Services

D. Van Meirvenne (photo)
Managing Director

Currenta

Executive Board

K. Schäfer (photo)
Chairman

J. Waldi*

Glossary

A

A1CNow™ User-friendly device for measuring the long-term blood glucose level A1c at doctors' offices and diabetes outreach clinics

Adalat® Drug product for the treatment of hypertension; active ingredient: nifedipine

Admire® Insecticide; active ingredient: imidacloprid; main applications: vegetables, rice, fruit, potatoes

Advantage® product line (Advantix® and other brands) Flea and tick control product for dogs and cats; active ingredient: imidacloprid

Alemtuzumab Humanized monoclonal antibody, currently being tested in multiple sclerosis (MS)

Aleve®/Apronax®/Flanax® Analgesic; active ingredient: naproxen

Alion® Herbicide; active ingredient: indaziflam; main applications: plantation crops, sugarcane

Alka-Seltzer® Drug product that binds excess gastric acid and reduces pain and fever

Alpharadin™ Novel alpha-emitting radiopharmaceutical currently undergoing clinical development for the treatment of bone metastases; active ingredient: radium-223 chloride

Angeliq® Drug product for the treatment of menopause symptoms; active ingredients: drospirenone and estradiol

Antacids Drug products to treat heartburn and acid-related stomach complaints

Antra® Drug product that binds excess gastric acid; active ingredient: omeprazol

Arize® Hybrid rice seed

Aspirin® World-famous analgesic; active ingredient: acetylsalicylic acid

Aspirin® Cardio Drug product for protection against heart attack; active ingredient: acetylsalicylic acid

Atlantis® Herbicide; active ingredients: mesosulfuron-methyl, iodosulfuron-methyl-sodium, mefenpyr-diethyl; main applications: wheat, triticale, rye

Avalox®/Avelox® Drug product for the treatment of respiratory tract infections; active ingredient: moxifloxacin

Aviator® Xpro® Fungicide; active ingredients: bixafen, prothioconazole; main application: cereals

B

Balance® Herbicide; active ingredient: isoxaflutole; main applications: corn, sugarcane

Basta® Herbicide; active ingredient: glufosinate-ammonium; main applications: plantation crops, potatoes, vegetables

Bayblend® Brand name for polymer blends based on polycarbonate and acrylonitrile-butadiene-styrene

Baycox® Drug product to control coccidiosis, a parasitic infectious disease in young livestock; active ingredient: toltrazuril

Baycusan® C Brand name for polyurethane dispersions used in cosmetic formulations

Bayfol Reflex™ Technology of Bayer subsidiary Artificial Muscle, Inc. for touchscreens with tactile feedback

Baymedix® Brand name for innovative biomaterials used in medical technology

Baytril® Drug for the treatment of severe veterinary infectious diseases; active ingredient: enrofloxacin

Belt® Insecticide; active ingredient: flubendiamide; main applications: vegetables, soybeans, cotton, rice

Bepanthen® Range of skin care and wound-healing products; active ingredient: dexpanthenol

Bepanthol® Range of care products to treat dry, irritated skin; active ingredient: panthenol

Berocca® Dietary supplement containing B-group vitamins, vitamin C, calcium, magnesium and zinc

Betaferon®/Betaseron® Drug product for the treatment of multiple sclerosis; active ingredient: interferon beta-1b

Beyaz® Oral contraceptive including folate; active ingredients: ethinyl estradiol, drospirenone, levomefolate calcium

Breeze® 2 Blood glucose meter for people with diabetes for simple, safe and rapid use at home or while traveling

C

Canesten® Antifungal medication to treat skin infections; active ingredient: clotrimazole or bifonazole

Capital invested (CI) Capital invested comprises the assets on which the company must obtain a return by generating an appropriate cash inflow; in some cases the cost of ultimately reproducing the assets must be earned in addition.

Cash flow return on investment (CFROI) The cash flow return on investment is the ratio of the gross cash flow to the average capital invested for the year and is thus a measure of the return on capital employed.

Cash value added (CVA) This is the difference between the gross cash flow and gross cash flow hurdle. It is therefore the portion of the gross cash flow that exceeds the return and reproduction requirements. If CVA is positive, the investors' return and reproduction requirements have been satisfied.

