

BAYER AKTIENGESELLSCHAFT

Form 20-F

April 08, 2004

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As filed with the Securities and Exchange Commission on April 8, 2004

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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

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**FORM 20-F**

(Mark One)

- REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF  
THE SECURITIES EXCHANGE ACT OF 1934  
OR  
 ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2003.  
OR  
 TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF  
THE SECURITIES EXCHANGE ACT OF 1934

Commission file number 001-16829

**BAYER AKTIENGESELLSCHAFT**

*(Exact name of Registrant as specified in its charter)*

**BAYER CORPORATION\***

*(Translation of Registrant's name into English)*

**Federal Republic of Germany**

*(Jurisdiction of incorporation or organization)*

**Bayerwerk, Gebäude W11**

**Kaiser-Wilhelm-Allee**

**51368 Leverkusen, GERMANY**

*(Address of principal executive offices)*

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Securities registered or to be registered pursuant to Section 12(b) of the Act.

**Title of each class:**

**Name of each exchange on which registered:**

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American Depositary Shares representing Bayer AG  
ordinary shares of no par value  
Bayer AG ordinary shares of no par value

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New York Stock Exchange  
New York Stock Exchange\*\*

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Securities registered or to be registered pursuant to Section 12(g) of the Act.

None

(Title of class)

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Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

None

(Title of class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

As of December 31, 2003, 730,341,920 ordinary shares, of no par value, of Bayer AG were outstanding.

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No  Not applicable.

Indicate by check mark which financial statement item the registrant has elected to follow:

Item 17  Item 18

\* Bayer Corporation is also the name of a wholly-owned subsidiary of the registrant in the United States.

\*\* Not for trading, but only in connection with the registration of American Depositary Shares.

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### **Defined Terms and Conventions**

Bayer AG is a corporation organized under the laws of the Federal Republic of Germany. As used in this annual report, unless otherwise specified or required by the context, the term *Company*, *Bayer* or *Bayer AG* refers to Bayer AG and the terms *we*, *us* and *our* refer to Bayer AG and, as applicable, Bayer AG and its consolidated subsidiaries.

Due to rounding, numbers presented throughout this document may not add up precisely to the totals we provide and percentages may not precisely reflect the absolute figures.

### **Forward-Looking Information**

This annual report contains forward-looking statements that reflect our plans and expectations. As these statements are based on current plans, estimates and projections, you should not place undue reliance on them. We generally identify forward-looking statements with words such as *expects*, *intends*, *anticipates*, *plans*, *believes*, *estimates* and similar expressions.

Forward-looking statements involve known and unknown risks, uncertainties and other factors. We caution you that a number of important factors may cause our actual results, performance, achievements or financial position to be materially different from any results, performance, achievements or financial position expressed or implied by forward-looking statements. These factors include, but are not limited to:

Cyclicality in our industries;

Reduced demand for older products in response to advances in biotechnology;

Increasingly stringent regulatory controls;

Increased raw materials prices;

The expiration of patent protections;

Environmental liabilities and compliance costs;

Failure to compete successfully, integrate acquired companies or develop new products and technologies;

Risks from hazardous materials;

Litigation and product liability claims; and

Fluctuations in currency exchange rates.

A discussion of these and other factors that may affect our actual results, performance, achievements or financial position is contained in Item 3, *Key Information – Risk Factors*, the various *Strategy* sections in Item 4, *Information on the Company*, Item 5, *Operating and Financial Review and Prospects* and elsewhere in this annual report.

Forward-looking statements speak only as of the date they are made, and we undertake no obligation to update publicly any of them in light of new information or future events.

### **Enforceability of Civil Liabilities under U.S. Federal Securities Laws**

We are a German corporation. All of our directors and executive officers are residents of Germany. A substantial portion of our assets and those of such individuals is located outside the United States.

As a result, although a multilateral treaty to which both Germany and the United States are party guarantees service of writs and other legal documents in civil cases if the current address of the defendant is known, it may be difficult or impossible for you to effect service of process

upon these persons from within the United States.

Also, because these persons and assets are outside the United States, it may be difficult for you to enforce judgments against them in the United States, even if these judgments are of U.S. courts and are based on the civil liability provisions of the U.S. securities laws.

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If you wish to execute the judgment of a foreign court in Germany, you must first obtain from a German court an order for execution (*Vollstreckungsurteil*). A German court may grant an order to execute a U.S. court judgment with respect to civil liability under the U.S. federal securities laws if that judgment is final as a matter of U.S. law. In granting the order, the German court will not enquire whether the U.S. judgment was, as a matter of U.S. law, correct. However, the German court must refuse to grant the order if:

the U.S. court lacked jurisdiction, as determined under German law;

the person against whom the judgment was obtained did not receive service of process adequate to permit a proper defense, did not otherwise acquiesce in the original action and raises the lack of service of process as a defense against the grant of the execution order;

the judgment would conflict with the final judgment of a German court or with the final judgment of another foreign court that is recognizable under German law;

recognition of the judgment would violate an important principle of German law, especially basic constitutional rights; or

there is a lack of reciprocity between Germany and the jurisdiction whose court rendered the original judgment.

You should be aware that German courts hold certain elements of some U.S. court judgments, for example, punitive damages, to violate important principles of German law. Judgments for ordinary compensatory damages are generally enforceable, unless in an individual case one of the reasons described above would forbid enforcement.

If you bring an original action before a German court based on the provisions of the U.S. securities laws and the court agrees to take jurisdiction over the case, the court will decide the matter in accordance with the applicable U.S. laws, to the extent that these do not violate important principles of German law. However, the court may refuse to accept jurisdiction if another action is pending before a U.S. or other foreign court in the same matter. Furthermore, the court might decide that, for a lawsuit brought by a U.S. resident under U.S. law against a defendant that, like Bayer, has a significant presence in the United States, a U.S. court would be the more proper forum.

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**PART I**

**Item 1. Identity of Directors, Senior Management and Advisors  
Directors and Senior Management**

Not applicable.

**Item 2. Offer Statistics and Expected Timetable**

Not applicable.

**Item 3. Key Information  
Selected Financial Data**

We derived the following selected financial data for each of the years in the five-year period ended December 31, 2003 from our consolidated financial statements. We have prepared our consolidated financial statements in accordance with International Financial Reporting Standards, or IFRS, and, where indicated, in accordance with U.S. Generally Accepted Accounting Standards or U.S. GAAP. Since 2002, IFRS is the term for the entire body of accounting standards issued by the International Accounting Standards Board, replacing the earlier IAS, or International Accounting Standards. Individual accounting standards that the IASB issued prior to this change in terminology continue to use the prefix IAS. Note 44 to our consolidated financial statements included in Item 18 of this annual report describes the reconciliation of significant differences between IFRS and U.S. GAAP.

Since January 1, 1999, we have prepared our financial statements in European Union euros (€). In this annual report, we have translated certain euro amounts into U.S. dollar amounts at the rate of \$1.2597 = 1.00, the noon buying rate of the Federal Reserve Bank of New York on December 31, 2003. We have translated these amounts solely for your convenience, and you should not assume that, on that or any other date, one could have converted these amounts of euros into dollars at that or any other exchange rate.

The financial information presented below is only a summary. You should read it together with the consolidated financial statements included in Item 18.



**Table of Contents****Consolidated Income Statement Data**

	Year ended December 31,					
	1999	2000	2001	2002	2003	2003
	\$					
(in millions, except per share data)						
<b>IFRS:</b>						
Net sales from continuing operations	(1)	(1)	21,702	22,038	22,178	27,938
Net sales from discontinuing operations	(1)	(1)	8,573	7,586	6,389	8,048
<b>Net sales</b>	27,320	30,971	30,275	29,624	28,567	35,986
Operating result from continuing operations	(1)	(1)	1,466	850	449	566
Operating result from discontinuing operations	(1)	(1)	210	760	(1,652)	(2,081)
<b>Operating result</b>	3,357	3,287	1,676	1,610	(1,203)	(1,515)
Non-operating result	(521)	(297)	(561)	(654)	(791)	(996)
Income before income taxes	2,836	2,990	1,115	956	(1,994)	(2,512)
Income taxes	(818)	(1,148)	(154)	107	645	813
Income after taxes	2,018	1,842	961	1,063	(1,349)	(1,699)
Minority stockholders' interest	(16)	(26)	4	(3)	(12)	(15)
<b>Net income</b>	2,002	1,816	965	1,060	(1,361)	(1,714)
Average number of shares in issue	730	730	730	730	730	730
Operating result from continuing operations per share	(1)	(1)	2.01	1.16	0.61	0.77
Basic net income/loss per share	2.74	2.49	1.32	1.45	(1.86)	(2.34)
Diluted net income/loss per share	2.74	2.49	1.32	1.45	(1.86)	(2.34)
Dividends per share	1.30	1.40	0.90	0.90	N/A (2)	N/A (2)
<b>U.S. GAAP:</b>						
Net income	1,967	1,783	800	1,277	(1,445)	(1,820)
Basic and diluted net income per share	2.69	2.44	1.10	1.75	(1.98)	(2.49)

(1) We do not present discontinuing operations data for 1999 and 2000 because we were unable without unreasonable effort and expense to restate these years' financial data to reflect the operations we classified as discontinuing operations in all more recent periods.

(2) The dividend payment for 2003 has not yet been decided on. Our Supervisory Board has accepted our Board of Management's proposal to recommend at our annual general shareholders' meeting a dividend for 2003 of 0.50 per share, for a total dividend of 365 million.

**Consolidated Balance Sheet Data**

	December 31,					
	1999	2000	2001	2002	2003	2003
	\$					
(in millions, except per share data)						
<b>IFRS:</b>						
Total Assets	31,279	36,451	37,039	41,692	37,445	47,169
Of which discontinuing operations	(1)	(1)	8,813	6,904	5,655	7,124
Stockholders' equity	15,006	16,140	16,992	15,335	12,213	15,385
Liabilities	16,097	20,074	20,019	26,237	25,109	31,630
Of which long-term financial obligations	2,359	2,803	3,071	7,318	7,113	8,960
Of which discontinuing operations	(1)	(1)	3,489	3,143	3,153	3,972
<b>U.S. GAAP:</b>						
Stockholders' equity	17,177	19,110	18,300	16,734	13,327	16,788
Total assets	32,769	38,740	37,831	42,668	38,012	47,884

- (1) We do not present discontinuing operations data for 1999 and 2000 because we were unable without unreasonable effort and expense to restate these years' financial data to reflect the operations we classified as discontinuing operations in all more recent periods.

**Table of Contents****Dividends**

The following table indicates the dividends per share paid from 2001 to 2003. Shareholders who are U.S. residents should be aware that they will be subject to German withholding tax on dividends received. See Item 10, *Additional Information – Taxation*.

	<u>2001</u>	<u>2002</u>	<u>2003</u>
Total dividend (euros in millions)	657	657	N/A(1)
Dividend per share (euro)	0.90	0.90	N/A(1)

(1) The dividend payment for 2003 has not yet been decided on. Our Supervisory Board has accepted our Board of Management's proposal to recommend at our annual general shareholders' meeting a dividend for 2003 of 0.50 per share, for a total dividend of 365 million.

See also Item 8, *Financial Information – Dividend Policy and Liquidation Proceeds*.

**Exchange Rate Data**

The following table shows, for the periods and dates indicated, the exchange rate of the U.S. dollar to the euro based on the noon buying rate of the Federal Reserve Bank of New York. Fluctuations in the exchange rate between the euro and the dollar will affect the market price of the shares and the ADSs, the dollar amount received by holders of shares and the ADSs on conversion by the Depositary of any cash dividends paid in euro and the dollar translation of our results of operations and financial condition.

<u>Year</u>	<u>Period End</u>	<u>Average</u>	<u>High</u>	<u>Low</u>
(dollar per euro)				
1999	1.0070	1.0655	1.1812	1.0016
2000	0.9388	0.9233	1.0335	0.8270
2001	0.8901	0.8909	0.9535	0.8370
2002	1.0485	0.9454	1.0485	0.8594
2003	1.2597	1.1321	1.2597	1.0361

<u>Previous six months</u>	<u>High</u>	<u>Low</u>
(dollar per euro)		
October 2003	1.1833	1.1596
November 2003	1.1995	1.1417
December 2003	1.2597	1.1956
January 2004	1.2853	1.2389
February 2004	1.2848	1.2426
March 2004	1.2431	1.2088

**Risk Factors**

*An investment in our shares or ADSs involves a significant degree of risk. You should carefully consider these risk factors and the other information in this annual report before deciding to invest in our shares or ADSs. The risks described below are the ones we consider material. However, they are not the only ones that may exist. Additional risks not known to us or that we consider immaterial may also have an impact on our business operations. The occurrence of any of these events could seriously harm our business, operating results and financial condition. In that case, the trading price of our shares or ADSs could decline and you could lose all or part of your investment.*

***Our intended transactions relating to Lanxess may be unsuccessful and we may not realize the benefits we expect from these transactions***

As announced in November 2003, we plan to combine Bayer Chemicals (except for Wolff Walsrode and H.C. Starck), with certain parts of the Bayer Polymers business in a new company to be named Lanxess. In a



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first step, we intend to contribute the activities we have identified for this business, including the foreign activities and the related functions in our service and corporate center, into Lanxess, which at that time will be a wholly-owned subsidiary. In a second step, we intend to dispose of the shares in this subsidiary. Our aim for this company is to be listed on the Frankfurt Stock Exchange by early 2005.

We may not be successful in combining businesses with Lanxess on strategically advantageous terms, and our strategy for choosing which business we place in Lanxess and which we retain may be flawed. Lanxess and our continuing businesses could each or all fail to succeed for reasons relating to our actions or for external reasons. Any of this can lead to a loss of revenues or income. Moreover, any definitive plan for any spin-off of this business may be subject to regulatory action and other execution risks. Our financial condition, results of operations and stock price could be adversely affected if we do not conclude the Lanxess transaction on advantageous terms or in a timely manner (or if we fail to conclude it at all).

Furthermore, we may not realize all the benefits for our Group that we intend to realize from this transaction and our related reorganization.

### ***Cyclicality may reduce our operating margins or cause operating losses***

Several of the industries in which Bayer operates are cyclical. These industries include chemicals and polymers in particular. Typically, increased demand during peaks in the business cycle in these industries leads producers to increase their production capacity. Although peaks in the business cycle have been characterized by increased selling prices and higher operating margins, in the past these capacity increases have led to overcapacities because they have exceeded demand growth. Low periods in the business cycles are then characterized by decreasing prices and excess capacity. These factors can depress operating margins and may result in operating losses.

We believe that several areas within the chemical and polymer industries currently show overcapacity, especially those areas, such as basic chemicals, that are subject to commoditization, and we expect that there may be further capacity additions in the next few years. Future growth in demand may not be sufficient to absorb current overcapacity or future capacity additions without significant downward pressure on prices and adverse effects on our operating results.

The agriculture sector is particularly subject to seasonal and weather factors and fluctuations in crop prices, which may have a negative influence on our business results. As climate conditions and market prices for agricultural products change, the demand for our agricultural products generally also changes. For example, a drought will often reduce demand for our fungicides products.

### ***Failure to develop new products and production technologies may harm our competitive position***

Bayer's operating results significantly depend on the development of commercially viable new products and production technologies. We devote substantial resources to research and development. Because of the lengthy development process, technological challenges and intense competition, we cannot assure you that any of the products we are currently developing, or may begin to develop in the future, will become market-ready or achieve commercial success. If we are unsuccessful in developing new products and production processes in the future, our competitive position and operating results will be harmed.

Competitive pressure from new agrochemical compounds that achieve similar or improved results with better ecotoxicological profiles and smaller doses may reduce the sales of our existing products. The growing importance of plant biotechnology in the crop protection field could reduce market demand for some of our agrochemical products and, to the extent that our competitors supply those biotechnological products, could lead to declines in our revenues.

### ***Regulatory controls and changes in public policy may reduce the profitability of new or current products***

We must comply with a broad range of regulatory controls on the testing, manufacture and marketing of many of our products. In some countries, including the United States, regulatory controls have become increasingly demanding. We expect that this trend will continue and will expand to other countries, particularly

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those of the European Union. A proposed new EU chemicals policy could mandate a significant increase in the testing and assessment of all chemicals, leading to increased costs and reduced operating margins for these products. Although we have adopted measures to address these stricter regulations, such as increasing the efficiency of our internal research and development process in order to reduce the impact of extended testing on time-to-market, stricter regulatory regimes could delay our product development or restrict our marketing and sales.

Our Pharmaceuticals, Biological Products segment and our Consumer Care, Diagnostics segment are subject to particularly strict regulatory regimes. Failure to achieve regulatory approval of new products can mean that we do not recoup our research and development investment through sales of that product. Withdrawal by regulators of an approval previously granted can mean that the affected product ceases to generate revenue. This can occur even if regulators take action falling short of actual withdrawal or direct their action at over-the-counter (OTC) products that do not require regulatory approval. For example, in November 2000, the U.S. Food and Drug Administration issued a recommendation to all manufacturers of products containing phenylpropanolamine (PPA). As a result, we voluntarily discontinued marketing our Consumer Care products that contained this substance. In addition, in some cases we may voluntarily cease marketing a product even in the absence of regulatory action.

Our Biological Product Division is generally facing complicated production processes that are more subject to disruption than is the case with other processes and therefore pose increased risk of manufacturing problems, unplanned shutdowns and loss of products.

Pharmaceutical product prices are subject to controls or pressures in many markets. Some governments intervene directly in setting prices. In addition, in some markets major purchasers of pharmaceutical products (whether governmental agencies or private health care providers) have the economic power to exert substantial pressure on prices. Price controls limit the financial benefits of growth in the life sciences markets and the introduction of new products. We cannot predict whether existing controls will increase or new controls will be introduced, further limiting our financial benefits from these products.

Changes in governmental agricultural policies could significantly change the structure of the overall market for agricultural products in affected countries in which we operate. A substantial change in the level of subsidies for agricultural commodities could negatively affect the level of agricultural production and the extent of the area under cultivation. As a consequence, existing markets could change with a corresponding negative impact on our CropScience subgroup's sales and operating results.

As it is impossible at present to determine precisely what changes, if any, may occur, whether and when such changes will be implemented and the extent of their impact, close monitoring and analyses of the related political developments are necessary. We expect the operating result of our CropScience business to reflect the uncertainties of this industry. Similarly, but to a lesser extent, changes in agricultural policy could also have a negative effect on the sales and operating results of our Animal Health business.

### ***Our operating margins may decrease if we cannot pass increased raw material prices on to customers or if prices for our products decrease faster than raw material prices***

Significant variations in the cost and availability of raw materials and energy may reduce our operating results. Bayer uses significant amounts of petrochemical-based raw materials in manufacturing a wide variety of our products. We also purchase significant amounts of natural gas, coal, electricity and fuel oil to supply the energy required in our production processes. The prices and availability of these raw materials and energy vary with market conditions and may be highly volatile. There have been in the past, and may be in the future, periods during which we cannot pass raw material price increases on to customers. Even in periods during which raw material prices decrease, we may suffer decreasing operating profit margins if the prices of raw materials decrease more slowly than do the selling prices of our products. In the past, we have entered into hedging arrangements with respect to raw materials prices only to a limited extent. If the market for these hedging arrangements attains sufficient liquidity and we can obtain their protection at a reasonable cost, we would consider making more extensive use of these hedge instruments.

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### ***Litigation and administrative claims could harm our operating results and cash flows***

We are involved in a number of legal proceedings and may become involved in additional legal proceedings. See Item 8, *Financial Information – Legal Proceedings*. Each of these proceedings or potential proceedings could involve substantial claims for damages or other payments. These proceedings include claims alleging product liability and claims alleging antitrust violations. If our opponents in these lawsuits obtain judgments against us or if we determine to settle any of these lawsuits, we could be required to pay substantial damages and related costs.

We are also plaintiff in lawsuits to enforce our patent rights in our products. If we are not successful in these actions, we would expect our revenue from these products to decline as generic competitors enter the market.

In cases where we believe it appropriate, we have established provisions to cover potential litigation-related costs. Increased risks currently result from litigation commenced in the United States after we voluntarily withdrew *Lipobay/Baycol* (cerivastatin) from the market and voluntarily stopped marketing products containing phenylpropanolamine (PPA).

Due to the considerable uncertainty associated with these proceedings related to *Lipobay/Baycol* (cerivastatin), it is currently not possible to more accurately estimate the potential liability and thus no provisions exceeding the expected insurance coverage and our accounting measures already taken have yet been made. Depending on the progress of the litigation, Bayer may face payments that exceed our expected insurance coverage and our accounting measures and will continue to reconsider the need to establish additional provisions, which may have a negative effect on our financial results.

Due to the considerable uncertainty associated with the proceedings related to PPA, it is currently not possible to more accurately estimate potential liability and thus no provisions for such potential liabilities have yet been made. Depending on the progress of the litigation, Bayer may face payments that exceed our insurance coverage and will continue to reconsider the need to establish provisions, which may have a negative effect on our financial results.

### ***The loss of patent protection or ineffective patent protection for marketed products may result in loss of sales to competing products***

During the life of its patent related to the compound per se, a patented product is normally only subject to competition from alternative products. After a patent expires, the producer of the formerly patented product is likely to face increased competition from generic products entering the market. This competition is likely to reduce market share and sales revenue. See Item 4, *Information on the Company – Intellectual Property Protection*, for a discussion of the scheduled expiration dates of our significant patents. In addition, generic drug manufacturers, particularly in the United States, may seek marketing approval for pharmaceutical or agricultural products currently under patent protection by attacking the validity or enforceability of a patent. If a generic manufacturer succeeds in voiding a patent protecting one of our products, that product could be exposed to generic competition before the natural expiration of the patent. See Item 8, *Financial Information – Legal Proceedings*, for a discussion of several important patent-related proceedings in which we are involved.

The extent of patent protection varies from country to country. In some of the countries in which we operate, patent protection may be significantly weaker than in the United States or the European Union. Piracy of patent-protected intellectual property has often occurred in recent years, particularly in some Asian countries. In particular, these countries could facilitate competition within their markets from generic manufacturers who would otherwise be unable to introduce competing products for a number of years. We do not currently expect any proposed patent law modifications to affect us materially. Nevertheless, if a country in which we sell a substantial volume of an important product were to effectively invalidate our patent rights in that product, our revenue could suffer.

### ***Failure to compete successfully or integrate newly acquired businesses may reduce our operating profits***

Bayer operates in highly competitive industries. Actions of our competitors could reduce our profitability and market share. In some commodity areas (especially within our Plastics, Rubber segment, our Polyurethanes,

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Coatings, Fibers segment and our Chemicals segment), we compete primarily on the basis of price and reliability of product and supply. All of our segments, however, also compete in specialty markets on the basis of product differentiation, innovation, quality and price. Significant product innovations, technical advances or the intensification of price competition by competitors could harm our operating results.

In the Healthcare business our competitors are consolidating, and the strength of combined companies could affect our competitive position.

From time to time, we acquire all or a portion of an established business and combine it with our existing business units. Integration of existing and newly acquired businesses requires difficult decisions with respect to staffing levels, facility consolidation and resource allocation. We must also plan carefully to ensure that established product lines and brands retain or increase their market position. If we fail to effectively integrate a new business or if integration results in significant unexpected costs, our results of operations could suffer.

### ***Risks from the handling of hazardous materials could harm our operating results***

Bayer's operations are subject to the operating risks associated with pharmaceutical and chemical manufacturing, including the related storage and transportation of raw materials, products and wastes. These hazards include, among other things:

pipeline and storage tank leaks and ruptures;

explosions; and

discharges, disposal or releases of toxic or hazardous substances.

These operating risks can cause personal injury, property damage and environmental contamination, and may result in the shutdown of affected facilities and the imposition of civil or criminal penalties or negatively impact the reputation of the whole company. The occurrence of any of these events may significantly reduce the productivity and profitability of a particular manufacturing facility and harm our operating results.

Although we maintain property, business interruption and casualty insurance that we believe is in accordance with customary industry practices, this insurance may not be adequate to cover fully all potential hazards incident to our business.

For more detailed information on environmental issues, see Item 4, *Information on the Company – Business – Governmental Regulation*.

### ***Environmental liabilities and compliance costs may have a significant negative effect on our operating results***

The environmental laws of various jurisdictions impose actual and potential obligations on Bayer to remediate contaminated sites. These obligations may relate to sites:

that we currently own or operate;

that we formerly owned or operated;

where waste from our operations was disposed; or

where we contaminate air, water or soil by emissions or spills onto the property of third parties.

These environmental remediation obligations could significantly reduce our operating results. In particular, our accruals for these obligations may be insufficient if the assumptions underlying these accruals prove incorrect or if we are held responsible for additional, currently undiscovered contamination. See Item 4, *Information on the Company – Business – Governmental Regulation*.

Furthermore, Bayer is or may become involved in claims, lawsuits and administrative proceedings relating to environmental matters. An adverse outcome in any of these might have a significant negative impact on our operating results and public reputation.



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Stricter environmental, safety and health laws and enforcement policies could result in substantial costs and liabilities to Bayer and could subject our handling, manufacture, use, reuse or disposal of substances or pollutants to more rigorous scrutiny than is currently the case. Consequently, compliance with these laws could result in significant capital expenditures as well as other costs and liabilities, thereby harming our business and operating results.

***Existing insurance coverage may turn out to be inadequate***

We are aiming at adequately covering foreseeable risks by insurance. Such insurance coverage, however, may turn out not to fully cover the risks to which the company is exposed. For certain risks, adequate insurance coverage may not be available on the market or may not be available at reasonable conditions.

***Fluctuations in exchange rates may affect our financial results***

Bayer conducts a significant portion of its operations outside the euro zone. Fluctuations in currencies of countries outside the euro zone, especially the U.S. dollar, can materially affect our revenue as well as our operating results. For example, changes in currency exchange rates may affect:

the relative prices at which we and our competitors sell products in the same market; and

the cost of items we require for our operations.

Although these fluctuations can benefit us, they can also harm our results. From time to time, we may use financial instruments to hedge our exposure to foreign currency fluctuations. As of December 31, 2003, we had entered into forward foreign exchange contracts and currency swaps with a total notional value of 4.0 billion (excluding cross currency interest rate swaps included in our 6.3 billion notional amount of interest rate hedging contracts). For further information on these products, see Item 11, *Quantitative and Qualitative Disclosures about Market Risk*.

**Table of Contents****Item 4. Information on the Company****HISTORY AND DEVELOPMENT OF THE COMPANY**

Bayer Aktiengesellschaft, or Bayer AG, is a stock corporation (*Aktiengesellschaft*) organized under the laws of the Federal Republic of Germany.

Bayer AG was incorporated in 1951 under the name *Farbenfabriken Bayer AG* for an indefinite term and adopted its present name in 1972. Bayer AG's registered office (*Sitz*) and principal place of business are at the Bayerwerk, 51368 Leverkusen, Germany. Its telephone number is +49 (214) 30-1 and its home page on the World Wide Web is at [www.bayer.com](http://www.bayer.com). Reference to our website does not incorporate the information contained on the website into this annual report. The headquarters of Bayer AG's U.S. subsidiary, Bayer Corporation, are located at 100 Bayer Road, Pittsburgh, PA 15205-9741.

Although Bayer AG was incorporated in 1951, it traces its roots to Friedr. Bayer & Co., an aniline dye works founded in Wuppertal, Germany in 1863 by Friedrich Bayer and Johann Friedrich Wescott. This company achieved a leading position in its industry, opening facilities and agencies in the United States and in other European countries. Friedr. Bayer & Co. made numerous discoveries, most notably of aspirin (acetylsalicylic acid), perhaps the best-known and most widely used medication in world history.

In 1925, the original Bayer company merged with five other leading German chemical and pharmaceutical companies, including the ancestors of today's Aventis and BASF, to form I.G. Farbenindustrie AG, or I.G. Farben. After the second World War, the Allied High Commission, formed by the United States, the United Kingdom, France and the former Soviet Union to administer occupied Germany, seized the assets of I.G. Farben. Pursuant to Law No. 35 of the Allied High Commission, some of these assets were later distributed among 12 newly formed companies, including the present Bayer AG.

After World War I, the U.S. government expropriated the U.S. rights to the Bayer name and trademarks as enemy property. In 1986, Bayer reacquired the U.S. rights to the Bayer trademark with respect to products for the manufacturing industry and, in 1994, reacquired full U.S. rights to its name and trademarks, including the Bayer cross.

Friedr. Bayer & Co. established operations in the United States as early as 1870. In 1992, Bayer AG's U.S. subsidiaries Mobay Corporation, Miles Inc. and Agfa Corporation merged with the management holding company Bayer USA Inc. to form a new operating company, Miles Inc. In April 1995, Miles Inc. changed its name to the current form, Bayer Corporation.

Since 2001, we have incurred capital expenditures as follows:

	<u>2001</u>	<u>2002</u>	<u>2003</u>
	(euros in millions)		
Pharmaceuticals, Biological Products	375	178	185
Consumer Care, Diagnostics	238	272	201
Animal Health	45	26	21
CropScience	199	297	413
Plastics, Rubber	536	504	290
Polyurethanes, Coatings, Fibers	468	506	283
Chemicals	501	285	203
Reconciliation <sup>(1)</sup>	255	315	143
	<u>          </u>	<u>          </u>	<u>          </u>
Total	2,617	2,383	1,739
	<u>          </u>	<u>          </u>	<u>          </u>

(1) Capital expenditures not allocated to an individual segment (such as investments in the Corporate Center).



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Our expenditures on acquisitions in the past three years were as follows:

In 2001, we spent 0.5 billion on acquisitions, including rights to manufacture and market products that detect hepatitis C and HIV antibodies, as well as the corn herbicide *Mikado*®. We also made a 93 million equity investment in CuraGen.

In 2002, we spent a total of 7.9 billion on acquisitions, mainly for the acquisition of Aventis CropScience effective June 1, 2002 from Aventis and Schering. Approval of this acquisition by the relevant antitrust authorities, particularly in Europe and the United States, was conditional upon our divesting or outlicensing a number of products. We also acquired Visible Genetics Inc. in Canada and Tectrade A/S in Denmark.

In 2003, we spent a total of 72 million on acquisitions mainly for increasing our interest in the Bayer Polymers Sheet Europe Group (formerly known as Makroform) up to 100 percent.

In March 2004, we purchased Crompton Corporation's 50 percent stake in the Gustafson seed treatment business in the United States, Canada and Mexico for a purchase price of \$124 million. This purchase gave Bayer CropScience, which already held a 50 percent stake in the U.S. and Canadian Gustafson joint ventures, full ownership of Gustafson's NAFTA business.

We divested the following operations in the past three years:

Our acrylic fiber product line in the first half of 2001. We classified the remainder of our Fibers business group under Discontinuing Operations. In May 2002, we reclassified Fibers as part of our ongoing business. See Item 5, *Operating and Financial Review and Prospects Overview*.

Our interest in the EC Erdölchemie joint venture in May 2001, which we had previously classified under Discontinuing Operations. Haarmann & Reimer effective September 30, 2002, as part of the streamlining of our portfolio.

The remaining 30 percent of our Agfa business segment in June 2002, of which we had already divested 70 percent in 1999.

Our 94.9 percent interest in Bayer Wohnungen, effective March 1, 2002.

A large part of the global household insecticides business of our Consumer Care division was divested in 2002 amounting to 0.4 billion; we also sold the remaining parts of this business in 2003 amounting to 0.3 billion.

Our French and Spanish generic pharmaceutical operations, as a further part of our drive to streamline our portfolio.

Our 50 percent interest in PolymerLatex. This transaction was closed on May 9, 2003.

Following the acquisition of Aventis CropScience in 2002, our global business activities have been integrated and the divestments imposed by the European Commission and the United States Federal Trade Commission have largely been completed. We terminated our research agreement with Millennium Pharmaceuticals, Inc. on October 31, 2003 as planned and sold our interest in this biotechnology company in the fourth quarter 2003, realizing 0.3 billion.

In connection with the planned realignment of the Bayer Group, we classified our chemicals activities excluding H.C. Starck and Wolff Walsrode and certain parts of our polymers activities under Discontinuing Operations (see Item 4 *Business*). As part of our ongoing portfolio management, we plan to divest the plasma business of the Biological Products division. These activities are also shown under Discontinuing Operations.

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**BUSINESS**

We are a global company offering a wide range of products, including ethical pharmaceuticals, diagnostics and other health care products; agricultural products; polymers; and chemicals.

Bayer AG is headquartered in Leverkusen, Germany and is the management holding company of the Bayer Group, which includes over 330 consolidated subsidiaries. During 2003, we continued to implement the decision to adopt a holding company structure that was approved by our shareholders in April 2002. Under our plan for this new structure, we transferred most of Bayer AG's assets to the new subsidiaries.

This new structure, which evolves out of our historical four pillar strategy, resulted in the division of our business operations among four new, legally independent operating companies heading up four subgroups, which in turn, consist of a total of seven business segments:

*Bayer HealthCare AG* (heading up the Bayer HealthCare subgroup, which consists of our three health care segments: Pharmaceuticals, Biological Products; Consumer Care, Diagnostics; and Animal Health), which became legally independent on September 30, 2003, with retroactive economic effect from January 1, 2003;

*Bayer CropScience AG* (heading up the Bayer CropScience subgroup, which consists of our CropScience segment), which became legally independent on October 1, 2002, with retroactive economic effect from January 1, 2002;

*Bayer MaterialScience AG* (heading up the Bayer Polymers subgroup, which consists of our Plastics, Rubber segment and our Polyurethanes, Coatings, Fibers segment), which became legally independent on December 30, 2003, with retroactive economic effect from October 1, 2003; and

*Bayer Chemicals AG* (heading up the Bayer Chemicals subgroup, which consists of our Chemicals segment), which became legally independent on September 30, 2003, with retroactive economic effect from July 1, 2003.

The activities of the seven business segments, which house the business operations, are performed by the operating companies Bayer HealthCare AG, Bayer CropScience AG, Bayer MaterialScience AG and Bayer Chemicals AG. Each operating company, together with the domestic and international subsidiaries assigned to it, forms a Bayer subgroup. Each of the four subgroups Bayer HealthCare, Bayer CropScience, Bayer Polymers and Bayer Chemicals is, within the framework of strategies, targets and guidelines determined by the Bayer AG Board of Management, an independent operating unit with worldwide business accountability and its own management. Each of the operating companies has entered into a control and profit and loss transfer agreement with Bayer AG.

Three legally independent service companies provide support functions to the four subgroups, Bayer AG and third parties. They include:

*Bayer Technology Services GmbH* (providing engineering functions), which became legally independent on September 30, 2003, with retroactive economic effect from January 1, 2003;

*Bayer Business Services GmbH* (providing information management, accounting and reporting, consulting and administrative services), which became legally independent on December 30, 2003, with retroactive economic effect from October 1, 2003; and

*Bayer Industry Services GmbH & Co. OHG* (operating the Bayer Chemical Park network in Germany and providing site specific services), which became legally independent on December 30, 2003, with retroactive economic effect from October 1, 2003.

Under the new structure, our Board of Management continues to determine the overall strategy of the Bayer Group and control resource allocation. It also nominates the management of the subsidiary Group companies and sets each company's performance criteria. Although these entities are currently wholly-owned subsidiaries, we may consider strategic partnerships and collaborations involving them.

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For the year ended December 31, 2003, Bayer reported total sales of 28,567 million, an operating loss of 1,203 million, and a net loss of 1,361 million. Sales from continuing operations amounted to 22,178 million. As of December 31, 2003, we employed 115,400 people worldwide.

The following table shows a breakdown of our sales in 2003 based on the location of the Bayer entity on the books of which our sales are recorded (point of origin):

Region	Sales	
	(euros in millions)	(percentage of total)
Europe	13,518	47.3
North America	8,763	30.7
Asia/Pacific	3,913	13.7
Latin America/ Africa/Middle East	2,373	8.3

In the future, we plan to focus more closely on our strengths in the fields of health care, nutrition and innovative materials. The Board of Management and the Supervisory Board of Bayer AG have therefore decided to adjust the Group's structure and business alignment accordingly. We plan to place the Chemicals business (except H.C. Starck and Wolff Walsrode) and parts of the Polymers subgroup that we no longer regard as core businesses into an independent company, to be named Lanxess, which we plan to list on the Frankfurt Stock Exchange by early 2005. We intend to combine the other activities of the Polymers and Chemicals subgroups in the new Bayer MaterialScience subgroup. Our goal is to strengthen the competitiveness of our fast-growing, innovation-driven businesses in the HealthCare, CropScience and MaterialScience subgroups by concentrating on the special needs of these businesses.

We are therefore specializing in businesses that we believe have greater potential for growth, value creation and innovation. These businesses require more sophisticated structures and a substantial level of investment. We believe that businesses that do not fit this profile are better served by being placed in an environment in which they can fully deploy their own management resources and create the structures they need.

In connection with the new alignment of the Bayer Group, we have decided to position Pharmaceuticals as a medium-sized enterprise with the appropriate structures. Here we intend to concentrate on infectious diseases, cardiovascular risk management, urology and oncology. We also intend to strengthen regional collaborations, partnerships and in-licensing activities. An additional element of our strategy is continuous life cycle management, with which we aim to further enhance the success of our products that are already on the market. See Item 4, *Pharmaceuticals Research and Development*.

In the Biological Products Division, we plan to expand our profitable *Kogenate*® business, emphasizing that product's good profile and further improvements to its delivery. We announced on October 2, 2003 our intent to divest the plasma business. The *Kogenate*® business is not affected by this decision.

In Bayer HealthCare, we plan to focus more closely on our competencies and experience in the consumer-oriented health care business. In Consumer Care, we aim to continue our growth by strengthening our own products and brands, including in particular non-prescription pain-relievers. We also regularly review options for expanding our product portfolio and regional presence through in-licensing and acquisitions.

In Diagnostics, we aim to maintain our position as one of the market leaders. We intend, through the introduction of new products, to spur our growth in the consumer-oriented Self-Testing unit. In Professional Testing, we plan to pursue strong development with further product launches that will allow us to serve our customers even more specifically. Other focuses include the forging of new strategic partnerships and the expansion of existing collaborations.

In Animal Health, we aim to further expand our position as one of the world's leading suppliers of veterinary pharmaceuticals. Here we intend to concentrate on strengthening the consumer-oriented Companion Animals business unit and systematically expanding our Livestock business. To solidify our position, we aim to maintain our focus on attractive key markets and on the steady expansion of our core products. We are also analyzing options for improving our market position and rounding out our product portfolio through acquisitions or strategic alliances.

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In the Bayer CropScience subgroup, the integration of Aventis CropScience and the divestitures required to fulfill antitrust conditions are nearly complete. We intend to further strengthen our market positions in Crop Protection and Environmental Science and expand our seed business and plant biotechnology activities. We regard new product launches, realization of synergies, strict cost management and portfolio streamlining as key factors in achieving our target operating result for Bayer CropScience.

In the Crop Protection Business Group, we aim to expand our business by exploiting our strong market positions, our regional presence and our broad range of herbicide, fungicide, insecticide and seed treatment products. Over and above these activities, we are planning to focus primarily on new products from our research and development pipeline. Environmental Science intends to further strengthen its position as a leading supplier of non-agricultural pest control products, in particular through strategic partnerships in the U.S. lawn and garden business and through consistent portfolio optimization. In BioScience, the focus lies on cotton, canola, rice and vegetable crops. We also plan to access new markets using plant biotechnology.

In the new Bayer MaterialScience subgroup, we aim to further expand our strong market positions primarily through exploiting our technological expertise in the field of innovative materials, with a focus on polycarbonates and isocyanates. By further optimizing our processes and expanding our activities in Asia in particular, we intend to create competitive advantages that will strengthen the long-term earning power of our businesses in these growth markets.

The strategic alignment on core competencies should enable Bayer to increase investment in growth businesses and innovative technologies. We expect that this will allow us to play a leading role in these attractive markets and expand our current strong positions. We intend to optimize the allocation of resources as well as continue with our cost-saving and efficiency-improvement programs in order to increase Bayer's corporate value over the long term.

We aim to avoid accidents, to prevent our activities from harming human and animal health and to tailor our product range to the tenets of sustainability. Bayer's long-term strategy and activities are guided by the principles of *sustainable development*. Our objective is to meet the economic, ecological and social needs of today's society without compromising the ability of future generations to meet their own needs. We contribute to sustainable development by participating in the worldwide *Responsible Care*® initiative developed by companies in the global chemical industry.

**BAYER HEALTHCARE****PHARMACEUTICALS, BIOLOGICAL PRODUCTS****Overview**

Our Pharmaceuticals, Biological Products segment is comprised of the Pharmaceuticals and Biological Products divisions. This segment formerly consisted of a single division responsible for both pharmaceutical and biological products. Beginning in 2002, we have organized the segment internally into two separate divisions. The following table shows the segment's performance for the last three years.

	2001	2002	2003
	(euros in millions)		
External net sales	5,729	4,767	4,745
Percentage of total sales	18.9	16.1	16.6
thereof Discontinuing Operations	695	679	613
Intersegment sales	38	33	51
Operating result	52	(186)	(425)
Percentage of total operating result	3.1		
thereof Discontinuing Operations	(139)	(111)	(353)
thereof special items <sup>(1)</sup>	(321)	(333)	(832)

(1) The special items are detailed in Item 5, *Operating and Financial Review and Prospect - Operating Results 2001, 2002 and 2003 - Segment Data*.





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The following table shows our sales during the past three years from the products that we regard as material to the sales of the segment as a whole.

Product	2001		2002		2003	
	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales
<i>Cipro</i> ®	1,964	34.3	1,411	29.6	1,411	29.7
<i>Adalat</i> ®	975	17.0	800	16.8	676	14.2
<i>Kogenate</i> ®	250	4.4	400	8.4	497	10.5
<i>Gamimune</i> ®/ <i>Gamunex</i> ®	343	6.0	333	7.0	304	6.4
<i>Avelox</i> ®	181	3.2	280	5.9	299	6.3
<i>Glucobay</i> ®	312	5.4	287	6.0	273	5.8
<i>Prolastin</i> ®	131	2.3	151	3.2	166	3.5
<i>Trasylol</i> ®	136	2.4	154	3.2	157	3.3
<i>Levitra</i> ®	0	0	6	0.1	144	3.0

**Segment Strategy****Pharmaceutical Products**

In connection with the new alignment of the Bayer Group, we have decided to position Pharmaceuticals as a medium-sized enterprise with the appropriate structures.

To achieve this target our strategic priorities include:

Focusing on the following areas:

Infectious diseases,

Cardiovascular Risk Management,

Urology, and

Oncology; and

Working on regional co-operations, alliances and licensing, all as appropriate in light of the local circumstances.

In addition to our immediate priorities, life cycle management remains a continuing element of our strategy. Successful life cycle management enables us to extend the commercial success of established products. See *Research and Development Life Cycle Management*.

**Biological Products**

Our strategic priorities for the Biological Products division include:

In the midterm future, we intend to focus on growth of the *Kogenate*® brand while maintaining profitability. To achieve this, the *Kogenate*® strategy is to create greater differentiation between *Kogenate*® and other recombinant Factor VIII (FVIII) products by adding value with product improvements, expanding new technology to patients and care givers and investing in the development of strategic partnerships for the future.

Bayer AG announced on October 2, 2003 its intent to divest the plasma business. The *Kogenate*® business is not affected by this decision. Until the plasma business has been divested, we intend to pursue a strategy of maintaining this business market share and generating an

improved operating result and cash flow for the business. To accomplish these targets, we intend to expand the portfolio with selected product line extensions, new developments and added indications and to improve the efficiency of the plasma production site operations.

**Table of Contents****Pharmaceuticals***Overview*

Our Pharmaceuticals division focuses on the development and marketing of ethical pharmaceuticals. Ethical pharmaceuticals are medications requiring a physician's prescription and sold under a specific brand name.

*Major Products*

The following table shows the sales of our Pharmaceuticals division during the past three years from the products that we regard as material to the sales of the division in 2003.

Product	2001		2002		2003	
	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales
<i>Cipro</i> ®	1,964	34.3	1,411	29.6	1,411	29.7
<i>Adalat</i> ®	975	17.0	800	16.8	676	14.2
<i>Avelox</i> ®	181	3.2	280	5.9	299	6.3
<i>Glucobay</i> ®	312	5.4	287	6.0	273	5.8
<i>Trasylol</i> ®	136	2.4	154	3.2	157	3.3
<i>Levitra</i> ®	0	0.0	6	0.1	144	3.0
Others	1,216	21.1	750	15.7	675	14.2
Total	4,784	83.5	3,688	77.4	3,635	76.6

Ciprofloxacin, marketed under the trademark *Cipro*® in the United States and *Ciproxin*®, *Ciproxine*®, *Ciprobay*®, *Ciproxina*®, *Bacip*® and *Ciflox*® in other countries, is a broad-spectrum antimicrobial agent of the fluoroquinolone class. We launched *Cipro*® in 1986 and have since marketed it in more than 100 countries. *Cipro*®'s main uses are in the treatment of urinary tract infections and in severe hospital infections, where it competes with other fluoroquinolones as well as with antibiotics of other classes. It is also approved for the treatment of anthrax. In January 2003, we launched in the United States *Cipro*® XR (Extended Release) in a 500 mg extended release tablet for once daily administration in the treatment of uncomplicated urinary tract infections, and in September 2003, we launched *Cipro*® XR in a 1,000 mg extended release tablet for once daily therapy of complicated urinary tract infections. In addition, in June 2003, Barr Laboratories, Inc. started to supply the U.S. market with generic versions of *Cipro*® standard oral presentations based upon an agreement concluded with us in 1996. Barr Laboratories is sourcing the products from Bayer Pharmaceuticals Corporation. In December 2003, patent protection for the active pharmaceutical ingredient expired in the U.S. However, market exclusivity has been granted for another six months by the FDA based upon fulfillment of written requests of the FDA on the pediatric use of *Cipro*®. *Cipro*® is our leading pharmaceutical product.

*Adalat*® is the brand name for nifedipine, the first representative of the dihydropyridine class of calcium antagonists. Calcium plays an important role in the body's regulation of blood pressure and the supply of blood to the heart tissues. Calcium antagonists can reduce blood pressure and improve blood supply to heart tissue.

Moxifloxacin, marketed under the trade name *Avelox*® in the United States and *Avalox*®, *Izilox*® and *Actira*® in other countries, is an antibiotic used to treat common bacterial respiratory tract infections. We currently market *Avelox*® in more than 90 countries. It is indicated for the treatment of community-acquired pneumonia, acute exacerbations of chronic bronchitis and acute sinusitis. In late 2001, we launched *Avelox*® i.v., a new intravenous form of this product, in the United States, our most important market for this product in terms of sales, and subsequently in other markets.

*Glucobay*®, *Precose*® (in the United States) and *Prandase*® (in Canada) are our trade names for acarbose, an oral antidiabetic product that delays carbohydrate digestion. *Glucobay*® improves metabolic control in diabetics alone or in combination with other antidiabetic drugs.



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*Trasylol®* is a natural proteinase inhibitor obtained from bovine lung tissue. Used prophylactically, it reduces blood loss during coronary bypass surgery, reducing the patient's need for blood transfusions.

Vardenafil, our erectile dysfunction medication marketed under the trade name *Levitra®*, has been launched in the United States and all major markets with the exception of Canada and Japan. The application that we filed with the Japanese authorities in December 2001 is currently under review. We market the product in co-operation with GlaxoSmithKline in all markets except Japan and also jointly perform life cycle management. For more information on life cycle management, see *Research and Development - Life Cycle Management*. See Item 8, *Financial Information - Legal Proceedings* for a discussion of the intellectual property status in the United States of *Levitra®* and other erectile dysfunction medications.

*CardioAspirin* refers to Bayer's collective group of products (in both our Pharmaceuticals and Consumer Care divisions) that are professionally indicated for the prevention of an MI (myocardial infarction, or heart attack) in either those individuals who have already had an initial MI (secondary prevention) or in individuals deemed at risk for a first MI by their physician (primary prevention). These products vary in status (whether or not a prescription is required) based on local regulations. We face competition from both over-the-counter and prescription drugs in the cardiovascular marketplace which claim secondary and/or primary prevention benefits.

