ANNUAL REPORT 2009

COVER PICTURE

As an inventor company Bayer aims for innovation, supported by its 12,400-strong global research and development team. One member of that team is Dr. Xin Ma, Head of the Global Drug Discovery Innovation Center China in Beijing. The photo shows the scientist preparing an experiment during drug development.

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

Key Data

[Table 1.1]

	2008	2009	Change
	€ million	€ million	%
Bayer Group			
Sales	32,918	31,168	–5.3
EBITDA[1]	6,266	5,815	–7.2
EBITDA before special items	6,931	6,472	–6.6
EBITDA margin before special items	21.1%	20.8%	
EBIT[2]	3,544	3,006	–15.2
EBIT before special items	4,342	3,772	–13.1
Income before income taxes	2,356	1,870	–20.6
Net income	1,719	1,359	–20.9
Earnings per share (€)[3]	2.22	1.70	–23.4
Core earnings per share (€)[4]	4.17	3.64	–12.7
Gross cash flow[5]	5,295	4,658	–12.0
Net cash flow[6]	3,608	5,375	+49.0
Net financial debt	14,152	9,691	–31.5
Capital expenditures as per segment table	1,982	1,669	–15.8
Research and development expenses	2,653	2,746	+3.5
Dividend per Bayer AG share (€)	1.40	1.40	0.0
Bayer HealthCare			
External sales	15,407	15,988	+3.8
EBITDA[1]	3,692	4,148	+12.4
EBITDA before special items	4,157	4,468	+7.5
EBITDA margin before special items	27.0%	27.9%	
EBIT[2]	2,181	2,640	+21.0
EBIT before special items	2,764	3,012	+9.0
Gross cash flow[5]	3,045	3,153	+3.5
Net cash flow[6]	2,259	3,431	+51.9
Bayer CropScience			
External sales	6,382	6,510	+2.0
EBITDA[1]	1,450	1,311	–9.6
EBITDA before special items	1,603	1,508	–5.9
EBITDA margin before special items	25.1%	23.2%	
EBIT[2]	918	798	–13.1
EBIT before special items	1,084	1,017	–6.2
Gross cash flow[5]	1,192	1,043	–12.5
Net cash flow[6]	736	745	+1.2
Bayer MaterialScience			
External sales	9,738	7,520	–22.8
EBITDA[1]	1,041	341	–67.2
EBITDA before special items	1,088	446	–59.0
EBITDA margin before special items	11.2%	5.9%	
EBIT[2]	537	(266)	•
EBIT before special items	586	(126)	•
Gross cash flow[5]	850	319	–62.5
Net cash flow[6]	782	849	+8.6

[1] EBITDA: EBIT plus amortization of intangible assets and depreciation of property, plant and equipment. EBITDA, EBITDA before special items and EBITDA margin are not defined in the International Financial Reporting Standards and should therefore be regarded only as supplementary information. The company considers underlying EBITDA to be a more suitable indicator of operating performance since it is not affected by depreciation, amortization, write-downs/write-backs or special items. The company also believes that this indicator gives readers a clearer picture of the results of operations and ensures greater comparability of data over time. The underlying EBITDA margin is calculated by dividing underlying EBITDA by sales. See also Chapter 4.2 "Calculation of EBIT(DA) Before Special Items," page 74.
[2] EBIT as shown in the income statement
[3] Earnings per share as defined in IAS 33 = net income divided by the average number of shares. For details see Note [16] to the consolidated financial statements, page 193f.
[4] Core earnings per share is not defined in the International Financial Reporting Standards. The company believes 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 Chapter 4.3 on page 75.
[5] Gross cash flow = income from continuing operations after taxes, plus income taxes, plus non-operating result, minus income taxes paid or accrued, plus depreciation, amortization and write-downs, minus write-backs, plus/minus changes in pension provisions, minus gains/plus losses on retirements of noncurrent assets, plus non-cash effects of the remeasurement of acquired assets. The change in pension provisions includes the elimination of non-cash components of the operating result. It also contains benefit payments during the year. See also Chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group," page 78ff.
[6] 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.

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Bayer: a strong company

Dear Stockholders:

2009 was an especially challenging year. Despite our best efforts, we too were unable to prevent a decline in sales and earnings. Yet thanks to our strategic alignment, we navigated the economic downturn with comparative success. Sales fell by 5.3 percent to €31.2 billion, and we limited the drop in earnings to 6.6 percent. EBITDA before special items came in at €6.5 billion, making 2009 operationally one of the three best years in Bayer's history. We also improved net cash flow by 49 percent to €5.4 billion. This enabled us to reduce net financial debt by €4.5 billion – a bigger drop than expected – to €9.7 billion.

These achievements were the result of an outstanding level of commitment by our employees, to whom I extend my sincere thanks on behalf of the entire Board of Management.

Our business performance varied from one subgroup to another. HealthCare again registered growth in both sales and earnings that was driven by all divisions. This subgroup's activities account for about half of our sales and some 70 percent of underlying EBITDA. We strategically strengthened our HealthCare subgroup with further acquisitions and a number of license agreements in key areas. These transactions included research, development and distribution partnerships, particularly in oncology, the purchase of exclusive rights to an insulin product for the Chinese market, and the acquisition of two dermatology products in the United States.

CropScience further increased sales and market share, with our young products again showing above-market growth. Thus in 2009 we already achieved an important target: €2 billion in sales of products based on active ingredients launched since 2000. In terms of earnings, CropScience was unable to match the record level of 2008 due to higher raw material costs and negative currency effects. Strategically, however, there were a number of highlights, ranging from extensive license agreements in the field of plant traits to the acquisition of U.S.-based biotech company Athenix, which was Bayer's largest transaction in 2009.

For MaterialScience, it was a very difficult year as expected. Yet business recovered tangibly as the year went on. The subgroup initiated a rapid, broad response to the sharp drop in demand with measures such as temporary plant shutdowns, production cutbacks, and short-term reductions in working hours and compensation. These actions paid off. We also accelerated the implementation of our restructuring programs and applied strict cost management.

It goes without saying that you, our stockholders, should benefit from the relatively stable performance of our business. The Board of Management and the Supervisory Board are therefore proposing to pay a dividend for 2009 of €1.40 per share, the same as in the previous year. This payout reflects the Bayer Group's operational earning power and future perspectives.

We brought 2009 to a successful close and are optimistic for 2010. This year we are targeting currency- and portfolio-adjusted sales growth of more than 5 percent and aim to increase EBITDA before special items toward €7 billion. Core earnings per share are expected to improve by about 10 percent.

Having largely achieved our current target margins, our main focus for the future is on creating value through profitable growth. To do this we plan to continue investing primarily in our research and development pipeline, in BioScience and in the emerging markets. We expect to achieve steady currency- and portfolio-adjusted sales growth of approximately 5 percent annually through 2012 and plan to raise EBITDA before special items to around €8 billion within this period. We are targeting an average 10 percent annual improvement in core earnings per share, which would mean an increase to around €5 per share.

Today we are benefiting from the work we have done in recent years to align the enterprise toward innovation and growth and give it a competitive structure.

That work began with the biggest reorganization in Bayer's history. We separated the Group's strategic management from the day-to-day running of the business, created clear lines of responsibility and focused our activities more closely on their respective markets. This new organizational structure proved to be a solid foundation for our subsequent activities.

We focused our portfolio on the core areas of health care, nutrition and high-tech materials. The acquisition of Schering AG, Berlin, Germany, crucially strengthened our pharmaceutical operations. Since 2002 we have acquired or divested businesses worth a total of over €43 billion in order to restructure the Bayer Group.

Since the reorganization – in other words, between 2002 and 2009 – we implemented efficiency improvement and cost containment measures with a total volume of some €4 billion, completing the last of the restructuring programs last year. There can be no doubt that we would not have mastered the crisis so well if we had not transformed our portfolio and increased our efficiency.

This is also reflected in our stock market performance, which was very positive last year at nearly 40 percent. Bayer shares thus trended significantly better than the DAX or the EURO STOXX 50. Since 2005 our stock has appreciated by an average of 22 percent a year, taking dividends into account.

As you can see, long-term alignment and sustainable business management have been the top priority at Bayer for many years. And this strategy also proves effective in a difficult environment.

An important milestone is our new sustainability strategy, which we presented last year. We are contributing Bayer products and the expertise of our employees to eight international lighthouse projects in the areas of health care, nutrition and climate protection to help drive sustainable development forward throughout the world. These activities once again underline our strategic objective of balancing ecological, economic and social needs.

A special focus has been set with our foundation activities. Greater investment in education is needed to safeguard the future. In this context, the Bayer Science & Education Foundation is providing financial assistance for projects designed to improve science teaching in schools. Since the launch of our school support program at the end of 2007, we have already facilitated more than 100 projects with total funding of over €1.25 million.

Our direction is clear: as an inventor company, Bayer stands for research and development. That's why the cover of this Annual Report is dedicated to research. The picture shows the director of our new HealthCare research center in China.

Innovation is vital for a company's future. With this in mind, we are maintaining our commitment to research and development even in these challenging times. In 2009 we invested €2.75 billion in research and development – the largest amount in Bayer's 146-year history. These expenditures are intended to lead to pioneering innovations that will benefit future generations too.

This fall, after 44 years with Bayer and more than eight years as Chairman of the Board of Management, I will relinquish my responsibility for steering the company. I would like to thank Bayer for the opportunity to have such an interesting, challenging and varied career. My thanks are also due to all the colleagues who have shown such dedication and commitment to Bayer over the years.

In addition, I would like to thank you, our stockholders, for the trust you have placed in me and the entire Board of Management in recent years. I ask that you give the same support to my successor, Dr. Marijn E. Dekkers, and the management team in continuing Bayer's successful course.

Sincerely,

WERNER WENNING
Chairman of the Board of Management of Bayer AG

Board of Management

WERNER WENNING
Chairman

Werner Wenning has been Chairman of the Bayer AG Board of Management since April 2002. Born in Leverkusen in 1946, Wenning joined the company in 1966 as a commercial trainee. He held a number of positions with Bayer in Germany and abroad, serving as managing director of Bayer subsidiaries in Peru and Spain and later as Head of the Corporate Planning and Controlling Division. Wenning was first appointed to the Bayer AG Board of Management as Chief Financial Officer in February 1997. Werner Wenning is married with two daughters.

DR. MARIJN DEKKERS
Chairman (from 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 succeeds Werner Wenning effective October 1, 2010. Marijn Dekkers is married with three daughters.

DR. WOLFGANG PLISCHKE
Innovation · Technology · 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.

WERNER BAUMANN
Finance · Europe region (from 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 succeeds Klaus Kühn effective May 1, 2010. Werner Baumann is married with four children.

KLAUS KÜHN
Finance · Europe region

Born in Berlin in 1952, Klaus Kühn studied mathematics and physics at the Technical University of Berlin, gaining a mathematics degree in 1978. He also studied in the United States, where he obtained a Master of Business Administration. Kühn joined Bayer AG in 1998 as Head of the Finance Section, and shortly afterwards was made Head of the Group Finance Division. He was appointed to the Bayer AG Board of Management in May 2002. Klaus Kühn is married with two daughters.

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 Wenning, Werner Baumann, Klaus Kühn

Report of the Supervisory Board

Dear stockholders:

During 2009 the Supervisory Board monitored the conduct of the company's business 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 and the Chairman of the Board of Management maintained a constant exchange of information. 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 2009. In addition, two resolutions were passed outside of the meetings. One of these concerned the submission of a binding offer to acquire Athenix Corp., and the other related to an agreement with Genzyme Corp. to alter certain aspects of the existing collaboration and transfer the hematological oncology portfolio to Genzyme. No member of the Supervisory Board attended fewer than half of its meetings. All members of the Board of Management regularly attended 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, as well as on personnel decisions in connection with the appointment of successors to Werner Wenning and Klaus Kühn. Other topics were discussed at each of the meetings. At the meeting held in February, the Supervisory Board dealt at length with the Bayer Group's risk management system. At its September meeting the Supervisory Board appointed Dr. Marijn E. Dekkers a member of the Board of Management effective January 1, 2010, and Chairman of the Board of Management effective October 1, 2010. It also appointed Werner Baumann to the Board of Management effective January 1, 2010 and resolved on the service contracts

of both the new Board of Management members. At the meeting in December 2009, the Supervisory Board adapted the compensation system for the members of the Board of Management to the new statutory requirements and resolved on necessary amendments to their service contracts. At the meeting in December 2009, 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 2010 through 2012. This meeting also discussed the new version of the German Corporate Governance Code, approved the issuance of a new declaration of compliance and resolved on amendments to the Supervisory Board's rules of procedure.

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 88 of this Annual Report and therefore is not reproduced here.

Work of the committees

In 2009 the Presidial Committee of the Supervisory Board resolved on two amendments to the wording of the articles of incorporation necessitated by the issuance of shares to service conversion rights under a convertible bond. The Presidial Committee was not required to convene in 2009 in its capacity as the Mediation Committee under Section 27 Paragraph 3 of the German Codetermination Act.

The Audit Committee met four times during the year, addressing in particular the company's and the Group's 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 2009 fiscal year. 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, the risk management system, legal risks and corporate compliance. 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. A focus of the April meeting was on the report of the Compliance Officer. At its October meeting, the Audit Committee deliberated on the most recent changes to the International Financial Reporting Standards (IFRS) and their consequences for the Bayer Group.

The Human Resources Committee convened on three 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 predominantly matters concerning the compensation of the Board of Management. At its meeting in September, the Human Resources Committee also discussed the departure of Werner Wenning and Klaus Kühn, which will become effective during 2010, and the planned appointment of two new members, Dr. Marijn E. Dekkers and Werner Baumann. Recommendations concerning the related resolutions were submitted to the full Supervisory Board. At its December meeting, the Human Resources Committee addressed in detail the consequences of the newly enacted German Law on the Appropriateness of Management Board Compensation. It recommended that the Supervisory Board adapt the compensation system for the members of the Board of Management and make the necessary amendments to their service contracts.

On one occasion in 2009, 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.

The meetings and decisions of the committees were prepared on the basis of reports and other information provided by the Board of Management. Members of the Board of Management regularly attended the committee meetings. 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 June 2009. 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 2009 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.

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 €1.40 per share.

The Supervisory Board would like to thank the Board of Management and all employees for their dedication and hard work in 2009.

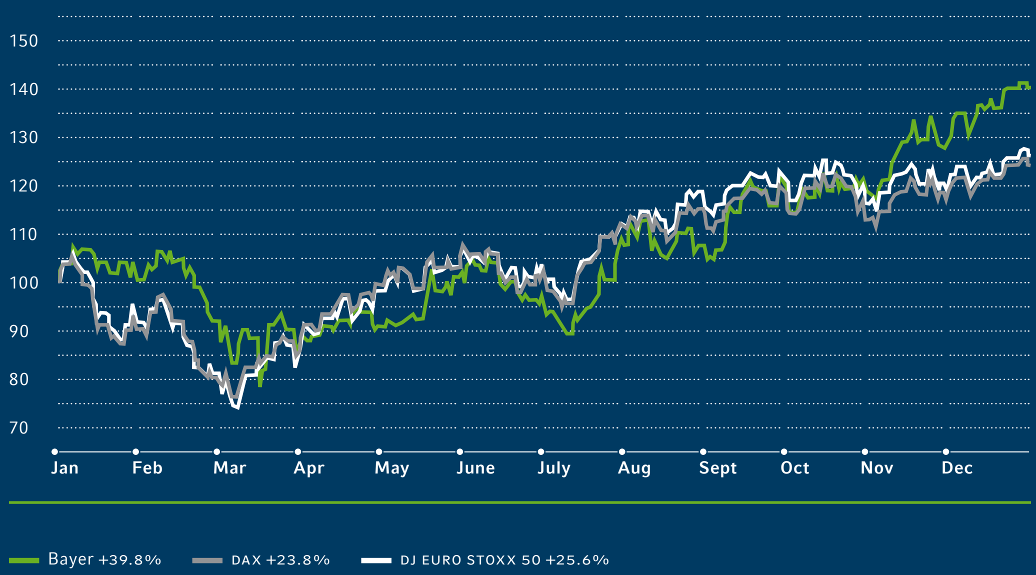
Leverkusen, February 2010
For the Supervisory Board

DR. MANFRED SCHNEIDER
Chairman

Investor Information

Performance of Bayer Stock in 2009 **[Graphic 2.1]**

(indexed; 100 = closing price on December 31, 2008)



Bayer stock showed a strong performance in 2009, appreciating by nearly 40 percent, while the DAX ended the year up 24 percent. The Board of Management and the Supervisory Board propose the distribution of a dividend of €1.40 per share, the same as for the previous year.

A volatile year on the stock markets

Sharp fluctuations throughout 2009

Substantial price movements characterized the international stock markets in 2009. In the wake of the economic and financial crisis, the DAX had slipped roughly 24 percent by early March to its year low of 3,666 points. This was also its lowest level for five years. However, the market rallied considerably in the months that followed, and the DAX closed the year at 5,957 points, up some 24 percent from the end of 2008. On a longer-term view, 2009 was an above-average year on the German stock market. In only three of the past ten years did the DAX achieve a better performance: 1999 (approx. 39 percent), 2003 (approx. 37 percent) and 2005 (approx. 27 percent).

INTERNET

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

Prices trended similarly in other European countries, Asia and North America, with the DJ EURO STOXX 50 up some 26 percent on the year, the S&P 500 in the U.S. gaining around 23 percent and Japan's Nikkei 225 rising 19 percent.

The positive trend in equities, especially in the second half of the year, was driven primarily by central bank and fiscal policy and investor optimism about an economic recovery.

Bayer stock again significantly outperformed the DAX

In 2009, Bayer stock outperformed the DAX and EURO STOXX 50 indices for the third consecutive year, gaining 34.7 percent on the year. Including the dividend of €1.40 per share for 2008 paid in May 2009, its performance amounted to 39.8 percent. The shares ended 2009 at €55.96, very close to their high for the year.

Bayer's market capitalization showed an even stronger improvement. The conversion of the mandatory convertible bond in June 2009 boosted the number of shares to 826,947,808. In sum, our market capitalization rose last year by nearly 46 percent to over €46 billion.

The trading volume in our shares receded by about 30 percent from the previous year to an average of 4.3 million per day. However, Bayer stock still trended better than the average for the Deutsche Börse cash market, which was down more than 50 percent compared with 2008.

Successful capital market transactions despite difficult market conditions

In the first half of 2009, the ability to raise capital in order to refinance debt and create an additional liquidity reserve for risk management was almost entirely confined to companies with investment-grade ratings. Although risk premiums were far higher than before the collapse of the U.S. investment bank Lehman Brothers, they were more favorable than in the fourth quarter of 2008 and below those on equivalent bank loans.

The decline in risk premiums during the year can be seen from the trend in credit default swaps (CDS), depicted 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.

Bayer's good credit rating and sound reputation on the capital market enabled us even in the first half of 2009 to raise capital for purposes of refinancing and creating a safety cushion. In the first quarter of 2009 we issued promissory notes (Schuldscheine) with a total face value of €620 million and a €1.3 billion Eurobond.

A list of the bonds issued by Bayer can be found in Note [27] to the consolidated financial statements on page 227.

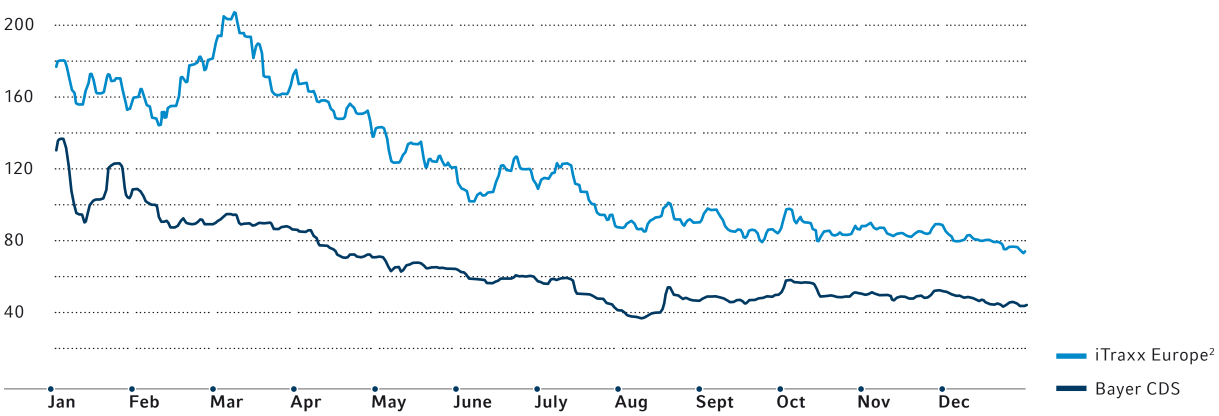
Bayer Stock Data [Table 2.1]

		2008	2009
Earnings per share	€	2.22	1.70
Core earnings per share[1]	€	4.17	3.64
Cash flow per share	€	6.93	5.63
Equity per share	€	21.38	22.92
Dividend per share	€	1.40	1.40
Year-end price[2]	€	41.55	55.96
High for the year[2]	€	65.68	56.45
Low for the year[2]	€	36.83	32.69
Total dividend payment	€ million	1,070	1,158
Shares entitled to the dividend (Dec. 31)	million	764.34	826.95
Market capitalization (Dec. 31)	€ billion	31.8	46.3
Average daily trading volume	million	6.0	4.3
Price/EPS[2]		18.7	32.9
Price/core EPS[1, 2]		10.0	15.4
Price/cash flow[2]		6.0	9.9
Dividend yield	%	3.4	2.5

[1] For details on the calculation of core earnings per share, see the combined management report, Chapter 4.3, page 75.
[2] XETRA closing prices (source: Bloomberg)

Rates for Five-Year Credit Default Swaps (CDS) in 2009 [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.

Average 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 €27,247 as of December 31, 2009, giving an average annual return of 22.2 percent.

Long-Term Returns on Bayer Stock in % p.a. (Dividends Reinvested) [Table 2.2]

Annual returns	1 year 2009	3 years 2007–09	5 years 2005–09
	%	%	%
Bayer	+39.8	+14.3	+22.2
DAX	+23.8	−3.3	+7.0
DJ EURO STOXX 50	+25.6	−7.4	+3.1

A sustainable investment

Bayer stock is included in many important sustainability indices and funds that single out companies with sustainable and responsible corporate strategies. These include the Dow Jones Sustainability Index World, the FTSE4Good index series, the Storebrand SRI Funds and the ASPI (Advanced Sustainable Performance Indices) Eurozone. Our sustainability reporting is based on the guidelines issued by the Global Reporting Initiative.

In 2009 Bayer was honored by the Carbon Disclosure Project (CDP) for its climate reporting, and included in the Carbon Disclosure Leadership Index (CDLI) as the world's best company on this criterion. The CDLI ranks companies on the range and depth of carbon disclosure.

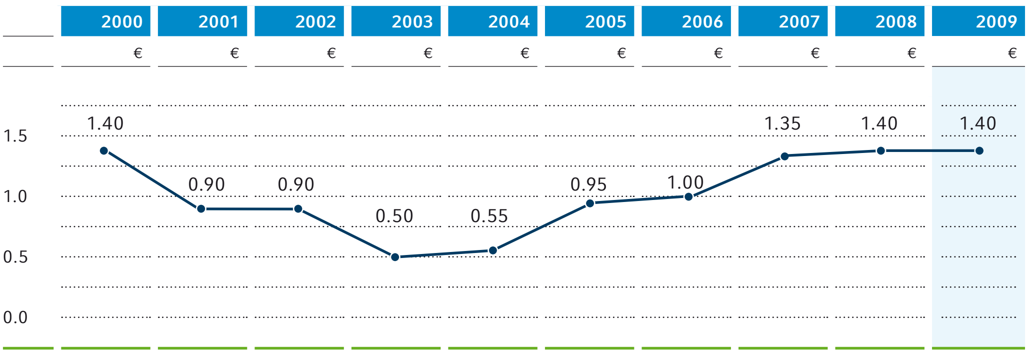
Bayer also explained its commitment to sustainability at one-on-one meetings and conferences with investors.

Dividend steady at €1.40 per share

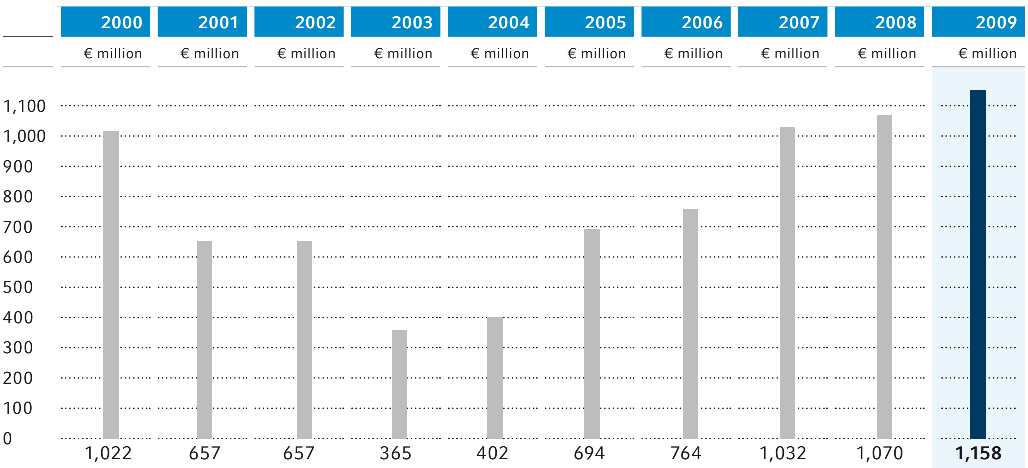
The Board of Management and the Supervisory Board will propose to the Annual Stockholders' Meeting that a dividend of €1.40 per share be paid for 2009, the same as for the previous year. This results in a payout ratio of approximately 38 percent calculated on core earnings per share (see page 75), which is within the target corridor of 30 to 40 percent.

The dividend yield calculated on the share price of €55.96 at year end 2009 amounts to 2.5 percent and the total dividend payment to €1,158 million.

Dividends Per Share [Graphic 2.3]



Total Dividend Payment [Graphic 2.4]



Switch to registered shares

In September 2009 Bayer AG switched its entire capital stock of 826,947,808 bearer shares to registered shares at a conversion ratio of 1:1. Listing our stockholders in the share register is intended to facilitate contact with them and increase transparency.

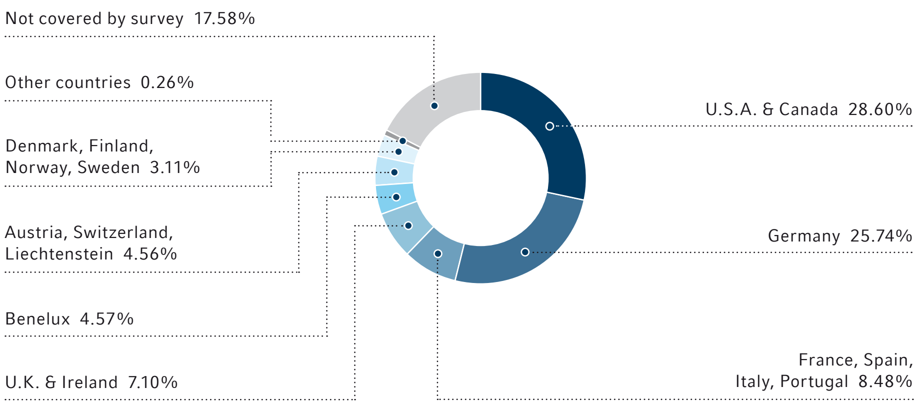
Switch to registered shares facilitates contact and increases transparency

International ownership structure

As of December 31, 2009, approximately 320,000 stockholders worldwide 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 2009:

Ownership Structure by Country [Graphic 2.5]



Registered shares make investor relations activities more efficient

The share register offers us additional opportunities to identify our stockholders and more accurately target our communications. The switch to registered shares has thus increased the efficiency of our investor relations activities.

Last year, we held some 400 one-on-one meetings with investors at 26 financial centers, providing them with information on topics of current interest relating to the Bayer Group. Along with our quarterly reporting, the pharmaceuticals research pipeline remains the prime focus of investors' attention. As in the past, we held conference calls, which were also streamed on the Internet, to keep stockholders informed of progress with drug products or candidates such as Xarelto® or riociguat.

Our Bayer MaterialScience subgroup also received increased attention at the start of the year in light of the economic situation. The consequences of the financial and economic crisis and our actions to counter its effects were discussed at length.

Investors also followed topics relating to the CropScience subgroup, such as new license agreements and collaborations and the acquisition of Athenix Corp.

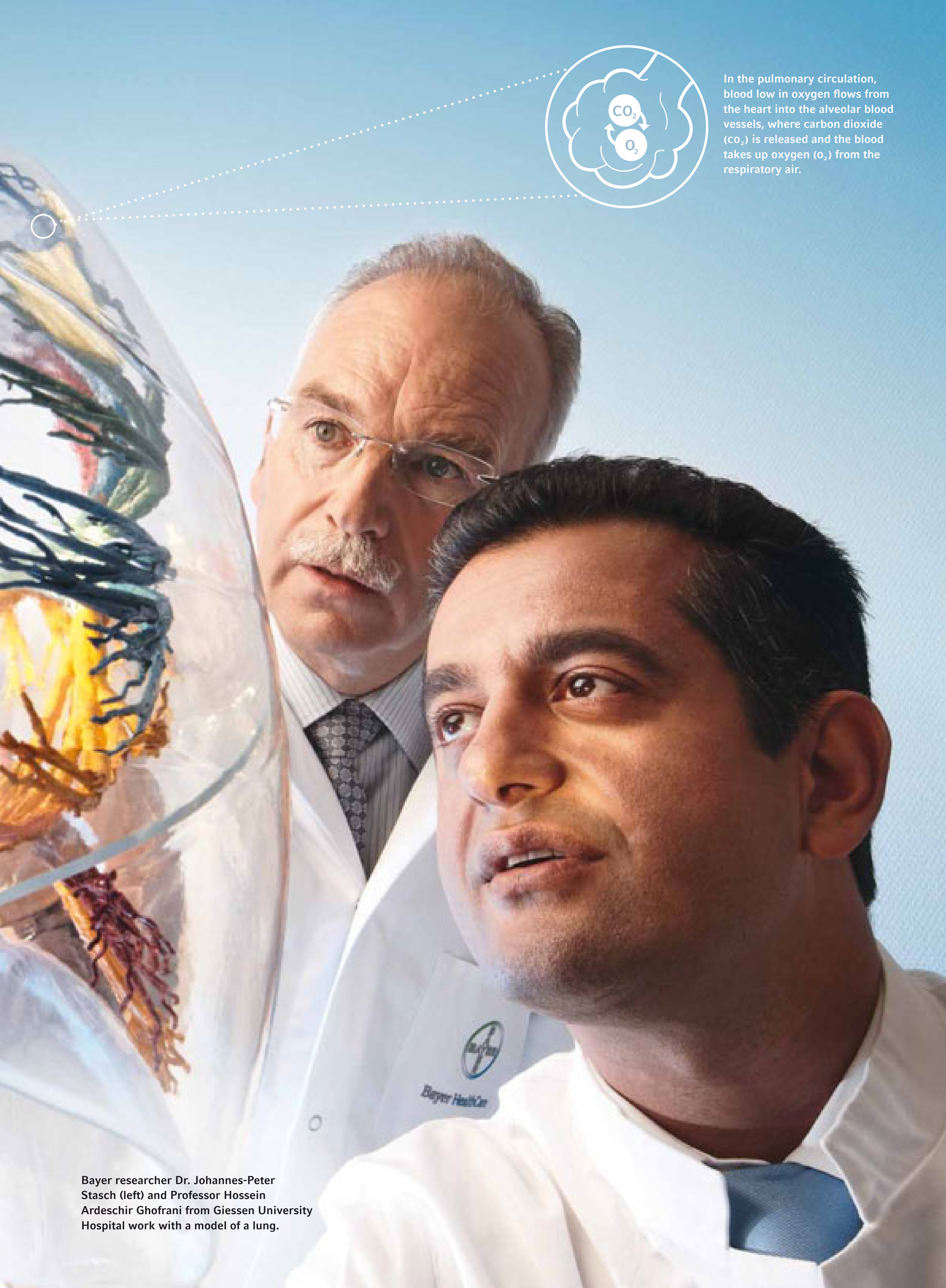
Awards for investor relations activities

Our IR activities once again garnered several awards from investors and analysts in 2009. For example, our investor relations team was named the best in the chemicals sector following a survey conducted by the U.S. capital market journal *Institutional Investor* and was similarly honored in the UK & Continental Europe Awards presented by *IR Magazine*. We are also proud to have secured third place among EURO STOXX 50 companies in the 2009 Investor Relations Awards bestowed by the German business magazine *Capital*.

Bayer HealthCare

Healthy circulation

The risk of cardiovascular disease increases with age, but the drug products currently available offer only limited prospects for successful treatment. Scientists at Bayer are addressing this challenge by focusing on novel substances to treat serious heart and lung diseases. Their efforts have met with success, and the first promising compounds for the treatment of pulmonary hypertension and heart failure are at an advanced stage of clinical development.



In the pulmonary circulation, blood low in oxygen flows from the heart into the alveolar blood vessels, where carbon dioxide (CO_2) is released and the blood takes up oxygen (O_2) from the respiratory air.

Bayer researcher Dr. Johannes-Peter Stasch (left) and Professor Hossein Ardeschir Ghofrani from Giessen University Hospital work with a model of a lung.

Continuous high performance, 24 hours a day, often for more than 80 years. The human heart performs like no machine can. This hollow muscle contracts some 70 times every minute. A healthy heart pumps six liters of blood through the circulation during this time, transporting oxygen and nutrients to every cell in the body. If the heart and circulation remain healthy, people can continue to lead active lives and cope with everyday tasks up to an advanced age.

Yet a strong heart and intact blood vessels cannot be taken for granted. Diseases such as myocardial infarction, stroke and acute heart failure are still among the most common causes of death. According to estimates by the World Health Organization, 17.5 million people around the world died from cardiovascular diseases in 2005 alone. By 2015, the annual figure is expected to rise to 20 million. "These statistics underline the great medical need for innovative, effective and well tolerated products to treat or prevent serious diseases," says Dr. Frank Misselwitz, head of Global Clinical Development for the Cardiovascular and Coagulation Therapeutic Area at Bayer Schering Pharma. "With our comprehensive portfolio of in-market and pipeline products for the prevention and treatment of acute and chronic cardiovascular diseases, Bayer Schering Pharma is helping to meet this need and close therapeutic gaps."

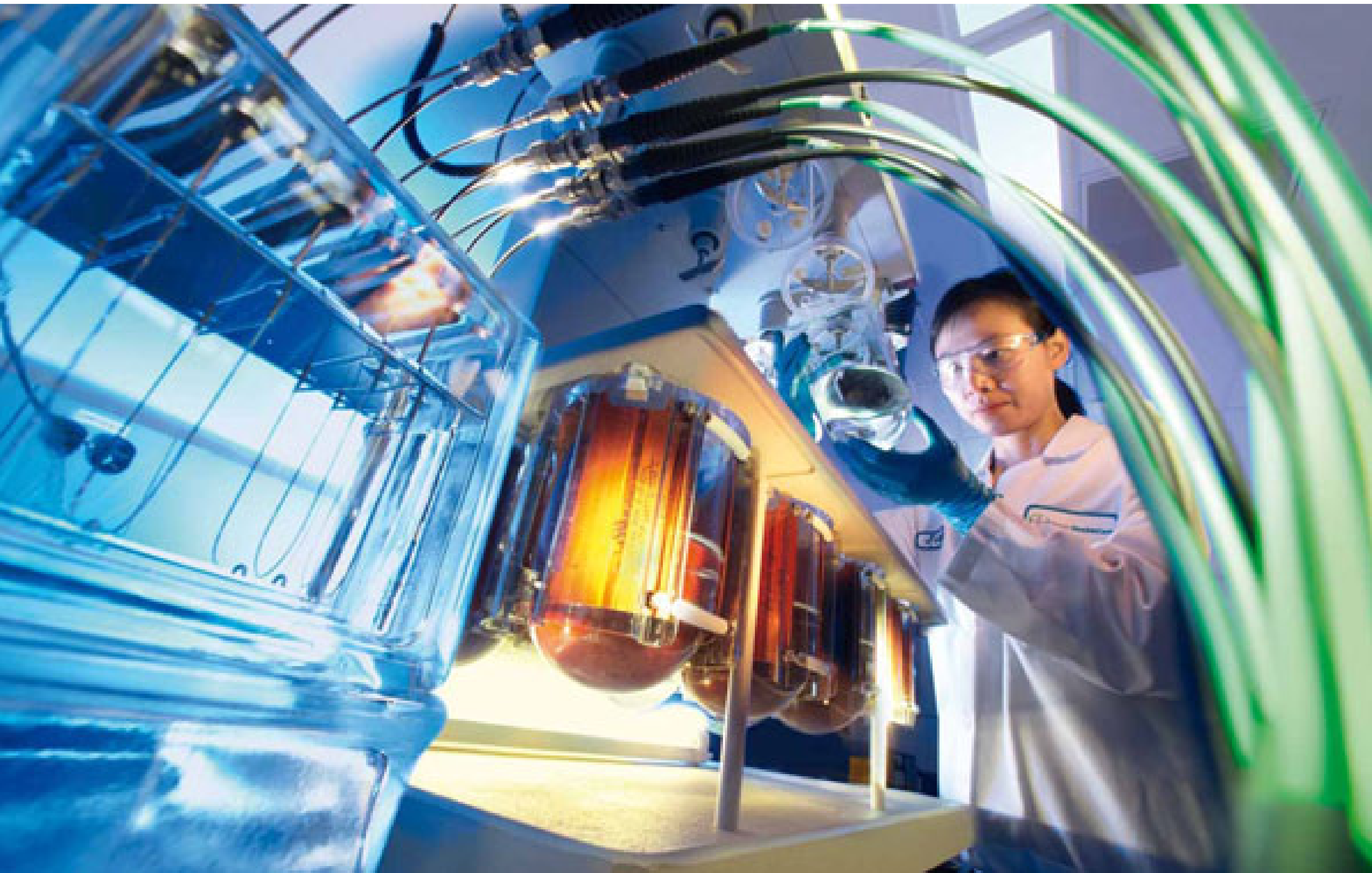
PODCAST CENTER

In December 2009 a Bayer research team received the German Future Prize from German President Horst Köhler for the development of the new anticoagulant Xarelto®. A video about the award can be found in the Podcast Center at WWW.PODCAST.BAYER.COM. For more information see "Highlights" on page 38.

Novel drug candidates for the future

The company's researchers are concentrating on novel substances in order to overcome the limitations of the medications currently used. Two of the most recent examples from a series of promising drug candidates are Xarelto® – the novel oral Factor Xa inhibitor developed for a number of indications – and riociguat for the treatment of pulmonary hypertension. "We are taking this approach in preparation for the challenges of the future," explains Misselwitz. One of these challenges is an aging society. In addition, the lifestyles of many people around the world are changing. They exercise too little and eat too many fatty and sweet foods. Over the years, a lack of exercise, obesity and other risk factors can cause changes to the blood vessels. Arteriosclerosis

Julin Tong tests new formulations of the active ingredient acetylsalicylic acid at Bayer HealthCare's U.S. facility in Morristown, New Jersey.



"We are taking this approach in preparation for the challenges of the future."

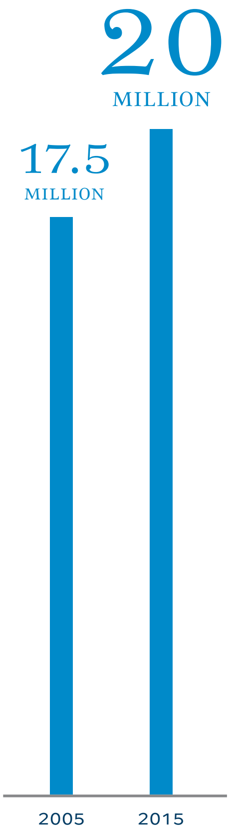
DR. FRANK MISSELWITZ
Head of Global Clinical Development, Cardiovascular and Coagulation, Bayer Schering Pharma

and high blood pressure reduce the heart's performance and can be serious warning signs of potentially life-threatening events such as myocardial infarction.

Doctors can now rely on a number of well-established drug products to treat many risk factors such as high blood pressure and diabetes, not least thanks to the pioneering work of Bayer scientists. Adalat®, for example, an antihypertensive still widely prescribed today, was the first product of its kind to be launched on the market. The same applies to the active substance acetylsalicylic acid, which Bayer synthesized more than 100 years ago. In the form of Aspirin Cardio®, this proven product is regarded as a drug of choice for secondary prevention of myocardial infarction. Xarelto®, the most recent addition to the range of products marketed by Bayer Schering Pharma, promises to continue this tradition. Its active ingredient rivaroxaban, an innovative anticoagulant, has the potential to treat a number of cardiovascular disorders caused by blood clots, such as myocardial infarction, pulmonary embolism and stroke. Since 2008, Xarelto® has been approved in more than 80 countries worldwide for the prevention of venous thromboembolism following elective hip or knee replacement surgery.

Prevention and treatment of thrombosis

Unlike the previous standard treatment, rivaroxaban can be administered in tablet form. In addition, the registration study showed that



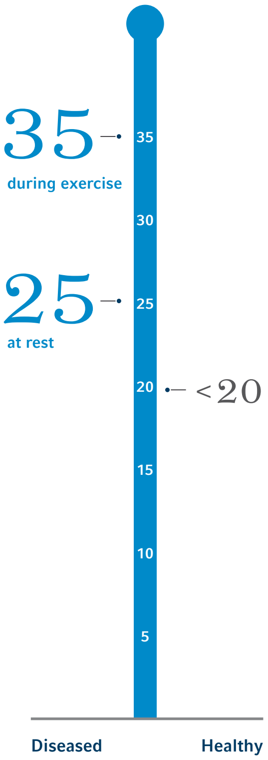
The World Health Organization (WHO) estimates that 20 million people will die from cardiovascular diseases in 2015.

Source: WHO

rivaroxaban protects against clot formation after elective hip or knee joint replacement surgery more reliably than the comparator product enoxaparin. Further studies are currently ongoing. More than 65,000 patients are ultimately expected to be involved in the rivaroxaban development program, which aims to demonstrate that rivaroxaban is at least as effective as the current standard therapy in preventing and treating various forms of venous and arterial thrombosis. An example is the prevention of stroke in patients with atrial fibrillation, a specific form of cardiac arrhythmia that can lead to stroke triggered by a blood clot.

"At present, some 70 percent of at-risk patients receive inadequate treatment or no treatment at all," says Misselwitz. This is because the anticoagulants currently available interact with some foods and with other medications, making them difficult to dose correctly. The risk of bleeding is high, and regular blood tests are required. These limitations could be overcome with rivaroxaban.

This is not the only gap in the therapy of serious cardiovascular diseases that Bayer's scientists aim to close with innovative products. Another example is pulmonary hypertension, a term doctors use to describe several conditions with different causes. Some 2.5 million people worldwide suffer from pulmonary hypertension, a condition characterized by elevated blood pressure in the pulmonary circulation and changes to the blood vessels in the lungs. The conse-



Pulmonary hypertension is defined as a mean pulmonary arterial pressure of 25 mmHg at rest and 35 mmHg during exercise. 1 mmHg is the static pressure exerted by a mercury column one millimeter high.

quences are severe: the heart progressively weakens and the supply of oxygen to the body is reduced. Patients become short of breath and their physical stamina is rapidly impaired. Initially, only climbing stairs is difficult, but then patients find themselves out of breath after walking for just a few minutes. Later on, just walking from one room to the next is too much. There is no cure, and patients diagnosed with pulmonary hypertension have an average life expectancy of only five to six years.

Help for pulmonary hypertension

There are currently only a very small number of drugs that can relieve the symptoms. But that isn't the only problem. "At present some 90 percent of patients receive only very limited treatment, and the few drugs currently available are only approved for a small subgroup of pulmonary hypertension patients," says Dr. Gerrit Weimann, the physician at Bayer Schering Pharma responsible for the global development of riociguat. This substance is the first promising drug candidate from a new class of compounds discovered by Bayer scientists. "According to convincing initial evidence from clinical trials, riociguat may be able to overcome the major disadvantages of existing therapeutic options. For example, in a Phase II trial that ended in 2008, patients who received riociguat tablets were able to cope with physical exertion much better than before," says Weimann.

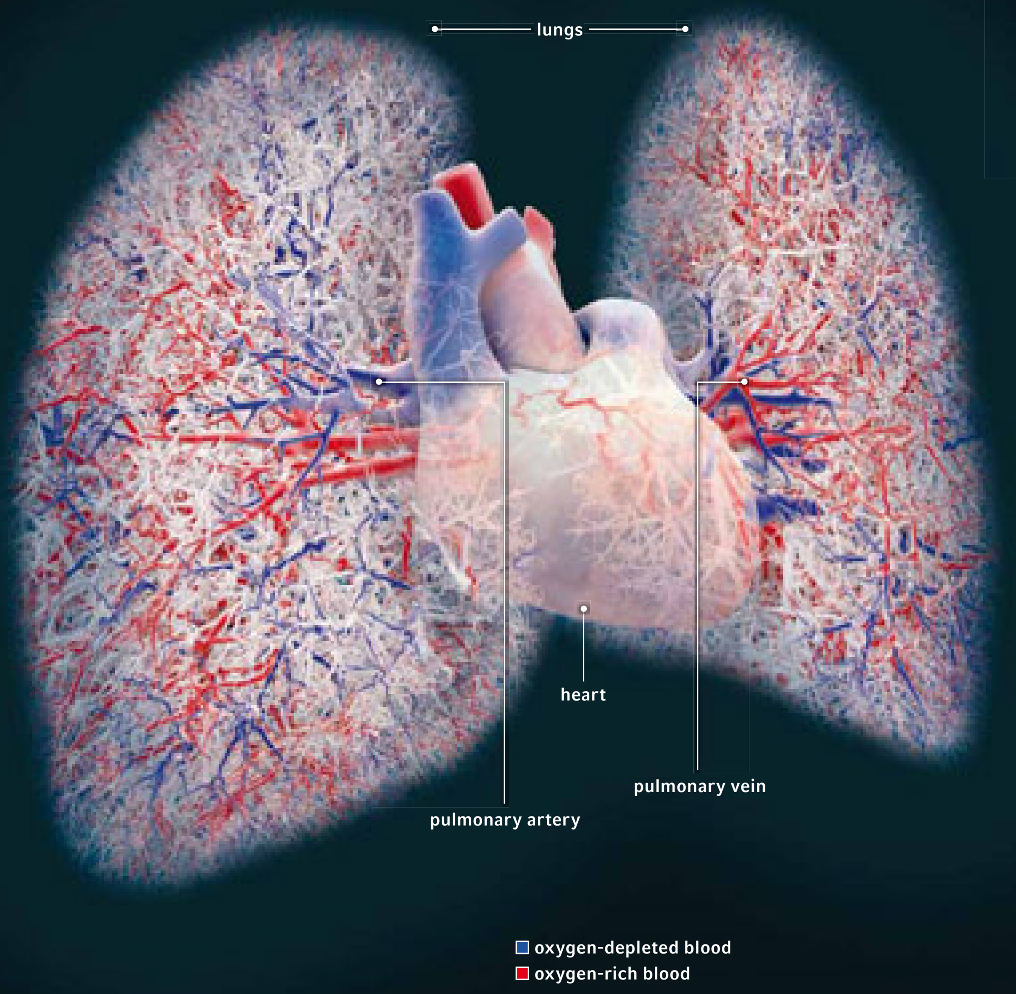
Phase II and III trials are currently under way to document the safety and efficacy of the compound in various forms of pulmonary hypertension. "If this can be confirmed, it will be an important breakthrough for patients with this disorder," says Professor Hossein Ardeschir Ghofrani, head of the Pulmonary Hypertension Department at Giessen University Hospital, Germany. "There is good reason to hope that riociguat may be the first effective drug to be well tolerated by certain patient groups and that it may therefore provide these people with an adequate treatment option for the first time."

But there are more benefits. "Preclinical data suggest that riociguat not only improves the symptoms of pulmonary hypertension, but could also counteract the progression of the disease," says Dr. Johannes-Peter Stasch, a chemist and pharmacist who works in Cardiology Research at Bayer Schering Pharma. The discoverer of the new class of active ingredients is also working on a number of approaches that go well beyond the treatment of pulmonary hypertension. "Riociguat could be just the beginning of a new generation of cardiovascular drugs," he adds.

Treatment of acute heart failure

Bayer scientists are also focusing on heart failure, a serious disease that particularly affects

Dr. Peter Kolkhof, pharmacologist in Cardiology Research, inspects a microscope slide at Bayer Schering Pharma's laboratory in Wuppertal, Germany.



PULMONARY HYPERTENSION

The pulmonary circulation connects the heart and lungs. Oxygen-depleted blood flows from the heart through the pulmonary arteries into the alveolar blood vessels, where carbon dioxide (CO_2) is released and the blood takes up oxygen (O_2) from the respiratory air. Oxygen-rich blood flows through the pulmonary veins back to the heart, which pumps it around the body. In pulmonary hypertension the blood vessel walls thicken and lose their elasticity, and the channel within them narrows. To prevent the body from becoming starved of oxygen, the heart then steps up its output in order to pump enough blood into the pulmonary circulation through the constricted blood vessels. This exertion increasingly weakens the heart, with the result that its output steadily declines over time and the body is supplied with less and less oxygen.

people of advanced age. Many elderly heart failure patients have previously suffered a myocardial infarction, but other underlying diseases can also gradually restrict the heart's performance. At first, affected individuals become exhausted more quickly than before during physical activity such as walking or climbing stairs. Later on, daily chores such as shopping, housework and gardening become a challenge. Fluid begins to accumulate in the legs. In the final stage, patients are barely able to leave their beds, and every movement takes their breath away. Chronic heart failure is one of the most prevalent diseases in the Western industrialized world and is the third most common cause of death.

"There is a major need for new, effective and well-tolerated drugs to treat this condition," says Dr. Martin Bechem, head of Cardiology and Hematology Research at Bayer Schering Pharma. Scientists at Bayer are therefore investigating other promising substances to make life easier for patients with chronic heart failure. "We are pursuing a broadly based approach with the aim of relieving the burden on the diseased ventricle and protecting the heart and kidneys. Some molecules have already reached early phases of development."

One of the other initiated projects relates to the causal treatment of pulmonary hypertension and atrial fibrillation. "Our well-stocked cardiology pipeline gives us a potentially world-leading position in the growing market for innovative therapies for severe cardiovascular and lung diseases," says Dr. Jean-Philippe Milon, global head of the General Medicine business unit. "The scientists' efforts focus on the patient," says Milon. "Our work is aimed at helping to improve the quality of life of seriously ill people and extend their life expectancy."

PODCAST CENTER

Video and audio podcasts about the anticoagulant Xarelto® and the new substance riociguat for patients with pulmonary hypertension can be found on the Internet in the Podcast Center at WWW.PODCAST.BAYER.COM.

Bayer CropScience

Scientists at Bayer CropScience are working on ways to improve the agronomic performance and quality of cotton. Another goal is to develop plants that give higher yields while using less water.

Vivian Oliver (left) and Gary Henniger from Bayer CropScience examine cotton plants at the new U.S. research center in Lubbock, Texas.

Plants of the future

Feeding the world's growing population is one of the greatest challenges of our time, requiring a substantial increase in global crop yields. That's where scientific developments such as plant biotechnology and modern breeding methods can help. Bayer CropScience has set the course for the future by greatly expanding research activities in its seeds and traits business.

Kellie Milam prepares corn rootworm eggs for use in bioassays at an Athenix laboratory in Research Triangle Park, North Carolina, United States.

POPULATION GROWTH

According to forecasts by the United Nations, the world's population will exceed nine billion by 2050.

The plan is ambitious. Bayer CropScience intends to invest some €3.5 billion to expand its modern plant breeding activities through 2018. This will enable the BioScience business unit, comprising the company's activities in seeds and plant traits, not only to expand more rapidly than any other unit of the subgroup but also to grow roughly twice as fast as the market.

BioScience has already begun to widen its global network – strengthening in-house research, forging new alliances and making selective acquisitions. In 2009 alone, Bayer established three new research and development centers in the United States and Canada. "At the same time we have concluded twelve major research agreements as well as some smaller ones with leading biotechnology institutes and companies in Europe, China, Israel, Australia, Canada and the United States," reports Dr. Joachim Schneider, head of the BioScience business unit at Bayer CropScience.

An important strategic move was the acquisition of Athenix Corp., one of the leading U.S. research companies in the field of plant biotechnology, based in Research Triangle Park, North Carolina, United States. Athenix has an extensive library of genes and a modern development platform that enables crops to be selectively enhanced with important new traits such as herbicide tolerance or resistance to insects and nematodes.

"In the coming years we will need to speed up progress in plant breeding by using state-of-the-art technologies and develop new plant traits in order to satisfy the demand for food," Schneider explains. United Nations (UN) estimates put the world's population at seven billion by 2012 – almost three times the 1950 figure – and it is likely to exceed nine billion by 2050.

Less arable land to supply food

At the same time, the amount of land available to grow food is diminishing in relation to the population. UN experts predict that there will be only one third as much arable land available per capita in 2050 as there was in 1950. The impact of climate change is exacerbating the situation. Every year, heat, cold and extreme weather conditions lead to agricultural losses running into the billions. Corn, rice and wheat, for example, can no longer cope with these more extreme environmental factors. Even if their fields are well managed, farmers in some parts of the world often lose between 30 and 70 percent of their harvests.

This is why agricultural output is only increasing by between one and two percent annually. Experts at the Food and Agriculture Organization (FAO) of the United Nations estimate that production will need to double by 2050 if everyone is to have enough to eat. There is only one way to overcome this enormous challenge without clearing huge areas of forest to create new arable land and thereby harming the environment: a "Second Green Revolution."

It is not the first time that the world's population has increased so sharply that farmers cannot keep pace with the demand. In 1943 four million people starved to death in India alone. The country had to import millions of tons of cereals for years afterwards. It was not until the mid-1960s that the "First Green Revolution" brought about a dramatic change. New breeding methods enabled scientists to develop high-performance varieties of rice and wheat that gave substantially higher yields and required less fertilizer. As a result, India's wheat output nearly tripled within ten years. China achieved similar success with improved rice varieties.

"Today, we again need to use all the technologies at our disposal to safeguard harvests worldwide," comments Dr. Michael Metzlaff, a molecular biologist at Bayer CropScience's Innovation Center for Plant Biotechnology in Ghent, Belgium. Almost 1,000 scientists and breeders in BioScience are already working on more than 50 research projects with plants that are crucially important for human nutrition or clothing, and the number of projects is scheduled to increase considerably.

Canola genome fully sequenced

One major focus of this work is canola. In August 2009, Bayer CropScience opened one

30% – 70%

In some parts of the world, farmers often lose between 30 and 70 percent of their harvest due to extreme climate conditions despite sound crop management.