Cipro®/Ciprobay®/Ciproxin®/Baycip® Drug product for the treatment of infectious diseases; active ingredient: ciprofloxacin

Confidor® Insecticide; active ingredient: imidacloprid; main applications: vegetables, rice, fruit, potatoes

Connect® Insecticide; active ingredients: imidacloprid, beta-cyfluthrin; main applications: soybeans, corn, cotton

Contour® USB Blood glucose meter for people with diabetes, featuring USB capability and integrated diabetes management software

Core earnings per share (core EPS) Core earnings per share comprises adjusted core net income divided by the weighted average number of issued ordinary shares (taking into account the potential shares resulting from the conversion of the mandatory convertible bond). The adjusted core net income is computed from EBIT plus amortization and impairment losses on intangible assets and impairment losses on property, plant and equipment, plus/minus special items, minus non-operating result, plus/minus income taxes, plus/minus tax adjustments, minus income after taxes attributable to non-controlling interests, plus financing expenses for the mandatory convertible bond net of tax effects. Core earnings per share are not defined in the International Financial Reporting Standards. The company considers that this indicator gives readers a clearer picture of the results of operations and ensures greater comparability of data over time.

Corporate compliance Corporate compliance comprises the observance of statutory and company regulations on lawful and responsible conduct by the company, its employees, and its management and supervisory bodies.

Corporate governance Corporate governance comprises the long-term management and oversight of the company in accordance with the principles of responsibility and transparency. The German Corporate Governance Code sets out basic principles for the management and oversight of listed companies.

Credit default swaps (CDS) Credit default swaps are tradable insurance contracts used to hedge against the default of a borrower.

D

Decis® Insecticide; active ingredient: deltamethrin; main applications: vegetables, fruit, cereals, canola

Delta cash value added (Delta CVA) Delta cash value added is an indicator of the difference between the cash value added between two periods. A positive delta CVA shows that a unit has created value or destroyed less value compared with the reference period.

Desmodur® Brand name for various isocyanates

Desmopan® Brand name for thermoplastic polyurethanes

Desmophen® Brand name for various polyesters and polyols used in the manufacture of polyurethanes

Desonate® Topical glucocorticoid for the treatment of atopic dermatitis; active ingredient: desonide

Drontal® product line Dewormers for dogs and cats; active ingredients: combinations of praziquantel, pyrantel and febantel

E

Earnings before interest and taxes (EBIT) EBIT comprises the operating profit of a company before deduction of the non-operating result and taxes. In Bayer's Annual Report, EBIT is the operating result shown in the income statement.

Earnings before interest, taxes, depreciation and amortization (EBITDA) EBIT plus amortization and impairment losses on intangible assets and depreciation and impairment losses on property, plant and equipment, minus impairment loss reversals. EBITDA, underlying EBITDA and the underlying EBITDA margin are not defined in the International Financial Reporting Standards. The company considers EBITDA before special items to be a more suitable indicator of operating performance since it is not affected by depreciation, amortization, impairments or special items. By reporting this indicator, the company aims to give readers a clearer picture of the results of operations and ensure greater comparability of data over time.

Earnings per share (EPS) EPS is calculated by dividing Group net income by the weighted average number of shares as defined in IAS 33.

EBITDA margin before special items The EBITDA margin before special items is calculated by dividing EBITDA before special items by sales.

EcoCommercial Building Innovative, globally aligned business model for a range of integrated energy and material solutions culminating in the zero emissions building. The model has been included in the Sustainable Buildings & Climate Initiative (SBCI) of UNEP.

Emerion® Fungicide; active ingredient: penflufen; main applications: seed treatment in soybeans, corn, cereals, canola, cotton, rice

Emesto® Fungicide; active ingredient: penflufen; main application: seed treatment in potatoes

EMTN and multi-currency EMTN program The Euro Medium Term Notes (EMTN) program is a documentation platform that enables Bayer to raise capital by quickly issuing debt on the European capital market. Securities issued under this program may be listed in Luxembourg or unlisted. Their maturities, currencies and conditions may vary considerably.