**Markets and Distribution**

The Pharmaceuticals division's principal markets are North America, Western Europe and Asia (especially Japan). The division's sales by region and total sales for the past three years are as follows:

	2001	2002	2003
	(euros in millions)		
Europe	1,450	1,155	1,067
North America	2,049	1,420	1,532
Asia/Pacific	895	769	705
Latin America/ Africa/Middle East	390	344	331
	<hr/>	<hr/>	<hr/>
Total	4,784	3,688	3,635
	<hr/>	<hr/>	<hr/>

Among the factors that have affected, or may affect, our Pharmaceuticals business are:

in Europe and North America, increasingly competitive price pressures, as managed care groups, health care institutions, government agencies and other purchaser groups seek price discounts and rebates for pharmaceutical products;

the impact of competing generic products entering the European and North American markets;

currency effects resulting from transactions in countries outside the euro zone;

competition from large pharmaceutical companies in the market with substantial resources for research, product development and promotion; and

in Japan, regulation of pharmaceutical prices and mandatory price reductions stipulated by the Japanese Ministry of Health, Labor and Welfare.

We generally distribute our products through wholesalers, pharmacies and hospitals as well as, to a certain extent, directly to patients. Where appropriate, we actively seek to supplement the efforts of our sales force through co-promotion and co-marketing arrangements. In November 2001, we entered into a co-promotion agreement with GlaxoSmithKline for *Levitra®* (vardenafil), our erectile dysfunction medication. See *Major Products*.

We currently produce the active ingredients for our ethical pharmaceutical products almost entirely at the Bayer facilities in Wuppertal and Leverkusen, Germany. Bayer facilities throughout the world compound our raw materials and package the finished product for shipment. Our

main pharmaceutical production facilities are in Leverkusen, Germany; Garbagnate, Italy; and Shiga, Japan.

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We obtain the raw materials for our active ingredients in ethical pharmaceuticals partly from Bayer's Chemicals business segment and partly from third parties in Europe and Asia. We maintain strategic reserves of our products to avoid breaks in the supply chain. We obtain additional ingredients and packaging materials from diverse suppliers on a worldwide basis. As a rule, we approve several suppliers for each required material. At the same time, we are increasingly entering into global contracts in order to secure advantageous pricing. Where a required material is available from only one supplier, our policy is to amass a strategic reserve, typically equal to a 90-day supply, while mounting an intensive search for potential alternative suppliers.

We encounter competition in all of our geographical markets from large national and international competitors. Our main competitors are GlaxoSmithKline, Pfizer and Abbott Laboratories in the antibacterial products market; Pfizer, Merck & Co., Novartis, and AstraZeneca in the area of hypertension and coronary heart disease therapy; Takeda, GlaxoSmithKline, Aventis and Bristol-Myers Squibb in the oral antidiabetics market; and Pfizer and Eli Lilly in the erectile dysfunction market.

**Research and Development**

Bayer allocates the largest part of its research and development budget to the Pharmaceuticals division. Within this division, we focus our research and development activities on therapeutic areas in which we believe there is a high degree of inadequately met medical need and where we expect our research and development investment to yield high productivity. Our established areas of core competency are infectious diseases as well as cardiovascular diseases, urology (erectile dysfunction and urinary incontinence) and oncology. Research was discontinued in the areas of respiratory diseases and neurological/ neurodegenerative disorders in 2003. However, focused development activities in these areas will be completed.

The division's largest research and development facilities are located in Wuppertal, Germany for cardiovascular and anti-infectives; West Haven, Connecticut for cancer and metabolic diseases; and Kyoto, Japan for urology. In December 2003, a decision was made to close the research center in Kyoto, Japan and discontinue Biotech research in Berkeley, California. Urology research will be transferred from the research center in Kyoto to the other sites, as will ongoing research projects and appropriate parts of the technology platform for the biotech research now in Berkeley.

**Life Cycle Management**

We apply life cycle management measures to our marketed products to expand the scope of possible treatment opportunities by identifying new indications and improved formulations. *Adalat*® is a prime example of successful life cycle management: eighteen years after the patent protection for the active ingredient nifedipine, its key component, expired, the drug generated 676 million in sales in 2003. Similarly, we are implementing life cycle management measures, such as improved formulations and dosage forms, for other major products.

**Phase II/III Trials**

In October 2003, Bay 43-9006, a Raf Kinase inhibitor, an investigational compound directed against a specific molecular target involved in excess growth signaling in cancer and developed jointly with U.S.-based Onyx Pharmaceuticals Inc., began enrollment in a large Phase III clinical trial in Renal Cell Carcinoma. Our Factor Xa inhibitor for the prevention and treatment of thrombosis has also done well in trials so far and is currently in phase II clinical testing. Drug candidates in Phase II/III of clinical development are listed in the following table with their respective indications:

<b>Project</b>	<b>Indication</b>	<b>Status</b>
Repinotan	Acute ischemic stroke	In Phase II
Factor Xa inhibitor	Thrombosis	In Phase II
Novel Taxane	Cancer	In Phase II
PDE4 Inhibitor	Respiratory diseases	In Phase II
Raf Kinase inhibitor	Cancer	In Phase III

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The listed compounds represent a snapshot of the Bayer pipeline. The nature of drug development and discovery is such that not all products can be expected to fulfill or meet with favorable regulatory response, so it is possible that some of the above listed projects under clinical development will not result in marketed products.

### *Microbial resistance to antibiotics*

The development by microbes of resistance to antibiotics is a cause for concern for the medical community. Resistance development is a natural process. It is almost certainly impossible to eliminate it altogether. Although emergent ciprofloxacin or moxifloxacin resistance could become a problem on an isolated, individual-patient basis, we do not believe that microbial resistance will impair the general clinical usefulness of these two products in large patient populations in the foreseeable future.

We actively encourage health care professionals to adopt standards of appropriate antibiotic use to avoid facilitating the development of resistance. Inappropriate use of antibiotics is one factor that facilitates the development of microbial resistance. This includes using antibiotics when not indicated, for example, for treating viral infections, but it also includes not using the most efficacious antibiotics when there is a need for antibacterial treatment. To provide physicians and patients with information on how they can use antibiotics appropriately, we have initiated the LIBRAINITIATIVE.COM project to collect data on bacterial resistance on a global basis.

### *Collaborations*

To supplement our internal research and development efforts, we have established an integrated program for collaborations with research-oriented companies that are leaders in their technologies. Our research collaboration program brings together major research companies to create a pool of expertise covering the entire research cycle, from discovery of pharmaceutical mechanisms through characterization of new active compounds to identification of a novel development candidate.



**Table of Contents***Research Collaborations*

The following table illustrates the phases of the typical pharmaceutical research cycle, the various disciplines and techniques involved and the major companies that provide us with active assistance in our research efforts.

<b>Research Cycle</b>	<b>Discipline/ Technique</b>	<b>Research Company</b>
Understanding the disease mechanism and identifying new targets	Functional genomics ( <i>functional analysis of genetic data</i> )	Millennium; Incyte Affymetrix; CuraGen
	Proteomics ( <i>mapping protein expression and function in an organism or tissue</i> )/Target Validation	Galapagos; Artemis; Pharmagene Jackson Labs; Dharmacon; Cenix; Cellzome; King's College
	Bioinformatics ( <i>applying the tools of Information Technology to biological data analysis</i> )	Lion Bioscience
Screening the candidate substances	High-throughput screening ( <i>rapid, automated testing of compounds for potential effectiveness against a given target</i> )	Axxam; Discovery Partners
	Toxico- and Pharmacogenomics ( <i>increasing the quality and probability of success of drug candidates</i> )	CuraGen
Increasing the pool of potential drug candidates by small-chemical molecules and macromolecules ( <i>proteins, peptides</i> )	Animal Models	Phenomix
	Combinatorial Chemistry/ Substance synthesis ( <i>techniques for increasing the number and diversity of test compounds</i> )	ArQule; ComGenex
	X-ray crystallography Pool of Bayer biomolecules ( <i>for example, monoclonal antibodies and conjugates</i> )	Structural Genomix Morphosys; Seattle Genetics

In addition to the collaborations focusing on disease mechanisms and screening, we have established collaborations in the field of medicinal chemistry. These collaborations together with our internal research efforts have given us access to more than one million substances; the HTS (high-throughput screening) technologies that we developed in collaboration with our partners enable us to screen more than 200,000 substances for a given target in a single day. Although our relationship with each of the individual research partners is important to us, it is the cooperative structure as a whole that is a key element of our strategy.

Three of our research collaborations – those with Millennium Inc., LION Bioscience and CuraGen – are or have been of particular importance.

*Millennium*

Together with Millennium, we have created a substantial collaborative effort to use the tools of genomics to identify new drug targets. The collaboration ended on October 31, 2003 as planned and we sold our interest in Millennium in the fourth quarter of 2003. During the collaboration, Bayer progressed more than 180 targets into various stages of assay configuration and drug discovery. The companies amended the agreement to provide Bayer, at no additional cost, extended access for up to seven years to a pool of 280 additional proprietary targets which have for technical reasons not yet been configured into assays. At the end of the seven-year period, the targets remaining in the pool will be returned to Millennium.

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An additional goal which has been realized in this collaboration was to obtain technology and expertise to enable us to continue the genomics program independently after the completion of the collaboration.

The final financial volume of this collaboration was \$465 million including a \$96.6 million equity investment.

### *LION Bioscience*

We have established two collaboration projects with LION Bioscience, a bioinformatics technology provider.

Under the first project, which began in 1999, LION established a subsidiary in Cambridge, Massachusetts, LION Bioscience Research Inc. (LBRI). LBRI provides our life sciences effort with a strong IT platform and software development program and allows us to review drug-relevant target gene data for further use in our laboratories. LBRI delivered more than 400 disease-related targets, which we have developed into a large number of new patent applications.

In October 2000, we began our second project with LION, in the field of pharmacophore informatics. The goal of this collaboration is to develop software tools to cross-link biological and chemical data.

We expect to invest \$46.5 million plus 34.1 million in our collaborations with LION, including a 27.7 million equity investment that we have already made. We have an option to acquire LBRI when both collaboration projects are complete.

### *CuraGen*

In 2001, we initiated two collaborative projects with CuraGen. In the first project, CuraGen agreed to provide drug targets during an initial five-year period. The goal is to identify drug candidates for obesity and diabetes treatment for clinical development over a 15-year period. Our agreement provides that during this period, we will share the expenses of pre-clinical and clinical development (up to \$1.3 billion). We will also share with CuraGen co-promotion rights and any profits derived from these drugs.

The goal of the second project is to compile a database of gene-based markers and information to predict potential drug toxicities, understand how specific drugs function and identify new disease conditions. Through this project, we expect to reduce drug development costs and create safer and more effective drugs. We plan to invest a total of \$124 million in this five-year project, including an \$85 million equity investment that we have already made and which was written down in 2003.

### *Product Development Collaborations*

The major collaborations in the area of Product Development are described below:

*Onyx.* Bayer and Onyx are co-developing Raf Kinase Inhibitor, an investigational compound directed against a specific molecular target involved in excess growth signaling in cancer. This collaboration results in Onyx funding 50 percent of the development costs for Raf-Kinase Inhibitor. In return, Onyx has a 50 percent profit share in the United States, where the companies may co-promote the product. Everywhere else in the world except Japan, Onyx's share is somewhat less than 50 percent since Bayer has exclusive marketing rights. In Japan, Bayer funds product development and Onyx receives a royalty.

*GlaxoSmithKline.* Vardenafil, the active ingredient of *Levitra*®, researched by Bayer, is being marketed in co-operation with GlaxoSmithKline in all markets except Japan. The co-operation also includes life cycle management.

*Paratek.* Bayer and Paratek Pharmaceuticals signed a Collaborative Development and License Agreement in August 2003 for a novel aminomethylcycline antibiotic. The agreement provides Bayer with a global, exclusive patent and know-how license for the development, manufacturing and marketing of injectable preparations. Paratek will contribute to global development costs, retain co-promotion rights and share profits in the United States and receive royalties on net sales outside the United States.

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*Indena.* Bayer signed a licensing agreement with Indena S.p.A in March 2000, which gives Bayer worldwide exclusive rights to IDN 5109, a new anti-cancer compound, and its derivatives. The terms of the agreement state that Indena is responsible for extracting and producing the compound and Bayer will see the compound through clinical development and commercialization.

*In-licensing activities*

We supplement our portfolio of products of our own Research and Development with in-licensed products both on global or national level. Recent examples are *Fosrenol*®, a remedy to treat hyperphosphatemia associated with End Stage Renal Disease, which we in-licensed from Shire International Licensing BV for Japan, and *Sativex*®, a cannabis-based medicinal extract product for the treatment of the debilitating symptoms of multiple sclerosis and severe neuropathic pain, which we in-licensed from GW Pharmaceuticals plc for the United Kingdom and Canada. *Fosrenol*® is in early stage of clinical development; *Sativex*® is in the process of registration.

**Biological Products***Overview*

Our Biological Products division focuses on biological products (for example, blood plasma products) and recombinant protein therapies. Biological Products operated as a separate business unit within Pharma until December 31, 2001. As of January 1, 2002, it has been a division within Bayer HealthCare.

*Major Products*

The following table shows the sales of our Biological Products division during the past three years, broken down by category of activity.

Category	2001		2002		2003	
	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales
Kogenate®	250	4.4	400	8.4	497	10.5
Plasma	695	12.1	679	14.2	613	12.9
Total	945	16.5	1,079	22.6	1,110	23.4

*Kogenate®*

*Kogenate® FS* (*Kogenate® Bayer* in the EU) is a genetically engineered recombinant version of the protein FVIII. Patients with Hemophilia A cannot produce sufficient FVIII, and their blood therefore cannot clot properly. Physicians use both plasma-derived and recombinant FVIII to treat Hemophilia A. Because recombinant products like *Kogenate®* do not derive from human donors, the risk that their users will inadvertently contract infection with HIV, hepatitis or other viruses occasionally present in plasma-derived products is greatly reduced.

We supply recombinant FVIII to Aventis Behring, which markets it under the brand name *Helixate® FS*.

*Plasma Products*

*Gamunex®* is a plasma-derived concentrate of human antibodies (chromatography purified Immune Globulin Intravenous or IGIV-C) registered in the United States and Canada. In addition, the Paul Ehrlich Institut in Germany has approved a license application for the German market. *Gamunex®* represents the first completely new IGIV therapy development by Bayer in more than a decade. Biological Products received approval for its new IGIV-C *Gamunex®* for the Canadian and the U.S. markets in August 2003 and the first sales to customers took place in October 2003.



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*Gamimune®/Polyglobin®* is a plasma-derived concentrate of human antibodies (IGIV) registered worldwide, including the United States, Canada, Germany and Japan. Physicians use it to treat immune system deficiencies as well as for the treatment of some autoimmune disorders, in which the immune system mistakenly attacks the body's own tissues.

*Prolastin®* (alpha1-proteinase inhibitor human) is a plasma-derived product approved for use in the United States, Canada and several European countries. It is used for chronic therapy in individuals with emphysema related to congenital alpha1-antitrypsin (AAT) deficiency. AAT deficiency is an inherited disorder that causes insufficient AAT in the body. This deficiency can cause serious lung disease and, ultimately, emphysema.

**Markets and Distribution**

The Biological Products division's principal markets are North America, Europe and Japan. The division's sales by region and total for the past three years are as follows:

	<u>2001</u>	<u>2002</u>	<u>2003</u>
	(euros in millions)		
Europe	179	256	352
North America	588	664	622
Asia/Pacific	136	115	104
Latin America/ Africa/Middle East	42	44	32
	<u>    </u>	<u>    </u>	<u>    </u>
Total	945	1,079	1,110
	<u>    </u>	<u>    </u>	<u>    </u>

We generally distribute our products through governmental agencies, wholesalers, pharmacies and hospitals as well as, to a certain extent, directly to patients.

We produce plasma-derived products and, under a license from Genentech, recombinant FVIII at our facilities in Clayton, North Carolina and Berkeley, California in the United States. We obtain raw plasma as well as some intermediates and supplies for plasma-derived products from third-party U.S. suppliers. As Biological Products does not own plasma collection centers, we have to buy raw plasma from third-party collection centers or other manufacturers. The price and availability of raw plasma depends on the available donor base, ongoing consolidation between larger collectors and regulatory procedures.

Our main competitors are Baxter and Aventis in the blood coagulation market and CSL, Baxter and Aventis in the markets for proteinase inhibitors and Immune Globulins.

In January 2003, Bayer and Aventis terminated negotiations regarding the establishment of a joint venture for biological products.

**Research and Development**

Key research and product development projects include *Kogenate® Next Generation*, *Kogenate® FS EZ-Fuse™*, Plasmin, *Prolastin®* (Alpha C), and IGIV-C (*Gamunex®*) Expanded Indications.

**R&D Facilities**

The division's research and development facilities are located in the United States, specifically in Raleigh, North Carolina for Bioanalytic Research; Clayton, North Carolina for Bioanalytic Development and Plasma Technology; Research Triangle Park, North Carolina for Research and Pathogen Safety; Berkeley, California for Process Technology (*Kogenate®*); and Raleigh, North Carolina for Nucleic Acid Testing (NAT).

**Table of Contents***Phase II/III Trials*

<b>Product</b>	<b>Indication</b>	<b>Status</b>
IGIV-C	Multiple Sclerosis New Indication	Phase II
IGIV-C	ITP (idiopathic thrombocytopenic purpura) Rapid Infusion	Phase III
IGIV-C	CIDP New Indication (Chronic inflammatory demyelinating polyneuropathy)	Phase III
IGIV-C	PID (primary immune deficiency) Rapid Infusion	Phase III

*Kogenate® Next Generation*

We have identified five constructs for potential Next Generation *Kogenate®* development; evaluation of proteins and technology is ongoing and the decision to proceed with the initiation of clinical trials is targeted for 2004.

On June 3, 2003, Bayer signed an exclusivity agreement with Opperbas Holding B.V. for use of *Kogenate® FS* in proprietary formulation development. The decision to continue further development is scheduled for the second quarter of 2004.

Additionally, Bayer has an agreement with Avigen (signed in November 2000) to develop Factor IX (FIX) gene therapy for Hemophilia B patients to reduce spontaneous bleeding episodes and the need for FIX protein injections. Avigen's proprietary adeno associated virus (AAV) vector, *Coagulin-B®*, is designed to deliver the FIX gene into the patient's cells where it will produce FIX. Avigen is currently conducting a Phase I trial. Bayer will collaborate with Avigen in conducting Phase II/ III clinical trials for *Coagulin-B®*.

*Kogenate®-FS EZ-Fuse™ Delivery System*

The *EZ-Fuse™* infusion device was developed to provide patients with a more convenient and safer delivery system that complemented *Kogenate® FS*. It enables patients to safely reconstitute Factor VIII without having to handle any exposed transfer needles. It is a self-contained design to reduce risk of contamination, it is latex free to reduce the risk of allergic reactions and it requires fewer steps for faster infusions. The application for approval was submitted to the FDA in the fourth quarter of 2003.

*Plasmin New Protein*

A new thrombolytic agent, plasmin (derived from human plasma) has entered Phase I clinical trial stage. It is a direct thrombolytic agent and is infused at the site of the clot to prevent it from activating plasmin downstream, making it potentially safer. The Phase I trial for Hemodialysis Graft Occlusion has begun screening patients. It is planned that Phase II will commence in the third quarter of 2004 and, based on successful outcomes, trials for a second indication, deep vein thrombosis, will commence late 2004. Launch is anticipated in 2008.

*Prolastin® Aerosolized AAT and Alpha-C*

The Alpha-C project is the development of an improved Alpha-1 Proteinase Inhibitor (A1-Pi; *Prolastin®*) product with greater purity and increased yield as an intravenous formulation for congenitally deficient (CD) patients and as an aerosol formulation.

On October 8, 2003, Bayer acquired exclusive rights for a new advanced inhalation technology for the dosing of alpha-1 antitrypsin (AAT) protein from Inamed GmbH. Under this deal, Bayer will have worldwide exclusive rights to the new AKITA compressor and any other products developed by Inamed based on the same technology for clinical development and marketing of its inhaled AAT products. Currently, all AAT must be administered intravenously. It is planned to commence with Intravenous Phase I and II non-inferiority pharmacokinetic to IV *Prolastin®* and proof of principal in patients in 2004. Anticipated launch for CD is 2007 and for the aerosolized product in 2009.

**Table of Contents***IGIV-C Expanded Indications*

A number of studies are being conducted to enhance marketability of *Gamunex*®. For the purpose of obtaining labeling for new indications, a Phase II 120-patient multinational multiple sclerosis trial was initiated in 2002 and is planned to be completed in 2005; and a Phase III 110-patient CIDP (neuropathy) trial was initiated in 2003 and is planned to be completed in 2006. To support existing indications, rapid infusion in PID Phase III (primary immune deficiency) and ITP Phase III (immune thrombocytopenic purpura) patients initiated in 2003 is planned to be completed in 2004. Additionally, the division is supporting investigator-led projects in the areas of renal transplant and pregnancy loss.

**CONSUMER CARE, DIAGNOSTICS****Overview**

Our Consumer Care, Diagnostics segment is comprised of the Consumer Care and Diagnostics divisions.

The following table shows the segment's performance of the last three years.

	2001	2002	2003
	(euros in millions)		
External net sales	4,104	3,755	3,336
Percentage of total sales	13.6	12.7	11.7
Intersegment sales	2	2	4
Operating result	342	602	589
Percentage of total operating result thereof special items <sup>(1)</sup>	20.4 (40)	37.4 214	589 268

(1) The special items are detailed in Item 5, *Operating and Financial Review and Prospects - Operating Results 2001, 2002 and 2003 - Segment Data*.

The following table shows our sales during the past three years from the products that we regard as material to the sales of the segment as a whole.

Product	2001		2002		2003	
	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales
<i>Aspirin</i> ®(1)	723	17.6	589	15.7	574	17.2
<i>Ascensia</i> ®	492	12.0	689	18.3	593	17.8
<i>Advia Centaur</i> ®	259	6.3	340	9.1	387	11.6
<i>Canesten</i> ®	162	3.9	142	3.8	135	4.0

(1) The figures include CardioAspirin, which is partially distributed by our Pharmaceutical division.

**Segment Strategy****Consumer Care**

The objective of our Consumer Care division is to outpace market growth in the over-the-counter (OTC) market and to improve our global position.

The key strategic focus to exploit our organic growth potential is on our analgesics business, mainly through *Aspirin*®. In parallel, we plan to consider licensing and acquisitions in order to strengthen both our product portfolio and our regional presence.

*Diagnostics*

Our Diagnostics business consists of two Strategic Business Entities (SBEs): the Professional Testing SBE, which includes the Laboratory Testing, the Near Patient Testing and the Nucleic Acid Diagnostics business units,



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and the Self Testing SBE. We furthermore established Viterion TeleHealthcare LLC as a joint venture with Matsushita Electric Industrial Co., Ltd.

The overall objective for Diagnostics is to outpace industry sales growth in the markets and to achieve a long-term sustainable position with above industry average profitability.

We strive to reach these objectives by introducing innovative solutions to improve the overall efficiency and economics of targeted Professional Testing customers by focusing our efforts in building a product portfolio with breadth and depth. In Self Testing, we are expanding our product offering by regularly introducing innovative systems with improved convenience and sampling with minimal pain for diabetic patients. To support our objectives, we continue to develop our strategic partnerships in desired areas of expertise to complement our in-house strengths.

**Consumer Care****Overview**

Our Consumer Care division develops and markets over-the-counter (OTC) medications (analgesics, cough and cold, dermatological and gastrointestinal remedies), as well as vitamin and nutritional supplements.

**Major Products**

The following table sets forth the sales of our Consumer Care division for the last three years, broken down by category of activity.

Category	2001		2002		2003	
	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales
Analgesics	775	18.9	621	16.5	588	17.6
Cough/Cold	177	4.3	120	3.2	120	3.6
Dermatologicals	246	6.0	218	5.8	209	6.3
Gastrointestinals	266	6.5	209	5.6	185	5.6
Nutritionals	197	4.8	174	4.6	205	6.1
Others	434	10.6	374	10.0	96	2.9
Total	2,095	51.0	1,716	45.7	1,403	42.1

**Analgesics**

The analgesics market comprises pain relief products both in oral form (for example, pills and tablets) and for topical use (for example, ointments and salves). We concentrate primarily on the oral products segment. Our OTC products also face competition from prescription drugs, for example cyclooxygenase (COX-II) inhibitor pain relievers.

*Aspirin®* (Bayer® brand aspirin in the United States) is a nonsteroidal anti-inflammatory drug (NSAID). It is used for pain relief and, in countries where so indicated, for the prevention of heart attacks. Bayer first synthesized aspirin in 1893 and began marketing it in powder form in Germany in 1900. We introduced the familiar aspirin tablets in 1910.

*Aleve®* is a nonprescription strength of the analgesic naproxen sodium. *Aleve®* is a long-lasting pain reliever and can be used for fever reduction.

Our *Midol*® product family, which competes in the menstrual pain relief category, comprises several specific product positions, for example, Maximum Strength Menstrual Formula, Teen Formula, PMS and Cramp Pain. We sell *Midol*® products only in the United States and Canada.

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### *CardioAspirin (see Pharmaceuticals Major Products)*

CardioAspirin refers to Bayer's collective group of products (in both our Consumer Care and Pharmaceuticals divisions) that are professionally indicated for the prevention of an MI (myocardial infarction, or heart attack) in either those individuals who have already had an initial MI (secondary prevention) or in individuals deemed at risk for a first MI by their physician (primary prevention). These products vary in status (whether or not a prescription is required) based on local regulations. We face competition from both over-the-counter and prescription drugs in the cardiovascular marketplace who claim secondary and/or primary prevention benefits.

### *Cough/Cold*

Within the total cough and cold market, we concentrate on the cold/flu remedy segment. This OTC category faces threats from non-medicinal remedies (for example, nutritional or herbal products such as zinc supplements and echinacea), as well as from preventive medicines available by prescription or under development.

*Alka-Seltzer Plus*® is an effervescent product to relieve symptoms accompanying the common cold. We market *Alka-Seltzer Plus*® in the United States and Canada. *Tabcin* is a line of products similar to *Alka-Seltzer Plus*®; we market it primarily in Latin America.

*Aleve*® Cold & Sinus was launched in the United States in 2000 as the first long-lasting combination of analgesic naproxen sodium and nasal decongestant.

### *Dermatologicals*

The dermatological category includes a broad range of skin treatments. Within this market, we focus on the antifungal category, which in turn consists of three sub-segments: gynecological, dermatological and general topical/ other antifungals. All topical dermatologicals face significant threats from the prescription drug area, as well as from locally marketed generic products and low-price brands.

*Canesten*® is treatment for vaginal yeast infections, athlete's foot and other dermatological problems. Originally introduced in 1973 as a prescription drug, *Canesten*® has been switching to OTC status on a country-by-country basis since 1990.

*Rid*® is a topical head lice treatment marketed only in the U.S. We acquired this brand from Pfizer (Warner-Lambert) in 2000.

### *Gastrointestinals*

The gastrointestinal (GI) category includes antacids, anti-gas products, digestives, laxatives and anti-diarrheals. Our primary focus within this category includes all non-prescription segments except laxatives and anti-diarrheals. Longer term, all OTC GI products will face threats from related business areas including products switching from prescription to OTC status, OTC brand expansion from related categories (for example, anti-diarrheal brands extending or re-positioning to cover the antacid segment) and possible future preventative or curative therapies (for example, products that eradicate or manage the ulcer-causing bacterium *H. pylori*).

*Alka-Seltzer*® was developed in the late 1920s by Miles Laboratories and U.S. national distribution began in 1931. *Alka-Seltzer*® is used for speedy relief of acid indigestion, sour stomach or heartburn with headache, or body aches and pains. Today we market *Alka-Seltzer*® in close to 100 countries.

*Phillips Milk of Magnesia*® is a saline laxative used as an overnight remedy for constipation and acid indigestion, heartburn or sour stomach that may accompany it. The original Phillips' formulation entered the U.S. market in 1873.

*Talcid*® was originally a prescription medication developed and sold by our Pharmaceuticals segment. Since 1988, it has obtained OTC status in several countries in Europe, Asia and South America. *Talcid*® is used for the relief of symptoms from heartburn and acid indigestion.

**Table of Contents***Nutritionals*

The nutritionals category is very broad, encompassing vitamins, minerals, multi-vitamins/ minerals, herbals, sports nutrition and specialty supplements in many different forms. Applicable regulations vary greatly, both from country to country and across nutritional segments (for example, herbals vs. vitamins). As a general rule, however, regulation of nutritionals tends to be less stringent than that of other OTC products. Bayer's primary interests in the nutritionals field are in the vitamin and mineral (especially multi-vitamins/ minerals) segments.

*One-A-Day*® multivitamins entered the marketplace in 1940. Since 1994, we have offered a variety of special formulations, such as Men's, Women's, 55 Plus, Maximum and Essential formulas. In 2003, *One-A-Day*® introduced *WeightSmart*™, a complete multivitamin specially designed to provide nutritional support to people who are working to control their weight through diet and exercise.

*Flintstones*® are multivitamin dietary supplements containing (depending on type) 10-19 essential nutrients for children ages 2-12. They were introduced nationally in the United States in 1969. *Bugs Bunny*® children's sugar-free multivitamins were introduced in 1971 in the United States. To strengthen our position in the children's vitamin market, we launched *Scooby-Doo*® children's vitamins in the United States in 2001.

We recently launched nine products the development of which was coordinated internally. These products are:

<b>Product/ Brand name</b>	<b>Principal application</b>	<b>Status</b>
<i>Aspirin Complex</i> ®	Congestion, pain relief	Launched in 2003
<i>Canesten</i> ® Oral	Vaginal Mycosis	Launched in 2003
<i>Alka-Seltzer Plus</i> ® Ready Relief Tabs	Cough & Cold	Launched in 2003
<i>Bayer Muscle &amp; Joint</i>	Topical pain	Launched in 2003
<i>Phillips</i> ® Chews	GI	Launched in 2003
<i>Rid Pure Alternative</i> ™	Lice treatment	Launched in 2003
<i>One-A-Day</i> ® <i>WeightSmart</i> ™	Nutritional Supplement	Launched in 2003
<i>Lasonil</i> ® Gel	Topical pain	Launched in 2003
<i>Aspirin</i> ® Effect	Pain relief	Launched in 2003

*Aspirin Complex*® is a combination product (*Aspirin*® & pseudoephedrin), launched in Germany in 2003 for the relief of cold symptoms.

*Canesten*® Oral is a one-dose antifungal oral product for the treatment of vaginal yeast infections launched in the United Kingdom.

*Alka-Seltzer Plus*® Ready Relief is a fast-dissolve antihistamine/ nasal decongestant introduced in the United States.

*Bayer Muscle & Joint* is a topical analgesic for pain relief launched in the United States.

*Phillips*® Chews are a laxative dietary supplement providing overnight relief of occasional constipation introduced in the United States.

*Rid Pure Alternative*™ is a pesticide-free lice removal system consisting of a patented comb and dimethicone gel launched in the United States.

*One-A-Day*® *WeightSmart*™ is a complete multivitamin specially designed to provide nutritional support to people who are working to control their weight through diet and exercise introduced in the United States.

*Lasonil*® Gel is a topical painkiller containing Ketoprofene, launched in Italy, for treatment of sports-related injuries and muscle pain.

*Aspirin*® Effect is a dry granule analgesic product that dissolves on the tongue and was launched in Germany.

**Table of Contents****Markets and Distribution**

Our Consumer Care division focuses on the OTC market for medicinal products that consumers may generally purchase without a prescription. In some European markets, this category also includes products sold to consumers on a prescription basis and later reimbursed under an insurance plan.

The division's sales by region and totals for the past three years are as follows:

	2001	2002	2003
	(euros in millions)		
Europe	467	452	387
North America	894	680	668
Asia/Pacific	222	188	56
Latin America/ Africa/Middle East	512	396	292
<b>Total</b>	<b>2,095</b>	<b>1,716</b>	<b>1,403</b>

The division experiences moderate seasonality, primarily due to the cough/cold market.

The typical sales and marketing channels of the division outside Europe are supermarket chains and other mass marketers. In Europe, however, pharmacies are the usual distribution channel.

Consumer Care procures many high-volume raw materials internally from other Bayer divisions and companies. Our major externally procured high-volume raw materials are sodium citrate, sodium bicarbonate, citric acid and ascorbic acid. These are readily available and are usually not subject to significant price fluctuations. Changes in oil and energy prices can affect a few key items, such as acetylsalicylic acid, phenol and aluminum foil. We diversify our raw materials sources internationally to help balance currency exchange rate risk.

We regard Johnson & Johnson, GlaxoSmithKline, Wyeth and Pfizer as our major competitors in the Consumer Care business.

**Research and Development**

Consumer Care focuses its research and development activities on identifying, developing and launching products and initiatives which can contribute to achieving business growth through:

efficient development of new products and indications to support current brands; and

product development, clinical and regulatory strategies, which provide opportunity to capitalize on new technologies, expanded label indications and reclassifications of products from prescription required to over-the-counter.

The division's primary research and development facilities are located in Morristown, New Jersey.

Bayer is involved in a joint venture with Hoffmann-LaRoche to market and sell *Aleve*®, *Vanquish*® and *Midol*® in the United States. Both partners are actively involved in research and development planning for these products.

**Diagnostics****Overview**

Diagnostics, based in Tarrytown, New York, is one of the largest diagnostics businesses in the world. We support customers in over 100 countries with an extensive portfolio of products for the Laboratory Testing, Near Patient Testing, Nucleic Acid Diagnostics (NAD) and Self Testing environments. These products serve in the assessment and management of health in such areas as infectious diseases, cardiovascular

disease, oncology, virology, women's health and diabetes.

**Table of Contents****Major Products**

The following table sets forth the sales of our Diagnostics division for the last three years, broken down by category of activity.

Category	2001		2002		2003	
	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales
Laboratory testing	791	19.3	813	21.7	796	23.9
Near patient testing	407	9.9	398	10.6	381	11.4
NAD testing	86	2.1	99	2.6	126	3.8
Self-testing	722	17.6	729	19.4	625	18.7
Tele Healthcare	0	0.0	0	0.0	1	0.0
Others	3	0.1	0	0.0	4	0.1
<b>Total</b>	<b>2,009</b>	<b>49.0</b>	<b>2,039</b>	<b>54.3</b>	<b>1,933</b>	<b>57.9</b>

**Laboratory Testing**

The *ADVIA*® family of products is the centerpiece of our Laboratory Testing portfolio, which provides a wide range of solutions for the laboratory. *ADVIA*® products include medium- and high-throughput systems for immunoassay diagnostics (the measurement of such substances as proteins, steroids, drugs and antibodies in patients' blood), clinical chemistry and hematology analysis and other diagnostic disciplines. The main systems include *ADVIA Centaur*®, *ADVIA 1650*, *ADVIA 120* and *ADVIA IMS 800i*, for medium- to large-size hospitals and laboratories. In addition, we offer large laboratory integration and automation solutions with *LabCell*® and *WorkCell*™. In addition to our *ADVIA*® products, we offer the *ACS:180*® and *Bayer Immuno 1*® immunodiagnostic analyzers, as well as the *Clinitek Atlas*® urine chemistry system for high volume urinalysis testing. The market position of the *ADVIA*® product line was strengthened in 2003 by the introduction of a new BNP test to assist in the diagnosis of heart failure.

**Near Patient Testing**

We provide a variety of solutions for the Near Patient Testing environment, both in the hospital and in physicians' office laboratories. For the critical care environment, we offer the *Rapid*™ family of instruments and reagents for the measurement of blood gases and electrolytes.

In the field of urinalysis, we offer the *Multistix*® family of urine reagent strips for visual reading of up to 10 parameters and the *Clinitek*® line of instruments for automated sample analysis. We also offer the *DCA 2000*®+ system that provides diagnostic tests for diabetes and kidney disease management.

**Nucleic Acid Diagnostics**

With the completion of the Visible Genetics Inc. (VGI) integration, Diagnostics now offers a complete virology infectious disease portfolio including quantitative and qualitative analysis as well as genotyping and resistance testing. For highly specific testing of infectious diseases, we offer a family of DNA probes under the *VERSANT*® brand for the testing of HIV and Hepatitis B and C. NAD techniques detect nucleic acids such as DNA and RNA to allow for effective treatment of infectious and other diseases. In 2003, we obtained FDA approval for our *VERSANT*® *HCV RNA 3.0 (bDNA)* assay, which complements our already FDA approved products *VERSANT*® *HIV-1 RNA 3.0 (bDNA)* assay, *VERSANT*® *HCV RNA* qualitative assay and *TRUGENE*® *HIV-1* Genotyping assay.

**Self Testing**

In the Self Testing segment, we launched the *Ascensia*® brand for our blood glucose monitoring products. Our key products include the *Ascensia*® *DEX*®/*ESPRIT*® and the *Ascensia*® *BREEZE*®/*CONFIRM*® blood



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glucose meters. These products incorporate a 10-test disc to provide greater convenience to patients who test their blood sugar levels several times per day. Another part of our key products is the *Ascensia*® *CONTOUR*® meter which uses a single test strip. Our best selling diagnostics product, the *Ascensia ELITE*®, is a versatile blood glucose meter that serves a wide spectrum of patient needs.

*TeleHealthcare*

We signed a joint venture agreement with Matsushita Electric Industrial Co. to establish Viterion™ TeleHealthcare LLC, an independent company that is marketing products and services for the telemedicine sector. The company was established in January 2003. Main products are the Viterion™ 100 TeleHealth Monitor, a compact home health care monitor and the Viterion™ 500 TeleHealth Monitor, a state of the art home health care monitor.

We recently launched the following products:

<b>Product/ Brand name</b>	<b>Principal application</b>	<b>Status<sup>(1)</sup></b>
<i>ADVIA IMS</i> ® 800i Integrated Modular System	Modular platform, combining immunodiagnostic and clinical chemistry on a single instrument with a broad assay menu	Launched in August 2003
<i>ADVIA Centaur</i> ® menu expansion	Infectious disease, Her-2/neu, BNP and homocysteine	Throughout 2003
<i>ADVIA</i> ® 1650 & <i>ADVIA</i> ® 2400 menu expansion	High-volume clinical chemistry	Throughout 2003
<i>Rapidpoint</i> ® 405	Blood gas electrolyte instrument with co-oximetry	Launched in March 2003
<i>Clinitek Status</i> ®	Automated urinalysis instrument	Launched in November 2003
<i>VERSANT</i> ® <i>HCV RNA 3.0 (bDNA)</i>	Quantitative detection of Hepatitis C	Launched in May 2003
<i>Ascensia</i> ® <i>BREEZE</i> ®/ <i>CONFIRM</i> ®	Next generation 10-cartridge whole blood glucose monitoring system	Launched in June 2003
<i>Ascensia</i> ® <i>ENTRUST</i> ™	Low-cost alternative whole blood glucose monitoring system	Launched in May 2003
<i>Ascensia</i> ® <i>CONTOUR</i> ®	Next generation whole blood glucose monitoring single strip system	Launched in April 2003
<i>Viterion</i> ™ 100 TeleHealth Monitor	Compact home healthcare monitor	FDA approved and launched in November 2003

(1) The term "throughout" refers to the fact that there are multiple products that were launched at different times throughout the year; "launched in" refers to a single product.

**Markets and Distribution**

Our Diagnostics division markets its products in over 100 countries worldwide, both directly and through a network of distributors. Our principal markets include North America, Western Europe and Japan.

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The divisions' sales by region and totals for the past three years are as follows:

	2001	2002	2003
	(euros in millions)		
Europe	697	742	735
North America	880	901	836
Asia/Pacific	289	268	246
Latin America/ Africa/Middle East	143	128	116
<b>Total</b>	<b>2,009</b>	<b>2,039</b>	<b>1,933</b>

Diagnostics sales are typically lower in the first quarter, but show a slightly stronger performance in the fourth quarter.

We market our Laboratory Testing and NAD products, as well as most of our Near Patient Testing products, directly to customers, who are primarily reference or private laboratories and hospitals. In the Near Patient Testing segment, we market urine chemistry primarily through distributors. We channel our Self Testing products to the consumer market through distributors and large pharmacy and retail chains. We market our TeleHealthcare products directly to home health care agencies, disease management companies and the government.

We manufacture or assemble a significant portion of our own products. In order to do so, we rely on a supplier management process to supply raw materials, sub-assemblies and finished goods on an OEM (original equipment manufacturer) basis. Most of our direct materials are readily available commodities. Typically, these materials are not subject to significant changes in price or availability.

We do require some direct or OEM materials that carry a substantial risk to the business if they were to become unavailable. In these instances, we maintain strategic reserves of selected direct materials or finished products to avoid interruptions in our customers' continuous and reliable supply. We maintain a global supplier base with contracts in place where appropriate. Our supplier management process includes procedures for continuous supplier monitoring and evaluation, as well as new supplier analysis and qualification.

Our primary competitors in the diagnostics market are:

*Laboratory Testing:* Abbott, Roche, Beckman Coulter, Dade Behring and Johnson & Johnson;

*Nucleic Acid Diagnostics:* Roche, Abbott and Gen-Probe;

*Near Patient Testing:* Roche, Radiometer, i-Stat and Instrumentation Laboratory;

*Self Testing:* Roche, Johnson & Johnson (Lifescan), Abbott (Medisense) and Therasense; and

*TeleHealthcare:* HomMed, American Telecare, Health Hero, Philips Medical, Alere Medical.

**Research and Development**

Our Diagnostics division focuses its research and development activities primarily on strengthening its core product lines and on expanding into high growth/high margin segments of the market:

in Laboratory Testing, through development of the ADVIA® family of systems and in the expansion of assays in growth areas;

in NAD Testing, through menu expansion of assays for infectious disease and oncology testing;

in Near Patient Testing, through enhancements of our Rapid systems and Clinitek products, and entry into the Point of Care Immunoassay market; and

in Self Testing, through internal development and in-sourcing of mass market, user-friendly whole blood glucose monitoring systems and by focusing research on a minimally invasive system, using a small blood sample and having a short testing time, coupled with the convenience of no test strip handling and non-invasive technology, which is glucose monitoring without the painful sampling of body fluid.

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The division's primary research and development facilities are located in the United States: Tarrytown, New York and Walpole and Cambridge, Massachusetts for our Laboratory Testing Segment; Medfield, Massachusetts for our Near Patient Testing Segment; Elkhart, Indiana for our Self Testing Segment; and Berkeley, California and Walpole, Massachusetts for our Nucleic Acid Diagnostics Segment.

We currently have a number of products in late stages of development. Depending on completion of clinical trials and subsequent grant of any necessary FDA approvals, we expect to launch these products during the periods indicated below. These products are:

Product/ Brand name	Principal Application	Status <sup>(1)</sup>
<i>ADVIA Centaur</i> ® menu expansion	Completion of full ID panel	Launches planned throughout 2004
<i>ADVIA</i> ® 1200	Clinical chemistry system	Launch planned for 2004
<i>ADVIA</i> ® 1650 and <i>ADVIA</i> ® 2400 menu expansions	Extension of clinical chemistry menu	Launches planned throughout 2004
<i>ADVIA</i> ® 2120 with Autoslide	Second generation hematology system with slide maker/ stainer	Launch planned for 2004
<i>Rapidlab</i> ® 1200	Blood gas/electrolyte analyzer	Launch planned for 2004
<i>VERSANT</i> ® HBV 3.0 (bDNA)	Quantitative detection of Hepatitis B	Launch planned for 2004

(1) The term launch(es) planned throughout refers to the fact that there are multiple products that we expect to launch at different times throughout the year; launch planned for refers to a single product.

In December 2003, we signed an exclusive worldwide development and supply agreement with Amersham Biosciences Corp. for the joint development of assays and instrumentation in the field of human immunodeficiency virus (HIV) sequencing, as well as sequencing of other important infectious disease-causing pathogens.

In 2003, we entered into a licensing agreement with Sontra Medical Corporation for their continuous non-invasive glucose monitoring technology, including exclusive worldwide rights to the intellectual property in Sontra's *SonoPrep*™ ultrasonic skin permeation technology for the continuous non-invasive glucose monitoring field.

**ANIMAL HEALTH****Overview**

Our Animal Health segment researches, develops and markets new products for the health care of animals. These products are divided between the two business units Livestock and Companion Animal. The main activities of the Animal Health segment are the development of therapies for infectious diseases caused by bacteria, virus and parasites, and the development of pharmacologicals. This range of products is supplemented by a line of cosmetic care products as well as farm hygiene products.

The following table shows the segment's performance of the last three years.

	2001	2002	2003
	(euros in millions)		
External net sales	858	850	790
Percentage of total sales	2.8	2.9	2.8
Intersegment sales	4	1	8
Operating result	162	170	170
Percentage of total operating result thereof special items <sup>(1)</sup>	9.7	10.6	
	0	(11)	22

(1) The special items are detailed in Item 5, *Operating and Financial Review and Prospects - Operating Results 2001, 2002 and 2003 - Segment Data*.



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The following table shows our sales during the past three years from the products that we regard as material to the sales of the segment as a whole.

Product	2001		2002		2003	
	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales
<i>Advantage</i> ® (incl. Combi)/ <i>K9Advantix</i> ®	211	24.6	205	24.1	196	24.8
<i>Baytril</i> ®	187	21.8	183	21.5	170	21.5

**Segment Strategy**

Animal Health aims to be a worldwide leading company in the Livestock and Companion market and strives to be the preferred partner for and provider of veterinary solutions.

It is part of our business strategy for Animal Health to sustain its current profit position by focusing on attractive key countries and target markets. Furthermore, Animal Health pursues a policy of organic growth by exploiting existing core brands supported by new business development activities. To complete our existing product portfolio, Animal Health periodically evaluates the possibility of acquisitions or strategic alliances. The Animal Health segment collaborates closely with our Pharmaceuticals division and CropScience segment as well as other life science companies in research and development in order to bring to the market new active ingredients and products that combat diseases in animals.

**Major Products**

The following table sets forth the segment's sales for the last three years, broken down by category of activity.

Category	2001		2002		2003	
	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales
Parasiticides	455	53.0	448	52.7	406	51.4
Antimicrobials	208	24.2	205	24.1	187	23.7
Biologicals	45	5.2	39	4.6	36	4.6
Nutritionals	69	8.0	63	7.4	52	6.6
Others (incl. Farm Hygiene)	81	9.4	95	11.2	109	13.8
Total	858	100	850	100	790	100

**Parasiticides**

*K9 Advantix*® is a flea and tick control product in an easy-to-use spot-on application form with additional repelling effect against ticks and mosquitoes.

*Advantage*® is a flea control product in an easy-to-use, spot-on application form.

The *Droncit*® and *Drontal*® product family offers solutions for the control of tapeworm and roundworm.

*Bayticol*® is a topical product against major tick species that attack livestock animals.

*Baycox*® is a product for controlling coccidiosis, primarily in poultry and, more recently, in piglets.

***Antimicrobials***

The *Baytril*® family is our line of fluoroquinolone antimicrobials for the treatment of severe bacterial infections in animals.

**Table of Contents****Biologicals**

Before December 2003, the *Bayovac*® vaccine family comprised three main product types. Foot and mouth disease, or FMD, vaccines have been part of this product line for 50 years. Our *Bayovac*® IBR Marker vaccines, used in controlling bovine respiratory disease, make it possible to distinguish vaccinated from infected animals. *Baypamune*® is an immunomodulator which is an aid in the prevention and treatment of infectious and stress-induced diseases.

In December 2003, the non-FMD products of our biological business were sold to Pfizer. The acquisition agreement, effective from December 9, 2003, also provides for cooperation in the contract manufacture of these products by Bayer. These products include IBR-Marker-Vaccine and the immunostimulant *Baypamune*®. FMD-Vaccines will continue to be produced and marketed by Bayer.

**Nutritionals**

These highly generic and homogenous commodities are essential for higher-value proprietary products like *Baytril*® and *Baycox*® to participate in the Asian market.

**Farm Hygiene**

Integrated into our livestock business is our biosecurity management process that includes Farm Hygiene products. These products include insecticides for fly control, rodenticides against rats and mice (which now belong to our CropScience segment but are also marketed by Animal Health in some countries) and disinfectants against bacteria.

**Markets and Distribution**

The Animal Health business covers worldwide markets, including emerging markets such as China, Vietnam and others in South-East Asia. We divide our marketing activities into two main business areas: marketing for food-producing (livestock) animals, and marketing for companion animals including horses.