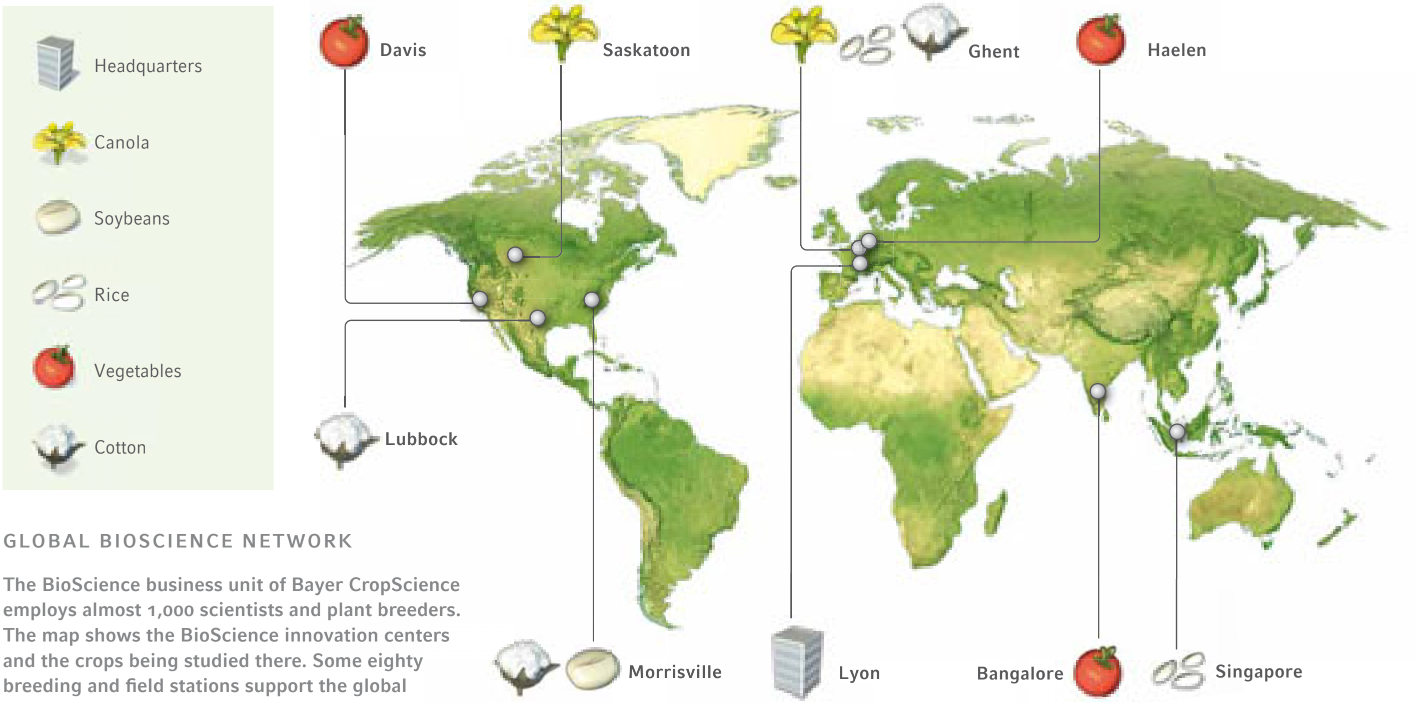
of the world's most modern canola research and breeding stations in the western Canadian City of Saskatoon. Canola is a cultivar of rapeseed grown primarily in North America. In the future researchers want to find out which of the plant's genes confer the ability to withstand influences such as major temperature fluctuations or drought.

A sound basis for this work has been established. In October 2009, Bayer researchers succeeded in sequencing the full genome of canola in collaboration with public research institutes – the Beijing Genomics Institute in Shenzhen, China, and the University of Queensland, Australia – and the biotech company Keygene in Wageningen, Netherlands.

Another example is rice. The company's business in hybrid rice seed is its fastest-growing segment at the moment, expanding at an average annual rate of 38 percent. The main driver of this growth is the hybrid rice Arize®, developed by Bayer CropScience, which has a 20 to 30 percent higher yield than traditional varieties. Arize® Dhani, launched in India in 2008 and recently also in Bangladesh, offers farmers

"We aim to improve the quality of cotton plants, increase their yields, and make them less susceptible to extreme growing conditions."

LINDA TROLINDER
Cotton Research and Development Manager, Bayer CropScience



GLOBAL BIOSCIENCE NETWORK

The BioScience business unit of Bayer CropScience employs almost 1,000 scientists and plant breeders. The map shows the BioScience innovation centers and the crops being studied there. Some eighty breeding and field stations support the global BioScience network.

an additional variety that is resistant to bacterial leaf blight, a dreaded disease of rice plants that can destroy entire harvests. In the future, researchers are aiming to add further traits to both hybrid rice varieties with the goal of making them more tolerant to flooding and saline conditions, for example.

One of the pillars of this work is the collaboration agreement concluded with Evogene Ltd., Rehovot, Israel, in April 2009. This biotech company develops enhanced plant traits.

Better stress protection for cotton

Cotton is another major focus. Bayer is already the largest supplier of cotton seed in terms of planted area, both globally and in the United States, which ranks third in cotton production after China and India. Bayer's leading role was further reinforced in 2007 by the acquisition of U.S. cotton seed company Stoneville. More products from Bayer's own research pipeline are now reaching the market, including new herbicide-tolerant cotton varieties scheduled for introduction in the United States.

"We aim to improve the quality of cotton plants, increase their yields, and make them less susceptible to extreme growing conditions," explains Linda Trolinder, Cotton Research and Development Manager at Bayer CropScience. The goal is to develop plants that need less water while giving higher yields. Trolinder's team is also developing cotton with fibers that can be dyed more easily and lastingly. "Tomorrow's clothes will be better protected against fading," the expert says.

Bayer recently opened a new research and development laboratory in Lubbock, Texas, United States, thereby expanding its activities aimed at accelerating the development of better cotton plants. These activities include collaboration between Bayer researchers and scientists from Texas Tech University.

Nunhems, Bayer CropScience's vegetable seed business, opened new laboratories in Davis, California, United States, in early 2009 to be geographically closer to the academic experts.

Researchers at Bayer CropScience in Lubbock isolate the genetic material from cotton to study the genes coding for the traits of interest for cotton breeding.

The University of California in Davis is widely considered to be one of the best research institutions in the field of plant biotechnology. "This will give us even greater insight into current developments and long-term trends in agricultural research," explains Johan Peleman, head of Research at Nunhems.

Nunhems recently succeeded in breeding tomatoes with resistance to harmful viruses. In this kind of work, researchers look for molecular markers, typical sections of genetic material that are known to be associated with certain traits. The use of modern breeding methods enables the breeders to find plants with the target traits much faster and more precisely. This cuts out years of development work and allows researchers to respond more specifically to the needs of farmers and consumers. "There is a global demand for fruit and vegetables that have a more intense flavor and are easier to process than existing varieties," Peleman says.

"We will continue to need good breeding methods in order to make use of the results of molecular biological studies," explains Bayer researcher Metzlaff. Breeders are not focused solely on individual genes or traits. They see the bigger picture – and that is what ultimately decides whether a plant will survive in the field. "We intend to pursue an even more integrated approach in the future," explains Schneider . "This includes offering farmers complete packages so that they can protect their crops from seed to harvest."

Other crops in our sights

BioScience will also be expanding its research activities to include other crops such as soybeans and wheat. The first major step was taken in July 2009, when the company announced a long-term cooperation agreement with the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Canberra, Australia, one of the world's leading institutions for wheat research.

The emphasis of this cooperation agreement is on developing high-yielding varieties of cereals, particularly wheat. Practically no other crop has been feeding so many people for decades. But wheat production is under pressure. The decline in the area under cultivation in relation to the growing world population, combined with higher demand, has recently led to repeated sharp increases in the price of wheat. The aim is for intensified research, modern breeding and biotechnology to help safeguard food supplies for large numbers of people. Bayer CropScience is contributing significantly to this endeavor with the expansion of its BioScience portfolio.

Breeders at BioScience punch small pieces of leaf out of fresh seedlings to analyze their genes. Molecular breeding methods enable them to identify plants with the required traits more easily and precisely.

Tony Salcido (left) and Nkonko Mutamba from Bayer CropScience in the United States examine cotton plants near Phoenix, Arizona.

Bayer MaterialScience

Third-generation solar cells are only 0.2 micrometers thick and therefore flexible. They are produced by printing on a film. For comparison, the average human hair is 70 micrometers thick.

Cally Lim (left) inspects wafer-thin solar cells while Wilfredo Aguilar and Dr. Stefan Bahnmüller (right) examine luminescent functional films at Bayer's Singapore facility.

Visions with films

Whether it's foldable electronic newspapers, cell phones as thin as business cards or luminescent wallpaper, a glimpse into the future of specialty films reveals a world of undreamed-of technological possibilities. The new Functional Films unit at Bayer MaterialScience is looking to use innovative ideas based on proven materials to bring visions to life and transform them into products that meet tomorrow's needs.

Can a telephone light up in different colors? Red when a friend calls, for example? Or yellow, if it's your partner? Very soon, cell phones are expected to be able to change color like a chameleon to aid communication. While nature is responsible for the unique way the animal changes color, in the cell phone this will be achieved with special films. By glowing blue or red, for example, they will indicate to the owner who is calling – thanks to functional films that convert electrical energy into light.

PODCAST CENTER

Flexible coatings from Bayer make surfaces light up without light bulbs or LEDs. The glare-free light provides uniform brightness over the entire surface, creating a unique atmosphere. Watch a video about the unprecedented potential of this new technology at WWW.PODCAST.BAYER.COM.

Yet this is only one of the possibilities offered by these films, which are less than a millimeter thick. They can also act like muscles, with the material contracting or expanding as required. Depending on the application, the films can conduct electricity or store energy. They can be transparent or flexible, and they can also be made to feel either hot or cold to the touch. This gives them a broad range of potential applications, ranging from the automotive industry, electrical engineering and electronics to information technology and even climate protection.

Source of creativity

The Functional Films unit at Bayer MaterialScience is currently working on films that can be molded into three-dimensional shapes. "They can light up or conduct electricity – that's a great source of creativity for designers," says Bernd Steinhilber, head of Functional Films.

Potential applications for these functional films are determined by social trends and people's needs. "We are carrying out research so that we can offer solutions for the markets of the future. Our new developments open up unprecedented options for users, and new business opportunities for Bayer MaterialScience," says Steinhilber.

TRENDS AND NEEDS

Relevant social trends and human needs include the following:

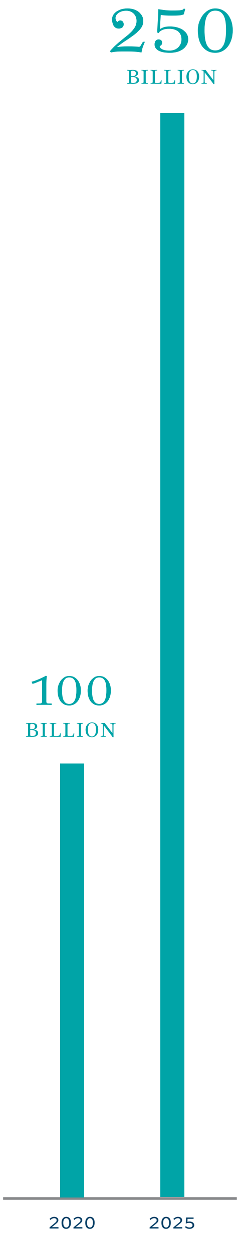
- numerous products will be even smaller, faster and more effective in 2015;
- additional sources of renewable energy are needed;
- mobility is increasing;
- urbanization is making security issues more acute;
- manufacturers want materials that offer maximum design freedom;
- the aim is always to manufacture products as efficiently as possible.

Functional films offer a cost-effective alternative to electronic components that comprise a large number of individual elements and are labor-intensive to produce. "Our films are ideal for the mass production of low-cost electronic parts and products for everyday use," explains

The testing chamber at Functional Films in Leverkusen, Germany: Alexander Pogorzalek examines the effect of elevated temperatures and humidity on the aging of luminescent films.

"We are carrying out research so that we can offer solutions for the markets of the future."

BERND STEINHILBER
Head of the Functional Films unit
at Bayer MaterialScience



Estimated market volume for functional films in US$

Source: IDTechEx

Dr. Karsten Dierksen, head of the Polymer Electronics department in the Functional Films unit. In 2005, this market was worth US$650 million. Renowned British market research company IDTechEx predicts the figure will reach nearly US$100 billion by 2020 and US$250 billion only five years later.

Future areas of application include identification labels based on radio frequency identification (RFID) technology. These are already used in ski passes, travel tickets, containers and electronic vehicle immobilizer systems. The films for these applications are inexpensive to produce, as the components can be printed like electronic inks onto flexible films made from polycarbonate, for example. Materials that are conductive, semi-conductive or non-conductive – depending on user requirements – can be printed one on top of the other in wafer-thin layers. "That will be as easy as printing a newspaper," explains Dierksen.

But that's not all. High-tech materials from Bayer MaterialScience also provide the basis for products such as flexible screens. Within two to three years the films could even be used in televisions. They will require much less energy and also offer greatly improved picture quality. The ideas being developed by experts from Functional Films have ceased to be utopian.

Innovations with proven products

Tried-and-tested materials have long formed the basis for many developments at Functional Films. For a quarter of a century, polycarbonate has been successfully used in automotive interiors for cockpits and control elements, for example. The way is now open for numerous new applications for polycarbonate-based films that offer automotive design gurus undreamed-of freedom. For instance, instrument panels can be made to appear three-dimensional. This saves space and reduces weight. The special feel of these films promotes harmony of design and a sense of comfort inside the car. Functional films have also become indispensable in the flatscreens now so prevalent in the home environment.

A completely new application area is the security sector, which is gaining in importance due to the growing world population and increasing urbanization. Holograms are used to protect credit cards, banknotes and event tickets against forgery. They used to be extremely difficult to produce. "This was because materials and processes were not sophisticated enough for producing large quantities of three-dimensional color holograms cost-effectively," says Dr. Thomas Fäcke, an expert in holography in the Functional Films unit. A special film has now been developed for this application. Fäcke is convinced of its benefits, saying that "even trademark protection will benefit from this." Holograms of this kind on packaging for sports goods or pharmaceutical products can protect against counterfeiting.

A further security measure is currently being developed specifically for credit cards. This involves tiny metal platelets embedded in plastic films made of Makrofol® ID Protexxion. As the platelets are distributed at random within the material, even the smallest section has an unmistakable, unique surface – making each card as unique as a fingerprint.

Concentrated expertise

Polycarbonate is a key material for enhancing security. This is where Functional Films can harness the expertise of Bayer as the inventor of polycarbonate chemistry. The best example is the production of innovative passports, driver's licenses or ID cards in credit card format. Sensitive electronic components such as memory chips can be securely encased in the film layers. An added bonus is that a variety of security features can be integrated within the cards, which last much longer thanks to the film's extreme durability.

Experts in the coatings field have made a key contribution to the success of these new products. Their knowledge essentially forms the basis for the production of functional films. This is because – irrespective of the purposes these materials serve – functional films use

In the production of organic light-emitting diodes, Nicolas Degiorgio makes use of a nitrogen chamber free of oxygen and moisture.

know-how that Bayer MaterialScience has accumulated over the years in the coatings and surfaces field. "At Functional Films, we have systematically integrated the expertise we have acquired in special films and in printing and coating technology," says Steinhilber.

In developing and marketing new products, Functional Films places great emphasis on synergies within the company and on collaboration with external partners. "We are continually adding experts from science and industry to our network. This dialogue enables us to use our innovative ideas to fast-track products for future markets," says Steinhilber.

Strategic focus on Asia

The focus here is on the electronics industry in particular, and therefore on Asia. Bayer MaterialScience has been creating the necessary research resources and networks for development projects with customers in Taiwan, South Korea and Japan since 2008. These are augmented by a dedicated research center for material and product development in Singapore, which is scheduled to open in 2010. Film manufacturing at the Map Ta Phut site on Thailand's east coast is another major element in this forward-looking strategy thanks to the facility's expertise in process and production technology – also of major importance for functional films.

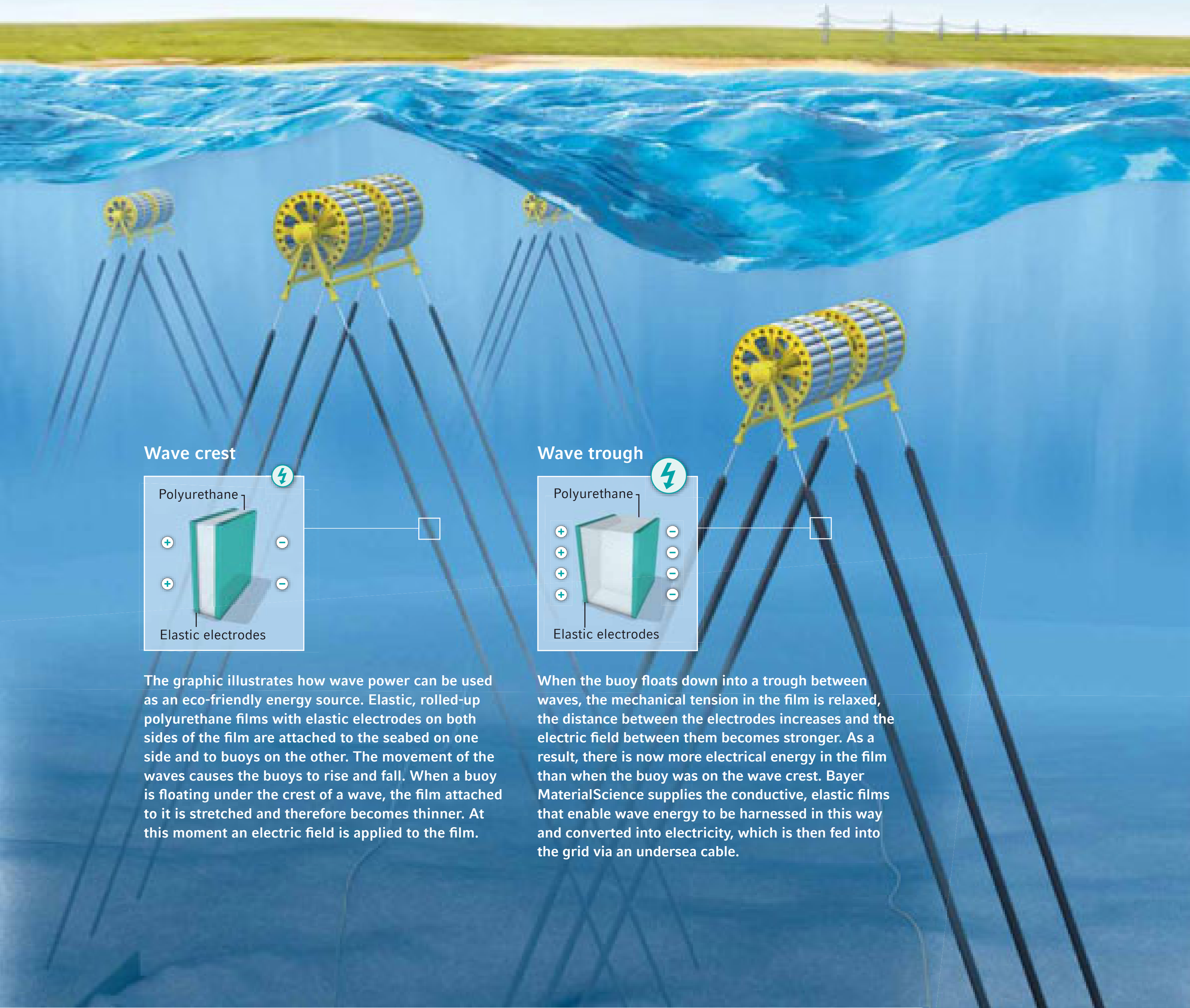
Specific projects have already been launched at the development centers in South Korea and Taiwan. "These focus on applications in liquid crystal display technology, radio tags, cell phones and computers," says Dr. Christian Haessler, who is responsible for research and development in Asia. Bayer MaterialScience is working with selected customers, organizations and government agencies in these fields. Steinhilber describes the next steps to be taken: "We aim to gain further expertise through collaborations with other research organizations and address complex issues right along the value chain."

Future-focused project to protect the climate

One very special cooperative venture to help protect the climate involves a future-focused project in the Atlantic Ocean. Bayer MaterialScience and SBM Offshore have entered into a cooperation agreement to jointly develop a flexible wave energy converter. This technology will permit the production of clean energy in the future, harnessing the untapped resources of our seas.

The World Energy Council estimates global wave energy resources to be roughly double the amount of electrical power currently generated throughout the world. It is therefore expected

The layers of a functional film are applied individually by screen printing.



The graphic illustrates how wave power can be used as an eco-friendly energy source. Elastic, rolled-up polyurethane films with elastic electrodes on both sides of the film are attached to the seabed on one side and to buoys on the other. The movement of the waves causes the buoys to rise and fall. When a buoy is floating under the crest of a wave, the film attached to it is stretched and therefore becomes thinner. At this moment an electric field is applied to the film.

When the buoy floats down into a trough between waves, the mechanical tension in the film is relaxed, the distance between the electrodes increases and the electric field between them becomes stronger. As a result, there is now more electrical energy in the film than when the buoy was on the wave crest. Bayer MaterialScience supplies the conductive, elastic films that enable wave energy to be harnessed in this way and converted into electricity, which is then fed into the grid via an undersea cable.

that this new technology will be of particular interest to utility companies worldwide that seek to extend their renewables portfolios.

To demonstrate the wave energy converter, a development program has been set up with the aim of establishing an offshore, grid-connected power plant by 2015. SBM Offshore is designing the system using Bayer MaterialScience's polyurethane films, which were tailor-made specifically for this application. The converter will transfer the energy of the sea waves directly into electrical power.

The benefits of this ecologically friendly energy generation include high efficiency and low wear levels. "By using this technology, we can convert much more energy into electricity than is possible with a conventional generator," says Dirk Schapeler, an expert in electro-active polymers in the Polymer Electronics department at Bayer MaterialScience. "We and our partner SBM Offshore believe that this combination of converter design and electro-active polymers is a promising approach to leverage the wide spectrum of wave conditions. More importantly, it avoids fatigue and maintenance issues, which represent a major cost factor."

The opportunities offered by functional films are far from exhausted. Steinhilber is in no doubt: "The market is calling out for electro-active films and films with other specific technological properties," he says. These films are therefore expected to contribute greatly to future growth at Bayer MaterialScience, opening up new areas of application for polymer materials such as polyurethane and polycarbonate.

Award for outstanding research: German President Köhler (second from left) honors Bayer researchers Dr. E. Perzborn, Dr. F. Misselwitz and Dr. D. Kubitza (from left).

Highlights 2009

Award for novel anticoagulant

Bayer team wins President's "German Future Prize"

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Watch a video podcast of the award ceremony at WWW.PODCAST.BAYER.COM

The "German Future Prize 2009," awarded by the Federal President, went to an R&D team from Bayer: Dr. Frank Misselwitz, Dr. Elisabeth Perzborn and Dr. Dagmar Kubitza received the prize for achievements in technology and innovation from President Horst Köhler at a ceremony in Berlin.

The Bayer scientists from Wuppertal were honored with this prestigious award for developing the new anticoagulant drug rivaroxaban (Xarelto®). "The development of this drug was very expensive, and projects like this require a great deal of patience and stamina. That's why I'm particularly pleased that major corporations such as Bayer have long-term innovation strategies," the President explained.

"I am delighted at this outstanding recognition for our research team. It again shows how important research and innovation are at Bayer," said Werner Wenning, Chairman of the Board of Management of Bayer AG. "The 'German Future Prize,' the highest innovation award in Germany, puts the spotlight on science, ensuring that the potential of the natural sciences, technology and medicine become more firmly anchored in the public consciousness," Wenning added.

Dr. Wolfgang Plischke, the Bayer Management Board member responsible for research, was in Berlin to congratulate the award-winners: "Winning this award is a truly historic moment and a milestone for Bayer as an inventor company." North Rhine-Westphalia Innovation Minister Professor Andreas Pinkwart also sent his congratulations: "There could be no more impressive evidence that investment in research and development is worthwhile. This is a crowning moment in Bayer's successful history as an inventor company."

The award-winners themselves were also delighted. "We really didn't expect this," said Misselwitz. He said the award was the result of excellent teamwork. Together with their teams and numerous scientists from a wide range of disciplines, the three Bayer researchers developed the new active ingredient for the prevention of thromboembolism after elective hip or knee joint replacement surgery.

Read more about this new medicine in the Magazine section starting on page 22.

Phase III trial launched for diagnosis of Alzheimer's disease

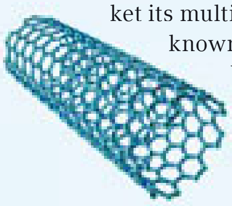
Bayer Schering Pharma, Berlin, Germany is progressing with the development of florbetaben to support the diagnosis of Alzheimer's disease. At the 95th Scientific Assembly and Annual Meeting of the Radiological Society of North America, the company announced the launch of an international Phase III trial to evaluate the efficacy and safety of florbetaben PET (positron emission tomography) imaging in the detection of beta-amyloid deposits in the brain.

The trial will include subjects with and without manifest dementia such as Alzheimer's disease. In the preceding Phase II trial, florbetaben successfully demonstrated its potential to detect beta-amyloid deposits in the brain as a pathological hallmark of disease in Alzheimer's patients.

Dr. Ludger Dinkelborg (left) and Dr. Thomas Dyrks compare a healthy brain (left screen) with that of an Alzheimer's patient.

"Currently, there is no diagnostic tool on the market to facilitate the in vivo diagnosis of the various dementia types, including Alzheimer's disease," said Dr. Thomas Balzer, Head of Global Clinical Development, Diagnostic Imaging, at Bayer Schering Pharma, Berlin. "This Phase III study showed that florbetaben can be used as a new tool to clearly detect beta-amyloid deposits in the brain while the patient is still alive. This could lead to better and earlier diagnosis of this devastating disease and eventually to more specific treatment."

World's largest production facility for carbon nanotubes



Schematic drawing of a carbon nanotube

Bayer MaterialScience can now market its multi-wall carbon nanotubes known as Baytubes® in the United States as well, following the granting of regulatory approval for the product by the U.S. Environmental Protection Agency (EPA) at the beginning of 2009. This reinforces Bayer MaterialScience's role as the supplier with currently the world's largest production capacity for carbon nanotubes.

Baytubes® can be added to polymer matrices or metal systems as a modifier or filler to improve their mechanical strength and/or antistatic properties. The product's applications include rotor blades for wind turbines along with sports equipment such as skis, hockey sticks, baseball bats and surfboards. Another application for nanotubes is the modification of light metals such as aluminum or magnesium.

The global market for carbon nanotubes is currently predicted to grow by 25 percent a year. Experts estimate that annual sales of these products will reach US$2 billion within about ten years. Bayer MaterialScience is one of the few companies capable of producing carbon nanotubes of consistently high quality on an industrial scale.

The world's largest pilot plant for carbon nanotubes was inaugurated in the Leverkusen Chempark in 2009. Bayer MaterialScience invested some €22 million in the facility, which has a capacity of 200 tons per year.

New active ingredient doesn't give weeds a chance

Bayer CropScience presented a new herbicidal active ingredient known as indaziflam in February 2009. Indaziflam, one of the new substances that Bayer CropScience is planning to launch by 2012, is currently at an advanced stage of development.

The company anticipates marketing the first products based on this active ingredient in 2011, assuming that regulatory approval is granted. Advantages of indaziflam include its long-lasting action, low application rate and the control of a broad spectrum of weeds.

Applications for indaziflam include fruit and wine growing, citrus, olives and sugar cane. Uses may also extend to golf courses, sports fields, public parks and gardens, and other non-agricultural environments.

Acquisition of biotech company Athenix completed

Trial in an Athenix greenhouse in the United States: Jayme Williams harvests soybeans.

Bayer CropScience has completed the purchase of Athenix Corp., a biotechnology company headquartered in Research Triangle Park, North Carolina, United States. The company, which was privately held, was acquired for US$365 million. Further cash payments totaling up to US$35 million will be made, depending on the achievement of certain development milestones.

The acquisition of Athenix and its innovative technology platform significantly boosts Bayer CropScience's ability to provide growers worldwide with novel technology and complete agricultural solutions – from seed to harvest. Athenix has an extensive development platform for herbicide tolerance and insect control traits. The company also possesses the industry's largest collection of genes that are crucial for insect resistance in plants.

"We are investing heavily in our BioScience business to strengthen our position in the global seeds and traits market," said Professor Friedrich Berschauer, Chairman of the Board of Management of Bayer CropScience. Read more in the Magazine section starting on page 28.

Treatment option for bone metastases in cancer patients

Bayer Schering Pharma has entered into a global agreement with Algeta ASA, Oslo, Norway, for the development and commercialization of the cancer drug Alpharadin™, a novel alpha-emitting radiopharmaceutical based on radium-223. 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 treatment.

"We recognize the tremendous potential of Algeta's Alpharadin as a possible treatment for bone metastases – a serious, life-threatening condition. The data we have seen suggest that Alpharadin may represent a highly targeted treatment option that could potentially extend overall survival with good tolerability, and offers convenient handling," said Kemal Malik, a member of the Board of Management of Bayer Schering Pharma. "Our goal is to further expand our global oncology portfolio."

Flagship sports venue for Leverkusen

After a 20-month renovation phase, the BayArena soccer stadium in Leverkusen reopened its gates in mid-August. Featuring three new upper tiers, the completely modernized stadium now provides seating for more than 30,000 spectators.

At the same time, the media, team and physio areas along with the restaurant and boxes were significantly enlarged. All functional areas now meet the highest international standards. The stadium's most spectacular showpiece is its new roof. The 28,000 square-meter covering of Makrolon® sheet is supported by a discus-shaped steel cable construction.

The BayArena thus boasts the largest stadium roof yet to be made of this high-tech plastic from Bayer MaterialScience, and the anti-corrosion coating for the steel support structure is based on the company's polyurethane raw materials.

At the inauguration, Bayer AG Management Board Chairman Werner Wenning emphasized the fact that the renovation was carried out without public funding. "Our soccer team is an important image vehicle for the Bayer Group both in Germany and abroad," he explained. In 2011, the BayArena will host some of the Women's World Cup matches.

The Makrolon® roof of the new BayArena is a particularly impressive sight after dark.

Bayer CEO Werner Wenning (at the lectern) and Board of Management member Dr. Wolfgang Plischke (on the platform at left) explained the Sustainability Program to journalists.

Bayer strengthens sustainability commitment

Extensive new program includes global lighthouse projects

Bayer is increasing its commitment to sustainability. To this end the company is launching an extensive program including eight lighthouse projects focusing on the fields of health care, nutrition and climate protection. The aim is to integrate the company's products and its employees' expertise into international projects to promote sustainable development across the globe.

Bayer CEO Werner Wenning and Board of Management member Dr. Wolfgang Plischke presented the Bayer Sustainability Program at a press conference in Leverkusen, which was attended by approximately 120 journalists from 35 countries. "We are helping in specific ways to balance commercial success with the protection of the environment and the needs of society," said Wenning.

More than 15 million people worldwide will benefit directly from the lighthouse projects forming the centerpiece of the Sustainability Program. Apart from this, Bayer plans to achieve a 10 percent increase in energy efficiency at its production facilities by 2013 compared with 2008, corresponding to total annual reductions of 350,000 metric tons in greenhouse gas emissions. In addition, a new technology for chlorine production will enable these emissions to be reduced by a further 250,000 metric tons a year by 2020.

Bayer's business activities are focused on sustainability. "Sustainable development forms an integral part of Bayer's corporate policy, which is geared toward high-quality solutions and long-term success," Wenning said, adding: "We are aiming for sustainability in everything we do."

World's best climate protection reporting

Bayer has emerged as a leader in climate protection, now featuring in the Carbon Disclosure Leadership Index as the world's best company. This was announced by the investor group of the Carbon Disclosure Project (CDP) in New York in September. Awarded 95 out of a possible 100 points, Bayer came in first out of 50 companies represented in the Leadership Index, which were chosen from among the world's top 500 stock-exchange-listed companies. Rating takes place according to the thoroughness and transparency of companies' reporting on their climate strategies and greenhouse gas emissions.

Bayer is the only European company in the chemical and pharmaceutical industry to be included in the climate index for the fifth time in a row. CDP members' investment decisions are increasingly based on how companies strategically address the challenges posed by climate change.

Energy expert Jochem honored

The Bayer Science & Education Foundation chose energy efficiency expert Professor Eberhard Jochem of the Fraunhofer Institute for Systems and Innovation Research (ISI) in Karlsruhe, Germany, as the inaugural winner of the "Bayer Climate Award." "More than almost any other researcher, Professor Jochem has demonstrated that improving energy efficiency is the most important lever for reducing greenhouse gas emissions in the various areas of our industrialized society," Bayer CEO Werner Wenning said at the award ceremony in Berlin.

New contraceptive pill launched in Europe

Bayer Schering Pharma, Berlin, Germany, has started the European roll-out of Qlaira®. The new oral contraceptive has been available in several European countries, including Germany, since May 2009.

Qlaira® is the first in a new class of oral contraceptives with estradiol valerate as the estrogen component. Estradiol valerate is transformed into estradiol in the female body. The second component of Qlaira® is the progestogen dienogest. Until now, only one substance – ethinylestradiol – has been used as the estrogen component of oral contraceptives worldwide. For a long time, efforts to use estradiol had failed to achieve a satisfactory level of bleeding control.

Clinical studies with Qlaira® have shown that the combination of estradiol with the progestogen dienogest achieves good cycle control. It also offers a dynamic dosing regimen designed to deliver hormones at the right levels and at the right time during the cycle, providing reliable contraception and good cycle control.

The New Drug Application in the United States was submitted in July 2009. The company has sought approval for Qlaira® for the contraception indication and for the treatment of heavy and/or prolonged menstrual bleeding.

The children's daycare center of Bayer CropScience in Monheim, Germany, is housed in a zero-emissions building.

Business model for sustainable construction

Bayer aims to support the construction industry in the use of sustainable, eco-friendly building techniques as part of its worldwide climate program. The EcoCommercial Building program of Bayer MaterialScience demonstrates the use of its materials to increase the energy efficiency of buildings, thereby helping to reduce carbon dioxide emissions. The special feature of this concept is that it can be adapted for use in different climate zones around the world.

The program is designed to act as an interface between decision makers and the construction industry and generate new business in the field of sustainable, energy-efficient construction. It includes an integral planning process that combines the materials expertise of Bayer MaterialScience with the construction skills of customers and service partners. Bayer's Belgian headquarters in Diegem and a children's daycare center in Monheim, Germany, were the first EcoCommercial buildings in Europe.

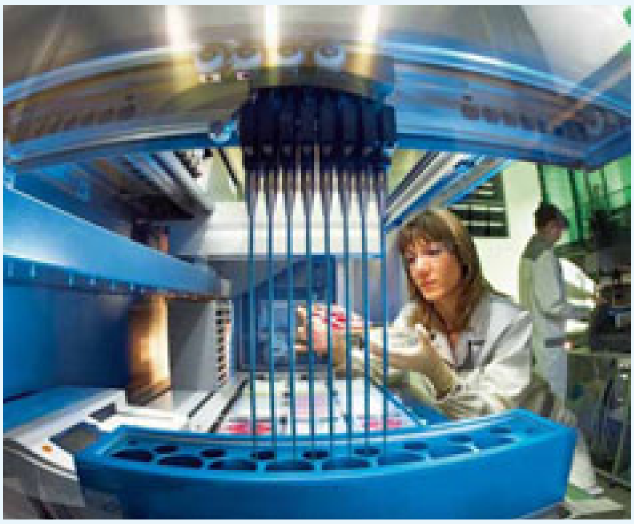
Promising approach to cancer therapy

Bayer Schering Pharma, Berlin, Germany, is working with biopharmaceutical company Micromet, Inc. to develop a new specific BiTE antibody for the treatment of solid tumors. In January 2009, the two companies entered into an option, license and collaboration agreement. By exercising the option in November 2009, Bayer Schering Pharma triggered a joint collaboration on the development of the BiTE antibody against an undisclosed solid tumor target through the completion of Phase I clinical trials, at which point Bayer will assume full control of the further development and commercialization of the antibody.

BiTE antibodies are designed to direct the body's cell-destroying T-cells against tumor cells, and represent a new therapeutic approach to cancer therapy. According to the agreement, Micromet will be eligible for milestone payments totaling up to €285 million and up to double-digit royalties based on tiered net sales of the product. In addition it is planned to reimburse Micromet for its R&D expenses.

"BiTE antibodies represent a promising approach to cancer therapy," said Dr. Karl Ziegelbauer, Head of Therapeutic Research Oncology at Bayer Schering Pharma. "We are looking forward to developing a new treatment for patients with solid tumors and to further advancing novel therapeutic options in our oncology portfolio."

Bayer employees Daniela Fischer (left) and Katja Zachmann prepare samples for automated RNAi testing.



Development of substances to control malaria mosquitoes

Bayer CropScience signs agreement with U.K. research institute

Defense against malaria mosquitoes: nets made of fibers impregnated with the active ingredient deltamethrin from Bayer CropScience provide effective protection.

Bayer CropScience and the Innovative Vector Control Consortium (IVCC), Liverpool, United Kingdom, plan to jointly develop new active ingredients to control mosquitoes that transmit diseases such as malaria and are resistant to conventional insecticides. Resistance is currently one of the greatest problems in the battle against malaria vectors. The aim is to discover new active ingredients for public health products (PHPs) that help protect people against diseases by controlling the insects that transmit them. According to figures from the World Health Organization, some 3.3 billion people – half the world's population – live in malaria-endemic areas.

The two partners signed a research agreement in May 2009 that will initially run for three years. Bayer CropScience is contributing its spectrum of substances and screening capabilities, along with its experience in chemical synthesis and insecticides research and development.

Initially established as a research consortium in 2005, the IVCC has evolved into a product development partnership (PDP).

Partners in Beijing

Bayer HealthCare and Tsinghua University in Beijing, China, have signed an agreement to enter into a comprehensive strategic partnership. Under the agreement, the partners have established a joint research center at Tsinghua University, the Bayer-Tsinghua (Institute of Biomedicine) Research Center of Innovative Drug Discovery.

The center is part of an initiative of Bayer HealthCare's newly inaugurated R&D Center in Beijing. Under the terms of the agreement, scientists from the university will collaborate with scientists from Bayer Schering Pharma, Berlin, Germany, along the drug discovery and development value chain, particularly in the areas of oncology, women's healthcare, diagnostic imaging and cardiology.

Best film of the year

Another accolade for Bayer's corporate image film: "Elements of Fascination" was chosen as the Grand Winner of the Galaxy Award 2009. This honor is bestowed on only one of the films awarded the Gold Prize, which means Bayer's corporate image film was named best film of the year.

"The film presents Bayer as a modern and innovative inventor company. It is a special honor for us that it has now been selected best film of the year from among so many excellent communication activities," said Michael Schade, Head of Communications at Bayer.

The award tops off the already strong showing by Bayer Communications at the Galaxy Awards, where Bayer won seven prizes in 2009. The Bayer corporate image film "Elements of Fascination" and the online version of the Annual Report each took home gold. The text and layout of the Annual Report and the company magazine *report* each won bronze. The scientific magazine *research* and the corporate image film received an "Honors" ranking in the "Stakeholder Dialogue" category.

A scene from "Elements of Fascination"

Combined Management Report
of the Bayer Group and Bayer AG

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

2009 operationally one of Bayer's strongest years

Bayer successful in a difficult environment

Optimistic for the future

- Group sales of €31.2 billion (-5.3%)
- EBITDA before special items of €6.5 billion (-6.6%) still at a high level
- Net income of €1.4 billion (-20.9%)
- Net cash flow significantly improved to €5.4 billion (+49.0%)
- Net financial debt reduced by €4.5 billion to €9.7 billion
- Unchanged dividend of €1.40 proposed
- Outlook for 2010: core earnings per share expected to improve by about 10%

1. Overview of Sales, Earnings and Financial Position

Full year 2009

In 2009 Bayer was successful in a difficult environment. We achieved EBITDA before special items of €6.5 billion, the third-highest level in our history, and nearly reached our ambitious target of limiting the decline in earnings against the record year 2008 to about 5%. Moreover, we improved net cash flow by 49% to a record €5.4 billion. This enabled us to reduce net financial debt by €4.5 billion – a greater amount than planned – to €9.7 billion.

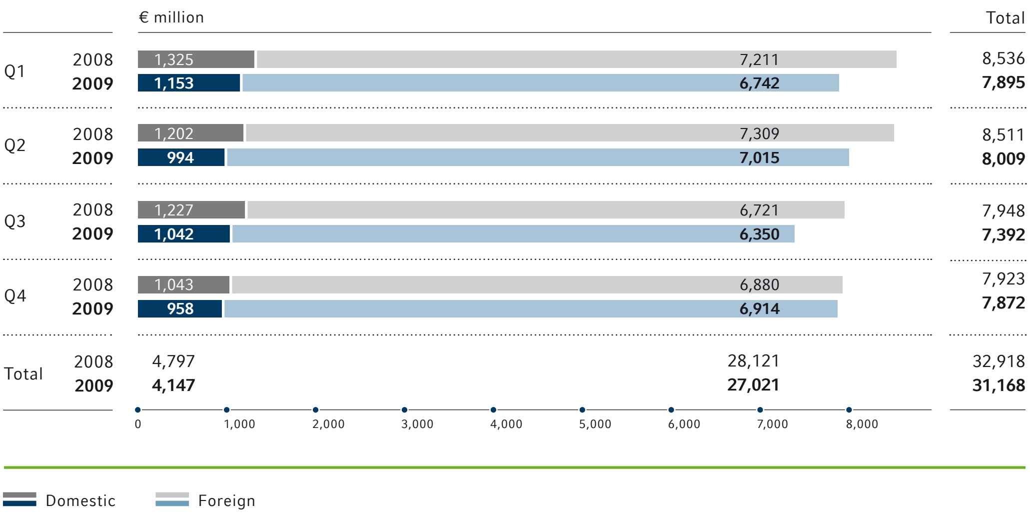
HealthCare again saw pleasing growth in both sales and earnings. CropScience achieved a slight improvement in sales despite a weakening market environment, though earnings came in somewhat below the previous year's record level. MaterialScience was hard hit by the slump in the world economy. Despite a recovery in business during the year, sales and earnings in 2009 came in well below the prior-year level.

Change in Sales [Table 3.1]

	2008	2009
	%	%
Volume	+2.8	−2.9
Price	+1.6	−2.8
Currency	−3.4	+0.6
Portfolio	+0.6	−0.2

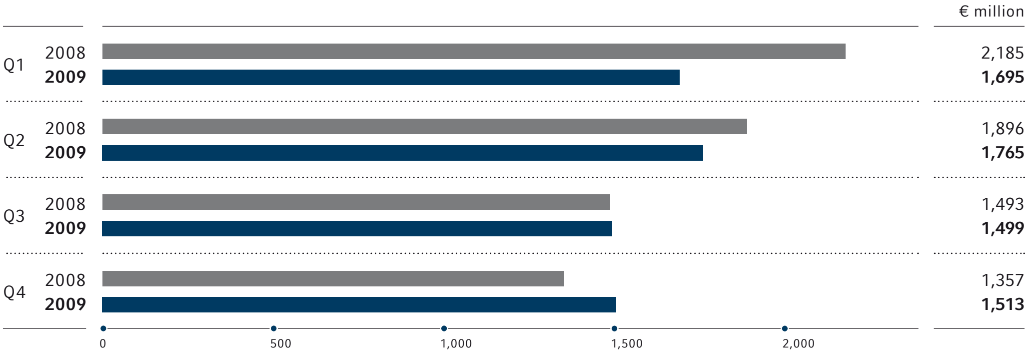
Group **sales** fell by 5.3% to €31,168 million (2008: €32,918 million). Adjusted for currency and portfolio effects (Fx & portfolio adj.), sales receded by 5.7%. Sales of HealthCare grew by 3.8% (Fx & portfolio adj. +3.8%). In the CropScience subgroup, business expanded by 2.0% (Fx & portfolio adj. +2.5%). Sales of MaterialScience fell by a substantial 22.8% (Fx & portfolio adj. 24.7%) due to the economic situation.

Bayer Group Quarterly Sales [Graphic 3.1]



EBITDA before special items of the Bayer Group, at €6,472 million, was down 6.6% from the prior-year figure of €6,931 million. Shifts in currency parities, particularly in the emerging markets, diminished earnings by some €140 million. The EBITDA margin before special items declined slightly to 20.8% (2008: 21.1%).

Bayer Group Quarterly EBITDA Before Special Items [Graphic 3.2]



EBITDA before special items of HealthCare improved by 7.5% to a record €4,468 million (2008: €4,157 million), yielding an EBITDA margin before special items of 27.9% (2008: 27.0%). Contributing to this increase were the gratifying business performance and the synergies from the integration of the former business of Schering, Berlin, Germany. EBITDA before special items of CropScience, at €1,508 million, was 5.9% below the very good result for the preceding year (€1,603 million). The EBITDA margin before special items came in at 23.2% (2008: 25.1%). The drop in earnings was due primarily to higher raw material costs and negative currency effects, which were only partly offset by earnings contributions from the additional sales. In the difficult year 2009, EBITDA before special items of MaterialScience amounted to €446 million (2008: €1,088 million). This substantially lower earnings level was due to negative price and volume effects on account of the much weaker demand caused by the economic slump. However, earnings of MaterialScience improved as the year went on, approaching the 2008 level by the third quarter. The EBITDA margin before special items dropped to 5.9% (2008: 11.2%).

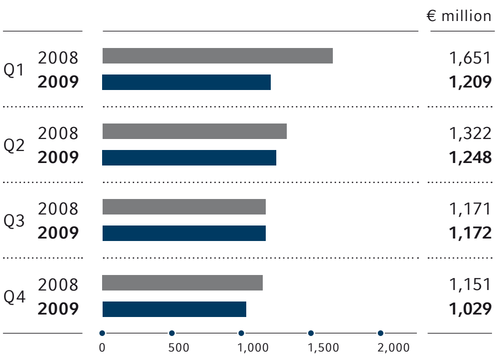
EBIT before special items of the Bayer Group, at €3,772 million, was down 13.1% from the previous year's level of €4,342 million. EBIT in 2009 was diminished by net special charges of €766 million (2008: €798 million). Of the 2009 figure, HealthCare accounted for €372 million, CropScience for €219 million and MaterialScience for €140 million. The net special charges related mainly to restructuring (2009: €354 million; 2008: €215 million) and the integration and acquisition of Schering, Berlin, Germany (2009: €87 million; 2008: €365 million). These expenses completed the current restructuring programs. Special charges of €225 million (2008: €106 million) were litigation-related, €68 million comprised additional funding for the German corporate pension assurance association necessitated by record bankruptcy losses, and €32 million consisted of impairment charges (2008: €98 million). EBIT of the Bayer Group fell by 15.2% to €3,006 million (2008: €3,544 million).

After a non-operating result of minus €1,136 million (2008: minus €1,188 million), income before income taxes in 2009 came in at €1,870 million (2008: €2,356 million). The main components of the non-operating result were €548 million (2008: €702 million) in net interest expense, €436 million (2008: €300 million) in interest cost for pension and other provisions, and a €92 million (2008: €79 million) exchange loss. The lower net interest expense was partly due to the reduction in financial debt and the decline in interest rates. Tax expense in 2009 came to €511 million (2008: €636 million).

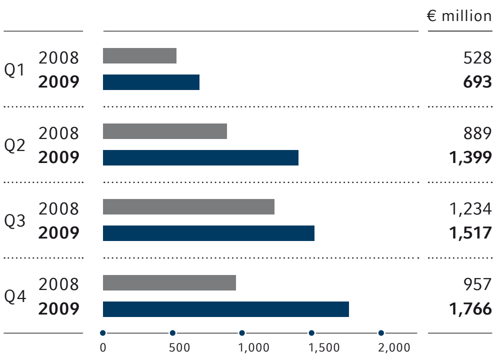
After tax we recorded income from continuing operations of €1,359 million (2008: €1,720 million).

The Bayer Group posted net income of €1,359 million in 2009 (2008: €1,719 million). Earnings per share were €1.70 (2008: €2.22). Core earnings per share moved back to €3.64 (2008: €4.17). The calculation of core earnings per share is explained in Chapter 4.3 “Core Earnings Per Share,” page 75.

Gross Cash Flow by Quarter [Graphic 3.3]



Net Cash Flow by Quarter [Graphic 3.4]



Gross cash flow of the Bayer Group receded by 12.0% year on year to €4,658 million (2008: €5,295 million) due to the weak business performance at MaterialScience. By contrast, net cash flow advanced by 49.0% to €5,375 million (2008: €3,608 million), due particularly to improved working capital management and lower income tax payments.

We significantly reduced net financial debt during the year to €9.7 billion on December 31, 2009, compared with €14.2 billion at the end of 2008. The reduction included the conversion of the €2.3 billion mandatory convertible bond. The net pension liability – the aggregate of pension obligations and plan assets – rose by €0.4 billion compared with December 31, 2008, to €6.4 billion, mainly because of lower long-term interest rates on the capital market.

Fourth quarter of 2009

Sales of the Bayer Group dipped by 0.6 percent in the fourth quarter of 2009, to €7,872 million (Q4 2008: €7,923 million). After adjustment for currency and portfolio effects (Fx & portfolio adj.), sales rose by 3.4%. HealthCare sales increased by 0.6% (Fx & portfolio adj. +5.9%). Business in our CropScience subgroup grew by 3.4% (Fx & portfolio adj. +6.2%). Sales of MaterialScience declined by 1.9%, but expanded by 1.0% on a currency-adjusted basis.

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

	Sales		EBIT before special items*		EBITDA before special items*		EBITDA margin before special items*	
	4th Quarter 2008	4th Quarter 2009	4th Quarter 2008	4th Quarter 2009	4th Quarter 2008	4th Quarter 2009	4th Quarter 2008	4th Quarter 2009
	€ million	€ million	€ million	€ million	€ million	€ million	%	%
HealthCare	**4,140**	**4,164**	**759**	**775**	**1,095**	**1,154**	**26.4**	**27.7**
Pharmaceuticals	2,673	2,698	481	497	753	789	28.2	29.2
Consumer Health	1,467	1,466	278	278	342	365	23.3	24.9
CropScience	**1,352**	**1,398**	**53**	**42**	**182**	**166**	**13.5**	**11.9**
Crop Protection	1,124	1,177	52	42	158	149	14.1	12.7
Environmental Science, BioScience	228	221	1	0	24	17	10.5	7.7
MaterialScience	**2,055**	**2,016**	**(86)**	**59**	**54**	**203**	**2.6**	**10.1**
Reconciliation	**376**	**294**	**(20)**	**(59)**	**26**	**(10)**	**6.9**	**(3.4)**
Continuing Operations	**7,923**	**7,872**	**706**	**817**	**1,357**	**1,513**	**17.1**	**19.2**

2008 figures restated
* for definition see chapter 4.2 "Calculation of EBIT(DA) Before Special Items," page 74

EBITDA before special items in the fourth quarter advanced by 11.5% to €1,513 million (Q4 2008: €1,357 million), despite a negative currency effect of about €80 million. HealthCare posted underlying EBITDA of €1,154 million (Q4 2008: €1,095 million), up 5.4% year on year. EBITDA before special items of CropScience fell by 8.8% to €166 million (Q4 2008: €182 million). EBITDA before special items at MaterialScience nearly quadrupled to €203 million from €54 million in the prior-year quarter, when earnings were already hampered by the economic crisis. **EBIT** before special items in the fourth quarter advanced by 15.7% to €817 million (Q4 2008: €706 million). Net special charges of €451 million (Q4 2008: €294 million) were incurred, with HealthCare accounting for €312 million (Q4 2008: €197 million), CropScience for €98 million (Q4 2008: €62 million) and MaterialScience for €45 million (Q4 2008: €35 million). Fourth-quarter EBIT thus came in at €366 million (Q4 2008: €412 million).

After a non-operating result of minus €248 million (Q4 2008: minus €375 million), income before income taxes was €118 million (Q4 2008: €37 million). The non-operating result contained net interest expense of €94 million (Q4 2008: €167 million). Including tax income of €38 million (Q4 2008: €65 million), income from continuing operations was €156 million (Q4 2008: €102 million).

After non-controlling interest, Group net income in the fourth quarter came to €153 million (Q4 2008: €106 million). Earnings per share came in at €0.18 (Q4 2008: €0.16). Core earnings per share were €0.90 (Q4 2008: €0.71).

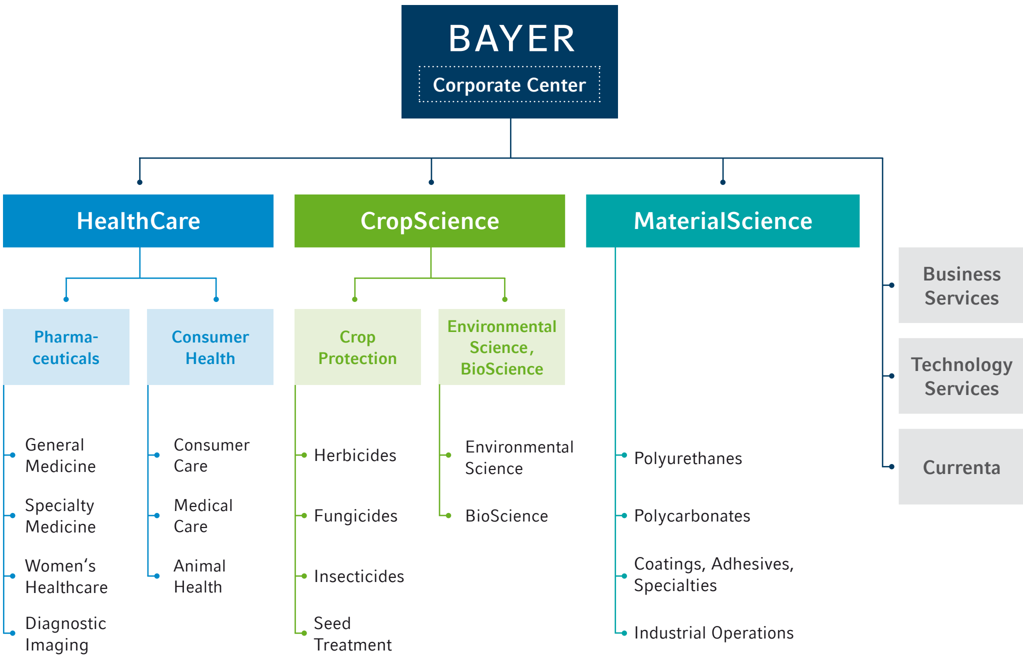
Gross cash flow declined by 10.6% year on year in the fourth quarter of 2009, to €1,029 million (Q4 2008: €1,151 million). Net cash flow climbed by 84.5% to €1,766 million (Q4 2008: €957 million), mainly because of a significant decrease in cash tied up in working capital.

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 3.5]

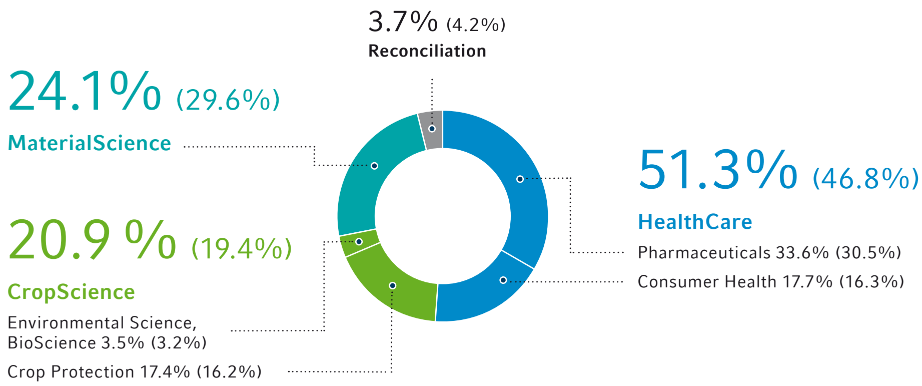


The globally operating HealthCare subgroup is divided into the Pharmaceuticals and Consumer Health segments. The Pharmaceuticals segment concentrates on prescription products in the fields of General Medicine, Specialty Medicine, Women's Healthcare and Diagnostic Imaging. Our Consumer Health segment comprises the Consumer Care, Medical Care and Animal Health divisions. The Consumer Care Division has businesses in 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, and coating and adhesive raw materials. 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.

Sales by Segment 2009 (2008 in parentheses) [Graphic 3.6]



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.

The commentaries in this report relate exclusively to continuing operations, except where specific reference is made to discontinued operations or to a total value. We had no discontinued operations to report in 2009.