Extavia® Drug product for the treatment of multiple sclerosis; active ingredient: interferon beta-1b

F

Fandango® Fungicide; active ingredients: fluoxastrobin and prothioconazole; main application: cereals

Ficam® Insecticide; active ingredient: bendiocarb; main application: professional non-agricultural pest control

Finale® Herbicide; active ingredient: glufosinate-ammonium; main applications: plantation crops, potatoes, vegetables

Flint® Fungicide; active ingredient: trifloxystrobin; main applications: fruit, grapes, vegetables

Florbetaben Novel F18-labeled tracer substance currently undergoing clinical development for the detection of beta-amyloid plaques in the brain using positron emission tomography (PET)

Folicur® Fungicide; active ingredient: tebuconazole; main applications: cereals, soybeans, canola, peanuts, vegetables, fruit, grapes

G

Gadovist® Contrast agent for magnetic resonance imaging of the central nervous system that enables the number and location of lesions to be displayed in patients with brain metastases or multiple sclerosis; active ingredient: gadobutrol

Gaucho® Insecticide; active ingredient: imidacloprid; main applications: seed treatment for sugar beet, corn, cereals, cotton, canola

Global commercial paper program Commercial paper is a short-term unsecured debt instrument normally issued at a discount and redeemed at nominal value. It is a flexible way of obtaining short-term funding on the capital markets. Bayer's commercial paper program allows the company to issue commercial paper on both the U.S. and European markets.

Glucobay® Drug product for the treatment of diabetes; active ingredient: acarbose

Glucofacts® Deluxe Diabetes management software

Gross cash flow The gross cash flow comprises income after taxes, plus income taxes, plus non-operating result, minus income taxes paid or accrued, plus depreciation, amortization and impairment losses, minus impairment loss reversals, plus/minus changes in pension provisions, minus gains/plus losses on retirements of noncurrent assets, minus gains from the remeasurement of already held assets in step acquisitions. The change in pension provisions includes the elimination of non-cash components of the operating result (EBIT). It also contains benefit payments during the year.

Gross cash flow hurdle The GCF hurdle is the gross cash flow that must be generated in light of the respective asset situation in order to satisfy investors' return and reproduction requirements.

H

HDI Hexamethylene diisocyanate, a raw material for polyurethane coatings

Hybrid bond A hybrid bond is an equity mezzanine corporate bond, usually with either no or very long maturity. Due to its subordination, issuer bankruptcy can lead to a complete financial loss.

I

Ignite® Herbicide; active ingredient: glufosinate ammonium; main applications: genetically modified crops (cotton, canola, soybeans, corn)

Input® Fungicide; active ingredients: prothioconazole, spiroxamine; main application: cereals

Intense® Tomato seed

InVigor® Summer canola seed

Iopamiron® Non-ionic intravascular contrast agent for all common x-ray analyses

K

Key performance indicators (KPI) Indicators used to evaluate the attainment of targets by the company

Kinzal® Drug product for the treatment of hypertension; active ingredient: telmisartan

K-Othrine® Insecticide; active ingredient: deltamethrin; main applications: insects that transmit malaria, sleeping sickness and Chagas' disease

Kogenate® Drug product for the treatment of hemophilia; active ingredient: recombinant Factor VIII

L

Levitra® Drug product for the treatment of erectile dysfunction; active ingredient: vardenafil

Liberty® Herbicide; active ingredient: glufosinate-ammonium; main applications: genetically modified crops (cotton, canola, soybeans, corn)

LibertyLink® Plant trait: herbicide tolerance; main applications: cotton, canola, soybeans, corn

Lifenet® Mosquito nets to prevent malaria based on a textile fiber incorporating the active ingredient deltamethrin

Life sciences Field of activities comprising particularly health care and nutrition; at Bayer this refers to the activities of the HealthCare and CropScience subgroups.