The combined sales by region and totals for the past three years for these two business areas are as follows:

	2001	2002	2003
	(euros in millions)		
Europe	237	243	242
North America	340	337	305
Asia/Pacific	134	136	122
Latin America/ Africa/Middle East	147	134	121
	<u>858</u>	<u>850</u>	<u>790</u>
Total	858	850	790

On a worldwide basis, the activities of the Animal Health segment are not subject to any significant seasonal effects.

Depending on national legislation, Animal Health products may be available to end users on a prescription or non-prescription basis. End users may purchase prescription products directly from veterinarians or pharmacies with a written prescription issued from a licensed practicing veterinarian. Also, based on national legislation, non-prescription products may be available through over-the-counter retailers, cooperatives, pet shops, integrators in the livestock segment and other specialized channels in the companion animal market.

We currently obtain the active pharmaceutical ingredients for our veterinary pharmaceutical products either within the Bayer Group or from third parties world-wide. We obtain additional ingredients and packaging materials from diverse suppliers on a world-wide basis. As a rule, we approve our suppliers for each required material.



Our main pharmaceutical production facilities devoted to formulation and packaging of our products for shipment are Kiel, Germany and Shawnee, Kansas.

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We take measures in order to assure continuous product supply. This includes entering into long-term contracts or building strategic reserves of the material in question.

Merial, Pfizer and Intervet are our main competitors, with Merial and Pfizer being active in both segments companion and livestock animals and Intervet concentrating on the livestock business. The global animal health market is characterized by market consolidations and increasing competitive pressure from generic substitutes.

**Research and Development**

The Animal Health segment focuses its research and development activities on antimicrobials, parasiticides and pharmacologicals. A particular goal of our research and development efforts is to provide the segment with innovative and patent-protected products (new active ingredients, formulations and application technologies).

The segment's primary research and development facilities are located in Monheim, Germany and Kansas City, Missouri.

We currently have several products or product families in late stages of development. Subject to regulatory approval, we expect to launch these products between 2004 and 2007. These products are:

<b>Projects/Products</b>	<b>Indication</b>	<b>Status</b>
Endoparasiticide and ectoparasiticide combinations	Control of fleas, ticks, heartworm and gastrointestinal worms in cats and dogs	launch/in registration/in clinical development
Red mite control remedy	Poultry	in clinical development
<i>Baycox</i> ® calves	Coccidiosis control in calves	in clinical development
<i>Baytril</i> ® swine (North America)	Antimicrobial infections in pigs	in registration
Pradofloxacin	Antimicrobial for dogs and cats	in clinical development

**BAYER CROPSCIENCE****Overview**

Bayer CropScience develops and markets chemical crop protection products, seeds and integrated plant biotechnology solutions for agricultural and non-agricultural uses. Bayer CropScience operates through three business groups: Crop Protection, Environmental Science and BioScience. Crop Protection markets chemical crop protection products for the control of insects, weeds and fungi (plant diseases) and develops active ingredients with new modes of action for enhanced effectiveness against these target pests. Environmental Science markets pest-control products for non-agricultural uses, including products for professional pest control; the green industry (including the treatment of golf courses, lawn care and industrial vegetation management); lawn, garden and household care; termite and vector control; and rural hygiene. BioScience focuses on the research, development and marketing of conventional seeds and plant biotechnology products. The following table shows Bayer CropScience's performance for the last three years.

	<b>2001</b>	<b>2002</b>	<b>2003</b>
	(euros in millions)		
External net sales	2,838	4,697	5,764
Percentage of total sales	9.4	15.9	20.2
Intersegment sales	102	90	69
Operating result	490	(108)	324
Percentage of total operating result	29.2		
thereof special items <sup>(1)</sup>	0	67	(81)

(1)

The special items are detailed in Item 5, *Operating and Financial Review and Prospects - Operating Results 2001, 2002 and 2003 - Segment Data*.

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The following table shows the sales during the past three years from the products that we regard as material to the sales of Bayer CropScience as a whole.

Product	2001		2002		2003	
	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales	Sales (euros in millions)	Percentage of segment sales
<i>Confidor®</i> , <i>Gaicho®</i> , <i>Admire®</i> , <i>Merit®</i> <sup>(1)</sup>	608	21.4	561	11.9	590	10.2
<i>Folicur®/Raxil®</i>	272	9.6	260	5.5	315	5.5
<i>Puma®/Accord®</i> (2)			92	2.0	226	3.9
<i>FLINT®</i>	97	3.4	159	3.4	200	3.5
<i>Basta®/Liberty®</i> (2)			70	1.5	159	2.8
<i>Decis®/K-Othrine®</i> (2)			87	1.9	159	2.8
<i>Betanal®</i> (2)			41	0.9	143	2.5
<i>Fenikan®/Javelin®</i> (2)			71	1.5	115	2.0
<i>Aliette®/Mikal®/Chipco® Signature</i> <sup>(2)</sup>			64	1.4	107	1.9
<i>Balance®/Merlin®</i> (2)			36	0.8	106	1.8

(1) The active ingredient imidacloprid contained in these products is also used in the Animal Health segment's *Advantage®* product.

(2) Sales after Aventis CropScience acquisition (June 2002).

**Segment Strategy**

Following the acquisition of Aventis CropScience in 2002, the global business activities have largely been integrated and the divestments imposed by European, United States and Canadian antitrust authorities have been completed, with the exception of the product propoxycarbazon.

Bayer CropScience aims to strengthen its market position in the Crop Protection and Environmental Science businesses and to expand its activities in seeds and plant biotechnology. We intend to improve Bayer CropScience's operating result by introducing new products, realizing our synergy targets, controlling costs and streamlining the portfolio. Bayer CropScience is continuously exploring opportunities to improve its portfolio through strategic joint ventures and acquisitions.

In Crop Protection, the strategic focus is to grow our business by utilizing our strong market position, regional representation and broad product portfolio comprising insecticides, fungicides, herbicides and seed treatment products. A key growth driver is the introduction of new products from our research and development pipeline.

Environmental Science is among the leading suppliers for non-agricultural pest control solutions worldwide. Our objective is to strengthen this market position through selective partnerships for the lawn and garden business in the United States and the continuous optimization of our portfolio.

BioScience is an emerging player in the research, development and marketing of products derived from plant biotechnology and seeds. Our strategic approach comprises three specific business fields.

Agricultural Crops focuses on delivering high quality seeds and technologies to field crop growers particularly in our core crops cotton, oilseed rape (canola) and rice.

In New Business Ventures, we are exploring the opportunities to establish platforms that enable us to develop novel plant-based specialty products for the non-agricultural markets in the areas of Nutrition, Health and BioMaterials.

In the Vegetables field, where the Nunza unit of BioScience is a leading developer and supplier of high quality vegetable seed varieties, we intend to pursue growth opportunities.



**Table of Contents****Major Products*****Crop Protection******Insecticides***

Imidacloprid (*Confidor®*, *Admire®*, *Provado®*) is an active ingredient in the chemical class of neonicotinoids. It controls a broad range of pests, including aphids, thrips, whiteflies, leafhoppers, locusts, leafminers, wireworms and many species of beetles, and is suitable for a wide variety of application methods, including foliar spray, soil drench, seed treatment and drip irrigation. Imidacloprid is now marketed in more than 120 countries for use on numerous important crops.

Deltamethrin (*Decis®*) is a broad-spectrum pyrethroid insecticide. Although used primarily against chewing and biting insects, it is also effective against various sucking pests. *Decis®* is marketed in more than 100 countries for use on a wide range of crops (including cotton, soybeans, vegetables and cereals).

Aldicarb (*Temik®*) is a broad-spectrum carbamate insecticide and nematicide in granular form. *Temik®* is applied to soil to protect crop roots from insects and nematodes and to protect against pests such as aphids or mites. *Temik®* is used on a large number of crops, such as cotton, citrus and potatoes.

***Fungicides***

Tebuconazole (*Folicur®*) prevents the targeted fungus from synthesizing vital components of its cell membrane. It can be used as a spray and in special applications, such as sealing wounds in woody plants and in material protection. In addition, tebuconazole has certain plant growth-regulatory properties that are useful in certain crops.

Trifloxystrobin (*Flint®*) is a strobilurin-type broad-spectrum fungicide used primarily to protect cereals and a variety of other crops. It is used in foliar sprays as a straight product under our lead brand *Flint®* and in numerous combinations such as *Stratego®* and *Sphere®*.

Fosetyl Aluminum (*Aliette®*) is a fungicide with specific activity against downy mildew fungi in vines, fruits and vegetables. A key property of fosetyl aluminum is its upward and downward mobility in plants. Sprayed on leaves, it is either absorbed and transported inside the plants downward to the roots to protect them against attack from fungi in the soil, or it is re-directed inside the plants upward to protect newly emerging leaves as well. It is used in foliar sprays and soil drenches as a straight product under our lead brand *Aliette®* and in various combinations under brands, such as *Mikal®* or *Valiant®*.

***Herbicides***

Fenoxaprop-P-ethyl (*Puma®*), Bayer CropScience's best selling herbicide, is used in more than 73 countries and is one of the leading products used worldwide against grass weeds in cereals, rice, soybeans and canola.

Glufosinate-Ammonium (*Basta®*) is a post-emergence herbicide with a broad spectrum of efficacy against annual and perennial weeds and grasses. It is primarily used on perennial tree crops, vegetables, non-crop areas and as a harvest aid. *Liberty®*, introduced in 1998 in the United States and Canada, refers to the registered trade name of glufosinate-ammonium applied on herbicide tolerant crops.

The active ingredients phenmedipham, desmedipham and ethofumesate make up the *Betanal®* product family, the basis of weed control systems in various beet varieties. Ongoing improvements in the efficiency and range of uses of these products have extended the life cycle of the product family, resulting in its strong position in the sugar beet market.

Foramsulfuron (*Option®*, *Maister®*), is a post-emergence herbicide for broad spectrum weed control in corn, launched in 2002. Primarily controlling annual and perennial grassy weeds, it controls an important range of broadleaved weeds as well. A line extension has taken foramsulfuron (*Revolver®*) into the turf market in our Environmental Science business for annual grass control.

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Mesosulfuron-methyl (*Mesomaxx*® as globally protected trademark for the active ingredient, core product brands *Atlantis*® and *Cossack*®) stands for the latest generation of safened cereal herbicide sulfonyleureas, and has been in the launch phase globally since 2002. The products offer a broad and consistent grass control performance in global cereal production.

### *Seed Treatment*

The insecticidal active ingredient imidacloprid (*Gaucho*®) is Bayer CropScience's best selling seed treatment product. It is registered in over 100 countries for the treatment of early season pests and soil and leaf pests in key crops such as sugarbeet, corn, cereals and cotton.

Tebuconazole (*Raxil*®) is registered in our most important markets worldwide as a seed treatment to control seed and soil borne diseases in cereals.

### ***Environmental Science***

Environmental Science markets its products to different end customers, including pest management professionals, homeowners and do-it-yourself gardeners.

Imidacloprid-based *Premise*® is a termite control product launched in the United States in 1996. *Merit*®, another imidacloprid-based product, is used in the green industry segment, in particular in turf and ornamentals. It controls a large spectrum of insects such as grubs and cutworms.

Deltamethrin (*K-Othrine*®, *Deltagard*®), another important insecticide marketed by Environmental Science, controls a large spectrum of flying and crawling insects. Deltamethrin is recommended by the World Health Organization and has been used for many years to control insect-borne diseases such as malaria.

*Maxforce*® is an insecticide used in passive treatment applications such as gels and baits. It contains hydramethylnone or fipronil. *Maxforce*®'s range of products includes a large number of insecticides controlling crawling insects.

The products targeting the non-professional users are marketed under the umbrella brands *Bayer Advanced*® in the United States and *Bayer Garden*® in Europe.

### ***BioScience***

Nunza is a leading developer and supplier of high quality vegetable seed varieties that are marketed to professional outdoor and greenhouse growers, plant raisers and the food processing and service industries. The main crop seeds are carrots, onions, melons, leeks and tomatoes. The brand names used for these products are *Nunhems*® and *Sunseeds*®.

*LibertyLink*® corn, provided by licensee seed companies in North America, provides farmers with the ability to utilize *Liberty*® brand herbicide (glufosinate-ammonium) in a post-emergent weed control program for corn.

*FiberMax*® cottonseed brand was launched in the U.S. market in 1998. It was also introduced in Greece, Spain, Turkey and some Latin American countries. *FiberMax*® cotton fiber displays qualities which are well suited for the textile industry.

*InVigor*® hybrid canola (oilseed rape) varieties are available to farmers in Canada and the USA. *InVigor*® hybrid canola varieties are high yielding and provide agricultural management options that require less cultivation. These hybrid varieties also have tolerance to glufosinate-ammonium.

### ***Markets and Distribution***

Europe has traditionally been Bayer CropScience's strongest crop protection market, accounting for 40 percent of our sales in 2003.

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Bayer CropScience's sales by region and totals for the past three years are as follows:

	<b>2001</b>	<b>2002</b>	<b>2003</b>
	(euros in millions)		
Europe	1,063	1,851	2,296
North America	636	1,024	1,339
Asia/Pacific	558	797	963
Latin America/ Africa/ Middle East	581	1,025	1,166
<b>Total</b>	<b>2,838</b>	<b>4,697</b>	<b>5,764</b>

The following table sets forth Bayer CropScience's sales for the last three years, broken down by category of activity.

	<b>2001</b>	<b>2002</b>	<b>2003</b>
	(euros in millions)		
Insecticides	1,059	1,250	1,376
Fungicides	821	1,030	1,168
Herbicides	538	1,452	1,848
Seed Treatment		270	409
<b>Total Crop Protection</b>	<b>2,418</b>	<b>4,002</b>	<b>4,801</b>
Environmental Science	420	605	692
BioScience		90	271
<b>Total</b>	<b>2,838</b>	<b>4,697</b>	<b>5,764</b>

Due to the fact that more than 80 percent of Bayer CropScience's business is realized in the northern hemisphere, the business is affected by the seasonality of the various crop and distribution cycles.

Bayer CropScience obtains a significant part of its raw materials from within the Bayer Group but also enters into contractual agreements with non-Bayer companies. Some raw materials can be subject to price volatility caused by fluctuation in the price of oil, energy or transport costs.

We market our Crop Protection products through a two- or three-step distribution system, depending on local market conditions. Under this system, products are sold either to wholesalers or directly to retailers.

Environmental Science products are directed towards professional and consumer markets. For each of these markets, the products run through different distribution channels. For professional markets, products are sold to the pest control industry, the green industry, as well as the public health and rural hygiene sectors. In the consumer business, Lawn and Garden products are sold to end user consumers through specialized distribution channels. Also, specialty active ingredients are sold to marketers of household products.

BioScience markets its seeds to end users, distributors and processing industries. Plant biotechnology traits are mainly distributed through out-licensing to seed companies, which produce commercial seeds on the licensor's behalf. In some cases, traits are provided to other companies that utilize the technology in their own research and products.

Our main competitors in the Crop Protection business are Syngenta, Monsanto, BASF, Dow AgroSciences and DuPont. Dow AgroSciences and Syngenta are our main competitors in the overall Environmental Science business. In the business of plant biotechnology-based products and seeds, DuPont, Monsanto and Syngenta are the market leaders.





**Table of Contents****Research and Development***Crop Protection*

Bayer CropScience Research and Development is globally represented with main facilities in Monheim (headquarters) and Frankfurt, Germany; Lyon and Sophia Antipolis, France; Stilwell, Kansas and Raleigh, North Carolina; and Yuki City, Japan.

The responsibility of the Crop Protection Research and Development function is to discover and develop customer-focused, innovative and profitable solutions in crop protection.

Research covers all activities to identify new active ingredients that can be developed as insecticides, fungicides or herbicides. Genomics, high-throughput screening and combinatorial chemistry are part of the technological platform to identify new lead structures.

Collaborations with research companies supplement our internal research activities (*e.g.*, target identification carried out by Paradigm Genetics or GenOptera LLC, a joint venture between Bayer and Exelixis, Inc.).

Once a compound is identified for development, its biological, environmental and toxicological profile, as well as its economic potential, is assessed. Suitable candidates are launched in the market.

Bayer CropScience actively supports its products through continuous life cycle management. This includes the development of new formulations for existing active ingredients and expanding their applicability to additional crops and countries.

*Environmental Science*

The molecules invented by Crop Protection Research are also tested and evaluated in Environmental Science for potential development. Development projects include passive treatments (gels, baits) and innovative formulations to control insects, as well as new herbicide products and new mixtures of fungicides for the turf and ornamental market segments.

*BioScience*

The BioScience research and development facilities are located in Lyon and Evry, France; Haelen, The Netherlands; Gent, Belgium; and Potsdam, Germany.

Plant biotechnology research and development is predominantly directed towards agronomic and quality improvement. The technologies include all relevant tools from identifying the gene of interest to development to improve key crops (cotton, oilseed rape (canola), rice) for growers and industrial partners. Research activities range from the exploration of novel agronomic traits to the discovery of new plant-based specialty products for the Nutrition, Health and BioMaterials markets.

The following new active ingredients were launched in 2003 or are expected to be launched subject to regulatory approval in 2004:

<b>New active ingredients</b>	<b>Product Family</b>	<b>Status</b>
Spirodiclofen	Insecticides	Launched in 2003
Clothianidin <sup>(1)</sup>	Insecticides	Launched in 2003
Prothioconazole	Fungicides	Launch expected in 2004

(1) Co-developed with Sumitomo Chemical Takeda Agro Co. Ltd.

The broad spectrum acaricide spirodiclofen (*Envidor*®) belongs to the new chemical class of tetrone acid derivatives discovered by Bayer CropScience. The product shows excellent activity against mite pests in perennial crops. Spirodiclofen has a new mode of action (interference with lipid biosynthesis) and shows no cross-resistance to any resistant mite field population and is therefore also a valuable tool for resistance management. Spirodiclofen is being developed for worldwide use in pome fruit, stone fruit, citrus, grapes, almonds and nuts.



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Clothianidin (*Poncho*®) is a new active ingredient in the chemical class of chloronicotinyls. It has been jointly developed by Sumitomo Chemical Takeda Agro Co. Ltd. and Bayer CropScience AG. Bayer CropScience has exclusive rights for seed treatment developments. The active ingredient, which is applied as a seed treatment, has been developed primarily for the control of the major soil and early season pests in corn, sugarbeet, oilseed rape (canola) and cereals.

Prothioconazole (*Proline*®) is the newest development in triazole chemistry for broad spectrum disease control. As part of crop resistance management, this product will be used for foliar and seed treatment application in cereals, oilseed rape (canola), peanuts and other crops.

**BAYER POLYMERS****PLASTICS, RUBBER****Overview**

Our Plastics, Rubber segment comprises seven strategic business entities which are summarized under Thermoplastic Polymers and Rubber Polymers below. The following table shows the segment's performance for the last three years.

	<u>2001</u>	<u>2002</u>	<u>2003</u>
	(euros in millions)		
External net sales	5,396	5,210	4,813
Percentage of total sales	17.8	17.6	16.8
thereof discontinuing operations	3,689	3,337	3,096
Intersegment sales	116	115	76
Operating result	214	76	(666)
Percentage of total operating result	12.8	4.7	
thereof discontinuing operations	6	(48)	(716)
thereof special items <sup>(1)</sup>	(70)	(91)	(593)

(1) The special items are detailed in Item 5, *Operating and Financial Review and Prospects – Operating Results 2001, 2002 and 2003 – Segment Data*.

No individual product is material to the revenue of the segment as a whole.

**Segment Strategy**

Our goal is to continue expanding our leading market position (based on product volume) in high-value added plastic and rubber products. We intend to continue developing new applications for our products. We aim to improve profit margins by continually streamlining our existing product portfolio, implementing efficient cost structures, eliminating capacity constraints and further exploiting our regional growth potential.

In November 2003, Bayer announced that the Bayer Group intends to maintain its focus on its core businesses and therefore combine Bayer Chemicals with certain parts of the Bayer Polymers business in a new company to be named Lanxess (see *Business*). Only Polycarbonates, Polycarbonate Sheets and Polycarbonate Blends will remain within Bayer Group. This remaining business within the Plastics, Rubber segment together with the Polyurethanes, Coatings segment (without Fibers), as well as Wolff Walsrode and H.C. Starck from Bayer Chemicals, will comprise the Bayer MaterialScience subgroup and will be conducted from a wholly-owned subsidiary of Bayer Group called Bayer MaterialScience AG.

We are continuing our stringent cost and efficiency programs in the Polyurethanes, Coatings, Fibers and the Plastics, Rubber segments. As part of these programs, we had announced in 2002 that we planned to reduce the headcount in the Polyurethanes, Coatings, Fibers and the Plastics, Rubber segments. We reduced headcount by 2,200 (or 8.5 percent) in 2003 and continue to reduce the number of employees in these segments. We plan to continue cost reduction and efficiency programs as well as the reduction of headcount for Bayer MaterialScience.



**Table of Contents****Thermoplastic Polymers***Overview*

With its broad product portfolio, our Thermoplastic Polymers business entities (Polycarbonates, Styrenics, Semi-Crystalline Products and Polycarbonate Sheets) are some of the leading global suppliers and manufacturers of engineering thermoplastics. Our acquisition of the remaining shares of Makroform GmbH on July 15, 2003 strengthens our position as a leading supplier of polycarbonate sheets based on product volumes. Many Bayer materials have chemical and physical properties that enable them to resist very low or very high operating temperatures as well as corrosive chemicals and solvents.

**Major Products***Polycarbonates (will remain with Bayer)*

Polycarbonates are plastics that are transparent and highly stable across a wide temperature range. Polycarbonates almost completely dominate the field of optical data storage media, such as pre-recorded and recordable CDs and DVDs, and are widely used throughout the electrical/ electronics segments in general for injection molding purposes. The construction industry is also a major user of polycarbonates, for example, for Polycarbonate sheet applications. *Makrolon®* is our leading polycarbonate product. Its key characteristics include high transparency, heat resistance and toughness. It can be both sterilized – important for the food and medical industries – and recycled. Our other polycarbonates include the *APEC®* range for high temperature usages such as components for automobile headlights and *Makroblend®*.

*Styrenics (will be partially transferred to Lanxess)*

Styrenics lend themselves well to blending with other forms of plastic. Blend technology can transform a palette of a few basic polymers into a wide range of new, advanced polymers with tailored properties, creating user-specific solutions and, in many cases, cost advantages as well. Styrenics are widely used in the automotive, electric/ electronic and IT industries. Special applications exist in household, packaging, toys and medical area. *Novodur®* and *Lustran®*, both acrylonitrile/ butadiene/styrene – ABS copolymers, are our leading styrenics. Other styrenics include *Lustran SAN®*, *Bayblend®* (Polycarbonate/ABS blend) (which will stay with Bayer), *Triax®* and *Centrex®*.

*Polycarbonate Sheets (Fabricated Products) (will remain with Bayer)*

We also produce plastic films as well as solid and multiwall sheets with a broad range of characteristics for a wide variety of applications. These materials consist of polycarbonate, polycarbonate blends or thermoplastic polyethers. We market our films under the trade names *Makrofol®* and *Bayfol®*, and our sheets as *Makrolon®*, *Vivak®* and *Axpet®*.

*Semi-Crystalline Products (will be transferred to Lanxess)*

*Polyamides.* Polyamides are tough, strong, high-performance plastics. They are resistant to chemicals and can often replace metal and other materials. The most important consumers of polyamides are the automotive, food packaging and electrical/ electronic industries. In addition, we use these materials in producing halogen-free flame retardant products. In the automotive field alone, applications of polyamides range from such long-established uses as coolant casings, hubcaps, door handles, external mirrors, sun-roofs and central electrical systems to more recent developments, such as tail pipes, vehicle electronics and AntiBlockingSystems. *Durethan®* is a product within our range of engineering thermoplastics based on Polyamid 6, Polyamid 66 and their copolyamides.

*Polyesters.* Semi-Crystalline thermoplastic polyesters like polybutylene terephthalate (PBT) and engineering plastics polyethylene terephthalate (PET) show high resistance to chemicals, heat distortion and stress cracking and show low water absorption. They are used unreinforced, glass fiber reinforced, flame retardant, filled and in blends. *Pocan®* is our trademark for engineering thermoplastics based on PBT and PET.

**Table of Contents****Markets and Distribution**

We sell the products of our Thermoplastic Polymers business entities to thousands of customers worldwide. These customers include injection-molding operators and a large number of plastic-component manufacturers, whose products are overwhelmingly used in the automotive, electrical, electrical engineering, construction, data technology, medical and leisure fields.

The business entities' external sales, by region and totals, for the past three years are as follows:

	2001	2002	2003
	(euros in millions)		
Europe	1,490	1,402	1,387
North America	781	722	601
Asia/Pacific	699	700	669
Latin America/ Africa/Middle East	211	171	185
<b>Total</b>	<b>3,181</b>	<b>2,995</b>	<b>2,842</b>

The following table sets forth the business entities' external sales for the last three years, broken down by category of activity.

	2001	2002	2003
	(euros in millions)		
Polycarbonates	1,231	1,067	1,091
Styrenics	1,162	1,102	981
Semi-Crystalline Products	493	528	515
Polycarbonate Sheets	279	268	236
Others	16	30	19
<b>Total</b>	<b>3,181</b>	<b>2,995</b>	<b>2,842</b>

The market for engineering thermoplastics is characterized by constant pressure on margins and growing price competition due to globalization, excess capacities, reduced demand due to the economic slow-down and increasing customer purchasing power. The primary driver of competition is price. Our major customers also expect global presence, high quality products, technical support and service and reliable delivery. In order to meet these demands and to achieve leadership in both cost and technology, we are extending our production and marketing presence in our key regions and markets.

Despite continually growing demand, global overcapacity remains a problem in some product lines. Although several producers have cancelled or postponed expansion plans, capacity continues to increase. We expect that the industry will continue to consolidate and new low-cost technologies will replace small, increasingly obsolete facilities.

Bayer does not produce basic petrochemicals. The principal raw materials of our Thermoplastic Polymers business entities are styrene, butadiene, acrylonitrile, acetone, phenol, cyclohexane, butandiol and dimethylterephthalate. Because many of these materials derive from petrochemicals, we obtain them almost exclusively from third parties. We do, however, produce Bisphenol-A, which is a major precursor of polycarbonate, from phenol and acetone internally. Nevertheless, our costs are affected by fluctuations in raw material prices, driven in turn by fluctuations in oil prices. We typically procure third-party raw materials under long-term, "as-if-producer" contracts that establish cost-based pricing formulas, limiting raw material price fluctuation to the effects of fluctuation in the price of crude oil and energy.

We market substantially all our plastics products through regional distribution channels, supported by regional competence centers and by our head office. In addition, we also use trading houses and local distributors to work with small volume customers. We are increasingly using e-commerce tools to market our products.





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Our most significant global competitor in all regions is General Electric Plastics. We also compete with several other companies, most notably BASF, Dow and DuPont. Particularly in the Far East, local competitors with more limited product portfolios, such as Teijin, Chimei, Idemitsu, Mitsubishi and LG, are also important market players.

**Research and Development**

The Thermoplastic Polymers business entities focus their research and development activities on process development in polycarbonates, styrenics and semi-crystalline thermoplastics. We have been introducing a new polycarbonate melt manufacturing process which will be the basis for our new investment in China. We are also furthering the development of the PA 6 polymerization process. In product development, we focus on consolidating our product portfolio, developing new blends, refining optical data carriers and modifying the surface of plastics with coatings.

The business entities primary research and development facilities are located in Krefeld and Dormagen, Germany; Pittsburgh, Pennsylvania; Addyston, Ohio; and Moxi, India.

The Thermoplastic Polymers business entities are currently focusing their research and development activities on the following products.

Product/ Brand name	Application
Surface-modified Makrolon	Automotive, construction
Improved Makrolon ODS grade	recordable ODS formats
Extension of Bayblend FR series	Business machines/ information technology
Electroconductive Triax for online painting	Automotive exterior parts
Pocan, Durethan for thinwall application (EasyFlow)	Electric/Electronic
Halogenfree flame retardant Pocan	Electric/Electronic

**Rubber Polymers (will be transferred to Lanxess)****Overview**

As a leading supplier of raw materials, our Rubber Polymers business entities (BR/Butyl, Technical Rubber Products, Rubber Chemicals) are an important partner to the rubber and tire industry. Our portfolio comprises synthetic rubber, rubber chemicals and modifiers for the plastics industry, along with special preparations and processing chemicals. On May 9, 2003, we sold our interest in PolymerLatex, a joint venture with Degussa AG.

**Major Products****BR/Butyl**

**Butadiene Rubber (BR).** We produce polybutadiene rubbers (BR) using three different catalyst systems, each type imparting specific characteristics to the resulting polymers. BR is used principally in tire treads, invariably compounded with other rubbers to give the desired balance of properties such as long life, skid resistance and improved fuel economy. Polystyrene modification is the second major application for BR, which is also used in golf balls and some industrial products. The BR product family includes solution-polymerised styrene-butadiene rubbers.

**Butyl.** We produce a full range of standard and halogenated butyl rubber, the principal characteristic of which is impermeability to air and gases, making them well suited for use in the pneumatic tire. Inner tubes are manufactured from standard grades, whereas the halogenated types are used in impermeable linings in the tire itself. Other applications include pharmaceutical stoppers and chewing gum.

**Technical Rubber Products**

We produce a wide range of synthetic rubber. Our portfolio comprises polychloroprene, ethylene-propylene co- and ter-polymers, nitrile rubber and styrene-butadiene copolymers as well as hydrogenated nitrile rubber and



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ethylene-vinyl acetate copolymers specialities. Our customers may process our rubber materials into end products, often blending them with other synthetic rubbers or natural rubber to form a wide range of compounds. Our products offer customers an array of varying characteristics, including processability, hardness, flexibility and wear, heat and chemical resistance, to suit their specific needs. Our rubber products are the basis for a wide variety of other articles such as hoses, belts, cable and wire sheathing, footwear and golf balls.

*Rubber Chemicals.* We produce a broad range of chemical products for use in the rubber compounding and production process. These products help rubber producers to control the speed of vulcanization, to protect rubber products against degradation caused by oxidation or effects of ozone and heat and to alter the physical properties of rubber products. The products range consists mainly of relatively mature products with limited substitution risk. These products are in general use by all rubber fabricators. The tire and automotive industry is the largest end user market.

*PolymerLatex and Rhein Chemie.* Our subsidiary Rhein Chemie produces a wide variety of substances used in rubber manufacture and processing. On May 9, 2003, we sold our interest in the PolymerLatex joint venture.

**Markets and Distribution**

The main markets for the Rubber Polymers business entities are Europe and North America. The tire and automotive industries generate a large percentage of the business entities' revenue, both from new car production and replacement tires.

The business entities' external sales by region and total for the past three years are as follows:

	2001	2002	2003
	(euros in millions)		
Europe	1,063	1,023	950
North America	725	679	585
Asia/Pacific	307	370	306
Latin America/ Africa/Middle East	120	143	130
	-----	-----	-----
Total	2,215	2,215	1,971
	=====	=====	=====

The following table sets forth the business entities' sales for the last three years, broken down by category of activity.

	2001	2002	2003
	(euros in millions)		
BR/Butyl	960	951	900
Technical Rubber	477	508	458
Rubber Chemicals	287	292	270
Rhein Chemie	293	280	257
PolymerLatex	190	179	66
Other	8	5	20
	-----	-----	-----
Total	2,215	2,215	1,971
	=====	=====	=====

Our Rubber Polymers business entities are not subject to significant seasonality.

We regard the following companies as the major competitors of our Rubber Polymers business entities:

*Technical Rubber:* Exxon, Polimeri Europa, DuPont Dow Elastomers, DSM and Nippon Zeon;

*Rubber Chemicals:* Flexsys and Crompton;

*Butyl:* Exxon; and

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*Butadiene Rubber (BR)*: Michelin, Bridgestone, and Goodyear, as the largest tire companies, all have in-house production.

**Research and Development**

The Rubber Polymers business entities focus their research and development activities on creating new products, improving processing technology and improving testing methods. The business entities' primary research and development facilities are located in Leverkusen and Dormagen, Germany, and Sarnia, Canada.

Because a substantial portion of our business comes from the automotive sector, anticipating and meeting that sector's needs is a key priority of our research and development effort. In the non-tire automotive industry, the primary goal is developing rubber parts that have longer durability in more demanding environments. Another aspect of our work is promoting the use of our materials in non-traditional applications, such as the packaging industry.

We have four products in late stages of development. These products are:

Product/Brand name	Application
Therban XT	Improved hot abrasion and adhesion
Levapren 900	PVC substitute in NitrileButadieneRubbers blends
Vulcuren	Vulcanization of rubber goods with less reversion
Buna VSL KA8955	New modified Solution-StyreneButadieneRubber (S-SBR) for improved tire tread performance

**POLYURETHANES, COATINGS, FIBERS****Overview**

Our Polyurethanes, Coatings, Fibers segment comprises seven strategic business entities which are summarized under Polyurethane Materials and Coatings Materials below. The following table shows the segment's performance for the last three years.

	2001	2002	2003
	(euros in millions)		
External net sales	5,275	5,213	5,084
Percentage of total sales	17.4	17.6	17.8
thereof Discontinuing Operations	228	199	167
Intersegment sales	138	78	207
Operating result	153	(134)	(514)
Percentage of total operating result	9.1		
thereof Discontinuing Operations	(17)	(99)	(67)
thereof special items <sup>(1)</sup>	(85)	(374)	(785)

(1) The special items are detailed in Item 5, *Operating and Financial Review and Prospects - Operating Results 2001, 2002 and 2003 - Segment Data*.

No individual product is material to the revenue of the segment as a whole.

**Segment Strategy**

Our goal is to continue expanding our global position in Polyurethane, Coatings. We plan to focus on capacity expansion in Asia, where we see opportunities for above-average growth.

In November 2003, Bayer announced that the Bayer Group intends to maintain its focus on its core businesses and therefore combine Bayer Chemicals with certain parts of the Bayer Polymers business in a new company to be named Lanxess (see *Business*). Our Fibers business that is

included in the Polyurethanes, Coatings, Fibers segment will be transferred to this new company. The remaining Polyurethanes, Coatings

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business, together with the Polycarbonates, Polycarbonate Sheets and Polycarbonate-Blends business from the Plastics, Rubber segment, as well as Wolff Walsrode and H.C. Starck from Bayer Chemicals, will comprise the Bayer MaterialScience subgroup and will be conducted through a wholly-owned subsidiary of Bayer Group called Bayer MaterialScience AG.

As announced in 2002, we intend to boost our returns through stringent cost and efficiency programs in the Polyurethanes, Coatings, Fibers and the Plastics, Rubber segments. We reduced headcount by 2,200 in 2003 and continue to reduce the number of employees in the segments. We plan to continue cost reduction and efficiency programs as well as the reduction of headcount for Bayer MaterialScience.

**Polyurethane Materials****Overview**

Our Polyurethane Materials business entities (MDI, TDI, Polyether) focus on the development, production and marketing of isocyanates and polyol materials for polyurethane formulations and systems used in producing a wide variety of polyurethane polymers for a broad range of industrial and consumer applications.

**Products**

Polyurethanes are polymers formed through the reaction of two liquid chemicals: an isocyanate – typically diphenylmethane diisocyanate (MDI) or toluene diisocyanate (TDI) – and a polymeric alcohol such as polyether polyols. We produce a range of different isocyanates and polyether polyols under such brand names as *Desmodur®*, *Desmophen®*, *Baydur®* and *Bayflex®*. The characteristics of a given polyurethane depend on both the material components used as well as the precise proportion of each used in the mix.

Our customers use our isocyanates or polyether polyols, or both, to create their own specific polyurethane formulations. In addition, upon request we design and evaluate custom blends to meet specific customer requirements. When we have perfected a formulation for a specific end product, we deliver the components to the customer, who then combines them at its manufacturing site. The customer receives a ready-to-use two-component system. The precise formulation of each custom blend is proprietary.

Typical applications for which our customers use our polyurethane materials include furniture, mattresses, automotive components, appliances, sport and leisure equipment and construction.

**Markets and Distribution**

Europe and the NAFTA nations remain the primary markets for our Polyurethane Materials business entities, although Asia is growing in importance.

The Polyurethane Materials business entities' external sales by region and totals for the past three years are as follows:

	2001	2002	2003
	(euros in millions)		
Europe	1,304	1,221	1,289
North America	1,110	1,138	1,049
Asia/Pacific	445	451	464
Latin America/ Africa/Middle East	414	387	382
	—	—	—
Total	3,273	3,197	3,184

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The following table sets forth the business entities sales for the last three years, broken down by product type.

	2001	2002	2003
	(euros in millions)		
TDI	575	593	581
MDI	1,177	1,099	1,193
Polyethers	1,392	1,504	1,392
Others	129	1	18
	<u>3,273</u>	<u>3,197</u>	<u>3,184</u>
Total	<u>3,273</u>	<u>3,197</u>	<u>3,184</u>

For our customers applications, there are no significant man-made or natural substitute materials for flexible polyurethane foams. Polystyrenes can compete with rigid polyurethane foams if the required materials are in sheet or block form. Conversely, polyurethane elastomers compete with other thermoplastic materials on cost, performance and fit with the production mix at the customer s site.

In the automotive area, there is constant competition between polyurethanes and other polymers in many applications, except for seating and steering wheels, due to required physical properties, costs, design or functional requirements.

On a worldwide level, the Polyurethane Materials business entities sales are not subject to significant seasonality. On the regional level, business can display indirect seasonality where, for example, revenue depends on such seasonal industries as construction and other outdoor applications.

The basic raw materials for our isocyanates and polyols are commodity petrochemical products. We typically purchase these on the open market partially under long term contracts, as Bayer generally does not produce petrochemicals. However, through our acquisition of Lyondell s polyol business, we have acquired a low-cost source for propylene oxide, one of our key raw materials. Although these raw materials are readily available, they are subject to price fluctuation driven by, for example, changes in world oil prices.

The Polyurethane Materials business entities sell their products directly to customers and, to a much smaller degree, through so-called system houses and traders. System houses typically serve smaller-volume customers and may be either independent companies or the subsidiaries of larger companies. It is our strategy to systematically establish our own regional system houses.

To further increase efficiency along the supply chain, we are establishing regional supply chain centers, replacing country-specific organizations, to fill orders. Ultimately, we plan to have the regional supply chain centers balance worldwide supply with regional demand.

We are currently in a consolidation phase regarding our production sites. As part of this consolidation in the TDI area, we terminated the Industriale Cydsa Bayer joint venture (ICB) and closed the TDI plant at Coatzacoalcos, Mexico, as well as the TDI plants in Leverkusen, Germany, and SBU, Japan. Other parts of this consolidation included the termination of the Bayer-Shell Isocyanates N.V. (BSI) joint venture, as well as the closure of the polyether site at Institute, West Virginia during 2003.

Our main competitors are BASF, Dow Chemical, Huntsman, Lyondell, Mitsui Takeda and Shell.

**Research and Development**

The Polyurethane Materials business entities focus their research and development activities on:

reducing the thermoconductivity of rigid polyurethane foams;

halogen-free flame retardants;

halogen-free blowing agents;



reduction of volatile components in polyurethane raw materials;

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new applications for polyurethanes and polyurethane materials; and

reducing costs and improving quality in production processes.

The business entities' primary research and technical development facilities are located in Dormagen and Leverkusen, Germany; Pittsburgh, Pennsylvania; South Charleston, West Virginia; New Martinsville, West Virginia; Amagasaki, Japan; and Shanghai, China.

The main areas of innovation in the polyurethane field are currently the development of new or improved polyether polyol types and blends as well as the improvement of manufacturing processes. The business entities concentrate their research and development efforts with respect to aromatic isocyanates on improving existing products and technologies for their manufacture. High-throughput experiments are used for the development of new formulations and will help to reduce time-to-market for new products.

## **Coatings Materials**

### ***Overview***

Our Coatings Materials business entities (Base- and modified isocyanates, Polyester TPU and Films, Inorganic Basic Chemicals and Fibers) develop and market a wide variety of products that serve as raw materials for lacquers, coatings, sealants and adhesives. To enable these entities to concentrate on their core business areas, we transferred the Colorants business to Bayer Chemicals in 2003.

### ***Major Products***

#### *Resins and Hardeners*

Polyurethane lacquers are formed through the combination of an isocyanates component with a polyol-like polyester, polyacrylate-, polyether- or polycarbonatepolyols. We offer a variety of polyol components branded as *Desmophen*®, *Rucote*® and *Bayhydrol*® (Polyester, TPU and Films) and polyisocyanates such as *Desmodur*®, *Desmodur BL*®, *Bayhydur*®, and *Crelan*® (base- and modified isocyanates). This variety enables us to provide custom-tailored solutions for a number of different applications.

*Special raw materials.* Our special material unit produces such specialty products as *Pergut*® (Polyester, TPU and Films) for coatings and adhesives, *Impranil*®, our polyurethane coating systems for textiles, and *Baybond*® for glass fiber sizing.

#### *Adhesive raw materials*

*Dispercoll*® and *Desmocoll*® (Polyester, TPU and Films) are our raw materials for adhesives. Their primary users are shoe manufacturers, though we also have customers from the automotive, furniture and building industries.

*Thermoplastic polyurethanes.* Thermoplastic polyurethanes, or TPUs (Polyester, TPU and Films), belong to the high-performance thermoplastic elastomers family. A key property of TPUs is their resistance to high abrasion and wear. TPUs' abrasion- and wear-resistant properties are substantially superior to those of abrasion-resistant rubber compounds. Their wet abrasion resistance surpasses even that of most metals. We market our thermoplastic polyurethanes under the trademarks *Desmopan*® in Germany and other EU countries and *Texin*® in the United States.

*Inorganic basic chemicals.* Inorganic basic chemicals are of major importance for Bayer. A large part of Bayer Polymers sales are dependent on chlorine. Chlorine is used for the production of intermediates that are subsequently processed into a variety of products, such as polyisocyanates and polycarbonates. Over 90 percent of the sodium chloride electrolysis capacity is based on the environmentally-friendly, energy-efficient membrane process. In addition to chlorine, sodium chloride electrolysis generates caustic soda, which can be sold to external markets, to the extent that it is not used internally.

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*Fibers (will be transferred to Lanxess)*. Our Fibers business focuses on the development, production and marketing of fibers for the textile industry under the trade name *Dorlastan®*, and in general applications under the trade names *Atlas®* and *Bayco®*.

**Markets and Distribution**

Our Coatings Materials business entities are a major producer of raw materials for coatings and adhesives. The primary ultimate end users of our products are the automotive, furniture and plastics industries; other users include the textile, shoe and building industries.

The business entities' external sales by region and total for the past three years are as follows:

	<u>2001</u>	<u>2002</u>	<u>2003</u>
	(euros in millions)		
Europe	1,024	1,031	1,020
North America	526	552	477
Asia/Pacific	299	293	266
Latin America/ Africa/Middle East	153	140	137
	<u>          </u>	<u>          </u>	<u>          </u>
Total	2,002	2,016	1,900
	<u>          </u>	<u>          </u>	<u>          </u>

The following table sets forth the business entities' sales for the last three years, broken down by category of activity.

	<u>2001</u>	<u>2002</u>	<u>2003</u>
	(euros in millions)		
Base- and modified isocyanates (BMI)	773	842	791
Polyester, TPU and Films (PTF)	708	777	702
Inorganic Basic Chemicals	220	181	218
Fibers	232	200	170
Others	69	16	19
	<u>          </u>	<u>          </u>	<u>          </u>
Total	2,002	2,016	1,900
	<u>          </u>	<u>          </u>	<u>          </u>

Our revenue is not subject to significant seasonality over the course of the typical year. Some of the individual markets and regions that we serve experience seasonal fluctuation, such as the building industry during the winter months or southern Europe during the summer. All markets and regions taken as a whole, however, produce relatively constant revenue throughout the year.

Temporary fluctuations in prices, such as the price of crude oil or energy, can have a significant effect on the cost of our raw materials. Nevertheless, because of our broadly diversified supplier base and raw material mix, we secure our most important chemical raw materials through long-term contracts.

We coordinate and carry out our sales and marketing from our head office in Leverkusen, Germany, as well as through our various national subsidiaries. Our key account managers handle our globally active major customers directly.

We regard the following companies as the chief competitors of our Coatings Materials business entities.

*Resin components (PTF)*: UCB/Solutia, Cray Valley, DIC;

*Aliphatic isocyanates (BMI)*: Rhodia, Degussa, BASF, Asahi, NPU (Nippon Polyurethane Industry);

*Aromatic isocyanates (BMI)*: DOW, MITSUI TAKEDA, SAPICI; and

*Inorganic basic chemicals (IBC)*: DOW, Solvay, Akzo Nobel.

**Table of Contents****Research and Development**

The Coatings Materials business entities focus their research and development activities on developing products that we can formulate into high performance coatings, such as aliphatic and aromatic polyisocyanates and resin components. We are also exploring ways of reducing the amount of solvent needed by technologies such as high solids and waterborne and powder coatings systems.

The business entities' primary research and development facilities are located in Leverkusen and Dormagen, Germany and Pittsburgh, Pennsylvania.

**BAYER CHEMICALS****Overview**

Bayer Chemicals consists of our Chemicals segment. The Chemicals segment is comprised of the Chemicals and H.C. Starck business groups.

Our products are available to customers worldwide and are used in many different industries (*e.g.*, electronic, optics, metal processing, food, coatings, textile, leather, paper, plastics, rubber, building materials, pharmaceuticals, and engineering ceramics industries). Our products are available as either individual building blocks or as system-wide solutions designed to assist an entire production process. Our core competencies lie in research and development and the production and marketing of highly differentiated, industrial, fine process and performance chemicals.

The following table shows the Chemical segment's performance for the last three years.

	<u>2001</u>	<u>2002</u>	<u>2003</u>
	(euros in millions)		
External net sales	5,201	4,322	3,400
Percentage of total sales	17.2	14.6	11.9
thereof Discontinuing Operations	3,961	3,371	2,513
Intersegment sales	456	409	370
Operating result	527	1,057	(499)
Percentage of total operating result	31.4	65.7	
thereof Discontinuing Operations	360	1,018	(516)
thereof special items <sup>(1)</sup>	222	857	(541)

(1) The special items are detailed in Item 5, *Operating and Financial Review and Prospects - Operating Results 2001, 2002 and 2003 - Segment Data*.

No individual product is material to the revenue of the Chemicals segment as a whole.

**Segment Strategy**

The focus of our activities in the Chemicals segment is improving our margins. Our Industrial Chemicals business entities aim to enhance their operating result by improving the manufacturing processes. Our other business entities aim to improve their margins by streamlining the portfolio and focusing on selected activities in the chemical industry. These business entities pursue a strategy of achieving niche positions with focus on the customers.

In November 2003, Bayer announced that the Bayer Group intends to maintain its focus on its core businesses and therefore combine Bayer Chemicals (except for Wolff Walsrode and H.C. Starck) with certain parts of the Bayer Polymers business in a new company to be named Lanxess (see *Business*). After this separation, Wolff Walsrode and H.C. Starck will be grouped together with the remaining parts of the Bayer Polymers business in a wholly-owned subsidiary of Bayer Group called Bayer MaterialScience.



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Lanxess will be focused on four core business activities: Chemical Intermediates, Performance Chemicals, Performance Plastics and Performance Rubber. All structures and processes will be adapted to the specific requirements of these businesses.

### **Chemicals**

#### *Overview*

The Chemicals business group covers eleven strategic business entities which are summarized under Industrial Chemicals, Custom Manufacturing, Functional Chemicals, Process Chemicals and Wolff Walsrode. All these businesses except for Wolff Walsrode will be transferred to Lanxess.

### **Major Products**

#### *Industrial Chemicals*

Our Industrial Chemicals business entities focus on the development, manufacture and marketing of a wide range of basic chemicals, mainly aromatic compounds and iron-oxide pigments. Industrial chemicals are produced in bulk quantities using few synthesis steps.

The Industrial Chemicals business entities produce inorganic and aromatic compounds. In the few last years, the focus was on improving processes and thereby enhancing productivity.

*Bayferrox*® is our iron-oxide based anorganic colorant, which is available in a variety of colors for a wide range of uses. For example, it provides the characteristic reddish tone of roofing tiles.