Key Data by Subgroup and Segment [Table 3.3]

	Sales		EBIT before special items*		EBITDA before special items*		EBITDA margin before special items*	
	2008	2009	2008	2009	2008	2009	2008	2009
	€ million	€ million	€ million	€ million	€ million	€ million	%	%
HealthCare	**15,407**	**15,988**	**2,764**	**3,012**	**4,157**	**4,468**	**27.0**	**27.9**
Pharmaceuticals	10,030	10,467	1,760	2,018	2,920	3,193	29.1	30.5
Consumer Health	5,377	5,521	1,004	994	1,237	1,275	23.0	23.1
CropScience	**6,382**	**6,510**	**1,084**	**1,017**	**1,603**	**1,508**	**25.1**	**23.2**
Crop Protection	5,339	5,424	962	875	1,397	1,301	26.2	24.0
Environmental Science, BioScience	1,043	1,086	122	142	206	207	19.8	19.1
MaterialScience	**9,738**	**7,520**	**586**	**(126)**	**1,088**	**446**	**11.2**	**5.9**
Reconciliation	**1,391**	**1,150**	**(92)**	**(131)**	**83**	**50**	**6.0**	**4.3**
Continuing Operations	**32,918**	**31,168**	**4,342**	**3,772**	**6,931**	**6,472**	**21.1**	**20.8**

2008 figures restated
* for definition see chapter 4.2 "Calculation of EBIT(DA) Before Special Items," page 74

Changes in corporate structure

We implemented a number of organizational changes effective January 1, 2009 that affected our segment reporting and thus the presentation within the subgroups as described below. The prior-year figures have been restated accordingly. In the HealthCare subgroup, the dermatology business (Intendis) was integrated into the Consumer Care Division within the Consumer Health segment and thus is no longer part of the Pharmaceuticals segment. The Diabetes Care Division was combined with our medical equipment business Medrad – which previously formed part of the Diagnostic Imaging business unit in the Pharmaceuticals segment – to create the Medical Care Division. In the Pharmaceuticals segment we now conduct our business in the General Medicine (formerly Primary Care and Cardiology), Specialty Medicine (formerly Specialized Therapeutics, Oncology and Hematology), Women's Healthcare and Diagnostic Imaging business units. MaterialScience is reported as a single segment. The Thermoplastic Polyurethanes (TPU) business unit was dissolved. The TPU granules business was integrated into the Polyurethanes business unit, while the TPU films activities now form part of the Coatings, Adhesives, Specialties business unit (Functional Films). In light of organizational changes, the non-core businesses previously reported as "Other Systems" are now reported under Industrial Operations.

2.2 Operating Environment

Global economy

In 2009 the global economy was dominated by the financial and economic crisis, which led to a worldwide economic slump in the fall of 2008. The industrialized countries were particularly hard hit, with some of the emerging markets also experiencing major downturns or at least tangibly lower rates of growth.

The pace of the downswing slowed during the second quarter of 2009, in some countries more significantly than expected. This was substantially the result of extensive governmental stimulus programs. The financial markets also stabilized increasingly during the year following massive intervention by the central banks. The bottom of the cycle was reached in the summer months, and the world economy slowly recovered in the second half of the year. With business and consumer confidence continuing to improve, production in the industrialized countries expanded once more. The emerging economies again posted higher growth rates, albeit well below those of 2008. However, the worldwide recovery at year end was not nearly sufficient to offset the slump at the start of the year, with the result that global economic output in 2009 was well down on the previous year.

HealthCare

In 2009 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 result of more restrictive health care policies, which are leading to stricter cost controls and limiting access to certain types of treatment. Growth continued in the emerging countries, where health services are becoming available to more and more people and the need for treatment options for chronic diseases is increasing.

While growth in the global **consumer health market** ebbed slightly in 2009, it proved relatively stable overall thanks to some price increases. Inventory adjustments by traders had a negative effect in the first half. Market expansion in the emerging economies did not fully offset the low growth rates in the industrialized countries.

CropScience

Following the positive trend in 2008, conditions in the global **seed and crop protection market** deteriorated markedly during 2009. Declining prices for the major agricultural crops, lower insect and disease infestation pressure and adverse weather patterns led to a tangible drop in demand for crop protection products, particularly in the second half.

The economic situation of farmers in Latin America worsened overall in the wake of extreme drought conditions in the first half of 2009. The region's farm economy was also hampered by an unfavorable exchange rate for the U.S. dollar and by the financial crisis. In North America, the use of crop protection products declined mainly due to above-average rainfall in the first half and a sharp drop in producer prices. In many European countries, comparatively low infestation by insect pests and fungal diseases in crops such as cereal, potatoes or grapes reduced the demand for crop protection products. Many farms in eastern Europe cut back spending on inputs due to a lack of liquidity caused by the financial crisis. In Asia/Pacific, too, business conditions in 2009 were predominantly unfavorable, especially in the region's growth markets. Infestation pressure in China was low, particularly in rice. The erratic monsoon in the second half of the year held back growth, especially in India. By contrast, Australian agriculture saw a modest recovery from the prolonged drought of recent years.

MaterialScience

The customer industries of importance to MaterialScience experienced a slump in business in 2009 that varied in intensity from one region to another. In the first quarter, particularly, demand plummeted. The difficult economic conditions gradually improved as the year went on, mainly as a result of the extensive stimulus programs introduced throughout the world.

The **automotive markets** of many countries stabilized initially thanks to the governmental stimulus programs. Although production declined substantially in 2009 as a whole, these programs prevented an even worse situation. Currently, only China appears on course for sustained growth.

The **electrical/electronics sector**, which as a supplier industry is closely interlinked with all other industry sectors, saw a mid-single-digit decline in production worldwide in 2009. The picture varied widely from one region to another. Production in the industrialized countries fell sharply, while the emerging countries continued to show robust growth.

The global **construction industry** shrank in 2009 for the first time since the early 1990s. While there were clear signs of stabilization in the United States as the year progressed, some markets in western Europe slumped dramatically. Other major markets such as China and India were less affected by the crisis and continued growing at slightly slower rates.

The **furniture industry** suffered from a sharp drop in business, especially in the first half of 2009, with the market gradually bottoming out in the second half. In the United States and several European countries in particular, weaker consumer confidence had an adverse effect on demand. In the Asian markets, which were stabilized by extensive stimulus programs, part of the decline in exports was offset by an increase in domestic consumption.

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. 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

An organizational 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 to 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, as well as Berkeley and Emeryville, California, United States. These substances are processed into finished products and packaged worldwide using sophisticated technologies. 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 manufacturing 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.

In the Consumer Health segment, the Consumer Care Division procures certain active substances, such as acetylsalicylic acid and clotrimazole, from within the Bayer Group. 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 direct materials or finished products in order to be able to supply our customers consistently and reliably. Our largest 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. The cost of some raw materials depends on oil and energy prices and freight charges. Key products 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. Another major factor in ensuring supplies is that we buy primarily from certified suppliers with defined quality standards for their production and for the raw materials to be procured.

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 and Institute, West Virginia, 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 facilities the active ingredients are processed into herbicides, fungicides, insecticides, seed treatments and Environmental Science products according to local requirements and application areas. We continued to invest in our global production network in 2009, selectively expanding our capacities for important products such as the herbicide Basta®/Liberty®/Ignite® and the fungicide Proline®/Input®/Prosaro®.

In the BioScience business unit, we produce our seeds close to the customer in Europe, Asia, and North and South America. Our canola, cotton, rice and vegetable seed is bred in our own centers or grown under contract on an area of more than 90,000 hectares.

MaterialScience

The basic 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, making energy costs a significant factor for the MaterialScience business. To minimize the price fluctuation risk, we aim for a balanced diversification of fuels for steam production and a mix of external procurement and captive production for power generation. We also employ commodity swaps and commodity options in the case of long-term, fixed-price supply contracts, for example.

The largest production facilities of MaterialScience for the European market are located in Dormagen, Krefeld and Brunsbüttel, Germany; Antwerp, Belgium; and Tarragona, Spain. The major production site for the North American market is at Baytown, Texas, United States, while customers in the Asia/Pacific region are supplied chiefly from Map Ta Phut, Thailand, and Shanghai, China. In the field of commodities we endeavor to reduce costs by operating world-scale production facilities that enable us to supply markets across national borders. We also have a large number of production facilities close to local markets in 17 countries to serve our diverse businesses. Of these facilities, our systems houses formulate and supply customized polyurethane systems under the trade name BaySystems®, while others carry out compounding of polycarbonate granules (brand name: MakroColor®) 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 size 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

In the Pharmaceuticals segment we supply prescription products in the areas of General Medicine, Specialty Medicine, Women's Healthcare and Diagnostic Imaging. In the field of General Medicine we supply products such as Adalat® to treat high blood pressure and coronary heart disease, and Avalox®/Avelox® to fight infectious diseases. Our offering in the area of Specialty Medicine includes the multiple sclerosis treatment Betaferon®/Betaseron®, the hemophilia A treatment Kogenate® and the cancer drug Nexavar®. Women's Healthcare markets contraceptive products, such as YAZ®/Yasmin®/Yasminelle® and Mirena®, and hormone replacement therapies such as Angeliq®. Our contrast agents, which are used in diagnostic imaging, include Ultravist® and Magnevist®. In the pharmaceuticals market we are among the world's top 15 companies in terms of sales.

Partnerships optimize distribution

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 Schering-Plough (now Merck & Co., Inc., United States) under which that company markets selected primary care products in the United States. We also co-market Zetia®, a product of Merck & Co., Inc., in Japan.

The Consumer Health segment offers chiefly non-prescription (over-the-counter = OTC) medicines. The Consumer Care Division has brands in most OTC categories, such as Aspirin® and Aleve® (analgesics) or Canesten® (dermatologicals). The product range also includes nutritionals such as Supradyn® and One-A-Day®, antacids, skin care products such as Bepanthen®/Bepanthol®, 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.

In the Medical Care Division we offer user-friendly blood glucose monitoring devices such as the single-strip Contour® system or the multi-strip Breeze® system. We generally market these products to consumers outside Europe through pharmacies, drugstores, mass merchants, hospitals and wholesalers. In Europe, they are sold mainly through pharmacies. We are among the top three companies in the market for blood glucose meters. Additionally we offer medical equipment such as contrast injection systems for diagnostic and therapeutic medical procedures in computed tomography, magnetic resonance imaging and molecular imaging, along with mechanical systems for the treatment of constricted or blocked blood vessels. These products are marketed to cardiologists, radiologists and vascular surgeons in hospitals and out-patient clinical sites through a global direct sales organization that is supplemented in certain regions by local distributors. We are the global market leader in contrast agent injection systems.

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 is Advantage® to treat flea infestation in dogs and cats, followed by Baytril® for the control of infectious diseases, the wormers Drontal® and Drontal Plus®, and Baycox® for the treatment of 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 with a prescription issued by a veterinarian or over the counter from retail stores, drugstores and pharmacies.

CropScience

Integrated, sustainable product portfolio offers solutions from seed to harvest

The CropScience business is subject to the growing seasons for the relevant crops and the respective distribution cycles.

Our Crop Protection business is based on a broad, balanced 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 world's second-leading supplier in the fungicides market and occupies a strong number three position in the global market for weed control products (herbicides), including plant growth regulators. Our Seed Treatment business unit focuses on the use of crop protection active ingredients specially developed for the protection of seeds and seedlings. Its broad, balanced range of insecticides, fungicides and combination products makes CropScience the leading company in the seed treatment market 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 our crop protection active ingredients and are specially designed for non-agricultural uses. In terms of sales, Bayer is among the world's leading suppliers of non-agricultural pest control products. The business unit is divided into Consumer Products, which markets plant care products and lawn, home and garden brands specifically to consumers, and Professional Products, which offers solutions for professionals in the green, pest control and vector control industries. 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 either directly to customers or via wholesalers. In the vector control field, particularly, much of our business takes place in response to tendering by government agencies and non-governmental organizations.

In the BioScience business unit, our 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. We market our canola seed primarily in North America, our cotton seed in North and Latin America, India and southern Europe, and our hybrid rice seed in Asia and, since 2009, in the United States. Our vegetable seed varieties are sold in more than 100 countries throughout the world. Our seed is distributed to farmers, breeders, specialist retailers and the processing industry. Traits developed using modern breeding methods and plant biotechnology are either incorporated into our own seed varieties or licensed to other seed companies for use in their products. In some cases, traits are also provided to other companies for research purposes.

MaterialScience

MaterialScience is among the world's leading manufacturers and suppliers of polyurethanes and polycarbonates and of raw materials for coatings and adhesives. The subgroup holds leading competitive positions in these product groups in all regional markets. We also produce and market selected inorganic basic chemicals such as chlorine, sodium hydroxide solution, hydrogen, hydrochloric acid, nitric acid and carbon monoxide, which serve either as raw materials (such as chlorine) for our primary products or are generated as by-products (such as sodium hydroxide solution) and sold to external customers.

Our primary products are used mainly in the automotive, construction, electronics, data communications, furniture, timber, chemical, sports equipment, leisure goods, textile, medical technology and manufacturing 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, car headlamps, stadium roofs and water bottles for water dispensers. The Coatings, Adhesives, Specialties business unit manufactures raw materials for coatings and adhesives used in the automobile and commercial vehicle industries, and for adhesives used in footwear.

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]

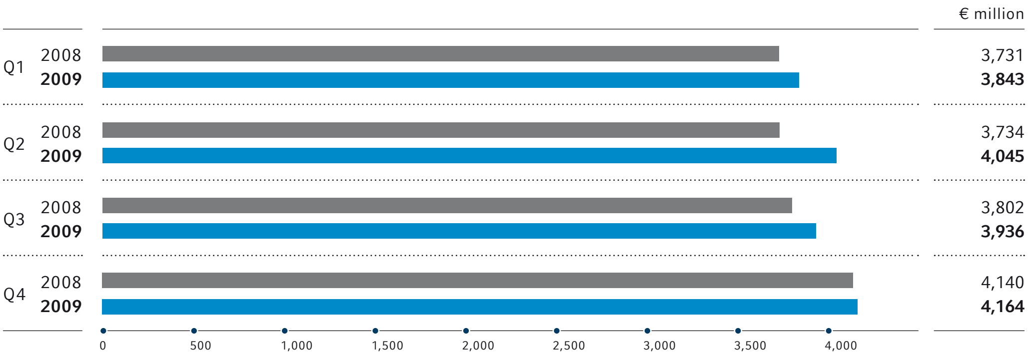
	2008	2009	Change
	€ million	€ million	%
Sales	**15,407**	**15,988**	**+3.8**
Pharmaceuticals	10,030	10,467	+4.4
Consumer Health	5,377	5,521	+2.7
Sales by Region			
Europe	6,379	6,344	−0.5
North America	4,512	4,634	+2.7
Asia/Pacific	2,278	2,677	+17.5
Latin America/Africa/Middle East	2,238	2,333	+4.2
EBITDA*	**3,692**	**4,148**	**+12.4**
Special items	*(465)*	*(320)*	
EBITDA before special items*	***4,157***	***4,468***	***+7.5***
EBITDA margin before special items*	27.0%	27.9%	
EBIT*	**2,181**	**2,640**	**+21.0**
Special items	*(583)*	*(372)*	
EBIT before special items*	***2,764***	***3,012***	***+9.0***
Gross cash flow**	**3,045**	**3,153**	**+3.5**
Net cash flow**	**2,259**	**3,431**	**+51.9**

2008 figures restated
* for definition see chapter 4.2 "Calculation of EBIT(DA) Before Special Items," page 74
** for definition see chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group," page 78

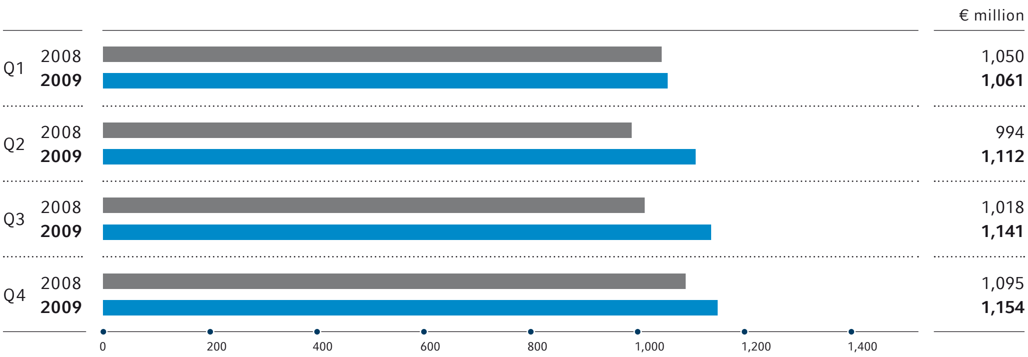
Above: illustration of blood cells

Sales of the HealthCare subgroup rose by 3.8% in 2009 to €15,988 million (2008: €15,407 million). On a currency- and portfolio-adjusted basis, sales also grew by 3.8%, due particularly to the positive business performance in the emerging markets. Favorable price and volume effects each contributed 1.9 percentage points to this growth.

HealthCare Quarterly Sales [Graphic 3.7]



HealthCare Quarterly EBITDA Before Special Items [Graphic 3.8]



EBITDA before special items of HealthCare rose by 7.5% in 2009 to €4,468 million (2008: €4,157 million). The EBITDA margin before special items came in at 27.9%, meeting the target set for the year despite significant negative currency effects. The growth in earnings was largely attributable to the positive business trend and to lower selling and administration expenses. These savings were made possible by synergies realized from the integration of Schering, Berlin, Germany, and by further cost-containment measures. On the other hand, earnings were diminished by increased manufacturing costs and by higher research and development expenses. **EBIT** before special items grew by 9.0% to €3,012 million (2008: €2,764 million). The net special charges of €372 million (2008: €583 million) related particularly to litigations and the integration of Schering, Berlin, Germany, as well as to restructuring measures, a valuation write-down and additional funding for the German corporate pension assurance association. EBIT rose by a substantial 21.0% to €2,640 million (2008: €2,181 million).

Pharmaceuticals

Key Data – Pharmaceuticals [Table 3.5]

	2008	2009	Change
	€ million	€ million	%
Sales	**10,030**	**10,467**	**+4.4**
General Medicine	3,208	3,463	+7.9
Specialty Medicine	3,050	3,159	+3.6
Women's Healthcare	2,873	2,946	+2.5
Diagnostic Imaging	899	899	0.0
Sales by Region			
Europe	4,181	4,107	−1.8
North America	2,646	2,712	+2.5
Asia/Pacific	1,805	2,136	+18.3
Latin America/Africa/Middle East	1,398	1,512	+8.2
EBITDA*	**2,500**	**2,912**	**+16.5**
Special items	*(420)*	*(281)*	
EBITDA before special items*	***2,920***	***3,193***	***+9.3***
EBITDA margin before special items*	29.1%	30.5%	
EBIT*	**1,222**	**1,696**	**+38.8**
Special items	*(538)*	*(322)*	
EBIT before special items*	***1,760***	***2,018***	***+14.7***
Gross cash flow**	**2,092**	**2,186**	**+4.5**
Net cash flow**	**1,547**	**2,280**	**+47.4**

2008 figures restated
* for definition see chapter 4.2 "Calculation of EBIT(DA) Before Special Items," page 74
** for definition see chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group," page 78

Sales of our **Pharmaceuticals** segment increased by 4.4% in 2009 to €10,467 million (2008: €10,030 million). Adjusted for currency and portfolio effects, sales advanced by 4.8%. Business expanded encouragingly in the Asia/Pacific (Fx adj. +9.1%) and Latin America/Africa/Middle East (Fx adj. +12.7%) regions, more than offsetting the slight decline in North America (Fx adj. -1.9%).

Best-Selling Pharmaceutical Products [Table 3.6]

	2008	2009	Change	Currency-adjusted change
	€ million	€ million	%	%
YAZ®/Yasmin®/Yasminelle® (Women's Healthcare)	1,222	1,278	+4.6	+4.7
Betaferon®/Betaseron® (Specialty Medicine)	1,144	1,214	+6.1	+5.7
Kogenate® (Specialty Medicine)	848	888	+4.7	+3.2
Adalat® (General Medicine)	626	633	+1.1	−3.6
Nexavar® (Specialty Medicine)	462	604	+30.7	+27.9
Mirena® (Women's Healthcare)	462	490	+6.1	+4.9
Avalox®/Avelox® (General Medicine)	462	460	−0.4	−1.7
Levitra® (General Medicine)	341	360	+5.6	+4.5
Cipro®/Ciprobay® (General Medicine)	338	331	−2.1	−3.6
Glucobay® (General Medicine)	304	315	+3.6	−0.9
Aspirin® Cardio (General Medicine)	270	315	+16.7	+14.9
Ultravist® (Diagnostic Imaging)	261	262	+0.4	+2.4
Magnevist® (Diagnostic Imaging)	241	219	−9.1	−13.4
Iopamiron® (Diagnostic Imaging)	199	199	0.0	−11.7
Kinzal®/Pritor® (General Medicine)	144	164	+13.9	+14.5
Total	**7,324**	**7,732**	**+5.6**	**+3.9**
Proportion of Pharmaceuticals sales	73%	74%		

Sales of the **General Medicine** business unit expanded by 7.9% to €3,463 million (2008: €3,208 million). The currency-adjusted (Fx adj.) increase was 5.7%. The gratifying expansion of business in the Asia/Pacific region played a particularly important role here. Sales of Aspirin® Cardio advanced by 14.9% (Fx adj.), especially as a result of strong gains in China. In Japan we achieved sales of €87 million with the cholesterol-lowering drug Zetia®. Other new products contributed to our growth as well. Sales of our erectile dysfunction drug Levitra® (Fx adj. +4.5%) and our antihypertensive drug Kinzal®/Pritor® (Fx adj. +14.5%) also developed positively, the latter benefiting from an expansion of indications to include prevention of cardiovascular disease. By contrast, sales of Adalat® to treat high blood pressure and coronary heart disease fell by 3.6% (Fx adj.). Despite the positive effects from the U.S. government contract concluded in 2008, sales of the anti-infective Cipro®/Ciprobay® were down 3.6% (Fx adj.) year on year, due partly to generic competition in Europe. Business with our oral antidiabetic Glucobay® (Fx adj. -0.9%) also shrank.

Sales in the **Specialty Medicine** business unit moved forward by 3.6% to €3,159 million (2008: €3,050 million). Adjusted for currency and portfolio effects, business was up by 6.7%. Sales of our cancer drug Nexavar® rose significantly (Fx adj. +27.9%), chiefly as a result of further market launches and the expansion of its registration in Japan to include the indication liver cancer. We also saw a gratifying expansion in business with our multiple sclerosis drug Betaferon®/Betaseron® (Fx adj. +5.7%), sales of which increased particularly in the United States. Business with our blood-clotting drug Kogenate® expanded by 3.2% (Fx adj.), thanks largely to a considerable increase in Latin America.

Sales of the **Women's Healthcare** business unit moved ahead by 2.5% to €2,946 million (2008: €2,873 million). On a currency-adjusted basis, sales grew by 3.6%. The positive sales performance of our YAZ®/Yasmin®/Yasminelle® line of oral contraceptives continued (Fx adj. +4.7%), due particularly to the growth of YAZ® in the United States and Europe. This increase more than offset the weakening of Yasmin® sales in the United States due to generic erosion. Sales of the hormone-releasing intrauterine device Mirena® continued to grow from the strong prior-year level (Fx adj. +4.9%).

In the **Diagnostic Imaging** business unit, sales were level year on year at €899 million (+0.0%), but dipped by 1.5% on a currency- and portfolio-adjusted basis. Business with Magnevist® contracted by 13.4% (Fx adj.); this was attributable partly to the transition to Gadovist®, sales of which grew strongly (Fx adj. +31.5%), particularly in Europe. Our Ultravist® business expanded further (Fx adj. +2.4%), while sales of Iopamiron® fell by 11.7% (Fx adj.), chiefly as a result of generic competition in Japan.

EBITDA before special items of the Pharmaceuticals segment advanced by 9.3% in 2009 to €3,193 million (2008: €2,920 million). These gains were attributable especially to the positive business trend and to lower selling and administration expenses. The savings were made possible by synergies realized from the integration of Schering, Berlin, Germany, and by cost-containment measures. Earnings were diminished by higher manufacturing costs. We also increased our expenditures for research and development by 5.9% in 2009. **EBIT** before special items grew by 14.7% to €2,018 million (2008: €1,760 million). Net special charges of €322 million resulted from expenditures related to litigation, the integration of Schering, additional funding for the German corporate pension assurance association and the valuation write-down related to our in-licensed development project Recothrom. EBIT climbed by a substantial €474 million to €1,696 million (2008: €1,222 million).

Consumer Health

Key Data – Consumer Health [Table 3.7]

	2008	2009	Change
	€ million	€ million	%
Sales	**5,377**	**5,521**	**+2.7**
Consumer Care	3,020	3,080	+2.0
Medical Care	1,394	1,464	+5.0
Animal Health	963	977	+1.5
Sales by Region			
Europe	2,198	2,237	+1.8
North America	1,866	1,922	+3.0
Asia/Pacific	473	541	+14.4
Latin America/Africa/Middle East	840	821	−2.3
EBITDA*	**1,192**	**1,236**	**+3.7**
Special items	*(45)*	*(39)*	
EBITDA before special items*	***1,237***	***1,275***	***+3.1***
EBITDA margin before special items*	23.0%	23.1%	
EBIT*	**959**	**944**	**−1.6**
Special items	*(45)*	*(50)*	
EBIT before special items*	***1,004***	***994***	***−1.0***
Gross cash flow**	**953**	**967**	**+1.5**
Net cash flow**	**712**	**1,151**	**+61.7**

2008 figures restated
* for definition see chapter 4.2 "Calculation of EBIT(DA) Before Special Items," page 74
** for definition see chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group," page 78

Our **Consumer Health** segment improved **sales** by 2.7% to €5,521 million (2008: €5,377 million). Adjusted for currency and portfolio effects, business was up by 2.1%, with all divisions contributing to this increase. This performance was due chiefly to strong sales gains in Russia and China that offset weaker business in the United States.

Best-Selling Consumer Health Products [Table 3.8]

	2008	2009	Change	Currency-adjusted change
	€ million	€ million	%	%
Contour® (Medical Care)	554	601	+8.5	+7.3
Aspirin®* (Consumer Care)	449	400	−10.9	−9.3
Advantage® product line (Animal Health)	329	336	+2.1	+0.2
Aleve®/naproxen (Consumer Care)	220	217	−1.4	−4.0
Canesten® (Consumer Care)	200	188	−6.0	−3.0
Bepanthen®/Bepanthol® (Consumer Care)	173	186	+7.5	+10.3
One-A-Day® (Consumer Care)	138	153	+10.9	+5.6
Baytril® (Animal Health)	152	149	−2.0	−4.7
Breeze® (Medical Care)	145	138	−4.8	−7.4
Supradyn® (Consumer Care)	140	136	−2.9	+1.0
Total	**2,500**	**2,504**	**+0.2**	**−0.2**
Proportion of Consumer Health sales	46%	45%		

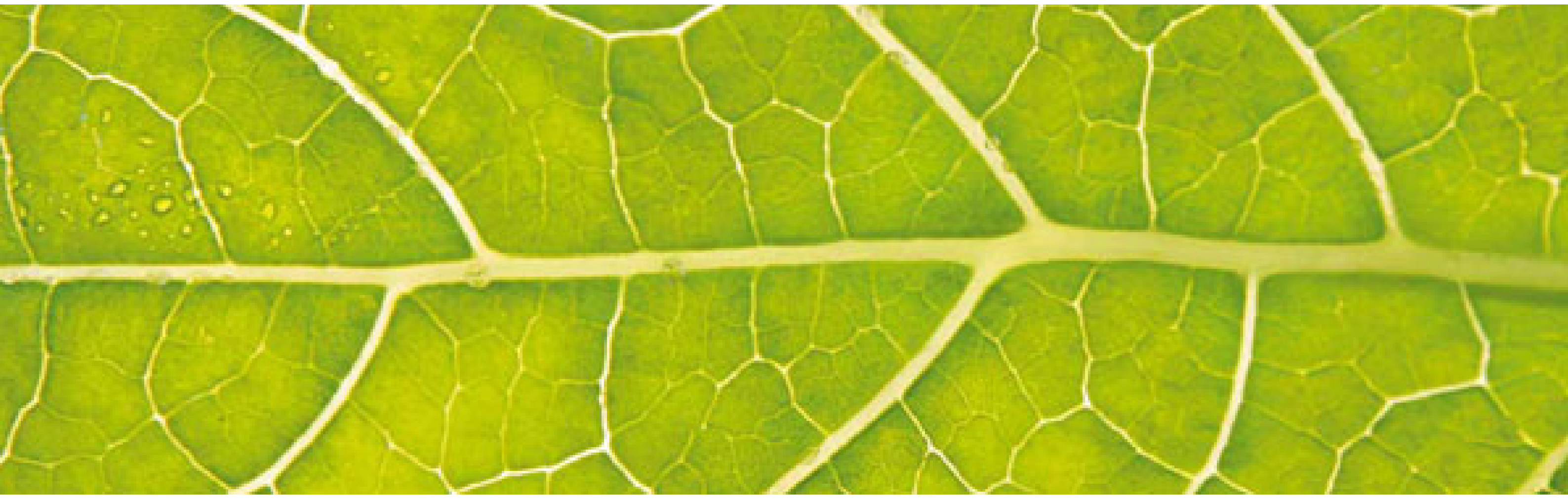
* total Aspirin® sales = €715 million (2008 = €719 million), including Aspirin® Cardio, which is reflected in sales of the Pharmaceuticals segment

In the **Consumer Care** Division, sales advanced by 2.0% to €3,080 million (2008: €3,020 million). The currency- and portfolio-adjusted increase was 2.5%. The effects of the economic weakness in established markets were more than offset by solid growth in the emerging markets. We achieved sales gains particularly for the food supplement lines Redoxon® (Fx adj. +19.1%) and Berocca® (Fx adj. +13.6%). Furthermore, our Bepanthen®/Bepanthol® skincare products (Fx adj. +10.3%) performed well, particularly in Europe. By contrast, sales were down for our analgesic Aspirin® (Fx adj. -9.3%) due to inventory adjustments in the market and intensified competition.

Sales of the **Medical Care** Division expanded by 5.0% to €1,464 million (2008: €1,394 million). The currency- and portfolio-adjusted increase was 2.1%. This growth was based primarily on higher sales of our blood glucose meters. Our Contour® product line (Fx adj. +7.3%) performed particularly well in Europe. This expansion was due in part to the substitution of our older Elite® system (Fx adj. -30.5%), which generated sales of €83 million in 2009. The decline in business with our Breeze® multi-test system (Fx adj. -7.4%) was attributable to an economy-related drop in demand in the United States.

In the **Animal Health** Division, sales advanced by 1.5% to €977 million (2008: €963 million). Adjusted for currency effects, the increase came to 1.0%. Business with our antiparasitic agent Baycox® grew by 15.6% (Fx adj.) to €48 million, mostly as a result of its market launch in Japan. Sales of our Advantage® line of flea, tick and worm control products remained level year on year, with the positive trend in the United Kingdom and Australia offsetting declines in the United States. Generic competition in Europe diminished sales of our Baytril® broad-spectrum antibiotic (Fx adj. -4.7%).

EBITDA before special items of the Consumer Health segment grew by 3.1% to €1,275 million (2008: €1,237 million). This earnings increase was attributable to the expansion of business and to lower selling expenses. Earnings were diminished by a currency-related increase in the cost of goods sold. **EBIT** before special items fell by 1.0% to €994 million (2008: €1,004 million). After special charges of €50 million relating mainly to the closure of a production facility in Brazil, EBIT fell by 1.6% to €944 million (2008: €959 million).



3.2 CropScience

Key Data – CropScience [Table 3.9]

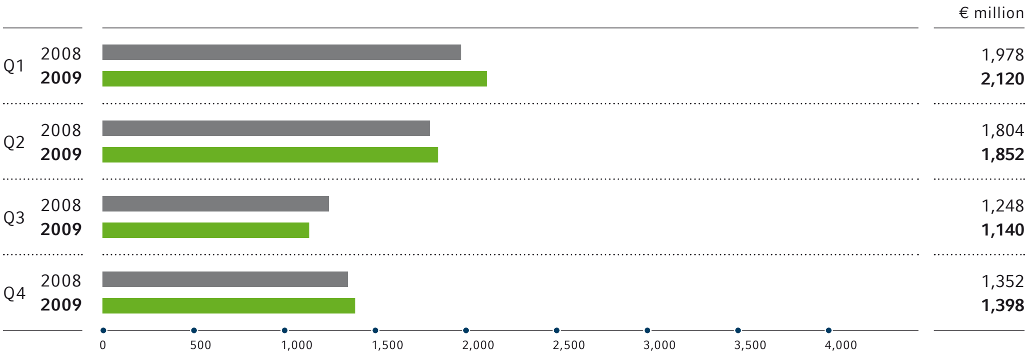
	2008	2009	Change
	€ million	€ million	%
Sales	**6,382**	**6,510**	**+2.0**
Crop Protection	5,339	5,424	+1.6
Environmental Science, BioScience	1,043	1,086	+4.1
Sales by Region			
Europe	2,625	2,540	−3.2
North America	1,396	1,529	+9.5
Asia/Pacific	964	1,028	+6.6
Latin America/Africa/Middle East	1,397	1,413	+1.1
EBITDA*	**1,450**	**1,311**	**−9.6**
Special items	*(153)*	*(197)*	
EBITDA before special items*	***1,603***	***1,508***	***−5.9***
EBITDA margin before special items*	25.1%	23.2%	
EBIT*	**918**	**798**	**−13.1**
Special items	*(166)*	*(219)*	
EBIT before special items*	***1,084***	***1,017***	***−6.2***
Gross cash flow**	**1,192**	**1,043**	**−12.5**
Net cash flow**	**736**	**745**	**+1.2**

* for definition see chapter 4.2 "Calculation of EBIT(DA) Before Special Items," page 74
** for definition see chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group," page 78

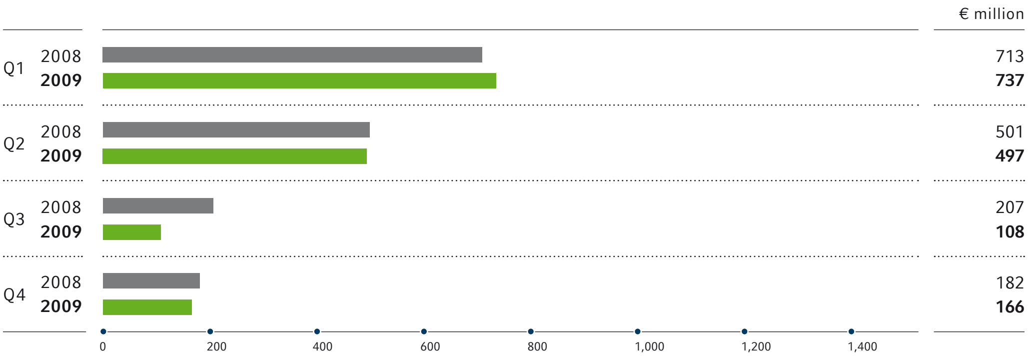
Above: detailed photograph of a canola leaf

CropScience improved **sales** by 2.0% in 2009 to €6,510 million (2008: €6,382 million). After adjusting for currency and portfolio effects, sales rose by 2.5%. Higher selling prices contributed 1.3 percentage points and higher volumes 1.2 percentage points to this increase.

CropScience Quarterly Sales [Graphic 3.9]



CropScience Quarterly EBITDA Before Special Items [Graphic 3.10]



EBITDA before special items was down by 5.9% to €1,508 million (2008: €1,603 million). The EBITDA margin before special items fell to 23.2%. This drop in earnings was due primarily to higher raw material costs and negative currency effects, which were only partly offset by positive earnings contributions from the expansion of business. **EBIT** before special items fell by 6.2% to €1,017 million. There were special charges for our current cost-structure program, the restructuring of our production site in Institute, West Virginia, United States, and additional funding for the German corporate pension assurance association. Further special charges related to defense costs associated with litigation pending in the United States in connection with genetically modified rice. After special charges of €219 million, EBIT was €798 million (2008: €918 million).

Best-Selling CropScience Products* [Table 3.10]

	2008	2009	Change	Currency-adjusted change
	€ million	€ million	%	%
Confidor®/Gaucho®/Admire®/Merit® (Insecticides/Seed Treatment/Environmental Science)	599	606	+1.2	−0.3
Flint®/Stratego®/Sphere®/Nativo® (Fungicides)	365	400	+9.6	+8.0
Basta®/Liberty®/Rely®/Ignite® (Herbicides)	235	323	+37.4	+34.3
Proline®/Input®/Prosaro® (Fungicides)	246	267	+8.5	+12.3
Atlantis® (Herbicides)	244	231	−5.3	−3.0
Folicur®/Raxil® (Fungicides/Seed Treatment)	242	210	−13.2	−12.0
Poncho® (Seed Treatment)	223	183	−17.9	−17.4
Decis®/K-Othrine® (Insecticides/Environmental Science)	175	170	−2.9	−0.9
Puma® (Herbicides)	203	167	−17.7	−14.5
Fandango® (Fungicides)	132	146	+10.6	+13.7
Total	**2,664**	**2,703**	**+1.5**	**+1.9**
Proportion of CropScience sales	42%	42%		

* Figures are based on active ingredient class. For the sake of clarity, only the principal brands and business units are listed.

Crop Protection

Key Data – Crop Protection [Table 3.11]

	2008	2009	Change
	€ million	€ million	%
Sales	**5,339**	**5,424**	**+1.6**
Herbicides	1,856	1,986	+7.0
Fungicides	1,565	1,564	−0.1
Insecticides	1,275	1,234	−3.2
Seed Treatment	643	640	−0.5
Sales by Region			
Europe	2,277	2,206	−3.1
North America	979	1,081	+10.4
Asia/Pacific	818	862	+5.4
Latin America/Africa/Middle East	1,265	1,275	+0.8
EBITDA*	**1,252**	**1,161**	**−7.3**
Special items	*(145)*	*(140)*	
EBITDA before special items*	***1,397***	***1,301***	***−6.9***
EBITDA margin before special items*	26.2%	24.0%	
EBIT*	**804**	**713**	**−11.3**
Special items	*(158)*	*(162)*	
EBIT before special items*	***962***	***875***	***−9.0***
Gross cash flow**	**1,026**	**924**	**−9.9**
Net cash flow**	**653**	**591**	**−9.5**

* for definition see chapter 4.2 "Calculation of EBIT(DA) Before Special Items," page 74
** for definition see chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group" page 78

Sales in the **Crop Protection** segment rose by 1.6% in 2009 to €5,424 million (2008: €5,339 million). After adjusting for shifts in exchange rates, business expanded by 2.3%. Despite a shrinking market overall, with lower producer prices and unfavorable weather conditions in major agricultural markets, we significantly expanded our herbicides business in particular, with our young products once again achieving above-average growth. In 2009 we reached our goal of €2 billion in sales of products based on active substances introduced to the market since 2000.

In the **Europe** region, sales fell by 3.1% to €2,206 million (2008: €2,277 million). Sales rose moderately on a currency-adjusted basis, however, by 0.9%. Business with our herbicides and insecticides improved modestly, while the fungicides business moved back slightly, above all due to unfavorable weather conditions and low fungal infestation. We saw an especially gratifying trend for our young products, such as the insecticides Biscaya®/Proteus® , the corn herbicide Laudis®, the fungicide Fandango® and the seed treatment product Poncho®.

Sales of our crop protection business in **North America** advanced by a substantial 10.4% to €1,081 million (2008: €979 million). The currency-adjusted increase was 6.8%. This improvement was largely due to the outstanding performance of our herbicides portfolio including the young products Corvus®/Velocity™, Laudis®, Infinity®/Wolverine® and Balance® flexx, as well as the herbicide Ignite® for use in genetically modified crops. In contrast, sales of our seed treatment business receded in the face of strong competition in the United States that affected particularly our corn seed treatment Poncho®.

Sales in the **Asia/Pacific** region climbed from €818 million in 2008 to €862 million, an increase of 5.4%. Adjusted for currency changes, business improved by 3.5%. In Southeast Asia and on the Indian subcontinent in particular, business expanded markedly due to the very good performance of our fungicides and herbicides. In addition, a very gratifying trend for our herbicides in Japan and Australia more than offset declines for our insecticides in China and Japan that resulted from low pest infestation.

Sales in the **Latin America/Africa/Middle East** region advanced by €10 million to €1,275 million (+0.8%). Adjusted for currency effects, sales increased by 0.4%. Business in Latin America was level year on year. Lower sales of our insecticides and fungicides as a result of very dry weather in Argentina and southern Brazil at the beginning of the year were offset by gratifying gains for seed treatment products, herbicides and fungicides in the second half. Especially positive performances were registered by the seed treatment product CropStar®, the young corn herbicide Soberan® and the fungicides Nativo® and Sphere® Max. Sales in Africa were up mainly because of expanded business with insecticides, while we posted slight declines in the Middle East.

EBITDA before special items in the Crop Protection segment fell 6.9% to €1,301 million (2008: €1,397 million). This was due above all to a rise in raw material costs and more unfavorable currency parities; these factors were only partially offset by higher selling prices in Europe and increased volumes in North and Latin America. **EBIT** before special items declined by 9.0% to €875 million. Special charges of €162 million in 2009 related to the cost structure program initiated in 2006, the restructuring of our production site in Institute, West Virginia, United States, and additional funding for the German corporate pension assurance association. EBIT was €713 million, down 11.3% from the prior-year figure of €804 million.

Environmental Science, BioScience

Key Data – Environmental Science, BioScience [Table 3.12]

	2008	2009	Change
	€ million	€ million	%
Sales	**1,043**	**1,086**	**+4.1**
Environmental Science	591	583	−1.4
BioScience	452	503	+11.3
Sales by Region			
Europe	348	334	−4.0
North America	417	448	+7.4
Asia/Pacific	146	166	+13.7
Latin America/Africa/Middle East	132	138	+4.5
EBITDA*	**198**	**150**	**−24.2**
Special items	*(8)*	*(57)*	
EBITDA before special items*	***206***	***207***	***+0.5***
EBITDA margin before special items*	19.8%	19.1%	
EBIT*	**114**	**85**	**−25.4**
Special items	*(8)*	*(57)*	
EBIT before special items*	***122***	***142***	***+16.4***
Gross cash flow**	**166**	**119**	**−28.3**
Net cash flow**	**83**	**154**	**+85.5**

* for definition see chapter 4.2 “Calculation of EBIT(DA) Before Special Items,” page 74
** for definition see chapter 4.5 “Liquidity and Capital Expenditures of the Bayer Group” page 78

Sales in the **Environmental Science, BioScience** segment grew by 4.1% in 2009, to €1,086 million (2008: €1,043 million). Adjusted for currency and portfolio effects, business was up by 4.0%.

Sales of the **Environmental Science** business unit fell by 1.4% to €583 million. Adjusted for currency effects, the decrease was 2.4%. This was largely attributable to declining sales of green industry products for professional users in the United States. On the other hand, we saw a gratifying expansion in business with our “Bayer Advanced” products for private consumers in North America that offset lower sales of our “Bayer Garden” portfolio in Europe. We also registered increased sales of specialty active ingredients for the processing industry.

BioScience increased sales by a substantial 11.3% to €503 million (2008: €452 million). After adjustment for currency and portfolio effects, business expanded by 12.3%. A key growth driver was our canola seed business in North America marketed under the InVigor® brand. Sales of our Arize® hybrid rice seed advanced further, while our cotton seed business remained level year on year despite a much smaller total cultivation area worldwide. Our vegetable seeds business posted very encouraging gains in Europe, Asia and the Middle East.

EBITDA before special items in the Environmental Science, BioScience segment remained level year on year at €207 million (2008: €206 million). The decline in business at Environmental Science and higher research and development expenditures at BioScience resulted in lower earnings contributions. These effects were offset by higher selling prices in both business units, increased volumes at BioScience and cost containment at Environmental Science. **EBIT** before special items advanced by €20 million to €142 million (+16.4%). Special charges of €57 million related, among other items, to defense costs associated with litigation pending in the United States in connection with genetically modified rice, as well as to restructuring measures. EBIT contracted by 25.4% to €85 million (2008: €114 million).

3.3 MaterialScience

Key Data – MaterialScience [Table 3.13]

	2008	2009	Change
	€ million	€ million	%
Sales	**9,738**	**7,520**	**−22.8**
Polyurethanes	5,069	3,783	−25.4
Polycarbonates	2,372	1,873	−21.0
Coatings, Adhesives, Specialties	1,648	1,364	−17.2
Industrial Operations	649	500	−23.0
Sales by Region			
Europe	4,267	3,054	−28.4
North America	2,108	1,536	−27.1
Asia/Pacific	2,098	1,951	−7.0
Latin America/Africa/Middle East	1,265	979	−22.6
EBITDA*	**1,041**	**341**	**−67.2**
Special items	*(47)*	*(105)*	
EBITDA before special items*	***1,088***	***446***	***−59.0***
EBITDA margin before special items*	11.2%	5.9%	
EBIT*	**537**	**(266)**	**·**
Special items	*(49)*	*(140)*	
EBIT before special items*	***586***	***(126)***	***·***
Gross cash flow**	**850**	**319**	**−62.5**
Net cash flow**	**782**	**849**	**+8.6**

2008 figures restated
* for definition see chapter 4.2 "Calculation of EBIT(DA) Before Special Items," page 74
**for definition see chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group," page 78

Above: thermoplastic polyurethane film

The business performance of MaterialScience in 2009 was impacted by the effects of the global financial and economic crisis. The subgroup saw a dramatic decline in sales worldwide at the beginning of the year, but business recovered markedly over the course of 2009. **Sales** of our MaterialScience business fell by 22.8% in 2009 to €7,520 million (2008: €9,738 million). The currency- and portfolio-adjusted decrease was 24.7%. Lower selling prices accounted for 12.3 percentage points of this decrease and lower volumes for 12.4 percentage points.

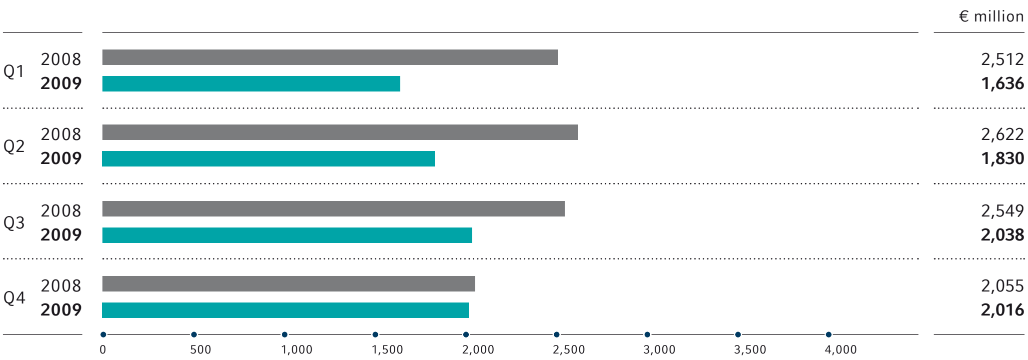
Sales of our **Polyurethanes** business unit fell by 25.4% to €3,783 million (2008: €5,069 million). Adjusted for currency and portfolio effects, sales dropped by 27.4%. This decline affected all polyurethane product groups (diphenylmethane diisocyanate (MDI), toluene diisocyanate (TDI) and polyether) and was attributable to both lower selling prices and lower volumes. By contrast, we achieved a gratifying expansion in volumes in the Asia / Pacific region.

Our **Polycarbonates** business unit saw sales fall by 21.0% year on year (Fx adj. -22.8%) to €1,873 million (2008 : €2,372 million). Volumes receded overall, but were up slightly in the Asia / Pacific region. Sales of our granules business fell due to both lower selling prices and lower volumes. Selling prices held steady in our semi-finished products (polycarbonate sheet) business, while volumes were down.

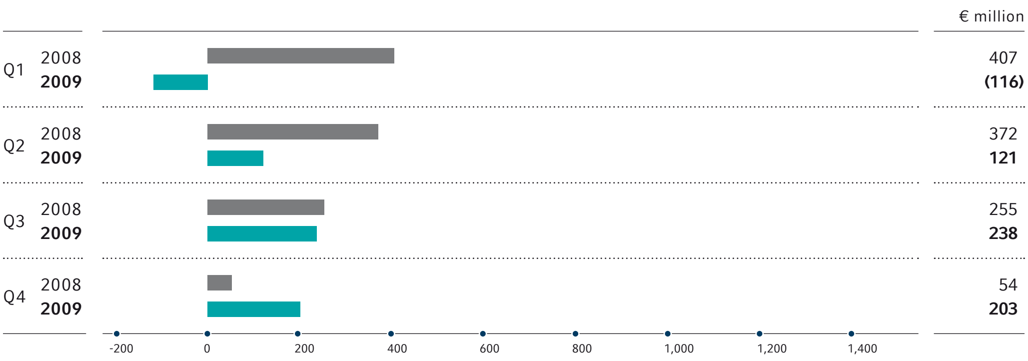
Sales of the **Coatings, Adhesives, Specialties** business unit dropped by 17.2% to €1,364 million (2008: €1,648 million). The currency- and portfolio-adjusted decline was 19.5%. This was primarily due to receding volumes in all product groups and regions, as well as to a slight decrease in selling prices.

Industrial Operations had sales of €500 million, down 23.0% (Fx adj. -23.6%) against the prior-year level of €649 million. In Europe, selling prices rose slightly but volumes declined significantly. In the United States we did not match the very high sales level of the previous year, mainly because of lower selling prices.

MaterialScience Quarterly Sales [Graphic 3.11]



MaterialScience Quarterly EBITDA Before Special Items [Graphic 3.12]



Earnings of MaterialScience dropped sharply in 2009. After a very weak first quarter, however, there was a successive, significant improvement in the earnings situation over the course of the year. **EBITDA** before special items in 2009 dropped to €446 million (2008: €1,088 million). The EBITDA margin before special items fell to 5.9%. This was due to lower selling prices and volumes. By contrast, earnings were increased by lower raw material and energy costs, as well as by savings from our restructuring program. In addition, we reacted to the weak business environment with further cost-containment measures.

EBIT before special items was minus €126 million (2008: plus €586 million). Also contributing to this decline was higher depreciation due to the commissioning of facilities at the Shanghai site in the fourth quarter of the previous year. Special charges in 2009 of €140 million (2008: €49 million) mainly related to the restructuring program initiated in 2007. Earnings were also diminished by additional funding for the German corporate pension assurance association. EBIT came in at minus €266 million (2008: plus €537 million).

3.4 Performance by Region

Sales by Region and Segment (by Market)

	Europe				North America			
	2008	2009			2008	2009		
	€ million	€ million	% yoy	Fx adj. % yoy	€ million	€ million	% yoy	Fx adj. % yoy
HealthCare	**6,379**	**6,344**	**−0.5**	**+2.5**	**4,512**	**4,634**	**+2.7**	**−1.8**
Pharmaceuticals	4,181	4,107	−1.8	+1.0	2,646	2,712	+2.5	−1.9
Consumer Health	2,198	2,237	+1.8	+5.4	1,866	1,922	+3.0	−1.7
CropScience	**2,625**	**2,540**	**−3.2**	**+0.5**	**1,396**	**1,529**	**+9.5**	**+5.9**
Crop Protection	2,277	2,206	−3.1	+0.9	979	1,081	+10.4	+6.8
Environmental Science, BioScience	348	334	−4.0	−2.0	417	448	+7.4	+3.9
MaterialScience	**4,267**	**3,054**	**−28.4**	**−28.4**	**2,108**	**1,536**	**−27.1**	**−30.7**
Continuing operations (incl. reconciliation)	**14,549**	**12,968**	**−10.9**	**−8.8**	**8,026**	**7,705**	**-4.0**	**−8.1**

2008 figures restated
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]

	2008	2009	Change
	€ million	€ million	%
Sales	**32,918**	**31,168**	**−5.3**
Cost of goods sold	16,456	15,135	−8.0
Selling expenses	8,105	7,923	−2.2
Research and development expenses	2,653	2,746	+3.5
General administration expenses	1,649	1,623	−1.6
Other operating income and expenses – net	(511)	(735)	−43.8
EBIT (operating result)	**3,544**	**3,006**	**−15.2**
Non-operating result	**(1,188)**	**(1,136)**	**+4.4**
Income before income taxes	**2,356**	**1,870**	**−20.6**
Income taxes	(636)	(511)	−19.7
Income after taxes from discontinued operations	**4**	**0**	**•**
Income after taxes	**1,724**	**1,359**	**−21.2**
of which attributable to non-controlling interest	5	0	•
of which attributable to Bayer AG stockholders (net income)	1,719	1,359	−20.9

Sales of the Bayer Group in 2009 fell by 5.3% or €1,750 million year on year to €31,168 million. The decline was mainly due to the drop in business at MaterialScience in the first three quarters. Adjusted for currency and portfolio effects, sales fell by 5.7%.

[Table 3.14]

Asia/Pacific				Latin America/Africa/Middle East				Continuing Operations			
2008	2009			2008	2009			2008	2009		
€ million	€ million	% yoy	Fx adj. % yoy	€ million	€ million	% yoy	Fx adj. % yoy	€ million	€ million	% yoy	Fx adj. % yoy
2,278	**2,677**	**+17.5**	**+9.5**	**2,238**	**2,333**	**+4.2**	**+9.3**	**15,407**	**15,988**	**+3.8**	**+3.2**
1,805	2,136	+18.3	+9.1	1,398	1,512	+8.2	+12.7	10,030	10,467	+4.4	+3.3
473	541	+14.4	+11.3	840	821	−2.3	+3.6	5,377	5,521	+2.7	+3.2
964	**1,028**	**+6.6**	**+5.1**	**1,397**	**1,413**	**+1.1**	**+1.2**	**6,382**	**6,510**	**+2.0**	**+2.6**
818	862	+5.4	+3.5	1,265	1,275	+0.8	+0.4	5,339	5,424	+1.6	+2.3
146	166	+13.7	+13.8	132	138	+4.5	+9.6	1,043	1,086	+4.1	+4.1
2,098	**1,951**	**−7.0**	**−12.4**	**1,265**	**979**	**−22.6**	**−20.2**	**9,738**	**7,520**	**−22.8**	**−24.4**
5,385	**5,712**	**+6.1**	**+0.3**	**4,958**	**4,783**	**−3.5**	**−0.6**	**32,918**	**31,168**	**−5.3**	**−5.9**

The cost of goods sold decreased by 8.0% to €15,135 million. This was mainly attributable to a considerably lower cost of goods sold at MaterialScience, which resulted mainly from the drop in volumes and lower average raw material and energy prices for the year. The ratio of the cost of goods sold to total sales was 48.6% (2008: 50.0%). Selling expenses declined by 2.2% to €7,923 million, and were thus equivalent to 25.4% (2008: 24.6%) of sales. We increased our expenditures for research and development again in 2009 by 3.5% to €2,746 million. The ratio of R&D expenses to sales was 8.8% (2008: 8.1%). However, we reduced general administration expenses by 1.6% to €1,623 million (2008: €1,649 million). This was partly due to synergies from the integration of Schering, Berlin, Germany, and measures related to our restructuring program at MaterialScience. The negative balance of other operating income and expenses, at €735 million, resulted mainly from costs related to the integration of Schering, restructuring, litigations, additional funding for the German corporate pension assurance association, and valuation write-downs.

EBIT for 2009 came in at €3,006 million (2008: €3,544 million). Before net special charges of €766 million (2008: €798 million), EBIT decreased by 13.1% to €3,772 million (2008: €4,342 million).

The non-operating result improved by €52 million to minus €1,136 million. It included substantially lower net interest expense of €548 million (2008: €702 million), €436 million (2008: €300 million) in interest cost for pension and other provisions, a €59 million (2008: €70 million) net loss from investments in affiliated companies and a €92 million (2008: €79 million) net exchange loss. The change in net interest expense was partly due to the reduction of financial debt and to lower interest rates. The increase in interest expense for pension and other provisions resulted mainly from a decline in the return on pension plan assets, which is offset against the interest on pension provisions.