Luna® Fungicide; active ingredient: fluopyram; main applications: wine and table grapes, fruit, vegetables

M

Magnevist® Contrast agent for diagnosis in the central nervous system and body; active ingredient: dimeglumine gadopentetate

Makroblend® Brand name for polymer blends made from polycarbonate and polybutylene terephthalate or polyethylene terephthalate

Makrofol® Brand name for films made from Makrolon®

Makrolon® Brand name for polycarbonate

MDI Diphenylmethane diisocyanate, an important raw material for rigid polyurethane foam used in thermal insulation

Merit® Insecticide; active ingredient: imidacloprid; main application: insecticide for non-agricultural grass lawns

Mirena® Intrauterine contraceptive; active ingredient: levonorgestrel

N

Nativo® Fungicide; active ingredients: trifloxystrobin, tebuconazole; main applications: cereals, soybeans, corn, rice

Natazia™ Oral contraceptive whose estrogen component is based on estradiol; active ingredients: estradiol valerate, dienogest

Natria™ Product line from Bayer's range of garden products for consumers; based on natural or nature-derived active ingredients

NeoBenz® Micro Drug product for the treatment of acne: active ingredient: benzoyl peroxide

Net cash flow The net cash flow is the cash flow from operating activities as defined in IAS 7.

Nexavar® Cancer drug for the treatment of patients with hepatocellular carcinoma or advanced renal cell carcinoma; active ingredient: sorafenib

O

One A Day® Multivitamin product

Over the counter (OTC) The trading of securities outside of an organized exchange. OTC transactions are still subject to the statutory provisions on securities trading. In the HealthCare business, OTC refers to non-prescription medication.

P

Poncho® Insecticide; active ingredient: clothianidin; main applications: seed treatment for corn, canola, sugar beet, cereals

PPA Purchase price allocation

Price/cash flow ratio The price/cash flow ratio is the ratio of the share price to gross cash flow per share. It shows how long it would take for the company's cash flow to cover the share price.

Price/EPS This is the ratio of the current share price to earnings per share. A high price/EPS ratio indicates that the market assigns a high value to the stock in the expectation of future earnings growth.

Pritor® Drug product for the treatment of hypertension; active ingredient: telmisartan

Proline® Fungicide; active ingredient: prothioconazole; main applications: cereals, canola

Prosaro® Fungicide; active ingredients: prothioconazole, tebuconazole; main applications: cereals, canola

Puma® Herbicide; active ingredient: fenoxaprop-p-ethyl; main applications: cereals, rice, soybeans

Q

Qlaira® Oral contraceptive whose estrogen component is based on estradiol; active ingredients: estradiol valerate, dienogest

R

Raxil® Fungicide; active ingredient: tebuconazole; main applications: seed treatment for wheat and barley

Redoxon® Vitamin product containing vitamin c and zinc

Regorafenib Novel oral multikinase inhibitor for the treatment of gastrointestinal stromal tumors (GIST)

Rely® Herbicide; active ingredient: glufosinate-ammonium; main applications: plantation crops, potatoes

Rennie® Medicine to treat heartburn and acid-related stomach disorders; active ingredients: calcium carbonate and magnesium carbonate

Riociguat Active ingredient from a new class of vasodilative substances; stimulates the enzyme soluble guanylate cyclase and is currently being tested in a Phase III program to determine its efficacy and safety in the treatment of chronic thromboembolic pulmonary hypertension and pulmonary arterial hypertension

Routine® Fungicide; active ingredient: isotianil; main application: rice

S

Safyral™ Oral contraceptive including folate; active ingredients: ethinyl estradiol, drospirenone, levomefolate calcium

Soberan® Herbicide; active ingredients: tembotrione and isoxadifen; main application: corn

Specticle® Herbicide; active ingredient: indaziflam; main application: lawncare for professional users

Sphere®/Sphere® Max Fungicide; active ingredients: trifloxystrobin and cyproconazole; main applications: soybeans, cereals, sugar beet, coffee

Squeeze-out Transfer of the shares held by minority stockholders in a stock corporation to the majority stockholder in return for a compensation payment. In Germany, a majority stockholder with an interest of 95 percent can request a squeeze-out.

STAXYN™ New formulation of the drug Levitra® for the treatment of erectile dysfunction; active ingredient: vardenafil

Stratego® Fungicide; active ingredients: trifloxystrobin, propiconazole; main applications: corn, soybeans, cereals, rice

Supradyn® Vitamin and mineral supplement with trace elements

Syndicated credit facility Credit line agreed with a group of banks. Generally used for extensive financing requirements, such as when making an acquisition, to increase the available liquidity reserves or as security for the issuance of debt instruments. The credit facility can be utilized and repaid flexibly, either in full or in portions, during its term.