The product line *Lewatit*® offers a broad range of ion-exchangers, adsorbers and catalysts. These products provide solutions, among others, for drinking or industrial water, for the food or chemical processing industries as well as for the mining and petrochemical industries.

#### *Custom Manufacturing*

Our Custom Manufacturing business entity produces a growing range of high specification, customized fine chemicals for use in advanced industrial sectors such as life sciences. The multi-step synthesis products are high value-added chemicals made to exact specifications by means of sophisticated and complex chemical synthesis processes. These chemicals comprise two broad categories:

*multi-customer products*, or catalogue products sold to more than one customer; and

*single customer products*, synthesized to the specifications of individual customers. Production of our single-customer fine chemicals often involves various levels of customer cooperation as well as custom-tailored research and manufacturing; typical examples are life science intermediates for the pharmaceutical and agrochemical industries.

#### *Process Chemicals*

In contrast to other chemicals business entities, the Process Chemicals business entities display a high degree of custom tailoring for the specific needs of its customers. There is a variety of broad product families, each of which contains several product lines. Each product line represents numerous individual compounds that are related to a general chemical composition and area of function. Overall, the product range comprises thousands of compounds and a technically trained sales force is available to consult with clients. The Process Chemicals business produces chemicals for the leather, paper and textile industries.

#### *Functional Chemicals*

The Functional Chemicals business entities comprise, among others, industrial biocides, organic colorants and plastic additives.





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Our plastic additives, including flame retardants, plasticizers, blowing agents and modifiers, improve properties and confer new ones on polymers such as PVC, thermosets, polyurethanes and elastomers. In respect of material protection, we offer a broad product range of industrial biocides and preservatives with applications ranging from wood protection to anti-fouling, disinfection, personal care, in-can preservation and corrosion inhibitors. Our range of colorants includes universal products as well as specialty products for special requirements. These products vary in their characteristics such as thermostability, color intensity, weather stability and brilliance.

*Wolff Walsrode (will remain with Bayer)*

Wolff Walsrode (which will remain with Bayer and not be transferred to Lanxess) develops, produces and markets cellulose derivatives, primarily for use in building materials, industrial coatings and inks, pharmaceuticals, food and health care products, and other additives for coatings, emulsion paints and printing inks.

*Walocel M*® is an additive that regulates water balance. It improves the workability and adhesion of building materials such as tile adhesives, plasters, mortars and dispersion paints.

*Walsroder NC*® serves in resin form in wood coatings and other industrial coatings as well as in printing inks for flexible packaging. It is also used as a component of nail polish and other specialty items.

*Walocel C*® is used primarily as a thickener and binder in water-based systems. It is used in pharmaceuticals, dairy products and toothpaste, as well as in ceramics compounding, textile and paper manufacture and oil drilling.

Effective November 1, 2003, we sold Walothen GmbH to the Wihuri Group of Finland. *Walothen*® is a class of films based on Polypropylen for food and cigarette packaging and paper lamination.

**Markets and Distribution**

The principal markets of the Industrial Chemicals business entities are industries using organic or inorganic intermediates. The products of the water treatment business are used in the consumer, semiconductor and pharmaceuticals industries, among others. The primary end users of inorganic colorants are the automotive, furniture and plastics industries.

The principal markets for our Custom Manufacturing business entity are customized fine chemicals for the photographic, electronics and life science industries.

Given the individualized nature of their products, the marketing activities of the Process Chemicals business entities focus on individual customer requirements. The end users are the textile, leather and paper industries.

The plastics, construction, food and pharmaceutical industries are, among others, the main customers for the Functional Chemicals business entities.

Wolff Walsrode competes in the building materials, industrial coatings, flexible packaging ink and life sciences markets, as well as in specialized industrial fields.

The business group's sales, by region and total, for the past three years are as follows:

	<u>2001</u>	<u>2002</u>	<u>2003</u>
	(euros in millions)		
Europe	2,277	1,883	1,567
North America	929	733	496
Asia/Pacific	622	600	441
Latin America/ Africa/Middle East	562	499	332

Total	4,390	3,715	2,836
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The following table sets forth the business group's sales for the last three years, broken down by category of activity.

	2001	2002	2003
	(euros in millions)		
Industrial Chemicals	1,055	1,000	975
Custom Manufacturing	276	215	188
Process Chemicals	1,038	890	740
Functional Chemicals	397	512	514
Wolff Walsrode and others	1,624	1,098	419
	<hr/>	<hr/>	<hr/>
Total	4,390	3,715	2,836
	<hr/>	<hr/>	<hr/>

Our Chemicals business group is not subject to significant seasonality over the course of the year. Some of the individual markets and regions that we serve experience seasonal fluctuation, such as the agriculture industry (which mainly affects our Custom Manufacturing business entity) and the building industry (which mainly affects our Industrial Chemicals and Wolff Walsrode business entities). All markets and regions taken as a whole, however, produce relatively constant revenue throughout the year.

The Chemicals business group acquires a part of the raw materials they use internally from other business groups of the Bayer Group. There are typically multiple sources for the rest of its raw materials; we purchase these from suppliers worldwide, usually under long-term contracts. Chemicals has historically not been affected by shortages; however, rising oil prices have had a moderate impact on production cost.

We produce part of our chemicals in dedicated, continuous-process manufacturing plants using advanced technologies. The other products are manufactured in batch-processing plants. The plants are predominantly located in Leverkusen and other German sites while others are located at locations around the world in order to serve the local markets more economically.

We market the products of the business group primarily through Bayer's worldwide network of trading companies and agencies, with their specialized and experienced salespeople.

We regard the following companies as our chief competitors:

*Industrial Chemicals:* BASF, Dow, Elementis, Rohm & Haas;

*Custom Manufacturing:* Lonza, DSM, Degussa;

*Process Chemicals:* Clariant, BASF, Ciba Specialty Chemicals;

*Functional Chemicals:* Solutia, Akzo Nobel, Rhodia, Avecia; and

*Wolff Walsrode:* Hercules, Dow, Clariant, Bergerac NC/SNPE, Nitroquimica Brasileira and Noviant.

**Research and Development**

The business group focuses its research and development activities on:

technological and chemical development and improvement of manufacturing processes of industrial and life science intermediates;

improved optical brighteners, retention and sizing agents for the paper industry;

improved ion exchange resins for waste water treatment and metal recovery;

environmentally friendly formulations of products for the leather, paper and textile industry;

polyurethane dispersions for the finishing of leather car seats;

high-performance data storage media for information technology;

new products for the textile industry;

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new flame retardants and high performance plasticizers;

new colorants for plastics and specialities;

new fungicides and efficient formulations for material protection; and

iron oxide media for drinking water and waste water treatment.

The primary research and development facilities are located in Leverkusen, Germany; Ede, the Netherlands; Woodbridge, Connecticut; and Bomlitz, near Walsrode, Germany.

We currently have over 120 products and new or improved processes in late stages of development. We expect to launch these during 2004 and 2005. In 2003, we launched more than 150 products and processes.

### **H.C. Starck (will remain with Bayer)**

#### ***Overview***

Our subsidiary H.C. Starck (which will remain with Bayer and not be transferred to Lanxess) develops, produces and markets metallic and ceramic powders and mill products for various markets and applications. H.C. Starck constantly pursues its policy of forward integration (further development of the product portfolios towards the customer). After the integration of CSM Industries, we acquired a majority interest in InDec B.V. in the first quarter of 2003. InDec produces ceramic cells for use in fuel cell systems. We expect these ceramic cells to enable H.C. Starck to advance into the Solid Oxide Fuel Cell (SOFC) market and to develop higher-value added products in the field of functional ceramics. There are many future large-scale applications of SOFC systems, such as residential and commercial co-generation, auxiliary power units for trucks, buses and passenger cars and numerous other applications where reliable, high quality power is needed.

#### ***Major Products***

##### *Metallic products and compounds*

We produce a broad portfolio of products ranging from ceramic materials to such metals as tungsten, molybdenum, tantalum and niobium and their various alloys and compounds for industrial customers. We manufacture these materials not only in the form of ceramic or metallic powders but also as solid intermediates or finished parts. This gives us the ability to provide engineering and design services for a wide variety of markets and end uses. We bring this ability to customers in the aerospace, medical, chemical, electronic, lighting, sophisticated tooling and optical components industries.

*Kulite*<sup>TM</sup> is our trademark for fabricated parts made from tungsten alloy powders. These products are used, for instance, as balance weights in the aerospace industry.

*Molyform*<sup>®</sup> powders are our molybdenum disulfide solid lubricants. We market a range of powdered lubricants under the brand name *Lubriform*<sup>®</sup>. Our customers use these compounds in producing lubricants. The automotive industry also uses *Molyform*<sup>®</sup> in manufacturing brake linings.

##### *Battery intermediates*

*Ampergy*<sup>®</sup> is our trade name for our nickel hydroxide and cobalt suboxide battery intermediates. Our customers in the electrochemical industry use *Ampergy*<sup>®</sup> in making rechargeable batteries for modern communications devices and in large-scale industrial batteries.

##### *Chemical catalysts*

*Amperkat*<sup>®</sup> is the trade name for our line of chemical catalysts. The chemical industry uses these products in a variety of applications, such as chemical synthesis, plastics production, hydration processes and desulphurization for generating low sulphur diesel-fuels.



**Table of Contents***Thermal spray powders*

*Amperit®* is the trade name of our line of thermal spray powders. Our customers use these powders to give their products a variety of protective coatings. Our *Amperit®* customers come primarily from the machine tool and aeronautics industries.

*Ceramic powders and parts*

Because of their resistance to corrosive substances, high mechanical durability and low weight, high-performance ceramic materials are increasingly replacing metals in various industrial uses. We produce a broad range of intermediates for use in advanced ceramics. H.C. Starck Ceramics produces functional ceramic parts from silicon carbide and silicon nitride for various industries such as pump seal rings, foundry parts and ball bearings.

**Markets and Distribution**

Although growth in the demand for ceramic products has been steady, strong competitive pressure has depressed prices. We expect, however, that the market for H.C. Starck Ceramics products will continue to grow steadily for the foreseeable future.

For our fabricated products business, we believe that we gain strength from the wide variety of markets and customers that we serve. We believe that China will be a promising market with large demand for all of our fabricated products in the lighting, telecommunications and transportation industries.

In 2003, the main factor influencing the H.C. Starck Group was the failure of the electronics industry to recover as we had expected.

The business group's external sales by region, as well as its overall sales, for the past three years are as follows:

	<u>2001</u>	<u>2002</u>	<u>2003</u>
	(euros in millions)		
Europe	325	248	245
North America	234	148	126
Asia/Pacific	208	196	183
Latin America/ Africa/Middle East	44	15	10
	<u>    </u>	<u>    </u>	<u>    </u>
Total	811	607	564
	<u>    </u>	<u>    </u>	<u>    </u>

China is the primary source for the raw materials for tungsten products. In the past, China had limited production, thereby causing shortages. We have our own tungsten production and recycling facilities, however, and are therefore only partly dependent on Chinese imports and do not bear the full brunt of raw material price increases. Tantalum raw material prices have remained relatively stable during the last two years. Raw material supply is secured through long term contracts in general lasting 5 years.

H.C. Starck has its own international sales organization in Europe, the United States and Japan, its most important markets. In addition, we have liaison offices for Scandinavia, the Benelux countries, France, Italy and the United Kingdom that maintain direct contact with our customers. We also have a liaison office in Singapore for the South-East Asia region. In other countries, we either rely on the Bayer-wide sales organization or use third-party sales agents.

We regard the following companies as our chief competitors:

*Metallic products and compounds:* Bergla, Cabot Group (including its associated joint ventures), Mitsui, MolymetOMG, Osram Sylvania, Umicore, Plansee AG, Philips Elmet, Phelps Dodge;

*Battery intermediates:* Tanaka, Umicore;

*Chemical catalysts:* Activated Metals, Degussa, Grace-Davison, Engelhard;

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*Thermal spray powders:* Praxair, Sulzer Metco, Woka; and

*Ceramic powders and parts:* Denki Kagaku, SB Boron; GE Ceramics, Tokuyama Soda.

**Research and Development**

H.C. Starck focuses its research and development activities on innovative products and system solutions. For example, we are developing high-capacity tantalum and niobium powders as intermediates for capacitors, and precursors for thin metallic films in microelectronic devices. We are also developing high-purity tantalum and niobium compounds for electroceramics and surface acoustic wave filters in computers and mobile telephones. H.C. Starck is also strongly committed to developing materials for more technically advanced batteries, fuel cells, hybrid vehicles and other energy storage and power generation applications.

The business group's primary research and development facilities are located in Goslar, Germany; Newton, Massachusetts (all refractory metals); and Mito, Japan (tantalum products and battery intermediates).

To follow the technical trends and the high innovation rates in electronics, all precursor materials for electronic components must be improved continuously and adapted to completely new and more challenging applications. In particular, tantalum and niobium powder for capacitors and filters must become finer, and the impurity level must be reduced to lower limits to make capacitors with steadily increasing capacities and higher reliabilities. We currently have seven products in late stages of development, and expect to start and continue their launch during 2004. See also Item 3, *Key Information - Risk Factors - Failure to develop new products and production technologies may harm our competitive position.*

<b>Product/ Brand name</b>	<b>Application</b>
Niobium Oxide 80 and 120 K powder	Capacitors
Tantalum 70/80 and 100/120 K powder	Capacitors
P/M tantalum plates PVD	Semiconductor Industry
Nb products for metal processes	Capacitors
MMC for thermal management sophisticated electronic heat sinks	Electronics
High temperature furnace materials	Furnace construction
Alternative (ferrous, nickel, cobalt) binders	Tool industry

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**INTELLECTUAL PROPERTY PROTECTION**

To succeed, Bayer must continually seek new products that provide our customers with better solutions for existing problems and new solutions for emerging problems. This requires us to expend significant effort on research, development, manufacturing and marketing. To preserve the value of our investment, we rely on the patent and trademarks laws of the jurisdictions where we do business. In addition, our production technologies typically incorporate specialized proprietary know-how.

We have both developed intellectual property internally and acquired it as assignee through acquisitions. In addition, Bayer may from time to time grant licenses to third parties to use our patents and know-how, and may obtain licenses from others to manufacture and sell products using their technology and know-how.

**Patents**

We seek to protect our products with patents in 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;

intermediates useful in the manufacture of products;

genomic research; and

new uses for existing 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. For example, although patent protection in the United States is generally strong, under some circumstances, U.S. law permits generic pharmaceuticals manufacturers to seek regulatory approval of generic products before the patents expire. See Item 8, *Financial Information - Legal Proceedings*. In addition, some developing countries have announced plans to reduce patent protection for some drugs.

The advance of genomic research has accelerated our patent filings for biological products. We typically seek protection upon determining a gene's function.

We currently hold thousands of patents, and have applications pending for a significant number of new patents. Although patents are important to our business, we believe that, with the exception of the patents covering *Adalat*®, *Avelox*®, *Cipro*®, *Levitra*® and imidacloprid, no single patent (or group of related patents) is material 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, the United States, Japan and certain other countries extend or restore patent terms or provide supplementary protection to compensate for patent term loss due to regulatory review and substantial investments in product research and development and regulatory approval. Our policy is to obtain these extensions where possible.

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Patent protection in our major markets for some of our key products is scheduled to expire in the near term. Although the expiration of a patent for an active ingredient normally results in the loss of market exclusivity, we may continue to derive commercial benefits from:

subsequently-granted patents on processes and intermediates used in manufacturing the active ingredient;

patents relating to specific uses for the active ingredient;

patents relating to novel compositions and formulations; and

in certain markets (including the United States), market exclusivity under laws other than patent laws.

The following table sets forth the expiration dates in our major markets of the patents covering *Adalat*®, *Avelox*®, ciprofloxacin, imidacloprid and vardenafil:

Product	Market							
	Germany	France	U.K.	Italy	Spain	Japan	U.S.A.	Canada
<i>Adalat</i> ®								
Crystal patent (Retard)				2003			2010	
<i>Adalat</i> ® CC (Coat Core)	2008	2008	2008	2008	2008	2008	2008	2009
Gits/Oros excl. license (Alza)	2004	2004	2003	2004	2004	2004		2004
<i>Avelox</i> ®								
Compound	2009	2009	2009	2014	2009	2009	2014	2016
Hydrochloride-Monohydrate	2016	2016	2016	2016	2016	2016	2016	2016
Tablet formulation	2019	2019	2019	2019	2019	2019	2019	2019
Ciprofloxacin								
Active ingredient		2004	2002	2009			2003	2004(1)
Process	2002	2002	2002	2002	2003	2002		2004
IV formulation	2006	2006	2006	2006	2006	2006	2007	2008
Tablet formulation	2007	2007	2007	2007	2007	2007	2011	2009
Imidacloprid	2006	2006	2006	2006	2007	2005	2006	2007
Vardenafil compound	2018	2018	2018	2018	2018	2018	2018	2018

(1) Composition.

See Item 8, *Financial Information - Legal Proceedings* for a description of patent-related litigation in which we are involved.

**Trademarks**

Our best-known trademarks include *Alka-Seltzer*®, *Aspirin*®, *Canesten*®, *Flint*®, *One-A-Day*®, *Rid*® and *Admire*®, as well as the Bayer name itself and our distinctive Bayer cross. Trademark protection varies widely throughout the world. In some countries, trademark protection continues as long as the mark is used. Other countries require registration of trademarks. Registrations are generally for fixed but renewable terms. Although our portfolio of trademarks is important to our business, we do not believe that any single trademark is material to Bayer's business as a whole.

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**GOVERNMENTAL REGULATION**

Our business is subject to significant government regulation. Many of our products must be examined and approved by regulatory agencies for safety, environmental impact and effectiveness before we may market them. In addition, all our operations must comply with applicable environmental regulations. Relevant regulation is typically national, although within the European Union (the EU), a considerable degree of harmonization exists. The EU institutions have created a common regulatory framework that applies in all of the EU Member States (and that sometimes allows EU Member States to adopt more detailed and more stringent regulations), and has indirect harmonizing effects in certain other European countries.

**Product Regulation**

The primary emphasis of product regulation is to assure the safety and effectiveness of our products. Regulation in the United States is of particular importance because of the United States' large share of the worldwide market. In the United States, the Food and Drug Administration (FDA) regulates many of our products, primarily in our HealthCare business. In addition, our pharmaceutical facilities typically require regulatory approval and are subject to periodic re-inspection. Comparable regulatory frameworks are in place in other regions as well, such as the EU, Japan, China and in most other industrialized countries.

The Toxic Substance Control Act (TSCA) administered under the U.S. Environmental Protection Agency (EPA) regulates product registrations (PMNs) for new industrial chemicals and polymers and can also regulate existing chemicals under test rules. In addition, the U.S. FDA food-contact regulations permit use of many of our chemicals and materials in food-contact applications. Furthermore, the EPA registers biocidal products for use in antimicrobial applications in addition to those for agricultural uses. For industrial chemicals and polymers in the United States, in order to insure proper use and handling, product safety is regulated by the Occupational Safety and Health Administration Hazard Communication. This regulation requires notification to our workers and customers through Material Safety Data Sheets and precautionary labels for potential hazards from exposure to chemicals.

Similarly, in the EU as well as in further regions there are restrictive rules applying to areas including the production, marketing, processing, use and disposal of dangerous substances and preparations, food and feeding stuffs and the use of biocides.

***Pharmaceutical Products***

Pharmaceutical products must be examined and approved by regulatory agencies for safety and efficacy before we may market them. Our pharmaceutical facilities require regulatory approval and are subject to periodic re-inspection. All our operations must comply with applicable quality and environmental regulations.

The various regulatory authorities administer and execute requirements covering the testing, safety, efficacy, labeling, approval, manufacturing and marketing of prescription pharmaceuticals. Pharmaceutical products must receive regulatory approval before they can be marketed. The regulatory requirements follow stringent standards that vary by country. Before a drug can qualify for marketing approval, a registration dossier must be submitted to a regulatory authority for review and evaluation. The registration dossier principally contains detailed information about the safety, efficacy and quality of a new medication. It also provides details about the manufacturing process, the production facilities and information to be provided to patients. The registration process can last from a few months to a few years and depends on the nature of the medication under review, the quality of the submitted data and the efficiency of the relevant agency. If a drug meets the approval requirements, the regulatory authority will grant a product license for marketing. In some countries, negotiation on pricing and reimbursement follow the grant of the product license. The process of developing a pharmaceutical product from discovery through testing, registration and initial product launch could take approximately ten years. The manufacturer is required to monitor adverse reactions and report them to the appropriate authorities.

In recent years, the EU, the United States and Japan have sought to shorten development and registration times for medicinal products by harmonizing the individual requirements of the three regions. This process is

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called the International Conference on Harmonization. For the foreseeable future, however, we will need to obtain approval in each market.

Increasing requirements from the FDA have resulted in a higher investment of time and money necessary to develop new products and bring them to market. The Food and Drug Administration Modernization Act of 1997 was principally designed to streamline regulatory procedures and improve the regulation of drugs, medical devices and food with a view to expediting the pre-market review process for new products.

In the European Union, there are two different approval procedures available: a centralized procedure and one based on the Mutual Recognition Procedure. The London-based European Agency for the Evaluation of Medicinal Products governs the centralized drug registration and approval process and consists of two committees, one for proprietary medicinal products (CPMP) and one for veterinary medicinal products (CVMP). The other method is the Mutual Recognition Procedure, in which one country makes the principal evaluation. The holder of the authorization may then submit to the other member states an application for recognition of the marketing authorization, which must normally be granted within 90 days.

Historically, two issues have affected the approval process in Japan for drugs developed outside of that country. First, the Japanese approval agency does not recognize documents used in registration procedures in other countries. Second, the Japanese approval agency requires that tests to determine appropriate dosages for Japanese patients be conducted on Japanese patient volunteers. However, with the process of ICH (International Conference on Harmonization), the Japanese approval agency is increasingly accepting study results and documentation used in registration procedures in the United States and Europe.

### ***Biological Products***

Our pharmaceuticals segment markets substances known as biologicals. Biologicals derive from biological sources (*e.g.*, from human plasma or from cell lines genetically engineered to produce a specific protein). In the United States and other markets, biologicals are regulated more stringently than other drug products. For example, in order to minimize the risk of infectious disease transmission, human plasma-derived products require donor screening and plasma testing, as well as multiple manufacturing steps designed to remove viruses and other infectious agents. Biological products are chemically complex, often depending on a precise structure (*e.g.*, the specific folding of a molecule) for their effectiveness. Regulations require us to subject these products to rigorous testing to ensure stability throughout their shelf-life. Because biological products typically cannot withstand conventional sterilization techniques, we must use special processes to ensure sterility. Under applicable regulatory requirements, we must submit detailed documentation to demonstrate appropriate controls over our manufacturing facilities, including associated equipment and supporting utilities like water supply and climate control.

### ***Consumer Care Products***

Most Consumer Care products are subject to regulations similar to those in the Pharmaceuticals segment. In the United States, for example, the FDA and, in part, the Federal Trade Commission, oversee the marketing, manufacturing and labeling of Consumer Care products.

### ***Diagnostics Products***

The products of the Diagnostics business group are in vitro diagnostic (IVD) products, subject to regulatory controls similar to those governing the development and marketing of pharmaceutical products. In the United States, the FDA regulates IVD products as medical devices, through its Center for Devices and Radiological Health. All manufacturers of medical devices must register their facilities with the FDA. Registered establishments are subject to periodic inspections by FDA investigators to ensure compliance with quality standards.

Most IVD products require FDA clearance or approval before they may be marketed. For devices requiring clearance, we seek where possible to obtain it on the grounds that the new product is substantially equivalent to a product the FDA has already cleared. FDA clearance usually takes between two and eighteen months,

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depending on the degree of novelty involved. For truly new IVD products, we must submit extensive data to the FDA based on actual clinical trials. FDA approval almost invariably involves an inspection of our facilities and a review of our design and manufacturing processes. After obtaining FDA approval, we must report all adverse incidents in which a product was allegedly involved.

In the EU, two Directives regulate these products. The Medical Device Directive governs diagnostic products that come in direct contact with the human body. The IVD Directive, as the name implies, applies to products used in vitro, that is those that do not come in direct contact with the human body. In Japan, a special section of the Pharmaceutical Affairs Law regulates diagnostic products. In Australia and Canada, the applicable laws and regulations are similar to the European model. Many countries in South America and Asia have regulatory requirements similar to those promulgated either by the FDA or the European Commission. All of these requirements involve product registration and approval and the reporting of adverse incidents and corrective actions.

### ***Animal Health Products***

Veterinary products must be examined and approved by regulatory agencies for quality, safety and efficacy before marketing in all countries. In the United States, the FDA's Center for Veterinary Medicine is responsible for ensuring that animal drugs are safe and effective for their intended uses and that food from treated animals is safe for human consumption. Animal health products are also regulated in the United States by the U.S. Department of Agriculture (USDA) and the Environmental Protection Agency (EPA).

In the EU, animal health products are subject to regulations similar to those governing the Pharmaceutical sector, including the two registration procedures described above. The centralized registration process is also governed by the European Agency for the Evaluation of Medicinal Products in London, but the committee responsible for animal health products is the Committee for Veterinary Medicinal Products (CVMP).

### ***Crop Protection Products***

In most countries, crop protection products must obtain government regulatory approval prior to marketing. This regulatory framework seeks to protect the consumer, the applicator and the environment. The strictest standards are applied in the United States, Japan and in the EU. Because humans may be exposed to these products (for example, through residues on food) the safety assessment considers human risk as well. If the product is used on a food crop, a legal limit for chemical residue is established.

It generally takes seven to nine years from discovery of a new crop protection product until the dossier is submitted to the appropriate regulatory authority for product approval. Afterwards the authorities usually need another two to four years to evaluate the data submitted in order to decide whether a registration can be granted.

The introduction of new regulations, data requirements or test guidelines is a normal part of enhancing safety assessments for crop protection products. However, unpredictable new requirements and inappropriate deadlines have led to numerous delays of registrations of crop protection products in the past, especially in the authorization processes in the EU and in the NAFTA countries. Therefore, Bayer CropScience must anticipate new regulatory trends and must closely follow the process of developing and requiring new data. Bayer CropScience also actively participates in these processes by commenting on draft guidelines and regulations proposed by the authorities.

### ***Environmental Science Products***

In both the professional and the consumer business, as in crop protection, our products must obtain government regulatory approval prior to marketing. In most countries, Environmental Science products are regulated by authorities other than those which regulate the crop protection products. The regulatory requirements are often different from crop protection products, due to different routes of exposure. Generally, there is an increase of regulatory requirements, in particular in the United States, Europe and Japan. To some extent, the regulatory files developed for crop protection products with the same active ingredients can also be used for the regulatory purposes in the Environmental Science area.

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In the EU, certain products sold in the professional pest control area, as well as pest control products available to consumers, fall under the Biocidal Products Directive (BPD), which requires that complete regulatory dossiers be developed before placing on the EU market biocidal products or active substances for use in such products. Certain green industry products and consumer lawn and garden products are governed by the Plant Protection Directive, which requires authorization before products can be placed on the market.

In the United States, registration of Environmental Science products is granted by the EPA. There has been an increase of registration requirements due to the implementation of the Food Quality Protection Act (FQPA), which considers both dietary and non-dietary exposure aspects. Certain food-related regulatory requirements exist in other areas, notably in the EU.

The review period for registration depends on the country and could vary from two to five years for a product containing a new active ingredient.

### ***BioScience Products***

Plant biotechnology products, in particular those based on genetic modification, are subject to specific regulatory oversight covering environmental impact as well as use and trade of products and derivatives in food and feed. The number of countries that have regulatory frameworks concerning plant technology is increasing each year and, in countries that already have such regulations, the requirements are also increasing or changing. The most important countries, based on their importance to us as an agricultural center and/or trading partner, include the United States, Canada, the EU, Japan, Brazil, Argentina, Australia and China. In the United States, the main regulatory authorities are the USDA, the FDA and the EPA. The EU has implemented a set of new regulations including the creation of a new EU Food Safety Authority. Similar regulations in Japan are under review and being updated. Many Asian countries have developed regulatory frameworks over the last few years, most recently China, Taiwan, Korea and the Philippines. With the Cartagena Protocol on BioSafety, which came into force in September 2003, it is expected that more countries will establish regulatory frameworks over the next few years.

The timeframe for approvals varies substantially around the world. The development of the regulatory file will take two to three years. In the USA, Canada and Japan, typically the review of a regulatory file will take another one to two years. However in the EU, no approvals have been granted over the last five years, during which time the regulations have been updated.

### **Proposed new EU Regulations**

We must comply with an increasing range of regulatory measures concerning testing, manufacturing and marketing of our products. In some countries, including the United States, regulatory controls have become increasingly demanding. We expect this trend to continue and expand to other countries.

Within the European Union a new chemicals policy has been proposed and may become effective in 2005/2006. It will mandate a significant increase in the testing and assessment of all chemicals used, leading to increased costs and reduced operating margins for these products. Although we have adopted measures to address the stricter regulations, such as increasing the efficiency of our internal research and development process in order to reduce the impact of extended testing on time-to-market, stricter regulatory regimes could delay product development or restrict marketing and sales.

In addition, the EU directive on emissions trading may affect Bayer's business opportunities, especially in Europe. The directive requires EU member states to meet the carbon dioxide emissions targets set for each member state under EU legislation and based on the Kyoto Protocol. Emissions levels have to be reduced by 21 percent in Germany and 7.5 percent in Belgium, in each case based on 1990 carbon dioxide emission levels. Compliance may require material capital expenditures.

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### **Health, Safety and Environmental Regulation**

The production and distribution of Bayer products involves the use, storage, transportation, handling and disposal of toxic and hazardous materials. We are subject to increasingly stringent environmental regulations, which address:

emissions into the air;

discharges of waste water;

other releases into the environment;

generation, handling, storage, transportation, treatment and disposal of hazardous and non-hazardous material; and

construction and operation of facilities.

It is our policy to comply with all environmental, health and safety requirements and to provide workplaces for employees that are safe and environmentally sound. We track, check and evaluate all environmental legal initiatives and laws regarding their potential impact on our actual and past activities in order to develop appropriate measurements in a timely and effective manner. When necessary, we incur capital expenditures to ensure this. We expect that Bayer will continue to be subject to stringent environmental regulation. Although we cannot predict future expenditures, we believe that current spending trends will continue.

We are subject to regulations that may require us to remove or mitigate the effects of the disposal or release of chemical substances. Under some of these regulations, a current or previous owner or operator of property may be held liable for the costs of remediation on, under, or in its property, without regard as to whether it knew of or caused the presence of the contaminants, and regardless of whether the practices that resulted in the contamination were legal at the time they occurred. As many of our industrial sites have long histories, we cannot predict the effect these regulations will have on us. We cannot assure you that soil or groundwater contamination will not occur or be discovered.

In the United States, we are subject to potential liability under the U.S. Federal Comprehensive Environmental Response, Compensation, and Liability Act (commonly known as Superfund), the U.S. Resource Conservation and Recovery Act and related state laws for investigation and clean-up costs at a number of sites. At many of these sites, companies including Bayer have been notified that the EPA, the state governing body or private individuals consider such companies to be potentially responsible parties under Superfund or related laws. The proceedings relating to these sites are in various stages. The clean-up process at many sites is ongoing. We regularly review the liabilities for these sites and have accrued our best estimate of our ultimate liability for investigation or clean-up costs.

It is difficult to estimate the future costs of environmental protection and remediation because of uncertainties about the status of regulations, their future developments, and information related to individual sites, products and facilities. Taking into consideration our experience and currently known facts, we believe that capital expenditures and remedial actions to comply with environmental regulations will not have a material adverse effect on our financial position, results of operations or cash flows. As of December 31, 2003, we had reserved 200 million for environmental matters.

We believe that we are in substantial compliance with applicable environmental, health and safety laws and regulations. We devote considerable attention to the health and safety of our employees and the protection of public health and the environment. Although this compliance has not adversely effected our competitive position or business, we cannot predict the effect of possible future regulations. As a member of the American Chemical Council, Bayer is committed to the principles of *Responsible Care*®, the chemical industry's health, safety and environmental performance improvement initiative.



**Table of Contents****ORGANIZATIONAL STRUCTURE**

Since the reorganization of our Group, which was completed at the end of 2003, Bayer AG has been functioning as the Group's strategic holding company. The Bayer Group is managed by the four-member Board of Management of Bayer AG. Among other things, the Board of Management sets long-term targets and strategies for the Bayer Group and its subgroups and prescribes guidelines and principles for the corporate policy derived from them. The Board of Management furthermore decides on the Group's holdings, oversees the management, distributes the (financial) resources and is responsible for the financial management of the Group. The Corporate Center created within Bayer AG supports the Board of Management in performing its tasks, by providing certain governance, support and service functions.

Bayer AG consists of the following corporate center functions: the Corporate Office; Communications; Investor Relations; Corporate Auditing; International Human Resources & Organization; Human Resources Germany; Corporate Development; Law & Patents, Insurance; Finance; Group Accounting and Controlling; Governmental & Product Affairs; and Regional Coordination.

The activities of the seven business segments, which house the business operations, are performed by the operating companies Bayer HealthCare AG, Bayer CropScience AG, Bayer MaterialScience AG and Bayer Chemicals AG. Each operating company, together with the domestic and international subsidiaries assigned to it, forms a Bayer subgroup. Each of the four subgroups Bayer HealthCare, Bayer CropScience, Bayer Polymers and Bayer Chemicals is, within the framework of strategies, targets and guidelines determined by the Bayer AG Board of Management, an independent operating unit with worldwide business accountability and its own management. Each of the operating companies has entered into a control and profit and loss transfer agreement with Bayer AG.

Three legally independent service companies, Bayer Technology Services GmbH, Bayer Business Services GmbH and Bayer Industry Services GmbH & Co. OHG, provide support functions to the four subgroups as well as Bayer AG.

Apart from its interests in the operating and service companies, Bayer AG also has interests in other domestic and international companies.

For more information on our current organizational structure, see *Business*.

**Subsidiaries**

The following table lists Bayer AG's principal consolidated subsidiaries as of December 31, 2003 and its beneficial ownership interest in each.

Company Name and Place of Business	Bayer's Interest (%)
<b>Germany</b>	
Bayer Chemicals AG, Leverkusen	100
Bayer CropScience AG, Monheim	100
Bayer CropScience Deutschland GmbH, Langenfeld	100
Bayer CropScience GmbH, Frankfurt am Main	100
Bayer HealthCare AG, Leverkusen	100
Bayer MaterialScience AG, Leverkusen	100
Bayer Vital GmbH, Leverkusen	100
H.C. Starck GmbH, Goslar	100
Wolff Cellulosics GmbH & Co. KG, Bomlitz	100

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Company Name and Place of Business	Bayer's Interest (%)
<b><i>Other European Countries</i></b>	
Bayer Antwerpen N.V., Belgium	100
Bayer Biologicals S.r.l., Italy	100
Bayer CropScience France S.A., France	100
Bayer CropScience Holding S.A., France	100
Bayer CropScience Limited, U.K.	100
Bayer CropScience S.r.l., Italy	100
Bayer CropScience S.A., France	100
Bayer Diagnostics Europe Ltd., Ireland	100
Bayer International S.A., Switzerland	100
Bayer Pharma S.A., France	99.8
Bayer Polimeros S. L., Spain	100
Bayer Public Limited Company, U.K.	100
Bayer Rubber N.V., Netherlands	100
Bayer S.p.A., Italy	100
Quimica Farmaceutica Bayer, S.A., Spain	100
<b><i>North America</i></b>	
Bayer CropScience LP, USA	100
Bayer HealthCare LLC, USA	100
Bayer Inc., Canada	100
Bayer Pharmaceuticals Corporation, USA	100
Bayer Polymers LLC, USA	100
<b><i>Asia/Pacific</i></b>	
Bayer Australia Ltd., Australia	100
Bayer CropScience K.K., Japan	100
Bayer (India) Ltd., India	71.2
Bayer Medical Ltd., Japan	100
Bayer Polymers Co. Ltd., Hong Kong	100
Bayer South East Asia Pte Ltd., Singapore	100
Bayer Thai Company Ltd., Thailand	100
Bayer Yakuhin Ltd., Japan	100
Sumika Bayer Urethane Co., Ltd., Japan	60
<b><i>Latin America/ Africa/Middle East</i></b>	
Bayer CropScience Ltda., Brazil	100
Bayer de México, S.A.de C.V., Mexico	100
Bayer (Proprietary) Ltd., South Africa	100
Bayer S.A., Argentina	100
Bayer S.A., Brazil	100

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Also included in the consolidated financial statements are the following material associated companies:

<b>Company Name and Place of Business</b>	<b>Bayer's Interest (%)</b>
DyStar Textilfarben GmbH, Frankfurt am Main, Germany	35
DyStar Textilfarben GmbH & Co. Deutschland KG, Frankfurt am Main, Germany	35
Lyondell Bayer Manufacturing Maasvlakte VOF, Netherlands	50
PO JV, LP Corporation, USA	42.7

**PROPERTY, PLANTS AND EQUIPMENT**

We operate through a large number of offices, research facilities and production sites throughout the world. The principal executive offices of Bayer AG as well as a number of Bayer's key production facilities are located in Leverkusen, Germany. We also have facilities in Europe, North and South America, Asia, Oceania and Africa, of which the most important are in Germany and the United States. We also have other properties, including office buildings, laboratory and research laboratories and distribution centers.

Our policy is to acquire full ownership rights in our manufacturing facilities whenever possible. We own most of our manufacturing facilities and other properties. Where locally applicable law does not permit this or acquisition of full property rights is otherwise unfeasible, we acquire possessory interests conferring substantially the same rights of use as ownership (for example, German-law hereditary building rights or *Erbbaurechte* and granted land-use rights in Asian countries).

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### **Item 5. Operating and Financial Review and Prospects**

Prospective investors should read the following operating and financial review and prospects together with the consolidated financial statements and the notes to those financial statements included elsewhere in this annual report. We have prepared these financial statements in accordance with IFRS, which differs in some respects from U.S. GAAP. For a reconciliation of net income and stockholder's equity to U.S. GAAP, see Note 44 to our consolidated financial statements.

The forward-looking statements in this Item 5 are not guarantees of future performance. They involve both risk and uncertainty. Several important factors could cause our actual results to differ materially from those anticipated by these statements. Many of those factors are macroeconomic in nature and are, therefore, beyond the control of our management. See *Forward-Looking Information*.

We have based the presentation of our results in this section on certain significant accounting assumptions. For a more detailed description of these assumptions, see *Critical Accounting Policies*, below.

## **OVERVIEW**

We are a global company offering a wide range of products, including high-value pharmaceuticals, diagnostics and other health care products; agricultural products; polymers; and chemicals.

Bayer comprises the parent company, Bayer AG of Leverkusen, Germany, and over 330 consolidated subsidiaries. We are organized into seven business segments: Pharmaceutical, Biological Products; Consumer Care, Diagnostics; Animal Health; CropScience; Plastics, Rubber; Polyurethanes, Coatings, Fibers; and Chemicals. In 2003, we completed the implementation of plans to transform Bayer AG into a strategic holding company that holds our operating businesses through four newly-formed direct operating subsidiaries. See Item 4, *Information on the Company Business*.

Although Bayer AG was first incorporated in 1951, we trace our historical roots to Friedr. Bayer & Co., founded in 1863. Since our formation in 1951, we have pursued a program of growing both organically and through selective acquisitions. In 2001, we spent a total of 514 million on acquisitions. The largest acquisition in that year was the purchase by Bayer Corporation, our U.S. subsidiary, of the development, manufacturing and distribution rights for products that detect antibodies to the hepatitis C (HCV) and human immunodeficiency (HIV) viruses. Nearly equal in magnitude was our acquisition of the *Mikado*® corn herbicide, which included patents, other product rights and know-how.

In October 2001, we entered into an agreement to acquire Aventis CropScience from Aventis and Schering. We closed this transaction on June 3, 2002. In 2002, we also acquired Visible Genetics Inc. in Canada and Tectrade A/S in Denmark.

We selectively divest businesses and assets that no longer fit in our strategic plan. We took the following steps in the years indicated to streamline our portfolio and concentrate our business on our core businesses:

In 2001:

In May 2001, we sold our interest in the EC Erdölchemie joint venture, which we had previously classified under *Discontinuing Operations*.

During the first half of 2001, we sold our former acrylic fiber product lines and classified the remainder of the Fibers business group as *Discontinuing Operations*.

In 2002:

In May 2002, we decided to retain our Fibers business as part of Polymers. We included the Fibers business in our ongoing business for all periods beginning with the second quarter of 2002.

We sold Haarmann & Reimer effective September 30, 2002.

We sold the remaining 30 percent of our Agfa business segment, of which we had already divested 70 percent in 1999.

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Effective March 1, 2002, we sold our 94.9 percent interest in Bayer Wohnungen.

We sold a large part of the global household insecticides business of our Consumer Care business group.

We divested our French and Spanish generic pharmaceutical operations.

We contracted to sell our 50 percent interest in PolymerLatex. (This transaction closed on May 9, 2003.)

In 2003:

We sold the products (and the related rights) comprising the insecticidal active ingredients fipronil (for regions worldwide outside China) and ethiprole, as well as a number of fungicidal active ingredients (primarily for regions in Europe and, based on a non-exclusive license, for seed treatment outside Europe) to BASF. The sale included production facilities in Elbeuf, France.

We sold the remainder of the global household insecticides business to SC Johnson & Son Inc.

We sold our interest in Millennium Pharmaceuticals Inc. to Credit Suisse First Boston.

In the future, we plan to focus more closely on our strengths in the fields of health care, nutrition and innovative materials. The Board of Management and the Supervisory Board of Bayer AG have therefore decided to adjust the Group's structure and business alignment accordingly. We plan to place the Chemicals business (except H.C. Starck and Wolff Walsrode) and parts of the Polymers subgroup that we no longer regard as core businesses into an independent company, to be named Lanxess, which we plan to list on the Frankfurt Stock Exchange by early 2005. We intend to combine the other activities of the Polymers and Chemicals subgroups in the new Bayer MaterialScience subgroup. Our goal is to strengthen the competitiveness of our fast-growing, innovation-driven businesses in the HealthCare, CropScience and MaterialScience subgroups by concentrating on the special needs of these businesses.

Lanxess plans to focus on four core business activities: Chemical Intermediates, Performance Chemicals, Performance Plastics and Performance Rubber. All structures and processes will be adapted to the specific requirements of these businesses.

Because we have determined that we will be disposing of the Lanxess businesses, we began in 2003 to account for it as a Discontinuing Operation pursuant to IAS 35. In accordance with IAS 35, we show net sales from Discontinuing Operations and operating result from Discontinuing Operations on the face of our statement of income, and Note 6 to our Consolidated Financial Statements breaks down our Discontinuing Operations, including the Lanxess businesses, in our statement of income individually. We also show Discontinuing Operations separately in the discussion of our segments appearing below. We have restated the comparable information for past periods to segregate the Lanxess businesses from our continuing operations.

The following table sets forth net sales, operating result and net income (loss) from Discontinuing Operations attributable to each of the individual Discontinuing Operations shown in our financial statements for the three years under review and the segments to which they relate.

	Lanxess			Plasma			Haarmann & Reimer			Erdölchemie		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
	(euros in millions)			(euros in millions)			(euros in millions)			(euros in millions)		
Net sales	6,773	6,241	5,776	695	679	613	872	666		233		
Operating result	(57)	(109)	(1,299)	(139)	(111)	(353)	73	980		333		
Net income (loss)	(77)	(93)	(975)	(139)	(126)	(230)	34	954		326		
Affected segments	Plastics, Rubber/Polyurethanes, Coatings, Fibers/Chemicals			Pharmaceuticals, Biological Products			Chemicals			Chemicals		

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**CRITICAL ACCOUNTING POLICIES**

Critical accounting policies are those that are both most important to the portrayal of the Group's financial position and results, and that require application of management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. We are not aware of any reasonably possible events or circumstances that would result in different amounts being reported that would have a material effect on our results of operations or financial position.

Our significant accounting policies are outlined in the notes to the financial statements. While not all of these significant accounting policies require the Group to make difficult, subjective or complex judgments, we believe that the following accounting policies could be considered critical.

**Intangible Assets and Property, Plant and Equipment**

Intangible assets, including goodwill, and property, plant and equipment, are amortized over their estimated useful lives. Useful lives are based on our estimates of the period that the assets will generate revenue.

Intangible assets and property, plant and equipment are tested for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Impairment testing under IAS 36 requires management to compare the carrying value of the assets to the expected discounted future cash flows from the related assets. Determining the expected discounted future cash flows involves significant estimations, including future sales prices and sales volumes, costs, and risk-adjusted discount rates. In connection with the impairment review we conducted at year-end 2003, the necessity of which was indicated by sustained changes in the macroeconomic environment and the reorganization of our group, we estimated the future cash flows with our reoriented long-term planning. This in turn took into account revised views on the competitive environment in which our businesses operate, changes in our expectations of long-term price developments and our expectations about economic growth prospects in our target markets. The discounting process also requires assumptions and estimations, which have also changed as macroeconomic conditions have changed, concerning the cost of capital.

Although we believe that our estimates of useful lives, our assumptions concerning the macroeconomic environment and developments in our industries and our estimations of discounted future cash flows are appropriate, changes in assumptions or circumstances could require changes to our analysis. This could lead to additional impairment charges in the future, or writebacks of value should the trends we have identified reverse (or our assumptions and estimates prove incorrect). This would impact our future reported results.

In 2003, we continued to amortize goodwill according to IFRS, even though for U.S. GAAP purposes we ceased to amortize goodwill in accordance with Statement of Financial Accounting Standards (SFAS) No. 142 *Goodwill and Other Intangible Assets* (SFAS 142). SFAS 142 requires us to perform an annual review of our U.S. GAAP goodwill for impairment. We recognize impairment losses if necessary based on this annual review. As a result of the impairment test we conducted at the end of 2003, we wrote off, under U.S. GAAP (but not IFRS), 182 million of pre-1995 goodwill relating to a 1990 acquisition which we had capitalized under U.S. GAAP. In general, the process of evaluating goodwill involves making adjustments and estimates relating to the projection and discounting of future cash flows. In addition to their sensitivities to our assumptions regarding the future performance of the assets concerned, these evaluations are sensitive to changes in the discount rate we apply. An increase in discount rates increases the likelihood of impairment charges under U.S. GAAP.

**Pensions and other obligations**

We sponsor pension and other retirement plans in various forms covering employees who meet the plans' eligibility requirements. These plans cover the majority of our employees. We use several statistical and other models, which attempt to anticipate future events in calculating the expenses and liabilities related to the plans. These factors include assumptions about the discount rate, expected return on plan assets and rate of future compensation increases. In addition, our actuarial consultants also use statistical information such as withdrawal and mortality rates to estimate these factors. The actuarial assumptions used may differ materially from actual

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results due to changing market and economic conditions, higher or lower withdrawal rates or longer or shorter life spans of participants. Such differences may result in a significant impact on the amount of pension income or expense recorded in future years.

### **Environmental Provisions**

Our compliance with environmental laws and regulations may require us to remove or mitigate the effects of the disposal or release of chemical substances in jurisdictions where we do business or maintain properties. The cost of such compliance is provided for when it is probable and can be reasonably estimated. Provision amounts are estimated based on currently available facts, remediation strategies, regulations, our relative share of the total remediation costs, and discount rate. Changes in these assumptions could impact our future reported results.

### **Litigation Provisions**

As more fully described in Note 29 to the financial statements, we are involved in a number of legal proceedings. As a global company active in a wide range of life sciences and chemical activities, we have and may, in the normal course of our business become involved in proceedings relating to such matters as:

product liability;

patent validity and infringement disputes;

tax assessments;

competition and antitrust; and

past waste disposal practices and release of chemicals into the environment.

We cannot predict with certainty the outcome of any proceedings in which we are or may become involved. An adverse decision in a lawsuit seeking damages from us could result in a monetary award to the plaintiff and, to the extent not covered by our insurance policies, could significantly harm our business or the results of our operations. If we lose a case in which we seek to enforce our patent rights, we could sustain a loss of future revenue as other manufacturers begin to market products we developed.