Tax expense in 2009 amounted to €511 million (2008: €636 million). Income after taxes, which in 2009 was equivalent to net income, came in at €1,359 million. Net income in 2008 was €1,719 million, including €4 million in income from discontinued operations and after deduction of €5 million in income attributable to non-controlling interest.

4.2 Calculation of EBIT(DA) Before Special Items

Key performance indicators for the Bayer Group are EBIT before special items, EBITDA before special items and the EBITDA margin 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, write-downs/write-backs or special items. The company also believes that this indicator gives readers a clearer picture of the results of operations and ensures 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 and amortization in 2009 increased by 3.2% to €2,809 million (2008: €2,722 million), comprising €1,537 million (2008: €1,550 million) in amortization and write-downs of intangible assets and €1,272 million (2008: €1,172 million) in depreciation and write-downs of property, plant and equipment. Total asset write-downs were €149 million. Of this amount, €109 million constituted special items.

Special Items Reconciliation [Table 3.16]

	EBIT* 2008	EBIT* 2009	EBITDA** 2008	EBITDA** 2009
	€ million	€ million	€ million	€ million
After special items	**3,544**	**3,006**	**6,266**	**5,815**
HealthCare	**583**	**372**	**465**	**320**
Schering PPA effects***	208	0	208	0
Schering integration costs	157	87	111	79
of which gain from divestitures	*(69)*	*(114)*	*(69)*	*(114)*
Write-downs	98	32	26	0
Restructuring	0	47	0	35
Litigations	106	180	106	180
Additional funding for the pension assurance association	0	26	0	26
Other	14	0	14	0
CropScience	**166**	**219**	**153**	**197**
Restructuring	166	177	153	155
Litigations	0	35	0	35
Additional funding for the pension assurance association	0	7	0	7
MaterialScience	**49**	**140**	**47**	**105**
Restructuring	49	130	47	95
Additional funding for the pension assurance association	0	10	0	10
Reconciliation	**0**	**35**	**0**	**35**
Litigations	0	10	0	10
Additional funding for the pension assurance association	0	25	0	25
Total special items	**798**	**766**	**665**	**657**
Before special items	**4,342**	**3,772**	**6,931**	**6,472**

* EBIT = operating result as per income statements
** EBITDA = EBIT plus amortization of intangible assets and depreciation of property, plant and equipment
*** The purchase price paid for Schering AG, Berlin, Germany, was allocated among the acquired assets and assumed liabilities in accordance with the International Financial Reporting Standards (IFRS). To ensure comparability with future earnings data, the expected long-term effects of the step-up are reflected in EBIT and EBITDA before special items, whereas temporary, non-cash effects of the purchase price allocation are eliminated and deducted when calculating EBIT before special items.

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 from continuing operations after elimination of the amortization of intangible assets, asset write-downs (including any impairment losses), 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, which is that the dividend should be between 30% and 40% of core earnings per share.

Core earnings per share in 2009 amounted to €3.64 (2008: €4.17). The proposed dividend of €1.40 is thus equivalent to 38.5% of core earnings per share (2008: 33.6%).

Calculation of Core EBIT and Core Earnings Per Share [Table 3.17]

	2008	2009
	€ million	€ million
EBIT as per income statements	**3,544**	**3,006**
Amortization and write-downs of intangible assets	1,550	1,537
Write-downs of property, plant and equipment	88	88
Special items (other than write-downs)	665	657
Core EBIT	**5,847**	**5,288**
Non-operating result (as per income statements)	(1,188)	(1,136)
Income taxes (as per income statements)	(636)	(511)
Tax adjustment	(691)	(685)
Income after taxes attributable to non-controlling interest (as per income statements)	(5)	0
Core net income from continuing operations	**3,327**	**2,956**
Financing expenses for the mandatory convertible bond, net of tax effects	112	47
Adjusted core net income from continuing operations	**3,439**	**3,003**
	Shares	Shares
Weighted average number of issued ordinary shares	**764,342,029**	**801,050,237**
(Potential) shares (to be) issued upon conversion of the mandatory convertible bond	59,893,122	24,955,936
Adjusted weighted average total number of issued and potential ordinary shares	**824,235,151**	**826,006,173**
Core earnings per share from continuing operations (€)	**4.17**	**3.64**

The calculation of earnings per share in accordance with IFRS is explained in Note [16] to the consolidated financial statements on page 193. The (adjusted) core net income from continuing operations, core earnings per share and core EBIT are not defined in the 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. In 1994 we became one of the first German companies to embark on the development of a value management system, which we introduced throughout the Group in 1997. The system is used for the planning, controlling and monitoring of our businesses. Our primary 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 company or business entity concerned has created value. If it is negative, the anticipated capital and asset reproduction costs have not been earned. Gross cash flow and CVA are profitability indicators for a single reporting period. For a year-on-year comparison we therefore use the delta CVA, which is the difference between the CVAs of two consecutive periods. A positive delta CVA shows that value creation has improved from one period to the next.

Calculating the cost of capital

Bayer calculates the cost of capital according to the debt/equity ratio by 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 a ten-year corporate bond issue.

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 2009 this was 8.0% (2008: 8.0%) for HealthCare, 7.5% (2008: 7.5%) for CropScience and 7.0% (2008: 7.0%) for MaterialScience. The minimum return required for the Group in 2009 was 7.8% (2008: 7.5%).

Gross cash flow, cash flow return on investment and cash value added 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 thus a more meaningful performance indicator.

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 allow for fluctuations in the capital invested, the CFROI is computed on the basis of the average figure for the respective year.

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 required return on equity and debt plus the cost of asset reproduction has been earned. The CFROI hurdle for 2009 was 10.4% (2008: 10.1%), while the corresponding gross cash flow hurdle was €4,431 million (2008: €4,049 million).

Actual gross cash flow came in at €4,658 million, exceeding the hurdle by 5.1%. Thus in 2009 we earned our entire capital and asset reproduction costs, and the positive CVA of €227 million shows that Bayer created value. Given the previous year's CVA of €1,246 million, the Bayer Group therefore recorded a negative delta CVA of €1,019 million, showing that value creation was markedly lower than in the previous year. The CFROI for 2009 amounted to 10.9% (2008: 13.0%).

Positive CVA
=
value created

HealthCare and CropScience exceeded their target returns including asset reproduction, while MaterialScience – unlike in previous years – was unable to reach the gross cash flow hurdle in the crisis year 2009. The CFROI for HealthCare was 13.6% (2008: 13.6%). CropScience was below the previous year with a CFROI of 11.6% (2008: 14.1%). MaterialScience recorded a CFROI of only 3.7% (2008: 10.1%).

Value Management Indicators by Subgroup [Table 3.18]

	HealthCare		CropScience		MaterialScience		Bayer Group	
	2008	2009	2008	2009	2008	2009	2008	2009
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Gross cash flow hurdle (GCF hurdle)	2,387	2,589	906	902	696	775	4,049	4,431
Gross cash flow* (GCF)	3,045	3,153	1,192	1,043	850	319	5,295	4,658
Cash value added (CVA)	658	564	286	141	154	(456)	1,246	227
Delta cash value added	663	(94)	264	(145)	(450)	(610)	497	(1,019)
CFROI hurdle	10.9%	11.1%	10.8%	10.6%	8.7%	8.7%	10.1%	10.4%
Cash flow return on investment (CFROI)	13.6%	13.6%	14.1%	11.6%	10.1%	3.7%	13.0%	10.9%
Average capital invested	22,380	23,261	8,471	8,967	8,442	8,686	40,862	42,811

*for definition see Chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group," page 78

4.5 Liquidity and Capital Expenditures of the Bayer Group

Bayer Group Summary Statements of Cash Flows [Table 3.19]

	2008	2009
	€ million	€ million
Gross cash flow*	**5,295**	**4,658**
Changes in working capital/other non-cash items	(1,687)	717
Net cash provided by (used in) operating activities (net cash flow)	**3,608**	**5,375**
Net cash provided by (used in) investing activities	**(3,089)**	**(1,126)**
Net cash provided by (used in) financing activities	**(873)**	**(3,621)**
Change in cash and cash equivalents due to business activities	**(354)**	**628**
Cash and cash equivalents at beginning of period	**2,531**	**2,094**
Change due to exchange rate movements and to changes in scope of consolidation	(83)	3
Cash and cash equivalents at end of period	**2,094**	**2,725**

*Gross cash flow = income from continuing operations after taxes, plus income taxes, plus non-operating result, minus income taxes paid or accrued, plus depreciation, amortization and write-downs, minus write-backs, plus/minus changes in pension provisions, minus gains/plus losses on retirements of noncurrent assets, plus non-cash effects of the remeasurement of acquired assets. The change in pension provisions includes the elimination of non-cash components of the operating result. It also contains benefit payments during the year.

Operating cash flow

Gross cash flow in 2009 was down by 12.0% from the previous year to €4,658 million (2008: €5,295 million), largely because of the decline in the operating result. HealthCare showed a slight improvement in gross cash flow due to the steady growth in business. At CropScience and MaterialScience, lower operating results caused gross cash flow to recede. Net cash flow of the Group, however, rose by 49.0% to €5,375 million (2008: €3,608 million). This was mainly the result of improved working capital management. Considerably lower income tax payments (2009: €500 million; 2008: €1,073 million) also contributed to the improvement.

Investing cash flow

Net cash outflow for investing activities in 2009 totaled €1,126 million (2008: €3,089 million). Cash outflows for property, plant and equipment and intangible assets were 10.5% lower at €1,575 million (2008: €1,759 million). Of this amount, HealthCare accounted for €528 million (2008: €567 million), CropScience for €341 million (2008: €299 million) and MaterialScience for €504 million (2008: €672 million). Included here are disbursements related to the expansion of our polymers production facilities in Shanghai, China, and for marketing rights in the pharmaceuticals field. The €354 million in cash outflows for acquisitions related primarily to the purchase in November 2009 of Athenix Corp., United States, for which total payments of €247 million were made. In 2009 we also acquired two product lines from SkinMedica, Inc., United States, and the remaining 10% interest in Bayer Polymers Shanghai. The prior-year figure of €1,617 million related mostly to payments in connection with the acquisition of the remaining interest in Bayer Schering Pharma AG, Berlin, Germany, the acquisition of Possis Medical, Inc., United States, the purchase of the eastern European OTC business of Sagmel, Inc., the acquisition of the OTC business of the Chinese Topsun group and the purchase of Direvo Biotech AG, Germany. For further information see Note [6.2] to the consolidated financial statements, page 182ff. The main cash inflow item in 2009 was €477 million (2008: €553 million) in interest and dividends received.

The principal strategically relevant capital expenditures for property, plant and equipment in the operating segments of the Bayer Group in 2009 and 2008 are listed in the following table:

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

Segment	Description
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 capacity 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 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
BioScience	Capacity expansion for the production of vegetable seeds in Parma, Idaho, U.S.A.
	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
Capital expenditures 2008	
Pharmaceuticals	Optimization of steroid production in Bergkamen, Germany
	New packaging lines in Weimar and Berlin, Germany, and Gaillard, France
	Expansion of the production site in Beijing, China
	Capacity expansion in Jakarta, Indonesia
Crop Protection	Capacity expansions for herbicidal active ingredients in Frankfurt am Main and Knapsack, Germany
	Consolidation of formulating activities in Kansas City, Missouri, U.S.A
	Expansion of formulating capacity for non-herbicides in Belford Roxo, Brazil
	New insecticide formulation plant in Hangzhou, China
	Modification of a herbicide production facility in Ankleshwar, India
BioScience	Construction of canola greenhouse, phytotron and laboratory complex in Saskatoon, Canada
MaterialScience	Construction of a world-scale integrated production facility for MDI in Shanghai, China
	Polyether capacity increases in Dormagen, Germany, and Santa Clara, Mexico
	Construction of a pilot plant for carbon nanotubes in Leverkusen, Germany
	Construction of a polyurethane systems house in Noida, India
	Construction of the MacroColor Center in Noida, India
	Modification of a facility for the manufacture of high-purity polycarbonate in Antwerp, Belgium

Financing cash flow

Net cash outflow for financing activities in 2009 amounted to €3,621 million (2008: €873 million). It included €1,442 million in net loan repayments, the main item here being the €1,600 million disbursement to redeem the floating-rate EMTN note in the second quarter of 2009. Interest payments were 5.2% lower at €1,206 million (2008: €1,272 million). There was a €973 million outflow for "dividend payments and withholding tax on dividends" (2008: €1,126 million), including Bayer AG's €1,070 million dividend payment made in May 2009 and €101 million in refunds of withholding tax on intra-Group dividend payments.

Liquid assets and net financial debt

Net Financial Debt [Table 3.21]

	Dec. 31, 2008 € million	Dec. 31, 2009 € million
Bonds and notes	10,729	8,301
of which hybrid bond	1,245	1,267
of which mandatory convertible bond	2,296	0
Liabilities to banks	4,438	3,251
Liabilities under finance leases	535	550
Liabilities from derivatives	612	578
Other financial liabilities	333	178
Positive fair values of hedges of recorded transactions	(454)	(426)
Financial debt	**16,193**	**12,432**
Cash and cash equivalents*	(2,037)	(2,725)
Current financial assets	(4)	(16)
Net financial debt	**14,152**	**9,691**

* after deducting €0 million (December 31, 2008: €57 million) of the liquidity in escrow accounts

Net financial debt of the Bayer Group declined by €4.5 billion and amounted to €9.7 billion on December 31, 2009. Of this amount, €2.3 billion resulted from the conversion of the mandatory convertible bond, issued in 2006, into new shares. As of December 31, 2009 the Group had cash and cash equivalents of €2.7 billion. Financial debt on the closing date amounted to €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 indicators. Our noncurrent financial liabilities as of December 31, 2009 amounted to €11.5 billion.

4.6 Asset and Capital Structure of the Bayer Group

Bayer Group Summary Statements of Financial Position [Table 3.22]

	Dec. 31, 2008	Dec. 31, 2009	Change
	€ million	€ million	%
Noncurrent assets	35,351	34,049	−3.7
Current assets	17,152	16,993	−0.9
Assets held for sale and discontinued operations	8	0	•
Total current assets	17,160	16,993	−1.0
Total assets	52,511	51,042	−2.8
Equity	16,340	18,951	+16.0
Noncurrent liabilities	22,336	23,118	+3.5
Current liabilities	13,822	8,973	−35.1
Liabilities directly related to assets held for sale and discontinued operations	13	0	•
Total current liabilities	13,835	8,973	−35.1
Liabilities	36,171	32,091	−11.3
Total equity and liabilities	52,511	51,042	−2.8

Total assets decreased by €1.5 billion compared with December 31, 2008, to €51.0 billion. Noncurrent assets declined by €1.3 billion to €34.0 billion, mainly due to the amortization of intangible assets. Noncurrent assets included goodwill of €8.7 billion (2008: €8.6 billion) resulting primarily from the acquisition of Schering, Berlin, Germany. Current assets declined by €0.2 billion compared with the previous year, to €17.0 billion.

Equity rose by €2.6 billion to €19.0 billion. The main positive effects came from a €2.3 billion increase in the capital stock through conversion of the mandatory convertible bond, the net income of €1.4 billion and positive currency effects of €0.3 billion. Equity was diminished by the dividend payment of €1.1 billion made in 2009 and a €0.3 billion after-tax increase in pension obligations recognized outside profit or loss. Our equity ratio (equity coverage of total assets) was 37.1% as of December 31, 2009 (2008: 31.1%).

Liabilities decreased by €4.1 billion compared with December 31, 2008, to €32.1 billion, largely because of a decline in financial liabilities. Current and noncurrent financial liabilities declined by a substantial €4.0 billion – including €2.3 billion from the conversion of the mandatory convertible bond – to €12.9 billion.

Net Pension Liability

Net Pension Liability [Table 3.23]

	Dec. 31, 2008	Dec. 31, 2009
	€ million	€ million
Provisions for pensions and other post-employment benefits	6,347	6,517
Prepaid benefit assets	(351)	(100)
Net pension liability	**5,996**	**6,417**

The net pension liability increased from €6.0 billion to €6.4 billion in 2009, due especially to lower long-term capital market interest rates. Provisions for pensions and other post-employment benefits rose from €6.3 billion to €6.5 billion. Benefit plan assets in excess of obligations, reflected in the statement of financial position as other receivables, came to €0.1 billion (2008: €0.4 billion).

Ratios [Table 3.24]

		2008	2009
Cost of sales ratio (%)	Cost of goods sold / Sales	50.0	48.6
R&D expense ratio (%)	Research and development expenses / Sales	8.1	8.8
Inventory turnover	Cost of goods sold / Inventories	2.5	2.5
Receivables turnover	Sales / Trade accounts receivable	5.5	5.1
EBIT margin before special items (%)	EBIT before special items / Sales	13.2	12.1
EBITDA margin before special items (%)	EBITDA before special items / Sales	21.1	20.8
Asset intensity (%)	Property, plant and equipment + intangible assets / Total assets (continuing operations)[1]	61.1	60.6
D&A/capex ratio (%)	Depreciation and amortization[2] / Capital expenditures[2]	129.7	159.4
Liability structure[3] (%)	Current liabilities / Liabilities	38.2	28.0
Gearing	Net debt + pension provisions / Equity	1.3	0.9
Free operating cash flow (€ million)	Net operating cash flow less capital expenditures	1,849	3,800
Equity ratio[3] (%)	Equity / Total assets	31.1	37.1
Return on equity[3] (%)	Income after taxes / Average equity	10.4	7.7
Return on assets (%)	Income before taxes and interest expense / Average total assets for the year based on segment table	7.0	6.1

[1] total assets (continuing operations) = noncurrent and current assets minus the item “Assets held for sale and discontinued operations” in the statement of financial position
[2] property, plant and equipment + intangible assets
[3] Ratio refers to the total of continuing and discontinued operations.

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 economic success 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 for the first time.

5.1 Earnings Performance of Bayer AG

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

	2008	2009
	€ million	€ million
Income from investments in affiliated companies – net	2,711	2,984
Interest expense – net	(1,092)	(683)
Other non-operating income (expense) – net	(84)	276
Other operating income	209	169
General administration expenses	194	177
Other operating expenses	266	142
Income before income taxes	**1,284**	**2,427**
Income taxes	(123)	(201)
Net income	**1,161**	**2,226**
Allocation to retained earnings	(91)	(1,068)
Distributable profit	**1,070**	**1,158**

2008 figures restated

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 2009, income from investments in affiliated companies was €2,984 million (2008: €2,711 million). Of this amount, Bayer Schering Pharma AG accounted for €2,349 million (2008: €564 million), Bayer CropScience AG for €604 million (2008: €725 million) and Bayer MaterialScience AG for minus €234 million (2008: minus €80 million). It should be noted that the previous year's results were diminished by expenses resulting from the remeasurement of pension obligations. The jump in earnings at Bayer Schering Pharma AG was partly due to a €608 million gain in connection with the agreement with Genzyme Corp., United States. In 2008 income from investments in affiliated companies included one-time income of €1,348 million in connection with a capital decrease at Bayer MaterialScience AG.

Net interest expense amounted to €683 million, which was €409 million less than in the previous year. While the reduction in financial debt played a part in this improvement, the main factor was the significant drop in interest rates. Of the decrease in net interest expense, €117 million was attributable to transactions with third parties and €292 million to intra-Group transactions.

Other non-operating income and expenses yielded a positive balance of €276 million in 2009, compared with a negative balance of €84 million in 2008. The improvement of €360 million was principally attributable to a better result from the translation of foreign currency receivables and payables and from currency derivatives.

The balance of miscellaneous operating income and expenses related to the performance of Bayer AG's functions as a holding company was plus €27 million (2008: minus €57 million) while general administration expenses amounted to €177 million (2008: €194 million). The year-on-year improvement of €101 million in the balance of these income and expense items resulted mainly from the fact that in 2008 expenses of €108 million were recognized in connection with the re-measurement of pension obligations for employees of the holding company.

Pre-tax income grew by €1,143 million to €2,427 million. Tax expense amounted to €201 million (2008: €123 million). After deduction of taxes, net income came in at €2,226 million. Of this amount, €1,068 million was allocated to other retained earnings and €1,158 million was recognized as the distributable profit.

Proposed dividend
€1.40

The Board of Management and Supervisory Board will propose to the Annual Stockholders' Meeting on April 30, 2010 that the distributable profit be used to pay an unchanged dividend of €1.40 per share (826,947,808 shares) on the capital stock of €2,117 million entitled to the dividend for 2009.

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, 2008	Dec. 31, 2009
	€ million	€ million
ASSETS		
Noncurrent assets		
Intangible assets, property, plant and equipment	381	395
Financial assets	34,532	34,594
	34,913	**34,989**
Current assets		
Receivables from subsidiaries	1,697	1,928
Remaining receivables, other assets	624	400
Cash and cash equivalents, marketable securities	1,306	1,862
	3,627	**4,190**
Total assets	**38,540**	**39,179**
EQUITY AND LIABILITIES		
Equity	**10,782**	**14,391**
Provisions	**3,547**	**3,258**
Other liabilities		
Bonds and notes, liabilities to banks	8,378	7,029
Payables to subsidiaries	15,110	13,965
Remaining liabilities	723	536
	24,211	**21,530**
Total equity and liabilities	**38,540**	**39,179**

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 grew in 2009 by €0.7 billion to €39.2 billion, the increase being almost entirely due to a €0.6 billion increase in cash and cash equivalents.

Financial assets included investments in subsidiaries amounting to €34.1 billion (2008: €34.1 billion), or 87.1% (2008: €88.4%) of total assets. Receivables from subsidiaries amounted to €1.9 billion (2008: €1.7 billion) while payables to subsidiaries totaled €14.0 billion (2008: €15.1 billion). These amounts accounted for 4.9% of total assets and 35.6% of total equity and liabilities, respectively.

Of the €39.2 billion in total assets as of December 31, 2009 (2008: €38.5 billion), €14.4 billion (2008: €10.8 billion) was equity-financed. The equity ratio therefore rose from 28.0% to 36.7%. The conversion of the €2.3 billion mandatory convertible bond issued by Bayer Capital Corporation B.V., Netherlands, in 2006 contributed to the €3.6 billion increase in equity, while €2.2 billion came from net income. Equity was diminished by the €1.1 billion dividend payment for 2008. A further €0.2 billion resulted from reversals of provisions allocated directly to retained earnings upon first-time application of the German Accounting Law Modernization Act (BilMoG).

Provisions declined by €0.3 billion to €3.3 billion in 2009. This decline relates to provisions for pensions and other post-employment benefits, with €0.2 billion being due to the first-time application of the new German accounting legislation mentioned above.

Liabilities decreased by €2.7 billion to €21.5 billion as of December 31, 2009. External financial debt, in particular, was reduced by €1.5 billion, comprising €1,600 million in bond redemptions, €369 million in repayments of liabilities to banks, and €110 million in repayments relating to a commercial paper program that was no longer required. Promissory notes were issued in the amount of €620 million.

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, 2009 to €2,117 million (2008: €1,957 million), divided into 826,947,808 (2008: 764,343,225) no-par registered shares. 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.

We received three notifications from Capital Research and Management Company, United States, in 2009 of direct or indirect holdings of shares in Bayer AG that exceed 10% of the capital stock. This company initially notified us that the proportion of voting rights it held via shares in our company fell below the 10% threshold on September 25, 2009, and that on that date it held 9.9% of the voting rights. In a further notification, the company informed us that its proportion of voting rights exceeded the 10% threshold on September 30, 2009, and that on that date it held 10.04% of the voting rights. In a subsequent notification, the company informed us that its proportion of voting rights fell below the 10% threshold again on November 26, 2009, and that on that date it held 9.97% of the voting rights.

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

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 27, 2011, the Board of Management may use the Authorized Capital I to increase the capital stock by up to a total of €465 million. The issue of new shares may take place in exchange for cash and/or contributions in kind, but capital increases in exchange for contributions in kind may not exceed a total of €370 million. If the Authorized Capital I is used to issue shares in return for cash contributions, stockholders must be granted subscription rights. With the approval of the Supervisory Board and until April 26, 2012, the Board of Management is also authorized to increase the capital by up to €195 million in one or more installments by issuing shares out of the Authorized Capital II in exchange for cash contributions. The stockholders must 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 2008 Annual Stockholders' Meeting adopted two resolutions creating conditional capital of €195,584,000 each in connection with two authorizations 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, exclude the subscription rights that in principle are granted to stockholders for such bonds provided, among other things, that the proportionate amount of the shares covered by such subscription rights 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 Stock Corporation Act shall be credited against this 10% limit. Further, the Annual Stockholders' Meeting on May 12, 2009 authorized the Board of Management to purchase and sell company shares representing up to 10% of the capital stock. This authorization expires on November 11, 2010.

A material agreement entered into by Bayer AG that is subject to the condition precedent of a change of control pertains to the €7 billion syndicated loan granted to Bayer AG on March 23, 2006. This agreement contains provisions entitling the banks participating in the syndication to terminate the agreement in the event of a change of control and demand repayment of any outstanding sums. The loan was valued at €1.25 billion as of December 31, 2009, unchanged from the previous year. However, a subsidiary of Bayer AG purchased receivables of €365 million in 2009 using the syndicated credit facility. There is also an undrawn €3.5 billion syndicated credit facility, arranged by Bayer AG and its U.S. subsidiary Bayer Corporation on March 31, 2005, that is available until 2012. The participating banks are entitled to terminate the credit facility in the event of a change in control at Bayer and demand repayment of any loans that may have been granted under this facility up to that time.

Finally, the terms of the €4.0 billion (as of December 31, 2009) in notes issued by Bayer in the years 2006 to 2009 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.

In the event of a takeover offer for Bayer AG, the following agreements exist for members of the Board of Management whose service contracts were concluded prior to the entry into force of the amendments to the German Corporate Governance Code in June 2008:

The severance indemnity clause for these members described in the Compensation Report is supplemented by a change-of-control clause which, like the severance indemnity clause, only takes effect if a change of control results in the termination of a Group Management Board member's service contract and his leaving the Bayer Group prior to his 60th birthday. The potential benefits are the same as under the severance indemnity clause.

However, this clause is now obsolescent and of only limited significance. 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 two existing members' contracts could the clause still be invoked. In the case of the remaining contracts, either the clause is no longer applicable because the member has reached the age of 60 or a cap on severance payments in the event of a change of control has been agreed. Under these contracts such payment claims, including ancillary benefits, are limited to the value of three years' compensation and may not compensate more than the remaining term of the contract. The annual compensation defined for this purpose is based on the sum of the fixed salary and the target value of the short-term incentive for the previous year and, if appropriate, also the current year.

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 OF BAYER AG

concerning the German Corporate Governance Code (June 18, 2009 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. The declaration pursuant to Section 161 of the Stock Corporation Act shall be available to shareholders at all times. An annual declaration was last issued in December 2008.

With respect to the past, the following declaration refers to the June 6, 2008 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 June 18, 2009 version of the Code.

The Board of Management and the Supervisory Board of Bayer AG hereby declare that the company has been 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 since issuance of the last compliance declaration in December 2008 and is in compliance with the following exception:

> D&O insurance with an appropriate deductible exists for the Members of the Supervisory Board, but the amount of the deductible is not in compliance with the recommendation given in Section 3.8 Paragraph 2 of the Code.

The D&O insurance is a group policy for numerous persons for whom a deductible in the recommended amount has not currently been agreed. For the Board of Management, it is planned to agree a deductible in line with the provisions of the German Law on the Appropriateness of Management Board Compensation when the policy next comes up for renewal on April 1, 2010. In this connection it is also planned to agree a corresponding deductible for the Supervisory Board. The company will therefore be in compliance with the recommendations of the Code from that date.

Leverkusen, December 2009

For the Board of Management: For the Supervisory Board:

WENNING KÜHN 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.

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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 2009 the company was again able to renew its declaration that it has been fully compliant with the recommendations of the German Corporate Governance Code in the past and intends to be fully compliant again in the future with one temporary exception.

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 June 18, 2009. The resulting declaration of compliance, reproduced above, was issued in December 2009 and posted on Bayer's website along with previous declarations.

Duties and activities of the Board of Management

Board of Management directs the Group's operations

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.

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 three members who served on the Board of Management in 2009, being respectively responsible for Strategy and Human Resources; Finance; and Innovation, Technology and Environment. Each of these members also represents certain geographical regions.

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.

Oversight of company management by the Supervisory Board

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 two stockholder representatives and two employee representatives. 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 2009, 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 another 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.

Personal liability in place of a deductible

In 2009 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 undertake, 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 such damage occurs; the members of the Supervisory Board undertake 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. There is no insurance coverage for intentional breach of duty.

The company plans to agree the statutory deductible for the members of the Board of Management when the D&O insurance is renewed on April 1, 2010. It is also planned to agree a deductible for the members of the Supervisory Board in the amount recommended by the German Corporate Governance Code with effect from April 1, 2010. The personal declarations mentioned above will thus become obsolete as of April 1, 2010. They remain in effect until that date.

Disclosure of securities transactions by members of the Supervisory Board or Board of Management

To comply with Section 15a of the German Securities Trading Act, members of the Board of Management and Supervisory Board and their close relatives are 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.

No such transactions were reported to Bayer AG in 2009.

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 processes 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 Group Management Board has summarized in its Corporate Compliance Policy the areas in which violations of applicable law can have particularly serious adverse consequences, both for the entire enterprise and for the individual employee. 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 messages concern the need to

- comply with antitrust regulations,
- ensure integrity in business transactions,
- observe sustainability principles,
- keep business and personal interests strictly separate and
- ensure fair and respectful working conditions within 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 local Compliance Officer. Some foreign companies have several local Compliance Officers with clearly defined responsibilities for the different business units. 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 has now been made 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 to their employees, spread the compliance message increasingly within their companies and take organizational measures to implement it. Starting in 2010, a GLC member may be required to repay the short-term incentive 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 supplement the Corporate Compliance Policy, Bayer has drawn up a Group mission statement setting out the principles underlying the corporate strategy. It outlines the framework for Bayer's entrepreneurial activity to stockholders, customers, employees and the general public. Common values and leadership principles are considered essential for all employees in their daily work. The values include a will to succeed; a passion for our stakeholders; integrity, openness and honesty; respect for people and nature; and the sustainability of our actions. The assessment of managers' performance on the basis of defined leadership principles helps to ensure adherence to these values throughout the enterprise.

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For further details of the Group mission statement see WWW.BAYER.COM/EN/MISSION-STATEMENT.ASPX

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.

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.

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For comprehensive information on Bayer, go to WWW.BAYER.COM

In line with the principle of fair disclosure, we provide the same information to all stockholders and other principal target groups. 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

Until December 31, 2009, the compensation of the Board of Management basically comprised four 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 three-year period in relation to a target amount, 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 fixed salary consists of two parts: a base salary and a fixed supplement.

The short-term incentive award for 2009 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.

The directly effected compensation (non-performance-related compensation and short-term incentive) of the members of the Board of Management in 2009 amounted to €8,830 thousand (2008: €8,813 thousand), comprising €2,156 thousand (2008: €2,105 thousand) in base salaries, €1,067 thousand (2008: €1,042 thousand) in fixed supplements and €5,442 thousand (2008: €5,498 thousand) in short-term incentive awards to be paid out in 2010 as well as €165 thousand (2008: €168 thousand) in compensation in kind and other benefits, the latter item consisting mainly of amounts assigned to compensation in kind and other benefits in accordance with German taxation guidelines.

The members of the Board of Management participate in the long-term stock-based compensation program Aspire I (annual tranches 2007 through 2009). 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 three-year period. 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 2009 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 2009.

Board of Management Compensation – Aggregate Compensation [Table 3.27]

		Werner Wenning	Klaus Kühn	Wolfgang Plischke	Richard Pott	Total
		€ thousand	€ thousand	€ thousand	€ thousand	€ thousand
Base salary	**2009**	**812**	**448**	**448**	**448**	**2,156**
	2008	794	437	437	437	2,105
Fixed supplement	**2009**	**353**	**344**	**185**	**185**	**1,067**
	2008	344	336	181	181	1,042
Fixed salary	**2009**	**1,165**	**792**	**633**	**633**	**3,223**
	2008	1,138	773	618	618	3,147
Compensation in kind and other benefits	**2009**	**36**	**41**	**49**	**39**	**165**
	2008	61	36	38	33	168
Total non-performance-related compensation	**2009**	**1,201**	**833**	**682**	**672**	**3,388**
	2008	1,199	809	656	651	3,315
Short-term incentive	**2009**	**2,158**	**1,264**	**1,010**	**1,010**	**5,442**
	2008	2,105	1,305	1,044	1,044	5,498
Total directly effected compensation	**2009**	**3,359**	**2,097**	**1,692**	**1,682**	**8,830**
	2008	3,304	2,114	1,700	1,695	8,813
Fair value of newly granted stock-based compensation as of grant date	**2009**	**208**	**84**	**151**	**151**	**594**
	2008	352	240	191	191	974
Aggregate compensation (according to the German Commercial Code)	**2009**	**3,567**	**2,181**	**1,843**	**1,833**	**9,424**
	2008	3,656	2,354	1,891	1,886	9,787

The award entitlements earned in 2009 – both from the 2009 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 on the performance of Bayer stock in 2009. The fair value of the award entitlement already earned in 2009 from the 2009 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 3.28]

		Werner Wenning	Klaus Kühn	Wolfgang Plischke	Richard Pott	Total
		€ thousand	€ thousand	€ thousand	€ thousand	€ thousand
Long-term incentive (stock-based compensation entitlements earned in the respective year)	**2009**	**587**	**398**	**319**	**319**	**1,623**
	2008	569	364	267	309	1,509
Change in value of existing entitlements	**2009**	**390**	**265**	**212**	**212**	**1,079**
	2008	(195)	(135)	(97)	(106)	(533)

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 Board of Management member and is capped at 80% for members appointed prior to 2006 and 60% for those appointed since 2006. 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. Under the provisions of the German Accounting Law Modernization Act (BilMoG), which is being applied as of 2009, 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 previous year's figures have been restated accordingly. 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 3.29]

		Werner Wenning	Klaus Kühn	Wolfgang Plischke	Richard Pott	Total
		€ thousand	€ thousand	€ thousand	€ thousand	€ thousand
Current service cost for pension entitlements earned in the respective year (IFRS)	**2009**	**-**	**985**	**181**	**198**	**1,364**
	2008	-	505	182	197	884
Present value of pension entitlements at the closing date (IFRS)*	**2009**	**14,675**	**6,335**	**5,577**	**5,478**	**32,065**
	2008	14,271	4,902	4,743	4,770	28,686
Current service cost for pension entitlements earned in the respective year (German Commercial Code)**	**2009**	**4**	**1,090**	**200**	**223**	**1,517**
	2008	2	575	626	223	1,426
Present value of pension entitlements at the closing date (German Commercial Code)**	**2009**	**15,128**	**6,597**	**5,794**	**5,728**	**33,247**
	2008	16,608	6,069	5,770	5,999	34,446

* after deducting plan assets
** 2008 figures restated pursuant to the German Accounting Law Modernization Act

The aggregate compensation of the Board of Management 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. The current service cost for pension entitlements must also be added.

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

Board of Management Compensation According to IFRS [Table 3.30]

	2008	2009
	€ thousand	€ thousand
Directly effected compensation	8,813	8,830
Long-term incentive (stock-based compensation entitlements earned in the respective year)	1,509	1,623
Change in value of existing entitlements	(533)	1,079
Current service cost for pension entitlements earned in the respective year	884	1,364
Aggregate compensation (IFRS)	**10,673**	**12,896**

For active Board of Management members whose service contracts were 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 a member's 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 short-term incentive 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.

This clause is now obsolescent and of only limited significance. 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, either the clause is no longer applicable because the member is leaving the company or has reached the age of 60, or 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 short-term incentive) 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 compensation payments to be made by the company during the two-year duration of the post-contractual non-compete clause. For members who held office in 2009, the amount of this compensation is 50% of the average contractually agreed salary for the preceding three years. For the members newly appointed to the Board of Management effective January 1, 2010, the compensation under the non-compete agreement is 50% of fixed salary. It is offset against any benefits payable by the company under the pension plan.

Members of the Board of Management who joined the company before January 1, 1979 – like all salaried employees hired prior to that date – are entitled to six months' pre-retirement leave. A cash payment may be made in lieu of this leave under certain conditions. The only current member to whom this applies is Werner Wenning.

Special supplementary arrangements apply in the event of a change of control, see "Takeover-Relevant Information," page 85ff.

There were no loans to members of the Board of Management outstanding as of December 31, 2009, nor any repayments of such loans during the year.

We currently pay former and 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 are reassessed annually as of 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. Pension payments to retired members of the Board of Management and their surviving dependents in 2009 amounted to €11,273 thousand (2008: €11,697 thousand). Pension provisions for former members of the Board of Management and their surviving dependents at the closing date amounted to €107,223 thousand (2008: €107,863 thousand) according to IFRS and €110,069 thousand (2008: €121,557 thousand) according to HGB.

COMPENSATION SYSTEM FOR THE BOARD OF MANAGEMENT EFFECTIVE 2010

The compensation system for the Board of Management already complied in the past with the recommendations of the German Corporate Governance Code and with many of the requirements of the new German Act on the Appropriateness of Management Board Compensation (VorstAG), which came into force in August 2009.

- The short-term incentive is designed so that payments vary upward or downward depending on the company's economic performance.
- Caps on both short- and long-term incentive payments have been in place for many years.
- Long-term incentive payments are governed by the long-term compensation program for members of the Board of Management and senior executives (Aspire I). Under the rules of this program, a personal investment must be made in Bayer shares. Performance is measured partly by the stock's outperformance of a reference index (EURO STOXX 50) and partly in terms of average prices.
- The consistency of compensation systems, from the Board of Management to junior managers, has been standard practice at Bayer for years, with identical compensation components, structures and performance parameters.

In December 2009, the Supervisory Board resolved on adjustments to ensure that the compensation of the Bayer AG Board of Management continues to comply fully with the requirements of the above Act and the recommendations of the German Corporate Governance Code. These adjustments are outlined below:

- To further enhance the sustainability aspect and long-term focus of the compensation structure, the previous short-term incentive (STI) for the Board of Management is being split into two parts. 50% will continue to be paid out in the respective following year in the same way as the STI awards for all eligible employees in the Bayer Group. The remaining 50% takes the form of a new stock-based long-term incentive (LTI) component involving a grant of virtual Bayer shares, which are subject to a three-year retention period. The value of these shares then depends on the trend in the price of Bayer stock during the retention period. This strengthening of the long-term incentive means that the fixed salary and short-term incentive account for about 30% each and the long-term incentive for roughly 40% of total compensation.

- The performance period (retention period) under the current Aspire programs (Aspire I and II) is being extended from three to four years. At the same time, the performance hurdles are being raised. The proven elements already mentioned, such as payment caps, outperformance and average share price, are being retained.

In addition, the Board of Management has voluntarily undertaken to comply with the new share ownership guidelines, under which the Chairman in future will hold shares to the value of 150% and the other members 100% (formerly 40% in both cases) of annual fixed salary.

The adjustments described apply effective January 1, 2010 to all the members of the Board of Management except those leaving during 2010.

It is intended to seek the stockholders' approval for the compensation system for the members of the Board of Management by way of a consultative resolution at the 2010 Annual Stockholders' Meeting.

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 provisions 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 €605 thousand (2008: €591 thousand).

There were no loans to members of the Supervisory Board outstanding as of December 31, 2009, nor any repayments of such loans during the year.

Compensation of the Members of the Supervisory Board of Bayer AG in 2009 [Table 3.31]

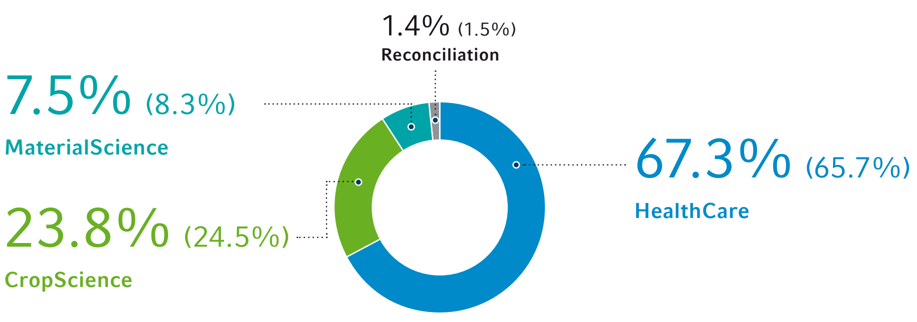
	Fixed Compensation	Variable Compensation	Total
	€ thousand	€ thousand	€ thousand
Dr. Paul Achleitner	75	38	113
André Aich	60	30	90
Willy Beumann	60	30	90
Dr. Clemens Börsig	60	30	90
Karl-Josef Ellrich	75	38	113
Dr.-Ing. Thomas Fischer	75	38	113
Peter Hausmann	75	38	113
Prof. Dr.-Ing. e.h. Hans-Olaf Henkel	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
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

8. Research and Development

€2.75 billion
for research and development

Our mission statement "Bayer: Science For A Better Life" underscores Bayer's belief that innovation has a major role to play in addressing global challenges and therefore will remain a key driver of the company's growth in the future. We have the resources at our disposal to generate further growth opportunities through research and development. In 2009 a total of €2,746 million – equivalent to 8.8% of sales – was invested in research and development, compared with €2,653 million in the previous year. Of particular importance is the focused development of new products to strengthen our core businesses. To expedite the growth we strive for, we are working to steadily renew and expand our product portfolio and optimize our production processes. Being closely aligned to market needs, our research and development activities are subject to a continuous process of adjustment. They are supplemented by an international network of collaborations with leading universities, public-sector research institutes and partner companies. By pooling expertise in this way, we aim to rapidly translate new ideas into successful products. Our activities are also supported by the systematic advancement of the people who work in our research and development units.

Research and Development Expenses by Subgroup (2008 in parentheses) [Graphic 3.13]



HealthCare

€1,847 million
for research and development at HealthCare

In 2009 we invested €1,847 million (2008: €1,742 million) in research and development in the Pharmaceuticals and Consumer Health segments to lay the foundations for the launch of new and innovative health care products. This represented 67.3% of the Bayer Group's entire research and development expenditures and was equivalent to 11.6% of HealthCare sales.

Drug discovery in the Pharmaceuticals segment focuses on the areas of cardiology, oncology, women's healthcare and diagnostic imaging. The respective research activities and capacities are concentrated at three sites in Berlin and Wuppertal, Germany, and Berkeley, California, United States. Work in Berlin and Wuppertal centers largely on identifying molecular targets in order to develop and optimize lead substances. 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 drug discovery and the biotechnological production of Kogenate® take place.

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 2009. On completion of all the necessary studies, we submitted applications to one or more regulatory authorities for registration, or expansion of the existing registration, for some of these candidates. The most important drug candidates currently in registration are:

Products in Registration [Table 3.32]

	Indication
Rivaroxaban/Xarelto®	U.S.A., prevention of venous thromboembolism following elective hip and knee replacement surgery
Qlaira® (E2V/DNG)	U.S.A., fertility control (oral) and treatment of heavy and/or prolonged menstrual bleeding
Levitra®	Erectile dysfunction, orodispersible tablets
YAZ® Plus, Yasmin® Plus	Fertility control (oral) with added folate
Valette® Plus	E.U., fertility control (oral) with added folate

The following table shows the principal drug candidates currently in Phase III or II of clinical testing:

Research and Development Projects (Phases III and II)* [Table 3.33]

	Indication	Status
Alemtuzumab	Multiple sclerosis	Phase III
Alpharadin™	Treatment of bone metastases in hormone-refractory prostate cancer	Phase III
Angeliq® low-low	Hormone replacement therapy	Phase III
Bonefos®	Prevention of bone metastasis in breast cancer	Phase III
FC Patch low	Fertility control	Phase III
Florbetaben	PET imaging in diagnosis of Alzheimer's disease	Phase III
Gadovist®	Magnetic resonance imaging	Phase III
LCS (ULD LNG Contraceptive System)	Fertility control	Phase III
Nexavar®	Thyroid cancer	Phase III
Nexavar®	Non-small-cell lung cancer	Phase III
Riociguat (sGC stimulator)	Pulmonary hypertension (CTEPH)	Phase III
Riociguat (sGC stimulator)	Pulmonary hypertension (PAH)	Phase III
Rivaroxaban/Xarelto®	Prevention of venous thromboembolism in medically ill, immobilized patients	Phase III
Rivaroxaban/Xarelto®	Treatment of venous thromboembolism	Phase III
Rivaroxaban/Xarelto®	Stroke prevention in atrial fibrillation	Phase III
Rivaroxaban/Xarelto®	Secondary prevention of acute coronary syndrome/myocardial infarction	Phase III
VEGF Trap-Eye	Wet age-related macular degeneration	Phase III
VEGF Trap-Eye	Central retinal vein occlusion	Phase III
YAZ® Flex	Fertility control (oral)	Phase III

Research and Development Projects (Phases III and II)* [Table 3.33 (continued)]

	Indication	Status
Alpharadin™	Treatment of bone metastases in breast cancer	Phase II
Amikacin Inhale	Pulmonary infection	Phase II
Cinaciguat (sGC activator)	Acute heart failure	Phase II
Ciprofloxacin Inhale	Pulmonary infection	Phase II
E2+DRSP	Fertility control (oral)	Phase II
L19-SIP	Lung cancer, brain metastases	Phase II
Nexavar®	Breast cancer	Phase II
Nexavar®	Colon cancer	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
Sagopilone (ZK-EPO)	Lung/ovarian/prostate cancer	Phase II
VEGF Trap-Eye	Diabetic macular edema	Phase II
ZK 245186	Atopic dermatitis	Phase II

*as of February 15, 2010
PAH = pulmonary arterial hypertension; CTEPH = chronic thromboembolic pulmonary hypertension
COPD = chronic obstructive pulmonary disease; ILD = interstitial lung disease; PET = positron emission tomography
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 marketed products. It is also possible that the requisite FDA, European Medicines Agency (EMEA) or other regulatory approval will not be granted for these compounds.

We regularly evaluate our research and development pipeline in order to prioritize the most promising pharmaceutical projects. Among our principal development candidates is the innovative cancer drug Nexavar®, which has been developed jointly with Onyx Pharmaceuticals, Inc., United States. Nexavar® targets both the tumor cells and the vascular supply to the tumor. Preclinical trials have shown that the action of Nexavar® intervenes in two classes of kinase that are known to be involved both in cell proliferation (growth) and angiogenesis (the formation of new blood vessels) – two important processes that enable tumor growth. We continue to conduct research with this promising active substance, which is currently being marketed worldwide for the treatment of advanced renal cell carcinoma and hepatocellular carcinoma. Nexavar® is currently in various stages of clinical testing for the treatment of other tumor types (see Table 3.33).

Our novel anticoagulant Xarelto®, a direct Factor xa inhibitor in tablet form, was launched in September 2008 for prophylaxis of venous thromboembolism (VTE) in adult patients following elective hip or knee-joint replacement surgery. Bayer has received marketing authorization for the product in more than 80 countries, including the European Union member states, Australia, China, Canada and Mexico. Xarelto® is now on the market in over 60 countries. The extensive clinical trial program supporting Xarelto® makes it the most studied oral, direct Factor xa inhibitor in the world today. More than 65,000 patients are expected to be enrolled into the Xarelto® clinical development program, which will evaluate the product in the prevention and treatment of a broad range of acute and chronic blood-clotting disorders (see Table 3.33).

In the field of women's healthcare, we are working to expand the range of contraceptive options. In April 2009, Phase III clinical trials began with a transparent contraceptive patch, intended to become the smallest, lowest-dosed product of its kind on the market. Our oral contraceptives YAZ® Plus and Yasmin® Plus were submitted for approval in Europe and the United States. These products combine the contraceptives of the YAZ® family with a folate in a single tablet. Our novel oral contraceptive Qlaira® is already on the market in Europe. In May 2009 we submitted this product for approval in the United States, not only for contraception but also for treating heavy and/or prolonged menstrual bleeding. Qlaira® contains estradiol valerate, which is rapidly metabolized to estradiol in the body. This product is the first in a new class of oral contraceptives to deliver estradiol, the estrogen identical to the one produced by the female body.

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 to treating various forms of pulmonary hypertension.

Our activities in the area of diagnostic imaging are focused on the development of positron emission tomography (PET) tracers that may assist in earlier and more accurate disease diagnosis. We are concentrating on three indications: central nervous system disorders, oncology and cardiovascular diseases.

Our aim in the development of the new PET tracer florbetaben is to contribute to earlier and more definitive diagnosis of Alzheimer's disease. The Phase II data for this substance, presented in July 2009, underline its potential as an important imaging adjunct to clinical methods currently used to diagnose dementia. Additional Phase II studies are ongoing. The global Phase III program for florbetaben was launched in November 2009.

The portfolio of products emerging from our own research and development is supplemented by products in-licensed on a global, regional or national level. 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). Under the terms of the new strategic agreement entered into by Bayer and Genzyme in 2009, the co-development partnership for alemtuzumab will continue. Bayer has returned the worldwide distribution rights for alemtuzumab to Genzyme Corp., United States, but will receive royalties and co-promotion rights.

In the VEGF Trap-Eye project that we are pursuing in collaboration with Regeneron Pharmaceuticals, Inc., United States, two Phase III studies in age-related macular degeneration and a Phase II study in patients with diabetic macular edema are under way. In 2009 two Phase III studies were launched to investigate the use of the substance in central retinal vein occlusion (CRVO). 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, preventing the abnormal formation of new blood vessels and the leakage of fluid. The medication is administered topically 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 that country.

We amended the agreement with ZymoGenetics, Inc., United States, for recombinant thrombin and will now market this product only in Canada. We received marketing authorization in Canada in December 2009 and expect to introduce the product in that market in February 2010.

In April 2009 Bayer entered into a licensing agreement with Ardea Biosciences, Inc., United States, concerning the development and marketing of small-molecule mitogen-activated ERK kinase (MEK) inhibitors for the treatment of solid tumors. These kinases are believed to play an important role in cancer cell proliferation, apoptosis (programmed cell death) and metastasis.

In September 2009 Bayer in-licensed Alpharadin™, an alpha-emitting radiopharmaceutical, from Algeta ASA, Norway, for joint development and marketing. 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.

We also invest in continuous life-cycle management to identify possible additional indications and improved delivery forms for products already on the market.

In our Consumer Health segment, research and development activities of the Consumer Care Division at our product development centers in Morristown, New Jersey, United States, and Gaillard, France, focus 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 in several markets in 2009.

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 research and development center for our diabetes care business in Tarrytown, New York, United States, we are working to strengthen core product lines and continue our expansion into attractive segments of the diabetes market. In 2009 we launched several innovative products, including Contour® USB, Didget® and A1cNow® SelfCheck to meet specific needs of individuals with diabetes. The research and development activities for our medical equipment business center on continually improving our market-leading contrast injection systems for computed tomography and magnetic resonance imaging as well as our vascular intervention systems. We are also entering additional attractive segments such as medical data management systems. The respective research and development center is located near Pittsburgh, Pennsylvania, United States.

The Animal Health Division focuses its research and development activities in Monheim, Germany, on anti-infectives and parasiticides along with active ingredients for the treatment of non-infectious disorders in animals. As well as developing new products to combat parasites in companion animals and livestock, the division concentrates on building its portfolio of organ disease products for dogs and cats, particularly in the areas of chronic kidney and cardiovascular diseases and cancer. In 2009 we launched Profender® (emodepside and praziquantel) – a novel substance to combat worm infestation in dogs – in the European market.

€653 million
for research and development at CropScience

CropScience

In 2009, €653 million (2008: €649 million) in research and development expenditures, or 23.8% of the Bayer Group total, were made in the CropScience subgroup. This was equivalent to 10.0% of subgroup sales.

CropScience maintains a global network of research and development facilities employing nearly 4,000 people. Our largest R&D sites for crop protection products are located in Monheim and Frankfurt am Main, Germany, and Lyon, France. The major research centers of the BioScience unit, which focuses on seed technology and breeding, are located in Ghent, Belgium, and Haelen, Netherlands.

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 products can be tested under regional climatic conditions.

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 unit we identify and develop innovative, safe and sustainable products for use in agriculture as herbicides, fungicides or insecticides, 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 lead structures. Collaborations with external partners complement our own activities.

We are broadening the range of uses for our products by developing seed treatment solutions, 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 20 development projects, of which 10 are at an advanced stage and 10 at an early stage of development. An additional 45 projects are undergoing early-stage research.

In 2009 we began marketing our active ingredient thiencarbazone-methyl in combination with our new safener cyprosulfamide. Thiencarbazone-methyl (major brands: Adengo®, Corvus®) is a new active ingredient to control weeds in corn and cereal crops. This substance, a member of the sulfonyl amino carbonyl triazolinone (SACT) class of herbicides, ideally complements our active ingredient isoxaflutole, which is already on the market. The combined modes of action of these two ingredients, in conjunction with the safener cyprosulfamide, ensure particularly good plant tolerance. Safeners are special substances added to herbicides to protect crops from potentially damaging effects of the active ingredient.

We plan to launch six promising new active ingredients between 2010 and 2012, subject to their successful registration:

Planned Product Launches [Table 3.34]

New active ingredient	Use	Planned launch
Isotianil	Fungicide	2010
Fluopyram	Fungicide	2010/2011
Bixafen	Fungicide	2010/2011
Bacillus firmus	Seed treatment biopesticide	2010/2011
Indaziflam	Herbicide	2011
Penflufen	Seed treatment fungicide	2011/2012

CropScience anticipates a total peak sales potential of €1.25 billion for the four new active ingredients it has launched since 2008 and the six other substances mentioned above that are expected to be commercialized by 2012.

We plan to strengthen our portfolio in Asia with the introduction of the new rice fungicide isotianil (major brand: Routine®), a member of the isothiazole class. This active ingredient from our research pipeline has undergone further development in collaboration with Sumitomo Chemical Co., Ltd. of Japan. Isotianil protects rice against Pyricularia, the fungus that causes rice blast, by stimulating the plants' natural defense mechanisms.

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 brand: 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. Representing a new group of active ingredients, bixafen is well suited as a component of resistance management.

Bacillus firmus (major brand: Votivo®), a biological pest control agent for use as a seed treatment, is a new addition to our portfolio of conventional products to combat nematodes – threadworms that live in the soil.

Indaziflam 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 such as lawn care on golf courses and sports fields.

Penflufen is a novel pyrazole fungicide for 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 Rhizoctonia spp. Penflufen contributes to particularly strong seedling development due to its good seed tolerance.

The compounds developed by Crop Protection are also tested and evaluated by our Environmental Science unit 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 herbicides and fungicide mixtures, as well as biological solutions. In the area of vector control, we are stepping up research into insecticidal products for treating materials. Uses include impregnated nets to protect people from malaria transmitted by mosquitoes. We are also working closely with the Innovative Vector Control Consortium (IVCC) in Liverpool, United Kingdom, to assemble a new insecticides research platform and discover new resistance-breaking insecticides for the control of malaria vectors.

In 2009, Environmental Science introduced numerous new products featuring easy, user-friendly handling. In the United States, for example, we launched Triton® SG, a new triticonazole-based fungicide formulation. Products added to our Bayer Advanced portfolio for U.S. consumers included several new fungicides and insecticides. In Europe we expanded our Bayer Garden range, mainly by launching new herbicides and a new snail-control product. Several more product introductions are planned for 2010. These include herbicides for the green industry and innovative fungicides featuring our StressGard technology that not only combat fungal diseases but also improve plant health. We also plan to introduce new biologically based product lines for consumer markets this year.