T

TDI Toluene diisocyanate, an important raw material for polyurethane flexible foam used in upholstery, mattresses and car seats

Temprid® Insecticide; active ingredients: imidacloprid, betafluthrin; main application: professional non-agricultural pest control

U

Ultravist® Contrast agent for x-ray examinations including computed tomography; active ingredient: iopromide

V

VALETTE® PLUS Oral contraceptive including folate (vitamin B); active ingredients: dienogest, ethinyl estradiol, levomefolate calcium

VEGF Trap-Eye VEGF (vascular endothelial growth factor) is a natural growth factor that is also involved in the pathological formation of new blood vessels in the eyes, which leads to wet age-related macular degeneration (AMD). VEGF Trap-Eye specifically inhibits this process and other growth factors and is currently undergoing Phase III clinical testing.

Votivo™ Biological agent based on Bacillus firmus to protect against nematodes, main applications: seed treatment in combination with Poncho® in corn, soybeans and cotton

Vulkollan® Brand name for a high-performance polyurethane elastomer

W

Weighted average cost of capital (WACC) The weighted average cost of capital (WACC) represents the return required by investors on the capital invested in the company. It is computed as a weighted average of the cost of equity and debt. The cost of equity correlates with the return expectations of stockholders while the cost of debt comprises the conditions obtained by the company for its long-term financing.

World-scale production facility Extremely large production plant whose capacity allows the realization of substantial economies of scale.

X

Xarelto® Direct Factor Xa inhibitor in tablet form. The active ingredient rivaroxaban is used to prevent and treat thrombosis in a wide range of indications and is registered in the European Union and other regions as Xarelto® for the prophylaxis of venous thromboembolism (VTE) in adults following elective hip and knee replacement surgery.

Xpro® Fungicide; active ingredients: bixafen, prothioconazole; main application: cereals

Y

YAZ®/Yasmin®/Yasminelle® Oral contraceptives; active ingredients: ethinyl estradiol and drospirenone

Z

Zetia® Cholesterol-lowering drug from Merck & Co., co-marketed by Bayer in Japan; active ingredient: ezetimib

INTERNET

For explanations of further specialist terminology, go to:
WWW.INVESTOR.BAYER.COM
> STOCK
> GLOSSARY

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Global Commitment to Sustainability

Sustainability at Bayer is an integral part of a corporate policy geared to long-term success and innovative solutions. This commitment is also evidenced by the company's participation in numerous initiatives and projects around the world. Logos relating to a selection of these activities appear in the left margin in the order in which the respective activities are described below.

Bayer has long practiced the concept of Responsible Care. To achieve continuous improvement in the areas of health, safety and environment, the company has been guided by the principles of the voluntary Responsible Care initiative of the chemical and pharmaceutical industry since 1994 and by the Responsible Care Global Charter, which was last revised in 2006.

A member of the World Business Council for Sustainable Development since 1997, Bayer was a co-founder of German industry's sustainable development forum "econsense" in 2000.

Bayer is a founding member of the United Nations Global Compact (UNGC) initiative, also established in 2000, actively promoting its 10 principles through its support for the LEAD, "Caring for Climate" and "CEO Water Mandate" initiatives and numerous projects. In Brazil, for example, Bayer supports the Abrinq Foundation in its efforts to combat child labor, and in India the company participates in the "Learning for Life" initiative for the protection and advancement of children during their education.

Bayer's collaboration with the United Nations Environment Programme (UNEP) has been in place since 2004 and has set standards in public-private partnerships. Among the long-standing joint activities is the "Bayer Young Environmental Envoy" program, in which young people from 18 countries on three continents participate.

In 2009 the company joined the UNEP Climate Neutral Network, which promotes low-CO_2-emission industrial and social structures. To help reduce greenhouse gas emissions from relevant buildings worldwide, Bayer is also supporting the Sustainable Buildings and Climate Initiative of the U.N. Environment Programme (UNEP SBCI) as part of its EcoCommercial Building Program.