Litigation cases and claims raise difficult and complex legal issues and are subject to many uncertainties and complexities, including, but not limited to, the facts and circumstances of each particular case and claim, the jurisdiction in which each suit is brought, and differences in applicable law. Upon resolution of any pending legal matters, we may incur charges in excess of presently established provisions and related insurance coverage. It is possible that our results of operations and cash flows could be materially affected by an ultimate unfavorable outcome of certain pending litigation.

### **Income Taxes**

We are required to make estimates in determining our provision for income taxes and our deferred tax assets and liabilities.

Additional estimates are made to determine whether valuation allowances are required against deferred tax assets. Such valuation allowances are recognized when it is not sufficiently certain that the assets will be realized. Uncertainties exist in respect of interpretation of complex tax regulations and the amount and timing of future taxable income. Differences between actual results and our assumptions, or changes in our assumptions in future periods, could result in adjustments to tax expense in future periods.

### **Use of Estimates**

The preparation of all financial statements includes the use of estimates and assumptions that affect a number of amounts included in our financial statements, including employee benefit costs and related disclosures, inventory valuations, sales allowances, income taxes and contingencies. We base our estimates on historical experience and other assumptions that we believe are reasonable. If actual amounts are ultimately different from estimates, revisions are included in our results of operations for the period in which the actual amounts become





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known. Historically, the aggregate differences, if any, between our estimates and actual amounts in any year have not had a significant impact on our consolidated financial statements.

**OPERATING RESULTS 2001, 2002 and 2003****Introduction**

The most significant drivers of our sales, results of operations and cash flows in 2003 were:

our decisions to separate the businesses being combined in Lanxess from our Group's remaining businesses and the determination, arising in part from our strategic reorientation, the Lanxess decision and the changing business conditions in our industries and generally, that it was appropriate to recognize impairment charges, unscheduled amortization expenses and other write-downs on a number of our businesses and investments;

the net gains and losses on dispositions of businesses and other assets described and set forth in *Acquisitions and Dispositions* below;

our incurrence of other charges that we view as special, consisting primarily of provisions established and other expenses incurred in connection with legal matters and some headcount reduction initiatives; and

the effects on our results of operations of the substantial strengthening of the euro against other currencies, especially the dollar.

In the consolidated operating results information we present below, we report, in addition to our operating result, a measure of operating result that excludes these items (other than exchange rate effects), all of which we refer to as special items. We present this measure because we believe that doing so assists readers in understanding the performance of our business without the large impacts on the net result figures resulting from our decisions to reorient our business and because of certain expenses (such as some of our impairments and provisions in respect of legal contingencies). The following table shows our operating profit, the special items and our operating profit excluding the special items.

	2001	2002	2003
	<u>          </u>	<u>          </u>	<u>          </u>
	(euros in millions)		
Operating result	1,676	1,610	(1,203)
Impairment charges and write-downs	(116)	(289)	(1,927)
Restructuring charges and unscheduled amortization	(216)	(470)	(508)
Portfolio changes	229	1,905	469
Other charges	(210)	(364)	(619)
	<u>          </u>	<u>          </u>	<u>          </u>
Total special items	(313)	782	(2,585)
Operating result excluding special items	1,989	828	1,382
	<u>          </u>	<u>          </u>	<u>          </u>

The following paragraphs describe these major drivers and the related special items we take into account in arriving at operating result excluding special items.

**Impairments, unscheduled amortization and restructuring charges**

In November 2003, we announced that we intend to strengthen our focus on our core businesses and therefore combine Bayer Chemicals (except for Wolff Walsrode and H.C. Starck) with certain parts of the Bayer Polymers business in a new company to be named Lanxess. The aim for this company is to be listed on the Frankfurt Stock Exchange by early 2005. After this separation, Wolff Walsrode and H.C. Starck will be grouped together with the remaining parts of the Bayer Polymers business in a wholly-owned subsidiary of Bayer Group called Bayer MaterialScience, and we intend to focus on our core businesses retained in this subsidiary as well as in Bayer HealthCare and Bayer CropScience.

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In light of the strategic realignment of our Group, and the changing business conditions for portions of it (which are described below under *Segment Data*), we determined that it was necessary to carry out impairment tests on those assets and investments in accordance with IAS 36 and to recognize unscheduled amortization on some of our businesses. Accordingly, we recognized charges related to impairments and other asset write-downs of 1,927 million in 2003 relating to portions of our polymers and chemicals activities and our plasma business.

We also incurred charges of 508 million in respect of restructuring measures and unscheduled amortizations, including closures of facilities and the related severance payments. Of this 508 million, we charged 408 million in respect of the closure of facilities and the cessation of business activities and the remaining 100 million relating primarily to write-downs of enterprise management systems. This was necessary when we changed and reoriented these systems when we reorganized our Group into a holding company structure. Of the 408 million in restructuring charges and unscheduled amortization in 2003, 182 million related to severance payments, 145 million related to unscheduled amortization of fixed assets and intangibles and 81 million related to other expenses. We expect that the majority of the severance payments and other expenses charged in 2003 will be paid in 2004.

In 2002, we recognized impairment charges totaling 289 million and restructuring charges and unscheduled amortization totaling 470 million. The impairment charges related to our polyols and fibers businesses. Of the 470 million, 372 million related to the closure of facilities and the cessation of business activities, including severance payments, and 98 million related to write-downs on our enterprise management systems as described above.

In 2001, we incurred impairment charges totaling 116 million and charges in respect of restructuring measures and unscheduled amortization totaling 216 million. The impairment charges were on inventory and resulted from the voluntary withdrawal from the market of *Lipobay/Baycol*.

The following table sets forth the components of these charges during each of the last three years.

	2001	2002	2003
	(euros in millions)		
Impairment charges and write-downs	(116)	(289)	(1,927)
Restructuring charges and unscheduled amortization	(216)	(470)	(508)
<b>Total</b>	<b>(332)</b>	<b>(759)</b>	<b>(2,435)</b>

The following table allocates the restructuring charges and unscheduled amortization of fixed assets and intangibles we recognized in 2003 according to the businesses and activities to which they relate:

Activity/ Business in 2003	Severance payments	Unscheduled amortization	Other charges	Total
	(euros in millions)			
Closure of research facilities in Kyoto, Japan and Berkeley, California	10	101	28	139
Continued integration of businesses acquired in 2002 from Aventis CropScience	100	2	0	102
Personnel adjustments in Polymers area	52	0	0	52
Plant closure in West Haven, Connecticut	8	21	3	32
Closure of the polyether production site at Institute, West Virginia	3	12	4	19
Further ongoing restructuring programs to improve profitability	9	9	46	64
<b>Totals</b>	<b>182</b>	<b>145</b>	<b>81</b>	<b>408</b>
Write-downs on enterprise management systems	0	100	0	100
<b>Grand totals</b>	<b>182</b>	<b>245</b>	<b>81</b>	<b>508</b>



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The following table allocates the restructuring charges and unscheduled amortization of fixed assets and intangibles we recognized in 2002 according to the businesses and activities to which they relate. Due to the reorganization of our businesses in 2003 we are unable to separate severance payments and other charges for 2002 and 2001 without unreasonable effort.

Activity/ Business in 2002	Unscheduled amortization	Severance payments and other charges	Total
(euros in millions)			
Integration of businesses acquired from Aventis CropScience	0	89	89
Restructuring of the rubber production site in Sarnia, Ontario, Canada	41	26	67
Shutdown of polymers production in Rieme, Belgium	31	7	38
Shutdown of production of iron oxide in New Martinsville, West Virginia	10	20	30
Closure of powder coatings production in Hicksville, New York	18	8	26
Restructuring measures in connection with sale of organic pigments facility in Bushy Park, South Carolina	0	23	23
Restructuring of the Consumer Care production in Elkhart, Indiana	8	12	20
Closure of production plant in Barcelona, Spain	2	17	19
Expenses in connection with cooperation arrangement with Aventis Behring	0	17	17
Reduction of headcount in Polymers area	0	10	10
Restructuring in New Martinsville, West Virginia	7	3	10
Further ongoing restructuring programs to improve profitability	14	9	23
Totals	131	241	372
Write-downs on enterprise management systems	98	0	98
Grand totals	229	241	470

The following table allocates the restructuring charges and unscheduled amortization of fixed assets and intangibles we recognized in 2001 according to the businesses and activities to which they relate.

Activity/ Business in 2001	Unscheduled amortization	Severance payments and other charges	Total
(euros in millions)			
Restructuring of styrenics production in Brazil, U.S.A. and Germany	35	30	65
Restructuring of several facilities regarding the Lyondell integration, U.S.A., France and Germany	7	32	39
Restructuring plans in Baytown, Texas and New Martinsville, West Virginia	0	35	35
Restructuring measures in connection with sale of organic pigments facility in Bushy Park, South Carolina	0	20	20
Restructuring measures at Bayer AG	0	17	17
Restructuring of the Consumer Care production in Elkhart, Indiana	9	6	15
Restructuring measures relating to iron oxide production in New Martinsville, West Virginia	10	3	13
Further ongoing restructuring programs to improve profitability	12	0	12
Totals	73	143	216

**Acquisitions and Dispositions**

Acquisition and disposition activities also affect our results of operations, and are responsible for substantial swings in our results from year to year. As a diversified global company, we often enter into numerous merger

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and acquisition transactions that, taken as a whole, can have a significant effect. In connection with our strategic reorientation and focus on our core businesses, we have been disposing of numerous businesses, investments and participations. Our most recent transactions are summarized above in *Overview*. Our net gains from our dispositions were 469 million in 2003, 1,905 million in 2002 and 229 million in 2001.

Acquisitions and divestitures during 2003 and 2002 had a negative effect on net sales in 2003 of 95 million, and acquisitions and divestitures during 2002 and 2001 had a positive effect on net sales of 1.9 billion. This activity affected the comparison between the three years sales figures as shown in the following two tables:

	<b>Change in 2003 from 2002</b>
	<b>(euros in millions)</b>
<i>Acquisitions</i>	
Aventis Crop Science Holding S.A. (Acquired in 2002)	1,450
Visible Genetics Inc. (Acquired in 2002)	9
Tectrade A/S (Acquired in 2002)	6
Other	1
	<u>1,466</u>
<i>Divestitures</i>	
Haarmann & Reimer Group (divested in 2002)	(666)
Dispositions in compliance with antitrust conditions by Bayer	
CropScience	(435)
Household insecticides business	(272)
PolymerLatex group	(117)
Organic pigments	(54)
Walothén GmbH	(10)
Other	(7)
	<u>1,561</u>
Net effects on sales	<u>(95)</u>
	<u>          </u>
	<b>Change in 2002 from 2001</b>
	<b>(euros in millions)</b>
<i>Acquisitions</i>	
Aventis CropScience Holding S.A.	1,977
Tectrade A/S	12
Other	3
	<u>1,992</u>
<i>Divestitures</i>	
ChemDesign Corporation (divested in 2001)	(56)
Covexx Films (divested in 2001)	(42)
Sale of the generic business	(16)
Other	(8)
	<u>          </u>

	(122)
Net effect on sales	<u>1,870</u>



**Table of Contents****Changes in Exchange Rates**

Our net sales and our operating result were significantly affected during 2003 by changes in exchange rates. Because a substantial portion of our assets, liabilities, sales and earnings are denominated in currencies other than the euro zone currencies, we have exposure to fluctuations in the values of these currencies relative to the euro. These currency fluctuations, especially the fluctuation of the value of the U.S. dollar relative to the euro, but also fluctuations in the currencies of the countries in which we have significant operations and/or sales, can have a material impact on our results of operations. We face both transaction risk, where our businesses generate sales in one currency but incur costs relating to that revenue in a different currency, and translation risk, which arises when we translate the income statements of our subsidiaries into euro for inclusion in our financial statements. With respect to transaction risk, we generally enter into hedging transactions for a significant portion of our forecasted operational foreign currency exposure and therefore do not believe that even significant increases or decreases in the exchange rates of the euro relative to other world currencies materially affect our cash flows or results of operations. However, transaction risks could over time adversely affect our cash flows and results of operations to the extent we are unable to reflect changed exchange rates in the pricing of our products in local currency. We do not quantify the effects on our financial statements of transaction risks. Translation risks, which we do quantify and against which we do not hedge, do not affect our local currency cash flows or results of operations, but do affect our consolidated financial statements. In general, declines in the value of the U.S. dollar relative to the euro, such as those that occurred in 2003, will decrease the euro value of our sales and earnings made in the dollar zone and decrease the competitiveness of our products produced in Europe in the United States and in other countries with falling currencies.

In 2003, the euro appreciated substantially against the dollar and other currencies. This adversely affected our net sales in cases in which products are sold at prices denominated in one of the currencies against which the euro strengthened. To the extent that our non-euro denominated expenses do not match our non-euro denominated sales, our operating result is also adversely affected by these translation effects. The following table sets forth the exchange rates for the euro of currencies important for our results of operations during 2003:

	Units of foreign currency per euro			
	At December 31,		Average for the year ended December 31,	
	2002	2003	2002	2003
Argentinean pesos	3.53	3.70	2.97	3.33
Brazilian reals	3.71	3.66	2.78	3.47
Canadian dollars	1.66	1.62	1.48	1.58
Great Britain pounds	0.65	0.70	0.63	0.69
Japanese yen	124.39	135.05	118.06	130.96
Mexican pesos	10.99	14.18	9.15	12.22
Swiss francs	1.45	1.56	1.47	1.52
U.S. dollars	1.05	1.26	0.95	1.13

The translation effects of these currency changes had a negative impact on our sales in 2003, decreasing them by 2.5 billion compared to 1.5 billion in 2002 and a positive effect of 0.1 billion in 2001. For further information concerning our exchange rate exposure, see Item 11, *Quantitative and Qualitative Disclosures about Market Risk*.

**Raw Materials, Pricing**

The single most important factor that affects our costs on a continuing basis is the price of raw materials for our products. We seek to reduce our sensitivity to fluctuations in many raw material prices by producing at least a part of our requirements internally, within the Bayer Group. Petrochemical feedstocks are important raw materials in many of our products, especially in our Polymers and Chemicals segments. We do not produce significant volumes of petrochemicals. Effective May 1, 2001, we sold our 50 percent interest in the EC Erdölchemie joint venture, which had been our one significant venture into this area, to Deutsche BP, our former

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joint venture partner. Because of this lack of internal petrochemicals sourcing, as well as the volatility of oil prices in recent years, our single greatest raw-materials sensitivity is to fluctuations in the price of petrochemicals. In the first half of 2003, these prices were about 10 percent above the average prices in 2002; in the second half, they returned to a level comparable to those at the beginning of 2002, which were slightly above the average prices for that year.

**Bayer Group**

The following table shows sales and income for Bayer as a whole.

	2001	Change from Previous Year (%)	2002	Change from Previous Year (%)	2003
(euros in millions)					
Net sales from continuing operations	21,702	1.5	22,038	0.6	22,178
Net sales from discontinuing operations	8,573	(11.5)	7,586	(15.8)	6,389
Net sales	30,275	(2.2)	29,624	(3.6)	28,567
Gross profit	13,047	(8.5)	11,944	(1.8)	11,733
as percentage of sales (%)	43.1		40.3		41.1
Selling expenses	(7,205)	3.8	(6,933)	6.5	(6,484)
Research and development expenses	(2,559)	(0.7)	(2,577)	6.3	(2,414)
General and administrative expenses	(1,037)	(40.8)	(1,460)	(15.8)	(1,690)
Other operating income	885	205.8	2,706	(57.2)	1,158
Other operating expenses	(1,139)	(81.7)	(2,070)	(69.4)	(3,506)
Operating result from continuing operations	1,466	(42.0)	850	(47.2)	449
Operating result from discontinuing operations	210	261.9	760		(1,652)
Operating result	1,676	(3.9)	1,610		(1,203)
as percentage of sales (%)	5.5		5.4		(4.2)
Non-operating result	(561)	(16.6)	(654)	(20.9)	(791)
Income before income taxes	1,115	(14.3)	956		(1,994)
Net income	965	9.8	1,060		(1,361)

The following table shows a geographical breakdown of our sales based on where we sold our products.

	2001	Change from Previous Year (%)	2002	Change from Previous Year (%)	2003
(euros in millions)					
Europe	12,383	(0.9)	12,266	(0.8)	12,162
North America	9,720	(7.4)	9,005	(4.1)	8,636
Asia/Pacific	4,826	1.6	4,901	(7.6)	4,529
Latin America/ Africa/Middle East	3,346	3.2	3,452	(6.1)	3,240

**2003 compared with 2002***Net Sales*

Net sales represents the gross inflow of economic benefits from the sales of goods and services that we receive or that are receivable by us. Net sales excludes rebates and discounts that we give our customers, as well as the amounts that we collect on behalf of third parties, such as sales taxes, goods and services taxes and value added taxes. Net sales of the Bayer Group declined by 3.6 percent, or 1,057 million, from 2002 to 28,567 million in 2003. Net sales from continuing operations remained essentially flat, while the difficult economic and industry conditions contributed to a 15.8 percent decline in net sales of discontinuing operations. Total net sales increased, however, in local currency terms. Had the average exchange rates we used to translate



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our non-euro denominated revenues into euros stayed constant in 2003 as compared with 2002 rather than declining as they in fact did, our net sales would have increased, primarily due to volume increase, by 1,433 million, or 4.8 percent; this was more than offset by the 2,545 million less in net sales caused by the currency changes. Prices were on average fairly flat in 2003; in comparison with 2002, price increases led only to 150 million of increased net sales, an increase of 0.5 percent. Changes in our portfolio of businesses accounted for a 95 million reduction in our net sales.

*Gross Profit*

Gross profit represents net sales after cost of goods sold and services provided. Cost of goods sold and services provided include the production costs of goods sold and the cost of goods purchased for resale.

The cost of goods sold and services provided decreased by 4.8 percent in 2003 to 16,834 million, due mainly to currency effects, as our non-euro denominated costs were also reduced by the strong euro. Other cost-reducing factors, apart from portfolio effects, were improved manufacturing efficiencies in HealthCare and plant closures in Polymers.

*Operating Result*

Operating result represents gross profit after selling expenses, research and development expenses, general administration expenses and other operating income and expenses. We distinguish between our result from continuing and discontinuing operations.

Selling expenses diminished by 6.5 percent to 6,484 million due to currency and portfolio factors.

The 15.8 percent increase in general administration expenses, to 1,690 million, was largely related to the Aventis CropScience acquisition.

Other operating income amounted to 1,158 million. This figure includes the gain from the sale of the remaining part of the household insecticides business ( 256 million), the PolymerLatex group ( 28 million) and real estate in Germany, Belgium and Spain ( 106 million). The previous year's figure contained the gain from the sale of the Haarmann & Reimer group ( 933 million), company housing units ( 452 million), a large part of the household insecticides business ( 272 million) and generics activities ( 75 million).

Other operating expenses increased to 3,506 million, including impairment charges and other write-downs of 1,927 million. The impairments resulted mainly from a global review of asset values according to IAS 36 in connection with the planned strategic realignment of the Bayer Group and the sustained adverse conditions affecting our industrial business. Other operating expenses also included the 300 million we charged to income as a result of the settlement we reached with a majority of our insurers in connection with *Lipobay/Baycol*. (See Item 8 *Legal Proceedings*.)

Operating result declined to a loss of 1,203 million, with special items mainly impairment charges, restructuring expenses and items related to portfolio changes having a 2,585 million net negative effect. For a breakdown of these special items, see *Overview Introduction Impairment, unscheduled amortization and restructuring charges*. Excluding these items, however, operating profit climbed by 66.9 percent to 1,382 million. Operating profit from continuing operations was 47.2 percent below 2002's level.

*Non-Operating Result*

The non-operating result declined to an expense of 791 million, due particularly to a drop in the net result of investments in affiliated companies to an expense of 93 million. This decrease was attributable to write-downs of our investments in DyStar and Curagen and a net loss position for companies included at equity. The principal item of non-operating income was the 190 million tax-free gain from the sale of our equity interest in Millennium Pharmaceuticals.

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### *Income (Loss) Before Income Taxes*

We incurred a loss before income taxes of 1,994 million in 2003, as compared with income before income taxes of 956 million in 2002.

### *Income Taxes*

We recognized an income tax credit of 645 million in 2003, as compared with a credit of 107 million in 2002. The tax rate for our Group was 32 percent. The tax result was composed of income taxes paid or payable of 607 million, offset by deferred tax changes that led to a net credit of 1,252 million.

### *Net Loss*

The Group recorded a 1,361 million net loss.

### **2002 compared with 2001**

#### *Net Sales*

Our net sales were down by 651 million in 2002, a decrease of 2.2 percent. Currency movements and price declines reduced sales by 4.8 percent and 2.4 percent, respectively, while portfolio changes particularly the acquisition of Aventis CropScience added 5.4 percent.

Sales in our Pharmaceuticals, Biological Products segment decreased 16.8 percent in 2002 to 4,767 million. Sales in our Consumer Care, Diagnostics segment decreased 8.5 percent to 3,755 million. Sales in our Animal Health segment declined 0.9 percent to 850 million, while sales in our CropScience segment increased 65.5 percent, to 4,697 million. Sales in our Plastics, Rubber segment decreased 3.4 percent to 5,210 million. Sales in the Polyurethanes, Coatings, Fibers segment decreased 1.2 percent to 5,213 million. Sales in our Chemicals segment decreased 16.9 percent to 4,322 million. See *Segment Data*, below, for a more detailed discussion of the results of each of our business segments.

#### *Gross Profit*

Our gross profit decreased 8.5 percent in 2002.

#### *Operating Result*

Our operating result fell 3.9 percent to 1,610 million in 2002 from 1,676 million in 2001. We incurred special charges of 1,123 million relating mainly to asset write-downs, restructuring measures and site consolidations. For a breakdown of these special items, see *Overview Introduction Impairment, unscheduled amortization and restructuring charges*. Also included here are provisions established in connection with an agreement reached with the U.S. federal authorities relating to an investigation into pharmaceutical product prices. These charges were partially offset by special income of 1,905 million, generated mainly by the sale of the Haarmann & Reimer group, Bayer Wohnungen GmbH and the household insecticides business. The previous year's figure contained 333 million pertaining to EC Erdölchemie.

The operating result before special items decreased by 58.4 percent to 828 million. We attribute this development primarily to additional depreciation and amortization of goodwill determined and inventories remeasured in purchase accounting following the Aventis CropScience acquisition.

In 2002, our selling expenses decreased 3.8 percent, while research and development expenses increased 0.7 percent. General administration expenses increased 40.8 percent mainly due to expenses incurred in connection with the reorganization of the Bayer Group.

#### *Non-Operating Result*

Our non-operating loss for 2002 increased 16.6 percent over the previous year, mainly because of the additional interest expense associated with the financing of the Aventis CropScience acquisition and also as a



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consequence of securities write-downs. Income from investments in affiliated companies was sharply higher due to the sale of our interest in Agfa-Gevaert N.V.

*Income Before Income Taxes*

Our income before taxes decreased by 14.3 percent from 2001 to 956 million.

*Income Taxes*

The lower operating result, tax-free income and deferred tax assets resulted in net tax income of 107 million. The effective tax rate (*i.e.*, adjusted for tax free income and expenses) calculated on taxable income was 37.5 percent.

*Net Income*

Group net income rose by 9.8 percent to 1,060 million.

**Segment Data**

We use operating result before special items as an internal reporting measure for our segments in order to promote comparability from period to period. The special items we report include primarily expenses relating to impairment charges, accelerated depreciation, restructuring measures charged to operating result, costs of facilities shutdowns and income from divestments. On a consolidated basis, operating result before special items is considered a non-GAAP financial measure under applicable rules of the Securities and Exchange Commission.

*Pharmaceuticals, Biological Products*

	2001	Change from Previous Year (%)	2002	Change from Previous Year (%)	2003
	(euros in millions)				
Net sales (external), continuing operations	5,034	(18.8)	4,088	1.1	4,132
Net sales (external), discontinuing operations	695	(2.3)	679	(9.7)	613
<b>Total net sales (external)</b>	<b>5,729</b>	<b>(16.8)</b>	<b>4,767</b>	<b>(0.5)</b>	<b>4,745</b>
Intersegment sales	38	(13.2)	33	54.5	51
Operating result from continuing operations	191		(75)	4.0	(72)
Operating result from discontinuing operations	(139)	20.1	(111)	(218.0)	(353)
<b>Total operating result</b>	<b>52</b>		<b>(186)</b>	<b>(128.5)</b>	<b>(425)</b>
Special items	(321)	(3.7)	(333)	(149.8)	(832)
<b>Operating result before special items</b>	<b>373</b>	<b>(60.6)</b>	<b>147</b>	<b>176.9</b>	<b>407</b>

The primary special items were as follows:

Year	Nature of special item	Income/ charge
(euros in millions)		
2001	Write-downs of inventories and recall charges in connection with <i>Lipobay/Baycol</i>	(328)
2002	Legal provisions for settlement with U.S. authorities in the context of an investigation into pharmaceuticals product prices	(272)

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	Restructurings and write downs	(49)
2003	Charges taken on the basis of the final agreement reached with the majority of insurers in connection with <i>Lipobay/Baycol</i>	(300)
	Impairments and write-downs of plasma business	(317)
	Shutdown costs	(171)



**Table of Contents***2003 compared with 2002*

Sales of the Pharmaceuticals, Biological Products segment, at 4,745 million in 2003, almost matched the 4,767 in sales of the previous year. Sales increased, however, in local currency terms. Had the average exchange rates we used to translate our non-euro denominated revenues into euros stayed constant in 2003 as compared with 2002 rather than declining as they in fact did, our net sales in the Pharmaceuticals, Biological Products segment would have been 542 million higher, and would have risen by 11.4 percent in comparison with 2002.

Sales growth in the Pharmaceuticals Division was to a large extent driven by the successful introduction of the erectile dysfunction drug *Levitra*®, which is now being marketed in the United States, Europe, numerous South American countries and the Asia/Pacific region. In the United States the most significant market for *Levitra*® the product had already captured a 16 percent share of new prescriptions by the end of 2003, according to the data published by International Medical Statistics (IMS) Dataview. *Levitra*® also made inroads in new prescriptions in other major markets. *Levitra*® accounted for 144 million of net sales in 2003, its first year on the market. We are engaged in a dispute with Pfizer, Inc., in which Pfizer claims that the sale of *Levitra*® infringes upon Pfizer's U.S. patent relating to products for the treatment of erectile dysfunction. See Item 8, *Financial Information - Legal Proceedings - Patent validity challenges and infringement proceedings; patent-related antitrust actions - Vardenafil-related actions*. Sales of the respiratory antibiotic *Avalox*®/*Avelox*® continued to expand in a highly competitive environment, with sales of this product rising by 6.8 percent to 299 million. Had the average exchange rates we used to translate our non-euro denominated revenues into euros stayed constant in 2003 as compared with 2002, sales of this product would have shown a 20.4 percent increase. The increased net sales attributable to *Levitra*® and *Avalox*®/*Avelox*® were offset in part by a decline in sales of the antihypertensive drug *Adalat*®, which fell by 15.5 percent to 676 million due to increased competition from producers of generic substitutes, particularly in the United States. Had the average exchange rates we used to translate our non-euro denominated revenues into euros stayed constant in 2003 as compared with 2002, *Adalat* sales would have declined by 7.6 percent. Sales of our anti-infective *Ciprobay*®/*Cipro*®, our largest volume health care product in terms of net sales, remained constant at the high level of 1,411 million, with sales in local currencies terms rising by 14.2 percent. The increase was mainly attributable to continued strong demand in the United States, especially product sales to the U.S. generics manufacturer Barr Laboratories and the introduction of the once-daily formulation *Cipro*® XR for the treatment of urinary tract infections. Following the expiration of the U.S. patent for *Cipro*®, the Food and Drug Administration extended Bayer's exclusive right to market the antibiotic *Cipro*® (for twice-daily administration) in the United States until June 2004. We expect the net sales attributable to *Cipro*® to decline in coming periods as generic products erode its market share in the absence of patent protection. Complementing our cardiovascular risk management portfolio is the innovative in-licensed antihypertensive drug *Kinzalmono*®/*Kinzalkomb*®, which has been launched in several European countries, including Germany and Switzerland.

Due to substantially increased releases of product and volumes sold, our sales of *Kogenate*®, our recombinant Factor VIII clotting factor, expanded by 24.3 percent in 2003, or 97 million, to 497 million. Had exchange rates stayed consistent, our sales of *Kogenate*® would have risen by 33.4 percent, partly, we believe, as a result of increases in market share, particularly in the United States and Japan.

The market where we view our growth prospects the most optimistically for Pharmaceuticals and Biological Products is North America. However, sales (in euro terms) in the North American market, as well as in the Asia/Pacific and Latin America/ Africa/ Middle East regions, were adversely affected in 2003 by the unfavorable exchange rate movements described above. Net sales in Europe remained essentially steady in 2003 as compared to 2002.

We expect our sales environment to be increasingly challenging. European pharmaceutical companies are operating in an increasingly difficult environment marked by ongoing cost-containment measures in the health care sector. In the United States, while the market for our products continues to develop favorably overall, there is a growing debate about ways to reduce expenditure on drugs, for example through reimports. In Japan, market growth in 2003 was considerably slower than in the United States or Europe. Developments like these may reduce the prices we can charge for our products in these important markets and, if we are unable to reduce our costs proportionally, may adversely affect our results of operations.

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Operating result before special items for the segment grew by 260 million, or 176.9 percent, in 2003, to 407 million, due mainly to the upward trend in the Pharmaceuticals Division and the *Kogenate*® business of the Biological Products Division. In Pharmaceuticals, the improvement was also aided by cost reductions achieved through closures and relocations of production facilities and the consolidation of research activities. Additional contributing factors in the Biological Products Division were increases in the efficiency of some of our production processes and improved cost structures for *Kogenate*®.

Special items in 2003 comprised primarily impairments of the plasma business of our Biological Products Division and charges in respect of the shutdowns of our research centers in Kyoto, Japan, the termination of research activities in Berkeley, California and of a production facility in West Haven, Connecticut. We charged 300 million in respect of the agreement reached with a majority of our insurers in connection with *Lipobay/Baycol*. See Item 8 *Legal Proceedings*.

To further streamline our portfolio, we intend to divest the plasma business. These activities are therefore reported as discontinuing operations. The *Kogenate*® business is not affected by this decision.

*2002 compared with 2001*

Sales in our Pharmaceuticals, Biological Products segment declined by 16.8 percent in 2002. Sales in the Pharmaceuticals business group decreased 22.9 percent, or 1,096 million, to 3,688 million. We attribute this development primarily to the withdrawal of the cholesterol-lowering drug *Lipobay/Baycol* (which accounted for net sales of 367 million in 2001) and to lower sales of the antibiotic *Ciprobay*®/*Cipro*®, for which demand had been particularly high in the previous year due to its indication for anthrax (*Ciprobay*®/*Cipro*® sales were 1,411 million in 2002, a 28.2 percent decline from the 1,964 million in 2001). Also, sales of the antihypertensive *Adalat*® were down, due to increased competition from generic products. The drivers behind the growth in Pharmaceuticals that offset the above mentioned declines in part were the respiratory antibiotic *Avalox*®/*Avelox*® and the cardiovascular drug *Aspirin Cardio*®. Sales in the Biological Products business group expanded by 14.2 percent, or 134 million, to 1,079 million. This was due primarily to significant growth in volumes for our *Kogenate*® clotting factor.

The segment's operating result before special items decreased to 147 million in 2002 from 373 million, a change of 60.6 percent from 2001. We attribute this development primarily to lower sales of *Cipro*® and *Adalat*®, and the market withdrawal of *Lipobay/Baycol*.

In 2002, we incurred special charges of 333 million. More than half this amount represented provisions for expected payments under an agreement being negotiated with U.S. federal authorities. This agreement, which concerned an investigation into pharmaceutical product prices, has since been finalized.

*Consumer Care, Diagnostics*

	2001	Change from Previous Year (%)	2002	Change from Previous Year (%)	2003
	(euros in millions)				
Net sales (external)	4,104	(8.5)	3,755	(11.2)	3,336
Intersegment sales	2	0	2	100.0	4
Operating result	342	76.0	602	(2.2)	589
Special items	(40)		214	25.2	268
Operating result before special items	382	1.6	388	(17.3)	321

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The primary special items were as follows:

Year	Nature of special item	Income/ charge
		(euros in millions)
2001	Voluntary discontinuation of marketing of PPA containing products	(25)
2002	Divestment of household insecticides	272
	Shutdown and restructuring charges	(44)
2003	Divestment of household insecticides	256

Sales of the Consumer Care Division declined by 18.2 percent, or 313 million, to 1,403 million, mainly due to the divestment of the household insecticides business and the strength of the euro. Of this change, 272 million related to the divestment of the household insecticides business, the net sales of which were 345 million in 2002 and 73 million in 2003 (up to the effective date of the divestment). The rise of the euro against non-euro currencies led to a decline of 100 million in net sales. Excluding the net sales relating to this divested business in both years, and had we translated our non-euro denominated net sales at the average exchange rates applicable in 2002 rather than those applicable in 2003, net sales would have increased by 11.6 percent. This business thus expanded much faster than the market, which, according to our internal estimate based on regional Information Resources Inc. (IRI) and IMS data, grew by 3 percent.

In the United States, the market in which the Consumer Care division has grown most significantly in recent periods, we successfully launched our *One-A-Day*® Weight Smart vitamin product, which posted sales of 60 million in its first year on the market. In the United States, sales of our analgesic *Aleve*® advanced by 18.8 percent in local currency terms (but fell 0.7 percent in euro terms), boosting our share of the market for over-the-counter pain relievers according to IRI. Sales of the Diagnostics Division were down by 5.2 percent, or 106 million, to 1,933 million. Adjusting for the 209 million decline in Diagnostic net sales attributable to the above mentioned changes in exchange rates, net sales of the Diagnostics Division would have increased 5.1 percent. Sales of our Professional Testing products increased 10.6 percent, also in local currency terms, while *ADVIA*® *Centaur* experienced a 24.4 percent sales increase in local currency terms and a 13.8 percent increase, to 387 million, in euro terms.

Sales in Self-Testing declined by 14.2 percent, to 626 million, due to negative currency effects and heightened competitive pressure, with the United States and Europe accounting for most of the decline. We are hopeful that the new *Ascensia*® diabetes care systems we introduced in mid-2003 will help to improve our market position in Self-Testing once again. In the German market, *Ascensia*® *Contour*, on the basis of IRI data, appeared to be gaining market share by the end of 2003.

Based on our industry research (in turn based on IRI and IMS), sales of over-the-counter (OTC) non-prescription products generally developed well in 2003, with particularly strong growth in the United States due to several drugs attaining non-prescription status. Sales also increased due to a strong cold and flu season in Europe and North America. On the other hand, the over-the-counter drugs business in Europe continued to be hampered by the effects of health care reforms. The global diagnostic products industry grew more slowly than in the preceding years, the main reasons being the negative trend for blood glucose monitoring systems, particularly in the United States, and the weak economy in our principal markets for these products.

Operating result for the Consumer Care, Diagnostics segment slipped by 2.2 percent to 589 million, marred by the lower sales in Self-Testing and adverse currency factors. We successfully completed the divestment of the household insecticides business, initiated in 2002, to U.S.-based SC Johnson & Son, Inc. Of the total gain of 528 million on this sale, we realized 256 million in 2003.

The special items in both 2003 and 2002 related mostly to gains on our sale of the household insecticide business.

*2002 compared with 2001*

Sales in our Consumer Care, Diagnostics segment decreased by 8.5 percent in 2002, from 4,104 million in 2001 to 3,755 million in 2002. Currency depreciation in Latin America and inventory reduction by North

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American drug suppliers caused sales of the Consumer Care business group to decline by 18.1 percent, or 379 million, to 1,716 million. Sales of the Diagnostics business group rose by 1.5 percent, or 30 million, to 2,039 million, driven mainly by growth in laboratory diagnostic systems and nucleic acid diagnostics.

The segment's operating result before special items increased to 388 million in 2002, a change of 1.6 percent from 2001. This increase was a result of improved business performance of Diagnostics in North America, as well as costs saved through CURE, our internal restructuring program.

The net special income of 214 million was primarily related to the sale of Consumer Care's household insecticides business.

**Animal Health**

	2001	Change from Previous Year (%)	2002	Change from Previous Year (%)	2003
(euros in millions)					
Net sales (external)	858	(0.9)	850	(7.1)	790
Intersegment sales	4	(75.0)	1	700.0	8
Operating result	162	4.9	170	0	170
Special items <sup>(1)</sup>	0		(11)		22
Operating result before special items	162	11.7	181	(18.2)	148

(1) Special items were accounted for primarily by gains from the disposal of the rights to the *Bayovac®/Baypamun®* products in 2003 and charges in 2002 for a writedown on an enterprise management system.  
*2003 compared with 2002*

Sales of the Animal Health segment fell by 7.1 percent, or 60 million, to 790 million, due primarily to negative currency effects. Had exchange rates not changed as they did and our non-euro denominated net sales had been translated into euro at the same exchange rates as in 2002, our net sales would have been 40 million higher than as reported, and sales would have risen by 4.7 percent. This currency-adjusted positive performance resulted primarily from the successful launch in North America of the new antiparasitic treatment *Advantix®*. Sales in Europe remained at the previous year's level. We experience declines in net sales in our other regions primarily due to the negative currency movements.

As part of our ongoing portfolio adjustments, the rights to the *Bayovac®/Baypamun®* products were sold to Pfizer Animal Health in December 2003.

We believe that the global market for animal health products continued to grow at a moderate pace in 2003; we observed more positive trends in North America, Europe and Japan. The Companion Animals market segment continued to expand at a rate in excess of underlying economic growth in its major markets. By contrast, the Livestock market segment stagnated, primarily because of sustained pressure on prices through increased use of generic products in agricultural production and the increasing effects of regulatory barriers to the use of veterinary medicines.

Operating result before special items fell by 33 million as a result of exchange rate developments, where the negative impact on sales outweighed the positive impact of translating non-euro denominated costs into euro, as well as due to expenses for the *Advantix®* and other new product introductions.

*2002 compared with 2001*

Animal Health's sales, at 850 million, essentially matched sales from the previous year. While business was hampered by lower demand for the antiparasitic treatment *Advantage®* and the economic crisis in Argentina, we successfully launched the new antiparasitic treatment *Advantix®* in December 2002 in North America.



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The operating result before special items increased to 181 million in 2002, a change of 11.7 percent from 2001. The primary factors driving this positive development were a change in product mix and cost savings.

**CropScience**

	2001	Change from Previous Year (%)	2002	Change from Previous Year (%)	2003
	(euros in millions)				
Net sales (external)	2,838	65.5	4,697	22.7	5,764
Intersegment sales	102	(11.8)	90	(23.3)	69
Operating result	490		(108)		324
Special items	0		67		(81)
Operating result before special items	490		(175)		405

The primary special items were as follows:

Year	Nature of special item	Income/ charge
		(euros in millions)
2002	Restructuring related to the Aventis CropScience acquisition	(89)
	Gains on divestments relating to the Aventis CropScience acquisition	172
2003	Restructuring related to the Aventis CropScience acquisition	(102)
	Gains on sale of the prior Bayer CropScience products	46

**2003 compared with 2002**

Sales of the CropScience subgroup climbed by 22.7 percent to 5,764 million largely because of the Aventis CropScience acquisition. Exchange rates had an offsetting negative effect. Had we translated our non-euro denominated revenues in 2003 at 2002's average exchange rates, we would have had 605 million more net sales in 2003 than reported. Adjusted for the Aventis CropScience acquisition and these currency effects, our net sales would have grown by 11.8 percent.

Sales of the Crop Protection Business Group rose by 20.0 percent to 4,801 million. This increase was mainly due to acquisitions and a significant increase in sales of our top products. Sales of our *Confidor*®/ *Gaucho*®/ *Admire*®/ *Merit*® insecticide/ seed treatment/ environmental science products grew by 5.2 percent to 590 million, with the largest increases being recorded in Germany, France and Brazil. Net sales of our *Folicur*®/ *Raxil*® fungicides/ seed treatment products also increased considerably, advancing by 21.2 percent to 315 million, mainly due to higher volumes in the United States and Brazil. Sales of *Folicur*®/ *Raxil*® more than doubled in each of these countries. Our *Flint*® fungicide also fulfilled our growth expectations, with sales gaining 25.8 percent to 200 million. In light of this product's effectiveness against the Asian rust fungus, there was particularly high demand in Brazil for its new formulations *Stratego*® for soybeans and *Sphere*® for coffee crops.

Sales of the products acquired with the Aventis CropScience transaction, notably *Puma*®/ *Accord*® and *Basta*®, also developed well.

*Envidor*®, our new broad-spectrum acaricide for use in perennial crops, was successfully launched in Japan and Brazil in 2003. The new seed treatment *Poncho*® had a good start following its registration in the United States, already accounting for a significant share of sales of the Seed Treatment unit (4.6 percent) in its first year on the market.

Net sales of the Environmental Science Business Group improved by 14.4 percent to 692 million. This was mainly due to the products *Merit*®, *MaxForce*®, *Premise*®, *Deltagard*® and *K-Othrine*®, as well as to the performance of the *Bayer-Advanced*®/ *Bayer-Garden*®-line.

The BioScience Business Group's net sales increased to 271 million. Sales of our vegetable seeds developed favorably, as did our cotton and canola seed products in the United States and Canada. *FiberMax*® and *InVigor*® achieved particularly large sales increases.



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In 2003, we proceeded with the integration of Aventis CropScience, which is now largely complete. With the exception of the active substance propoxycarbazone, we have now effected all of the individual product divestitures mandated by the antitrust authorities.

The net sales of Bayer CropScience developed well in North America, Latin America, Europe, Africa and the Middle East, while sales in Japan and South Korea were below expectations. This was largely due to the varying market developments in these regions. In our assessment, the global market for crop protection products measured in local currencies did not change significantly in size from the previous year, although regional differences were significant. Measured in euros, however, there was a downward trend in 2003 due to the sharp rise in the value of the euro against the U.S. dollar and other currencies. Net sales in Europe were impacted by the exceptionally dry weather, the main effect of which was lower fungicide usage. Volumes decreased in the important markets of France and Germany, with agriculture in eastern Europe also affected by the drought. The North American market benefited from favorable weather patterns and good growing conditions along with a high level of insect infestation. Prices, however, remained in decline. Developments in the Asia/Pacific region included a further reduction in rice acreages in Japan and South Korea, which caused the market for crop protection products to shrink. However, the markets of both Australia and India recovered from the adverse climatic conditions of the previous year. In Latin America, economic conditions generally stabilized in 2003, leading to increased usage of crop protection products.

Our operating result in CropScience reversed from a loss of 108 million to a positive 324 million despite negative currency effects, the growth in earnings being mainly due to higher sales. While special items in 2002 comprised mainly the proceeds of individual product divestments, in 2003 they included primarily restructuring charges relating to the integration of the Aventis CropScience business. Operating result before special items improved by 580 million to 405 million.

*2002 compared with 2001*

The acquisition of Aventis CropScience allowed CropScience to increase sales by 65.5 percent to 4,697 million in 2002 from 2,838 million in 2001. Disregarding the Aventis CropScience acquisition, sales decreased by 4.1 percent, mainly because of the weak economy in Latin America and a weather-related demand reduction in North America, Australia and Asia.

The segment's operating result before special items fell to a loss of 175 million in 2002. This is attributable to additional depreciation and amortization of goodwill and write-downs of inventory in connection with the Aventis CropScience acquisition. Following the acquisition, operating result was also reduced by integration costs. The net special income was 67 million. The special items were primarily from the sale of the Everest, Goltix and Herold products (172 million) and for restructuring programs.

**Plastics, Rubber**

	2001	Change from Previous Year (%)	2002	Change from Previous Year (%)	2003
(euros in millions)					
Net sales (external), continuing operations	1,707	9.7	1,873	(8.3)	1,717
Net sales (external), discontinuing operations	3,689	(9.5)	3,337	(7.2)	3,096
<b>Total net sales (external)</b>	<b>5,396</b>	<b>(3.4)</b>	<b>5,210</b>	<b>(7.6)</b>	<b>4,813</b>
Intersegment sales	116	(0.9)	115	(33.9)	76
Operating result from continuing operations	208	(40.4)	124	(59.7)	50
Operating result from discontinuing operations	6		(48)	(1,391.7)	(716)
<b>Total operating result</b>	<b>214</b>	<b>(64.5)</b>	<b>76</b>		<b>(666)</b>
Special items	(70)	(30.0)	(91)	(551.6)	(593)
<b>Operating result before special items</b>	<b>284</b>	<b>(41.2)</b>	<b>167</b>		<b>(73)</b>



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The primary special items were as follows:

Year	Nature of special item	Income/ charge
		(euros in millions)
2001	Facilities shutdowns	(26)
	Restructuring charges	(28)
2002	Facilities shutdowns	(67)
	Restructuring charges	(11)
2003	Impairment charges	(463)

Sales of the Plastics, Rubber segment fell by 7.6 percent in 2003 to 4,813 million from 5,210 million in 2002. Had we translated our non-euro denominated net sales into euro at the average exchange rates applicable in 2002, our net sales would have been 355 million higher, which would have given rise to a decrease in net sales of 0.8 percent. Thermoplastic Polymers was down by 5.1 percent to 2,842 million, mainly because of increased pressure on prices and adverse currency fluctuations. Rubber Polymers sales dropped by 11.0 percent to 1,971 million from 2,215 million in 2002, due also to selling price erosion as well as to unfavorable economic conditions in Europe. Sales were also lower as a result of the divestiture in May 2003 of PolymerLatex, which posted sales of 179 million in the previous year and 62 million in 2003 until the date of its divestiture.

Sales in Europe declined by 3.6 percent to 2,337 million. Disregarding the divestiture of the PolymerLatex business, sales rose slightly despite economic stagnation in Europe that led to lower production in most customer industries.

In North America, sales fell by 15.3 percent to 1,186 million, particularly because of currency effects. Although sales of polycarbonates advanced due to higher demand from the electronics sector, this did not offset the decline in sales of styrenics and rubber polymers that was due mainly to lower demand from the automotive industry.

In the Asia/Pacific region, sales in euro terms were down, dropping by 95 million, or 8.9 percent, to 975 million. Sales of polycarbonates increased while other products recorded lower sales in a volume sufficient to offset the growth in polycarbonates.

In Latin America, the downswing in the automotive sector led particularly to lower sales of rubber polymers.

Operating result for the Plastics, Rubber segment fell to a loss of 666 million in 2003, due primarily to 463 million in impairment charges and to 130 million in other special items, which primarily comprised restructuring expenses. Operating result before special items fell to a loss of 73 million. This was attributable mainly to declining selling prices and higher raw material and energy costs.

In light of the strategic realignment of the Bayer Group and the changing business conditions for some parts of the Plastics, Rubber segment, we determined that it was necessary to carry out impairment tests on the relevant assets in accordance with IAS 36. A further reason for reviewing asset valuations was a further weaker-than-expected performance by some of the Plastics, Rubber segment's businesses that we now believe will be of lasting effect. The Acrylonitrile-Butadiene-Styrene business, in particular, was affected by the ongoing relocation of important customer industries to Asia. Economic conditions for our European and North American locations in the field of solid rubber were characterized by only slow growth. Increased raw material and energy costs had a further negative impact. Overcapacities in some markets served by the Plastics, Rubber segment led to fierce competition, with substantial declines in prices and margins clouding prospects for future development. The related impairment charges amounted to 463 million.

*2002 compared with 2001*

In 2002, sales of our Plastics, Rubber segment decreased by 3.4 percent. Thermoplastics Polymers had sales of 2,995 million, and Rubber Polymers had sales of 2,215 million in 2002. The decline in Thermoplastics Polymers sales was mainly a result of price pressure in Asia and the change in exchange rates.

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The segment's operating result before special items decreased to 167 million in 2002, a decline of 41.2 percent from 2001. We attribute this development primarily to a fall in prices, a decrease in volume in the Rubber business and idle plant expenses. We incurred special charges of 91 million. These charges were primarily due to restructuring of our Butyl and Polybutadiene businesses.