Steady expansion of R&D activities in BioScience

Research in our BioScience unit is dedicated to optimizing plant traits. We are developing new seed varieties of our core crops – cotton, canola, rice and vegetables. In 2009 we expanded our research activities to include cereals and soybeans as additional core crops. Our research and development work focuses on the agronomic traits of these crops. For example, our scientists are working to develop crop plants that are highly resistant to stress factors such as extreme temperatures and drought. We also aim to increase the plants' yield potential and quality. Examples here include improving the profile of canola oil or enhancing the properties of cotton fibers. Further areas of focus include developing new herbicide tolerances based on alternative mechanisms of action, and improving insect and disease resistance. To do this we employ both modern breeding techniques and methods based on plant biotechnology. Our BioScience research and development pipeline presently contains more than 50 promising lead projects and is complemented by over 80 current research agreements with public- and private-sector partners.

Business growth in BioScience in 2009 was supported by new product introductions. In conjunction with leading seed producers, we commercialized our LibertyLink® herbicide tolerance technology in soybean seeds in the United States. In 2011 we plan to introduce several innovative seed varieties, including cotton with our proprietary glyphosate herbicide tolerance trait and a cotton seed with tolerance against glyphosate and glufosinate-ammonium.

To further strengthen the innovative capability of CropScience, we intend to consistently increase research and development activities, particularly in the area of seeds and plant traits. The acquisition of Athenix Corp., United States, in November 2009 broadens our technology portfolio to include an additional extensive development platform for herbicide tolerance and insect resistance traits. We are also continuing to expand our network of research and development locations. For example, we aim to strengthen our presence in the important North American market by inaugurating a new biotechnological research center in Morrisville, North Carolina, United States, in the spring of 2010.

MaterialScience

In 2009, MaterialScience spent €207 million (2008: €221 million) on research and development (not including joint development activities with customers) to further expand its leading position in the market and in process technology as a global supplier of high-quality customized materials and system solutions. MaterialScience thus accounted for 7.5% of the Bayer Group's total research and development expenses. The subgroup's expenses in this field amounted to 2.8% of sales.

€207 million
for research and development at MaterialScience

The business units of MaterialScience employ the latest technologies and production processes to develop new products and applications in close cooperation with our customers and other external partners.

Product development work in the Polyurethanes business unit is focused on expanding applications for materials and optimizing the properties of our polyurethane systems. In the construction industry, for example, our polyurethanes form the basis for highly efficient insulating materials and in this way contribute actively to climate protection. Roughly 70 times as much energy can be saved during the product life cycle of rigid polyurethane foam as is required for its manufacture. As part of the Bayer Sustainability Program, regional centers of excellence are being established to launch the EcoCommercial Building concept Bayer has developed. This utilizes Bayer's own expertise in the field of high-tech construction materials and involves a partnership network consisting of suppliers, construction firms, architects and property developers. The aim is to offer modern, customized concepts for energy-optimized commercial and public buildings.

EcoCommercial Building Program: developing customized solutions for the construction of energy-optimized buildings

The use of renewable raw materials also plays an important part in our research and development activities. For example, we have developed polyols containing up to 70% by weight of renewable raw materials for use in mattresses, car seats and refrigerator insulation. Another groundbreaking application for polyurethanes is in the solar cell market, which continues to grow rapidly. The use of frames made from polyurethane considerably shortens production cycles for complete solar panel systems. Such frames also offer much greater design freedom and can be built flat into existing house roofs, for example.

Process development is currently focused on ways to manufacture new or improved raw materials and formulations and optimize the production of polyether polyols and aromatic isocyanates. Our 250,000 tons-per-year TDI facility in Shanghai, China, due to be completed in 2010 and start production in the second half of 2011, will employ the gas-phase phosgenation process, which uses up to 60% less energy than would a world-scale facility of the same size based on conventional technology. This innovative process will also lead to a reduction of up to 60,000 tons per year in carbon dioxide emissions.

Opening up new applications by developing customized products

The aim of our Polycarbonates business unit is to develop customized products that satisfy new customer needs and thereby open up new applications. In addition, we are working continuously to improve manufacturing processes. A key business driver is the identification of innovative solutions that align with global trends and societal needs. Such applications are made possible by the development of new polymer alloys (polycarbonate blends and compounds), modified base materials for polycarbonate sheets and various coating technologies for modifying polycarbonate surfaces. We are also continuing to develop architectural and other applications for polycarbonate sheets. Examples include roofing with maximum design freedom, highly effective and esthetic sound insulation walls and large-area window panes.

The principal development areas include LED light management, lightweight materials for the transport sector (such as polycarbonate glazing for cars), low-cost system solutions for automotive interiors, and design-based applications. Together with our customers we are developing solutions that address increasing global challenges in the areas of mobility, quality of life, the environment, and cost optimization in manufacturing.

Developing functional films for high-tech applications

The Coatings, Adhesives, Specialties business unit focuses its research and development activities on polyurethane raw materials for high performance coatings, adhesives and sealants, such as aliphatic and aromatic polyisocyanates and resin components. Important areas of research are raw materials for waterborne and UV-curing systems that meet today's market requirements and help to conserve resources by obviating the need for organic solvents and reducing drying times for coatings. In the new strategic business entity Functional Films and Specialties, we carry out research and development in the field of innovative surfaces and substrate materials. Here we focus on applications such as electroluminescent films, formable coated films for electronic and automotive applications, Makrofol® films to enhance the security of ID cards, and holograms as a security feature on bank cards and identification documents, for example. We are also working to open up more new applications in the areas of cosmetics and medical technology materials. In addition, we are established as one of the world's leading industrial-scale suppliers of carbon nanotubes (Baytubes®). In 2009 we completed the construction of the world's largest pilot plant for these materials with a capacity of 200 tons per year.

The New Business section of MaterialScience constantly tracks and evaluates new technological and market trends, channeling the most promising ideas into research and development projects in order to create profitable business opportunities for the future or expand existing technology platforms.

Bayer Technology Services

Bayer Technology Services supports all Bayer subgroups with technology platforms

All Bayer subgroups work closely with 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. 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. 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 investigates and evaluates innovative areas adjacent to the subgroups' current core activities and develops them into viable new businesses for the Bayer Group. An example is the manufacture of plant-made pharmaceuticals. In 2009 the U.S. Food and Drug Administration accepted Bayer's application for a clinical trial involving a personalized cancer vaccine for the therapy of non-Hodgkin's lymphoma. In the field of medical technology, an innovative dressing made from bioresorbable silica gel fibers for the treatment of chronic wounds is undergoing clinical testing. In the agriculture sector, novel hybrid concepts based on 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.

Bayer Innovation develops new businesses adjacent to core activities

Triple-i: Inspiration, Ideas, Innovation

The innovation campaign entitled "Inspiration, Ideas, Innovation" is motivating Bayer employees worldwide to submit ideas for new products and thereby add to the company's innovative capability. Some of these products have already been successfully commercialized.

9. Sustainability

Sustainability is a key component of our Values and Leadership Principles. True to our mission statement "Bayer: Science For A Better Life," we aim for sustainable commercial success based on sound business models and in harmony with the needs of our employees, society and the environment. To underline this mission we have committed to international sustainability initiatives such as the U.N. Global Compact and the Responsible Care Global Charter.

Our objective is to develop innovative solutions that will help address global challenges such as providing sustainable health care, feeding a steadily growing world population, combating climate change and overcoming the scarcity of natural resources. We therefore plan to align our core businesses to sustainability criteria even more rigorously than before. In 2009 we launched the Bayer Sustainability Program, initially comprising eight lighthouse projects. Major areas of focus are our alliances for sustainable health care, innovative partnerships to improve the supply of high-quality food, and new solutions for protecting the climate and managing natural resources.

INTERNET

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

Oversight of the Group-wide sustainability strategy has been assigned to Group committees headed by the member of the Board of Management responsible for Innovation, Technology and Environment. As part of our "sustainability in procurement" strategy, we have compiled a code of conduct for suppliers covering ethics, employee relations, occupational health, safety, environmental protection, quality and management systems. Our suppliers are selected and evaluated on the basis of this code starting at the end of 2009.

To steer our sustainability performance, we have defined specific targets and indicators through 2010, both for the Group as a whole and for our subgroups and service companies, in five fields of activity: innovation, product stewardship, management excellence, social commitment and environmental responsibility. These are supplemented by additional goals reaching beyond 2010 in areas where we believe the need for action is greatest – such as climate protection.

INTERNET

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

Each year we publish a Sustainable Development Report based on Application Level A+ of the Global Reporting Initiative (GRI) guidelines.

9.1 Employees

Employee Data [Table 3.35]

	Dec. 31, 2008	Dec. 31, 2009
	FTE	FTE
Employees by region		
Europe	55,500	54,500
North America	17,000	16,300
Asia/Pacific	20,800	21,600
Latin America/Middle East/Africa	15,300	16,000
Employees by corporate function		
Production	49,100	47,800
Marketing and distribution	38,000	38,900
Research and development	12,300	12,400
General administration	9,200	9,300
Total	**108,600**	**108,400**
of which trainees	2,900	2,700
	%	%
Percentage of women in Bayer Group senior management	4.7	5.5
Number of nationalities in Bayer Group senior management	23	22
Proportion of full-time employees with contractually agreed working time not exceeding 48 hours per week	100	100
Proportion of employees with health insurance	97	95
Proportion of employees eligible for a company pension plan or company-financed retirement benefits	76	74
Proportion of employees covered by collective agreements, particularly on pay and conditions	57	56

The total number of employees with permanent or temporary contracts is reported in full-time equivalents, with part-time employees included in proportion to their contractual working hours.

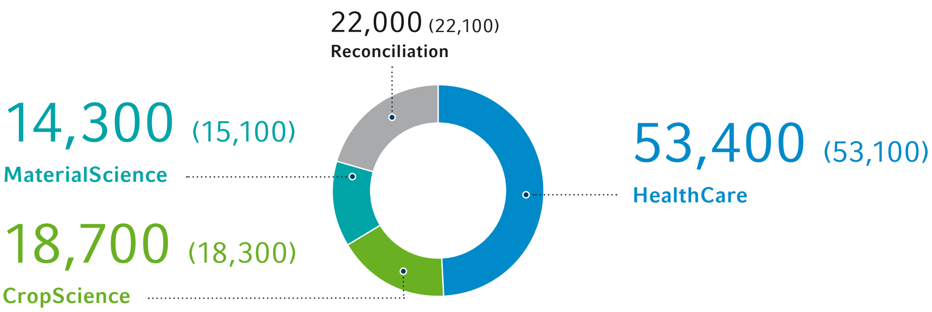
Employee data

On December 31, 2009, the Bayer Group had 108,400 employees worldwide, compared with 108,600 at the end of 2008. Thus headcount remained virtually steady even in the crisis year 2009. In Germany we had 36,700 employees (2008: 37,400), who made up 33.9% of the Group workforce.

HealthCare employed 53,400 (2008: 53,100) people, CropScience 18,700 (2008: 18,300) and MaterialScience 14,300 (2008: 15,100). The remaining 22,000 (2008: 22,100) employees worked mainly for the service companies. This figure also includes the 600 (2008: 600) employees of Bayer AG.

Personnel expenses rose in 2009 by 3.8% to €7,776 million (2008: €7,491 million), mainly due to exchange-rate effects and the higher contributions to the German pension assurance association.

Employees by Region (2008 in parentheses) [Graphic 3.14]



Sustainable human resources policy

Bayer pursues a sustainable human resources policy focusing on diversity, equality of opportunity, support for our employees' personal and career development, and social security. Our social responsibility is reflected in the fact that 74% of our workforce has access to a corporate pension plan of some kind. Nearly all of our employees throughout the world either have statutory health insurance or access to health insurance through the company. High social standards, performance- and market-oriented compensation with numerous additional benefits, and a wide range of career development options make Bayer an attractive employer. The fluctuation rate for the Group as a whole in 2009 was 7%.

Another feature of our corporate policy is dialogue with the employee representatives in a spirit of partnership. The working conditions for more than 55% of our global workforce are set forth in collective or company agreements. A flexibility clause in the collective bargaining agreement for the chemical industry enabled MaterialScience to cushion the effects of the global economic crisis on employees in Germany. Invoking this clause, working hours and pay were temporarily reduced for the period from February through October 2009, making official short-time working unnecessary. Moreover, in December 2009, the existing agreement under which Bayer Group companies in Germany refrain from dismissing employees for operational reasons was extended to run for a further three years.

Diversity and flexibility

The members of the Bayer Group's top management level are drawn from 22 countries. In 2009, women made up 35% percent of the global workforce.

Bayer Group Workforce Structure [Table 3.36]

	2009
	%
Senior managers	1
Other managers	27
Skilled employees	69
Trainees	3

Bayer provides an attractive working environment for its employees by accommodating their different needs in a number of ways. Flexible worktime models allow many employees to organize their work on a largely individual basis. In November 2009 we added to our range of employee childcare services with the inauguration of a new children's daycare center at the site in Monheim, Germany.

Employee participation exceeds

€460 million

Employee compensation and benefits

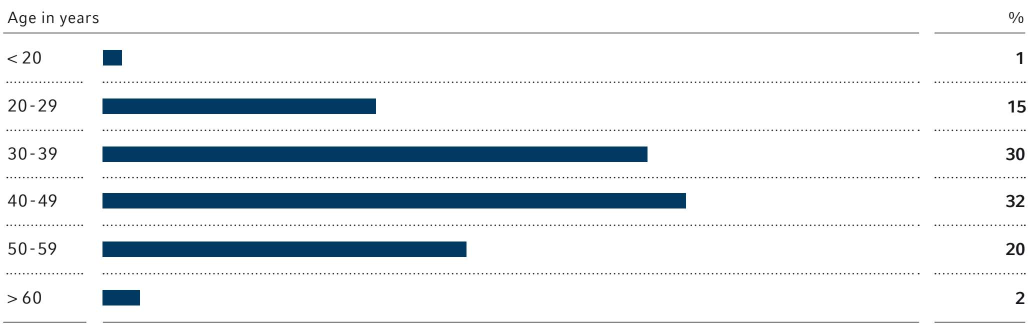
A largely standardized system of compensation for all employee groups and their regular participation in the company's financial success have long been firm features of Bayer's human resources policy. More than €460 million is earmarked for bonus awards to employees for the year 2009 under the Group-wide short-term incentive (STI) program. The individual bonuses to be paid out in the spring of 2010 will be determined for the first time according to a new system that places greater emphasis on rewarding the personal performance of the approximately 25,000 participants.

Complementing our extensive range of benefits in many countries are a variety of 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" that are based on ambitious earnings targets and – in the case of Group Leadership Circle members – require an appropriate personal investment in Bayer stock.

Vocational training and recruiting

Vocational training and advancing the talents of prospective young employees are crucial to the company's future viability in view of demographic change and an anticipated shortage of skilled employees in many areas. Bayer therefore upholds its traditionally strong commitment in the area of vocational training. At our German sites alone, more than 900 young people again entered the vocational training programs offered in 2009 to prepare for careers in more than 20 occupations. They included 156 youngsters who were first given preparatory courses to improve basic skills. We also offer systematic vocational training in numerous other countries. For example, 16 young people entered our dual training programs in Mexico, 30 in Argentina and 35 in China.

Employees by Age Group in % [Graphic 3.15]



Bayer aims to gain the interest of talented students through the diverse career opportunities it offers, and attract them to the company at an early stage. In 2009 Bayer Group companies once again awarded more than 1,230 challenging occupational internships to students of various disciplines worldwide. Our company's student support activities helped us to recruit some 5,000 academics to Bayer companies as technical or managerial employees in 2009. China accounted for the largest number of newly hired employees with an academic background, at about 1,500, followed by the United States with 965 and India with 525.

Continuing education and knowledge retention

The average age of our employees worldwide in 2009 was 41. Central to our strategy for addressing demographic change is continuing education for employees in all age groups. In 2009 we spent more than €60 million in Germany alone to advance our employees' occupational skills and help them meet changing requirements. Supported by our activities in occupational health management, the continuing education we provide is instrumental in retaining experienced employees for as long as possible and keeping their skills at a high level.

Realigning the human resources function

In 2009 Bayer continued the global realignment of its human resources (HR) function by way of the "Transforming Human Resources" project. The aim of this reorganization is to increase the value the HR function contributes to the business and enhance the quality and efficiency of HR processes throughout the Group. With the transformation in Germany successfully completed at the beginning of 2009, the country organizations in Spain, Belgium, Mexico and Brazil implemented the new operating model during the year.

9.2 Environment, Climate Protection and Safety

Key Performance Indicators [Table 3.37]

Category	Key Performance Indicators Health, safety and environment	2008	2009
Health and Safety	Industrial injuries to Bayer employees resulting in at least one day's absence (number of injuries per million hours worked)	2.2	2.0
	Reportable industrial injuries to Bayer employees (number of injuries per million hours worked)	3.6	3.1
	Major environmental incidents	9	13
	Transportation incidents	10	10
Emissions	Direct greenhouse gas emissions (CO_2 equivalents in million metric tons)*	5.09	4.57
	Indirect greenhouse gas emissions (CO_2 equivalents in million metric tons)*	3.57	3.53
	Volatile organic compounds (VOC) (thousand metric tons/year)	3.16	2.59
	Total phosphorus in waste water (thousand metric tons/year)	0.78	0.74
	Total nitrogen in waste water (thousand metric tons/year)	0.67	0.63
	Total organic carbon (TOC) (thousand metric tons/year)	1.59	1.34
Waste	Hazardous waste generated (million metric tons/year)	0.37	0.38
	Hazardous waste landfilled (million metric tons/year)	0.08	0.09
Use of resources	Water use (million m^3/day)	1.20	1.11
	Energy use (petajoules [10^{15} joules]/year)	82.79	77.33

2008 figures restated
* as per Greenhouse Gas Protocol

Environmental protection, safety and product stewardship

Bayer has long placed great importance on protecting the environment and conserving natural resources. We are constantly on the lookout for solutions that promote growth cost-effectively without further depleting natural resources or producing more emissions or waste. We are committed to leveraging our expertise in technology, process optimization and product innovation to protect nature, the environment and the climate. For example, Bayer is developing a method that holistically analyzes, and determines ways to minimize, the consumption of resources such as energy, water and raw materials. This resource efficiency check – based on the "Bayer Climate Check" – is currently being tested in pilot projects.

To ensure uniformly high health, safety, environmental protection and quality standards, Bayer has established HSEQ management systems in all subgroups and service companies that are aligned to recognized international standards. In 2009, 87% of Bayer sites had an audited HSE management system in place. The audits were performed according to an internal Bayer standard. Almost 40% of our production sites have been externally audited in line with international standards such as ISO 14001, EMAS or OHSAS 18001. The respective quality management systems are adapted to industry-specific quality standards.

We improved nearly all of our key performance indicators in 2009. The industrial injury rate again declined, almost reaching our target of <2.0. Emissions of volatile organic compounds (VOC), phosphorus, nitrogen and total organic carbon (TOC) also declined. Resource input decreased in 2009 due to lower production volume. Optimization of our data collection systems for energy input led to a reduction compared with the figure published in the Annual Report 2008 from 88.5 to 82.8 petajoules per year.

Group regulations on occupational health and safety

In 2009 there was an increase in the number of environmental incidents, including minor emissions reported in line with a voluntary internal commitment. Unfortunately, even our extensive safety precautions and training procedures cannot entirely prevent environmental incidents or traffic accidents. Any such events are carefully analyzed and evaluated so that steps can be taken to prevent a recurrence. As part of the ongoing development of our commitment in the field of occupational health and safety, we implemented a new Group regulation on transportation safety in 2009 and updated the Group regulations on occupational safety, occupational health, and process and plant safety.

For Bayer, sustainability also means systematically avoiding potential risks in the manufacture, application or disposal of our products. Product safety and compatibility therefore have top priority across all our fields of activity in all the countries where we operate. We examine all Bayer products and monitor them with regard to any potential health, safety, environment or quality (HSEQ) risks arising from their use in applications known to us, right along the value chain.

REACH: compliance on schedule

We are committed to product stewardship and also support the objectives of the E.U. chemicals policy (REACH), which are to ensure the safety of everyone who comes into contact with chemical products throughout their life cycles and to further improve consumer safety and environmental protection. Bayer had already pre-registered 817 substances with the European Chemicals Agency (ECHA) by the end of 2009 as required under the E.U. regulation. By the end of November 2010 we will now compile the necessary registration dossiers for substances that we use in particularly large quantities. 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, addresses one of the great global challenges: climate change. It forms a cornerstone of the new Bayer Sustainability Program. The aim of the Bayer Climate Program is to find ways to protect the climate and address the consequences of climate change. In 2009 Bayer was named the world's best company in the Carbon Disclosure Leadership Index, honoring our transparent reporting on climate strategy and greenhouse gas emissions.

Improving energy efficiency is a major factor in reducing our own greenhouse gas emissions. We use the Bayer Climate Check as an analysis tool to identify CO_2 emission reduction potential at our production facilities. By mid-2010 we plan to assess more than 140 facilities and buildings that currently account for over 85% of production-related CO_2 emissions. The analysis results so far point to an energy reduction potential of 10% by 2013 relative to 2008 in the production facilities of our subgroups and service companies. The identified reduction potential is being realized through a systematic energy efficiency program that is intended to reduce our greenhouse gas emissions by 350,000 tons per year. Process innovations are another focus of our efforts to reduce greenhouse gas emissions, one example being an innovative, climate-friendly chlorine production process developed jointly by Bayer and its partners that uses some 30% less energy. In the future we aim to market this technology outside of Bayer as well as using it in our own facilities.

Bayer also provides solutions for climate protection. With energy consumption in buildings accounting for nearly 20% of greenhouse gas emissions worldwide, the purpose of the "EcoCommercial Building" lighthouse project for zero- and low-emissions structures, launched two years ago, is to help reduce these emissions. This project has been developed into a comprehensive program to bring together all the partners along the value chain, so that integrated and sustainable design concepts can be developed for commercial and public building projects.

INTERNET

Detailed information can be found at WWW.CLIMATE.BAYER.COM and WWW.SUSTAINABILITY2008.BAYER.COM

The Bayer Climate Program also adopts other approaches, including measures such as the "ECO Fleet" program to reduce 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.

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. In 2009, direct greenhouse gas emissions fell by 10.2%, mainly as a result of process improvements and the general economic situation. Energy-related indirect greenhouse gas emissions fell by only 1.1%, mainly because of much less favorable conversion factors for the German electricity mix. The total of direct and indirect greenhouse gas emissions was down by 6.5% because of lower overall production volume, especially at MaterialScience.

The 2008 figure for direct greenhouse gas emissions published in the Annual Report 2008 rose from 4.0 to 5.1 million tons CO_2 equivalent, partly because we acquired a nitric acid facility in the United States in 2009 that had to be included retrospectively in line with the GHG Protocol.

Each Bayer subgroup has set its own ambitious climate goals for the period from 2005 through 2020. To track our target achievement more transparently, we publish detailed information on emission levels in our Sustainable Development Report.

9.3 Social Responsibility

Corporate social responsibility (CSR) forms an integral part of Bayer's philosophy and strategy as a business enterprise. The company regards itself as part of society and therefore considers it its duty to behave as a responsible corporate citizen. Bayer's CSR 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 2009 the Bayer Group provided funding of some €44 million for these activities, focusing on the fields of education and research, environment and nature, health and social needs, and sports and culture. Bayer's diverse activities in the area of sports and culture accounted for about half of CSR spending, followed by expenditures to promote health, education and environmental protection. We continuously develop the scope of our projects and/or extend them to additional countries.

€44 million

for social projects

We firmly believe that a sustainable CSR commitment in these areas can make an important contribution to the viability of society while at the same time improving the conditions for our business activity and promoting our economic success in the long term.

Education and research

Bayer traditionally places great importance on support for education and research. As an inventor company, we are particularly dependent on recruiting people with excellent scientific skills.

Support for talented young researchers and leading scientists

In 2009 the Bayer Science & Education Foundation provided financial support for outstanding scientists, high-achieving university students and dedicated school students. It also sponsored innovative teaching programs in schools. The €50,000 Hansen Family Award in 2009 went to Professor Patrick Cramer for his research into the molecular mechanisms of gene transcription, which may help in discovering new disease therapies and improving biotechnological processes. In 2009 the Foundation also presented the newly established "Bayer Early Excellence in Science Award" to three young scientists, who received €10,000 each. The recipients were Dr. Jürgen Groll of RWTH Aachen University, Germany, for the "Materials" field, Dr. Noriyuki Nishimura from the University of California, San Diego, United States, in the "Biology" category, and Dr. Tobias Ritter of Harvard University in Cambridge, Massachusetts, United States, for "Chemicals."

The Bayer Science & Education Foundation granted scholarships totaling €151,000 in 2009 to 34 gifted and ambitious students to assist them with specific study projects in the fields of natural sciences and medicine. The Foundation also provided a total of some €491,000 in funding for 51 new programs at schools and other educational institutions in communities near our sites to help make science education more innovative and attractive. Under the Bayer Climate Program, it also awarded seven scholarships in 2009 to school students participating in an international sustainability seminar in Pittsburgh, Pennsylvania, United States. In 2009 Brazil joined the list of countries participating in Bayer's educational program "Making Science Make Sense," which means schoolchildren in 12 countries are now benefiting from the commitment of Bayer employees who volunteer their time in schools and elsewhere to demonstrate experiments that illustrate the fascination and the benefits of science.

Environment and nature

Protecting the environment and nature has long been of major importance to Bayer. As a company with international production operations, we consider the judicious use of natural resources to be an important part of our social responsibility, along with environmental protection and nature conservation. In 2009 Bayer ceremonially presented Professor Eberhard Jochem of the Fraunhofer Institute for Systems and Innovation Research in Karlsruhe, Germany, with the inaugural Bayer Climate Award for his achievements in the field of energy efficiency. This accolade – the first international award for fundamental research in the climate sciences – will now be presented every two years by the Bayer Science & Education Foundation under the Bayer Climate Program.

In 2009 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 for environmental education. These activities centered on the International Children's and Youth Conference on the Environment in Daejeon, South Korea, which was attended by 600 participants from some 100 countries. Thanks to particularly strong interest from China, the annual children's painting competition run jointly by Bayer and UNEP received a record 2.4 million entries from 89 countries. Also within the scope of this partnership, Bayer organized the interdisciplinary scientific forum "Eco-Minds" in Auckland, New Zealand, in which students from nine countries in the Asia/Pacific region participated.

Involving young people in environmental protection

Bayer's "Young Environmental Envoys" program was expanded to include Chile, now the 19th participating country. In 2009 Bayer provided total funding of €1.2 million for projects implemented under the UNEP partnership.

Bayer launched a special environmental protection program in China entitled "Seeding for Green." Through this program, the company supports young people who are committed to environmental protection with the aim of boosting environmental awareness among the population. The program includes an environmental media award and a children's book about global warming.

Health and social needs

Bayer displays an active commitment to improving social conditions and health care in many regions of the world with the dual aim of promoting social stability in the communities near its sites and helping to solve global health challenges.

In 2009 the company agreed to provide the World Health Organization (WHO) with 400,000 tablets of its active ingredient nifurtimox annually free of charge, the objective being to develop a new therapy to tackle African sleeping sickness.

In addition we launched a unique project in Uganda in cooperation with the German Foundation for World Population (DSW) as part of our family planning program. A special "Youth Truck" is employed to reach out directly to teenagers to provide them with information on basic matters of sexual and health education and contraception. The program also involves parents and teachers. In addition, we are collaborating with organizations such as the United States Agency for International Development (USAID) and the United Nations Population Fund (UNFPA) to make contraceptives available free of charge to women who require them.

The Bayer Cares Foundation supported 42 charitable projects in the vicinities of the company's sites in Germany – and for the first time also in Latin America – with total funding of about €104,000. In this way the foundation rewarded employee and citizen volunteerism as a central feature of an active community.

In 2009 the Foundation initiated the Aspirin Social Prize to promote innovative support and consultation projects in the health care field in Germany. With this prize the Bayer Cares Foundation aims to honor specific efforts, bring social work in the health care sector to the attention of a wider public and strengthen social innovation in this area. The prize is worth €30,000 and will be awarded annually starting in 2010.

Sports and culture

Bayer has sponsored sports for over 100 years. This commitment is based on support for a wide variety of clubs in the areas of recreational, youth and disabled sports.

Bayer has also served as a patron of the arts for more than a century. The extensive program of events organized by Bayer Arts & Culture and our support for a range of clubs and societies make a significant contribution to cultural life and enhance the attractiveness of our corporate locations.

10. Events After the Reporting Period

Since January 1, 2010, 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

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. 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. 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.

Corporate Auditing is responsible for coordinating the identification and documentation of risk areas throughout the Group, enhancing the risk management system and monitoring its effectiveness at regular intervals.

In addition, the external auditor assesses the risk management system within the scope 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.

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 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 consolidation unit. 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-relating 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.

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 2009. 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.

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 areas of business. 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," page 128ff.

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," page 100ff.

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

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, page 241ff.

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 the past two years can be predicted.

For a summary forecast, see Chapter 11.3 “Economic Outlook,” page 133f.

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. 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 net income.

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 internal research and 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 registration or 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.

Patent risks

Increased competitive pressure following patent expiration

A large proportion of our products, mainly in our life sciences 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 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.

Hedging against raw material price risks through long-term supply contracts

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.

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, enacting rules and regulations that define the relevant roles and responsibilities, and implementing a periodic reporting system. 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 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 financial assets plus the risk of non-repayment of the loan capital drawn upon by Bayer-Pensionskasse for its effective initial fund represent the maximum credit risk exposure. Thanks to extensive receivables management, the Bayer Group so far has registered only a slight increase in the default risk for receivables despite the current situation on the financial markets.

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 and are 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 2010 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, 2009 and December 31, 2008. 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 euro currency zone, 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, 2009 would be €188 million (2008: €293 million). Of this €188 million, €88 million is related to the U.S. dollar, €21 million to the Japanese yen, €25 million to the Canadian dollar and €54 million to other currencies. Of the €188 million estimated hypothetical loss of cash flow, €190 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. The offsetting position of €2 million is primarily attributable to 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 €12,858 million as of December 31, 2009 (December 31, 2008: €16,647 million). The sensitivity analysis was performed on the basis of our floating-rate debt position at year end 2009, 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, 2009 would have raised our interest expense for the year ended December 31, 2009 by €58 million (2008 based on liabilities at year end 2008: €75 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. In addition, derivatives (primarily commodity swaps and commodity options) are employed to a limited extent to hedge against commodity price risks by smoothing variations in income statement items caused by changes in utility (particularly gas) prices over the long term. 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.

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, 2009 would be €31 million (2008: €30 million). Of this €31 million, €4 million would be directly disclosed in the income statement and €27 million would be recognized as a value adjustment in equity under other comprehensive income 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 achieve leadership roles and expand our already strong market positions. We will also continue our efforts to contain costs and improve efficiencies 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.

HealthCare

HealthCare continues to target above-market 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.

Within our strongest HealthCare segment in terms of sales – Pharmaceuticals – the activities of the General Medicine business unit focus on drug products that are usually prescribed by general practitioners. The Specialty Medicine, Women´s Healthcare and Diagnostic Imaging business units concentrate on products that are mostly prescribed by medical specialists.

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 business, and this segment consequently accounts for the largest share of the HealthCare subgroup's R&D budget. Here we also aim to strengthen our portfolio and supplement our own research and development activities with in-licensing, alliances and collaborations. Examples in 2009 included the agreements relating to the MEK inhibitor RDEA-119 of Ardea Biosciences, Inc., United States, and the radiopharmaceutical Alpharadin™ of Algeta ASA, Norway, both of which are being developed to treat tumor diseases.

The Pharmaceuticals segment already occupies a leading position in many emerging markets, particularly China and Russia. A key element of our pharmaceuticals strategy is the selective expansion of business in the emerging markets, the in-licensing of an insulin product from Bioton S.A., Poland, for the Chinese market being a significant example.

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

Course of expansion in fast-growing regions

The goal of our 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®, Aleve®, Canesten®, Bepanthen®, One-A-Day®, Supradyn®, Rennie® and Alka-Seltzer®. 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 develop our business in new growth segments. We will continue to take advantage of external growth opportunities in the form of strategically relevant acquisitions or in-licensing. One such growth opportunity is provided by the exclusive licensing agreement with AstraZeneca PLC for the marketing of omeprazole (10 and 20 mg) as an OTC medication under the trademark Antra® that came into effect in Germany in August 2009. In the fall of 2009, we strengthened our prescription dermatologicals business with the acquisition of the U.S. product lines Desonate® and NeoBenz® Micro from SkinMedica, Inc., Carlsbad, California, United States.

The goal of the Medical Care Division is to build on its competitive positions in the fields of blood glucose monitoring, diabetes management and injection systems for contrast agents, along with vascular intervention systems, such as thrombectomy systems for treating constricted or blocked blood vessels. We also plan to add to our portfolio by investing in more business areas and geographic regions and entering into strategic partnerships. We intend to continuously improve our products, reduce costs and deploy resources more efficiently. We want to expand our product range by developing new blood glucose measurement systems and innovative solutions that help people with diabetes to better manage the disease. In our medical equipment business, we are continuing to develop our core business in radiology as well as new IT-based services 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 position in the companion animals market, serving as a preferred supplier and partner. 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 in-licensing. We plan to focus more on developing new products ourselves in order to safeguard our long-term success. For this reason, the Animal Health Division has restructured its innovation process to more closely align its research and development activities to the market in the future and ensure earlier and more efficient prioritization of our development projects.

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 integrated solutions to meet the growing demand for affordable, high-quality food, feed, fiber and energy crops. Against the 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.

To offer our customers comprehensive, single-source solutions, we evolve coordinated and sustainable concepts – from seed to harvest – for specific crops in different regions. Our integrated 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 forms 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 products offering superior performance properties, environmental compatibility and user safety along with greater customer value. Our new products are crucial to increasing sales and achieving attractive margins, to which our strict cost management also contributes.

In Crop Protection, the larger of its business segments, CropScience aims to safeguard and further expand the market-leading positions in the Herbicides, Fungicides, Insecticides and Seed Treatment businesses 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. In addition, we engage 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.

The Environmental Science business unit makes use of the development and production capacities of Crop Protection and its innovative active ingredients. Our strategy is to expand our leading market position by developing and marketing innovative and sustainable products tailored to the specific needs of consumers and professional users. Such products are designed to be easy to use and safe to handle while satisfying society’s increasing requirements in the growing and greening, and health and hygiene areas.

Our BioScience business unit comprises the research, development and commercialization of seeds and solutions based on modern breeding methods and plant biotechnology. We will continue to expand our activities in seeds and plant traits with the aim of raising BioScience sales to about €1.4 billion by 2018. Our seed business has traditionally focused on four core-crop growth areas: canola, rice, cotton and vegetables. We aim to build on the strong market positions we have achieved in these crops by introducing new varieties and expanding into new regional markets. In 2009 we embarked on research into improved cereal varieties and defined soybeans as an additional research focus. As in other crops, our goals here include increasing yields and making plants more resistant to adverse weather conditions. Furthermore, we not only market our technologies in our own seed products, but also increasingly offer them for other crops through out-licensing.

CropScience markets its products in more than 120 countries worldwide. In the coming years we intend to further expand our business particularly in fast-growing markets such as eastern Europe, Russia, India, China and Brazil. In these countries there is major potential for the agriculture industry to cover the increasing 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

The strategy of MaterialScience is based on safeguarding its existing competitive position in its traditional markets, supplementing the portfolio with innovative new businesses and achieving profitable growth in the emerging markets. The financial and economic crisis has presented a major challenge to our customer industries, particularly in North America and Europe, to which we have responded appropriately. However, we believe that the long-term market trends remain unaffected by the crisis and continue to be relevant to our business strategy.

Our aim is to maintain our position in the isocyanates market and continue improving profitability. To achieve this, we endeavor to steadily boost the efficiency of our production and administration processes. We continuously evaluate potential investments in additional production capacities against the background of a constantly changing market situation. We are also working to strengthen our downstream business activities such as BaySystems® in the Polyurethanes business unit and compounding in the Polycarbonates business unit in order to increase the share of sales contributed by our differentiated business. At the same time, we are grasping new business opportunities based on the competencies of MaterialScience. This means driving forward our newly formed Functional Films, Carbon Nanotubes and Medical Coatings & Adhesives businesses, in which we are positioning ourselves as a focused technology leader.

Our goal in the Polyurethanes business unit is to expand our global market leadership in isocyanates, at the same time ensuring cost leadership in all areas. In 2010 we will complete the construction of our 250,000 tons-per-year TDI plant in Shanghai, China, which is due on stream in the second half of 2011. This facility is designed to support our long-term growth in Asia. We also intend to consolidate the production of isocyanates in Europe, stepping up our output in line with market trends. Our polyether polyols will primarily support growth in the isocyanates business in order to bolster our portfolio of customer solutions. In the BaySystems® business we aim to generate profitable growth and further expand our global market share. We will therefore proceed with our successful systems house strategy.

The polycarbonate industry currently faces significant overcapacities on the world market. We are addressing this trend with a two-pronged strategy. On the one hand, we aim to achieve cost leadership by operating world-scale facilities in all regions. At the same time, as a leading development and technology partner, we are offering our customers differentiated solutions in all polycarbonate applications.

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-screen televisions. We also plan to sustainably improve the performance of the Polycarbonates business unit by increasing distribution efficiency in standard segments, sharpening the focus of our research and continuing to improve cost structures.

The Coatings, Adhesives, Specialties business unit seeks to defend and selectively expand its market position in the strategic business entity "Basic and Modified Isocyanates." With this goal in mind, we plan to meet rising demand in the growth regions by increasing production capacities and expanding our technical centers. We aim to further improve profitability in the strategic business entity "Resins" by narrowing the focus of our portfolio toward modern waterborne and UV-curing coating and adhesive systems. The cost structures for our conventional systems are being improved, mainly by consolidating production capacities.

We have combined our activities in innovative surfaces and substrate materials into a new strategic business entity "Functional Films and Specialties." This includes applications in cosmetics, medical technology, carbon nanotubes for improving the properties of plastics and metals, and the area of functional films. The focuses of this business, which is still at an early stage of development, include formable coated films for electronic and automotive applications and forgery-proof Makrofol® films for identification and bank cards.

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 3.38]

	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," page 118ff.

11.3 Economic Outlook

The worldwide economic recovery is expected to continue in 2010. However, the impact of the global business downturn in 2009 will continue to be felt for some time to come, making it unlikely that the global economy will return to its pre-crisis condition in 2010.

The economic perspectives for 2010 are marked by considerable uncertainty. The risks jeopardizing the prospects for a sustained upswing remain in place for the time being, with investor and consumer reticence likely to continue initially in 2010 in view of global overcapacities and continuing problems on the international financial markets. In addition, the effects of fiscal stimulus measures will come to an end in most industry sectors. As a result, economic growth in both Europe and the United States will probably be only modest at first. By contrast, a stronger recovery is likely in the emerging markets, particularly those of Asia and Latin America. For 2010 as a whole we expect to see a moderate expansion of the world economy.

HealthCare

We expect growth in the **pharmaceutical market** in 2010 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 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 increasing cost pressure being exerted by health organizations. The overall economic environment is unlikely to provide significant growth stimuli for the pharmaceutical market.

We expect the global **consumer health market** to continue growing moderately in 2010, bolstered by a slight improvement in economic conditions in western Europe and North America compared with 2009.

CropScience

We believe the **seed and crop protection market** as a whole will recover in 2010. Although prices for agricultural crop commodities and energy are still expected to fluctuate and uncertainty in the financial markets will persist, agricultural activity is likely to intensify. This is mainly because of long-term factors shaping world agriculture markets, such as steadily rising demand for food and feed products and a shortage of arable land.

Assuming normal weather conditions, we expect currency-adjusted world market growth of approximately 3% for agrochemicals and over 5% for high-quality seeds and plant traits in 2010. We believe this growth will result from both rising prices and positive volume effects. Compared to the very strong first quarter of 2009, we anticipate market shrinkage initially, followed by a recovery over the course of the year. In regional terms, we expect the largest growth stimulus to come from Latin America, where soybean cultivation in particular should increase considerably compared with 2009. Crop production is also expected to increase in the Asia/Pacific region. This applies particularly to rice and cereals, and also to specialty crops such as fruit and vegetables. As far as the industrialized countries are concerned, however, we predict stagnation in western European crop protection markets in 2010, with slight declines possible in North America.

MaterialScience

Growth expectations for 2010 in the main customer industries of **MaterialScience** are moderately optimistic. The extent of the economic recovery will depend mainly on a sustained increase in demand in North America and Europe and continued growth in Asia.

The **automotive industry** will probably experience strong regional variations in 2010. Western Europe could be hardest hit by the slump in volumes, as unit sales in 2009 were propped up in all major vehicle-producing countries by massive stimulus programs and demand for automobiles may therefore be partially saturated. In North America, a recovery is expected in 2010 following an extremely weak year. However, we do not expect production to return to pre-crisis levels in the foreseeable future. Asia – led by China – will probably remain the growth engine for the automotive industry. There the government stimulus programs are continuing and are targeted very much toward boosting Chinese output.

The **electrical and electronics industry** should emerge quickly from the crisis thanks to the variety of segments it includes. Factors making robust growth likely in the coming years include the continuing high demand for modern infrastructure, particularly in the emerging markets, the highly competitive innovation climate in the industry, the challenges presented by climate change and the expansion of regenerative energies.

We expect a slight recovery in the global **construction industry** in 2010, partly because of the massive government stimulus programs. Continuing robust development in China and India and an improvement in eastern Europe should support a return to positive growth rates. By contrast, we predict a hesitant recovery in building investment in western Europe, North America and Japan.

We believe that the **furniture industry** will stabilize increasingly during 2010 following a phase of market shrinkage in 2009. However, many of the countries heavily impacted by the economic crisis will probably see only low rates of growth. The industry is likely to benefit from a sustained market rebound in subsequent years. The emerging economies of Asia, eastern Europe and Latin America should harbor development potential.

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 2010. We are targeting currency- and portfolio-adjusted sales growth of more than 5% and aim to increase EBITDA before special items toward €7 billion. Core earnings per share (calculated as explained in Chapter 4.3, page 75) are expected to improve by about 10%. Our estimates are based on an exchange rate of US$1.40 (2009 average: US$1.39) to the euro.

We do not expect to incur special charges for restructuring programs in 2010.

Our capital expenditure budget is €1.4 billion. Depreciation and amortization are expected to total about €2.6 billion, including €1.3 billion in amortization of intangible assets. We plan to spend some €2.9 billion on research and development.

Having largely achieved our current target margins, our main focus for the future is on creating value through profitable growth. To do this we plan to continue investing primarily in our research and development pipeline, in BioScience and in the emerging markets. We expect to achieve steady currency- and portfolio-adjusted sales growth of approximately 5% annually through 2012 and plan to raise EBITDA before special items to around €8 billion within this period. We are targeting an average 10% annual improvement in core earnings per share, which would mean an increase to around €5 per share.

HealthCare

HealthCare plans to grow at least with the market in 2010. This corresponds to a currency- and portfolio-adjusted expansion of about 5%. We also intend to increase EBITDA before special items.

We aim to continue growing at least with the market through 2012 and to steadily improve EBITDA before special items.

CropScience

For CropScience we anticipate slightly above-market growth in 2010, equivalent to a currency- and portfolio-adjusted increase of approximately 4%. We are targeting a small increase in EBITDA before special items. However, the business environment is currently more difficult than expected.

We aim to grow at least with the market through 2012 and to further improve EBITDA before special items.

MaterialScience

We anticipate a continuing recovery in the markets relevant to our MaterialScience business. In light of this we aim to increase sales by more than 10% on a currency- and portfolio-adjusted basis in 2010. We are targeting a substantial increase in EBITDA before special items.

We expect to report somewhat higher sales in the first quarter of 2010 than in the fourth quarter of 2009. In light of further increases in raw material costs, we expect first-quarter EBITDA before special items to be roughly level with the preceding quarter.

Provided the economic recovery continues, we expect MaterialScience to return to its pre-crisis sales level of more than €10 billion by 2012. We plan to considerably increase EBITDA before special items.

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

Bayer Group Consolidated Income Statements

[Table 4.1]

	Note	2008	2009
		€ million	€ million
Net sales	[7]	**32,918**	**31,168**
Cost of goods sold		(16,456)	(15,135)
Gross profit		**16,462**	**16,033**
Selling expenses	[8]	(8,105)	(7,923)
Research and development expenses	[9]	(2,653)	(2,746)
General administration expenses		(1,649)	(1,623)
Other operating income	[10]	907	922
Other operating expenses	[11]	(1,418)	(1,657)
Operating result [EBIT]		**3,544**	**3,006**
Equity-method loss	[13.1]	(62)	(48)
Non-operating income		589	789
Non-operating expenses		(1,715)	(1,877)
Non-operating result	[13]	**(1,188)**	**(1,136)**
Income before income taxes		**2,356**	**1,870**
Income taxes	[14]	(636)	(511)
Income from continuing operations after taxes		**1,720**	**1,359**
Income from discontinued operations after taxes	[6.3]	**4**	**-**
Income after taxes		**1,724**	**1,359**
of which attributable to non-controlling interest	[15]	5	-
of which attributable to Bayer AG stockholders (net income)		**1,719**	**1,359**
Earnings per share (€)			
From continuing operations	[16]		
Basic*		2.22	1.70
Diluted*		2.22	1.70
From discontinued operations	[16]		
Basic*		-	-
Diluted*		-	-
From continuing and discontinued operations	[16]		
Basic*		2.22	1.70
Diluted*		2.22	1.70

*The ordinary shares that resulted from conversion of the mandatory convertible bond were treated as already issued shares following the issuance of the bond.

Bayer Group Consolidated Statements of Comprehensive Income

[Table 4.2]

	Note	2008	2009
		€ million	€ million
Income after taxes		**1,724**	**1,359**
of which attributable to non-controlling interest	[15]	*5*	*-*
of which attributable to Bayer AG stockholders		*1,719*	*1,359*
Changes in fair values of derivatives designated as cash flow hedges	[30.3]	(110)	89
Recognized in profit or loss		(47)	10
Income taxes	[14]	55	(38)
Changes recognized outside profit or loss (cash flow hedges)		**(102)**	**61**
Changes in fair values of available-for-sale financial assets	[20]	(32)	11
Recognized in profit or loss		1	-
Income taxes	[14]	9	(2)
Changes recognized outside profit or loss (available-for-sale financial assets)		**(22)**	**9**
Change 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]	(1,067)	(437)
Income taxes	[14]	455	117
Change 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)		**(612)**	**(320)**
Exchange differences on translation of operations outside the euro zone		(413)	284
Recognized in profit or loss		-	-
Changes recognized outside profit or loss (exchange differences)		**(413)**	**284**
Changes in revaluation surplus (IFRS 3)	[24]	**8**	**-**
Effects of changes in liabilities from non-controlling interest in partnerships on other comprehensive income	[29]	**(15)**	**15**
Effects of changes in scope of consolidation		**1**	**(1)**
Total changes recognized outside profit or loss		**(1,155)**	**48**
of which attributable to non-controlling interest		*3*	*2*
of which attributable to Bayer AG stockholders		*(1,158)*	*46*
Total comprehensive income		**569**	**1,407**
of which attributable to non-controlling interest		*8*	*2*
of which attributable to Bayer AG stockholders		*561*	*1,405*

Bayer Group Consolidated Statements of Financial Position

[Table 4.3]

	Note	Dec. 31, 2008	Dec. 31, 2009
		€ million	€ million
Noncurrent assets			
Goodwill	[17]	8,647	8,704
Other intangible assets	[17]	13,951	12,842
Property, plant and equipment	[18]	9,492	9,409
Investments in associates	[19]	450	395
Other financial assets	[20]	1,197	1,200
Other receivables	[23]	458	549
Deferred taxes	[14]	1,156	950
		35,351	**34,049**
Current assets			
Inventories	[21]	6,681	6,091
Trade accounts receivable	[22]	5,953	6,106
Other financial assets	[20]	634	367
Other receivables	[23]	1,284	1,357
Claims for income tax refunds		506	347
Cash and cash equivalents	[36]	2,094	2,725
Assets held for sale and discontinued operations	[6.3]	8	-
		17,160	**16,993**
Total assets		**52,511**	**51,042**
Equity	[24]		
Capital stock of Bayer AG		1,957	2,117
Capital reserves of Bayer AG		4,028	6,167
Other reserves		10,278	10,613
		16,263	**18,897**
Equity attributable to non-controlling interest		77	54
		16,340	**18,951**
Noncurrent liabilities			
Provisions for pensions and other post-employment benefits	[25]	6,347	6,517
Other provisions	[26]	1,351	1,516
Financial liabilities	[27]	10,614	11,460
Other liabilities	[29]	432	415
Deferred taxes	[14]	3,592	3,210
		22,336	**23,118**
Current liabilities			
Other provisions	[26]	3,163	3,089
Financial liabilities	[27]	6,256	1,489
Trade accounts payable	[28]	2,464	2,735
Income tax liabilities	[26.1]	65	93
Other liabilities	[29]	1,874	1,567
Liabilities directly related to assets held for sale and discontinued operations	[6.3]	13	-
		13,835	**8,973**
Total equity and liabilities		**52,511**	**51,042**

2008 figures restated

Bayer Group Consolidated Statements of Cash Flows

[Table 4.4]

	Note	2008	2009
		€ million	€ million
Income from continuing operations after taxes		1,720	1,359
Income taxes		636	511
Non-operating result		1,188	1,136
Income taxes paid or accrued		(812)	(636)
Depreciation and amortization		2,722	2,809
Change in pension provisions		(292)	(366)
(Gains) losses on retirements of noncurrent assets		(75)	(155)
Non-cash effects of the remeasurement of acquired assets (inventory work-down)		208	-
Gross cash flow		**5,295**	**4,658**
Decrease (increase) in inventories		(692)	604
Decrease (increase) in trade accounts receivable		(134)	(28)
(Decrease) increase in trade accounts payable		16	235
Changes in other working capital, other non-cash items		(877)	(94)
Net cash provided by (used in) operating activities (net cash flow)	[33]	**3,608**	**5,375**
Cash outflows for additions to property, plant, equipment and intangible assets		(1,759)	(1,575)
Cash inflows from sales of property, plant, equipment and other assets		167	98
Cash inflows from (outflows for) divestitures		(41)	70
Cash inflows from (outflows for) noncurrent financial assets		(390)	169
Cash outflows for acquisitions less acquired cash		(1,617)	(354)
Interest and dividends received		553	477
Cash inflows from (outflows for) current financial assets		(2)	(11)
Net cash provided by (used in) investing activities	[34]	**(3,089)**	**(1,126)**
Capital contributions		-	-
Dividend payments and withholding tax on dividends		(1,126)	(973)
Issuances of debt		2,277	2,798
Retirements of debt		(752)	(4,240)
Interest paid		(1,272)	(1,206)
Net cash provided by (used in) financing activities	[35]	**(873)**	**(3,621)**
Change in cash and cash equivalents due to business activities		**(354)**	**628**
Cash and cash equivalents at beginning of year		**2,531**	**2,094**
Change in cash and cash equivalents due to changes in scope of consolidation		3	3
Change in cash and cash equivalents due to exchange rate movements		(86)	-
Cash and cash equivalents at end of year	[36]	**2,094**	**2,725**

2008 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, 2007	**1,957**	**4,028**	**12,949**	**(2,317)**
Equity transactions with owners				
Capital increase/decrease				
Dividend payments			(1,032)	
Other changes			4	
Changes recognized outside profit or loss**			(626)	(416)
Net income 2008			1,719	
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)**

* OCI = other comprehensive income
** 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
	32	**31**	**54**	**16,734**	**87**	**16,821**
				(1,032)	(9)	(1,041)
			(4)	-	(9)	(9)
	(22)	(102)	8	(1,158)	3	(1,155)
				1,719	5	1,724
	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**

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	
	2008	2009	2008	2009
	€ million	€ million	€ million	€ million
Net sales (external)	10,030	10,467	5,377	5,521
Change	+4.0%	+4.4%	+4.2%	+2.7%
Currency-adjusted change	+7.1%	+3.3%	+9.0%	+3.2%
Intersegment sales	97	149	6	17
Net sales	**10,127**	**10,616**	**5,383**	**5,538**
Other operating income	217	400	41	41
Operating result (EBIT)	1,222	1,696	959	944
EBIT before special items	1,760	2,018	1,004	994
EBITDA before special items	2,920	3,193	1,237	1,275
Gross cash flow	2,092	2,186	953	967
Capital invested	17,451	17,379	5,822	5,870
CFROI	12.3%	12.6%	17.6%	16.5%
Net cash flow	1,547	2,280	712	1,151
Equity-method income (loss)	-	-	-	-
Equity-method investments	-	-	-	-
Assets	21,953	20,844	6,562	6,432
Capital expenditures	424	428	186	137
Additions to noncurrent assets from acquisitions	259	5	642	55
Depreciation, amortization and write-downs	1,278	1,216	233	292
of which write-downs	121	48	-	36
Liabilities	3,809	3,839	1,508	1,554
Research and development expenses	1,485	1,572	257	275
Number of employees (as of Dec. 31)	36,000	36,300	17,100	17,100

2008 figures restated

Key Data by Region

	Europe		North America	
	2008	2009	2008	2009
	€ million	€ million	€ million	€ million
Net sales (external) – by market	14,549	12,968	8,026	7,705
Change	+1.4%	−10.9%	−1.7%	−4.0%
Currency-adjusted change	+2.1%	−8.8%	+5.3%	−8.1%
Net sales (external) – by point of origin	15,845	14,189	7,985	7,638
Change	+1.7%	−10.5%	−2.6%	−4.3%
Currency-adjusted change	+2.4%	−8.6%	+4.4%	−8.6%
Interregional sales	5,761	5,756	2,419	2,372
Other operating income	554	545	116	193
Operating result [EBIT]	2,230	1,981	914	583
Assets	33,180	32,450	9,637	8,934
Capital expenditures	945	894	385	295
Depreciation, amortization and write-downs	1,995	1,943	403	460
Liabilities	22,640	19,906	4,945	4,449
Research and development expenses	2,014	2,080	459	507
Number of employees (as of Dec. 31)	55,500	54,500	17,000	16,300

[Table 4.6]

CropScience				MaterialScience		Reconciliation					
Crop Protection		Environmental Science, BioScience		MaterialScience		All Other Segments		Corporate Center and Consolidation		Continuing Operations	
2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
5,339	5,424	1,043	1,086	9,738	7,520	1,380	1,139	11	11	32,918	31,168
+11.7%	+1.6%	−0.2%	+4.1%	−6.7%	−22.8%	+5.7%	−17.5%	-	-	+1.6%	−5.3%
+16.4%	+2.3%	+4.2%	+4.1%	−4.1%	−24.4%	+6.5%	−17.4%	-	-	+5.0%	−5.9%
47	40	8	12	41	55	1,616	1,647	(1,815)	(1,920)	-	-
5,386	**5,464**	**1,051**	**1,098**	**9,779**	**7,575**	**2,996**	**2,786**	**(1,804)**	**(1,909)**	**32,918**	**31,168**
228	187	28	19	265	88	64	37	64	150	907	922
804	713	114	85	537	(266)	78	32	(170)	(198)	3,544	3,006
962	875	122	142	586	(126)	78	63	(170)	(194)	4,342	3,772
1,397	1,301	206	207	1,088	446	194	189	(111)	(139)	6,931	6,472
1,026	924	166	119	850	319	273	241	(65)	(98)	5,295	4,658
7,016	7,633	1,531	1,754	8,919	8,453	912	587	1,025	1,269	42,676	42,945
14.8%	12.6%	10.8%	7.2%	10.1%	3.7%	-	-	-	-	13.0%	10.9%
653	591	83	154	782	849	230	261	(399)	89	3,608	5,375
-	-	-	-	(62)	(48)	-	-	-	-	(62)	(48)
-	-	-	-	450	395	-	-	-	-	450	395
7,241	7,383	1,648	1,978	7,586	6,896	1,218	1,170	6,295	6,339	52,503	51,042
273	282	41	64	831	512	201	206	26	40	1,982	1,669
-	12	-	351	81	28	4	4	-	-	986	455
448	448	84	65	504	607	117	126	58	55	2,722	2,809
16	21	1	1	5	41	3	2	6	-	152	149
2,568	2,388	447	598	1,952	1,947	1,571	1,969	24,303	19,796	36,158	32,091
492	482	157	171	221	207	34	34	7	5	2,653	2,746
15,000	15,200	3,300	3,500	15,100	14,300	21,500	21,400	600	600	108,600	108,400

[Table 4.7]

Asia/Pacific		Latin America/ Africa/Middle East		Reconciliation		Continuing Operations	
2008	2009	2008	2009	2008	2009	2008	2009
€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
5,385	5,712	4,958	4,783	-	-	32,918	31,168
+3.3%	+6.1%	+6.4%	−3.5%	-	-	+1.6%	−5.3%
+6.2%	+0.3%	+12.2%	−0.6%	-	-	+5.0%	−5.9%
5,184	5,486	3,904	3,855	-	-	32,918	31,168
+3.8%	+5.8%	+7.9%	−1.3%	-	-	+1.6%	−5.3%
+6.8%	−0.1%	+15.1%	+2.6%	-	-	+5.0%	−5.9%
341	334	297	360	(8,818)	(8,822)	-	-
40	53	197	131	-	-	907	922
143	367	427	273	(170)	(198)	3,544	3,006
5,500	5,255	2,855	3,246	1,331	1,157	52,503	51,042
525	357	127	123	-	-	1,982	1,669
196	268	70	83	58	55	2,722	2,809
3,724	3,288	1,192	1,239	3,657	3,209	36,158	32,091
144	131	36	28	-	-	2,653	2,746
20,800	21,600	15,300	16,000	-	-	108,600	108,400

2. General information

The consolidated financial statements of the Bayer Group as of December 31, 2009, have been prepared – pursuant to Section 315a of the German Commercial Code – according to the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB), London, and the Interpretations of the International Financial Reporting Interpretations Committee (IFRIC) endorsed by the European Union and in effect at the closing date.