The company places maximum importance on climate protection. Bayer has been included for six consecutive years in the Carbon Disclosure Leadership Index (CDLI) published by the Carbon Disclosure Project (CDP), an organization run on behalf of institutional investors, and in 2010 was also included in the CDP's new Carbon Performance Leadership Index (CPLI).

For more than 50 years, Bayer has supported family planning programs in over 130 countries, focusing on cooperation with private and public relief organizations such as the United Nations Population Fund (UNFPA). In the fight against tuberculosis, Bayer is cooperating with the Global Alliance for TB Drug Development, a U.S. non-profit organization, with the aim of developing a new drug that reduces treatment times. As part of its Sustainability Program, Bayer offers contraceptives at reduced prices in developing countries. Activities in the area of family planning also include educating teenagers on sexuality and health issues. In Uganda, for example, Bayer cooperates with the German Foundation for World Population (DSW) in this field.

Bayer is represented in major stock indices and investment funds that focus on companies pursuing responsible and sustainable corporate strategies. For example, Bayer is listed in the Dow Jones Sustainability Indices Europe and World, the FTSE4Good index series and the Advanced Sustainable Performance Indices (ASPI) Eurozone. It also qualified for inclusion in the Storebrand SRI Funds as a "Best in Class" company.

Our sustainability reporting is based on the guidelines of the Global Reporting Initiative (GRI), which Bayer supports as an organizational stakeholder.

The Bayer Group

Bayer

Bayer AG defines common values, goals and strategies for the entire Group. The subgroups and service companies operate independently, led by the management holding company. The Corporate Center supports the Group Management Board in its task of strategic leadership.

Bayer HealthCare

Bayer HealthCare is among the world's foremost innovators in the field of pharmaceutical and medical products. This subgroup's mission is to research, develop, manufacture and market innovative products that improve the health of people and animals throughout the world. Read more on page 58ff.

Bayer CropScience

Bayer CropScience, with its highly effective products, pioneering innovations and keen customer focus, holds global leadership positions in crop protection and non-agricultural pest control. The company also has major activities in seeds and plant traits. Read more on page 64ff.

Bayer MaterialScience

Bayer MaterialScience is a renowned supplier of high-tech polymers and develops innovative solutions for a broad range of applications relevant to everyday life. Products holding leading positions on the world market account for a large proportion of its sales. Read more on page 69ff.

SERVICE COMPANIES

Bayer Business Services is the Bayer Group's global competence center for IT and business services. Its portfolio is focused on services in the core areas of IT infrastructure and applications, procurement and logistics, human resources and management services, and finance and accounting.

Bayer Technology Services, the global technological backbone and a major innovation driver of the Bayer Group, is engaged in process development and in process and plant engineering, construction and optimization.

Currenta offers services for the chemical industry including utility supply, waste management, infrastructure, safety, security, analytics and vocational training.

At Home Throughout The World

NORTH AMERICA
In North America (United States and Canada), Bayer is represented in all strategic business areas. In 2010 Bayer's 16,400 employees in this region generated sales of €8.2 billion, which was 23.5% of the Group total.

EUROPE
In 2010 Bayer achieved sales of €13.8 billion on the European market, which accounted for 39.2% of the Group total. Numerous major production facilities and 54,300 employees (of whom 36,200 are based in Germany) give the company a strong presence in this region.

LATIN AMERICA / AFRICA / MIDDLE EAST
Bayer has been present in Latin America for more than 110 years. In 2010 the company's 16,100 employees in the Latin America / Africa / Middle East region generated €5.6 billion in sales – 16.0% of the Group total.

ASIA / PACIFIC
With its tremendous growth potential, this economic region is one of the most important markets of the future. In 2010 Bayer generated €7.5 billion in sales here – 21.3% of the Group total – with 24,600 employees.