**Polyurethanes, Coatings, Fibers**

	2001	Change from Previous Year (%)	2002	Change from Previous Year (%)	2003
<b>(euros in millions)</b>					
Net sales (external), continuing operations	5,047	(0.7)	5,014	(1.9)	4,917
Net sales (external), discontinuing operations	228	(12.7)	199	(16.1)	167
<b>Total net sales (external)</b>	<b>5,275</b>	<b>(1.2)</b>	<b>5,213</b>	<b>(2.5)</b>	<b>5,084</b>
Intersegment sales	138	(43.5)	78	165.4	207
Operating result from continuing operations	170		(35)	(1,177.1)	(447)
Operating result from discontinuing operations	(17)	(482.4)	(99)	32.2	(67)
<b>Total operating result</b>	<b>153</b>		<b>(134)</b>	<b>(283.6)</b>	<b>(514)</b>
Special items	(85)	(340.0)	(374)	(109.9)	(785)
<b>Operating result before special items</b>	<b>238</b>	<b>0.8</b>	<b>240</b>	<b>12.9</b>	<b>271</b>

The primary special items were as follows:

Year	Nature of special item	Income/ charge
<b>(euros in millions)</b>		
2001	Restructuring charges	(39)
2002	Impairment charges	(289)
	Restructuring charges	(36)
2003	Impairment charges	(671)

**2003 compared with 2002**

Despite growth in volumes, sales of our Polyurethanes, Coatings, Fibers segment dropped by 2.5 percent in 2003, particularly as a result of the decline in non-euro currencies against the euro. Sales of Polyurethane Materials were down by 0.4 percent to 3,184 million, while Coatings Materials decreased by 5.8 percent to 1,900 million. Had we translated our non-euro denominated net sales into euro at the average exchange rates applicable in 2002, our net sales would have been 450 million higher, which would have given rise to an increase in net sales of 6.2 percent.

Sales in Europe failed to meet our expectations, increasing by only 2.5 percent as a result of the weak economy. Our net sales of MDI increased more than our TDI and polyether polyols businesses, benefiting from higher demand for heat insulating materials.

In North America, sales dropped by 9.7 percent in euros, to 1,526 million, but increased by 7.2 percent in local currencies. Our MDI and TDI businesses benefited from strong growth in the construction, electrical and electronics industries. Sales of Coatings Materials were down year on year due to the downturn in the automotive and furniture industries.

Sales in Asia/Pacific were slightly below the previous year, at 730 million. In local currencies, however, net sales improved by 10.6 percent, mainly due to the high growth rates of major customer industries in this region, particularly in Greater China, which in turn led to considerably higher sales of polyurethane raw materials.

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Operating result for the Polyurethanes, Coatings, Fibers segment fell to a loss of 514 million. Before impairment losses and other special items, operating result climbed by 12.9 percent to 271 million as a result of higher volumes and the effects of our restructuring program. Further increases in raw material costs and the

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continuing low level of selling prices had a negative effect. The other special items of 114 million mainly comprised restructuring charges for our polyether, TDI and fibers businesses.

Impairment tests resulted in the recognition of 671 million in impairment losses for the Polyurethanes, Coatings, Fibers segment. Although impairment losses had already been recognized in 2002, we determined that a further writedown was necessary in 2003 because our economic assumptions had to be revised downward in light of these businesses' long-term perspectives. The polyols and fibers businesses were impacted by overcapacities and continuing strong competitive pressure in all regions, particularly Asia. The resulting decline in prices, combined with the sustained high level of raw material costs, have created constant pressure on margins. Our economic expectations for other businesses have also declined. The solvent-free powder coatings business that passed to us with the acquisition of Sybron Chemicals Inc. in 2000 now operates in a difficult environment marked by low capacity utilization, slow market growth and low prices. This business was also hurt by high raw material and energy costs.

*2002 compared with 2001*

In 2002, the net sales of the segment decreased by 1.2 percent. The Polyurethanes Materials business entities contributed 3,197 million, a decrease of 2.3 percent from the previous year, while Coatings Materials contributed 2,016 million, up 0.7 percent from 2001.

The segment's operating result before special items increased to 240 million in 2002, essentially unchanged from 2001. We attribute this development primarily to increased volumes and the success of our restructuring programs. We incurred net special charges of 374 million. These charges were primarily for restructuring programs in Polyether and Powder Coatings, as well as adjustments to carrying values of our Polyether and Fibers businesses.

**Chemicals**

	2001	Change from Previous Year (%)	2002	Change from Previous Year (%)	2003
(euros in millions)					
Net sales (external), continuing operations	1,240	(23.3)	951	(6.7)	887
Net sales (external), discontinuing operations	3,961	(14.9)	3,371	(25.5)	2,513
<b>Total net sales (external)</b>	<b>5,201</b>	<b>(16.9)</b>	<b>4,322</b>	<b>(21.3)</b>	<b>3,400</b>
Intersegment sales	456	(10.3)	409	(9.5)	370
Operating result from continuing operations	167	(76.7)	39	(56.4)	17
Operating result from discontinuing operations	360	182.8	1,018		(516)
<b>Total operating result</b>	<b>527</b>	<b>100.6</b>	<b>1,057</b>		<b>(499)</b>
Special items	222	286.0	857		(541)
<b>Operating result before special items</b>	<b>305</b>	<b>(34.4)</b>	<b>200</b>	<b>(79.0)</b>	<b>42</b>

The primary special items were as follows:

Year	Nature of special item	Income/ charge
(euros in millions)		
2001	Gains on divestment of EC Erdölchemie	316
	Loss on divestment of ChemDesign	(70)
2002	Gains on divestment of Haarmann & Reimer	933
	Restructuring charges	53
2003	Impairment charges	(476)



**Table of Contents***2003 compared with 2002*

Bayer Chemicals consists of our Chemicals segment, which, in turn, is comprised of the Chemicals and H.C. Starck business groups.

The Bayer Chemicals subgroup had sales of 3,400 million in 2003, a decline of 21.3 percent from the 4,322 million in net sales in 2002. Adjusted to exclude the net sales in both 2003 and 2002 relating to our disposals of our organic pigments business and Walothen GmbH in 2003 and the Haarmann & Reimer group in 2002 (described below), which together accounted for 47 million of net sales in 2003 and 783 million of net sales in 2002, and had non-euro denominated revenues been translated into euros at the average exchange rates applicable in 2002, which would have added 216 million to our net sales in chemicals, our net sales would have increased by 0.8 percent despite the lack of a recovery in major customer industries. We sold our organic pigments business to Sun Chemicals in the first quarter of 2003 and divested Walothen GmbH to the Wihuri group of Finland in the fourth quarter of the year.

Sales of the Industrial Chemicals business entities declined by 2.5 percent in 2003 to 975 million. In local currencies, however, sales rose by 3.1 percent, due largely to growth in basic chemicals. Custom Manufacturing's sales were 12.6 percent below the previous year at 188 million, mainly because of increased competition from Asian suppliers in the agrochemicals area and continuing weakness in the photographic chemicals market. Process Chemicals saw a drop in sales, particularly in textile chemicals, with sales down by 16.9 percent to 740 million. Sales of Functional Chemicals remained steady year on year at 514 million. Had this business unit's non-euro sales been translated into euro at 2002 exchange rates, however, sales of this business unit would have improved by 5.9 percent, with volume gains posted in industrial biocides and special material protection products. Sales of Wolff Walsrode decreased by 3.5 percent to 222 million. Business at H.C. Starck, also hampered by exchange rates, receded by 7.1 percent to 564 million. On a currency-adjusted basis as set forth above, however, H.C. Starck's sales would have increased by 1.1 percent from the previous year.

The decline in sales in all regions is mainly due to the fact that the previous year's figures contained the business of the Haarmann & Reimer group up to the date of its divestiture. In Europe, sales decreased by 15.0 percent to 1,812 million. Excluding the Haarmann & Reimer group from the previous year's sales, sales would have declined by 1.0 percent had non-euro denominated sales of the Europe region been translated into euro at 2002's exchange rates.

In the other regions, there was an additional negative effect from currency translations. Business in North America shrank by 29.4 percent to 622 million. Adjusted for currency effects, sales would have declined by 16.4 percent. The economy of this region weakened considerably in the first half of the year as a result of the Iraq war and the high price of oil. In the second half, however, consumer spending and growth indicators pointed to an upswing. This overall economic trend was also reflected in the markets served by Bayer Chemicals, where sales improved late in the year.

Sales in Asia/Pacific fell by 21.6 percent to 624 million, almost entirely attributable to the above mentioned currency and portfolio effects.

Business in the Latin America/ Africa/Middle East region dropped by 33.5 percent to 342 million. Most of this decrease was due to currency changes and to the effect of our disposals. Although this region has basically overcome the recent stagnation phase, the upward trend was restrained by a lack of demand in domestic markets and economic weakness in Mexico and Brazil.

In connection with the realignment of the Bayer Group and the deterioration in business conditions, we reviewed and adjusted the business plans of all strategic business entities. Consideration of current and forecasted market and competitive conditions, along with a fundamental reappraisal of the long-term return on past investments, resulted in impairment losses for Chemicals of 476 million. These write-downs relate particularly to the fine chemicals business, where there is sustained pressure on margins resulting from adverse exchange rates, ongoing consolidation in customer industries, overcapacities in certain market segments and increased competition, particularly from Asian suppliers. This was the main reason for the decline in operating income to a loss of 499 million. Adjusted to exclude these impairment charges and restructuring charges, operating result declined by 158 million to 42 million.

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*2002 compared with 2001*

The decline in Bayer Chemicals' sales by 16.9 percent to 4,322 million is largely the result of the sale of our petrochemicals holdings and our holdings in ChemDesign Corporation and Covexx Films Walsrode in 2001 and of our holdings in Haarmann & Reimer in 2002.

Sales in the Chemicals business group were 3,715 million, which represented a 15.4 percent decline from the previous year's levels. Negative exchange rate developments and the generally weak condition of the global economy contributed to this decline. The 25.2 percent sales decline at H.C. Starck, to 607 million, was attributable to greatly reduced demand in the electronics industry and a deterioration in prices.

Operating result before special items decreased by 34.4 percent to 200 million. This decline was primarily caused by H.C. Starck's weak financial results.

**Table of Contents****LIQUIDITY AND CAPITAL RESOURCES 2001, 2002 and 2003****Cash Flows**

In recent years, our primary source of liquidity has been cash from operations. We use cash in investing activities primarily for acquisitions as well as for additions to property, plant, equipment and investments; these activities represented our primary liquidity requirements. Nevertheless, in 2003, we generated cash from investing activities because our gains on disposals exceeded our capital expenditures. We use cash in financing activities primarily to retire debt and pay dividends. At December 31, 2003, we had cash, cash equivalents and net working capital totaling 7.7 billion. There are no material legal or economic restrictions on the ability of member companies of the Bayer Group to transfer funds to Bayer AG.

The following table summarizes our cash flows in each of the last three years:

	2001	Change from Previous Year (%)	2002	Change from Previous Year (%)	2003
(euros in millions)					
Gross operating cash flow	3,009	2.5	3,085	5.2	3,244
<i>thereof discontinuing operations</i>	433	(3.9)	416	(45.2)	228
Changes in working capital	871	57.6	1,373	(96.4)	49
Net cash provided by operating activities	3,880	14.9	4,458	(26.1)	3,293
<i>thereof discontinuing operations</i>	850	(45.8)	461	(92.8)	33
Net cash provided by (used in) investing activities	(2,132)	(208.2)	(6,570)		460
<i>thereof discontinuing operations</i>	(184)		973		(186)
Net cash provided by (used in) financing activities	(1,570)		2,171		(1,761)
<i>thereof discontinuing operations</i>	(148)	59.5	(60)		153
Change in cash and cash equivalents	178	(66.9)	59	3,276.3	1,992
Cash and cash equivalents at beginning of period	491	46.4	719	6.7	767
Change in scope of consolidation	42	(90.5)	4	(75.0)	1
Exchange rate movements	8		(15)	(73.3)	(26)
Cash and cash equivalents at end of year	719	6.7	767	256.5	2,734
Marketable securities and other instruments	52	(44.2)	29	344.8	129
Liquid assets as per balance sheet	771	3.2	796	259.7	2,863

**Cash from Operating Activities**

Gross operating cash flow was 3.2 billion in 2003, 3.1 billion in 2002 and 3.0 billion in 2001. Gross operating cash flow increased by 5.2 percent, mainly due to the higher income from operations partially offset by an increase in income tax payments due to the fact that 2002's income included tax-free divestment proceeds. Gross operating cash flow increased 2.5 percent in 2002.

Net cash provided by operating activities amounted to 3,293 million, a 26.1 percent decline from the 4,458 million in 2002. The 2003 figure reflects a disbursement of 231 million made following a settlement reached with U.S. authorities in the context of an investigation into pharmaceutical product prices. Provisions for these payments had been established in 2002. The decline in cash flow from operations was in other respects due to the high level of cash flow in 2002. We initiated a program in 2001 to improve our working capital management by reducing inventories and improving the collection of receivables. This had the effect of reducing the base levels of inventory and receivables, freeing up working capital. We believe that our working capital levels are sufficient to fund our present requirements. Net operating cash flow increased in 2002 to 4.5 billion, 14.9 percent above the 2001 level.



**Table of Contents*****Investing Activities***

Net cash of 460 million was provided by investing activities in 2003, as compared with net cash used in investing activities of 6,570 million in 2002. We greatly reduced our capital expenditures in 2003, with the total investment in property, plant and equipment falling by 26.2 percent from 2,239 million in 2002 to 1,653 million in 2003 consistent with our objective of ensuring stricter capital discipline across the group. The reduction in capital expenditures corresponds to our target of restructuring the group, with a concomitant concentration of our capital expenditures budget. We intend to focus our investments in our pharmaceutical activities to those befitting a mid-size company in this industry, concentrate our polymers investments in Asia and improve our Bayer CropScience activities in both the plants we previously owned and those acquired from Aventis CropScience. The capital expenditures that we did make in 2003 were more than offset by cash receipts from sales of property, plant and equipment. We received cash of 1,185 million from the divestments of crop science businesses mandated by the antitrust authorities in connection with the Aventis CropScience acquisition and 118 million from the sale of our interest in PolymerLatex. Further cash from investments of 258 million was provided by the divestment of our equity stakes in Millennium Pharmaceuticals and others. Cash was consumed, however, by the purchase of the remaining 45.5 percent of the shares of the Bayer Polymers Sheet Europe group (formerly Makroform GmbH).

By contrast, 2002 was a year of substantial investments in acquisitions, with the total cash outflow for investments totaling 7.8 billion. Cash disbursements in connection with the Aventis CropScience acquisition used 6,570 million. These acquisitions were offset to a small extent by the 714 million in cash inflow from our sale of shares in Agfa-Gevaert N.V. and by the 933 million from our sale of Haarmann & Reimer. The total cash inflow from the sale of equity stakes and from interest and dividend receipts, including marketable securities amounted to 1.3 billion in 2002.

Additions to property, plant and equipment and intangible assets in 2002 resulted in a cash outflow of 2.2 billion, while sales of property, plant and equipment led to cash inflow of 2.1 billion.

The net cash outflow for investing activities amounted to 2.1 billion in 2001. Additions to property, plant and equipment and intangible assets resulted in a cash outflow of 2.6 billion. Cash outflow for acquisitions amounted to 0.5 billion. Sales of property, plant and equipment led to a cash inflow of 0.5 billion, while that from investments, interest and dividend receipts and from marketable securities amounted to 0.5 billion.

***Financing Activities***

Net cash used in financing activities was 1,761 million in 2003, compared with net cash provided by financing activities of 2,171 million in 2002. The 2003 outflow resulted primarily from 664 million in dividend payments, 782 million in interest payments and 315 million in net debt retirements. Net borrowings amounted to 5,952 million at December 31, 2003.

In 2002, dividend payments ( 662 million) and interest payments ( 704 million) totaled 1.4 billion. Net borrowings amounted to 8.9 billion.

Financing activities led to a net cash outflow of 1.5 billion in 2001, which comprises mainly the 1.0 billion dividend payment for 2000 and 0.5 billion in interest payments.

See *Borrowings*, below, for a discussion of the times our existing debt will mature.

We believe that we have sufficient cash to meet our foreseeable needs. Additionally, we have ample borrowing capacity available. To provide flexible short- to medium-term funding, we established a \$5 billion global commercial paper program and a 2 billion European Medium-Term Note program in 2000, which we increased to 8 billion each.

At December 31, 2003, we had approximately 5.8 billion of total lines of credit, of which 0.5 billion was used and 5.3 billion was unused and available for borrowing on an unsecured basis. The majority of these lines of credit are represented by a multicurrency syndicated credit facility, which we established in 2003. When drawing under this facility, we are required to prove that there has been no material adverse change in our

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financial condition. The facility can be terminated by the lenders if a change of control of Bayer AG occurs and the majority of the lenders opt to terminate the facility.

**Capital Expenditures**

We generally fund our capital expenditures with cash flow from operations and, if such funds are not sufficient, through other cash on hand and from the sale of liquid investments, including cash equivalents and marketable securities. We fund any further capital expenditures with borrowings. Capital expenditures amounted to 1.7 billion in 2003, 2.4 billion in 2002 and 2.6 billion in 2001.

We spent a total of 1.7 billion for intangible assets, property, plant and equipment in 2003. As in recent years, the main focus of our capital spending was in our Polymers business.

Our major capital expenditures since 2000 included:

<b>Year</b>	<b>Segment</b>	<b>Description</b>
2001	Pharmaceuticals, Biological Products	Construction of a facility for packaging and storage of biological products, Berkeley, California
		Construction of research facility in West Haven, Connecticut and Kyoto, Japan (completed 2001)
	Consumer Care, Diagnostics CropScience	Expansion of solids plants, Bitterfeld, Germany and Lerma, Mexico
		Construction of a multi-purpose facility for crop protection products, Dormagen, Germany
		Protection products, Dormagen, Germany
	Plastics, Rubber	Insecticides production facility, Dormagen, Germany
		Expansion of polycarbonate capacities (production of bisphenol A and Makrolon), Map Ta Phut, Thailand and Uerdingen, Germany
		Expansion of films capacity, Dormagen, Germany
		Construction of a melt polycarbonate facility, Antwerp, Belgium (completed 2001)
		Construction of a rubber chemicals facility, Brunsbüttel, Germany (completed 2001)
	Polyurethanes, Coatings, Fibers	Expansion of isocyanate capacities including precursors, Uerdingen and Brunsbüttel, Germany
		Expansion of coating raw materials production, Leverkusen, Germany
		Expansion of capacity for aqueous dispersions, Dormagen, Germany (brought on stream 2001)
		Expansion of dyestuff production for transparent Plastics, Leverkusen, Germany
Chemicals	Construction of a coating raw materials facility, Caojing, China	
	Construction of a sulfuric acid facility, Leverkusen, Germany	
	Expansion/ modification of the electrolysis plant, Leverkusen, Germany	
	Construction of a polyaspartic acid facility, Leverkusen, Germany	
	Expansion of tantalum production, Goslar, Germany and Mito, Japan Process technology center, Goslar, Germany (completed 2001)	
	Modernization and expansion of the nitrocellulose facility, Bomlitz, Germany	
2002	Pharmaceuticals, Biological Products	Expansion of the molybdenum facility, Laufenburg, Germany
		Construction of a sterile filling facility for Factor VIII, Berkeley, California

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Year	Segment	Description
2003	Consumer Care, Diagnostics	Construction of a small volume facility with pilot plant for Aspirin production, Greppin, Germany
	CropScience	Completion of a multi-purpose facility for crop protection products, Dormagen, Germany
	Plastics, Rubber	Modification of butyl rubber production, Zwijndrecht, Belgium and Sarnia, Canada
		Expansion of capacity for ABS plastics, Tarragona, Spain and Map Ta Phut, Thailand
	Polyurethanes, Coatings, Fibers	Expansion of polycarbonate capacity including precursors, Uerdingen, Germany
	Chemicals	Expansion of isocyanate capacity including precursors, Brunsbüttel, Dormagen and Uerdingen, Germany and Niihama, Japan
		Expansion/ modification of electrolysis plants, Leverkusen, Germany
		Efficiency improvement in the integrated aromatics production network, Leverkusen, Germany
		Expansion of nitrocellulose production, Bomlitz, Germany
		Addition to capacity solid dosage plant, Leverkusen, Germany
		Sterile Filling Facility, Berkeley, California
		Lacquering (small-size plant), Greppin, Germany
	Elkhart site consolidation, Elkhart, Indiana	
	Good manufacturing practice upgrade, Panwol, South Korea	
	Multi-Purpose Plant, Dormagen, Germany	
	Fungicide Plant Extension, MuttENZ, Switzerland	
	New Research & Development Building, Gent, Belgium	
	Modification of butyl rubber production, Zwijndrecht, Belgium and Sarnia, Canada	
	Expansion of capacity for ABS plastics, Tarragona, Spain and Map Ta Phut, Thailand	
	Expansion of isocyanate capacity including precursors, Brunsbüttel and Dormagen, Germany	
	Expansion/ modification of electrolysis plant, Leverkusen, Germany	
	Expansion of methylcellulose production, Bitterfeld, Germany	
	Efficiency improvement in the integrated aromatics production network, Leverkusen, Germany	

**Commitments*****Off-Balance Sheet Arrangements***

Our unconsolidated entities are not considered special-purpose entities and do not constitute other off-balance sheet arrangements.

***Contractual Obligations and Commercial Commitments***

The table below summarizes all of the Group's contractual and commercial obligations. The timing of payments for collaborative agreements assumes that milestones or other conditions are met. These cooperations are mostly in our Pharmaceuticals division and our CropScience subgroup. The most significant of these, based on payments, are the product development cooperations with Onyx and Paratek in our Pharmaceuticals division (see Item 4, *Information on the Company Business Bayer HealthCare Pharmaceuticals, Biological Products Pharmaceuticals Collaborations*) and with Genoptera in our CropScience subgroup (see Item 4,

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*Information on the Company Business Bayer CropScience Major Products Research and Development*). We do not foresee any material payment triggers or milestone payments in our current collaborative arrangements.

Contractual Obligations	Total	Under one year	One year to less than three years	Three years to less than five years	After 5 years
(euros in millions)					
Long-term debt, excluding capital leases	8,851	2,227	644	3,066	2,914
Capital leases without interest portion	575	86	117	55	317
Operating leases	478	124	169	119	66
Purchase obligations	181	149	32	0	0
Other long-term liabilities (collaboration agreements)	424	129	146	54	95
Other liabilities <sup>(1)</sup>	2,459	2,361	41	0	57
<b>Total Contractual Obligations</b>	<b>12,968</b>	<b>5,076</b>	<b>1,149</b>	<b>3,294</b>	<b>3,449</b>

(1) Other liabilities comprise primarily guarantees of bills and checks, payment guarantees and indirect financial guarantees; commissions to customers and expense reimbursements; as well as tax, social security and payroll liabilities and other liabilities as set forth in Note 32 to the consolidated financial statements.

Payments for guarantees and endorsements of bills and of warranties of 341 million have been excluded from the other commercial commitments table above, as we do not expect to make any payments under these commercial commitments.

**Other Commitments**

In 2003, our minimum non-discounted future lease payments relating to long-term lease and rental arrangements totaled 1.2 billion, compared with 1.5 billion in the previous year. Of this amount, 760 million represented future payments under financial leases (899 million in 2002).

Our financial commitment for orders placed under purchase agreements relating to planned or ongoing capital expenditure projects totaled 181 million in 2003. We expect to pay the majority of this amount in 2004. In 2002, this figure was 286 million, and in 2001, 354 million.

Under collective agreements on part-time work arrangements for certain older employees, we have to accept applications for such arrangements from a certain quota of the work force. Other financial obligations that may arise from such work arrangements in the future cannot be quantified, since the quota has already been exceeded.

In addition, we have entered into research agreements with a number of third parties. Under these agreements, we have agreed to fund various research projects or to assume other commitments. Our payments under these agreements are typically based on the achievement of certain milestones or the fulfillment of other specific conditions by our research partners. In 2003, the total amount of these commitments was 424 million. For 2002, the figure was 570 million.

**Borrowings**

Our consolidated financial statements reflect borrowings as financial obligations, which include debentures, liabilities to banks, liabilities under lease agreements, liabilities from the issuance of promissory notes, commercial paper and other financial obligations. See the tables under *Contractual Obligations and Commercial Commitments* above for a summary of our current financial obligations. See also Note 30 to our consolidated financial statements.

**Table of Contents****Funding and Treasury Policies**

We are exposed to interest rate risk. We are also exposed to currency-related risks such as exchange rate and translation risk. To hedge our risks, we use primarily over-the-counter derivative instruments, particularly forward foreign exchange contracts, option contracts, interest rate swaps, and interest and principal currency swaps.

Interest rate risk applies mainly to receivables and payables with maturities of over one year. Items with these long maturities are not material to our operations but are relevant to our investments and financial obligations. Here, derivative financial instruments are our main method of interest rate hedging. We primarily use interest rate swaps to convert a portion of our fixed rate borrowings into, in effect, floating rate borrowings. In a normal interest rate environment, short-term interest rates are lower than long-term interest rates. Thus, floating rate debt generally leads to lower interest costs in the long run. Short-term interest rate hedging contracts (including interest and principal currency swaps) totaled a nominal amount of 0.3 billion in 2003, 0.5 billion in 2002 and 2.0 billion in 2001. In 2003, hedges maturing in more than one year represented a nominal amount of 6.0 billion, in 2002, 5.3 billion and in 2001, 2.5 billion.

Because a substantial portion of Bayer's assets, liabilities, sales and earnings are denominated in currencies other than the euro zone currencies, we have translation exposure to fluctuations in the values of these currencies relative to the euro. These currency fluctuations, especially the fluctuation of the value of the U.S. dollar relative to the euro, can have a material impact on our results of operations. For example, an increase in the value of the U.S. dollar relative to the euro will increase the euro value of Bayer's sales and earnings made in the dollar zone and increase the competitiveness of its products produced in Europe against products exported from the United States. The translation effects of currency fluctuations were negative in 2003, decreasing our sales by 2.5 billion compared to 1.4 billion in 2002 and a positive effect of 0.1 billion in 2001. This effect was mainly due to a decrease of the value of the U.S. dollar compared to the euro (the average relative value of one euro in 2003 was \$1.13, compared with average values of \$0.95 in 2002 and \$0.90 in 2001). Since these effects do not have an impact on our cash flows, we do not hedge these risks resulting from currency fluctuations.

We also face transaction risk when our businesses generate revenue in one currency but incur costs relating to that revenue in a different currency. We hedge a portion of our transaction currency risk through the use of derivative financial instruments, particularly forward foreign exchange contracts and currency options. Our Corporate Treasury department has the central responsibility for managing our currency exposures and using currency derivatives. We establish the maturity dates of hedging contracts according to the anticipated cash flows of the Bayer Group. Our policy is to use a mixture of instruments depending upon our view of market conditions based on fundamental and technical analysis. As of December 31, 2003, we had entered into forward foreign exchange contracts and currency swaps with a total notional value of 4.0 billion (excluding cross currency interest rate swaps included in our 6.3 billion notional amount of interest rate hedging contracts). For further information on these products, see Item 11, *Quantitative and Qualitative Disclosures about Market Risk*.

Our aggregate direct transaction risk from sales and purchases in foreign currencies before hedging was approximately 2.0 billion at December 31, 2003, consisting primarily of dollars (\$1.3 billion), Japanese yen (¥66 billion) and Brazilian real (R1.3 billion).

For more information, see Item 11, *Quantitative and Qualitative Disclosures about Market Risk*.

**Inflation, Seasonality and Cyclicity**

Inflation has not had a material effect on our operating results in recent years. Seasonality does not materially affect our business as a whole. However, several of our individual business lines are subject to seasonal effects. In addition, a number of our business groups are subject to cyclicity, either directly or because of the effect of cyclicity on their customers' businesses. See the descriptions of our various business segments in Item 4, *Information on the Company* for a discussion of those businesses subject to seasonal or cyclical effects.

**Table of Contents****RESEARCH AND DEVELOPMENT**

The following table sets forth our total research and development expenditures during the last three full years.

	<u>2001</u>	<u>Change from Previous Year (%)</u>	<u>2002</u>	<u>Change from Previous Year (%)</u>	<u>2003</u>
Research and development expenditure:					
Amount (euros in millions)	2,559	0.7	2,577	(6.3)	2,414
As a percentage of sales	8.5		8.7		8.5

We typically allocate the largest portion of our research and development expenses to our HealthCare businesses, primarily in the Pharmaceuticals, Biological Products segment. In 2003, Pharmaceuticals, Biological Products accounted for 40.0 percent of our total research and development spending (2002: 41.6 percent; 2001: 48.5 percent).

For a more detailed discussion of our research and development activities and policies, see the descriptions of each business group's research and development activities in Item 4, *Information on the Company - Business*. We discuss our patents and other intellectual property protection in Item 4, *Information on the Company - Intellectual Property Protection*.

**BASIS OF PRESENTATION**

We prepared the consolidated financial statements that appear elsewhere in this annual report in accordance with IFRS. See Note 44 to our consolidated financial statements for a reconciliation of the significant differences between IFRS and U.S. GAAP.

**New Accounting Standards**

The Consolidated Financial Statements reflect the application of IAS 41, Agriculture, a new accounting standard of the International Accounting Standards Board (IASB). This standard sets forth the financial statement presentation and disclosure applicable in connection with agricultural activities. The standard addresses, among other things, the accounting treatment of biological assets during the periods of their growth, degeneration, fertilization and reproduction and the initial valuation of agricultural products at the point of harvest. Biological assets are to be valued at fair market value less point-of-sale costs, if this can reliably be determined. Agricultural products that are harvested from these biological assets are also to be valued at fair market value at the time of harvest, less point-of-sale costs.

The application of this new standard has not had any material effect on the presentation of the financial condition or results of operations of our group in 2003 or affected comparability among our 2003, 2002 and 2001 financial statements.

In December 2003, the IASB released revised IAS 32, Financial Instruments: Disclosure and Presentation and IAS 39, Financial Instruments: Recognition and Measurement. These standards replace IAS 32 (revised 2000), and supersede IAS 39 (revised 2000) and are to be applied for annual periods beginning on or after January 1, 2005. The Group is currently evaluating whether to adopt the standards earlier and what impact they will have on the Group's shareholders' equity, financial position and results of operations.

In December 2003, as part of the IASB's project to improve International Financial Reporting Standards, the IASB released revisions to the following standards that supersede the previously released versions of those standards: IAS 1, Presentation of Financial Statements; IAS 2, Inventories; IAS 8, Accounting Policies, Changes in Accounting Estimates and Errors; IAS 10, Events after Balance Sheet Date; IAS 16, Property, Plant and Equipment; IAS 17, Leases; IAS 21, The Effects of Changes in Foreign Exchange Rates; IAS 24, Related Party Disclosures; IAS 27, Consolidated and Separate Financial Statements; IAS 28, Investments in Associates; IAS 31, Interests in Joint Ventures; IAS 33, Earnings per Share and IAS 40, Investment Property. The revised standards should be applied for annual periods beginning on or after January 1, 2005. The Group is currently

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evaluating whether to adopt the standards earlier and what impact they will have on the Group's shareholders' equity, financial position and results of operations.

In February 2004, the IASB issued International Financial Reporting Standard (IFRS) 2, Share-based Payment, on accounting for share-based payment transactions, including grants of share options to employees. IFRS 2 specifies the financial reporting by an entity when it undertakes a share-based payment transaction and requires an entity to reflect in its profit or loss and financial position the effects of share-based payment transactions, including expenses associated with transactions in which share options are granted to employees. IFRS 2 is to be applied for fiscal years starting on or after January 1, 2005. The Bayer Group is currently evaluating the impact the standard will have on the Group's shareholders' equity, financial position and results of operations.

In March 2004, the IASB issued IFRS 3, Business Combinations, replacing IAS 22, Business Combinations. IFRS 3 specifies that all business combinations are to be accounted for by applying the purchase method of accounting, and as such, eliminating the pooling method. Identifiable assets, liabilities and contingent liabilities are to be recognized at their fair value at the acquisition date. It requires that goodwill no longer be amortized but tested annually for impairment. IFRS 3 is to be applied to business combinations for which the agreement date is on or after March 31, 2004. For goodwill and intangible assets acquired in a business combination for which the agreement date was prior to March 31, 2004, the standard must be applied prospectively from the beginning of the first annual period beginning on or after March 31, 2004. The Bayer Group is currently evaluating the impact the standard will have on the Group's shareholders' equity, financial position and results of operations.

In March 2004, the IASB issued IFRS 4, Insurance Contracts. This standard applies to virtually all insurance contracts (including reinsurance contracts) that an entity issues and to reinsurance contracts that it holds. IFRS 4 is to be applied for annual periods beginning on or after January 1, 2005. The Bayer Group is currently evaluating the impact the standard will have on the Group's shareholders' equity, financial position and results of operations.

In March 2004, the IASB issued IFRS 5, Non-current Assets Held for Sale and Discontinued Operations. IFRS 5 requires that assets that are intended for disposal be recorded at the lower of the assets' carrying amounts or fair value less selling costs. The standard also addresses when certain operating segments of a business should be classified as discontinued operations. IFRS 5 is effective for periods beginning on or after January 1, 2005. The Bayer Group is currently evaluating the impact the standard will have on the Group's shareholders' equity, financial position and results of operations.

In March 2004, the IASB issued an amendment to IAS 39, Financial Instruments: Recognition and Measurement on Fair Value Hedge Accounting for a Portfolio Hedge of Interest Rate Risk. The amendment simplifies the implementation of IAS 39 by enabling fair value hedge accounting to be used more readily for portfolio hedging of interest rate risk than under previous versions of IAS 39. The amendments to the standard are effective for annual periods beginning on or after January 1, 2005. An entity shall apply the amendments to an earlier period if it applies IAS 39 (as revised in 2003) and IAS 32, Financial Instruments: Disclosure and Presentation, (as revised in 2003) to that period. The Bayer Group is currently evaluating the impact the amended standard will have on the Group's shareholders' equity, financial position and results of operations.

In March 2004, in connection with the issuance of IFRS 3, the IASB revised IAS 36, Impairment of Assets, and IAS 38, Intangible Assets. The main revisions require goodwill and intangible assets with an indefinite useful life to be tested for impairment annually, or more frequently if events or changes in circumstances indicate a possible impairment, prohibit reversal of impairment losses for goodwill, require an intangible asset to be treated as having an indefinite life when there is no foreseeable limit on the period over which the asset is expected to generate net cash inflows for the entity, and prohibits the amortization of such intangible assets. The revised standards are effective for goodwill and intangible assets acquired in business combinations for which the agreement date is after March 31, 2004 and all other goodwill and intangible assets for annual periods beginning on or after March 31, 2004. The Bayer Group is currently evaluating the impact the amended standards will have on the Group's shareholders' equity, financial position and results of operations.

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In June 2001, the Financial Accounting Standards Board ( FASB ) approved Statement of Financial Accounting Standards ( SFAS ) 143, Accounting for Obligations Associated with the Retirement of Long-Lived Assets ( SFAS 143 ), which requires that the fair values of an obligation associated with the retirement of long-lived assets be recognized in the period in which such obligation is incurred if a reasonable estimate of fair value can be made. When the liability is recorded, the Group must capitalize the costs of the liability by increasing the carrying amount of the long-lived asset. Over the estimated life of the asset, the liability is accreted to its present value and the related capitalized charge is depreciated over the useful life of an asset. SFAS 143 is effective for financial statements issued for fiscal years beginning after June 15, 2002. The Group adopted the provisions of SFAS 143 as of January 1, 2003, which did not have a material impact on our financial position, results of operations or cash flows.

In April 2002, SFAS 145, Rescission of FASB Statements no. 4, 44 and 64, Amendment of FASB Statement no. 13 and Technical Corrections ( SFAS 145 ) was issued. The statement updates, clarifies and simplifies existing accounting standards related to the presentation of gains and losses from certain extinguishments of debt, the accounting for certain intangible assets and the accounting for certain sale-leaseback transactions. Significant provisions of this statement applicable to Bayer are effective for our 2003 fiscal year. The adoption of SFAS 145 did not have a material impact on our financial position, results of operations or cash flows.

SFAS 146, Accounting for Costs Associated with Exit or Disposal Activities ( SFAS 146 ), was issued in June 2002. SFAS 146, which rescinds Emerging Issues Task Force ( EITF ) Issue 94-3, Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring) , requires a liability for costs associated with exit or disposal activities to be recognized and measured initially at fair value only when those costs are incurred, rather than at the date of a commitment to an exit or disposal plan. SFAS 146 is to be applied prospectively to exit or disposal activities initiated after December 31, 2002. The Group adopted the provisions of SFAS 146 as of January 1, 2003, which did not have a material impact on our financial position, results of operations or cash flows.

In November 2002, the FASB published FASB Interpretation no. 45, Guarantor s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others ( FIN 45 ). FIN 45 expands on the accounting guidance of other SFASs by extending the disclosures to be made by a guarantor in its financial statements about its obligations under certain guarantees, and it requires the guarantor to recognize a liability for the fair value of an obligation assumed under a guarantee. The disclosure requirements are effective for financial years ending after December 15, 2002, and require disclosure of the nature of the guarantee, the maximum potential amount of future payments that the guarantor could be required to make under the guarantee, and the current amount of the liability, if any, for the guarantor s obligations under the guarantee. FIN 45 s provisions for initial recognition and measurement should be applied prospectively to guarantees issued or modified after December 31, 2002. The Group adopted the provisions of FIN 45 as of January 1, 2003, which did not have a material impact on our financial position, results of operations or cash flows.

In May 2003, the FASB published SFAS 150, Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity ( SFAS 150 ). SFAS 150 establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. This statement is effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the first interim period beginning after June 15, 2003. The FASB issued FASB Staff Position ( FSP ) 150-3 on November 7, 2003 to defer the effective date for applying the provisions of SFAS 150 for certain mandatorily redeemable non-controlling interests. The Group adopted the provisions of FIN 150, and the related FSPs, in 2003, which did not have a material impact on our financial position, results of operations or cash flows.

In May 2003, the FASB EITF published Issue 00-21, Revenue Arrangements with Multiple Deliverables ( EITF 00-21 ). EITF 00-21 addresses certain aspects of the accounting by a vendor for arrangements under which it will perform multiple revenue generating activities. The Issue is effective for revenue arrangements entered into for fiscal periods beginning after June 15, 2003. The Group adopted the provisions of EITF



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Issue 00-21 effective in the third quarter of 2003, which did not have a material impact on our financial position, results of operations or cash flows.

In April 2003, the FASB issued SFAS 149, *Amendment of Statement 133 on Derivative Instruments and Hedging Activities* ( SFAS 149 ). This Statement amends and clarifies financial accounting and reporting for derivative instruments, including certain derivative instruments embedded in other contracts (collectively referred to as derivatives) and for hedging activities under SFAS 133, *Accounting for Derivative Instruments and Hedging Activities* . SFAS 149 is to be applied prospectively to contracts entered into or modified after June 30, 2003 and for hedging relationships designated after June 30, 2003. The Group adopted the provisions of SFAS 149 effective in the third quarter of 2003, which did not have a material impact on our financial position, results of operations or cash flows.

In January 2003, the FASB published FASB Interpretation no. 46, *Consolidation of Variable Interest Entities* ( FIN 46 ). FIN 46 addresses the consolidation of entities for which control is achieved through means other than through voting rights (such entities are designated *variable interest entities* or *VIE* ) by clarifying the application of ARB No. 51, *Consolidated Financial Statements* to certain entities in which equity investors do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. The primary objective of this interpretation is to provide guidance on how to identify a VIE and to determine when a VIE's assets, liabilities, noncontrolling interests and result of operations need to be included in a company's consolidated financial statements. For VIEs created after January 31, 2003, the Group is required to apply the measurement principles of FIN 46 in its 2003 financial statements. For VIEs created or acquired before February 1, 2003, the measurement principles of FIN 46 become effective for the Group as of January 1, 2004. In December 2003, the FASB issued FIN 46-R, *Consolidation of Variable Interest Entities* ( FIN 46-R ), in which a partial deferral of FIN 46, as well as various other amendments to FIN 46, were approved. The Group will adopt FIN 46-R in our 2004 fiscal year reporting. We do not believe that the implementation of FIN 46-R will have a material impact on our financial position, results of operations or cash flows.

In May 2003, the FASB ratified the consensus reached by the Emergency Issue Task Force on EITF Issue 01-08, *Determining Whether an Arrangement is a Lease* ( EITF 01-08 ). EITF 01-08 provides guidance in determining whether an arrangement should be considered a lease subject to the requirements of FASB Statement 13, *Accounting for Leases* . The consensus of this EITF is to be applied to arrangements agreed or committed to, modified, or acquired in business combinations initiated after the beginning of the next reporting period beginning after May 28, 2003. The Group will adopt this standard effective January 1, 2004. We do not believe the adoption of this standard will have a material impact on our financial position, results of operations or cash flows.

In August 2003, the FASB ratified the consensus reached by the Emergency Issue Task Force on EITF Issue 03-11, *Reporting Realized Gains and Losses on Derivative Instruments That Are Subject to FASB Statement No. 133, Accounting for Derivative Instruments and Hedging Activities, and Not Held for Trading Purposes* as Defined in EITF Issue No. 02-3, *Issues Involved in Accounting for Derivative Contracts Held for Trading Purposes and Contracts Involved in Energy Trading and Risk Management Activities* ( EITF 03-11 ). EITF 03-11 addresses whether realized gains and losses should be shown gross or net in the income statement for contracts that are not held for trading purposes, but are derivatives subject to SFAS 133. The consensus of this EITF is to be applied to derivative instruments entered into after the beginning of the next reporting period beginning after August 13, 2003. The Group will adopt this standard effective January 1, 2004. We do not believe the adoption of this standard will have a material impact on our financial position, results of operations or cash flows.

In December 2003, the AICPA issued SOP 03-3, *Accounting for Loans or Certain Debt Securities Acquired in a Transfer* ( SOP 03-3 ). SOP 03-3 proposes guidance on accounting for differences between contractual and expected cash flows from an investor's initial investment in loans or debt securities acquired in a transfer if those differences are attributable, at least in part, to credit quality. SOP 03-3 is effective for loans acquired in fiscal years beginning after December 15, 2004. The Group will adopt this standard effective

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January 1, 2005. We do not believe the adoption of this standard will have a material impact on our financial position, results of operations or cash flows.

In December 2003, the Medicare Prescription Drug, Improvements and Modernization Act of 2003 (the Medicare Act ) was approved in the United States. The Medicare Act provides for two new prescription drug benefit features under Medicare. The Group provides post-retirement benefits to its United States employees; the benefits provided are impacted by the Medicare Act. SFAS 106, Employers Accounting for Postretirement Benefits Other Than Pensions ( SFAS 106 ), requires that enacted changes in the law that take effect in future periods and that will affect the future level of benefit coverage be considered in the current period measurement for benefits expected to be provided in those future periods. In response to the Medicare Act and the requirements of SFAS 106, the Financial Accounting Standards Board ( FASB ) released FASB Staff Position No. 106-1, Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003 ( FSP 106-1 ). FSP 106-1 provides a one-time election to defer accounting for the effects of the Medicare Act until further guidance on the accounting for the new Medicare features is released. The Group has elected to defer the accounting for the effects of the Medicare Act. Accordingly, the Group s consolidated financial statements and the accompanying notes as of and for the year ended December 31, 2003 do not reflect the effects of the Medicare Act. Further guidance, when issued, could require the Group to change previously reported information.

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### **Item 6. Directors, Senior Management and Employees** **Directors and Senior Management**

In accordance with the German Stock Corporation Act (*Aktiengesetz*), Bayer AG has both a Board of Management (*Vorstand*) and a Supervisory Board (*Aufsichtsrat*). The Board of Management is responsible for the management of our business; the Supervisory Board supervises the Board of Management and appoints its members. The two boards are separate, and no individual may simultaneously be a member of both boards.

Members of both the Board of Management and the Supervisory Board owe a duty of loyalty and care to Bayer AG. In exercising their duties, the applicable standard of care is that of a diligent and prudent businessperson. Members of both boards must take into account a broad range of considerations when making decisions, including the interests of Bayer AG and its shareholders as well as of employees and creditors.

The members of the Board of Management and the Supervisory Board may be held personally liable to Bayer AG for breaches of their duties of loyalty and care. Bayer AG must bring an action for breach of duty against the Board of Management or Supervisory Board upon a resolution of the shareholders' meeting passed by a simple majority of votes cast, or upon the request of shareholders holding, as a group, at least 10 percent of the outstanding share capital. With the exception of shareholders of companies that (unlike Bayer AG) are under the control of another company, individual shareholders of German companies cannot sue directors on behalf of the company in a manner analogous to a shareholder's derivative action under U.S. law. Under German law, directors may be liable for breach of duty to shareholders (as opposed to a duty to the company itself) only where a breach of duty to the company also constitutes a breach of a statutory provision enacted specifically for the protection of shareholders. As a practical matter, shareholders are able to assert liability against directors for breaches of this sort only in unusual circumstances.

#### ***Board of Management***

The Board of Management is responsible for managing the business of Bayer AG in accordance with the German Stock Corporation Act and Bayer AG's Articles of Association. It also represents Bayer AG in its dealings with third parties and in court. According to the Articles of Association, the Board of Management consists of a minimum of two members. The Supervisory Board determines the number of and appoints the members of the Board of Management. Members of the Board of Management are appointed for a maximum term of five years and are eligible for reappointment after the completion of their term in office.

Bayer AG is legally represented by two members of the Board of Management acting together, or by one member of the Board of Management together with a person possessing a special power of attorney (*Prokura*).

The Board of Management must report regularly to the Supervisory Board, particularly on proposed business policy and strategy, on profitability and on the current business of Bayer AG, as well as on any exceptional matters that may arise from time to time. If not otherwise required by law, the Board of Management decides with a simple majority of the votes cast. In case of deadlock, the vote of the chairman is the relevant vote.

Under certain circumstances, such as a serious breach of duty or a vote of no confidence by the shareholders in an annual meeting, a member of the Board of Management may be removed by the Supervisory Board prior to the expiration of his term. A member of the Board of Management may not deal with, or vote on, matters relating to proposals, arrangements or contracts between him/herself and Bayer AG.

Individual Board members serve as representatives with primary responsibility for our various corporate functions and as representatives for the various geographic regions in which we operate.

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The following table shows the members of our current Board of Management, their ages, positions and the years in which their current terms expire.

Name and Age <sup>(1)</sup>	Position	Current term expires
Werner Wenning (57)	Chairman	2007
Dr. Udo Oels (60)	Member	2006
Klaus Kühn (52)	Member	2007
Dr. Richard Pott (49)	Member	2007

(1) Werner Spinner resigned from the Board of Management effective February 28, 2003.

*Werner Wenning* became chairman of our Board of Management in April 2002. He has served on the Board since 1997. Prior to becoming chairman, he served as chief financial officer and was a member of the Corporate Coordination and Human Resources Committees. From 1996 until he joined the Board in 1997, Mr. Wenning was head of Corporate Planning and Controlling. In addition to his responsibilities on the Board, he is a member of the supervisory boards of Gerling-Konzern Versicherungs-Beteiligungs AG and Henkel KGaA.

*Dr. Udo Oels* joined the Board of Management in 1996 and currently is responsible for the corporate functions innovation, technology and environment. In addition to his responsibilities on the Board, he is a member of the supervisory boards of Bayer Chemicals AG and ThyssenKrupp Services AG.

*Klaus Kühn* is Bayer's chief financial officer. Prior to joining the Board in May 2002, Mr. Kühn was head of Bayer's Finance Division. Prior to that appointment, he oversaw the spin-off of Bayer's former Agfa division. Before joining Bayer in 1998, Mr. Kühn worked with Schering AG, most recently as head of finance. He is also the vice president of the Deutsches Aktieninstitut e.V. In addition to his responsibilities on the Board, he is chairman of the supervisory board of Bayer CropScience AG.

*Dr. Richard Pott* joined the Board in May 2002. He had previously served as General Manager of our Specialty Products business group. Before assuming responsibility for Specialty Products, he served Bayer in a number of positions, most recently as head of the Strategic Planning Department and then as head of Corporate Planning and Controlling. Dr. Pott oversees strategy and human resources and serves as *Arbeitsdirektor*. In addition to his responsibilities on the Board, he is a member of the supervisory board of Bayer HealthCare AG.