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, 2010. The Audit Committee of the Supervisory Board of Bayer AG discussed the consolidated financial statements of the Bayer Group at its meeting on February 23, 2010 and the Supervisory Board approved them at its meeting on February 24, 2010.

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. The financial statements of the individual consolidated companies are prepared as of the closing date of the Group financial statements.

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, claims for tax refunds, tax liabilities and inventories are always presented as current items, deferred tax assets and liabilities and pension provisions as noncurrent items.

In compliance with IFRS 5 (Non-current Assets Held for Sale and Discontinued Operations), a distinction is made between continuing operations and discontinued operations or assets held for sale. The discontinued operations are recognized as separate line items in the income statement, statement of financial position and statement of cash flows. Depreciation of noncurrent assets allocable to discontinued operations and of assets held for sale ceased when the respective divestiture was announced. All data in these notes refer to continuing operations, except where otherwise indicated. Discontinued operations are described in Note [6.3].

Changes in recognition and valuation principles are explained in the notes. The retrospective application of new or revised standards requires – except as otherwise provided in the respective standard – that earnings for the preceding year and the opening statement of financial position for the reporting year be restated as if the new recognition and valuation principles had been applied in the past.

3. Effects of new accounting pronouncements

Accounting standards applied for the first time in 2009
In 2009, the following accounting standards and interpretations were applied for the first time. None of the new standards had a material impact on the presentation of the Group's financial position or results of operations, or on earnings per share.

In November 2006, the IASB published IFRS 8 (Operating Segments), which replaces IAS 14 (Segment Reporting), the existing standard in this field. IFRS 8 follows the "management approach," which means that segment reporting must be based on the information used internally by management to identify operating segments and to evaluate their performance.

In March 2007, the IASB issued amendments to IAS 23 (Borrowing Costs) requiring the capitalization of interest on borrowings made to acquire, construct or produce a qualifying asset. Interest on borrowed capital that is directly attributable to qualifying assets was already capitalized in the past, utilizing the option that existed under the previous version of the standard.

In September 2007, the IASB issued amendments to IAS 1 (Presentation of Financial Statements). Apart from proposing the renaming of certain sections of the financial statements, these amendments mandate that in certain circumstances an opening statement of financial position for the previous financial year be published along with a separate presentation of changes in equity arising from transactions with owners and with non-owners, and that the income tax effects of each component directly recognized in equity be disclosed separately in the statement of comprehensive income or in the notes.

In January 2008 the IASB published amendments to IFRS 2 (Share-based Payment) to clarify the definitions of vesting conditions (exercisability) and cancellation of share-based payment. The revised standard basically states that vesting conditions are defined as normal service and performance conditions only. It also mandates that all plan cancellations, whether by the company or the employee, receive the same accounting treatment.

In February 2008, the IASB issued amendments to IAS 32 (Financial Instruments: Presentation) and IAS 1 (Presentation of Financial Statements). The changes relate mainly to the distinction between equity and debt in accounting for company capital to which cancellation rights are attached (puttable financial instruments). Such cancellable instruments may now be classified as equity in certain circumstances.

In May 2008 the IASB published amendments – mainly of a terminological or editorial nature – to a number of International Financial Reporting Standards as part of its "Annual Improvements" project.

The amendments to IFRS 7 (Financial Instruments: Disclosures) issued in March 2009 mandate additional disclosures about financial instruments that are measured at fair value. Further information also has to be provided on liquidity risks. Notably, the revised version of IFRS 7 requires a three-level disclosure hierarchy according to the basis on which the fair values have been measured. The top level comprises fair values based on quoted market prices, while the bottom level contains instrument fair values not based on observable market data. Additional disclosures are required for the latter category, mainly regarding the effects of the fair value measurement of these instruments on the income statement. A company's maturity analysis must include financial guarantees and credit facilities.

In June 2007 the IFRIC issued Interpretation IFRIC 13 (Customer Loyalty Programmes), which addresses both revenue and expense recognition relating to "award credits" that are granted to customers as purchase incentives and can be exchanged for free or discounted goods or services in the future. An amount reflecting the value of the award credits granted in connection with a transaction must be accounted for as a separate transaction component. Part of the fair value of the goods or services delivered is allocated to the award credits and recognized as a liability. Revenue recognition then occurs in the period in which the credits are redeemed or expire.

IFRIC 15 (Agreements for the Construction of Real Estate), issued in July 2008, addresses revenue recognition for real estate sold before completion. The interpretation defines the criteria for applying either IAS 11 or IAS 18.

IFRIC 16 (Hedges of a Net Investment in a Foreign Operation), also issued in July 2008, defines the type of currency risk to which hedge accounting may be applied when hedging a net investment in a foreign operation and which entity or entities within a group may hold the respective hedging instrument.

IFRIC 18 (Transfer of Assets from Customers) was issued in January 2009. The interpretation defines the accounting treatment of assets and liabilities in the context of agreements under which a company receives from a customer an item of property, plant or equipment that the company must then use either to connect the customer to a network or to provide the customer with long-term access to a supply of goods or services. It also sets forth the conditions for revenue recognition.

Amendments were issued in March 2009 to IFRIC 9 (Reassessment of Embedded Derivatives) and IAS 39 (Financial Instruments: Recognition and Measurement). These amendments clarify the accounting treatment of embedded derivatives for companies that make use of the reclassification amendment to IAS 39 issued by the IASB in October 2008. The reclassification amendment allows companies to reclassify certain financial instruments out of the "at fair value through profit or loss" category in specific circumstances. The amendments of March 2009 clarify that, when a financial asset is reclassified out of the "at fair value through profit or loss" category, all embedded derivatives must be remeasured and, if necessary, accounted for separately in the financial statements.

Published accounting standards that have not yet been applied

The IASB and the IFRIC have issued the following standards, amendments to standards, and interpretations whose application was not yet mandatory for the 2009 fiscal year and is conditional upon their endorsement by the European Union.

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.
- 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.

IFRS 3 (revised 2008) and IAS 27 (revised 2008) are applicable prospectively for annual periods beginning on or after July 1, 2009. Their impact on the presentation of the Group's financial position and results of operations will depend on the scale of future business combinations or divestments.

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. The amendments are to be applied for the first time for annual periods beginning on or after July 1, 2009. They will not have a material impact on the presentation of the Group's financial position or results of operations.

In April 2009 the IASB issued a second 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. Except as otherwise specified, the amendments, which have not yet been endorsed by the European Union, are to be applied for annual periods beginning on or after January 1, 2010. They will not have a material impact on the presentation of the Group's financial position or results of operations.

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). The revised standard, which has not yet been endorsed by the European Union, is to be applied retrospectively for annual periods beginning on or after January 1, 2010. The amendments will have no impact on the presentation of the Group's financial position, results of operations or earnings per share.

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. Earlier application is permitted. It will not have a material impact on the presentation of the Group's financial position, results of operations or earnings per share.

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. Earlier application is permitted. It has not yet been endorsed by the European Union. The Bayer Group is currently evaluating the impact that the application of the revised standard may have on the presentation of its financial position and 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 Bayer Group is currently evaluating the impact that the application of the new standard may have on the presentation of its financial position and results of operations.

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 dividend paid and the carrying amount of the net assets distributed must be recognized in profit or loss at the distribution date. This interpretation is to be applied prospectively for annual periods beginning on or after July 1, 2009. It will not have a material impact on the presentation of the Group's financial position or 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. Earlier application is permitted. The interpretation has not yet been endorsed by the European Union. 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 amendments were 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 amendments apply when a company is subject to minimum pension plan funding requirements. They enable prepayments of the respective contributions to be recognized as an asset. The amendments are to be applied for annual periods beginning on or after January 1, 2011. Earlier application is permitted. They have not yet been endorsed by the European Union. These amendments 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 policies

The financial statements of the consolidated companies are prepared according to uniform accounting 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.

The preparation of the financial statements for the Bayer Group requires the use of estimates and assumptions that affect the classification and measurement of assets, liabilities, income, expenses and contingent liabilities. Estimates and assumptions mainly relate to the useful life of noncurrent assets, the discounted cash flows used for impairment testing or 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.

Consolidation

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.

Joint ventures are included by proportionate consolidation according to the same principles.

Capital consolidation is performed according to IAS 27 (Consolidated and Separate Financial Statements) by offsetting the net carrying amounts of subsidiaries in the statement of financial position against their underlying equity. Equity of subsidiaries is valued 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 cost of acquisition of a company included at equity in the consolidated financial statements 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 at equity 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 write-downs of goodwill – are reflected in the non-operating result. Intercompany profits and losses for these companies were not material in either 2009 or 2008.

Foreign currency translation

In the financial statements of the individual consolidated companies, all 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. Derivatives are stated at fair value. The majority of consolidated companies autonomously carry out their activities financially, economically and organizationally and their functional currencies are therefore the respective local currencies.

The assets and liabilities of foreign companies 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 rates for the year. Equity components 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 recognized in equity and stated separately in the tables in the notes. 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 4.8]

		Closing rate		Average rate	
		2008	2009	2008	2009
ARS	Argentina	4.80	5.47	4.64	5.20
BRL	Brazil	3.25	2.51	2.67	2.77
CAD	Canada	1.70	1.51	1.56	1.59
CHF	Switzerland	1.49	1.48	1.59	1.51
CNY	China	9.50	9.84	10.23	9.52
GBP	United Kingdom	0.95	0.89	0.80	0.89
JPY	Japan	126.14	133.16	152.37	130.31
MXN	Mexico	19.23	18.92	16.31	18.79
USD	United States	1.39	1.44	1.47	1.39

Net sales and other operating income

Revenues from the sale of products and the rendering of services are recognized 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 income 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 2009 amounted to 1.8% of total net sales (2008: 1.4%). In addition to rebates, Group companies offer cash discounts for prompt payment in some countries. Provisions for cash discounts as of December 31, 2009 and December 31, 2008 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 2009, 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 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.

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 the health care business, various research and development collaborations and alliances are maintained with third parties involving the provision of funding and/or payments for the achievement of performance milestones.

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.

According to IAS 38 (Intangible Assets), research costs cannot be capitalized; development costs must be capitalized if, and only if, specific, narrowly defined conditions are fulfilled. Development costs must be capitalized if it is sufficiently certain that the future economic benefits to the company will also cover the respective development costs. 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.

The following costs in particular, by their very nature, constitute research and development expenses: the appropriate allocations of direct personnel and material costs and related overheads for application technology, engineering and other departments; costs for experimental and pilot facilities; costs for services purchased in connection with research and development activities; costs for clinical research; costs for the utilization of third parties' patents for research and development purposes; and other taxes related to research facilities.

Under IAS 38 (Intangible Assets), milestone payments must initially be capitalized to the extent that they are related to the acquisition of the related technology rights, even if uncertainties exist as to whether the research and development will ultimately succeed in producing a saleable product. Where research and development collaborations are embedded in contracts for a strategic alliance, it is necessary to assess whether milestone or advance 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.

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 distribution of those cash flows over time.

Write-downs are made for impairment losses. Corresponding write-backs are made where the reasons for previous write-downs of intangible assets other than goodwill no longer apply, provided that the write-backs do not cause the carrying amount to exceed the amortized cost of acquisition.

Goodwill and other assets with an indefinite life are subject to annual impairment tests, which are explained under "Procedure used in global impairment testing and its impact."

Property, plant and equipment

Property, plant and equipment is carried at the cost of acquisition or construction depreciated over its estimated useful life. A write-down (impairment loss) is recognized in addition if an asset's value falls below the depreciated cost of acquisition or construction.

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, 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.

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 4.9]

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

Declines in value that go beyond regular depreciation and are expected to be permanent are accounted for by write-downs. Corresponding write-backs are made where the reasons for previous write-downs no longer apply, provided that the write-backs do not cause the carrying amount to exceed the cost of acquisition less accumulated depreciation.

When assets are sold, closed down or scrapped, the difference between the net proceeds and the 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. The leased asset is depreciated by the straight-line method. If subsequent transfer of title to the leased asset is uncertain, it is depreciated over the shorter of its estimated useful life or the lease term. The lease payments to be made are divided into the principal portion and the interest expense using the effective-interest method.

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. This category also comprises receivables from forward commodity contracts and receivables from other derivatives, which are included in other financial assets, 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, an impairment 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 impairment charges.

If there are substantial, objective indications that loans and receivables, held-to-maturity financial assets or available-for-sale financial assets are impaired, their carrying amount is compared to the present value of the expected future cash flows, discounted by the current market rate of return on a comparable financial asset. If impairment is confirmed, they are written down by the difference between the two amounts. Indications of impairment 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.

Corresponding write-backs are made where the reasons for previous write-downs no longer apply, provided that the write-backs do not cause the carrying amount to exceed the amortized cost. No write-backs are made for available-for-sale equity instruments.

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. Many transactions constitute economic hedges but do not qualify for hedge accounting under IAS 39 (Financial Instruments: Recognition and Measurement).

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 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 commodity options and those arising from the hedging of forecasted transactions in foreign currencies are recognized in other operating income and expenses.

The fair values of derivatives 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, currency 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. Certain long-term commodity contracts to which fair values cannot be assigned are measured with the aid of valuation models based on internal fundamental data.

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 the lower of acquisition or production cost – calculated by the weighted-average method – and net realizable value, which is the realizable 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 carry-forwards can be utilized in the future is the subject of forecasts by the individual consolidated companies regarding their future earnings situation and other parameters.

The deferred tax liabilities recognized on planned dividend payments by subsidiaries depend on assumptions regarding the future earnings situation of the subsidiaries concerned, their future financing structure and other factors. These assumptions are subject to regular review. Changes in the assumptions or in circumstances may necessitate adjustments that result in allocations to deferred taxes or reversals thereof.

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 the employees' remuneration 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 is calculated in accordance with IAS 19 (Employee Benefits) by the projected unit credit method. The future benefit obligations are valued by actuarial methods. This involves assumptions regarding life expectancy, staff fluctuation, and other parameters that depend partly on the economic situation in the respective country. The other main factors on which these calculations are based are assumptions regarding discount rate, expected return on plan assets, the rate of future compensation increases and variations in health care costs. Statistical information such as attrition and mortality rates is also used in estimating the expenses and liabilities under the plans. The effects of changes in important parameters are explained in Note [25].

The expenses for the benefits expected to be payable after retirement are spread over each employee's entire period of employment, also allowing for future changes 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).

The expected future cash outflows are discounted in order to recognize obligations for pensions and other post-employment benefits at their present value as of the closing date. 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 that is used to discount pension and post-employment benefit obligations as part of the actuarial valuation 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, as these generally provide higher yields by virtue of their risk structure.

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.

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 life of participants may also affect the amount 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 inherent difficulties in estimating liabilities in the businesses in which the Group operates, especially those for which the risk of environmental damage is relatively greater (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 of time that 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 as costs for real estate no longer utilized or severance payments to employees.

Restructuring measures may include the sale or termination of business units, site closures, relocation of business activities, changes in management structure or a fundamental reorganization 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 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 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 litigation, 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 litigation 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, issues regarding 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. Upon resolution of any pending legal matter, the Bayer Group may be forced to incur charges in excess of presently established provisions and related insurance coverage. If courts find against Bayer in patent suits and this results in other manufacturers being permitted to market products developed or acquired by the Bayer Group, this could adversely impact the Group's financial position or results of operations.

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 cancelled, 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, advance payments 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.

Noncurrent assets held for sale and discontinued operations, and liabilities directly related thereto

Assets held for sale comprise noncurrent assets and disposal groups (net of any related liabilities), the carrying amounts of which will be realized primarily by way of a highly probable divestment transaction within the next twelve months or a divestment transaction currently being executed, and not through continued use. Such assets are recognized at the lower of the carrying amount and the fair value less costs to sell.

Acquisition accounting

Acquired businesses are accounted for using the purchase 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 purchase method requires certain estimates and assumptions especially concerning the determination of the fair values of the acquired intangible assets and property, plant and equipment as well as the liabilities assumed at the date of the acquisition. Moreover, the useful lives of the acquired intangible assets, property, plant and equipment have to be determined.

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 and developed technologies 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 approval 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 information available at the acquisition date.

The effect of the revaluation of assets relating to acquisitions made in stages is recognized in equity in compliance with IFRS 3 (Business Combinations). If a company is acquired in several stages, all of its assets and liabilities have to be completely revalued on the date on which the acquiring company gains control and recognized at fair value. If the new fair value of the assets already held by the acquiring company exceeds their carrying amount, the carrying amount must be increased accordingly. This adjustment is recognized in a separate equity item (revaluation surplus) and thus has no effect on net income.

Procedure used in global impairment testing and its impact

Goodwill, other indefinite-lived intangible assets and research and development projects are tested regularly for impairment in accordance with IFRS 3 (Business Combinations) in conjunction with the related revised versions of IAS 36 (Impairment of Assets) and IAS 38 (Intangible Assets).

Where goodwill or other indefinite-lived intangible assets are allocated to a cash-generating unit, they are tested for impairment annually, or more frequently if events or changes in circumstances indicate a possible impairment. This involves comparing the carrying amount of each cash-generating unit to the recoverable amount, which is the higher of the cash-generating unit's fair value less costs to sell or its value in use. The cash-generating units defined for the Bayer Group are generally the strategic business entities, which are the second financial reporting level below the segments.

Where the carrying amount of a cash-generating unit exceeds the recoverable amount, an impairment loss is recognized for the difference. First, the goodwill of the relevant strategic business entity is written down accordingly. Any remaining impairment loss is allocated among the other assets of the strategic business entity in proportion to their carrying amounts. This value adjustment is recognized in the income statement 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 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 assumed growth rates, depending on the strategic business entity being measured, are 0% to 1.8% (2008: 0% to 2.0%) for HealthCare, 1.4% to 4.0% (2008: 1.7% to 6.4%) for CropScience and 0.5% (2008: 0% to 1.0%) for MaterialScience.

Bayer calculates the cost of capital on the basis of weighted average cost of equity and debt capital. The underlying capital structure of each subgroup is determined 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.

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. The discount rates used are 6.9% (2008: 7.6%) for HealthCare, 6.7% (2008: 7.0%) for MaterialScience and 7.0% (2008: 7.9%) for CropScience. 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 after-tax discount rates quoted above are equivalent to pre-tax rates of 8.5% to 9.9% (2008: 9.2% to 10.7%) for HealthCare, 8.5% to 12.0% (2008: 8.6% to 12.9%) for CropScience and 8.4% to 9.7% (2008: 8.5% to 10.7%) for MaterialScience. These rates are based on assumptions and estimates relating to business-specific costs of capital, which in turn depend on country risks, credit risks, and additional risks resulting from the volatility of certain businesses. The risk adjustment for each subgroup is determined by benchmarking against comparable companies in the same industry sector.

Sensitivity analysis is 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 have been observed due to the global economic and financial crisis, 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 2009, as in 2008, no impairment losses were recorded on the basis of the global annual impairment testing of the cash-generating units.

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 charges in the future or – except in the case of goodwill – to valuation write-backs should the expected trends reverse.

5. Segment reporting

The accounting standard IFRS 8 (Operating Segments) was applied for the first time as of the beginning of 2009. In addition, the following changes were implemented compared with the Consolidated Financial Statements for 2008:

- The integration of the thermoplastic polyurethanes businesses into the Polyurethanes and the Coatings, Adhesives, Specialties business units completed an important phase in the reorganization of the MaterialScience portfolio. It led to an adjustment in the segment presentation for that subgroup. The previously separate Materials and Systems segments were combined to form a single MaterialScience segment in light of their similar long-term economic performance and the comparability of their products, production processes, customer industries, distribution channels and regulatory environment.

- We transferred our dermatology business (Intendis) and the medical equipment business Medrad from the Pharmaceuticals to the Consumer Health segment. The prior-year figures have been restated accordingly.
- Business activities that cannot be allocated to any other segment are reported under "All other segments." These include primarily the services of Bayer Business Services (BBS), Bayer Technology Services (BTS) and Currenta.
- Holding companies' activities and the elimination of intersegment sales are presented in our segment reporting as "Corporate Center and Consolidation."

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).

As of December 31, 2009 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 and methods of distribution.

The segments' activities are as follows:

Activities of the Segments [Table 4.10]

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, dietary 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 plant traits.
MaterialScience	
MaterialScience	Development, production and marketing of high-quality plastics granules, sheet and film; development, production and marketing of polyurethanes for a wide variety of applications and of coating and adhesive raw materials; production and marketing of inorganic basic chemicals.

The segment table presents continuing operations only. Details of the discontinued operations are given in Note [6.3].

The reconciliation in the region table eliminates interregional sales 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 write-downs of intangible assets and depreciation and write-downs of property, plant and equipment.
- The gross cash flow comprises income from continuing operations after taxes, plus income taxes, plus non-operating result, minus income taxes paid or accrued, plus depreciation, amortization and write-downs, minus write-backs, plus/minus changes in pension provisions, minus gains/plus losses on retirements of noncurrent assets, plus non-cash effects of the remeasurement of acquired assets. 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 comprises all assets serving the respective segment that are required to yield a return on their cost of acquisition. Noncurrent assets are included 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 (associates).
- 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.
- The number of employees is reported in full-time equivalents, with part-time employees included in proportion to their contractual working hours.

The reconciliations of the operating result (EBIT), assets and liabilities of the reporting segments to the pre-tax income, the assets and the liabilities of the Group are given in the following table:

Reconciliation of Segment Result [Table 4.11]

	2008	2009
	€ million	€ million
Operating result of reporting segments	3,714	3,204
Operating result of Corporate Center	(170)	(198)
Operating result [EBIT]	**3,544**	**3,006**
Non-operating result	(1,188)	(1,136)
Income before income taxes (total)	**2,356**	**1,870**

Reconciliation of Segment Assets to Group Assets [Table 4.12]

	2008	2009
	€ million	€ million
Assets of reporting segments	**46,208**	**44,703**
Corporate Center assets	1,270	1,222
Non-allocated assets	5,025	5,117
Assets held for sale and discontinued operations	8	-
Total assets	**52,511**	**51,042**

Reconciliation of Segment Liabilities to Group Liabilities [Table 4.13]

	2008	2009
	€ million	€ million
Liabilities of reporting segments	**11,855**	**12,295**
Corporate Center liabilities	3,584	3,204
Non-allocated liabilities	20,719	16,592
Liabilities directly related to assets held for sale and discontinued operations	13	-
Total liabilities	**36,171**	**32,091**

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 4.14]

	Net sales (external) – by market		Intangible assets and property, plant and equipment	
	2008	2009	2008	2009
	€ million	€ million	€ million	€ million
Germany	4,797	4,147	16,896	15,944
United States	7,053	6,753	5,466	5,333
Other	21,068	20,268	9,728	9,678
Total	**32,918**	**31,168**	**32,090**	**30,955**

Information on major customers

Revenues from transactions with a single customer in no case exceeded 10% of Bayer Group sales in 2009 or 2008.

6. Scope of consolidation; subsidiaries and affiliates

The consolidated financial statements include all 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%. Special-purpose entities (SPEs) are consolidated even when Bayer AG holds 50% or less of the voting rights or shares if the substance of the economic relationship indicates that the SPE is controlled by Bayer AG. Inclusion of a company's accounts in the consolidated financial statements begins when Bayer AG starts to exercise control over the company and ceases when it is no longer able to do so.

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.

Associates over which Bayer AG exerts significant influence, generally through an ownership interest between 20% and 50%, are accounted for by the equity method.

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.

6.1 Changes in the scope of consolidation

Change in Number of Consolidated Companies [Table 4.15]

	Germany	Other Countries	Total
Bayer AG and consolidated companies			
December 31, 2008	63	253	**316**
Changes in scope of consolidation	(1)	-	**(1)**
Additions	1	1	**2**
Retirements	(4)	(11)	**(15)**
December 31, 2009	**59**	**243**	**302**

The decrease in the number of fully consolidated companies in 2009 is primarily due to mergers between Group companies.

The above table reflects four joint ventures that were included by proportionate consolidation in 2009 and 2008 in compliance with IAS 31 (Interests in Joint Ventures). These joint ventures affected the Group statement of financial position and income statement as follows:

Assets, Liabilities and Results of Operations of Joint Ventures [Table 4.16]

	2009		2009
	€ million		€ million
Current assets	30	Income	48
Noncurrent assets	78	Expenses	(45)
Current liabilities	(20)		
Noncurrent liabilities	(13)		
Net assets	**75**	**Income after taxes**	**3**

Also included in the consolidated financial statements are five associates – the same number as in 2008 – 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 79 subsidiaries and 23 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 0.3% of Group sales, less than 0.3% of equity and less than 0.3% of total assets.

The companies fully consolidated in the financial statements of the Bayer Group are listed in the following table:

Fully Consolidated Subsidiaries [Table 4.17]

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 Ltd.	Cambridge, U.K.	100
Bayer AGCO Ltd.	Cambridge, U.K.	100
Bayer Agriculture Ltd.	Cambridge, U.K.	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 GmbH	Potsdam, 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 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 France S.A.S.	Lyon, France	100
Bayer CropScience Holding S.A.	Lyon, France	100
Bayer CropScience Holdings Ltd.	Cambridge, U.K.	100
Bayer CropScience Ltd.	Cambridge, U.K.	100
Bayer CropScience Norwich Ltd.	Cambridge, U.K.	100
Bayer CropScience Nufarm S.A.	Lyon, France	100
Bayer CropScience S.A.	Lyon, France	100
Bayer CropScience S.A.-N.V.	Diegem, Belgium	100
Bayer CropScience S.L.	Valencia, Spain	100
Bayer CropScience S.r.l.	Milan, Italy	100
Bayer CropScience Vermögensverwaltungsgesellschaft 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 Diagnostics Manufacturing Ltd.	Bridgend, U.K.	100
Bayer Direct Services GmbH	Leverkusen, Germany	100
Bayer Environmental Science S.A.S.	Lyon, France	100
Bayer Gastronomie GmbH	Leverkusen, Germany	100

Fully Consolidated Subsidiaries [Table 4.17 (continued)]

Company Name	Place of Business	Bayer's interest %
Bayer Gesellschaft für Beteiligungen mbH	Leverkusen, Germany	100
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 S.A.	Fribourg, Switzerland	100
Bayer Ltd.	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.L.	Sant Joan Despi, Spain	100
Bayer MaterialScience S.r.l.	Milan, Italy	100
Bayer Oy	Espoo, Finland	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.-N.V.	Diegem, Belgium	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 S.A.S.	Gaillard, France	100
Bayer Santé S.A.S.	Puteaux, France	100
Bayer Schering Pharma AG	Berlin, Germany	100
Bayer Schering Pharma Oy	Turku, Finland	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 mbH	Leverkusen, Germany	100
Bayer Vital GmbH	Leverkusen, Germany	100
Bayer-Handelsgesellschaft mbH	Leverkusen, Germany	100
Bayfin GmbH	Leverkusen, Germany	100
BaySystems B.V.	Foxhol, Netherlands	100
BaySystems GmbH & Co. KG	Oldenburg, Germany	100
BaySystems Italia S.p.A.	Mussolente, Italy	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 4.17 (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 Polska Sp.Zo.o.	Warsaw, Poland	100
Intendis Portugal Sociedade Unipessoal Lda.	Mem Martins, Portugal	100
Intendis S.p.A.	Milan, Italy	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	Västra Frölunda, Sweden	100
Medrad UK Ltd.	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.Zo.o.	Poznan, Poland	100
Nunhems Spain S.A.	Valencia, Spain	100
Pallas Versicherung AG	Leverkusen, Germany	100
pbi Home & Garden Ltd.	Cambridge, U.K.	100
PGS International N.V.	The Hague, Netherlands	100
Pharma Verlagsbuchhandlung GmbH	Berlin, Germany	100
Quimica Farmacéutica Bayer S.L.	Sant Joan Despi, Spain	100
SC Bayer S.r.l.	Bucharest, Romania	100
Schering AG	Berlin, Germany	100
Schering Agrochemicals Holdings	Burgess Hill, U.K.	100
Schering Espana S.A.	Madrid, Spain	99.9
Schering GmbH und Co. Produktions KG	Weimar, Germany	100
Schering Health Care Ltd.	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 GmbH	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 4.17 (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
Baypo I LLC	New Martinsville, U.S.A.	100
Baypo II LLC	New Martinsville, U.S.A.	100
Baypo LP	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
Deerfield Urethane Inc.	South Deerfield, U.S.A.	100
Guidance Interactive Healthcare Inc.	Tarrytown, U.S.A.	100
Intendis Inc.	Pine Brook, 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
Medrad Saxonburg Inc.	Saxonburg, 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 Co. Ltd.	Beijing, China	100
Bayer (China) Ltd.	Beijing, China	100
Bayer (Malaysia) Sdn. Bhd.	Petaling Jaya, Malaysia	100
Bayer (Sichuan) Animal Health Co. Ltd.	Chengdu, China	70
Bayer (South East Asia) Pte. Ltd.	Singapore	100
Bayer Australia Ltd.	Pymble, Australia	100

*fully consolidated special-purpose entity according to IAS 27 in conjunction with SIC 12

Fully Consolidated Subsidiaries [Table 4.17 (continued)]

Company Name	Place of Business	Bayer's interest
		%
Bayer BioScience Pvt. Ltd.	Hyderabad, India	100
Bayer Co. (Malaysia) Sdn. Bhd.	Petaling Jaya, Malaysia	100
Bayer Coatings Systems Shanghai Co. Ltd.	Shanghai, China	100
Bayer CropScience (China) Co. Ltd.	Hangzhou, China	100
Bayer CropScience (Pvt) Ltd.	Karachi, Pakistan	100
Bayer CropScience Co. Ltd.	Taipeh, Taiwan	100
Bayer CropScience Holdings Pty Ltd.	East Hawthorn, Australia	100
Bayer CropScience Inc.	Laguna, Philippines	100
Bayer CropScience K.K.	Tokyo, Japan	100
Bayer CropScience Ltd.	Mumbai, India	71.1
Bayer CropScience Ltd.	Seoul, South Korea	100
Bayer CropScience Pty Ltd.	East Hawthorn, Australia	100
Bayer Far East Service Co. Ltd.	Hong Kong, China	100
Bayer Healthcare Co. Ltd.	Beijing, China	100
Bayer HealthCare Ltd.	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 Ltd.	Hong Kong, China	100
Bayer MaterialScience Ltd.	Tokyo, Japan	100
Bayer MaterialScience Pty Ltd.	Pymble, Australia	100
Bayer MaterialScience Pvt. Ltd.	Mumbai, India	100
Bayer MaterialScience Trading (Shanghai) Co. Ltd.	Shanghai, China	100
Bayer New Zealand Ltd.	Auckland, New Zealand	100
Bayer Pakistan (Pvt) Ltd.	Karachi, Pakistan	100
Bayer Pharmaceuticals Pvt. Ltd.	Mumbai, India	100
Bayer Philippines Inc.	Makati City, Philippines	100
Bayer Polymers (Shanghai) Co. Ltd.	Shanghai, China	100
Bayer Polyurethanes (Shanghai) Co. Ltd.	Shanghai, China	100
Bayer Polyurethanes Taiwan Ltd.	Taipeh, Taiwan	94.9
Bayer Sheet Korea Ltd.	Kimhae City, South Korea	100
Bayer Taiwan Company Ltd.	Taipeh, Taiwan	100
Bayer Technology and Engineering (Shanghai) Co. Ltd.	Shanghai, China	100
Bayer Thai Company 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 Pvt. Ltd.	Vapi, India	100
Guangzhou Bayer MaterialScience Co. Ltd.	Guangzhou, China	100
Imaxeon Pty. Ltd.	Rydalmere, Australia	100
Intendis K.K.	Osaka, Japan	100
Medipharm (Pvt) Ltd.	Lahore, Pakistan	100
Medrad Asia Pte. Ltd.	Singapore	100
Nihon Medrad K.K.	Osaka, Japan	100
Nunhems Beijing Seeds Co. Ltd.	Beijing, China	95
Nunhems India Pvt. Ltd.	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
U I M Agrochemicals (Aust) Pty Ltd.	East Hawthorn, Australia	100

Fully Consolidated Subsidiaries [Table 4.17 (continued)]

Company Name	Place of Business	Bayer's interest %
Latin America/Africa/Middle East		
AgrEvo South Africa (Pty) Ltd.	Isando, South Africa	100
Alimtec S.A.	Santiago, Chile	40*
Bayer (Pty) Ltd.	Isando, South Africa	100
Bayer Boliviana Ltda.	Santa Cruz De La Sierra, Bolivia	100
Bayer Central America S.A.	San Jose, Costa Rica	100
Bayer Cropscience S.A.	Bogota, Colombia	100
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.	Montevideo, Uruguay	100
Bayer S.A.	Quito, Ecuador	100
Bayer S.A.	San Jose, Costa Rica	100
Bayer S.A.	San Salvador, El Salvador	100
Bayer S.A.	Santiago, Chile	100
Bayer S.A.	Santo Domingo, Dom. Republic	100
Bayer S.A.	Sao Paulo, Brazil	100
Bayer S.A. de C.V.	Tegucigalpa, Honduras	100
Bayer Türk Kimya Sanayi Limited Sirketi	Istanbul, Turkey	100
BaySystems Pearl FZCO	Dubai, United Arab Emirates	51
Corporación Bonima S.A. de C.V.	Ilopango, El Salvador	99.8
Cropsa S.A.C.	Lima, Peru	100
Intendis do Brasil Farmaceutica Ltda.	Itapevi, Brazil	100
Intendis Ilac Ticaret Limited Sirketi	Istanbul, Turkey	100
Intendis Mexicana S.A. de C.V.	Mexico City, Mexico	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	99
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 special-purpose entity according to IAS 27 in conjunction with SIC 12

The following four joint ventures are included in the financial statements of the Bayer Group by proportionate consolidation:

Joint Ventures [Table 4.18]

Company Name	Place of Business	Bayer's interest %
Baulé S.A.S.	Romans-sur-Isère, France	50
Bayer IMSA S.A. de C.V.	Leon, Mexico	50
BayOne Urethane Systems LLC	St. Louis, U.S.A.	50
Indurisk Rückversicherung AG	Luxembourg, Luxembourg	50

The following associates are accounted for in the consolidated financial statements by the equity method:

Associated Companies [Table 4.19]

Company Name	Place of Business	Bayer's interest %
DIC Bayer Polymer Ltd.	Tokyo, Japan	50
Lyondell Bayer Manufacturing Maasvlakte VOF	Rotterdam, Netherlands	50
Palthough Industries (1998) Ltd.	Kibbutz Ramat Yochanan, Israel	25
PO JV LP	Wilmington, U.S.A.	41.3
Polygal Plastics Industries Ltd.	Kibbutz Ramat Hashofer, Israel	25.8

The following subsidiaries are reflected in the consolidated financial statements at amortized cost due to their immateriality:

Immaterial Subsidiaries [Table 4.20]

Company Name	Place of Business	Bayer's interest %
Europe		
1. BCrSV GmbH	Leverkusen, Germany	100
2. BHCV 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 04 Mobilien GmbH	Leverkusen, Germany	100
Bayer d.o.o. Sarajevo	Sarajevo, Bosnia & Herzegovina	100
Bayer Healthcare S.r.l.	Milan, Italy	100
Bayer Immobilier S.A.S.	Puteaux, France	100
Bayer Innovation Ventures GmbH	Düsseldorf, Germany	100
Bayer International Service GmbH	Leverkusen, Germany	100
Bayer OÜ	Tallinn, Estonia	100
Bayer UK Ltd.	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

Immaterial Subsidiaries [Table 4.20 (continued)]

Company Name	Place of Business	Bayer's interest
		%
BayInvest GmbH	Leverkusen, Germany	100
BaySystems a.s.	Prague, Czech Republic	100
BaySystems Northern Europe A/S	Otterup, Denmark	100
BaySystems Verwaltungs-GmbH	Oldenburg, Germany	100
BCS Romania S.r.l.	Bucharest, Romania	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.) Ltd.	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
Fünfte Bayer VV GmbH	Leverkusen, 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
Job@ctive GmbH	Leverkusen, 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 Romania S.r.l.	Bucharest, Romania	100
Schering Verwaltungsgesellschaft mbH	Weimar, Germany	100
Sechste Bayer VV GmbH	Leverkusen, Germany	100
SIA Bayer	Riga, Latvia	100
Sportrechte Vermarktungs- und Verwertungs-GmbH & Co. oHG	Leverkusen, Germany	100
ZAO Rhone-Poulenc AO	Moscow, Russia	100
North America		
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
The SDI Divestiture Corporation	Cincinnati, U.S.A.	100
Viterion TeleHealthcare LLC	Tarrytown, U.S.A.	100
Asia / Pacific		
Bayer CropScience (OHQ) (Malaysia) Sdn Bhd	Kuala Lumpur, Malaysia	100
Bayer CropScience (Thailand) Company Ltd.	Bangkok, Thailand	100
Bayer CropScience Ltd.	Dhaka, Bangladesh	60
BCS (Pvt) Ltd.	Karachi, Pakistan	100
Chemdyes Pakistan (Pvt) Ltd.	Karachi, Pakistan	100
Medrad Medical Equipment Trading Company	Beijing, China	100
Myanmar Aventis CropScience Ltd.	Yangon, Myanmar	100
Schering (Malaysia) Sdn Bhd	Kuala Lumpur, Malaysia	100
Schering Pty. Ltd.	Alexandria, Australia	100

*including a 10% interest held by a non-consolidated subsidiary

Immaterial Subsidiaries [Table 4.20 (continued)]

Company Name	Place of Business	Bayer's interest %
Latin America / Africa / Middle East		
AgrEvo Middle East (Cyprus) Ltd.	Limassol, Cyprus	100
Aventis CropScience Malawi Ltd.	Blantyre, Malawi	100
Bayer Algerie S.P.A.	Algiers, Algeria	100
Bayer Distribuidora de Produtos Quimicos e Farmaceuticos Ltda.	Sao Paulo, Brazil	100
Bayer Parsian AG	Teheran, Iran	100
Bayer Schering Pharma Mocambique Lda.	Maputo, Mozambique	100*
Bayer Zimbabwe (Pvt) Ltd.	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
Junta Comercializadora de Productos de Latinoamerica 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 are accounted for at amortized cost due to their immateriality:

Immaterial Associates and Joint Ventures [Table 4.21]

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
Pyco S.A.	Mont de Marsan, France	47
Sauerstoff- und Stickstoffrohrleitungsgesellschaft mbH	Krefeld, Germany	50
Société Immobilière de Gaillard d'Economie Mixte (SIGEM)	Gaillard, France	48
Solavista GmbH & Co. KG	Potsdam, Germany	50
Solavista Verwaltungs GmbH	Potsdam, Germany	50
North America		
Schein Pharmaceutical Canada Inc.	Toronto, Canada	50
Technology JV LP	Wilmington, U.S.A.	33.3

Immaterial Associates and Joint Ventures [Table 4.21]

Company Name	Place of Business	Bayer's interest
		%
Asia / Pacific		
Bayer DAS (Pvt) Ltd.	Karachi, Pakistan	50
Cotton Growers Services Pty. Ltd.	Wee Waa, Australia	50
Teijin-Bayer Polytec Ltd.	Tokyo, Japan	50
Latin America / Africa / Middle East		
Bayer Middle East LLC	Dubai, United Arab Emirates	49
BaySystems Pearl LLC	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. LP	Megiddo, Israel	25
Wenkem SA (Pty) Ltd.	Midrand, South Africa	24.9

The Bayer Group holds between 5% and 20% of the voting rights of the following "large limited liability companies" as defined in Section 267, paragraphs 2 and 3 of the German Commercial Code:

Other Interests in Large Limited Liability Companies [Table 4.22]

Company Name	Place of Business	Bayer's interest
		%
Hokkai Sankyo Co. Ltd.	Tokyo, Japan	19.8
Salzgewinnungsgesellschaft Westfalen mbH & Co. KG	Ahaus, Germany	10

The following domestic subsidiaries availed themselves in 2009 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 4.23]

Company Name	Place of Business	Bayer's interest
		%
Bayer 04 Immobilien GmbH	Leverkusen, Germany	100
Bayer 04 Leverkusen Fußball GmbH	Leverkusen, Germany	100
Bayer Animal Health GmbH	Leverkusen, Germany	100
Bayer Beteiligungsverwaltungsgesellschaft mbH	Leverkusen, Germany	100
Bayer BioScience GmbH	Potsdam, 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

German Exempt Subsidiaries [Table 4.23 (continued)]

Company Name	Place of Business	Bayer's interest
		%
Bayer Technology Services GmbH	Leverkusen, Germany	100
Bayer Verwaltungsgesellschaft für Anlagevermögen mbH	Leverkusen, Germany	100
Bayer Vital GmbH	Leverkusen, Germany	100
Bayer-Handelsgesellschaft mbH	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
Icon Genetics GmbH	Munich, Germany	100
Intendis GmbH	Berlin, 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
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 GmbH	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 were accounted for by the purchase method in accordance with IFRS 3 (Business Combinations), 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 acquisitions of companies domiciled outside the euro zone were translated at the exchange rates in effect at the respective dates of acquisition.

Acquisition costs in 2009 amounted to €404 million (2008: €932 million). The purchase prices of the acquired companies or businesses were settled mainly in cash. Goodwill arising on these acquisitions totaled €177 million (2008: €380 million) and related principally to the following transactions:

On June 25, 2009, we acquired the remaining 10% of the shares of Bayer Polymers (Shanghai) Co. Ltd., China, for €24 million. The difference between the carrying amount of this 10% interest and the purchase price was recognized as goodwill.

On October 1, 2009, we acquired two dermatology product lines from SkinMedica, Inc., Carlsbad, California, United States, for €43 million. These prescription medications, Desonate® and NeoBenz® 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 are €37 million pertaining to production rights and trademarks for the two product lines and €5 million of goodwill.

On November 2, 2009, we acquired Athenix Corporation, a privately held biotechnology company headquartered in Research Triangle Park, North Carolina, United States, for €286 million. The purchase price includes 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 are an amount of €217 million pertaining to development technologies which is 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 sowing through to harvesting. 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 €3 million to Bayer Group sales in 2009. These portfolio changes had an effect of -€6 million on the operating result (EBIT) for 2009. A total after-tax result of -€6 million was recorded for the acquired businesses since the respective dates of their first-time consolidation. This includes the financing costs incurred since the dates of acquisition.

If these acquisitions had already been made as of January 1, 2009, the Bayer Group would have had total sales of €31,182 million in 2009. Income after taxes would have amounted to €1,340 million, taking into account the effects of the revaluation of acquired net assets and hypothetical financing costs for the full year. Earnings per share from continuing and discontinued operations would not have been materially affected.

The effects of these and other, smaller acquisitions 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 4.24]

	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**

The fair-value adjustment reflects 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 2008 the following acquisitions were accounted for in accordance with IFRS 3:

Bayer subsidiary Medrad Inc. acquired the remaining shares of Possis Medical Inc. through its subsidiary Phoenix Acquisition Corp. in March 2008 for €227 million. By virtue of the merger of Phoenix Acquisition Corp. with Possis Medical Inc., the latter became a wholly owned subsidiary of Medrad, Inc. The main components of the difference between the carrying amount of the acquired net assets and the purchase price were €99 million pertaining to patented technologies, trademarks and research and development projects, €40 million in deferred taxes and €125 million of goodwill.

At the beginning of June 2008, we successfully completed the acquisition of the over-the-counter (OTC) business of U.S.-based Sagmel, Inc. for €265 million. The OTC business of Sagmel was integrated into the operations of Bayer HealthCare in Russia, Ukraine, Kazakhstan, the Baltic states and several countries of the Caucasus and Central Asia regions. The main components of the difference between the carrying amount of the acquired net assets and the purchase price were €161 million pertaining to trademarks and €70 million of goodwill.

In July 2008 the over-the-counter (OTC) cough and cold medicines business of the Chinese company Topsun Science and Technology Qidong Gaitianli Pharmaceutical Co. Ltd. was acquired for €109 million. The main components of the difference between the carrying amount of the acquired net assets and the purchase price were €50 million pertaining to trademarks and €48 million of goodwill. A subsequent purchase price payment of €12 million made in 2009 was recorded as goodwill.

The protein engineering specialist Direvo Biotech AG, Cologne, Germany, was acquired at the end of September 2008 for €185 million. The main components of the difference between the carrying amount of the acquired net assets and the purchase price were €150 million pertaining to patented research and development technologies, €45 million in deferred taxes and €106 million of goodwill.

With the entry of the squeeze-out of the remaining minority stockholders of Bayer Schering Pharma AG in the commercial register on September 25, 2008, all the shares of the minority stockholders of Bayer Schering Pharma AG were transferred by operation of law to Bayer Schering GmbH, a wholly owned subsidiary of Bayer AG. The remaining minority stockholders received cash compensation of €98.98 per share pursuant to the resolution of the stockholders' meeting of Bayer Schering Pharma AG held on January 17, 2007. The sum of €695 million held in escrow accounts for this purpose was disbursed to the stockholders in October 2008.

The effects of these and other, smaller acquisitions made in 2008 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 4.25]

	Pre-acquisition carrying amount	Fair value adjustment	Fair value at the acquisition date
	€ million	€ million	€ million
Goodwill	-	380	380
Patents	-	222	222
Trademarks	-	232	232
R&D projects	-	67	67
Other intangible assets	-	60	60
Property, plant and equipment	25	-	25
Other noncurrent assets	23	-	23
Inventories	31	7	38
Other current assets	56	(2)	54
Cash and cash equivalents	10	-	10
Provisions for pensions and other post-employment benefits	(1)	-	(1)
Other provisions	(10)	-	(10)
Financial liabilities	(12)	-	(12)
Other liabilities	(57)	1	(56)
Deferred taxes	15	(115)	(100)
Net assets	**80**	**852**	**932**
Non-controlling interest	-	-	-
Purchase prices			**932**
of which ancillary acquisition costs			6
Acquired cash and cash equivalents			10
Compensation of non-controlling interest			695
Net cash outflow for acquisitions			**1,617**

6.3 Divestitures and discontinued operations

Proceeds from divestitures, including those detailed below, in 2009 totaled €454 million.

The strategic alliance with Genzyme Corporation, United States, announced on March 31, 2009, was implemented at the end of May 2009. In accordance with the agreement terms, we transferred the hematological oncology portfolio – Campath®/MabCampath®, Fludara® and Leukine® – to Genzyme. The divested assets were recognized as assets held for sale starting in the first quarter of 2009. They comprised €92 million in goodwill, €150 million in patents, €25 million in other intangible assets and €30 million in inventories. We are continuing our established co-development partnership with Genzyme for the active substance alemtuzumab for an indication in multiple sclerosis. A related payment of €55 million was received in 2009. The present value of anticipated future revenue-based payments is €363 million.

In May 2009 we acquired the remaining 49% interest in Berlimed, S.A., Spain, from Juste S.A. Quimica Farmacéutica (Juste), and in return sold our 51% share of Justesa Imagen, S.A., Spain, to Juste 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.

In addition, we sold the Thermoplastics Testing Center, Krefeld, Germany, to Underwriters Laboratories Inc., United States, for €18 million in May 2009.

The impact of these and additional minor divestments on the assets, liabilities and earnings of the Group as of the respective divestment dates was as follows:

Divested Assets and Liabilities [Table 4.26]

	2009
	€ million
Property, plant and equipment	(6)
Other financial assets	(3)
Inventories	(9)
Other current assets	(12)
Assets held for sale	(297)
Provisions for pensions and other post-employment benefits	1
Other provisions	5
Other liabilities	14
Divested assets and liabilities	**(307)**
Non-controlling interest	6
Net assets	**(301)**
Net cash inflow from divestitures	70
of which cash outflow for divestiture costs	(8)
Future cash payments receivable	376
Net gain from divestitures	**145**
Deferred net gain	(8)
Net gain from divestitures (before taxes)	**137**

The pre-tax gain from the divestments is reflected in other operating income.

In 2009 the remaining assets and liabilities pertaining to discontinued operations are not reported separately due to their immateriality.

In 2008 an operating result of €6 million, after-tax income of €4 million, assets of €3 million and liabilities of €13 million were recognized under discontinued operations in connection with the divestment of the diagnostics activities.

Discontinued operations affected the Group statement of cash flows for 2008 as follows:

Discontinued Operations: Impact on Statements of Cash Flows [Table 4.27]

	Diagnostics 2008	Wolff Walsrode 2008	Total 2008
	€ million	€ million	€ million
Net cash provided by (used in) investing activities	(52)	8	(44)
Net cash provided by (used in) financing activities	52	(8)	44
Change in cash and cash equivalents	-	-	-

Notes to the Income Statements

7. Net sales

Net sales are derived primarily from product deliveries. Total reported net sales declined by €1,750 million or 5.3% from 2008 to €31,168 million in 2009. While the decrease in volumes diminished sales by €948 million, or 2.9%, favorable shifts in exchange rates had a positive effect of €201 million, or 0.6%. Changes in selling prices reduced the net sales by €943 million, or 2.8%. Portfolio changes further diminished sales by €60 million, or 0.2%.

Portfolio changes led to the following changes in sales compared with the previous year:

Portfolio-Related Changes in Sales [Table 4.28]

	2009
	€ million
Acquisitions	
Sagmel, Inc. (OTC business)	28
Possis Medical, Inc.	14
BaySystems B.V.	19
Others	27
	88
Divestitures	
Oncology portfolio	(106)
Justesa Imagen, S.A.	(16)
Others	(26)
	(148)
Net effect of portfolio changes	**(60)**

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 through the sale, storage and transportation of saleable products, advertising, the provision of advice to customers and market research activities. They include €952 million (2008: €1,024 million) for the physical distribution and warehousing of finished products, €2,392 million (2008: €2,720 million) in marketing expenses and €4,579 million (2008: €4,361 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 [Table 4.29]

	2008	2009
	€ million	€ million
Gains from sales of noncurrent assets and from divestitures	98	181
Write-backs of receivables	88	61
Reversals of unutilized provisions	38	65
Recognition of hedges	263	174
Miscellaneous operating income	420	441
Total	**907**	**922**
of which special items	92	138

The special items of €138 million (2008: €92 million) include €117 million (2008: €71 million) in gains from the sale of noncurrent assets and from divestments.

Miscellaneous operating income is composed of a large number of individually immaterial items at the subsidiaries.

11. Other operating expenses

Other Operating Expenses [Table 4.30]

	2008	2009
	€ million	€ million
Losses from sales of noncurrent assets and from divestitures	(23)	(26)
Write-downs of receivables	(113)	(106)
Expenses related to significant legal risks	(106)	(225)
Recognition of hedges	(193)	(212)
Miscellaneous operating expenses	(983)	(1,088)
Total	**(1,418)**	**(1,657)**
of which special items	(682)	(904)

Details of special items, which almost entirely relate to significant legal risks or are included in miscellaneous operating expenses, are given in the management report in Table 3.16, on a net basis.

Information on the restructuring expenses reported there 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 4.31]

	2008	2009
	€ million	€ million
Production-related	(220)	(305)
Marketing- and distribution-related	(44)	(148)
Research- and development-related	(135)	(37)
General-administration-related	(132)	(125)
Other	(151)	(289)
Total	**(682)**	**(904)**

12. Personnel expenses/employees

Personnel expenses rose in 2009 by €285 million to €7,776 million (2008: €7,491 million). Shifts in exchange rates increased personnel expenses by €77 million.

Personnel Expenses [Table 4.32]

	2008	2009
	€ million	€ million
Wages and salaries	5,978	6,286
Social expenses and expenses for pensions and other benefits	1,513	1,490
of which for defined contribution pension plans	431	495
of which for defined benefit pension plans	195	164
Total	**7,491**	**7,776**

The personnel expenses shown here do not contain the interest portion of the allocation to personnel-related provisions, which is included in the non-operating result as other non-operating expense (Note [13.3]). These personnel-related provisions are mainly for employee pensions.

The average number of employees classified by corporate functions is shown in the table below.

Employees [Table 4.33]

	2008	2009
Production	48,384	48,426
Marketing and distribution	38,006	38,598
Research and development	11,914	12,185
General administration	8,995	9,386
Total	**107,299**	**108,595**
of which trainees	2,623	2,665

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 2009 was 55 (2008: 60).

The average number of employees is stated in full-time equivalents, with part-time employees included on a pro-rata basis in line with their contractual working hours.

13. Non-operating result

The non-operating result for 2009 was minus €1,136 million (2008: minus €1,188 million), comprising an equity-method loss of €48 million (2008: €62 million), non-operating expenses of €1,877 million (2008: €1,715 million) and non-operating income of €789 million (2008: €589 million). Details of the components of the non-operating result are provided below.

13.1 Income (loss) from investments in affiliated companies

This comprised the following:

Income (Loss) from Investments in Affiliated Companies [Table 4.34]

	2008	2009
	€ million	€ million
Net loss from investments in associates (equity-method loss)	(62)	(48)
Expenses		
Write-downs of investments in affiliated companies	(13)	(15)
Losses from the sale of investments in affiliated companies	(7)	(11)
Income		
Dividends from affiliated companies and income from profit and loss transfer agreements (net)	-	5
Gains from the sale of investments in affiliated companies	12	10
Total	**(70)**	**(59)**

The income from investments in affiliated companies mainly comprised an equity-method loss of €49 million (2008: €64 million) from two production joint ventures with Lyondell.

Further details of the companies included at equity in the consolidated financial statements are given in Note [19].

13.2 Net interest expense

This comprised the following:

Net Interest Expense [Table 4.35]

	2008	2009
	€ million	€ million
Expenses		
Interest and similar expenses	(948)	(815)
Interest expenses for derivatives (held for trading)	(295)	(490)
Income		
Other interest and similar income	171	267
Interest income from derivatives (held for trading)	370	490
Total	**(702)**	**(548)**

This item includes interest expense of €20 million (2008: €31 million) relating to non-financial liabilities and interest income of €77 million (2008: €13 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 €14 million (2008: €18 million) was recognized as interest expense in this context.

13.3 Other non-operating income and expense

Other non-operating income and expense comprised the following:

Other Non-Operating Income and Expense [Table 4.36]

	2008	2009
	€ million	€ million
Expenses		
Interest portion of interest-bearing provisions	(300)	(436)
Exchange loss	(79)	(92)
Miscellaneous non-operating expenses	(73)	(16)
Income		
Miscellaneous non-operating income	36	15
Total	**(416)**	**(529)**

The interest portion of noncurrent interest-bearing provisions mainly relates to pension provisions.