Five-Year Financial Summary

[Table 1.2]

	2006	2007	2008	2009	2010
	€ million	€ million	€ million	€ million	€ million
Bayer Group					
Sales	28,956	32,385	32,918	31,168	35,088
Sales outside Germany	84.4%	85.1%	85.4%	86.7%	87.4%
EBIT (operating result)	2,762	3,154	3,544	3,006	2,730
EBIT before special items[1]	3,479	4,287	4,342	3,772	4,452
EBITDA[1]	4,675	5,866	6,266	5,815	6,286
EBITDA before special items[1]	5,584	6,777	6,931	6,472	7,101
Income before income taxes	1,980	2,234	2,356	1,870	1,721
Income after taxes	1,695	4,716	1,724	1,359	1,310
Earnings per share (€)[2]	2.22	5.84	2.22	1.70	1.57
Noncurrent assets	**35,897**	**34,712**	**35,351**	**34,049**	**33,188**
of which goodwill and other intangible assets	24,034	22,770	22,598	21,546	20,163
of which property, plant and equipment	8,867	8,819	9,492	9,409	9,835
Current assets	**17,069**	**16,582**	**17,152**	**16,993**	**18,318**
Inventories	6,153	6,217	6,681	6,091	6,104
Receivables and other current assets	8,001	7,834	8,377	8,177	9,374
Cash and cash equivalents	2,915	2,531	2,094	2,725	2,840
Financial liabilities	**19,801**	**14,417**	**16,870**	**12,949**	**11,833**
Noncurrent	14,723	13,081	10,614	11,460	9,944
Current	5,078	1,336	6,256	1,489	1,889
Interest expense – net	(728)	(701)	(702)	(548)	(499)
Return on equity	14.1%	31.8%	10.4%	7.7%	6.9%
Gross cash flow[3]	3,913	4,784	5,295	4,658	4,771
Capital expenditures (total)	1,939	1,905	1,982	1,669	1,621
Depreciation and amortization	2,086	2,478	2,570	2,660	2,571
Personnel expenses (including pension expenses)	6,630	7,571	7,491	7,776	8,099
Number of employees[4] (Dec. 31)	106,000	106,200	108,600	111,000	111,400
Research and development expenses	2,297	2,578	2,653	2,746	3,053
Equity including non-controlling interest (total)	**12,851**	**16,821**	**16,340**	**18,951**	**18,896**
Capital stock	1,957	1,957	1,957	2,117	2,117
Reserves	10,894	14,864	14,383	16,834	16,779
Net income	1,683	4,711	1,719	1,359	1,301
Non-controlling interest	84	87	77	54	63
Liabilities (total)	**43,040**	**34,557**	**36,171**	**32,091**	**32,610**
Total assets	**55,891**	**51,378**	**52,511**	**51,042**	**51,506**
Equity ratio	**23.0%**	**32.7%**	**31.1%**	**37.1%**	**36.7%**
Bayer AG					
Net income	1,250	1,928	1,161	2,226	1,245
Allocation to retained earnings	486	896	91	1,068	5
Total dividend payment	764	1,032	1,070	1,158	1,240
Dividend per share (€)	1.00	1.35	1.40	1.40	1.50

2009 figures restated, figures for 2006-2008 as last reported

[1] For definition see Combined Management Report, Chapter 4.2 "Calculation of EBIT(DA) Before Special Items."

[2] Earnings per share as defined in IAS 33: adjusted net income divided by the average number of shares. For details see Note [16] to the consolidated financial statements.

[3] For definition see Combined Management Report, Chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group."

[4] Full-time equivalents

Financial Calendar

Q1 2011 Interim Report	APRIL 28, 2011
Annual Stockholders' Meeting 2011	APRIL 29, 2011
Payment of Dividend	MAY 2, 2011
Q2 2011 Interim Report	JULY 28, 2011
Q3 2011 Interim Report	OCTOBER 27, 2011
2011 Annual Report	FEBRUARY 28, 2012
Q1 2012 Interim Report	APRIL 26, 2012
Annual Stockholders' Meeting 2012	APRIL 27, 2012

MASTHEAD

Publisher
Bayer AG, 51368 Leverkusen,
Germany

Editor
Jörg Schäfer, phone +49 214 30 39136
email: joerg.schaefer@bayer.com

English edition
Currenta GmbH & Co. OHG
Language Service

Investor Relations
Peter Dahlhoff, phone +49 214 30 33022
email: peter.dahlhoff@bayer.com

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