**Supervisory Board**

Under the German Stock Corporation Act, the German Co-Determination Act (*Mitbestimmungsgesetz*) of 1976 and our Articles of Association, the Supervisory Board consists of 20 members. The principal function of the Supervisory Board is to supervise the Board of Management and to appoint its members. The Supervisory Board oversees our business policy, corporate planning and strategy. It also approves the annual budget and the financial statements of Bayer AG and of the Bayer Group. The Supervisory Board may not make management decisions, but the Board of Management's Standard Operating Procedures (*Geschäftsordnung*) may require the prior consent of the Supervisory Board for specified transactions above a specified threshold, including:

the acquisition or disposition of assets;

the acquisition, disposition or encumbrance of real property;

the creation of new business units or the disposition of existing units; and

the issuance of bonds, entering into of credit agreements, or grant of guaranties, sureties (*Bürgschaften*) and loans, except to subsidiaries.

Our shareholders elect ten members of the Supervisory Board at the annual meeting of shareholders. Pursuant to the Co-Determination Act of 1976, our employees elect the remaining ten members. The term of a Supervisory Board member expires at the end of the annual meeting of shareholders in which the shareholders discharge Supervisory Board members for the fourth fiscal year following the year in which the member was elected. There is no compulsory retirement age for members of the Supervisory Board. However, in accordance



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with the German Corporate Governance Codex, Supervisory Board members are encouraged to retire at the Annual Shareholders Meeting following the member's 72nd birthday.

Any member elected by the shareholders at the annual meeting of shareholders may be removed by a majority of three quarters of the votes cast by the shareholders in such meeting. Any member elected by the employees may be removed by a majority of three quarters of the votes cast by the employees. Unless otherwise required by law or by the Articles of Association of Bayer AG, resolutions of the Supervisory Board are passed by simple majority of the votes cast. According to the Articles of Association, in the case of a deadlock, a second vote is held in which the chairman of the Supervisory Board is entitled to one additional vote. In order to constitute a quorum, at least half of the total members of the Supervisory Board must participate in the voting.

All of the current shareholder representatives on the Supervisory Board were elected by the shareholders at the annual meeting of shareholders held on April 26, 2002, with the exception of Dr. Jürgen Weber, who was elected on April 25, 2003.

The following table shows the current members of our Supervisory Board, their principal occupations and the year in which they were first elected or appointed. Employee representatives are identified by an asterisk.

<u>Name<sup>(1)</sup></u>	<u>Position</u>	<u>Principal occupation</u>	<u>First elected</u>
Dr. Manfred Schneider	Chairman	Former chairman of the management board, Bayer AG	2002
*Erhard Gipperich	Vice Chairman	Chairman of the Group and Central Works Councils of Bayer AG, Leverkusen	1998
Dr. Paul Achleitner	Member	Member of the management board, Allianz AG	2002
Dr. Josef Ackermann	Member	Chairman of the management board, Deutsche Bank AG	2002
*Karl-Josef Ellrich	Member	Chairman of the Works Council, Dormagen Site	2000
Prof. Dr.-Ing. e.h. Hans-Olaf Henkel	Member	President of the Leibniz Association	2002
*Thomas Hellmuth	Member	Agricultural Engineer	2002
Dr. h.c. Martin Kohlhaussen	Member	Chairman of the supervisory board, Commerzbank AG	1992
John Christian Kornblum	Member	Chairman of Lazard & Co.	2002
*Petra Kronen	Member	Chairman of the Works Council, Uerdingen Site	2000
Dr. Heinrich von Pierer	Member	President and Chief Executive Officer of Siemens AG	1993
*Wolfgang Schenk	Member	Engineer	2002
*Hubertus Schmoldt	Member	Chairman of German Mine, Chemical and Power Workers Union	1995
*Dieter Schulte	Member	Former Chairman of German Unions Federation	1997
Dipl.-Ing. Dr.-Ing. e.h. Jürgen Weber	Member	Chairman of the supervisory board, Deutsche Lufthansa AG	2003
*Siegfried Wendlandt	Member	North Rhine District Secretary of German Mine, Chemical and Power Workers Union	2001
*Reinhard Wendt	Member	Printer	2002
*Thomas de Win	Member	Commercial Clerk	2002
Prof. Dr. Dr. h.c. Ernst-Ludwig Winnacker	Member	University Professor, Bonn; President of the German Research Association, Bonn	1997
Dr. Hermann Wunderlich	Member	Former Vice Chairman of the Management Board, Bayer AG	1996

(1) Dr. Wolfgang Reitzle resigned from the Supervisory Board effective April 25, 2003.



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### ***Supervisory Board Committees***

Currently, the Supervisory Board has the following committees:

The Presidium was established pursuant to § 27 (3) of the Co-Determination Act and consists of the chairman and vice chairman of the Supervisory Board, as well as of one shareholder representative and one employee representative. It serves as our nomination committee (*Vermittlungsausschuss*). The purpose of this committee is to nominate members of the Board of Management for election by a simple majority of the votes of the Supervisory Board in the event that the Supervisory Board is unable to appoint members of the Board of Management with the votes of at least a two thirds majority of the Supervisory Board. Pursuant to § 9 (2) of the Standard Operating Procedures (*Geschäftsordnung*) of the Supervisory Board, the Presidium also prepares the general meetings of the full Supervisory Board. The current members of the Presidium are Mr. Schneider (chairman), Mr. Gipperich, Mr. von Pierer and Mr. Schmoldt.

The personnel committee (*Personalausschuss*) was established pursuant to § 10 of the Standard Operating Procedures of the Supervisory Board. The personnel committee consists of four members of the Supervisory Board. The chairman of the Supervisory Board acts as chairman of the personnel committee. The main responsibility of the personnel committee is the determination of the salary and further conditions of the employment of Board of Management members, the legal representation of the Company in affairs with Board of Management members pursuant to § 112 of the German Stock Corporation Act, the approval of agreements with Supervisory Board members pursuant to § 114 of the German Stock Corporation Act and the approval of loans granted to Supervisory Board and Board of Management members and other persons pursuant to § 89 and § 115 of the German Stock Corporation Act. The current members of the personnel committee are Mr. Schneider (chairman), Mr. Kohlhaussen, Mr. Ellrich and Ms. Kronen.

The audit committee (*Prüfungsausschuss*) was established pursuant to § 11 of the Standard Operating Procedures of the Supervisory Board. The audit committee consists of six members of the Supervisory Board. The chairman of the Supervisory Board acts as chairman of the audit committee. The main responsibilities of the audit committee are oversight of financial accounting, risk management, the preparation of the resolutions of the Supervisory Board with respect to the annual financial statements, the review of all non-audit services to be performed by the independent auditor, oversight over the independent auditors including scope of services, fees and schedules, the direct receipt of the audit reports, and the direct receipt of reports of accounting irregularities. The current members of the audit committee are Mr. Kohlhaussen (chairman), Mr. Schneider, Mr. Henkel, Mr. Schenk, Mr. Wendlandt and Mr. de Win.

### **Share Ownership**

Because the shares of Bayer AG are in bearer form, we cannot obtain precise information as to their holders. To the best of our knowledge, however, no member of the Supervisory Board or the Board of Management beneficially owns shares of Bayer AG totaling one percent or more of all outstanding shares.

### **Compensation**

The members of our Board of Management receive a base salary, a fixed supplement and a variable bonus. Beginning in 2003, the variable bonus for a given year is tied to the attainment of our Group gross cash flow target. In addition, the members of our Board of Management may participate in a cash-settlement-based stock option program if they place shares of their own into a special deposit account. In 2003, we paid salary and bonus compensation totaling 4,590,646 (2002: 5,700,737) to the members of our Board of Management. Of this amount, 4,431,023 was paid to members who were active on the Board as of December 31, 2003. With respect to their periods of active membership, an additional 159,623 was paid to members of the Board who resigned. Of the amount paid to members who were active on the Board as of December 31, 2003, 2,248,676 represented base salary and fixed supplement and 2,081,169 represented variable bonus. The Board members who were



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active as of December 31, 2003 also received remuneration in kind totaling 101,178 and consisting mainly of amounts such as the value assigned to the use of a company car for taxation purposes.

Emoluments to retired members of the Board of Management and their surviving dependents amounted to 10,184,254 (2002: 14,383,353). We pay former and retired members of the Board of Management a monthly pension equal to 80 percent of the last monthly base salary received while in service. If we increase the base salary of current members of the Board of Management, we adjust the pension payments to retired members accordingly. These amounts are in addition to any amounts they receive as a result of their participation in the Bayer pension plan described below. See *Employee Pension Plan*.

In 2000, we implemented our Stock Option Program, under which we may grant option rights to members of the Board of Management. The cash value that these option rights entitle holders to receive will vary substantially depending on certain performance benchmarks; if minimum benchmarks are not reached, the holder is not entitled to exercise the option rights. From the 2003 tranche of the Stock Option Program, the members of the Board of Management received a total of 30,300 option rights on the basis of their own investments. These rights are initially blocked for three years, followed by a two-year exercise period. See below, *Employee option plans Stock Option Program*.

The following table shows the remuneration paid to those individual members of our Board of Management who were active on the Board as of December 31, 2003.

***Remuneration of the Members of the Board of Management***

	<b>Period</b>	<b>Base Salary</b>	<b>Fixed supplement</b>	<b>Variable bonus</b>	<b>Total</b>	<b>Stock option rights (2003 tranche)</b>
				(euros)		
Klaus Kühn	Jan.-Dec. 2003	409,144	63,870	436,590	909,604	6,450
Dr. Udo Oels	Jan.-Dec. 2003	413,560	63,870	436,590	914,020	6,450
Dr. Richard Pott	Jan.-Dec. 2003	408,712	63,870	436,590	909,172	6,450
Werner Wenning	Jan.-Dec. 2003	713,877	111,773	771,399	1,597,049	10,950

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The following table shows the remuneration paid to individual members of the Supervisory Board who were active on the Board as of December 31, 2003. Employee representatives, who receive salaries from us unrelated to their work on the Supervisory Board, are identified by an asterisk. The aggregate amount of the salaries they received in 2003 in their capacities other than as members of the Supervisory Board is 574,823.

**Remuneration of the Members of the Supervisory Board**

	Basic remuneration	Variable remuneration	Totals
		(euros)	
Dr. Paul Achleitner	5,000	24,500	29,500
Dr. Josef Ackermann	5,000	24,500	29,500
*Karl-Josef Ellrich	6,250	30,625	36,875
*Erhard Gipperich	8,750	42,875	51,625
*Thomas Hellmuth	5,000	24,500	29,500
Prof. Dr.-Ing. e.h. Hans-Olaf Henkel	6,250	30,625	36,875
Dr. h.c. Martin Kohlhaussen	8,750	42,875	51,625
John Christian Kornblum	5,000	24,500	29,500
*Petra Kronen	6,250	30,625	36,875
Dr. Heinrich von Pierer	6,250	30,625	36,875
*Wolfgang Schenk	6,250	30,625	36,875
Hubertus Schmoldt	6,250	30,625	36,875
Dr. Manfred Schneider	15,000	73,500	88,500
Dieter Schulte	5,000	24,500	29,500
Dipl.-Ing. Dr.-Ing. e.h. Jürgen Weber	3,403	16,674	20,077
Siegfried Wendlandt	6,250	30,625	36,875
*Reinhard Wendt	5,000	24,500	29,500
*Thomas de Win	6,250	30,625	36,875
Prof. Dr. Dr. h.c. Ernst-Ludwig Winnacker	5,000	24,500	29,500
Dr. Hermann Wunderlich	5,000	24,500	29,500

There were no loans to members of the Board of Management or to members of the Supervisory Board outstanding as of December 31, 2003.

**Board of Management severance plan**

Beginning in 2001, we established a severance plan for the members of Bayer AG's Board of Management. This plan provides for payments to Board members if their relationship with Bayer AG is terminated following a change of control. Change of control, for the purposes of this plan, is defined as the acquisition by a third party of 25 percent or more of Bayer AG's outstanding shares or transactions that would have a similar effect. A Board member is generally eligible for payment under the plan if his or her relationship with Bayer AG ends within 12 months of the change of control, other than in the case of termination for cause or termination of a Board member aged 62 or more at the time of termination.

Under the plan, former Board members are entitled to receive the present value of the compensation they would have received through the normal expiration date of their employment contracts, discounted by 25 percent for a duration of more than three years. In addition, they are entitled to receive a severance payment equal to the sum of two to four years' annual compensation. The basic amount of these severance payments is equal to two years' compensation. If the former Board member is 50 or older at the time of termination, the payment increases by one year's compensation or by two years' compensation if, in addition, the former Board member's length of service with the company was at least 30 years or his or her tenure on the Board was at least ten years. Total payments under the plan are, however, capped at an amount equal to five times the former Board member's annual compensation. In addition, the former Board member retains full pension rights.

**Table of Contents***Employee option plans*

In May 2000, we implemented a three-tier program to provide employees and management with an opportunity to earn Bayer AG shares. We offer the *stock option program* for members of the Board of Management and senior executives, the *stock incentive program* for middle management and equivalent employees and the *stock participation program* for junior management and other employees.

To make use of the stock option program, the stock incentive program and Module 1 of the stock participation program (described below), participants must place Bayer AG shares of their own into a special deposit account. Participants do not pay an exercise price for the shares they receive under these programs. Rather, they receive the shares as bonus shares or as cash payments or, in the case of Module 2 of the stock participation program, have the opportunity to purchase shares at a discounted price.

We may implement our employee option programs in annual tranches. Each tranche has separate terms, holding periods and other key parameters as described below for 2003, in each case keyed to the starting date of that tranche.

*Stock Option Program*

Members of the Board of Management and senior executives who wish to participate in the stock option program must place Bayer AG shares of their own in a special deposit account. We determine on an individual basis the maximum number of shares each participant may deposit; the participant receives between one and three option rights for each share deposited. The exact number of option rights per share is dependent on relative performance of the company or the subgroups, in comparison to selected competitors during the three years preceding the tranche, as well as on the participant's individual performance. These deposited shares are locked up, meaning that the participant may not sell them during the following three-year holding period. After the end of these three years, a two-year exercise period begins. During this period, the participant may exercise the option rights if the performance criteria are fulfilled. Any unexercised option rights expire at the end of this two-year period.

We apply two criteria, one based on performance and one based on outperformance, to determine whether the participant is eligible to exercise option rights granted in any given tranche and, if so, the cash value to be received upon exercise. These criteria measure the absolute and relative performance of the Bayer AG share.

**Share Performance Criterion:** If the Bayer AG share price has increased at least 25 percent from the starting date of the tranche, each option right entitles the participant to have the cash value of one Bayer share for each option exercised added to the calculation. This amount will then be multiplied by the weighting for the share performance criterion (this factor is currently 1, set at the beginning and valid throughout the term of the tranche).

**Share Outperformance Criterion:** Outperformance is the difference between the percentage change in the price of the Bayer share and the percentage change in the Dow Jones EURO STOXX 50<sup>(SM)</sup> price index from the start of the program to the time the option is exercised. If the Bayer share has outperformed the index, the participant will, for each option exercised, have the cash value of one Bayer share at the start of the program added to the calculation, multiplied by the share outperformance. This amount is then multiplied by the weighting for the share outperformance criterion (this factor is currently 3, set at the beginning and valid throughout the term of the tranche).

The weighting for each of the two criteria is set such that the market values of both components are equal at the start of the tranche. We multiply the contributions resulting from both the Performance and the Outperformance criterion by the respective weighting factors. The sum of both products is the cash value to which the participant is entitled.

In 2003, participants in our stock option program received a total of 196,987 option rights. The current tranche started on August 31, 2003. Based on this start date, an outset value was calculated at 19.75 by averaging the Bayer share price over the ten trading days immediately preceding August 31, 2003. Based hereon, the performance criterion will start to pay off at a price of 24.69 ( 19.75 + 25 percent).

**Table of Contents***Stock Incentive Program*

Like the stock option program, our stock incentive program for middle management requires participants to deposit Bayer AG shares in a special deposit account. In any given annual tranche, a participant may deposit shares with a maximum aggregate value of half of his or her performance-related bonus for the preceding fiscal year. The amount of incentive payment the participant receives depends on the number of Bayer AG shares deposited at the start of the tranche as well as on the price performance of the Bayer AG share. Unlike the stock option program, the stock incentive program does not lock up deposited shares. Participants may sell their deposited shares during the term of the tranche, but any deposited shares they sell are no longer counted in calculating the number of incentive shares for subsequent distribution dates. In the 2003 fiscal year, participants were allowed to deposit shares in a maximum aggregate value equal to 50 percent of their performance-related bonus for the 2002 fiscal year.

Each tranche of the stock incentive program has a ten-year term. There are three incentive payment distribution dates during this period. On these dates, the participant receives an incentive payment based on the price (at that time) of a defined number of Bayer AG shares as follows:

Distribution date at end of	Incentive payments received (per 10 deposited shares)
Second year	2
Sixth year	4
Tenth year	4

Participants receive incentive payments only if the price increase of the Bayer AG share has outperformed the Dow Jones EURO STOXX 50<sup>(SM)</sup> price index on the relevant distribution date, as calculated from the starting date of the tranche.

Based on the number of Bayer AG shares that participants in the stock incentive program deposited in the tranche for 2003, participants are eligible to receive a total of 32,010 shares on the tranche's future distribution dates, assuming satisfaction of the performance criterion on each such date and assuming that these participants do not remove any shares from deposit during the term of the tranche.

*Stock Participation Program*

Our stock participation program has two components, Module 1 and Module 2. Employees not covered by the stock option program or stock incentive program may generally participate in both Module 1 and Module 2.

The Module 1 program, like the stock incentive program, requires participants to deposit Bayer AG shares in a special account. As with the stock incentive program, participants in the stock participation program may sell their deposited Bayer AG shares during the term of the tranche; any shares they sell are no longer counted in calculating the amount of incentive payments on subsequent distribution dates for that tranche. Participants may deposit shares in a total value equal to half their performance-related bonus for the previous year. In the 2003 fiscal year, junior management participants were allowed to deposit shares in a maximum aggregate value equal to 50 percent of their performance-related bonus for the 2002 fiscal year.

Each tranche of Module 1 has a term of ten years and entitles the participant to receive incentive payments on three distribution dates based on the number of shares he or she has deposited. Unlike the stock incentive program, Module 1 does not impose a share performance criterion. The participant receives an incentive payment based on the price (at that time) of a defined number of Bayer AG shares as follows on the distribution dates:

Distribution date at end of	Incentive payments received (per 10 deposited shares)
Second year	1
Sixth year	2
Tenth year	2

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Based on the number of Bayer AG shares that participants in Module 1 of the stock participation program have deposited in the tranche for 2003, participants are eligible to receive the financial equivalent of a total of

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307,230 shares on the future distribution dates, assuming that these participants do not remove any shares from deposit during the term of the tranche.

In addition, under the 2003 tranche of Module 2, each participant may purchase 20 Bayer AG shares per year at a tax-free discount of 7.70 per share under the then market price. These shares may not be sold until December 31, 2004. Participants may not include shares that they purchase under Module 2 among the shares they deposit under Module 1.

**Employees**

The following tables set forth the average number of employees in continuing operations during 2003, 2002 and 2001 by area of primary activity and an approximate breakdown of employees as of December 31, 2003, 2002 and 2001 by geographical region:

	Employees by Activity				Breakdown by Region		
	Average for				As of December 31,		
	2001	2002	2003		2001	2002	2003
Technology	61,055	66,051	62,850	Europe	67,800	70,100	66,100
Marketing	33,875	35,985	34,765	North America	24,000	24,600	23,300
Administration	9,091	10,035	9,063	Asia/Pacific	13,000	15,400	13,900
Research	11,206	12,521	11,602	Latin America/Africa/ Middle East	11,500	12,000	11,500
Total	115,227	124,592	118,280	Corporate	600	500	600

**Labor Relations**

The union-organized employees at our German facilities belong to several unions, the most important of which is IG BCE, the German Mining, Chemical and Energy Industrial Union. We do not negotiate collective bargaining agreements directly with these unions to cover our employees. Instead, in accordance with German practice, unions negotiate agreements with industry-wide employers associations, in our case, the German Chemical Industry Association.

In Germany, employers associations and unions typically negotiate collective bargaining agreements annually. However, collective bargaining agreements may be entered into for longer term. The current agreement that covers our employees has a term of 13 months, beginning April 2003. It grants employees a lump-sum payment of 40 in the first month of the agreement and a subsequent 2.6 percent pay increase over the life of the agreement. A German collective bargaining agreement governs the employment of all employees up to a certain level organized in the relevant union. At Bayer, for these employee groups, even the employees who are not union members are granted rights under the collective bargaining agreements by way of individual agreement.

There are 13 pay grades, based on job description, for our employees in positions governed by collective bargaining agreements. Our management employees, who have individual employment or service contracts, are organized in six contract levels. The Chemical Industry has a union for academics (Verband der angestellten Akademiker (VAA)). Apart from a specific collective bargaining agreement for young academics at entry level, management contracts are not subject to collective bargaining agreements.

Each Bayer facility in Germany has a works council (*Betriebsrat*), elected by all non-management employees. Members serve a four-year term; the last elections took place in March 2002. The works councils facilitate communications between management and staff at the facility level. A joint works council (*Gesamtbetriebsrat*) serves a similar purpose at the company-wide level and the same applies to the Group works council (*Konzernbetriebsrat*) at Group level, Germany-wide. The rights and responsibilities of works councils are set forth in the German Works Council Constitution Act (*Betriebsverfassungsgesetz*). Within the given framework

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of laws and collective bargaining agreements, works councils have participatory rights on site and company level with respect to managing staff-related issues as well as such working conditions as:

working hours (namely, beginning and end of daily working hours);

vacation guidelines;

social services (e.g., subsidized cafeterias); and

distribution guidelines for performance-related bonuses.

A works council has generally no authority, however, to negotiate with an employer on wage and salary compensation or other issues included in or typically included in collective bargaining agreements between employers' associations and labor unions, unless the relevant collective bargaining agreement provides otherwise. Under German labor law, employees may not legitimately strike during the term of the collective bargaining agreements. The provisions of the applicable collective bargaining agreements determine whether the right to strike in request of issues not covered by the applicable collective bargaining agreements is also excluded during such term. Works councils generally have no legal authority to call a work stoppage. On the European level, we put in practice a customized procedure for information and consultation of employee representatives based on a voluntary agreement between Bayer AG and the Group works council (Europaforum).

Associated with restructuring measures within the Bayer Group, on November 7, 2003, the Board of Management and the employee representatives of the Supervisory Board agreed, subject to the approval of the competent employee representative bodies, upon principles for the extension of the existing agreement with the joint works council dated December 12, 2000 for safeguarding employment at several of our major German sites, taking effect January 1, 2004. Under these principles, an act of solidarity by all employees at German Bayer locations allows us to maintain 1,000 full time equivalent (FTE) positions more than previously planned. By reducing the performance-related variable income by up to 10 percent, personnel costs of those employees who are temporarily unassigned are covered. On this basis, we agreed that we would not, except in exceptional circumstances, lay off employees at our Leverkusen, Dormagen, Uerdingen, Elberfeld and Brunsbüttel sites for operational reasons before December 31, 2007. If exceptional circumstances arise that are beyond our control and lead to an overcapacity of employees, we have agreed to negotiate with the joint works council in order to find a solution that will serve the interests of the company and the employees to the greatest possible extent.

### ***Employee Pension Plan***

All employees who have not reached the age of 55 before entering into employment with Bayer AG must join Bayer AG's pension fund (*Bayer-Pensionskasse*). As a member of the *Pensionskasse*, an employee makes a monthly contribution of 2 percent of his or her monthly salary (up to the threshold for the statutory pension insurance (*gesetzliche Rentenversicherung*), which for 2003 is 5,100 per month or 61,200 per year) to the pension fund. These contributions are withheld from the member's salary. Bayer AG also contributes to the *Pensionskasse*. Upon retirement, the employee is entitled to receive a monthly basic pension payment (*Grundrente*) from the *Pensionskasse* if the employee was employed by Bayer AG, or was a member of the *Pensionskasse*, for at least five years. Employees whose annual salary exceeds the annual salary threshold for statutory pension insurance (*gesetzliche Rentenversicherung*) as set forth above by up to 45,700 are entitled to receive an additional monthly pension payment from an additional pension plan (*Zusatzrente*), for which book reserves are included in the balance sheet. Employees whose annual earnings exceed the total of 61,200 plus 45,700 may become eligible for the grant of an individual pension promise. Bayer AG includes these individual pension entitlements also as book reserves in the balance sheet.

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### **Item 7. Major Shareholders and Related Party Transactions** **Major Shareholders**

Under our Articles of Association, each of our ordinary shares represents one vote. Major shareholders do not have different voting rights.

Under the German Securities Trading Act (*Wertpapierhandelsgesetz*), holders of voting securities of a listed German company must notify that company of the level of their holding whenever it reaches, exceeds or falls below specified thresholds. These thresholds are 5, 10, 25, 50 and 75 percent of the company's outstanding voting securities. One shareholder, Allianz AG, has informed the SEC via filing with the SEC on February 13, 2004 that it holds 41,877,321 ordinary shares of Bayer AG, which represents 5.7 percent of our outstanding shares. No other shareholder has notified us that it has crossed any of the Securities Trading Act's thresholds. Allianz AG does not have different voting rights.

Because the shares of Bayer AG are in bearer form, we cannot obtain precise information as to the identity of shareholders or the distribution of the shares among them. From time to time, however, we conduct surveys, using the assistance of banks, to form estimates as to Bayer AG's shareholder base. Our last such survey measured our shareholder structure as of June 1, 2001. The survey recorded responses with respect to 95.6 percent of our approximately 500,000 shareholders. Of this number, 94 percent were individuals, who together owned 24 percent of the shares. Approximately 55,000, or 12 percent, of the individual shareholders were Bayer employees, who together held approximately 2 percent of Bayer AG's outstanding shares. Institutional investors (*e.g.*, banks, insurance companies and investment funds) held another 67 percent of the shares. Shareholders in Germany numbered approximately 437,000 and owned 61 percent of the shares. Approximately 59,000 shareholders in 135 other countries held 39 percent of the shares. Of this group, British shareholders held approximately 10 percent, and U.S. shareholders about 8 percent, of the shares.

To our knowledge, we are not directly or indirectly owned or controlled by another corporation or by any government, and there are no arrangements which may result in a change of control.

See also Item 6, *Directors, Senior Management and Employees - Share Ownership*.

### **Related Party Transactions**

In the ordinary course of business, we purchase materials, supplies and services from numerous companies throughout the world. Members of Bayer AG's Supervisory Board are affiliated with some of these companies. We conduct our transactions with such companies on an arm's length basis. We do not consider the amounts involved in such transactions to be material to our business and believe that these amounts are not material to the business of the companies involved.

During our three most recent complete financial years and through the date of this annual report, we have not been involved in, and we do not currently anticipate becoming involved in, any transactions that are material to us or any of our related parties and that are unusual in their nature or conditions. We have not made any outstanding loans to or for the benefit of:

enterprises that, directly or indirectly, control or are controlled by, or are under common control with us (except at arm's length conditions in the ordinary course of business);

enterprises in which we have significant influence or which have significant influence over us (except at arm's length conditions in the ordinary course of business);

shareholders beneficially owning a 10 percent or greater interest in our voting power;

key management personnel; or

enterprises in which persons described above own, directly or indirectly, a substantial interest in the voting power.



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### **Interests of Experts and Counsel**

Not applicable.

### **Item 8. Financial Information Consolidated Financial Statements and Other Financial Information**

See Item 18.

### **Legal Proceedings**

Bayer is involved in a number of legal proceedings. As a global company active in a wide range of life sciences and chemical activities, we may in the normal course of our business become involved in proceedings relating to such matters as:

product liability;

patent validity and infringement disputes;

tax assessments;

competition and antitrust; and

past waste disposal practices and release of chemicals into the environment.

We cannot predict with certainty the outcome of any proceedings in which we are or may become involved. An adverse decision in a lawsuit seeking damages from us, or our decision to settle certain cases, could result in a monetary award to the plaintiff and, to the extent not covered by our insurance policies, could significantly harm our business or the result of our operations, financial positions or cash flows. If we lose a case in which we seek to enforce our patent rights, we could sustain a loss of future revenue as other manufacturers begin to market products we developed. In the remainder of this subsection, we describe what we believe to be the most significant of the proceedings in which Bayer AG or its subsidiaries are currently involved. The list of cases is not an exhaustive list of all of the claims that have been made against Bayer AG or its subsidiaries or of the proceedings in which they are involved, and subsequent developments in any pending matter, as well as additional claims that may arise from time to time, including additional claims similar to those described below, could become significant to Bayer.

#### ***Patent validity challenges and infringement proceedings; patent-related antitrust actions***

In the United States, Bayer AG and its U.S. subsidiaries are and have been plaintiffs or coplaintiffs in a number of patent infringement actions against generic drug manufacturers. The lawsuits arose because these manufacturers filed applications in the United States for regulatory approval of generic versions of products marketed by Bayer or its licensees. Some of these actions have, in turn, given rise to lawsuits alleging that Bayer AG, Bayer Corporation and other parties violated federal and state antitrust and similar statutes.

Generic drug manufacturers may receive approval to market formerly patented products after all applicable patent protections have expired. A generic drug manufacturer may, however, attempt to avoid a patent prior to its scheduled expiry by attacking its validity or enforceability. In the United States, the Federal Food, Drug and Cosmetics Act (the Act) enables generic manufacturers wishing to market a bio-equivalent version of another manufacturer's product to seek regulatory approval by filing an Abbreviated New Drug Application (ANDA). In its ANDA, the applicant must state the basis on which it seeks to avoid any applicable patents.

One basis for seeking approval is a claim that the applicant's product does not infringe existing patent rights or that the patent is invalid or unenforceable. This claim is commonly known as a paragraph IV certification or ANDA (IV). Under the Act, the filing of a paragraph IV certification is deemed an infringement of patent rights. The Act permits the holder of the patent rights to file an infringement action against the ANDA applicant within 45 days of receiving notice of the paragraph IV certification. If the holder of the patent rights chooses not to file suit within this period, the FDA may approve the ANDA immediately. The filing of a suit, however, stays



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final FDA approval of the ANDA for a period of 30 months. The court may shorten or extend this period. If the court rules that the applicant's product will not infringe the patent or that the patent is invalid or unenforceable, the FDA may grant approval immediately. If, on the other hand, the court rules that the product will infringe the patent, the FDA may not grant final approval until the original patent has expired.

***Ciprofloxacin-related actions***

*Patent-related actions.* In January 1997, Bayer AG and Bayer Corporation settled a patent infringement suit against Barr Laboratories, Inc. This suit arose when Barr filed an ANDA (IV) seeking regulatory approval of a generic form of Bayer's ciprofloxacin anti-infective product, which we sell in the United States under the trademark Cipro. Under the settlement agreement, Barr and Rugby Laboratories Inc., another generic manufacturer that supported Barr during the infringement suit, agreed to dismiss the litigation, acknowledging the validity and enforceability of Bayer's patent rights, and we agreed to pay each company \$24.5 million. The agreement gave us the option, until our patent expired in 2003, to supply Barr and Rugby's then parent company Hoechst Marion Roussel Inc. with ciprofloxacin products, which they could then market under a license from Bayer using a single trade name, or alternatively to make quarterly cash payments. Since concluding the settlement agreement, we have opted to make payments. As of June 9, 2003, Barr began selling ciprofloxacin hydrochloride tablets in the United States using licensed product purchased from Bayer. These purchases are being made pursuant to a separate obligation of Bayer under the settlement agreement to supply such product to Barr during the six-month period immediately preceding the December 2003 expiration of the patent protecting the sale of Cipro in the United States. Bayer has received pediatric exclusivity for Cipro from the FDA, which will delay the introduction of generic versions of ciprofloxacin for six months beyond expiration of the patent. The agreement term has been extended to include the additional six-month pediatric exclusivity period. Shortly after settling this suit, we applied to the U.S. Patent and Trademark Office for a re-examination of our patent. The Patent and Trademark Office reissued the patent in February 1999. See below, *Antitrust actions*.

*Antitrust actions.* Since July 2000, Bayer Corporation has been named as a defendant in 39 putative class action lawsuits, one individual lawsuit and one consumer protection group lawsuit filed in a number of state and federal courts in the United States. Bayer AG has also been named as a defendant in 20 of those cases, including the individual lawsuit and the consumer protection group lawsuit; however, to date it has only been served with process in the individual lawsuit and twelve of the putative class action lawsuits. In addition, Barr Laboratories, Inc., Aventis S.A., Hoechst Marion Roussel, Inc., Rugby Laboratories, Inc. and Watson Pharmaceuticals, Inc. have each been named as a defendant in one or more of these lawsuits. The plaintiffs in these suits allege that they are direct or indirect purchasers of Cipro who were damaged because Bayer's settlement of the Barr ANDA (IV) litigation prevented generic manufacturers from selling a generic version of Cipro. The plaintiffs allege that the settlement violates various federal antitrust and state business, antitrust, unfair trade practices and consumer protection statutes, and seek treble damages and injunctive relief.

The Judicial Panel for Multidistrict Litigation (or MDL Panel) transferred 35 of these cases to the U.S. District Court for the Eastern District of New York for coordinated pre-trial proceedings. The district court later remanded nine of those cases to various state courts.

On January 25, 2002, Bayer filed a motion to dismiss all of the cases pending in the District Court for the Eastern District of New York, and the plaintiffs filed motions for partial summary judgment that the conduct alleged in the complaints constitutes an agreement that is unlawful on its face. On May 20, 2003, the district court denied the plaintiffs' motions for partial summary judgment, concluding that the alleged conduct was not per se anticompetitive under U.S. antitrust laws. The district court also denied Bayer's motion to dismiss, except as to the consumer protection group lawsuit.

Nine cases have been consolidated and are currently pending in a California state court. The California state court certified a class of certain indirect purchasers on December 1, 2003 and the defendants appealed that decision on January 9, 2004. No other court has certified a class. Bayer is also involved in state court proceedings in Florida, New York, Kansas, Tennessee and Wisconsin. The New York and Wisconsin cases have been dismissed and plaintiffs have appealed the dismissal in Wisconsin.

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The Barr settlement is also the subject of an ongoing antitrust investigation by the U.S. Federal Trade Commission and a number of state attorneys general.

Because these cases, which may involve joint and several liability among the defendants, in the aggregate allege substantial unquantified damages and also seek treble and punitive damages and penalties, it is possible that the ultimate liability for us could materially adversely affect our results of operations or cash flows. Although we cannot predict the outcome of these cases with certainty, we believe that we have meritorious defenses to the antitrust allegations and intend to defend them vigorously. Additionally, due to the considerable uncertainty associated with these proceedings, it is currently not possible to accurately estimate potential liability. Depending on the progress of the litigation, we will continue to reconsider the need to establish provisions, which may have a negative effect on our results of operations, financial position or cash flows.

### ***Moxifloxacin-related actions***

In February 2004, Bayer AG and Bayer Corporation received separate ANDA (IV)s from two generic manufacturers seeking regulatory marketing approval for allegedly bio-equivalent versions of our respiratory tract anti-infective product with the brand name *Avelox*®/*Avalox*®. Both manufacturers seek the approval prior to the expiry of the Bayer patents that, among other things, protect moxifloxacin, the active ingredient of *Avelox*®. Bayer intends to take all appropriate legal action to enforce its legal rights.

### ***Nifedipine-related actions***

*Patent-related actions.* Since 1997, Bayer AG and Bayer Corporation have been involved in a number of patent infringement actions arising from ANDA (IV)s filed by generic manufacturers seeking regulatory marketing approval for allegedly bio-equivalent versions of our brand-name product Adalat CC and Pfizer, Inc.'s brand-name product Procardia XL. The active ingredient of these products is nifedipine. We own patent rights related to nifedipine drug product formulations. In addition, because Pfizer markets Procardia XL under a license from Bayer, Bayer AG and Bayer Corporation became Pfizer's co-plaintiffs in the infringement actions relating to that product. We have satisfactorily concluded these cases related to nifedipine with all of the defendants.

*Antitrust actions.* Biovail filed an antitrust lawsuit against Bayer AG, Bayer Corporation and Pfizer in the U.S. District Court for the District of Western Pennsylvania in April 1998. Biovail was seeking a declaratory judgment that Bayer's nifedipine patents are invalid. Biovail was also seeking damages under federal and state antitrust statutes alleging, among other things, that Bayer illegally asserted its patent rights. The district court stayed this litigation pending resolution of the nifedipine-related patent infringement actions against Biovail. This suit has been dismissed.

### ***Vardenafil-related actions***

On October 22, 2002, a lawsuit (Declaratory Judgment of Infringement of Pfizer's U.S. Patent number 6,469,012) was filed by Pfizer alleging that Bayer and GlaxoSmithKline Inc. had and were engaging in activities directed toward infringement of Pfizer's patent, including seeking FDA approval to market their co-promoted product, *Levitra*®. The FDA approved *Levitra*® for marketing in the U.S. on August 19, 2003. Bayer and SmithKline Beecham Corporation launched the product in the U.S. shortly thereafter. On September 22, 2003, Bayer AG and Bayer Corporation and SmithKline Beecham Corporation were sued by Pfizer Inc. and certain of its affiliates in the U.S. District Court for the District of Delaware in conjunction with Pfizer's earlier patent infringement lawsuit against the same Bayer companies and two different GlaxoSmithKline companies. In this action, Pfizer alleged that Bayer and GlaxoSmithKline were infringing the patent by, *inter alia*, marketing their co-promoted product, *Levitra*®, for the treatment of erectile dysfunction. In both, now consolidated, lawsuits, we and GlaxoSmithKline/SmithKline Beecham denied the allegations raised by Pfizer and filed a counterclaim that Pfizer's patent is invalid. We believe that we have meritorious defenses in these actions and intend to defend them vigorously. In September 2003, the U.S. Patent and Trademark Office initiated a re-examination of the Pfizer patent based on questions of patentability in light of prior art. The litigation has been stayed pending resolution of the re-examination.

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In some other countries further proceedings are pending, in part infringement actions initiated by Pfizer, in part patent nullity proceedings initiated by Bayer. In October 2001, the equivalent European Patent held by Pfizer was revoked by the European Patent Office. Pfizer has appealed against the decision of the European Patent Office. The proceeding is pending. We do not expect a final decision before the end of 2004.

***Aventis Behring actions***

Nattermann & Cie GmbH and Aventis Behring LLC filed a suit on April 11, 2003 against Bayer Corporation and Bayer HealthCare LLC in the U.S. District Court for the Eastern District of Pennsylvania alleging that Bayer's *Kogenate® FS* composition containing recombinant Factor VIII, which is used to treat hemophilia, infringes upon the U.S. patent owned by either Nattermann & Cie or Aventis Behring. Bayer counterclaimed, seeking, *inter alia*, a declaration of patent invalidity and non-infringement, and asserting that Bayer's use of the patented process is pursuant to a license. The proceedings are at an early stage. We believe that we have meritorious defenses in these actions and intend to defend them vigorously.

Aventis Behring LLC filed a suit on December 4, 2003 against Bayer Corporation and Bayer HealthCare LLC in the Court of Common Pleas of Montgomery County, Pennsylvania, alleging that Aventis Behring has been damaged as a result of Bayer's breach of a contract to supply Aventis Behring with agreed-upon quantities of recombinant Factor VIII. At the outset, we brought this state court action to the attention of the federal district court hearing the Nattermann action described above, arguing this breach of contract claim is a compulsory counterclaim in the Nattermann action and should be deemed waived since the deadline for filing such claims in that action has passed, or alternatively, that Aventis Behring should be required to bring this claim in the Nattermann action, rather than as an independent action in state court. In response to federal court directions, the parties have filed briefs on this issue. We believe we have meritorious defenses and claims in this action and intend to defend it vigorously. Due to the considerable uncertainty associated with these proceedings, it is currently not possible to estimate the potential liability.

***Product liability proceedings***

*HIV/HCV-related actions.* During the past decade, Bayer Corporation, as well as other fractionators of plasma products, have been involved in lawsuits alleging that hemophiliacs became infected with the human immunodeficiency virus (HIV), or ultimately developed AIDS, by using clotting factor concentrates derived from human plasma. Plaintiffs have brought actions on these grounds in the United States, Ireland, Italy, Taiwan, Argentina, Canada, Japan and Germany.

In the United States, a class action against Bayer Corporation and three other defendants consolidated the HIV-related claims of more than 6,000 claimants and claimant groups. The parties resolved this class action through a \$600 million settlement. Bayer Corporation's share of this settlement was approximately \$290 million. Bayer Corporation has settled nearly 400 lawsuits by plaintiffs who opted out of the class action. Two suits remain pending in the United States. Although Bayer Corporation has prevailed in the majority of cases that have proceeded to trial, plaintiffs were successful in three cases. The juries in each of these cases awarded damages not exceeding \$2 million. In addition, in 1999, a Louisiana jury awarded a plaintiff damages of \$35 million. However, the trial court set this award aside, and an appellate court upheld this decision. Bayer Corporation has since settled this matter in the context of a group settlement of nearly 100 Louisiana cases, of which Bayer Corporation's share was less than \$50 million. Bayer Corporation intends to defend aggressively the remaining HIV-related lawsuits in various countries. We have made what we believe to be appropriate provisions should these suits result in judgments in favor of the plaintiffs.

In June 2003, a U.S. law firm filed a putative class action against Bayer Corporation and other manufacturers on behalf of non-U.S. residents claiming compensation for HIV/HCV infections allegedly acquired through blood plasma products manufactured in the U.S. In September 2003, plaintiffs amended the complaint to include class action allegations on behalf of U.S. residents claiming compensation for HCV, hepatitis C virus, infections. The case has been transferred from the Northern District of California to the U.S. District Court for the Northern District of Illinois for coordinated discovery and other pre-trial proceedings. In addition to the June 2003 matter, non-U.S. residents have filed five and served three additional cases claiming compensation for HIV/HCV

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infections allegedly acquired through blood plasma products manufactured in the U.S. Two of these matters have been transferred to the Northern District of Illinois. These matters are at an early stage. We believe that we have meritorious defenses to these actions and intend to defend them vigorously. Due to the considerable uncertainty associated with these proceedings, it is currently not possible to estimate the potential liability.

*Cerivastatin-related actions.* In August 2001, Bayer voluntarily ceased marketing *Baycol*, the cerivastatin anticholesterol product, in response to reports of serious side effects in some patients. As of March 5, 2004, 9,948 lawsuits are pending in both federal and state courts, including putative class actions. The actions in the United States have been based primarily on theories of product liability, consumer fraud, medical monitoring, predatory pricing and unjust enrichment. These lawsuits seek remedies including compensatory and punitive damages, disgorgement of funds received from the marketing and sale of cerivastatin and the establishment of a trust fund to finance the medical monitoring of former cerivastatin users. The federal cases were transferred to the U.S. District Court for the District of Minnesota for coordinated discovery and other pre-trial proceedings. A motion for certification of nationwide personal injury, medical monitoring and economic refund classes was denied by this court on September 17, 2003. Similarly, on December 15, 2003, the Circuit Court of Cook County, Illinois denied a motion to certify a class action. On June 16, 2002, the Oklahoma District Court of Pottawatomie County certified a class of all Oklahoma residents who took cerivastatin and sustained muscular/skeletal injuries as a result. Bayer appealed this ruling to the Oklahoma Court of Appeals, which affirmed the lower court's class certification ruling on June 20, 2003. On November 3, 2003, the Oklahoma Supreme Court denied Bayer's motion for a writ of certiorari. On March 19, 2004, the Philadelphia County Court of Common Pleas in Pennsylvania certified a medical monitoring class of persons in Pennsylvania who took cerivastatin and have not been diagnosed with the diseases specified in the certification order. We believe that we have meritorious defenses against class certification and intend to appeal this ruling. The certification of a class is unrelated to a determination of our liability. As of March 5, 2004, 93 actions have been initiated against other companies of the Bayer Group in other countries, including class actions in Canada. In August 2003, the Supreme Court of British Columbia certified a class of all persons resident in British Columbia who ingested cerivastatin. Bayer appealed this ruling and a settlement agreement has been signed in this matter. Subject to court approval, the settlement agreement provides for a decertification of the class proceeding for all persons included in the original class who did not suffer from rhabdomyolysis. Bayer expects additional lawsuits to be filed in the United States and elsewhere. Three U.S. cases have been tried to date, all of which resulted in a verdict in our favor.

In negotiations with the insurance companies concerning the cerivastatin litigation, an agreement was reached with the majority of the insurers. The insurers had previously proceeded only on a provisional basis under a customary reservation of rights. The insurers that are parties to this agreement have now withdrawn the reservations of rights. Thus, Bayer expects the insurance coverage for cerivastatin to be approximately \$1.2 billion. Based on the agreement reached with the insurers and in consideration of further expected settlements and further defense costs, the Company has taken accounting measures, which resulted in a charge to income of 300 million for the fiscal year 2003.

Due to the considerable uncertainty associated with these proceedings, it is currently not possible to estimate the potential liability and thus no provisions exceeding the expected insurance coverage and the above referenced accounting measures already taken have been made. Depending on the progress of the litigation, Bayer may face payments that exceed our expected insurance coverage and the above referenced accounting measures and will continue to reconsider the need to establish additional provisions, which may have a negative effect on the results of our operations, financial positions or cash flows. Without acknowledging any liability, we have settled 2,224 cases in the United States as of March 5, 2004, resulting in settlement payments of approximately \$842 million.

In January and March 2004, Bayer signed settlement agreements with lawyers representing plaintiffs in *Baycol* litigation pending in Canada. The agreements together establish a procedure to settle claims of rhabdomyolysis for all Canadian residents. To facilitate an efficient implementation of the agreement, the parties have agreed to a settlement class which is subject to approval by the courts. Bayer will continue to offer fair compensation to people who experienced serious side effects while taking cerivastatin on a voluntary basis and without concession of liability. In cases where an examination of the facts indicates that *Baycol* played no part in the patient's medical situation, or where a settlement is not achieved, Bayer will continue to defend itself vigorously. Bayer believes it has meritorious defenses in these actions. In some countries, criminal proceedings

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have been initiated by the relevant authorities. In the United States, Bayer co-promoted this product with SmithKline Beecham Corporation. SmithKline Beecham Corporation and Bayer Corporation have signed an allocation agreement under which SmithKline Beecham has agreed to pay 5 percent of all settlements and compensatory damage judgments arising out of actions based on the sale or distribution of cerivastatin in the United States, with each party responsible for paying its own attorneys' fees.

In January 2004, Bayer Corporation received a subpoena for documents principally relating to cerivastatin from the Defense Criminal Investigative Service of the U.S. Department of Defense Inspector General. Prior to the withdrawal, Bayer had a contract with the Department to provide it with a supply of cerivastatin. Preliminary conversations with the Justice Department indicate that this is a joint Department of Defense/Food and Drug Administration investigation relating to cerivastatin. Bayer is not aware of any charges or complaints filed in connection with this inquiry. Bayer believes it has acted responsibly and fulfilled its responsibilities to the U.S. government, and will work cooperatively to provide the information requested.

*Phenylpropanolamine (PPA) actions.* In late 2000, Bayer voluntarily discontinued marketing over-the-counter cough and cold remedies containing PPA in the United States in response to a recommendation from the FDA that manufacturers voluntarily discontinue marketing products containing PPA. Bayer also voluntarily discontinued marketing products containing PPA in Canada and in various Latin American countries in late 2000 and in Spain in 2001. The FDA issued this recommendation after one epidemiological study of a small number of patients suggested a possible association between PPA and hemorrhagic stroke in women of certain ages. As of March 5, 2004, approximately 1,500 lawsuits are pending in the United States against Bayer Corporation. Of these, approximately 850 cases name Bayer as the only manufacturing defendant. In the remaining 650 cases, one or more other manufacturers are also defendants. As of March 5, 2004, Bayer AG has been named as a defendant in 43 of these individual cases; however, plaintiffs have agreed not to actively pursue their claims against Bayer AG at this time. The MDL Panel has assigned management of the federal court cases to the U.S. District Court for the Western District of Washington. Additionally, two purported class action suits against Bayer Corporation are currently pending in Pennsylvania and New Jersey. There has been little activity in these cases since they were filed in 2001. Class certification was denied in a total of twelve cases. A class certification was denied in an economic injury case brought in California. Plaintiffs appealed but later voluntarily dismissed their appeal, which the court approved in September of 2003. In another economic injury class action case, which was part of the multi-district litigation proceeding, class certification was denied and that decision affirmed on appeal.