14. Income taxes

The breakdown of income taxes by origin is as follows:

Income Tax Expense by Origin [Table 4.37]

	2008	2009
	€ million	€ million
Income taxes paid or accrued		
Germany	(161)	(186)
other countries	(651)	(476)
	(812)	**(662)**
Deferred taxes		
from temporary differences	323	430
from interest carryforwards	11	(11)
from tax loss carryforwards	(168)	(291)
from tax credits	10	23
	176	**151**
Total	**(636)**	**(511)**

The deferred tax assets and liabilities are allocable to the following items in the statement of financial position:

Deferred Tax Assets and Liabilities [Table 4.38]

	Dec.31, 2008		Dec.31, 2009	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
	€ million	€ million	€ million	€ million
Intangible assets	470	3,766	459	3,645
Property, plant and equipment	67	632	59	793
Financial assets	78	228	48	226
Inventories	324	85	357	51
Receivables	64	511	42	301
Other assets	150	74	101	36
Provisions for pensions and other post-employment benefits	1,170	462	1,229	570
Other provisions	301	318	464	36
Liabilities	524	44	408	37
Interest carryforwards	11	-	-	-
Tax loss carryforwards	429	-	156	-
Tax credits	96	-	112	-
	3,684	**6,120**	**3,435**	**5,695**
of which noncurrent	2,644	5,354	2,573	5,218
Set-off	(2,528)	(2,528)	(2,485)	(2,485)
Total	**1,156**	**3,592**	**950**	**3,210**

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 €117 million (2008: €455 million), whereas changes in fair values of available-for-sale financial assets and derivatives designated as hedges resulted in deferred tax liabilities that diminished equity by €36 million (2008: deferred tax assets that increased equity by €50 million). These effects on equity are reflected in the statement of comprehensive income.

The utilization of tax loss carryforwards from previous years reduced the income taxes paid or accrued in 2009 by €260 million (2008: €287 million). Utilization of tax credits reduced income taxes paid or accrued by €6 million (2008: €0 million).

Of the total tax loss carryforwards of €1,047 million in 2009 (2008: €1,856 million), an amount of €579 million (2008: €1,455 million) can probably be utilized within a reasonable period. Deferred tax assets of €156 million (2008: €429 million) were recognized for these tax loss carryforwards, including €13 million (2008: €15 million) outside profit or loss.

The utilization of €468 million (2008: €401 million) of loss carryforwards is subject to legal or economic restrictions. Consequently, no deferred tax assets were recognized for this amount. If it had been probable that these loss carryforwards could be utilized, deferred tax assets of €137 million (2008: €113 million) would have had to be recognized.

Tax credits of €112 million (2008: €96 million) were recognized as deferred tax assets, including €1 million (2008: €3 million) outside profit or loss. The utilization of €32 million (2008: €0 million) of tax credits is subject to legal or economic restrictions. Consequently, no deferred tax assets were recognized for this amount.

Unusable tax credits and tax loss carryforwards expire as follows:

Expiration of Unusable Tax Credits and Tax Loss Carryforwards [Table 4.39]

	Tax credits		Tax loss carryforwards	
	Dec. 31, 2008	Dec. 31, 2009	Dec. 31, 2008	Dec. 31, 2009
	€ million	€ million	€ million	€ million
One year	-	-	2	-
Two years	-	-	9	23
Three years	-	-	58	28
Four years	-	-	51	39
Five years	-	-	111	123
Thereafter	-	32	170	255
Total	**-**	**32**	**401**	**468**

In 2009, subsidiaries that reported losses for 2009 or 2008 recognized net deferred tax assets totaling €40 million (2008: €60 million) on temporary differences and tax loss carryforwards. These assets are considered to be unimpaired because the companies concerned are expected to generate taxable income in the future.

Deferred tax liabilities of €14 million were recognized in 2009 (2008: €19 million) for planned dividend payments by subsidiaries. Deferred tax liabilities were not recognized for temporary differences on €8,054 million (2008: €6,651 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 €511 million for 2009 (2008: €636 million) differs by €36 million (2008: €62 million) from the expected tax expense of €547 million (2008: €698 million) that would result from applying an expected weighted average tax rate to the pre-tax income of the Group. This average rate is derived from the expected tax rates of individual Group companies and was 29.3% in 2009 (2008: 29.7%). The effective tax rate was 27.3% (2008: 27.0%).

The reconciliation of expected to reported income tax expense and of the expected to the effective tax rate for the Group is as follows:

Reconciliation of Expected to Actual Income Tax Expense [Table 4.40]

	2008		2009	
	€ million	%	€ million	%
Expected income tax expense and expected tax rate	**698**	**29.7**	**547**	**29.3**
Reduction in taxes due to tax-free income				
Income from affiliated companies and divestiture proceeds	(10)	(0.4)	(9)	(0.5)
Other	(51)	(2.2)	(41)	(2.2)
First-time recognition of previously unrecognized deferred tax assets on tax loss carryforwards	(50)	(2.1)	(2)	(0.1)
Use of tax loss carryforwards on which deferred tax assets were not previously recognized	(11)	(0.5)	(1)	(0.1)
Increase in taxes due to non-tax-deductible expenses				
Write-downs of investments	29	1.2	5	0.3
Expenses related to litigations	18	0.8	1	0.1
Other	107	4.5	103	5.5
New tax loss carryforwards unlikely to be usable	-	-	10	0.5
Existing tax loss carryforwards on which deferred tax assets were previously recognized but which are unlikely to be usable	1	-	23	1.2
Tax income and expenses relating to other periods	(42)	(1.8)	(129)	(6.9)
Tax effects of changes in tax rates	7	0.3	(18)	(1.0)
Other tax effects	(60)	(2.5)	22	1.2
Actual income tax expense and effective tax rate	**636**	**27.0**	**511**	**27.3**

15. Income/losses attributable to non-controlling interest

Income attributable to non-controlling interest amounted to €11 million (2008: €12 million), while losses attributable to non-controlling interest amounted to €11 million (2008: €7 million).

16. Earnings per share from continuing and discontinued operations

Earnings per share are determined according to IAS 33 (Earnings Per Share) by dividing net income by the weighted average number of shares.

Until June 1, 2009, the conversion date of the mandatory convertible bond issued in April 2006, the number of ordinary shares taken into account for this purpose included the potential shares that would be issued upon conversion of the bond. Basic and diluted earnings per share were therefore identical. The financing expenses for the mandatory convertible bond were added back to net income.

Following the conversion of the mandatory convertible bond, the number of ordinary shares in issue was 826,947,808.

Further details of the convertible bond can be found in Note [27].

Earnings Per Share [Table 4.41]

	2008	2009
	€ million	€ million
Income after taxes	1,724	1,359
of which attributable to non-controlling interest	5	-
of which attributable to Bayer AG stockholders (net income)	1,719	1,359
Income from discontinued operations after taxes	4	-
Financing expenses for the mandatory convertible bond, net of tax effects	112	47
Adjusted net income from continuing operations	1,827	1,406
Adjusted net income from continuing and discontinued operations	1,831	1,406
Weighted average number of issued ordinary shares	764,342,029	801,050,237
(Potential) shares (to be) issued upon conversion of the mandatory convertible bond	59,893,122	24,955,936
Adjusted weighted average total number of issued and potential ordinary shares	824,235,151	826,006,173
Basic earnings per share	€	€
from continuing operations	2.22	1.70
from discontinued operations	-	-
from continuing and discontinued operations	2.22	1.70
Diluted earnings per share	€	€
from continuing operations	2.22	1.70
from discontinued operations	-	-
from continuing and discontinued operations	2.22	1.70

Notes to the Statements of Financial Position

In compliance with IFRS 5 (Non-current Assets Held for Sale and Discontinued Operations), the information in the Notes to the Statements of Financial Position refers to continuing operations.

17. Goodwill and other intangible assets

Changes in intangible assets in 2009 were as follows:

Changes in Intangible Assets [Table 4.42]

	Acquired goodwill	Patents	Trade-marks	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)
Changes from revaluation (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 write-downs, 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 write-downs in 2009	-	938	171	121	151	-	156	1,537
Amortization	-	938	167	88	151	-	132	1,476
Write-downs	-	-	4	33	-	-	24	61
Write-backs	-	-	-	-	-	-	-	-
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**

Other rights and advance payments include internally generated software. Costs of €56 million for internally generated software incurred during the application development phase were capitalized in 2009 (2008: €20 million). The carrying amount of internally generated software was €79 million (2008: €31 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. 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.

Write-downs of intangible assets totaled €61 million. These were mainly attributable to the following two events. In light of the current development status and a market appraisal, the blood glucose monitoring device COMBOMETER is not expected to be launched before 2015. A write-down of €20 million was made accordingly in the Consumer Health segment. Also, the worldwide marketing rights for the recombinant human thrombin Recothrom® as an aid to hemostasis in surgery were returned to the cooperation partner except in Canada. The respective intangible asset of the Pharmaceuticals segment was written down by €32 million.

Details of acquisitions and divestitures are contained in Notes [6.2] and [6.3]. Details of the impairment testing procedure for goodwill are given in Note [4].

Changes in intangible assets in 2008 were as follows:

Changes in Intangible Assets (Previous Year) [Table 4.43]

	Acquired goodwill	Patents	Trade-marks	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, 2007	**8,215**	**10,008**	**3,726**	**819**	**2,012**	**1,345**	**1,888**	**28,013**
Changes in scope of consolidation	1	-	-	-	3	-	-	4
Acquisitions	380	222	232	33	9	67	18	961
Capital expenditures	4	28	-	94	-	52	118	296
Retirements	-	(7)	-	-	-	-	(93)	(100)
Transfers	-	-	(7)	47	123	(120)	(40)	3
Transfers (IFRS 5)	-	-	-	-	-	-	-	-
Changes from revaluation (IFRS 3)	-	-	-	5	2	-	-	7
Exchange differences	47	14	34	6	(7)	15	34	143
December 31, 2008	**8,647**	**10,265**	**3,985**	**1,004**	**2,142**	**1,359**	**1,925**	**29,327**
Accumulated amortization and write-downs, December 31, 2007		**1,811**	**662**	**295**	**987**	**155**	**1,333**	**5,243**
Changes in scope of consolidation		-	-	-	-	-	-	-
Retirements	-	(6)	-	-	-	-	(86)	(92)
Amortization and write-downs in 2008	-	962	173	87	174	20	134	1,550
Amortization	-	930	161	87	174	-	134	1,486
Write-downs	-	32	12	-	-	20	-	64
Write-backs		-	-	-	-	-	-	-
Transfers		-	(2)	3	10	(2)	(9)	-
Transfers IFRS 5		-	-	-	-	-	-	-
Exchange differences		(1)	-	1	(5)	-	33	28
December 31, 2008	**-**	**2,766**	**833**	**386**	**1,166**	**173**	**1,405**	**6,729**
Carrying amounts, December 31, 2008	**8,647**	**7,499**	**3,152**	**618**	**976**	**1,186**	**520**	**22,598**
Carrying amounts, December 31, 2007	**8,215**	**8,197**	**3,064**	**524**	**1,025**	**1,190**	**555**	**22,770**

Over the next five years, amortization of the intangible assets recognized in 2009 is expected to be as follows:

Expected Amortization of Intangible Assets [Table 4.44]

	€ million
2010	1,316
2011	1,231
2012	1,146
2013	1,031
2014	976

Possible future acquisitions and/or divestments of intangible assets are not taken into account in these amounts and may therefore cause them to vary.

Changes in the carrying amounts of goodwill for the operating segments in 2009 and 2008 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, 2008	**5,413**	**1,051**	**6,464**	**1,114**	**486**	**1,600**
Change in scope of consolidation	1	-	1	-	-	-
Acquisitions	107	253	360	-	-	-
Capital expenditures	1	-	1	-	-	-
Retirements	-	-	-	-	-	-
Amortization and write-downs in 2008	-	-	-	-	-	-
Transfers	-	-	-	3	(3)	-
Transfers (IFRS 5)	-	-	-	-	-	-
Exchange differences	31	19	50	(29)	23	(6)
Carrying amounts, December 31, 2008	**5,553**	**1,323**	**6,876**	**1,088**	**506**	**1,594**
Change in scope of consolidation	-	-	-	-	-	-
Acquisitions	4	17	21	-	132	132
Capital expenditures	-	-	-	-	-	-
Retirements	-	-	-	-	-	-
Amortization and write-downs in 2009	-	-	-	-	-	-
Transfers	-	-	-	-	-	-
Transfers (IFRS 5)	(92)	-	(92)	-	-	-
Exchange differences	(5)	(12)	(17)	9	(13)	(4)
Carrying amounts, December 31, 2009	**5,460**	**1,328**	**6,788**	**1,097**	**625**	**1,722**

Goodwill by Reporting Segment [Table 4.45]

	MaterialScience	Reconciliation	Bayer Group
	€ million	€ million	€ million
Carrying amounts, January 1, 2008	**151**	**-**	**8,215**
Change in scope of consolidation	-	-	1
Acquisitions	20	-	380
Capital expenditures	3	-	4
Retirements	-	-	-
Amortization and write-downs in 2008	-	-	-
Transfers	-	-	-
Transfers (IFRS 5)	-	-	-
Exchange differences	3	-	47
Carrying amounts, December 31, 2008	**177**	**-**	**8,647**
Change in scope of consolidation	-	-	-
Acquisitions	24	-	177
Capital expenditures	-	-	-
Retirements	-	-	-
Amortization and write-downs in 2009	-	-	-
Transfers	-	-	-
Transfers (IFRS 5)	-	-	(92)
Exchange differences	(7)	-	(28)
Carrying amounts, December 31, 2009	**194**	**-**	**8,704**

HealthCare has reorganized to meet the rapidly changing demands in the pharmaceutical industry. This has led to changes in the reporting structure at the level of the strategic business entities. The prior-year figures for the goodwill of the reporting segments have been restated accordingly.

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	2,833	438
Pharmaceuticals	Specialized Therapeutics	1,200	228
Consumer Health	OTC	931	22
Pharmaceuticals	Diagnostic Imaging	915	129
Pharmaceuticals	Oncology	369	295
Consumer Health	Medrad business	268	510

Since it is uncertain whether acquired or in-licensed 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 in the amount of €1,137 million were capitalized as of the end of 2009 (2008: €1,186 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 names "Schering" and "Medrad," which passed to Bayer with the acquisition of Schering AG, Berlin, Germany, in 2006, also have an indefinite useful life. The period for which the Bayer Group will derive an economic benefit from these names cannot be determined as it intends to make continued use of them. The Bayer Cross is capitalized at €107 million, while the "Schering" and "Medrad" names are carried at €405 million and €283 million respectively.

Patents

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®, Ultravist®, 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®, Ultravist®, 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	2009	-	2009	-	-	-	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	-	-	-	-	-	-	2009	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[d]	2020
Ultravist®								
Active ingredient	-	-	-	2009	-	-	-	-
Xarelto®								
Active ingredient	2020[e]	2023[d]	2020[e]	2023[d]	2020[e]	2020	2021	2020
YAZ®								
Formulation	2020[e]	2020[e]	2020[e]	2022[d]	2020[e]	2020	2020[c]	2020
Dosage regimen	2014	2014	2014	2014	2014	2014[b]	2014	2014
Production process	2025	2025	2025	2025	2025	2026[b]	2025	2026[b]
Yasmin®								
Formulation	2020	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	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 March 2008. In August 2009, the U.S. Court of Appeals for the Federal Circuit affirmed this decision. Bayer has filed a petition for review in the U.S. Supreme Court. See Note [32].
d Patent term extended
e Current patent expiration. An application has been submitted to extend patent protection.

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 60,000 national registered or pending trademarks along with over 650 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 2009 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, 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
Changes from revaluation (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 write-downs, 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 write-downs in 2009	253	812	184	23	1,272
Depreciation	238	764	182	-	1,184
Write-downs	15	48	2	23	88
Write-backs	-	-	-	-	-
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**

Write-downs of property, plant and equipment totaled €88 million, including €69 million related to the subgroups' restructuring programs and €8 million related to plant closures in connection with the integration of Schering, Berlin, Germany.

Further capital expenditures were made for the expansion of production capacities in China. The total capital expenditures of €1,342 million included approximately €235 million for this major region.

In 2009, borrowing costs of €14 million (2008: €29 million) were capitalized as components of the cost of acquisition and construction of qualifying assets, applying an average financing cost factor of 4.9% (2008: 6.2%).

Capitalized property, plant and equipment included assets with a total net value of €469 million (2008: €454 million) held under finance leases. The cost of acquisition and construction of these assets as of the closing date totaled €1,038 million (2008: €989 million). They comprised plant installations and machinery with a carrying amount of €240 million (2008: €266 million), buildings with a carrying amount of €143 million (2008: €103 million) and other assets with a carrying amount of €86 million (2008: €85 million). For information on the liabilities arising from finance leases see Note [27].

Also included are assets with a carrying amount of €21 million (2008: €15 million) leased to other parties under operating leases as defined in IAS 17 (Leases). The cost of acquisition of assets classified as operating leases was €41 million (2008: €33 million); their depreciation in 2009 amounted to €4 million (2008: €4 million).

In 2009, rental payments of €203 million (2008: €291 million) were made for assets leased under operating leases as defined in IAS 17 (Leases).

Bayer sold a registered usufructuary right to real estate with a carrying amount of €130 million to a leasing company and leased it back immediately under an agreement that includes a right of repurchase upon expiration of the lease. This transaction, which is accounted for as a secured loan, does not restrict the operational use of the real estate.

Changes in property, plant and equipment in 2008 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, 2007	**6,999**	**12,448**	**1,599**	**1,362**	**22,408**
Changes in scope of consolidation	45	3	(2)	1	47
Acquisitions	12	8	3	2	25
Capital expenditures	231	554	136	765	1,686
Retirements	(169)	(267)	(137)	(33)	(606)
Transfers	252	637	(59)	(841)	(11)
Transfers (IFRS 5)	-	-	-	-	-
Changes from revaluation (IFRS 3)	-	-	1	-	1
Exchange differences	101	229	(7)	54	377
December 31, 2008	**7,471**	**13,612**	**1,534**	**1,310**	**23,927**
Accumulated depreciation and write-downs, December 31, 2007	**3,577**	**8,914**	**1,069**	**29**	**13,589**
Changes in scope of consolidation	30	-	1	1	32
Retirements	(120)	(249)	(122)	(17)	(508)
Depreciation and write-downs in 2008	278	732	157	5	1,172
Depreciation	226	705	153	-	1,084
Write-downs	52	27	4	5	88
Write-backs	-	-	-	-	-
Transfers	4	23	(31)	-	(4)
Transfers (IFRS 5)	-	-	-	-	-
Exchange differences	40	118	(5)	1	154
December 31, 2008	**3,809**	**9,538**	**1,069**	**19**	**14,435**
Carrying amounts, December 31, 2008	**3,662**	**4,074**	**465**	**1,291**	**9,492**
Carrying amounts, December 31, 2007	**3,422**	**3,534**	**530**	**1,333**	**8,819**

The following tables provide an overview of the main sites operated by each subgroup:

Principal Subgroup Sites [Table 4.50]

Location	Main activities
HealthCare	
Leverkusen, Germany	Bayer 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	Bayer 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 am Main, 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
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
Vapi, India	Development of new production processes and manufacture of products for Crop Protection and Environmental Science
MaterialScience	
Leverkusen, Germany	Bayer MaterialScience headquarters, administration, production of basic chemicals, functional films and modified isocyanates
Brunsbüttel, Germany	Production of diphenylmethane diisocyanate, toluene diisocyanate, chlorine, hydrochloric acid and hydrogen
Dormagen, Germany	Production of modified isocyanates, coating resins, polycarbonate films, toluene diisocyanate, polyether, thermoplastic polyurethanes, chlorine, sodium hydroxide solution, hydrochloric acid and hydrogen
Krefeld, Germany	Production of polycarbonates, diphenylmethane diisocyanate, chlorine, sodium hydroxide solution, hydrochloric acid and hydrogen
Antwerp, Belgium	Production of polycarbonates, aniline, nitrobenzene and polyether
Tarragona, Spain	Production of diphenylmethane disocyanate, polyether formulations
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 diisocyanate (under construction)

19. Investments in associates

Changes in the carrying amounts of the Group's interests in associates included at equity were as follows:

Changes in Carrying Amounts of Investments in Associates [Table 4.51]

	2008	2009
	€ million	€ million
Carrying amounts, January 1	**484**	**450**
Acquisitions	-	-
Other additions	14	1
Divestitures	-	-
Miscellaneous retirements	(15)	-
Equity-method loss after taxes	(47)	(48)
Exchange differences	14	(8)
Carrying amounts, December 31	**450**	**395**

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 have been established to produce PO (PO JV Delaware United States, Bayer's interest 41%, and Lyondell Bayer Manufacturing Maasvlakte VOF, Netherlands, Bayer's interest 50%). 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 included at equity in the consolidated financial statements of the Bayer Group.

Aggregated Income Statement Data of Associates Included at Equity [Table 4.52]

	2008	2009
	€ million	€ million
Sales	919	648
Gross profit	(25)	(27)
Net loss	(95)	(95)
Share of pre-tax loss	(47)	(48)
Pre-tax loss from interests in associates included at equity	**(47)**	**(48)**
Pre-tax loss upon derecognition of other interests	(15)	-
Pre-tax loss from interests in associates included at equity (equity-method loss)	**(62)**	**(48)**

Aggregated Data from the Statements of Financial Position of Associates Included at Equity [Table 4.53]

	Dec. 31, 2008	Dec. 31, 2009
	€ million	€ million
Noncurrent assets	944	863
Current assets	238	193
Noncurrent liabilities	13	10
Current liabilities	178	171
Equity	991	875
Share of equity	430	377
Other	20	18
Carrying amount of associates included at equity	**450**	**395**

The item “other” mainly comprises differences arising from adjustments of data to Bayer’s uniform accounting policies, purchase price allocations and their amortization in income, and impairment losses.

20. Other financial assets

Other financial assets were as follows:

Other Financial Assets [Table 4.54]

	Dec. 31, 2008		Dec. 31, 2009	
	Total	Of which current	Total	Of which current
	€ million	€ million	€ million	€ million
Loans and receivables	633	142	603	95
Available-for-sale financial assets	288	4	212	14
of which debt instruments	62	3	63	13
of which equity instruments	226	1	149	1
Held-to-maturity financial investments	167	57	107	13
Receivables from forward commodity contracts	81	57	36	34
Receivables from other derivatives	635	373	584	210
Receivables under lease agreements	27	1	25	1
Total	**1,831**	**634**	**1,567**	**367**

Loans mainly comprised capital of €310 million (2008: €310 million) provided to Bayer-Pensionskasse VVaG (Bayer-Pensionskasse) for its effective initial fund and jouissance right capital of €150 million (2008: €150 million).

In 2009, impairment losses of €1 million (2008: €1 million) were recognized on loans and receivables and an impairment charge of €15 million (2008: €14 million) was recognized on available-for-sale financial assets. Unimpaired other financial assets of €13 million (2008: €0 million) were overdue on the closing date.

Available-for-sale financial assets included equity instruments in the amount of €58 million (2008: €84 million) 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 are recognized at amortized cost.

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 €30 million (2008: €32 million), including €5 million (2008: €5 million) in interest. Of the expected lease payments, €2 million (2008: €2 million) was due within one year, €28 million (2008: €28 million) within the following four years and €0 million (2008: €2 million) after five years.

21. Inventories

Inventories comprised:

Inventories [Table 4.55]

	Dec. 31, 2008	Dec. 31, 2009
	€ million	€ million
Raw materials and supplies	1,253	1,130
Work in process, finished goods and goods purchased for resale	5,409	4,953
Advance payments	19	8
Total	**6,681**	**6,091**

The changes in the inventory reserve, which are reflected in the cost of goods sold and partly as a special item in other operating expenses, were as follows:

Write-Downs of Inventories [Table 4.56]

	2008	2009
	€ million	€ million
Accumulated write-downs, January 1	**(318)**	**(368)**
Changes in scope of consolidation	-	-
Additions expensed in the reporting period	(236)	(150)
Deductions due to reversal or utilization	186	193
Exchange differences	-	(6)
Accumulated write-downs, December 31	**(368)**	**(331)**

22. Trade accounts receivable

Trade accounts receivable less write-downs amounted to €6,106 million on the closing date (2008: €5,953 million), including €6,098 million (2008: €5,936 million) maturing within one year and €8 million (2008: €17 million) maturing after one year.

Changes in write-downs of trade accounts receivable were as follows:

Write-Downs of Trade Accounts Receivable [Table 4.57]

	2008 € million	2009 € million
Accumulated write-downs, January 1	**(295)**	**(256)**
Changes in scope of consolidation	-	-
Additions expensed in the reporting period	(184)	(85)
Deductions due to reversal or utilization	198	96
Exchange differences	25	(26)
Accumulated write-downs, December 31	**(256)**	**(271)**

Unimpaired trade accounts receivable of €1,057 million (2008: €1,137 million) were overdue or due immediately on the closing date.

Overdue Trade Accounts Receivable [Table 4.58]

	Carrying amount	Of which neither impaired nor overdue at the closing date	Of which not impaired but overdue at the closing date			
			up to 3 months*	3–6 months	6–12 months	more than 12 months
	€ million	€ million	€ million	€ million	€ million	€ million
December 31, 2009	6,106	4,881	617	136	137	167
December 31, 2008	5,953	4,699	739	156	142	100

* The figures in the column "up to three months" include receivables due immediately.

The unimpaired receivables are deemed to be collectible on the basis of established credit management processes and individual assessments of customer risks. The write-downs include an appropriate allowance for default risk. In addition, a small amount of receivables is collateralized by liens on land or buildings.

23. Other receivables

Other receivables, after write-downs of €11 million (2008: €9 million), are comprised as follows:

Other Receivables [Table 4.59]

	Dec. 31, 2008		Dec. 31, 2009	
	Total	Of which current	Total	Of which current
	€ million	€ million	€ million	€ million
Benefit plan assets in excess of obligation	351	-	100	-
Receivables from employees	41	41	42	41
Other tax receivables	403	399	354	352
Interest receivables	5	4	8	8
Miscellaneous receivables	942	840	1,402	956
Total	**1,742**	**1,284**	**1,906**	**1,357**

Interest receivables consist mainly of interest earned or accrued that is not due to be received until after the closing date.

Miscellaneous receivables include €200 million (2008: €174 million) in accrued income, of which €171 million (2008: €156 million) represents current receivables. Miscellaneous receivables of €363 million exist from the sale of the hematological oncology portfolio – Campath®/ MabCampath®, Fludara® and Leukine® – to Genzyme Corporation, United States.

Of the €970 million (2008: €676 million) in financial receivables included in other receivables, €130 million (2008: €187 million) was overdue or due immediately on the closing date.

Overdue Other Financial Receivables [Table 4.60]

	Carrying amount	Of which neither impaired nor overdue at the closing date	Of which not impaired but overdue at the closing date			
			up to 3 months*	3–6 months	6–12 months	more than 12 months
	€ million	€ million	€ million	€ million	€ million	€ million
December 31, 2009	970	828	88	10	12	20
December 31, 2008	676	469	126	13	13	35

* The figures in the column "up to three 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 (conditional) capital created by resolutions of the Annual Stockholders' Meeting, and our share buyback program. Bayer's Articles of Incorporation do not stipulate capital ratios.

The changes in the various components of equity during 2008 and 2009 are shown in the statements of changes in equity.

Capital stock and capital reserves

The capital stock of Bayer AG on December 31, 2009 amounted to €2,117 million (2008: €1,957 million), divided into 826,947,808 (2008: 764,343,225) no-par registered shares, and was fully paid in. Each share confers one voting right. In 2009 the conversion of the €2.3 billion mandatory convertible bond issued by Bayer Capital Corporation B.V., Netherlands, in 2006 resulted in an increase of €160 million in the capital stock and the issuance of 62,604,583 new shares. An amount of €2,139 million was allocated to capital reserves. A fractional amount was disbursed to bondholders in cash.

Authorized capital

Authorized capital of €465 million was approved by the Annual Stockholders' Meeting on April 28, 2006. It expires on April 27, 2011. 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 €370 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 convertible bonds or bonds with attached warrants or mandatory convertible bonds issued by Bayer AG or its Group companies, who would be entitled to subscription rights upon exercise of the conversion rights or warrants. 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.

Further authorized capital was approved by the Annual Stockholders' Meeting on April 27, 2007. The Board of Management is authorized until April 26, 2012 to increase the capital stock, subject to the approval of the Supervisory Board, by up to a total of €195 million in one or more installments 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 does not exceed 10% of the capital stock existing at the time this authorization becomes effective or the time this authorization is exercised, for purposes of issuing new shares against cash contributions at a price that is not significantly below the market price of shares in the company that are already listed on the stock exchange at the time the issue price is finally determined. 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 that Act during the term of this authorization shall count toward the above 10% limit. Shares issued or to be issued to service bonds with conversion rights, attached warrants or mandatory 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

Of the €187 million conditional capital created by resolution of the Annual Stockholders' Meeting on April 30, 2004, corresponding to 72,998,695 shares as of December 31, 2008, an amount of €160 million, corresponding to 62,604,583 shares, was used in 2009 to service conversion rights under a mandatory convertible bond issued by Bayer Capital Corporation B.V., Netherlands, on April 6, 2006. The remaining amount of €27 million expired with the deletion of the respective provision of the Articles of Incorporation, which deletion was entered in the Commercial Register on January 22, 2010.

The Annual Stockholders' Meeting on April 25, 2008 approved the creation of Conditional Capital 2008 I and Conditional Capital 2008 II and authorized a conditional increase in the capital stock in each case of €196 million through the issue of 76,400,000 shares. This conditional capital increase may be used to grant shares to the holders of bonds with warrants or convertible bonds, profit-sharing rights or profit participation bonds (or combinations of these instruments) with option or conversion rights or obligations, issued on or before April 24, 2013 by Bayer AG or a Group company in which Bayer AG holds a direct or indirect interest of at least 90%. The authorization to issue such instruments is limited to a total nominal value 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 set analogously with Section 186 Paragraph 3 Sentence 4 of the German Stock Corporation Act for the exclusion of stockholders' subscription rights may not be exceeded. Both shares and other such instruments shall count toward this limit if they were issued under exclusion of subscription rights in direct or analogous application of Section 186, Paragraph 3, Sentence 4 of the German Stock Corporation Act.

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, Oldenburg, Germany, in 2008. An amount of €6 million (2008: €4 million) that constitutes scheduled amortization/depreciation of the respective assets and is recognized in income was transferred in 2009 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 2008 (2007: €1.35 per share). The proposed dividend for the 2009 fiscal year is €1.40 per share, which would result in a total dividend payment of €1,158 million. The proposed dividend is subject to approval by the company's 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 2009 and 2008 are shown in the following table:

Components of Non-Controlling Interest in Equity [Table 4.62]

	2008	2009
	€ million	€ million
January 1	**87**	**77**
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 euro zone	3	2
Deferred taxes on valuation adjustments recognized directly in equity	-	-
Other changes in equity	(9)	(21)
Dividend payments	(9)	(4)
Changes in equity recognized in net income	**5**	**-**
December 31	**77**	**54**

Non-controlling interests mainly comprise the equity of Bayer CropScience Ltd., India; Sumika Bayer Urethane Co. Ltd., Japan; BaySystems Pearl FZCO, United Arab Emirates; Bayer East Africa Ltd., Kenya; Bayer Jinling Polyurethane Company Ltd., China; 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 are 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, 2008	Dec 31, 2009	Dec 31, 2008	Dec 31, 2009	Dec 31, 2008	Dec 31, 2009
	€ million	€ million	€ million	€ million	€ million	€ million
Germany	4,557	4,866	109	71	4,666	4,937
Other countries	1,197	1,130	484	450	1,681	1,580
Total	**5,754**	**5,996**	**593**	**521**	**6,347**	**6,517**

The expenses for defined benefit pension plans and other post-employment benefit obligations are comprised as follows:

Expenses for Defined Benefit Pension Plans [Table 4.64]

	Germany		Other countries		Total	
	2008	2009	2008	2009	2008	2009
	€ million	€ million	€ million	€ million	€ million	€ million
Current service cost	134	108	48	47	182	155
Past service cost	(9)	(14)	(2)	(2)	(11)	(16)
Interest cost	567	611	232	240	799	851
Expected return on plan assets	(307)	(300)	(267)	(200)	(574)	(500)
Plan curtailments	-	-	(3)	2	(3)	2
Plan settlements	-	-	1	(1)	1	(1)
Total	**385**	**405**	**9**	**86**	**394**	**491**

Expenses for Other Post-Employment Benefit Obligations [Table 4.65]

	Germany		Other countries		Total	
	2008	2009	2008	2009	2008	2009
	€ million	€ million	€ million	€ million	€ million	€ million
Current service cost	9	6	17	18	26	24
Past service cost	-	-	-	1	-	1
Interest cost	6	3	47	47	53	50
Expected return on plan assets	-	-	(28)	(21)	(28)	(21)
Plan curtailments	-	-	-	(1)	-	(1)
Plan settlements	-	-	-	-	-	-
Total	**15**	**9**	**36**	**44**	**51**	**53**

The status of unfunded and funded defined benefit obligations is as follows:

Status of Unfunded and Funded Defined Benefit Obligations

	Germany			
	Pension obligations		Other post-employment benefit obligations	
	2008	2009	2008	2009
	€ million	€ million	€ million	€ million
Defined benefit obligation as of January 1	**10,458**	**10,319**	**141**	**109**
Acquisitions	-	-	-	-
Divestitures/changes in scope of consolidation	(22)	25	-	-
Current service cost	134	108	9	6
Interest cost	567	611	6	3
Employee contributions	25	25	-	-
Past service cost	(9)	(14)	-	-
Plan settlements	-	-	-	-
Net actuarial (gain) loss	(287)	432	-	-
Benefits paid	(547)	(569)	(47)	(47)
Plan curtailments	-	-	-	-
Other reclassifications	-	-	-	-
Exchange differences	-	-	-	-
Defined benefit obligation as of December 31	**10,319**	**10,937**	**109**	**71**
Fair value of plan assets as of January 1	**6,165**	**6,032**	**-**	**-**
Acquisitions	-	-	-	-
Divestitures/changes in scope of consolidation	(16)	15	-	-
Expected return on plan assets	307	300	-	-
Net actuarial gain (loss)	(213)	(14)	-	-
Plan settlements	-	-	-	-
Employer contributions	311	303	47	47
Employee contributions	25	25	-	-
Benefits paid	(547)	(569)	(47)	(47)
Exchange differences	-	-	-	-
Fair value of plan assets as of December 31	**6,032**	**6,092**	**-**	**-**
Funded status as of December 31	**(4,287)**	**(4,845)**	**(109)**	**(71)**
Unrecognized past service cost	-	-	-	-
Asset limitation due to uncertainty of obtaining future benefits	-	-	-	-
Net recognized liability as of December 31	**(4,287)**	**(4,845)**	**(109)**	**(71)**
Amounts recognized in the balance sheet				
Benefit plan assets in excess of obligation	270	21	-	-
Provisions for pensions and other post-employment benefits	(4,557)	(4,866)	(109)	(71)
Net recognized liability as of December 31	**(4,287)**	**(4,845)**	**(109)**	**(71)**

[Table 4.66]

	Other Countries				Total			
	Pension obligations		Other post-employment benefit obligations		Pension obligations		Other post-employment benefit obligations	
	2008	2009	2008	2009	2008	2009	2008	2009
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
	3,705	**3,752**	**718**	**730**	**14,163**	**14,071**	**859**	**839**
	5	-	-	-	5	-	-	-
	1	-	-	-	(21)	25	-	-
	48	47	17	18	182	155	26	24
	232	240	47	47	799	851	53	50
	3	4	-	-	28	29	-	-
	(2)	(2)	-	1	(11)	(16)	-	1
	22	(1)	-	-	22	(1)	-	-
	138	309	(26)	4	(149)	741	(26)	4
	(216)	(209)	(34)	(42)	(763)	(778)	(81)	(89)
	(3)	2	-	(1)	(3)	2	-	(1)
	11	-	(11)	-	11	-	(11)	-
	(192)	31	19	(7)	(192)	31	19	(7)
	3,752	**4,173**	**730**	**750**	**14,071**	**15,110**	**839**	**821**
	3,568	**2,651**	**339**	**251**	**9,733**	**8,683**	**339**	**251**
	5	-	-	-	5	-	-	-
	-	-	-	-	(16)	15	-	-
	267	200	28	21	574	500	28	21
	(893)	280	(137)	38	(1,106)	266	(137)	38
	21	(2)	-	-	21	(2)	-	-
	100	141	35	45	411	444	82	92
	3	4	-	-	28	29	-	-
	(216)	(209)	(34)	(42)	(763)	(778)	(81)	(89)
	(204)	72	20	(9)	(204)	72	20	(9)
	2,651	**3,137**	**251**	**304**	**8,683**	**9,229**	**251**	**304**
	(1,101)	**(1,036)**	**(479)**	**(446)**	**(5,388)**	**(5,881)**	**(588)**	**(517)**
	3	(1)	(5)	(4)	3	(1)	(5)	(4)
	(18)	(14)	-	-	(18)	(14)	-	-
	(1,116)	**(1,051)**	**(484)**	**(450)**	**(5,403)**	**(5,896)**	**(593)**	**(521)**
	81	79	-	-	351	100	-	-
	(1,197)	(1,130)	(484)	(450)	(5,754)	(5,996)	(593)	(521)
	(1,116)	**(1,051)**	**(484)**	**(450)**	**(5,403)**	**(5,896)**	**(593)**	**(521)**

Of the defined benefit obligation for pensions, €5,006 million (2008: €4,799 million) relates to unfunded benefit obligations while €10,104 million (2008: €9,272 million) relates to funded benefit obligations. Of the defined benefit obligation for other post-employment benefits, €176 million (2008: €185 million) relates to unfunded benefit obligations while €645 million (2008: €654 million) relates to funded benefit obligations.

Of the funded pension plans, total overfunding of individual plans amounts to €111 million (2008: €366 million) while underfunding amounts to €986 million (2008: €955 million). Similarly, other funded post-employment benefit obligations of individual funds are underfunded by €341 million (2008: €404 million). Other unfunded post-employment benefit obligations relate 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.

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 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. With the aid of a risk management system, stress scenarios are simulated and other risk analyses are undertaken (e.g. value at risk).

For plan assets in other countries as well, the key investment strategy criteria are the structure of the benefit obligations and the risk profile. 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.

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	
	2008	2009	2008	2009
	%	%	%	%
Equity securities	17.68	19.54	37.94	42.60
Debt securities	60.73	59.97	50.17	46.61
Real estate and special real estate funds	8.83	9.08	1.80	1.43
Other	12.76	11.41	10.09	9.36
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	
	2008	2009	2008	2009
	%	%	%	%
Equity securities	-	-	39.38	45.20
Debt securities	-	-	44.53	35.18
Real estate and special real estate funds	-	-	-	-
Other	-	-	16.09	19.62
Total	**-**	**-**	**100.00**	**100.00**

The fair value of the plan assets includes real estate leased by Bayer, recognized at a fair value of €78 million (2008: €74 million), and Bayer shares held through investment funds, recognized at their market value of €30 million (2008: €14 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	
	2008	2009	2008	2009	2008	2009
	%	%	%	%	%	%
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
Other post-employment benefit obligations						
Discount rate	6.40	3.10	6.45	6.20	6.45	5.95

Parameters for Benefit Expense [Table 4.70]

	Germany		Other countries		Total	
	2008	2009	2008	2009	2008	2009
	%	%	%	%	%	%
Pension obligations						
Discount rate	5.50	6.00	6.45	6.30	5.75	6.10
Projected future remuneration increases	2.85	3.00	4.65	4.00	3.10	3.25
Projected future benefit increases	1.75	2.00	3.25	2.95	1.95	2.25
Expected return on plan assets	4.75	5.00	7.45	7.50	5.55	5.85
Other post-employment benefit obligations						
Discount rate	5.10	6.40	6.85	6.45	6.55	6.45
Expected return on plan assets	-	-	8.25	8.25	8.25	8.25

The discount rate for pension obligations in other countries is influenced mainly by the rates of 5.8% (2008: 6.2%) and 5.7% (2008: 6.4%) 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 impact pension and other post-employment benefit obligations as of year end 2009 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	(683)	765	(255)	281	(938)	1,046
Change in projected future remuneration increases	69	(62)	30	(31)	99	(93)
Change in projected future benefit increases	498	(460)	41	(80)	539	(540)
Other post-employment benefit obligations						
Change in discount rate	(1)	1	(40)	44	(41)	45

Altering individual parameters by 0.5 percentage points while leaving the other parameters unchanged would impact benefit expense in 2010 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	(9)	9	(13)	13
Change in projected future remuneration increases	8	(7)	3	(3)	11	(10)
Change in projected future benefit increases	34	(31)	2	(2)	36	(33)
Change in expected return on plan assets	(30)	30	(16)	16	(46)	46
Other post-employment benefit obligations						
Change in discount rate	-	-	(1)	1	(1)	1
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 is based on the assumption that they will increase at a rate of 10% (assumption in 2008: 11%), which should gradually decline to 5% by 2017 (assumption in 2008: 5% by 2016). 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	83	(70)
Impact on benefit expense	8	(7)

The following payments were made in 2009 and 2008, and are expected to be made in 2010, 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		
	2008	2009	2010 expected	2008	2009	2010 expected
	€ million	€ million	€ million	€ million	€ million	€ million
Pension obligations	311	303	451	100	141	292
Other post-employment benefit obligations	47	47	41	35	45	44
Total	**358**	**350**	**492**	**135**	**186**	**336**

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
2010	582	41	213	43	795	84
2011	597	14	211	44	808	58
2012	618	3	217	47	835	50
2013	639	2	200	49	839	51
2014	664	2	207	52	871	54
2015–2019	3,718	9	1,195	289	4,913	298

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, are as follows:

Changes in Accumulated Actuarial Gains and Losses Related to Defined Benefit Obligations and Plan Assets

	Pension obligations Germany					Pension obligations Other countries				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
Defined benefit obligation	10,256	11,357	10,458	10,319	10,937	4,269	4,348	3,705	3,752	4,173
Fair value of plan assets	4,599	6,053	6,165	6,032	6,092	3,485	3,804	3,568	2,651	3,137
Funded status	**(5,657)**	**(5,304)**	**(4,293)**	**(4,287)**	**(4,845)**	**(784)**	**(544)**	**(137)**	**(1,101)**	**(1,036)**
Accumulated actuarial gains (losses) relating to benefit obligation as of										
January 1	**(1,682)**	**(2,842)**	**(2,293)**	**(1,197)**	**(910)**	**(421)**	**(692)**	**(657)**	**(403)**	**(513)**
Changes due to divestitures and changes in scope of consolidation	-	1	1	-	-	-	-	-	-	-
Newly arisen during the year due to changes in actuarial parameters	(1,122)	441	1,097	450	(396)	(265)	46	299	40	(368)
Newly arisen during the year due to experience adjustments	(38)	46	(2)	(163)	(36)	3	(45)	(29)	(178)	59
Allocations to discontinued operations	-	61	-	-	-	-	34	-	-	-
Exchange differences	-	-	-	-	-	(9)	-	(16)	28	-
December 31	**(2,842)**	**(2,293)**	**(1,197)**	**(910)**	**(1,342)**	**(692)**	**(657)**	**(403)**	**(513)**	**(822)**
Accumulated actuarial gains (losses) relating to plan assets as of										
January 1	**(786)**	**(693)**	**(846)**	**(920)**	**(1,133)**	**(204)**	**(125)**	**15**	**7**	**(886)**
Changes due to divestitures and changes in scope of consolidation	-	-	4	-	-	-	-	-	-	-
Newly arisen during the year	93	(154)	(78)	(213)	(14)	84	159	(9)	(893)	280
Allocations to discontinued operations	-	1	-	-	-	-	(19)	-	-	-
Exchange differences	-	-	-	-	-	(5)	-	1	-	-
December 31	**(693)**	**(846)**	**(920)**	**(1,133)**	**(1,147)**	**(125)**	**15**	**7**	**(886)**	**(606)**

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				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
	878	864	718	730	750	14,525	15,705	14,163	14,071	15,110	1,036	1,003	859	839	821
	359	357	339	251	304	8,084	9,857	9,733	8,683	9,229	359	357	339	251	304
	(519)	**(507)**	**(379)**	**(479)**	**(446)**	**(6,441)**	**(5,848)**	**(4,430)**	**(5,388)**	**(5,881)**	**(677)**	**(646)**	**(520)**	**(588)**	**(517)**
	(259)	**(259)**	**(311)**	**(221)**	**(195)**	**(2,103)**	**(3,534)**	**(2,950)**	**(1,600)**	**(1,423)**	**(259)**	**(259)**	**(311)**	**(221)**	**(195)**
	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-
	(31)	(71)	33	(10)	(8)	(1,387)	487	1,396	490	(764)	(31)	(71)	33	(10)	(8)
	31	17	64	36	4	(35)	1	(31)	(341)	23	31	17	64	36	4
	-	-	-	-	-	-	95	-	-	-	-	-	-	-	-
	-	2	(7)	-	-	(9)	-	(16)	28	-	-	2	(7)	-	-
	(259)	**(311)**	**(221)**	**(195)**	**(199)**	**(3,534)**	**(2,950)**	**(1,600)**	**(1,423)**	**(2,164)**	**(259)**	**(311)**	**(221)**	**(195)**	**(199)**
	(36)	**(41)**	**(24)**	**(25)**	**(162)**	**(990)**	**(818)**	**(831)**	**(913)**	**(2,019)**	**(36)**	**(41)**	**(24)**	**(25)**	**(162)**
	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-
	(5)	17	(1)	(137)	38	177	5	(87)	(1,106)	266	(5)	17	(1)	(137)	38
	-	-	-	-	-	-	(18)	-	-	-	-	-	-	-	-
	-	-	-	-	-	(5)	-	1	-	-	-	-	-	-	-
	(41)	**(24)**	**(25)**	**(162)**	**(124)**	**(818)**	**(831)**	**(913)**	**(2,019)**	**(1,753)**	**(41)**	**(24)**	**(25)**	**(162)**	**(124)**

26. Other provisions

The various categories of provisions changed as follows in 2009:

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, 2008	**736**	**298**	**175**	**806**	**341**	**1,689**	**469**	**4,514**
Changes in scope of consolidation	(4)	-	-	-	-	(1)	25	20
Additions	833	37	130	530	346	1,176	328	3,380
Utilization	(653)	(45)	(89)	(462)	(260)	(1,187)	(315)	(3,011)
Reversal	(137)	(16)	(16)	(47)	(19)	(78)	(120)	(433)
Interest cost	3	4	1	-	2	47	1	58
Exchange differences	34	7	2	2	29	-	3	77
December 31, 2009	**812**	**285**	**203**	**829**	**439**	**1,646**	**391**	**4,605**

The expected utilization of the provisions recognized in the statement of financial position as of December 31, 2009 are 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
2010	554	46	113	829	194	1,089	266	3,091
2011	116	28	55	-	114	112	34	459
2012	9	35	18	-	9	68	3	142
2013	13	11	4	-	-	44	1	73
2014	2	4	3	-	1	48	19	77
2015 or later	118	161	10	-	121	285	68	763
Total	**812**	**285**	**203**	**829**	**439**	**1,646**	**391**	**4,605**

The provisions are partly offset by claims for refunds in the amount of €135 million (2008: €69 million), which are recognized as receivables. They relate principally to claims for refunds in connection with product liability and to environmental measures.

26.1 Taxes

Provisions for taxes comprise provisions for income taxes amounting to €686 million (2008: €676 million) and provisions for other types of taxes amounting to €126 million (2008: €60 million).

Further income tax commitments according to IAS 12 existed at year end in the amount of €93 million (2008: €65 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 €166 million (2008: €139 million) for severance payments and €37 million (2008: €36 million) for other expenses, which mainly comprised demolition and other costs related to the closure of production facilities.

The principal restructuring charges in 2009 related to four major projects.

In 2009 the Pharmaceuticals segment of the HealthCare subgroup continued the restructuring program introduced following the acquisition of Schering AG, Berlin, Germany, in 2006 with the aim of consolidating the Bayer Group's pharmaceuticals activities and enhancing the competitiveness of the business as a whole. To this end the commercial and administrative structures as well as the research and development processes were reviewed and adjusted worldwide. The division continued to consolidate the activities of its field forces in the various countries, optimized the operating model of the marketing organization and further sharpened the focus of its research and development activities. The products of the hematological oncology portfolio were transferred to Genzyme Corporation, United States. These structural changes led to net expenses of €87 million in 2009. The total expenses comprising €85 million in severance payments, €8 million in write-downs and €108 million in other restructuring expenses were partially offset by a €114 million gain from the sale of the hematological oncology portfolio. Provisions for the above and other restructuring measures as of December 31, 2009, amounted to €67 million.

In the Animal Health Division of the HealthCare subgroup, the decision to close a production facility in Brazil resulted in restructuring costs of €47 million. Of this amount, write-downs accounted for €12 million and other restructuring costs for €35 million. The provisions established in this connection amounted to €16 million as of December 31, 2009.

The implementation of the "NEW" restructuring program, instigated in August 2006 to ensure a sustained improvement in the efficiency of the Bayer CropScience subgroup, continued as planned in 2009 and was completed on schedule. Important measures under the program took place in France, the United States and the United Kingdom. In France, progress was made in merging the CropScience companies, creating the basis for optimizing cost structures and increasing administrative efficiency. In the U.S. and the U.K. the consolidation of production facilities was completed as planned. Total expenses for the restructuring amounted to €124 million in 2009. Of this amount, severance payments accounted for €18 million, write-downs for €5 million and other restructuring costs for €101 million. Provisions for the restructuring amounted to €65 million as of December 31, 2009.

The "RIVER" restructuring project initiated by the MaterialScience subgroup in the fall of 2007 to optimize cost structures and achieve a lasting improvement in efficiency continued to be implemented as planned in 2009. A major focus of the individual measures was on North America and Europe. In North America, apart from a large number of individual measures, significant improvements in the efficiency of administrative activities were achieved at the site in Pittsburgh, Pennsylvania, United States. Other measures related to the closures of a resins plant in New Martinsville, West Virginia, and an electrolysis plant in Baytown, Texas. In Germany, the main sites affected were those in Leverkusen and Krefeld, where steps were taken to optimize administrative workflows and a new site concept was introduced. Total restructuring expenses for the "RIVER" project amounted to €130 million in 2009, comprising €53 million in severance payments, €35 million in write-downs and €42 million in other restructuring expenses. The provisions for this restructuring amounted to €41 million as of December 31, 2009.

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 and other personnel costs. Also reflected here are the obligations under the stock-based compensation programs.

Stock-based compensation in the Bayer Group is granted primarily under standard programs and also on an individual agreement basis. Individual agreements enable the company to link remuneration components to the stock price or future stock price movements. Awards under such agreements may be contingent upon the attainment of agreed targets, or may be based solely on the length of service. Standard programs exist for different groups of employees. The program offered to members of the Board of Management and other senior executives from 2001 through 2004 was essentially a stock option program with variable stock-based awards. This program provides for cash payments. Middle management was offered a stock incentive program, while other groups of employees were offered a stock participation program. A stock-based compensation program for top and middle management known as "Aspire" was introduced in 2005. It comprises two variants, which are described on the following pages. For other managers and non-managerial employees, an annual stock participation program has been offered since 2005 under which Bayer subsidizes employee purchases of shares in the company. In 2009 this program, now named "BayShare," was also offered for the first time to the top and middle managers who are already eligible to participate in "Aspire."

As required by IFRS 2 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. Adjustments to provisions relating to all existing stock-based compensation programs 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 Option Program	Stock Incentive Program	Stock Participation Program	Aspire I	Aspire II	Total
	€ million	€ million	€ million	€ million	€ million	€ million
December 31, 2008	**2**	**2**	**9**	**41**	**33**	**87**
Additions	-	2	8	46	56	112
Utilization	(2)	-	(2)	(25)	(21)	(50)
Reversal	-	-	-	(2)	(7)	(9)
Exchange differences	-	-	-	(1)	(1)	(2)
December 31, 2009	**0**	**4**	**15**	**59**	**60**	**138**

Provisions of €12 million existed at the end of 2009 (2008: €10 million) for obligations entered into under individual stock-based compensation agreements. Total expense for all stock-based compensation programs in 2009 was €124 million (2008: €28 million).

The fair value of obligations under the standard stock-based compensation programs and individual agreements has been calculated using the Monte Carlo simulation method based on the following key parameters:

Parameters for Monte Carlo Simulation [Table 4.80]

	2008	2009
Dividend yield	3.80%	2.49%
Risk-free interest rate	1.93%	1.57%
Volatility of Bayer stock	31.56%	34.93%
Volatility of the EURO STOXX 50	25.72%	29.46%
Correlation between Bayer stock price and the EURO STOXX 50	0.68	0.68

Long-term incentive program for members of the Board of Management and other senior executives (Aspire I)

To participate in Aspire I, members of the Board of Management and other senior executives are required to purchase a certain number of Bayer shares that is predetermined according to specific guidelines and to 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, participants are granted an award of up to 200% of their individual Aspire target opportunity at the end of the program.

Long-term incentive program for middle management (Aspire II)

Other senior managers and middle managers are 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 150% of each manager's Aspire target opportunity.

BayShare 2009

Under the BayShare 2009 program (2008: Stock Participation Program 2008), Bayer subsidized eligible employees' personal investments in Bayer stock. The discount under this program is set separately each year. In 2009 it was 20% (2008: 15%) of the subscription amount. The conditions differed from the Stock Participation Program 2008 in that employees stated a fixed amount they wished to invest in shares instead of subscribing for a fixed number of shares. The maximum subscription amount was set at €2,500 (2008: €5,000) or €5,000 (2008: €10,000) depending on the employee's position. The shares thus acquired are held in a special deposit account and must be retained until December 31 of the year following the year of purchase.

In 2009 employees purchased a total of 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 were all similar in their respective structures. Provisions for the obligations under these programs are recorded in the statement of financial position at fair value through profit or loss. Entitlement to awards under these programs is conditioned on retention of the Bayer stock designated under the program for a certain time period.

The following table shows the programs applicable through December 31, 2004:

Stock-Based Compensation Programs 2000–2004 [Table 4.81]

	Stock Option Program	Stock Incentive Program	Stock Participation Program
Year of issue	2004	2000–2004	2000–2004
Original term in years	5	10	10
Retention period/distribution date in years from issue date	3	2 / 6 / 10	2 / 6 / 10
Reference price	0	0	0
Performance criteria	yes	yes	no

Stock Option Program

The stock option programs offered to members of the Board of Management and other senior executives up to 2004 ran for five-year periods, and were also subject to a three-year retention condition, followed by a two-year exercise period. The last options under the 2004 program were exercised at the end of the exercise period in August 2009, and the Stock Option Program was thus terminated. The right to exercise the options and the cash payment to which each participant was entitled depended on the absolute performance of Bayer stock and its performance relative to the Dow Jones EURO STOXX 50.

The maximum personal investment in Bayer stock eligible for the program was set individually for each participant at the start of each tranche, according to his/her position. This determined the number of options allocated. For the tranche issued in 2004, participants had received up to three options for each share held as a personal investment. For each option, a cash payment – equivalent to the market price of one Bayer share – and an outperformance premium were awarded at the exercise date, subject to the attainment of certain performance and outperformance targets.

Stock Incentive Program

Participants in this program 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. The Stock Incentive Program differs from the Stock Option Program in that 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 their performance-related bonus for the preceding fiscal year.

Stock Participation Program (until 2004)

The structure of this program, which was offered 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 on each occasion.

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 comprise the following:

Financial Liabilities [Table 4.82]

	Dec. 31, 2008		Dec. 31, 2009	
	Total	Of which current	Total	Of which current
	€ million	€ million	€ million	€ million
Bonds and notes / promissory notes	10,729	4,355	8,301	375
Liabilities to banks	4,438	1,409	3,251	807
Liabilities under finance leases	535	44	550	44
Liabilities from forward commodity contracts	223	77	91	46
Liabilities from other derivatives	612	104	578	113
Other financial liabilities	333	267	178	104
Total	**16,870**	**6,256**	**12,949**	**1,489**

The maturities of financial liabilities were as follows:

Maturities of Financial Liabilities [Table 4.83]

Maturity	Dec. 31, 2008	Maturity	Dec. 31, 2009
	€ million		€ million
2009	6,256	2010	1,489
2010	771	2011	1,867
2011	1,967	2012	2,793
2012	2,740	2013	1,430
2013	1,465	2014	1,785
2014 or later	3,671	2015 or later	3,585
Total	**16,870**	**Total**	**12,949**

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 (2008: €0 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, 2008	Dec. 31, 2009
				€ million	€ million
		Bayer AG			
6.075%	6.000%	EMTN bond 2002/2012	EUR 2,000 million	2,025	2,044
5.155%	5.000%	Hybrid bond 2005/2105 (2015)	EUR 1,300 million	1,245	1,267
Floating	Floating	EMTN bond 2006/2009	EUR 1,600 million	1,599	-
4.621%	4.500%	EMTN bond 2006/2013	EUR 1,000 million	995	996
5.774%	5.625%	EMTN bond 2006/2018	GBP 250 million	259	277
5.541%	5.625%	EMTN bond 2006/2018 (increase)	GBP 100 million	106	113
Floating	Floating	EMTN bond 2007/2010	EUR 300 million	300	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 Corp. B.V.			
7.117%	6.625%	Mandatory convertible bonds 2006/2009	EUR 2,300 million	2,296	-
4.750%	4.625%	EMTN bond 2009/2014	EUR 1,300 million	-	1,291
		Bayer Corporation			
7.180%	7.125%	Notes 1995/2015	US$ 200 million	162	153
6.670%	6.650%	Notes 1998/2028	US$ 350 million	249	241
4.043%	3.750%	EMTN bond 2004/2009	EUR 460 million	460	-
		Bayer Holding Ltd.			
1.654%	1.585%	EMTN bond 2007/2010	JPY 10 billion	79	75
2.006%	1.955%	EMTN bond 2007/2012	JPY 15 billion	119	112
Floating	Floating	EMTN bond 2007/2012	JPY 30 billion	237	225
Floating	Floating	EMTN bond 2008/2013	JPY 10 billion	79	75
3.654%	3.575%	EMTN bond 2008/2018	JPY 15 billion	119	112
		Total		**10,729**	**7,681**

In March 2009, Bayer Capital Corporation B.V. issued a corporate bond under the multi-currency Euro Medium Term Notes (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 with a nominal volume of €200 million under the EMTN program. It has a coupon of 4% and matures 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 comprised a three-year bond with a nominal volume of JPY 10 billion and a coupon of 1.585%, 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.

In April 2007, Bayer AG issued a floating rate bond with a maturity of three years and a nominal volume of €300 million under the EMTN program. The coupon is the three-month EURIBOR rate plus 10 basis points. At the same time, a four-year bond with a nominal volume of €200 million and a coupon of 4.375% was issued.

In May 2006 Bayer AG launched three further bond issues under its multi-currency EMTN program as part of the financing of the Schering acquisition. The first of these was a three-year floating rate note with a nominal volume of €1,600 million, bearing interest at 22.5 basis points above the 3-month EURIBOR rate. This was redeemed at maturity in May 2009. The second issue, with a nominal volume of €1,000 million, has a maturity of seven years and a coupon of 4.5%. A third bond, denominated in sterling (GBP), was issued in the nominal volume of GBP 250 million. A second tranche of GBP 100 million was issued in the same year. This bond has a coupon of 5.625% and matures in 2018. The entire issue has been swapped into euros.

In April 2006, Bayer Capital Corp. B.V. issued a subordinated mandatory convertible bond guaranteed by Bayer AG with a coupon of 6.625% and a nominal volume of €2,300 million as part of the financing of the acquisition of Schering AG, Berlin, Germany. The outstanding units of this bond were converted into 62,604,583 new shares in 2009.

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 par. 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 January 2004 Bayer Corporation issued a five-year bond with a nominal volume of €460 million and a coupon of 3.75% under the EMTN program. This bond was redeemed at maturity in January 2009.

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 October 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 comprise a syndicated loan raised in 2006 of now €0.9 billion, in connection with the acquisition of Schering AG, Berlin, Germany.
This credit facility is provided by a syndicate of eleven financial institutions and bears a variable rate of interest (EURIBOR plus a margin, which has been fixed at 20 basis points since July 2007). This credit facility has a fixed term until March 2011 but can be repaid in full or in part at any time on Bayer's request.

As of December 31, 2009 the Group had credit facilities at its disposal totaling €7.2 billion (2008: €9.9 billion), of which €3.3 billion (2008: €4.4 billion) was used and €3.9 billion (2008: €5.5 billion) was unused and thus available for borrowing on an unsecured basis.

Lease payments totaling €704 million (2008: €707 million), including €154 million (2008: €172 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, 2008				Dec. 31, 2009		
Maturity	Lease payments	Interest component	Liabilities under finance leases	Maturity	Lease payments	Interest component	Liabilities under finance leases
	€ million	€ million	€ million		€ million	€ million	€ million
2009	70	26	44	2010	71	27	44
2010	60	25	35	2011	67	25	42
2011	59	23	36	2012	58	23	35
2012	51	22	29	2013	217	18	199
2013	207	18	189	2014	36	11	25
2014 or later	260	58	202	2015 or later	255	50	205
Total	**707**	**172**	**535**	**Total**	**704**	**154**	**550**

Further information on the accounting for liabilities from derivatives is given in Note [30].

28. Trade accounts payable

Trade accounts are payable mainly to third parties. As of December 31, 2009, they included €2,720 million (2008: €2,463 million) due within one year and €15 million (2008: €1 million) due after one year.

Advance payments received amounted to €164 million (2008: €87 million). In 2009 these were included for the first time in trade accounts payable rather than in other liabilities. The prior-year figures have been restated accordingly.

29. Other liabilities

Other liabilities comprised:

Other Liabilities [Table 4.86]

	Dec. 31, 2008		Dec. 31, 2009	
	Total	Of which current	Total	Of which current
	€ million	€ million	€ million	€ million
Accrued interest on liabilities	321	304	255	242
Liabilities to employees	171	138	160	132
Liabilities for social expenses	143	133	214	191
Other tax liabilities	276	275	271	271
Liabilities to non-controlling interest	101	-	78	-
Miscellaneous liabilities	1,294	1,024	1,004	731
Total	**2,306**	**1,874**	**1,982**	**1,567**

Liabilities for social expenses include, in particular, social insurance contributions that had not been paid by the closing date.

The €78 million (2008: €101 million) in liabilities to non-controlling interest includes the third-party share of the equity of Currenta GmbH & Co. OHG.

Miscellaneous liabilities include €345 million (2008: €376 million) in accrued expenses, of which €172 million (2008: €200 million) is to be regarded as current. The accrued expenses include €63 million (2008: €49 million) in grants and subsidies received from governments, of which €12 million (2008: €13 million) was reversed and recognized in income. The miscellaneous liabilities also include a large number of individually immaterial amounts pertaining to subsidiaries.

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, 2008
		Carried at amortized cost	Carried at fair value	Non-financial assets/liabilities	
	Carrying amount Dec. 31, 2008	Fair value (for information)	Carrying amount	Carrying amount	Carrying amount in the statement of financial position
	€ million	€ million	€ million	€ million	€ million
Trade accounts receivable	5,953				5,953
Loans and receivables	5,953	5,953			5,953
Other financial assets	911		920		1,831
Loans and receivables	660	682			660
Available-for-sale financial assets	84		204		288
Held-to-maturity financial assets	167	168			167
Derivatives that qualify for hedge accounting			248		248
Derivatives that do not qualify for hedge accounting			468		468
Other receivables	676			1,066	1,742
Loans and receivables	676	671			676
Non-financial assets				1,066	1,066
Cash and cash equivalents	2,094				2,094
Loans and receivables	2,094	2,094			2,094
Total financial assets	**9,634**		**920**		**10,554**
of which loans and receivables	9,383				9,383
Financial liabilities	16,035		835		16,870
Carried at amortized cost	16,035	16,706			16,035
Derivatives that qualify for hedge accounting			308		308
Derivatives that do not qualify for hedge accounting			527		527
Trade accounts payable	2,377			87	2,464
Carried at amortized cost	2,377	2,377			2,377
Non-financial liabilities				87	87
Other liabilities	1,357		100	849	2,306
Carried at amortized cost	1,357	1,356			1,357
Derivatives that qualify for hedge accounting			87		87
Derivatives that do not qualify for hedge accounting			13		13
Non-financial liabilities				849	849
Total financial liabilities	**19,769**		**935**		**20,704**
of which carried at amortized cost	19,769				19,769
of which derivatives that qualify for hedge accounting			395		395
of which derivatives that do not qualify for hedge accounting			540		540

2008 figures restated

[Table 4.87]

	Dec.31, 2009						
	Carried at amortized cost				Carried at fair value	Non-financial assets/liabilities	
			Based on published market prices	Based on market-derived data	Based on individual measurement 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
	6,106						6,106
	6,106	6,106					6,106
	793		127	605	42		1,567
	628	700					628
	58		127		27		212
	107	111					107
				218			218
				387	15		402
	970					936	1,906
	970	971					970
						936	936
	2,725						2,725
	2,725	2,725					2,725
	10,594		**127**	**605**	**42**		**11,368**
	10,429						10,429
	12,280			669			12,949
	12,280	13,072					12,280
				235			235
				434			434
	2,571					164	2,735
	2,571	2,571					2,571
						164	164
	1,033			45	4	900	1,982
	1,033	1,033					1,033
				37			37
				8	4		12
						900	900
	15,884			**714**	**4**		**16,602**
	15,884						15,884
				272			272
				442	4		446

Loans and receivables and liabilities carried at amortized cost also included 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]

	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)
Impairment charges	(107)	-	(15)	-	-	(122)
Income from write-backs	63	-	-	-	-	63
Gains/losses from retirements	-	-	(1)	-	-	(1)
Other non-operating income and expense	2	-	(2)	-	(5)	(5)
Net result	**16**	**3**	**(12)**	**(62)**	**(672)**	**(727)**

Income, Expense, Gains and Losses on Financial Instruments (Previous Year) [Table 4.89]

	2008					
	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	123	10	1	370	24	528
Interest expense	-	-	-	(295)	(917)	(1,212)
Income from affiliated companies	-	-	-	-	-	-
Changes in fair value	-	-	-	12	-	12
Impairment charges	(114)	(27)	(14)	-	-	(155)
Income from write-backs	92	-	-	-	-	92
Gains/losses from retirements	-	-	(7)	-	-	(7)
Other non-operating income and expense	17	-	-	-	(22)	(5)
Net result	**118**	**(17)**	**(20)**	**87**	**(915)**	**(747)**

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 aggregate amount of financial assets and liabilities recognized at fair value based on individual measurement parameters was €56 million at the beginning of 2009. The carrying amount in the statement of financial position at the end of 2009 was €38 million, following €1 million in fair value changes recognized in the income statement, €18 million in retirements and minus €1 million in value changes recognized outside profit or loss. Of the value changes recognized in income, €10 million related to assets or liabilities still recognized in the statement of financial position at the end of the year and minus € 9 million to retired assets and liabilities. There were also divestment gains of €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].

As of the closing date, there was an unpaid portion of the effective initial fund of Bayer-Pensionskasse amounting to €490 million, which may result in further payments by Bayer AG in subsequent years.

Maturity Analysis of Financial Instruments

	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	36	-	356	375
Liabilities to banks	3,251	26	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	222	-	21	-
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	-	-

	Dec. 31, 2008	Cash flows January–March 2009		Cash flows April–December 2009	
	Carrying amount	Interest	Repayment	Interest	Repayment
	€ million	€ million	€ million	€ million	€ million
Financial liabilities					
Bonds and notes / promissory notes	10,729	48	460	462	1,600
Liabilities to banks	4,438	34	610	82	799
Remaining liabilities	868	4	185	22	126
Trade accounts payable	2,377	-	2,280	-	97
Other liabilities					
Accrued interest on liabilities	321	202	-	102	-
Remaining liabilities	1,036	2	633	10	197
Liabilities from derivatives					
Derivatives that qualify for hedge accounting	395	5	2	13	31
Derivatives that do not qualify for hedge accounting	540	(51)	64	92	181
Receivables from derivatives					
Derivatives that qualify for hedge accounting	248	-	148	1	-
Derivatives that do not qualify for hedge accounting	468	(56)	171	81	92

[Table 4.90]

	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
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-

	Cash flows 2010		Cash flows 2011		Cash flows 2012		Cash flows 2013		Cash flows 2014–2018		Cash flows after 2018	
	Interest	Repayment	Interest	Repayment	Interest	Repayment	Interest	Repayment	Interest	Repayment	Interest	Repayment
	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million	€ million
	309	379	305	400	286	2,356	163	1,079	359	1,929	159	251
	106	274	55	1,433	43	121	31	131	52	1,067	-	3
	25	35	24	75	23	31	19	219	45	182	15	22
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	17	-	-	-	-	-	-	-	-	-
	10	42	2	20	1	19	-	1	-	4	-	120
	3	24	4	27	76	24	5	-	39	150	-	-
	55	47	27	59	-	41	11	47	9	27	-	-
	1	3	-	-	87	-	-	-	11	-	-	-
	77	75	27	-	-	-	7	-	3	-	-	-

30.3 Information on derivatives

Fair value hedges are used to eliminate the risk of fluctuations in market value, especially on fixed-interest borrowings, by obtaining a variable interest rate. These fair value hedges relate mainly to the €2 billion bond issued in 2002 and the €1.3 billion bond issued in 2005.

Gains of €45 million (2008: €70 million) were recorded on fair value hedging instruments in 2009. Losses of €44 million (2008: €75 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 €3,523 million and €323 million (2008: €2,948 million and €140 million), respectively.

Accumulated other comprehensive income increased by €55 million after taxes in 2009 due to positive changes in the fair values of derivatives designated as cash flow hedges (2008: decreased by €64 million due to negative changes). In 2009, an amount of €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. In 2008, a corresponding amount of €47 million was recognized in income. Similarly, pro-rated deferred taxes of €4 million previously reflected in accumulated other comprehensive income were recognized as deferred tax income (2008: €14 million as deferred tax expense). No material ineffective portions of hedges had to be recognized in the income statement in 2009 or 2008.

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, 2008			Dec. 31, 2009		
		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	**7,498**	**240**	**(421)**	**7,652**	**58**	**(294)**
Forward exchange contracts	5,342	193	(169)	5,868	43	(88)
of which FV hedges	-	-	-	-	-	-
of which CF hedges	340	-	(52)	384	-	(5)
Cross-currency interest-rate swaps	2,156	47	(252)	1,784	15	(206)
of which FV hedges	-	-	-	-	-	-
of which CF hedges	1,535	41	(161)	1,512	15	(175)
Currency hedging of forecasted transactions	**2,948**	**152**	**(87)**	**3,523**	**136**	**(45)**
Forward exchange contracts	2,948	152	(87)	3,245	129	(44)
of which FV hedges	-	-	-	-	-	-
of which CF hedges	2,928	147	(87)	2,451	104	(37)
Currency options	-	-	-	278	7	(1)
of which FV hedges	-	-	-	-	-	-
of which CF hedges	-	-	-	239	7	-
Interest-rate hedging of recorded transactions	**10,937**	**214**	**(191)**	**12,612**	**368**	**(284)**
Interest rate swaps	8,937	211	(188)	10,612	368	(284)
of which FV hedges	1,510	59	-	2,467	92	-
of which CF hedges	-	-	-	-	-	-
Interest rate options	2,000	3	(3)	2,000	-	-
of which FV hedges	-	-	-	-	-	-
of which CF hedges	-	-	-	-	-	-
Commodity price hedging	**140**	**81**	**(223)**	**323**	**36**	**(91)**
Forward commodity contracts	94	37	(180)	167	13	(68)
of which FV hedges	-	-	-	-	-	-
of which CF hedges	31	1	(95)	85	-	(55)
Commodity option contracts	46	44	(43)	156	23	(23)
of which FV hedges	-	-	-	-	-	-
of which CF hedges	-	-	-	-	-	-
Total	**21,523**	**687**	**(922)**	**24,110**	**598**	**(714)**
of which short-term derivatives	8,962	410	(268)	10,922	239	(204)
for currency hedging	8,853	306	(190)	8,259	179	(126)
for interest rate hedging	27	47	(1)	2,400	26	(32)
for commodity hedging	82	57	(77)	263	34	(46)

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, 2008	Dec. 31, 2009
	€ million	€ million
Warranties	114	74
Miscellaneous	591	601
Total	**705**	**675**

The miscellaneous contingent liabilities included an unpaid portion of the effective initial fund of Bayer-Pensionskasse amounting to €490 million, which may result in further payments by Bayer AG in subsequent years.

In addition to provisions, other liabilities and contingent liabilities, there were 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 €606 million (2008: €685 million). The maturities of the respective payment obligations were as follows:

Operating Leases [Table 4.93]

Maturing in	Dec. 31, 2008	Maturing in	Dec. 31, 2009
	€ million		€ million
2009	205	2010	166
2010	145	2011	132
2011	113	2012	99
2012	81	2013	72
2013	65	2014	59
2014 or later	76	2015 or later	78
Total	**685**	**Total**	**606**

Financial commitments resulting from orders already placed under purchase agreements related to planned or ongoing capital expenditure projects totaled €441 million (2008: €300 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 €661 million (2008: €915 million). As of December 31, 2009, 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, 2008	Maturing in	Dec. 31, 2009
	€ million		€ million
2009	127	2010	154
2010	93	2011	114
2011	110	2012	83
2012	133	2013	39
2013	71	2014	43
2014 or later	381	2015 or later	228
Total	**915**	**Total**	**661**

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 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

Lipobay/Baycol: As of February 1, 2010, approximately 200 Lipobay/Baycol cases, approximately 175 of them in the United States, remain pending against Bayer worldwide, claiming economic loss and personal injury. We are currently aware of fewer than five pending cases in the United States that in our opinion meet our criteria for potential settlement. Bayer believes the legal risks remaining in the Lipobay/Baycol litigation are no longer material.

Magnevist®: As of February 1, 2010, there were approximately 310 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. Additional cases are anticipated.

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. Without admission of liability, Bayer has reached agreements with approximately 140 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. Irrespective of these settlements, Bayer continues to believe that it has meritorious defenses and intends to defend itself vigorously in the cases remaining. Bayer has taken 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, 2010, there were approximately 1,600 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 is 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. Additional cases are anticipated.

In 2006 and 2007 observational studies reported on a possible correlation between the administration of Trasylol® and severe renal dysfunction, myocardial infarction, stroke and an increase in mortality. In 2007, Bayer temporarily suspended worldwide marketing of Trasylol® after preliminary results from an independent clinical study in Canada raised concerns about a possible increased risk of mortality in patients who had received Trasylol®. The marketing suspension will remain in effect until the final results from the Canadian study have been analyzed and the benefit-risk assessment for Trasylol® can be re-evaluated together with the health authorities. In some countries, including the United States, Trasylol® continues to be available to certain surgical patients with an established medical need. We are closely cooperating with health authorities to resolve the questions that have arisen.

Bayer believes 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.

HIV/HCV: Numerous actions are pending against Bayer in the United States and other countries seeking damages for plaintiffs resident outside of the United States who claim to have become infected with HIV or HCV (hepatitis C virus) through use of blood plasma products sold by Bayer. Additional actions are pending by U.S. residents who claim to have been infected with HCV. Bayer and its three co-defendants have entered into an agreement with two U.S. law firms representing the vast majority of plaintiffs in the U.S. federal multidistrict factor concentrates litigation. The agreement is subject to conditions that must be satisfied before the settlement can be completed, including broad acceptance of, and overall participation in, the settlement by the groups of plaintiffs represented by these firms. Bayer will continue to vigorously defend any claims that are not included in the resolution process.

Yasmin®/YAZ®: As of February 15, 2010, there were about 1,100 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®, YAZ® and/or Ocella, a generic version of Yasmin® distributed by Barr Laboratories, Inc. in the U.S. market. Plaintiffs seek compensatory and punitive damages, claiming, in particular, that Bayer knew or should have known the alleged risks and should be held liable for having failed to disclose them or adequately warn users of Yasmin® and YAZ®. Bayer has also been served with three putative consumer class actions claiming economic loss, one of them also claiming personal injuries. All cases pending in U.S. federal courts have been consolidated in a multidistrict litigation (MDL) proceeding for common pre-trial management. In addition, two Canadian class actions have been served upon Bayer. Additional lawsuits are anticipated. Bayer believes that it has meritorious defenses and intends to defend itself vigorously. Bayer is also taking over Barr´s defense in certain cases according to the parties´ supply and licensing agreement. Based on the information currently available, Bayer has taken accounting measures for anticipated defense costs.

In connection with the above matters concerning Lipobay/Baycol, Magnevist®, Trasylol®, HIV/HCV 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 the 2005 ruling of the federal district court in New York dismissing all lawsuits filed in federal court. Meanwhile, there are no further avenues of appeal in these federal indirect purchasers' cases. Another appeal remains pending in the United States Court of Appeals for the Second Circuit (New York) concerning the claims brought by direct purchasers of Cipro®. 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 August 2009, the U.S. Court of Appeals for the Federal Circuit in a two-to-one opinion affirmed this decision. Bayer has filed a petition for review in the U.S. Supreme Court.

In 2008, Bayer and Barr Laboratories, Inc. signed a supply and licensing agreement for Yasmin® covering the United States. Bayer supplies Barr with a generic version of Yasmin® which Barr markets solely in the United States. Barr pays Bayer a fixed percentage of the revenues from the product sold by Barr. Bayer continues to pursue its appeal of the court decision that invalidated Bayer's U.S. patent '531 for Yasmin®. If Bayer should ultimately prevail, Bayer would receive a larger share of Barr's revenues from sales of its generic version of Yasmin® in the United States.

In 2008 Bayer received two notices of an Abbreviated New Drug Application with a Paragraph IV certification (an "ANDA IV") pursuant to which Watson Laboratories Inc. and Sandoz Inc. each seek approval to market a generic version of Bayer's oral contraceptive Yasmin® in the United States. Bayer has filed suit against Watson and Sandoz in U.S. federal court alleging patent infringement by Watson and Sandoz 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.

YAZ®: In 2007 and 2008, Bayer received notices from Barr Laboratories, Inc., Watson Laboratories Inc. and Sandoz Inc. that each company has filed an ANDA IV seeking approval of a generic version of Bayer's YAZ® oral contraceptive in the United States. All three applications claim that Bayer's patents are invalid and/or that the respective generic product does not infringe them. Bayer has filed patent infringement suits against Watson and Sandoz 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. If Bayer should ultimately prevail in its litigation with Barr regarding Yasmin®, Bayer would evaluate its options to use the '531 patent against Watson and Sandoz.

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. Bayer will supply Barr with the product for this purpose. Should Bayer lose patent lawsuits in the United States against other companies concerning YAZ®, Bayer would begin supplying the product to Barr at that time and Barr would begin marketing generic YAZ® in the United States. Barr will pay Bayer a fixed percentage of the revenues from the product sold by Barr.

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. In 2008 the court granted summary judgment in favor of Bayer with regard to one of the two patents and held the patent claims at issue invalid. After a trial on the issue of invalidity, the court also held the second patent invalid. In January 2010, the U.S. Court of Appeals for the Federal Circuit affirmed both decisions. It is not clear whether Abbott will pursue further legal remedies.

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. The arbitration proceeding is currently pending. Roche has added to the arbitration four additional patents which Roche alleges the Bayer Contour® systems infringe.

Bayer believes it has meritorious defenses in the above patent disputes and intends to defend itself vigorously.

Kogenate®: In 2008, Novartis Vaccines and Diagnostics Inc. and Novo Nordisc A/S commenced a patent infringement suit in the United States alleging that Bayer's manufacturing and marketing of the recombinant Factor VIII product Kogenate® infringe a patent granted in 2006. The suit primarily seeks damages. Bayer does not believe that it has infringed any valid patent. Proceedings were stayed in December 2009 because the parties had reached a settlement in principle. The parties are working to finalize the settlement agreement.

Levitra®: In July 2009, Bayer filed a patent infringement suit in U.S. federal court against Teva Pharmaceuticals USA, Inc. and Teva Pharmaceutical Industries, Ltd. In May 2009, Bayer had received notice of an Abbreviated New Drug Application with a Paragraph IV certification (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.

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.

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 May 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 which was originally concluded in 1994. Under this agreement, the parties jointly developed Nexavar®, a drug product to treat kidney and liver cancer. Bayer believes it has meritorious defenses and intends to defend itself vigorously.

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, 2010, Bayer was aware of a total of approximately 500 lawsuits, involving about 6,400 rice farmers and resellers, pending in U.S. federal and state courts against several Bayer Group companies in connection with genetically modified rice in the United States. 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. This is alleged to have led to 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. 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 cooperation with third parties, including a breeding research institute in the United States. 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.

In two trials in December 2009 and February 2010, two juries at the U.S. District Court in St. Louis, Missouri, ruled that Bayer must pay a total of approximately US$3.5 million in compensatory damages for losses sustained by five plaintiff farmers. The juries rejected the farmers´ claims for punitive damages. Bayer disagrees with the findings of liability and the awards of compensatory damages. Bayer is considering its options for legal remedies and, as to the first trial, has already filed a motion for a new trial.

Additional trials have been scheduled for 2010. The facts and amount of damages claimed differ significantly from case to case. Management believes that the outcomes of the St. Louis cases do not allow any direct conclusions on the outcomes of the other cases.

Bayer believes it has meritorious defenses in these actions and intends to continue to defend itself vigorously. Bayer has taken accounting measures for anticipated defense costs based on the information currently available.

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.

Premise®: Bayer, among others, had been named as a defendant in a putative nationwide class action filed in federal court in North Carolina, United States, which alleges violations of antitrust laws in the marketing of a certain pest control product (Premise®). In 2007, the court granted summary judgment in favor of the defendants and plaintiffs have appealed. Bayer prevailed on all appeals and unless plaintiffs petition the United States Supreme Court again in the near future, the case will be concluded.

MaterialScience:

Antitrust proceedings in connection with rubber products
Companies of the Bayer Group are subject to civil damage claims in Europe, the United States 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 now been closed.

In 2008, a group of plaintiffs who are primarily producers of tires brought an action for damages before the High Court of Justice in London against Bayer and other producers of butadiene rubber and emulsion styrene butadiene rubber. The plaintiffs allege damages resulting from alleged violations of E.U. competition law in the markets for butadiene rubber and emulsion styrene butadiene rubber. Parallel proceedings are pending before a court in Milan, to which Bayer joined as intervenient. It is still unclear whether the Milan court has jurisdiction.

In the United States, The Goodyear Tire & Rubber Company filed a claim in a federal court in 2008, alleging that Bayer violated antitrust law in the area of butadiene rubber and styrene butadiene rubber. The complaint seeks, among other things, treble damages.

In Australia, a class action alleging antitrust violations in connection with rubber chemicals products was filed in 2008. While the claim was struck out at first instance, the plaintiffs have filed an application for leave of appeal.

Bayer is defending itself in the European, U.S. and Australian litigation. 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 diphenylmethane diisocyanate (MDI) based products used in coal mines. In one case the plaintiffs allege that they were also exposed to TDI and HDI based products. Bayer believes it has meritorious defenses and intends to defend itself vigorously.

Liability considerations following the Lanxess spin-off

The liability situation following the spin-off of the Lanxess subgroup is governed by both statutory and contractual provisions. Under the German Transformation Act, all entities that are parties to a spin-off are jointly and severally liable for a period of five years for obligations of the transferor entity that are established prior to the spin-off date. This five-year period ends in March 2010. Bayer believes the liability risks remaining in connection with the Lanxess spin-off are not 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 cash and cash equivalents shown in the statement of cash flows comprise cash, checks and balances with banks. Also included are financial instruments with original maturities of up to three months.

The amounts reported by consolidated companies outside the euro zone are translated at average exchange rates for the year, 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.

Cash and cash equivalents contain both the proceeds from divestitures of discontinued operations and the cash inflows from these operations prior to the divestitures. In principle, therefore, the statement of cash flows must account for all cash inflows and outflows for both continuing and discontinued operations. However, IFRS 5 (Non-current Assets Held for Sale and Discontinued Operations) specifies that cash flows from operating, investing and financing activities be classified by continuing and discontinued operations. The discontinued operations' shares of the cash flows from operating, investing and financing activities are stated separately in Note [6.3].

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 2009 of €4,658 million (2008: €5,295 million) is the cash surplus from operating activities before any changes in working capital. The cash flows by segment are shown in the table in Note [1].

The net operating cash flow of €5,375 million (2008: €3,608 million) takes into account the changes in working capital and other non-cash transactions.

The line "Non-cash effects of the remeasurement of acquired assets (inventory work-down)" has been inserted in the statement of cash flows in order to eliminate the effects of the Schering purchase price allocation from gross cash flow. In this way the non-cash effect of the work-down of the step-up from the remeasurement of Schering inventories to fair value as of June 23, 2006, the date of acquisition, is already neutralized in the gross cash flow. In 2008, a final amount of €208 million was transferred to this line from "Decrease (increase) in inventories."

The net operating cash flow for 2009 included an income-tax-related net cash flow of €500 million (2008: €1,073 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 2009 amounted to €1,126 million (2008: €3,089 million).

Additions to property, plant and equipment and intangible assets in 2009 resulted in a cash outflow of €1,575 million (2008: €1,759 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 €98 million (2008: €167 million).

In addition, acquisitions resulted in cash outflows of €354 million (2008: €1,617 million), the principal item being the acquisition of Athenix Corp., United States. Disbursements for this purchase, including the acquired cash, amounted to €247 million. Included in the previous year's figure was the payment of €695 million related to the acquisition of the remaining shares of Bayer Schering Pharma AG. Following registration of the squeeze-out, the remaining minority stockholders received a cash compensation payment of €98.98 per share. 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 fiscal 2009 there was a net cash outflow of €3,621 million (2008: €873 million) for financing activities. Net loan repayments amounted to €1,442 million (2008: net borrowings of €1,525 million).

Net cash outflows for dividend payments amounted to €973 million (2008: €1,126 million), including €101 million in refunds (2008: €84 million in payments) of withholding tax on intra-Group dividends. Interest expense decreased to €1,206 million (2008: €1,272 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, 2009 amounted to €2,725 million (2008: €2,094 million).

Other Information

37. Audit fees

The following fees for the services of PricewaterhouseCoopers Aktiengesellschaft Wirtschaftsprüfungsgesellschaft, Essen, Germany, were recognized as expenses:

Audit Fees [Table 4.95]

	2008	2009
	€ million	€ million
Financial statements auditing	6	5
Audit-related services and other audit work	2	2
Tax consultancy	-	-
Other services rendered to Bayer AG or subsidiaries	-	-
Total	**8**	**7**

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 audit-related services and other audit work primarily relate to audit work in connection with acquisitions and divestitures, audits of the internal control system including project audits in connection with the implementation of new IT systems, and 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 at equity, and with post-employment benefit plans:

Related Parties [Table 4.96]

	2008			2009		
	Income	Receivables	Liabilities	Income	Receivables	Liabilities
	€ million	€ million	€ million	€ million	€ million	€ million
Non-consolidated subsidiaries	14	10	(67)	19	13	(33)
Joint ventures	37	3	-	32	3	(1)
Associates	22	15	(18)	24	10	(25)
Post-employment benefit plans	-	460	(46)	-	460	(89)

Bayer AG has undertaken to provide jouissance right capital in the form of an interest-bearing loan totaling €150 million for the Bayer-Pensionskasse. The entire amount remained drawn as of December 31, 2009. The loan capital of €310 million provided to Bayer-Pensionskasse in 2008 for its effective initial fund continued to exist as of December 31, 2009.

No write-downs were made in 2009 or 2008 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. This 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]

	2008	2009
	€ thousand	€ thousand
Directly effected compensation	8,813	8,830
Long-term incentive (stock-based compensation entitlements earned in the respective year)	1,509	1,623
Change in value of existing entitlements	(533)	1,079
Current service cost for pension entitlements earned in the respective year	884	1,364
Aggregate compensation (according to IFRS)	**10,673**	**12,896**

Further details are provided in the Compensation Report, which forms part of the Management Report.

Pension payments to retired members of the Board of Management and their surviving dependents in 2009 amounted to €11,273 thousand (2008: €11,697 thousand). Pension provisions for former members of the Board of Management and their surviving dependents at the closing date amounted to €107,223 thousand (2008: €107,863 thousand).

The compensation of the Supervisory Board amounted to €2,295 thousand (2008: €2,295 thousand), including €765 thousand (2008: €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, 2009, nor any repayments of such loans during the year.

Leverkusen, February 15, 2010
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 and of the statements' compliance with the International Financial Reporting Standards. The scope of the auditor's 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 2009.

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, 2010
Bayer Aktiengesellschaft

Werner Wenning	Werner Baumann	Dr. Marijn Dekkers
Klaus Kühn	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 for the business year from January 1, 2009 to December 31, 2009, 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., 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, 2010

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 corporation listed (as at December 31, 2009 or the date on which they ceased to be members of the Supervisory Board of Bayer AG):

DR. MANFRED SCHNEIDER
(born December 21, 1938)
Chairman of the Supervisory Board effective April 2002
- Daimler AG
- Linde AG (Chairman)
- RWE AG (Chairman, effective May 1, 2009)
- TUI AG

THOMAS DE WIN
(born November 21, 1958)
Vice Chairman of the Supervisory Board, Member of the Supervisory Board effective April 2002
Chairman of the Bayer Central Works Council
Chairman of the Works Council of the Leverkusen site of Bayer
- Bayer MaterialScience AG

DR. PAUL ACHLEITNER
(born September 28, 1956)
Member of the Supervisory Board effective April 2002
Member of the Board of Management of Allianz SE
- Allianz Deutschland AG
- Allianz Global Investors AG
- Henkel AG & Co. KGaA (Shareholders' Committee)
- RWE AG

ANDRÉ AICH
(born February 17, 1969)
Member of the Supervisory Board effective April 2007
Member of the Works Council of Bayer Schering Pharma AG

WILLY BEUMANN
(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 (effective August 26, 2009)

DR. CLEMENS BÖRSIG
(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. (effective February 2009)
- Linde AG

KARL-JOSEF ELLRICH
(born October 5, 1949)
Member of the Supervisory Board effective April 2000
Chairman of the Bayer Group Works Council
Chairman of the Works Council of the Dormagen site of Bayer
- Bayer CropScience AG (Vice Chairman)

DR.-ING. THOMAS FISCHER
(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
(born February 13, 1954)
Member of the Supervisory Board effective April 2006
North Rhine District Secretary of the German Mining, Chemical and Energy Industrial Union (until November 6, 2009)
Member of the Executive Committee of the German Mining, Chemical and Energy Industrial Union (effective October 13, 2009)
- Evonik Services GmbH

PROF. DR.-ING. E.H. HANS-OLAF HENKEL
(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
- EPG AG (until December 15, 2009)
- Heliad Equity Partners GmbH & Co. KGaA (effective March 9, 2009)
- Ringier AG
- SMS GmbH

REINER HOFFMANN
(born May 30, 1955)
Member of the Supervisory Board effective October 2006
Deputy General Secretary of the European Trade Union Confederation (ETUC)
North Rhine District Secretary of the German Mining, Chemical and Energy Industrial Union (effective November 6, 2009)
- SASOL Germany GmbH

DR. RER. POL. KLAUS KLEINFELD
(born November 6, 1957)
Member of the Supervisory Board effective April 2005
Chief Executive Officer of ALCOA Inc.

PETRA KRONEN
(born August 22, 1964)
Member of the Supervisory Board effective July 2000
Chairwoman of the Works Council of the Uerdingen site of Bayer
- Bayer MaterialScience AG (Vice Chairwoman, effective December 7, 2009)

DR. RER. NAT. HELMUT PANKE
(born August 31, 1946)
Member of the Supervisory Board effective April 2007
Member of various supervisory boards
- Microsoft Corporation
- Singapore Airlines Limited (effective September 1, 2009)
- UBS AG

HUBERTUS SCHMOLDT
(born January 14, 1945)
Member of the Supervisory Board effective January 1995
Chairman of the German Mining, Chemical and Energy Industrial Union (until October 13, 2009)
Member of various supervisory boards
- Deutsche BP AG (Vice Chairman)
- Dow Olefinverbund GmbH (Vice Chairman)
- E.ON AG (Vice Chairman)
- RAG AG (Vice Chairman)
- RAG Deutsche Steinkohle AG (Vice Chairman effective May 13, 2009)

DR.-ING. EKKEHARD D. SCHULZ
(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 (effective September 17, 2009, Chairman effective October 16, 2009)
- ThyssenKrupp Services AG (Chairman) (until September 30, 2009)
- ThyssenKrupp Steel Europe AG (former ThyssenKrupp Steel AG) (Chairman)
- ThyssenKrupp Technologies AG (Chairman) (until October 11, 2009)

DR. KLAUS STURANY*
(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 (effective August 18, 2009)

DIPL.-ING. DR.-ING. E.H. JÜRGEN WEBER
(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 Holding GmbH (Chairman)
- Tetra Laval Group
- Voith AG
- Willy Bogner GmbH & Co. KGaA

* independent expert member pursuant to Section 100 Paragraph 5 of the German Stock Corporation Act (AktG)

PROF. DR. DR. H.C. ERNST-LUDWIG WINNACKER
(born July 26, 1941)
Member of the Supervisory Board effective April 1997
Secretary General of the Human Frontier Science Program (effective July 1, 2009)
- Medigene AG (Chairman)
- Wacker Chemie AG

OLIVER ZÜHLKE
(born December 11, 1968)
Member of the Supervisory Board effective April 2007
Vice Chairman of the Works Council of the Leverkusen site of Bayer

Standing committees of the Supervisory Board of Bayer AG (as at Dec. 31, 2009)

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), Ellrich, 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, 2009):

WERNER WENNING
(born October 21, 1946)
Chairman of the Board of Management, appointed until September 30, 2010

- Bayer Schering Pharma AG (Chairman) (until August 26, 2009)
- Deutsche Bank AG
- E.ON AG
- HDI V.a.G. (effective October 1, 2009)
- Henkel AG & Co. KGaA, Shareholders' Committee
- Talanx AG (effective October 1, 2009)

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 (until December 31, 2009)
- DIREVO Biotech AG (until March 31, 2009)

DR. MARIJN DEKKERS
(born September 22, 1957)
Member of the Board of Management effective January 1, 2010, appointed until December 31, 2014

President und Chief Executive Officer of Thermo Fisher Scientific, Inc. (until October 15, 2009)

- Biogen Idec, Inc. (until December 31, 2009)

KLAUS KÜHN
(born February 11, 1952)
Member of the Board of Management, appointed until April 30, 2010

- Bayer Business Services GmbH (Chairman)
- Bayer CropScience AG (Chairman)
- Bayer Schering Pharma AG (until August 26, 2009)

DR. WOLFGANG PLISCHKE
(born September 15, 1951)
Member of the Board of Management, appointed until February 28, 2014

- ARK Therapeutics, Non-Executive Director
- Bayer Innovation GmbH, Shareholders' Committee (Chairman)
- Bayer MaterialScience AG (Chairman)
- Bayer Real Estate GmbH, Shareholders' Committee (Chairman) (effective March 13, 2009)
- Bayer Technology Services GmbH (Chairman)

DR. RICHARD POTT
(born May 11, 1953)
Labor Director
Member of the Board of Management, appointed until April 30, 2012

- Bayer Chemicals AG (Chairman)
- Bayer HealthCare AG (Chairman)
- Bayer Innovation GmbH, Shareholders' Committee
- Bayer Schering Pharma AG (Chairman) (effective August 26, 2009)
- Currenta Geschäftsführungs-GmbH (Chairman)

Organization Chart

as of February 1, 2010 [Graphic 5.1]

BAYER AG (HOLDING COMPANY)

Group Management Board

Werner Wenning
Chairman
(until September 30, 2010)

Werner Baumann
Finance
(effective May 1, 2010)

Marijn Dekkers
Chairman
(effective October 1, 2010)

Klaus Kühn
Finance
(until April 30, 2010)

Wolfgang Plischke
Innovation, Technology & 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
J. Peters
Finance
J. Dietsch
Corporate Development
M. Mangold

Law & Patents, Insurance
R. Hartwig
Environment & Sustainability
W. Grosse Entrup
Group Accounting & Controlling
U. Hauck
Regional Coordination
I. Paterson

BUSINESS AREAS

Bayer HealthCare

A. J. Higgins (photo)
Chairman
L. van der Broek
Animal Health
G. Balkema
Consumer Care
S. E. Peterson
Medical Care
A. Fibig
Bayer Schering Pharma (BSP)
U. Köstlin
BSP Regions
A. Busch *
BSP Global Drug Discovery
K. Malik
BSP Global Development
M. Vehreschild
Central Administration & Organization
H. Klusik
Product Supply

Bayer CropScience

F. Berschauer (photo)
Chairman
R. Scheitza *
Portfolio Management
A. Klausener
Research
F. J. Placke
Development
W. Welter
Industrial Operations & QHSE
D. Suwelack
Business Planning & Administration
B. Naaf
Crop Protection Asia/Pacific
J. du Puy
Crop Protection Europe & TAMECIS
W. Buckner
Crop Protection North America
M. Reichardt
Crop Protection Latin America
G. Riemann
Environmental Science
J. Schneider
BioScience

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

SERVICE AREAS

Bayer Business Services

Executive Board
D. Hartert (photo)
Chairman
N. Fieseler*

Bayer Technology Services

A. Noack (photo)
Managing Director

Currenta

Executive Board
K. Schäfer (photo)
Chairman
J. Waldi *

* Labor Director

List of Tables and Graphics

CONSOLIDATED FINANCIAL STATEMENTS OF THE BAYER GROUP

FURTHER INFORMATION

Glossary

A

A1CNow® User-friendly device for measuring the long-term blood glucose level HbA1c at doctor's offices and diabetes outreach clinics

Adalat® Drug product for the treatment of hypertension; active ingredient: nifedipine

Adengo® Herbicide; active ingredients: thiencarbazone-methyl, isoxaflutole, cyprosulfamide; main application: corn

Admire® Insecticide; active ingredient: imidacloprid; main applications: vegetables, rice, fruit, potatoes

Advantage® Flea control product for dogs and cats; active ingredient: imidacloprid

Alemtuzumab Humanized monoclonal antibody, currently being tested in multiple sclerosis (MS)

Aleve® Analgesic; active ingredient: naproxen

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

Antra® Drug product that binds excess gastric acid; active ingredient: omeprazol

Apronax®/Flanax® Analgesic; active ingredient: naproxen

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

Asset-backed securities (ABS) ABS are (debt) securities collateralized by a pool of receivables

Atlantis® Herbicide; active ingredients: mesosulfuron-methyl, iodosulfuron-methyl-sodium, mefenpyr; main applications: wheat, triticale, rye

Avalox®/Avelox® Drug product for the treatment of respiratory tract infections; active ingredient: moxifloxacin

Aviator® Xpro™ Fungicide; active ingredient: bixafen; main application: cereals

B

Balance® flexx Herbicide; active ingredient: isoxaflutole; main application: corn

Basta® Herbicide; active ingredient: glufosinate-ammonium; main applications: plantation crops, potatoes and vegetables

Bayblend® Brand name for polymer blends based on polycarbonate and acrylonitrile-butadiene-styrene

Baycox® Drug product to control coccidiosis, a parasitary infectious disease in young livestock; active ingredient: toltrazuril

BaySystems® Global umbrella brand for the polyurethane systems business

Baytril® Drug for the treatment of severe veterinary infectious diseases; active ingredient: enrofloxacin

Baytubes® Brand name for multi-wall carbon nanotubes

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

Biscaya® Insecticide; active ingredient: thiacloprid; main applications: canola, cereals, cotton, fruit, potatoes, rice and vegetables

Breeze® Blood glucose measurement device for people with diabetes for simple, safe and rapid use at home or while traveling

C

Canesten® Antifungal drug for infections of the skin; 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 earned in a period to the capital invested. It is thus a measure of profitability in that period.

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 company has created value.

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

Contour® USB Blood glucose measurement device for people with diabetes, featuring USB capability and integrated software

Core earnings per share (core EPS) Core earnings per share comprises adjusted core net income from continuing operations 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 of intangible assets and write-downs of property, plant and equipment, plus/minus special items, plus non-operating result, plus/minus income taxes, plus/minus tax adjustments, minus income after taxes attributable to non-controlling interests, plus financing costs relating to the mandatory bond after tax effects. Core earnings per share is not an indicator defined in the International Financial Reporting Standards. The company believes 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.

Corvus® Herbicide; active ingredients: thiencarbazone-methyl, isoxaflutole, cyprosulfamide; main application: corn

Credit default swaps (CDS) Credit default swaps are financial instruments that permit the trading of credit risks. They are essentially tradable insurance contracts used to hedge against the default of a borrower or similar credit instruments.

CropStar® Insecticide; active ingredients: imidacloprid and thiodicarb; main application: seed treatment in corn

D

Decis® Insecticide; active ingredient: deltamethrin; main applications: cotton, vegetables, cereals and fruit

Delta cash value added Delta CVA is an indicator of the change in the cash value added between two periods. A positive delta CVA shows that a unit has created more 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

Didget® Blood glucose measurement device developed specifically for children with diabetes

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 of intangible assets and depreciation of property, plant and equipment. 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, write-downs/write-backs or special items. The company also believes that this indicator gives readers a clearer picture of the results of operations and ensures 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.

(Underlying) EBITDA margin The (underlying) EBITDA margin 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.

EMTN and multi-currency EMTN program The Euro Medium Term Note (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.

F

Fandango® Fungicide; active ingredients: fluoxastrobin and prothioconazole; main application: cereals

Flint® Fungicide; active ingredient: trifloxystrobin; main applications: cereals, soybeans and fruit

Florbetaben Novel F18-labeled tracer currently undergoing clinical development for the detection of beta-amyloid plaques in the brain using positron emission tomography (PET); active ingredient: florbetaben

Folicur® Fungicide; active ingredient: tebuconazole; main applications: cereals, soybeans, canola and peanuts

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 (MS); active ingredient: gadobutrol

Gaucho® Insecticide; active ingredient: imidacloprid; main applications: seed treatment for sugar beet, corn, cereals, cotton and 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

Gross cash flow The gross cash flow comprises income from continuing operations after taxes, plus income taxes, plus non-operating result, minus income taxes paid or accrued, plus depreciation, amortization and write-downs, minus write-backs, plus/minus changes in pension provisions, minus gains/plus losses on retirements of noncurrent assets, plus non-cash effects of the remeasurement of acquired assets. 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)

Infinity® Herbicide; active ingredient: pyrasulfotole; main application: cereals

Input® Fungicide; active ingredients: prothioconazole, spiroxamine; main application: cereals

InVigor® Seed for summer canola

Iopamiron® Non-ionic intravascular contrast agent for all common X-ray analyses

K

Key performance indicators (KPI) Central indicators used to evaluate the attainment of targets in 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

Laudis® Herbicide; active ingredient: tembotrione; main application: corn

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

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, pome and stone fruit, vegetables, arable crops

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 polyurethane rigid foam used in thermal insulation

Merit® Insecticide; active ingredient: imidacloprid; main application: broad-spectrum insecticide for non-agricultural grass lawns

Mirena® Intrauterine contraceptive; active ingredient: levonorgestrel

N

Nativo® Fungicide; active ingredients: tebuconazole and trifloxystrobin; main applications: soybeans, corn, rice, cereals

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® Drug product to treat kidney and liver cancer; 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

Premise® Insecticide; active ingredient: imidacloprid; main application: termite control

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

Profender® Dewormer for dogs and cats; active ingredients: emodepsid, praziquantel

Proline® Fungicide; active ingredient: prothioconazole; main applications: cereals, canola

Prosaro® Fungicide; active ingredients: prothioconazole, tebuconazole; main applications: cereals, canola

Proteus® Insecticide: active ingredients: deltamethrin, thiacloprid; main applications; cereals, potatoes, canola

Puma® Herbicide; active ingredient: fenoxaprop-P-ethyl; main applications: cereals, rice, soybeans

Q

Qlaira® Oral contraceptive based on estradiol, the estrogen identical to that produced by the female body; 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

Rely® Herbicide; active ingredient: glufosinate-ammonium; main applications: canola, soybeans, corn, cotton, fruit, nuts

Rennie® Medicine to treat heartburn and acid-related stomach disorders; active ingredients: calcium carbonate and magnesium carbonate

Riociguat Drug product 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; active ingredient: soluble guanylate cyclase stimulator

Routine® Fungicide; active ingredient: isotianil; main application: rice

S

Soberan® Herbicide; active ingredients: tembotrione and isoxadifen; main application: corn

Sphere® 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.

Stratego® Fungicide; active ingredients: trifloxystrobin, propiconazole; main applications: soybeans, cereals, rice, corn

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

Triton® SG Fungicide; active ingredient: triticonazole; main application: golf courses

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.

Velocity™ Herbicide; active ingredient: thiencarbazone-methyl; main application: cereals

Votivo® Seed treatment product for biological pest control based on Bacillus firmus; main applications: corn, soybeans, 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.

Wolverine® Herbicide; active ingredient: pyrasulfotole; main application: cereals

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 joint replacement surgery.

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 high-quality 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. Since 1994 the company has actively supported the voluntary Responsible Care initiative of the chemical and pharmaceutical industry, including the Global Charter revised in 2006, striving for continuous improvement in the areas of health, safety and environment.

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 Global Compact initiative of the United Nations, actively promoting its principles through its support for the "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 partnership with the United Nations Environment Programme (UNEP) has set new standards in public-private partnerships. Among the long-standing joint activities is the "Bayer Young Environmental Envoy" program, in which young people from 19 countries on four continents take part.

The company places maximum importance on climate protection, and in 2009 joined the UNEP Climate Neutral Network, which promotes low-CO_2-emission industrial and social structures. Bayer was also included again in 2009 in the Carbon Disclosure Leadership Index published by the Carbon Disclosure Project, run on behalf of institutional investors and other organizations. 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.

For more than 50 years, Bayer has supported family 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.

Bayer set up the Global Exploration Fund together with National Geographic, the world's largest non-profit scientific organization.

Bayer is represented in major sustainability indices and investment funds that focus on companies pursuing responsible and sustainable corporate strategies. For example, Bayer is listed in the Dow Jones Sustainability Index 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, which Bayer supports as an organizational stakeholder.

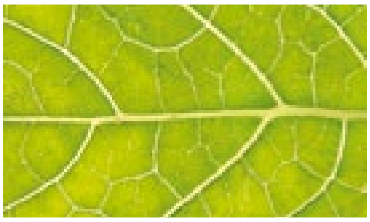
The Bayer Group

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 58.



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 64.

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 69.

SERVICE COMPANIES

Bayer Business Services is the Bayer Group's international competence center for IT-based services. The focus of this company's offering is on integrated 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 2009 Bayer's 16,300 employees in this region generated sales of €7.7 billion, which was 24.7% of the Group total.

EUROPE

In 2009 Bayer achieved sales of €13.0 billion on the European market, which accounted for 41.6% of the Group total. Numerous major production facilities and 54,500 employees (of whom 36,700 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 2009 the company's 16,000 employees in the Latin America/Africa/Middle East region generated €4.8 billion in sales – 15.4% 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 2009 Bayer generated €5.7 billion in sales here – 18.3% of the Group total – with 21,600 employees.

Five-Year Financial Summary

[Table 1.2]

Bayer Group	2005	2006	2007	2008	2009
	€ million	€ million	€ million	€ million	€ million
Sales	24,701	28,956	32,385	32,918	31,168
Sales outside Germany	84.4%	84.4%	85.1%	85.4%	86.7%
EBIT*	2,514	2,762	3,154	3,544	3,006
EBIT before special items*	3,047	3,479	4,287	4,342	3,772
EBITDA*	4,122	4,675	5,866	6,266	5,815
EBITDA before special items*	4,602	5,584	6,777	6,931	6,472
Income before income taxes	1,912	1,980	2,234	2,356	1,870
Income after taxes	1,595	1,695	4,716	1,724	1,359
Noncurrent assets	**20,130**	**35,897**	**34,712**	**35,351**	**34,049**
of which goodwill and other intangible assets	7,688	24,034	22,770	22,598	21,546
of which property, plant and equipment	8,321	8,867	8,819	9,492	9,409
Current assets	**16,592**	**17,069**	**16,582**	**17,152**	**16,993**
Inventories	5,504	6,153	6,217	6,681	6,091
Receivables and other current assets	7,798	8,001	7,834	8,377	8,177
Cash and cash equivalents	3,290	2,915	2,531	2,094	2,725
Financial liablities	**8,952**	**19,801**	**14,417**	**16,870**	**12,949**
Noncurrent	7,185	14,723	13,081	10,614	11,460
Current	1,767	5,078	1,336	6,256	1,489
Interest expense – net	(338)	(728)	(701)	(702)	(548)
Return on equity	14.4%	14.1%	31.8%	10.4%	7.7%
Gross cash flow**	3,114	3,913	4,784	5,295	4,658
Capital expenditures (total)	1,400	1,939	1,905	1,982	1,669
Depreciation and amortization	1,758	2,086	2,478	2,570	2,660
Personnel expenses (including pension expenses)	5,318	6,630	7,571	7,491	7,776
Number of employees*** (Dec. 31)	82,600	106,000	106,200	108,600	108,400
Research and development expenses	1,729	2,297	2,578	2,653	2,746
Equity including non-controlling interest (total)	**11,157**	**12,851**	**16,821**	**16,340**	**18,951**
Capital stock	1,870	1,957	1,957	1,957	2,117
Reserves	9,287	10,894	14,864	14,383	16,834
Net income	1,597	1,683	4,711	1,719	1,359
Non-controlling interest	80	84	87	77	54
Liabilities (total)	**25,565**	**43,040**	**34,557**	**36,171**	**32,091**
Total assets	**36,722**	**55,891**	**51,378**	**52,511**	**51,042**
Equity ratio	**30.4%**	**23.0%**	**32.7%**	**31.1%**	**37.1%**
Bayer AG					
Net income	613	1,250	1,928	1,161	2,226
Allocation to (from) retained earnings	(81)	486	896	91	1,068
Total dividend payment	694	764	1,032	1,070	1,158
Dividend per share (€)	0.95	1.00	1.35	1.40	1.40

figures for 2005-2008 as reported
* for definition see chapter 4.2 "Calculation of EBIT(DA) Before Special Items," page 74
** for definition see chapter 4.5 "Liquidity and Capital Expenditures of the Bayer Group," page 78ff.
*** full-time equivalents

Financial Calendar

2009 Annual Report	**FEBRUARY 26, 2010**
Q1 2010 Interim Report	**APRIL 29, 2010**
Annual Stockholders' Meeting 2010	**APRIL 30, 2010**
Payment of Dividend	**MAY 3, 2010**
Q2 2010 Interim Report	**JULY 29, 2010**
Q3 2010 Interim Report	**OCTOBER 28, 2010**
Annual Stockholders' Meeting 2011	**APRIL 29, 2011**
Payment of Dividend	**MAY 2, 2011**

MASTHEAD

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Forward-Looking Statements:
This Annual Report contains forward-looking statements based on current assumptions and forecasts made by Bayer Group or subgroup management. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual financial position, development or performance of the company and the estimates given here. These factors include those discussed in Bayer's public reports, which are available on the Bayer website at www.bayer.com. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.

Important Information:
The names "Bayer Schering Pharma" or "Schering" as used in this publication always refer to Bayer Schering Pharma AG, Berlin, Germany, or its predecessor, Schering AG, Berlin, Germany, respectively.