The claims primarily relate to compensation for alleged damage to health and personal injury, breach of warranty, negligent and reckless misrepresentation, entitlement to subsequent monitoring and reimbursement of the purchase price, and conspiracy to defraud and fraudulently conceal. Claims for punitive damages have also been filed. It is probable that additional actions will be initiated in the United States or in other jurisdictions where products containing PPA were marketed. Bayer believes it has meritorious defenses to these actions and intends to defend them vigorously. Bayer will, at times, consider the option of settling litigation on a case-by-case basis and, without acknowledging any liability, has recently settled a number of cases.

Due to the considerable uncertainty associated with these proceedings, it is currently not possible to estimate potential liability and thus no provisions for such potential liabilities have yet been made. Depending on the progress of the litigation, Bayer may face payments that exceed our insurance coverage and will continue to reconsider the need to establish provisions, which may have a negative effect on the results of our operations, financial positions or cash flows.

### ***Thimerosal actions***

As of March 12, 2004, Bayer Corporation has been served in 24 lawsuits filed in various state and U.S. federal courts by or on behalf of persons alleging injuries from use of Bayer products containing thimerosal or phenylmercuric acetate, specifically immunoglobulin injectable products and over-the-counter nasal sprays. Many of these cases involve multiple unrelated plaintiffs. Numerous manufacturers used mercury-containing compounds as preservative agents in vaccines and other medical and over-the-counter products. Plaintiffs allege that use of products containing these compounds has caused autism, neurodevelopmental disorders and other injuries. They are requesting various remedies for the alleged resulting injuries including compensatory, punitive

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and statutory damages and funding for medical monitoring and research. Additional cases may be filed in the future against Bayer and other companies that sold products using mercury-containing compounds. The cases against Bayer are at an early stage, and Bayer is contesting them on both procedural and substantive grounds. Bayer believes it has meritorious defenses in these actions and intends to defend them vigorously. Due to the considerable uncertainty associated with these proceedings, it is currently not possible to estimate the potential liability.

### ***Everest litigation***

The purchaser of Bayer CropScience's global Everest herbicide business, Arvesta, has filed a lawsuit in California demanding rescission of the asset purchase agreement in connection with the purchase of Everest and return of the purchase price or, alternatively, monetary damages. Arvesta alleges that Bayer CropScience withheld material information concerning the value of certain claims resulting from Everest use in Idaho and that Bayer CropScience misled Arvesta about the amount of Everest that had been used in Canada in 2002 and perhaps other years. Bayer CropScience is currently preparing its responsive pleadings.

### ***Imidacloprid actions***

The French registration on Maize of the Bayer CropScience product containing imidacloprid, *Gaucho*®, is being challenged by the Union Nationale de l'Apiculture Française (UNAF), a national association of beekeepers in France, due to alleged bee toxicity. The French Ministry of Agriculture refused to withdraw the registration in January 2003 and UNAF appealed. An adverse decision could adversely affect results of operations and cash flows. The French Ministry of Agriculture has recently requested an additional review of imidacloprid product registrations, which is currently ongoing. No new adverse findings have been presented to date.

In the United States, owners of honeybees and honeybee hives have filed a purported class action against Bayer in federal court in Pennsylvania as well as a corresponding action in Pennsylvania state court alleging that imidacloprid caused damage to their honeybees, to the honey as well as to the wax. The federal court dismissed without prejudice plaintiffs' motion to certify a class. These proceedings are at various preliminary stages. It is not possible to estimate potential liability in these cases. Bayer believes it has meritorious defenses in these actions and intends to defend them vigorously.

### ***BASF Fipronil Claim***

BASF has notified Bayer CropScience AG of a claim, which is based on the allegation that Bayer CropScience AG in connection with the sale of its fipronil business to BASF willfully misled BASF by not disclosing updated business developments with respect to fipronil in Brazil and Korea in the third quarter of 2002 and not disclosing updated business expectations for 2003 and the following years. Discussions between the parties are ongoing. Bayer believes it has meritorious defenses in this action and intends to defend it vigorously. Due to the considerable uncertainty associated with these proceedings, it is currently not possible to estimate the potential liability.

### ***Average wholesale price manipulation proceedings***

Sixteen pending lawsuits allege that a number of pharmaceutical companies, including Bayer Corporation, manipulated the average wholesale price (AWP) and/or Medicaid best price of their products. The suits allege that this manipulation resulted in overcharges to Medicare beneficiaries, Medicaid recipients, state governmental health programs, and private health plans. These suits generally seek damages, treble damages, disgorgement of profits, restitution and attorneys' fees. Ten of the sixteen actions are private class actions alleging injury to patients or payors. The remaining six are brought by government entities. All of the state court actions have been removed to federal court; two of the cases have been remanded back to state court in Arizona and Nevada.

The thirteen cases pending in the federal courts have been consolidated in the U.S. District Court for the District of Massachusetts for coordinated pre-trial proceedings. One of the federal suits names Bayer AG together with Bayer Corporation as defendants.



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In June 2003, plaintiffs filed an Amended Master Consolidated Complaint governing most of the private party class actions pending against Bayer. Bayer, along with other defendants, moved to dismiss that complaint. On February 24, 2004, the court granted the defendants' motion in part and denied it in part, dismissing the first count of the ten-count complaint. Bayer anticipates commencing discovery in the near future.

Due to the considerable uncertainty associated with these proceedings, it is not possible to estimate potential liability. Depending on the progress of the proceedings, we will continue to reconsider the need to establish provisions, which may have a negative effect on the results of our operations, financial positions or cash flows.

### ***Rubber-related actions***

Bayer AG and certain of its subsidiaries are the subjects of criminal and civil investigations being conducted by the Antitrust Division of the U.S. Department of Justice ( DOJ ), the Directorate General for Competition of the European Commission ( EC ), and the Canadian Competition Bureau ( CCB ), and, collectively, the Competition Authorities ). The Competition Authorities are investigating potential violations of their respective antitrust or competition laws involving certain of Bayer's rubber-related lines of business.

Since September 2002, the DOJ has undertaken criminal grand jury investigations of potential antitrust violations involving Bayer's rubber chemicals, ethylene propylene diene monomer ( EPDM ) synthetic rubber, and acrylonitrile butadiene rubber ( NBR ) synthetic rubber lines of business. The EC is conducting civil investigations of potential violations of European competition laws involving Bayer's rubber chemicals, EPDM and NBR lines of business. The CCB is conducting criminal investigations of potential violations of Canadian competition laws involving Bayer's rubber chemicals, EPDM and NBR lines of business.

Bayer and certain of its subsidiaries have been named, among others, as defendants in multiple putative class action lawsuits in various state courts in the United States and as defendants in lawsuits pending before various federal courts in the United States. In each state court action, the plaintiffs have alleged violations based on the defendants' alleged participation in a conspiracy to fix prices. The state court plaintiffs seek damages as indirect purchasers of the allegedly affected products. In the federal court actions, the plaintiffs allege the defendants' participation in a conspiracy to fix the prices and/or to allocate markets and customers for the sale of the allegedly affected products and seek damages as direct purchasers of those products. These proceedings are at various preliminary stages.

Bayer is aware that its competitors are subject to investigations by the Competition Authorities involving potential violations of antitrust or competition laws related to additional rubber-related products. Private civil lawsuits may arise out of these investigations, which may involve Bayer and its competitors.

Because these cases, which may involve joint and several liability among the defendants, in the aggregate allege substantial, unquantified damages and also seek treble and punitive damages and penalties, it is possible that the ultimate liability could be materially adverse to our results of operations, financial position or cash flows in one or more periods. Additionally, due to the considerable uncertainty associated with these proceedings, it is currently not possible to estimate potential liability. Depending on the progress of the litigation, we will continue to reconsider the need to establish or adjust provisions, which may have a negative effect on the results of our operations, financial positions or cash flows.

### ***Polyester polyols investigation***

Bayer's U.S. subsidiary, Bayer Corporation, is the subject of a criminal antitrust investigation by the Antitrust Division of the DOJ. The Division is investigating potential antitrust violations involving certain of Bayer Corporation's polyester polyols lines of business. This matter is at an early stage. It is not possible to estimate potential liability in this matter.

### ***Securities litigation***

Bayer AG, along with certain of its current and former officers and members of the Bayer AG Board of Management, and Bayer Corporation have been named as defendants in a purported class action lawsuit pending in the U.S. District Court for the Southern District of New York. The class action alleges violations of the

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U.S. securities laws and asserts that the defendants made false and misleading statements and omissions with respect to the commercial prospects, safety and efficacy of our cerivastatin anticholesterol products and with respect to the extent of the potential product liability exposure following our voluntary decision to cease marketing and to withdraw these products in August 2001. The case seeks damages on behalf of class members who allegedly purchased Bayer securities at inflated prices. The case results from court consolidation on June 27, 2003 of seven purported class action lawsuits that had been filed on related grounds. In consolidating the seven cases, the court appointed a lead plaintiff and lead plaintiff's counsel. On October 31, 2003, the lead plaintiff filed a consolidated amended complaint seeking unspecified damages on behalf of a class of all persons who purchased Bayer AG stock (including Bayer AG American Depository Receipts) between March 6, 1998 and February 21, 2003. Defendants filed a motion to dismiss the consolidated amended complaint on January 15, 2004. The court has not yet ruled on this motion. Bayer AG, as do the other defendants, denies liability, believes that it has meritorious defenses to this action and intends to defend itself vigorously. Due to the considerable uncertainty associated with these proceedings, it is currently not possible to estimate the potential liability.

### ***German shareholder lawsuit***

In June 2003, a shareholder of Bayer AG filed a lawsuit in the regional court of Cologne, Germany (*Landgericht Köln*) challenging certain resolutions approved by the shareholders' meeting of April 25, 2003, including the financial statements of Bayer AG (not the consolidated financial statements) and consequently the distribution of profits. In effect, the plaintiff sought to prevent the implementation of our planned new corporate structure. The lawsuit was withdrawn by the shareholder in July 2003.

### ***Asbestos litigation***

We are currently involved in asbestos litigation in the United States, primarily as a premises defendant, predominantly in the states in which Bayer has industrial sites. The overwhelming majority of cases involving Bayer have been filed in West Virginia and Texas and involve allegations of exposure at Bayer's sites. There are also some asbestos cases pending against Bayer in Indiana and California. Texas law and West Virginia law permit consolidated asbestos actions in which multiple plaintiffs can sue multiple defendants for asbestos-related conditions without specifying which plaintiff has a claim against which defendant. While Bayer may be named as a defendant, each plaintiff does not have to assert a claim against Bayer.

The allegations as to Bayer and numerous other premises defendants are that Bayer employed many contractors on our industrial sites, yet failed to warn them or protect them from the known hazards of asbestos exposure throughout the 1960's, 1970's and 1980's. Since premises owners now form a new group of targeted corporate defendants in these litigations, these types of actions may have an adverse impact on our results of operations, financial position or cash flows.

One of our U.S. subsidiaries, Bayer CropScience, Inc., is the legal successor to entities that sold asbestos-containing products from the 1940's until 1976 and is named as a defendant in asbestos-related litigation. Bayer CropScience is and has been fully indemnified for its costs and exposure in relation to this litigation by Union Carbide. Union Carbide continues to accept Bayer CropScience's tender of these cases, and it defends and settles them in Bayer CropScience's name, in its own name and in the name of the several predecessor companies to Bayer CropScience.

We believe that we have meritorious defenses in these actions and are defending them vigorously. Without acknowledging any liability, we have settled a number of these cases in the past. We may, on a case-by-case basis, settle additional cases for reasonable amounts when, in our judgment, settlement is economically feasible given the risks and costs inherent in the litigation. We have made what we believe to be appropriate provisions should these suits result in judgments in favor of the plaintiffs.

### ***Plant Genetic Systems litigation***

Former shareholders of Plant Genetic Systems NV (PGS) have initiated arbitration proceedings in the Netherlands against AgrEvo, now Bayer CropScience GmbH. Claimants sought damages of up to \$400 million based on alleged violations of a confidentiality agreement in connection with the acquisition of PGS by AgrEvo.

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in 1996, which allegedly prevented claimants from obtaining a higher purchase price. By judgment of August 1, 2003, the Arbitration Court finally and completely rejected all claims by former PGS shareholders.

### **Dividend Policy and Liquidation Proceeds**

Our shareholders may declare dividends at an ordinary general shareholders meeting, which must be held within the first eight months of each fiscal year.

Under German law, Bayer AG may pay dividends only from balance sheet profits reflected in its unconsolidated financial statements (as opposed to the consolidated financial statements of the Bayer Group), as adopted and approved by the Board of Management and the Supervisory Board. In determining the balance sheet profits that may be distributed as dividends, the Board of Management may under German law and the provisions of our Articles of Association allocate to other retained earnings (*andere Gewinnrücklagen*) the net income of Bayer AG for the fiscal year that remains after deducting amounts to be allocated to legal and statutory reserves (*gesetzliche Rücklagen*) and losses carried forward. More than 50 percent of the net income may be allocated to other retained earnings only if such retained earnings would then not exceed 50 percent of our capital stock. The Board of Management may also increase balance sheet profits when preparing the financial statements with funds withdrawn from retained earnings.

Our shareholders, in their resolution on the appropriation of balance sheet profits, may carry forward balance sheet profits in part or in full and may allocate additional amounts to retained earnings. Profits carried forward will be automatically incorporated in the balance sheet profits of the next fiscal year and may be used in their entirety to pay dividends in the next fiscal year. Amounts allocated to the retained earnings are available for dividends only if and to the extent the retained earnings have been dissolved by the Board of Management when preparing the financial statements, thereby increasing the balance sheet profits.

Dividends approved at an ordinary general shareholders meeting are payable promptly after the meeting, unless otherwise decided at the meeting. Because all of Bayer AG's shares are in book-entry form represented by a global certificate deposited with Clearstream Banking AG in Frankfurt am Main, Germany, shareholders receive dividends through Clearstream for credit to their deposit accounts. Additionally, the ordinary general stockholders meeting may decide to distribute the balance sheet profit partly or in total to the stockholders by way of distribution in kind.

We expect to continue to pay dividends, although we can give no assurance as to the payment of a dividend for any particular year or as to the particular amounts that we may pay from year to year.

Apart from liquidation as a result of insolvency proceedings, Bayer AG may be liquidated only with a combined majority of the votes cast and three-quarters of the share capital present or represented at a shareholders meeting at which the vote is taken. In accordance with the German Stock Corporation Act, upon a liquidation of Bayer AG, any liquidation proceeds remaining after paying off all of Bayer AG's liabilities would be distributed among the shareholders in proportion to the total number of shares held by each shareholder.

See also Item 3, *Key Information - Dividends*.

### **Significant Changes**

Except as discussed elsewhere in this annual report, no significant change has occurred since the date of the annual financial statements included in this annual report.

**Table of Contents****Item 9. The Listing****Listing Details**

American Depositary Shares (ADSs), each representing one share, are listed on the New York Stock Exchange and trade under the symbol BAY. The depositary for the ADSs is The Bank of New York.

The principal trading market for our ordinary shares is the Frankfurt Stock Exchange. Our shares are traded on Xetra, a computerized trading system operated by Deutsche Börse AG, in addition to being traded on the auction market (floor). Our shares are also listed on the other German stock exchanges, including Berlin/ Bremen, Düsseldorf, Hamburg, Hannover, Stuttgart and Munich. In addition, our shares are listed on the Paris, Barcelona, Madrid, Antwerp, Brussels, Amsterdam, London, Milan, Zurich, Luxembourg and Tokyo stock exchanges.

The table below sets forth, for the periods indicated, the reported high and low closing prices for our shares on the Frankfurt Stock Exchange (Xetra) and on the New York Stock Exchange.

	Frankfurt Stock Exchange		New York Stock Exchange	
	High	Low	High	Low
	(in euros)		(in dollars)	
<b>1999</b>	47.65	29.74		
<b>2000</b>	56.50	38.52		
<b>2001</b>	58.00	23.90		
<b>2002:</b>				
First quarter <sup>(1)</sup>	40.80	33.30	36.00	28.91
Second quarter	40.10	30.90	33.45	30.20
Third quarter	33.27	17.45	32.25	17.60
Fourth quarter	23.66	17.59	23.74	17.30
Full year 2002	40.80	17.45	36.00	17.30
<b>2003:</b>				
First quarter	22.42	10.28	23.38	11.24
Second quarter	20.60	12.47	24.03	13.60
Third quarter	21.28	18.55	23.93	21.43
Fourth quarter	23.58	17.97	29.41	21.21
Full year 2003	23.58	10.28	29.41	11.24
<b>Previous six months:</b>				
October 2003	20.67	17.97	23.97	21.21
November 2003	22.71	20.72	27.08	23.79
December 2003	23.58	22.12	29.41	27.17
January 2004	25.39	23.74	31.94	29.98
February 2004	24.32	22.55	30.88	28.31
March 2004	23.63	19.49	29.14	23.79

(1) From January 24, 2002, for New York Stock Exchange.

On March 31, 2004, the closing sales price per Bayer AG ordinary share on Xetra was 19.81 and on the New York Stock Exchange US \$24.40.

The average daily volume of Bayer shares traded on the Frankfurt Stock Exchange (Xetra and floor) for the years 2003, 2002 and 2001 was 5,405,362, 3,807,568 and 3,495,113, respectively. The average daily trading volume in 2003 and 2002 was 213,972 and 64,907 on the New York Stock Exchange.



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### **Item 10. Additional Information**

#### **Description of Share Capital**

For a description of material provisions of Bayer AG's Articles of Association (*Satzung*), including a discussion of the voting, dividend and other rights of shareholders, see Exhibit 1.1.

The Board of Management is authorized to repurchase shares for such purposes as distribution to members of the management who are not Board members and to employees of Bayer Group companies in connection with share option programs. This authorization has been extended to October 24, 2004. See Item 6, *Directors, Senior Management and Employees Compensation Employee option plans*.

#### **Material contracts**

We are not a party to any contracts that we regard as material to our business or financial position.

#### **Exchange controls**

There are currently no German foreign exchange control restrictions on the payment of dividends on the shares or the conduct of our operations.

#### **Taxation**

The following is a discussion of the material U.S. federal income and German tax consequences to you as a Qualified Holder of Bayer AG shares. This discussion is based upon existing U.S. federal income and German tax law, including legislation, regulations, administrative rulings and court decisions, as in effect on the date of this annual report, all of which are subject to change, possibly with retroactive effect.

For the purposes of this discussion, you are a Qualified Holder if you are the beneficial owner of ordinary Bayer AG shares and (1) are a resident of the United States for purposes of the Convention Between the United States of America and the Federal Republic of Germany for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and Capital, as amended (the Income Tax Treaty), which generally includes an individual U.S. resident, a corporation created or organized under the laws of the United States, any state thereof or the District of Columbia and a partnership, estate or trust, to the extent its income is subject to taxation in the United States as the income of a U.S. resident, either in its hands or in the hands of its partners or beneficiaries, (2) do not hold Bayer AG shares as part of the business property of a permanent establishment located in Germany or as part of a fixed base located in Germany and used for the performance of independent personal services and (3) if you are not an individual, are not subject to the limitation on benefits restrictions in the Income Tax Treaty. This discussion assumes that you hold Bayer AG shares as a capital asset. This discussion does not address all aspects of U.S. federal income and German taxation that may be relevant to you in light of your particular circumstances. For example, this discussion does not apply to Qualified Holders whose shares were acquired pursuant to the exercise of an employee share option or otherwise as compensation or who are subject to special treatment under U.S. federal income tax laws such as financial institutions, insurance companies, tax-exempt organizations, holders of 10 percent or more of Bayer AG shares, broker-dealers in securities or currencies, persons that hold Bayer AG shares as part of a hedging or a conversion transaction or as a position in a straddle, and persons whose functional currency is other than the U.S. dollar. This discussion also does not address any aspects of state, local or non-U.S. (other than certain German) tax law. If a partnership holds Bayer AG shares, the tax treatment of a partner generally will depend upon the status of the partner and the activities of the partnership. If a Qualified Holder is a partner in a partnership that holds Bayer AG shares, the Holder is urged to consult its own tax advisor regarding the specific tax consequences of the purchase, ownership and disposition of the Bayer AG shares.

In general, for U.S. federal income tax purposes, if you are a Qualified Holder of ADRs evidencing ADSs, you will be treated as the owner of the Bayer AG shares represented by such ADSs. Unless the context requires otherwise, all references in this section to Bayer shares are deemed to refer likewise to ADSs evidencing an ownership interest in Bayer AG shares.

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**We urge you to consult your tax advisor as to the U.S. federal income and German tax consequences of holding Bayer AG shares, including the particular facts and circumstances that may be unique to you, and as to any other tax consequences of holding Bayer AG shares.**

### ***Taxation of Dividends***

We are required to withhold tax on dividends in respect of the 2003 fiscal year in an amount equal to 20 percent of the gross amount paid to resident and non-resident shareholders. As a Qualified Holder, you are eligible to receive a partial refund of this withholding tax under the Income Tax Treaty (subject to certain limitations), effectively reducing the withholding tax to 15 percent of the gross amount of the dividend. Thus, for each \$100 of gross dividend paid by Bayer AG to you, the dividend will be subject to a German withholding tax of \$15 under the Income Tax Treaty. The cash received per \$100 of gross dividend will thus be \$85. For U.S. federal income tax purposes, the gross amount of the dividend, including German withholding tax, will be includible in your gross income. You will not be entitled to the dividends received deduction with respect to any dividends we pay.

A surtax on the German withholding tax is currently levied on dividend distributions paid by a German resident company. The rate of this surtax is 5.5 percent on the withholding tax due. The surtax will equal 1.1 percent (5.5 percent x 20 percent) of the gross dividend. Under the Income Tax Treaty, you will be entitled to a full refund of this surtax.

Dividends paid to you in euros will be included in income in a U.S. dollar amount, calculated by reference to the exchange rate in effect on the date the dividends are received or treated as received by you. Subject to certain exceptions for positions that are hedged or held for less than 61 days, an individual U.S. holder generally will be subject to U.S. taxation at a maximum rate of 15 percent in respect of dividends received after 2002 and before 2009. If you convert dividends paid in euros into U.S. dollars on the date received or treated as received, you generally should not be required to recognize foreign currency gain or loss in respect of such dividend.

### ***Refund Procedures***

To claim the refund reflecting the reduction of the German withholding tax from 20 percent to 15 percent and the refund of the 5.5 percent German surtax, when applicable, you must submit (either directly, or, as described below, through our U.S. transfer agent or the Depository Trust Company) a claim for refund to the German tax authorities, with the original bank voucher (or a certified copy thereof) issued by the paying entity documenting the tax withheld within four years from the end of the calendar year in which the dividend is received. Claims for refunds are made on a special form, which must be filed with the German tax authorities at the following address: Bundesamt für Finanzen, 53221 Bonn-Beuel, Germany. A refund claim form may be obtained from the German tax authorities at the same address as where applications are filed, from the Embassy of the Federal Republic of Germany, 4645 Reservoir Road, N.W., Washington, D.C. 20007-1998 or from the Office of International Operations, Internal Revenue Service, 1325 K Street, N.W., Washington, D.C. 20225, Attention: Taxpayer Service Division, Room 900. It can also be downloaded from the following web site: [http://www.bff-online.de/Steuer\\_\\_\\_Vordrucke/KSt\\_\\_\\_KapSt/ClaimRefundWithholdingTaxesDividends\\_\\_\\_Interests.pdf](http://www.bff-online.de/Steuer___Vordrucke/KSt___KapSt/ClaimRefundWithholdingTaxesDividends___Interests.pdf).

You must also submit to the German tax authorities certification of your last filed U.S. federal income tax return (IRS Form 6166). You can obtain this certification from the office of the Director of the Internal Revenue Service Center by filing a request for certification (generally IRS Form 8802) with the Internal Revenue Service Center in Philadelphia, Pennsylvania, Foreign Certificate Request, P.O. Box 16347, Philadelphia, PA 19114-0447. Requests for certification must be made in writing and must include your name, social security number or employer identification number, tax return form number and tax period for which you are requesting certification. This certification is valid for three years and need only be resubmitted in a fourth year in the event of a subsequent application for refund. IRS Publication 686 describes the certification procedure in more detail.

Our U.S. transfer agent will perform administrative functions necessary to claim the refund reflecting the reduction in German withholding tax from 20 percent to 15 percent and the refund of the 5.5 percent German surtax, when applicable, for you. However, these arrangements may be amended or revoked at any time in the future. Under the current procedure, the U.S. transfer agent will prepare the German claim for refund forms on

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your behalf and file them with the German tax authorities. In order for the U.S. transfer agent to file the claim for refund forms, the U.S. transfer agent will prepare and mail to you, and will ask that you sign and return to the U.S. transfer agent, (1) a statement authorizing the U.S. transfer agent to perform these procedures and agreeing that the German tax authorities may inform the Internal Revenue Service of any refunds of German taxes and (2) a written authorization to remit the refund of withholding to an account other than yours. The U.S. transfer agent will also require certification of your last filed United States federal income tax return (IRS Form 6166). The U.S. transfer agent will attach the signed statement, the IRS Form 6166 and the documentation issued by the paying agency documenting the dividend paid and the tax withheld to the claim for refund form and file them with the German tax authorities.

A simplified refund procedure will be available to you if your Bayer AG shares are registered with brokers participating in the Depository Trust Company. Under this simplified refund procedure, the Depository Trust Company will provide the German tax authorities with electronic certification of your U.S. taxpayer status based on information it receives from its broker participants, and will claim a refund on your behalf. If approved by the German tax authorities, a similar simplified refund procedure may also be implemented by the U.S. transfer agent in the future. Under such a simplified refund procedure, following each dividend payment, the U.S. transfer agent would file a claim for refund automatically on your behalf if you have instructed the U.S. transfer agent in writing to file on your behalf.

The German tax authorities will issue refunds denominated in euro. The refunds will be issued in the name of the U.S. transfer agent or the Depository Trust Company, as the case may be, which will then convert the refunds to dollars and make corresponding refund payments to you or your broker. This broker, in turn, will remit corresponding refund amounts to you.

If you receive a refund attributable to reduced withholding taxes under the Income Tax Treaty, you may be required to recognize foreign currency gain or loss, which will be treated as ordinary income or loss to the extent that the dollar value of the refund received or treated as received by you differs from the U.S. dollar equivalent of the refund on the date the dividend on which such withholding taxes were imposed was received or treated as received by you.

### ***Taxation of Capital Gains***

Under the Income Tax Treaty, you will not be liable for German tax on capital gains realized or accrued on the sale or other disposition of Bayer AG shares.

Upon a sale or other disposition of Bayer AG shares, you will recognize capital gain or loss for U.S. federal income tax purposes equal to the difference between the amount realized and your adjusted tax basis in the Bayer AG shares. This gain or loss generally will be U.S. source gain or loss, and will be treated as long-term capital gain or loss if your holding period in the Bayer AG shares exceeds one year. The net amount of long-term capital gain recognized by an individual U.S. holder generally is subject to taxation at a maximum rate of 20 percent; however, net long-term capital gain recognized by an individual U.S. holder after May 5, 2003 and before January 1, 2009 is generally subject to a taxation at a maximum rate of 15 percent. The deductibility of capital losses is subject to significant limitations.

### ***Passive Foreign Investment Company Status***

We believe that we will not be classified as a passive foreign investment company (a PFIC) for U.S. federal income tax purposes for our current taxable year or any future taxable year. However, as this is a factual matter that must be determined annually at the close of each taxable year, there can be no certainty as to our actual PFIC status in any particular year until the close of the taxable year in question.

### ***German Gift and Inheritance Taxes***

The Convention between the United States of America and the Federal Republic of Germany for the Avoidance of Double Taxation with Respect to Taxes on Estates, Inheritances and Gifts, as amended (the Estate Tax Treaty), provides that an individual whose domicile is determined to be in the United States for purposes of



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such treaty will not be subject to German inheritance and gift tax (the equivalent of the U.S. federal estate and gift tax) on the individual's death or making of a gift unless the Bayer AG shares (1) are part of the business property of a permanent establishment located in Germany or (2) are part of the assets of a fixed base of an individual located in Germany and used for the performance of independent personal services. An individual's domicile in the United States, however, does not prevent imposition of German inheritance and gift tax with respect to an heir, donee or other beneficiary who is domiciled in Germany at the time the individual died or the gift was made.

The Estate Tax Treaty also provides a credit against U.S. federal estate and gift tax liability for the amount of inheritance and gift tax paid in Germany, subject to certain limitations, in a case where the shares are subject both to German inheritance or gift tax and U.S. federal estate or gift tax.

### ***German Capital Tax (Vermögensteuer)***

The Income Tax Treaty provides that you will not be subject to German capital tax (*Vermögensteuer*) with respect to the Bayer AG shares. As a result of a judicial decision, the German capital tax (*Vermögensteuer*) presently is not imposed.

### ***Other German Taxes***

There are no German transfer, stamp or other similar taxes that would apply to you upon receipt, purchase, holding or sale of Bayer AG shares.

### ***U.S. Information Reporting and Backup Withholding***

Dividends on Bayer AG shares and payments of the proceeds of a sale of Bayer AG shares paid within the United States or through certain U.S.-related financial intermediaries are subject to information reporting and may be subject to backup withholding unless you (1) are a corporation or other exempt recipient or (2) provide a taxpayer identification number and certify that no loss of exemption from backup withholding has occurred. U.S. persons who are required to establish their exempt status generally must file IRS Form W-9 (Request for Taxpayer Identification Number and Certification). Non-U.S. holders generally will not be subject to U.S. information reporting or backup withholding. However, these holders may be required to provide certification of non-U.S. status (generally on IRS Form W-8BEN) in connection with payments received in the United States or through certain U.S.-related financial intermediaries.

Backup withholding is not an additional tax. Amounts withheld as backup withholding may be credited against your U.S. federal income tax liability. You may obtain a refund of any excess amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the Internal Revenue Service and furnishing any required information.

### ***Documents on display***

You can inspect the documents concerning Bayer AG mentioned in this annual report during normal business hours at Bayer AG's headquarters at the Bayerwerk, 51368 Leverkusen, Germany, as well as at the headquarters of Bayer AG's U.S. subsidiary, Bayer Corporation, 100 Bayer Road, Pittsburgh, PA 15205-9741.

### ***Memorandum and Articles of Association***

For a description of certain provisions of our Articles of Association, please refer to Item 10 of our registration statement on Form 20-F/A, filed on January 15, 2002, which is incorporated herein by reference.

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### **Item 11. Quantitative and Qualitative Disclosures about Market Risk**

#### **Market Risk**

The global nature of our business exposes our operations, financial results and cash flows to a number of risks, including those listed below.

*Currency exchange rate fluctuations.* We are exposed to fluctuations between the euro and other major world currencies. The majority of our currency fluctuation risk is between the euro and the U.S. dollar. In addition, we are exposed to fluctuations between the euro and the Japanese yen and fluctuations between the U.S. dollar and the Brazilian real.

*Interest rate fluctuations.* We are exposed to changes in interest rates. Our primary interest rate exposure is to fluctuations in short- and long-term European and U.S. interest rates.

*Credit risk.* We are exposed to credit risk with respect to the counterparties in our transactions.

*Raw material price fluctuations.* We are exposed to possible increases in raw material prices. We may not be able to pass any such increases on to our customers.

Any of these risks could harm our operating results and financial condition.

From time to time, we enter into hedging arrangements to mitigate our exposure to currency and interest risks. Our primary tools for hedging financial risks are over-the-counter derivative instruments, particularly forward foreign exchange contracts, option contracts, interest rate swaps and interest and principal currency swaps. As a matter of policy, we enter into these transactions only with counterparties of high credit standing. We have established uniform guidelines and internal controls for the use of these derivatives. We use these instruments only to economically hedge risks arising from our business operations and from related investments and financing transactions. We do not use derivatives for speculative purposes. Because we believe that the limited liquidity of hedges against changes in raw materials prices makes these hedges unreasonably expensive, we have used them in the past only to a small extent. To some degree, we make use of such derivative financial instruments to participate in commodity market fluctuations according to our own assessments of the relevant markets. Such trades are monitored closely and require authorization by our head of finance. A total loss limit of 2 million per year is imposed on these positions. This limit can be increased to 20 million per year on authorization by our risk committee, which consists of the head of Group finance and the heads of finance of the individual divisions.

#### ***Sensitivity Analysis***

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 sensitive instruments resulting from one or more selected hypothetical changes in interest rates, foreign currency rates, and other market rates or prices over a selected 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 provided below assume:

A simultaneous, parallel foreign exchange rates shift in which the euro appreciates against all currencies by 10%, and

A parallel shift of 100 basis points of the interest rate yield curves in all currencies.

We use our business experience, 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 our managers, shareholders, employees, suppliers and customers to appreciate an approximation of the effect changing market conditions could have on our business. Additionally, it allows our management after becoming aware of the impact of immediate and substantial changes to take the necessary steps to address such risks.

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Sensitivity analysis is subject to certain limitations, such as the following:

The risk-mitigating effects caused by correlation and diversification among different currencies and interest rate areas or between these different risk exposures are not taken into account. This may lead to an overestimation of risk, since a simultaneous adverse shift in all currencies and yield curves is highly unlikely.

Unlike other more complex risk modeling concepts, it applies only two shifts (up or down) in each risk category with the direction causing the adverse outcome chosen. While it is possible to apply more sophisticated risk measurement techniques, it is our view that sensitivity analysis gives decision makers in our non-financial businesses a sufficient warning of potential losses. We may apply further detailed analyses using the specific facts of a given situation to determine if appropriate corrective actions are needed.

Sensitivity analyses offer a snapshot of exposures at and between specific dates in time. However, there is continuous change in the Other Than Trading Portfolio. For example, positions are continually being opened and closed, assets and liabilities mature or new interest rates take effect. We accept this limitation and whenever we believe that more current information is required, produce either updated sensitivity analyses or utilize other management reporting options to understand in detail the effects of changing market conditions.

Sensitivity analyses do not provide an answer to the question of how long a sharp rise or fall of market rates will continue. Accordingly, we develop our own market direction projections and obtain other professional predictions that we then use in our financial planning and in modeling earnings impacts.

We continually refine our risk measurement and reporting procedures including a periodic re-examination of the underlying assumptions and parameters utilized. Compared to last fiscal year, there have not been any changes that have resulted in a material alteration of the risk estimates provided. The differences between periods principally reflect changes in our exposures and the market rates and prices only.

The sensitivity analyses included in the risk sections below present the hypothetical loss in cash flows of financial instruments and derivative financial instruments that we held as of December 31, 2003 and 2002. These instruments were subject to changes in foreign exchange rates and interest rates. The range of sensitivities that we chose for these analyses reflects our view of changes reasonably possible over a one-year period.

### ***Interest Rate Risk***

Interest rate risk is the possibility that the total return (all changes in fair value and interest rate performance) of a financial instrument will change due to movements in market rates of interest. This risk primarily affects debt with maturities of more than one year. Items with these long maturities are not of material significance to our operations, but are relevant to our financial obligations.

We sometimes make loans to employees. Although a small proportion of these loans are interest-free, they generally bear interest at market-oriented, fixed rates. More than three quarters of our loans to employees have terms of over five years. All of these loans are real estate related, many of them secured by real estate. None of these loans were provided to any of the members of our Board of Management.

### ***Derivative financial instruments***

Derivative financial instruments are our main method of interest rate hedging. We use interest rate swaps to convert a portion of our fixed rate borrowings into, in effect, floating rate debt. We do this because, in a normal interest rate environment, short-term interest rates are lower than long-term interest rates. Thus, floating debt leads to lower interest costs in the long-run. The derivatives we use to hedge interest rate risk are primarily over-the-counter instruments, particularly forward rate agreements, option and future contracts, interest rate swaps, and interest and principal currency swaps. Our Corporate Treasury department has central responsibility for managing our interest rate exposures and using interest rate derivatives.

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The notional amount of these derivatives is the total nominal value of the underlying transactions. The fair value of these derivatives is their repurchase value, based on quoted prices or, in the case of contracts not publicly traded, their values as determined by standard methods, as of a given closing date. The table below shows the notional amount and fair value of the interest rate derivatives we held as of December 31, 2003 and 2002; the fair values quoted disregard any compensating movements in the values of the underlying transactions.

	Notional amount As of December 31,		Fair value As of December 31,	
	2002	2003	2002	2003
	(euros in millions)			
Interest rate hedging contracts	5,799	6,331	365	485

At December 31, 2003, the notional amount of our short-term interest rate hedging contracts (including interest and principal currency swaps) totaled 0.3 billion (2002: 0.5 billion); those maturing after more than one year totaled 6.0 billion (2002: 5.3 billion).

*Sensitivity Analysis*

Based on our variable interest rate debt position at year-end 2003, a hypothetical increase of 100 basis points, or one percent per year, of the interest rates applicable to our debt denominated in all currencies (holding currency rates constant), effective beginning January 1, 2004, would have resulted in an increase in our interest expense for the year ended December 31, 2003 of 58 million (2002 (based on year-end 2002 debt levels): 39 million).

*Currency Risk*

Because we conduct our operations in many currencies, we face a variety of risks associated with fluctuations in the relative values of these currencies. The primary currencies with respect to which we have material exchange rate risk are the U.S. dollar, Japanese yen and Brazilian real. In general, appreciation of the euro in relation to another currency has an adverse effect on our reported revenues and results, and depreciation of the euro has a positive effect.

*Transaction Risk*

We face transaction risk when our businesses generate revenue in one currency but incur costs relating to that revenue in a different currency. Because we enter into foreign exchange transactions for a significant portion of our contracted and forecasted operational foreign exchange exposures, we believe that a significant increase or decrease in the exchange rate of the euro relative to other major world currencies would not, in the short term, materially affect our future cash flows. Over time, however, to the extent that we cannot reflect these exchange rate movements in the pricing of our products in local currency, they could harm our cash flows.

*Translation Risk*

Many of the companies of the Bayer Group are located outside the euro zone. Because the euro is our financial reporting currency, we translate the financial statements of these subsidiaries into euro for inclusion in our consolidated financial statements. Period-to-period changes in the average exchange rate for a particular country's currency can significantly affect the translation into euro of both revenues and operating income denominated in that currency. Unlike the effect of exchange rate fluctuations on transaction exposure, the effect of exchange rate translation exposure does not affect our local currency cash flows. See Note 38 to the consolidated financial statements.

Outside the euro zone, we hold significant assets, liabilities and operations denominated in local currencies, most importantly the U.S. dollar, the Japanese yen and the Brazilian real. Although we regularly assess and evaluate the long-term currency risk inherent in these investments, we generally undertake foreign exchange transactions addressing this type of risk only when we are considering withdrawal from a specific venture and

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repatriating the funds that our withdrawal generates. However, we reflect effects from currency fluctuations on the translation of net asset amounts into euro in our equity position.

*Derivative financial instruments*

To mitigate the impact of currency exchange fluctuations, we regularly assess our transaction exposure to currency risks and hedge a portion of those risks with derivative financial instruments. Our Corporate Treasury department has central responsibility for managing our currency exposures and using currency derivatives.

We relate the maturity dates of hedging contracts to the anticipated cash flows of the Bayer Group. Our policy is generally to use forward hedges and in some cases options depending upon our view of market conditions based on fundamental and technical analysis.

The table below shows the notional amounts and fair values of the currency derivatives (excluding cross currency interest rate swaps included in our notional amount of interest rate hedging contracts, see *Interest Rate Risk*) we held as of December 31, 2003 and 2002:

	Notional amount		Fair value	
	As of December 31,		As of December 31,	
	2002	2003	2002	2003
	(euros in millions)			
Forward exchange contracts and currency swaps	2,979	3,984	105	143
Currency options	239	266	9	11

At December 31, 2003, we estimated that our aggregate annual direct net transaction risk from sales and purchases in foreign currencies was approximately 2.0 billion, which consisted primarily of U.S. dollars (\$1.3 billion), Japanese yen (¥66 billion) and Brazilian real (R1.3 billion). We do not anticipate a significant change in these levels of risk with respect to our current business operations during 2004.

*Sensitivity Analysis*

We applied a hypothetical adverse change of 10 percent in foreign currency exchange rates, where the U.S. dollar, Japanese yen and Brazilian real simultaneously weakened against the euro using the year-end exchange rates of these currencies as a basis. The estimated hypothetical loss in cash flows of derivative and non-derivative financial instruments as at December 31, 2003 would be 29 million (2002: 43 million). Of these 29 million, 22 million are related to the U.S. dollar, 5 million to the Japanese yen and 2 million to the Brazilian real.

*Credit Risk*

Credit risk is the possibility that the value of our assets may become impaired if counterparties cannot meet their obligations in transactions involving financial instruments. Since we do not conclude master netting arrangements with our customers, the total of the amounts recognized in assets represents our maximum exposure to credit risk.

*Raw Materials and Commodity Price Risks*

We operate in markets in which economic cyclicality often affects raw material and product prices. Fluctuations in prices and availability of raw materials and commodities affect some of our businesses. In order to secure our supply of raw materials, we are party to long-term supply contracts, buy additional quantities on the spot markets, and enter into swap agreements to manage our supply/ demand as needed. The most important of our raw materials affected by price fluctuations are:

1.3-butadiene;

ACN;

Benzene;

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Cyclohexane;

Phenol;

Propylene oxide;

Styrene; and

Toluene.

These products are derived from crude oil, therefore their prices are affected by the volatility in the crude oil market.

We typically use the following measures to avoid and manage pricing risk in purchasing raw materials:

Coverage of recurrent requirements with long-term contracts to reduce the price volatility of purchases on the spot markets;

incorporating pricing formulas linked to economic indices and pre-products into our contracts, rather than using published prices; and

stock-keeping, flexibility in supply sources and, wherever possible, other alternative production plants to limit risks from raw material availability.

Facing increasing volatility in energy markets, we started a price risk management program in 2003 designed to reduce the variability of our expenditures for energy purchases by entering into financial swaps, collars and options on the over-the-counter markets. The gas and steam contracts for our major European sites are linked to liquidly traded fuel oil and gas oil indices; the U.S. contracts are based on different U.S. natural gas indices. All these contracts are treated as trading instruments for accounting purposes.

The strategy for economically hedging energy price risks is based on contracts with a maturity of up to three years. It is designed in such a way that it takes advantage of the backwardation in the energy forward markets. In addition, a cost average effect is aimed at by building up a pre-defined hedge position over time.

**Item 12. Description of Securities Other Than Equity Securities**

Not applicable.

**Table of Contents****PART II****Item 13. Defaults, Dividend Arrearages and Delinquencies**

None.

**Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds**

None.

**Item 15. Controls and Procedures**

As required by Rule 13a-15 under the Securities Exchange Act of 1934, the chairman of our Board of Management and our chief financial officer, assisted by other members of our management, have evaluated our disclosure controls and procedures as of December 31, 2003. Based on this evaluation, they have concluded that our disclosure controls and procedures are effective to ensure that the information we are required to disclose in this annual report is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission. There were no significant changes in our internal controls or in other factors that could significantly affect these controls subsequent to the date of the evaluation. We identified no significant deficiencies or material weaknesses that required corrective action.

**Item 16. [Reserved]****Item 16A. Audit Committee Financial Expert**

Our Supervisory Board has determined that Dr. Schneider is an audit committee financial expert, as that term is defined in Item 16A(b) of Form 20-F.

**Item 16B. Code of Ethics**

We have adopted a code of ethics, as that term is defined by Item 16B(b) of Form 20-F, that is applicable to all of our employees, including our principal executive officer, principal financial officer and principal accounting officer. Our code of ethics is available on our website at [http://www.bayer.com/about\\_bayer/corporate\\_policy/principles\\_of\\_corporate\\_policy/legal\\_compliance/page1134.htm](http://www.bayer.com/about_bayer/corporate_policy/principles_of_corporate_policy/legal_compliance/page1134.htm). (Reference to this uniform resource locator or URL is made as an inactive textual reference for informational purposes only. The information found at this website is not incorporated by reference into this document.)

**Item 16C. Principal Accountant Fees and Services  
Independent Auditor Fees**

In January 2003, the U.S. Securities and Exchange Commission adopted rules requiring disclosure of fees billed by a public company's accountants in each of the company's two most recent fiscal years.

Fees billed to the Company for professional services by its principal accountant, PwC, during the fiscal years 2002 and 2003 were as follows:

Type of fees	2002	2003
	(euros in millions)	
Audit fees	28	23
Audit-related fees	1	3



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Tax fees	1	1
All other fees	—	—
Total	30	27

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The audit-related services PwC provided related to acquisition/disposition due diligence, an audit of a carve-out statement, reviews of Bayer's information system unrelated to audit and audits of employee benefit plans. No services falling under the de minimis exception of paragraph (c)(7)(i)(c) of Rule 2-01 of Regulation S-X were provided to the Company by PwC in 2003. During 2002, PwC also billed the Company \$21 million for management and human resources consulting services, which were transferred to IBM and Mellon Financial Services, respectively, on October 2, 2002. The \$21 million represented fees charged by PwC until the date of the transfer.

### ***Audit Committee Pre-Approval Policies***

All services provided by our auditor and companies affiliated with our auditor must be pre-approved by the audit committee of our Supervisory Board (*Aufsichtsrat*). The annual contract conditions and fees relating to the audit of the financial statements of the Bayer Group and Bayer AG must be approved by the audit committee on a case-by-case basis. Other services may be pre-approved by the audit committee within the authorities the audit committee has adopted; if they fall outside these authorities, they require case-by-case approval. Our policies for these pre-approvals grant authority to management to engage our auditor and companies affiliated with our auditor for:

Audit services up to an annual aggregate, which was \$26 million in 2003 for Bayer Group and Bayer AG and which include the audit of the consolidated financial statements of Bayer and its affiliates; services necessary to provide audit opinions; services in connection with the submission of reports to the SEC; attest services for reports prepared on Bayer's internal control system and review of Bayer's information systems; accounting and disclosure advice in connection with the annual audit; and audit services relating to the audit of restated prior-year figures, if any.

Audit-related services, which include acquisition/ disposition due diligence; audits of material companies acquired or to be acquired, of carve-out statements relating to acquisitions or dispositions, of closing balances for dispositions and of employee benefit plans; procedures necessary to meet finance, accounting or other regulatory reporting requirements; advice on internal control systems; reviews of Bayer's information systems unrelated to audit; assistance in interpreting SEC requirements; and evaluation of risk management.

Tax advisory services, provided that the auditor or affiliate does not act as a representative of Bayer and did not recommend the transaction to which the tax advisory services relate; these include tax planning and advice; assistance with tax compliance; reviewing tax declarations; assistance in tax audits and appeals; and tax appraisals.

Other services, which include other risk management advice; other financial advice; valuation services; consultations and recommendations relating to valuation methods; non-audit appraisals of valuations; analysis or review of business plans or planning processes (but not design or implementation thereof); and preparation of financial statements if it is reasonably certain that the statements will not subsequently be audited by the auditor or an affiliate.

Pre-approval for the audit-related services, tax advisory services and other services categories is only valid if these services together aggregate below 66 percent of the annual budget set for audit services. Any requests for services to be provided by the auditor or an affiliate must be made through Bayer's accounting department, which will, if necessary, prepare the individual approval applications. The accounting department also notifies the audit committee of services provided pursuant to the pre-approval policies, monitors the pre-approval budget, notifies the chairman of the audit committee once the 66 percent pre-approval threshold has been reached and maintains records of all services provided by the auditor and its affiliates.

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**Item 16D. Exemptions from the Listing Standards for Audit Committees**

Not applicable.

**Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

Not applicable.

**PART III**

**Item 17. Financial Statements**

We have responded to Item 18 in lieu of responding to this item.

**Item 18. Financial Statements**

See pages F-1 through F-97, incorporated herein by reference.

**Item 19. Exhibits**

Documents filed as exhibits to this annual report:

Exhibit 1.1	Articles of Association ( <i>Satzung</i> ) of Bayer AG, as amended to date, in English translation.
Exhibit 2.1	The total amount of long-term debt securities Bayer AG authorized under any instrument does not exceed 10 percent of the total assets of the Company. Bayer AG agrees to furnish to the Securities and Exchange Commission, upon its request, a copy of any instrument defining the rights of holders of long-term debt of Bayer AG or its subsidiaries for which consolidated or unconsolidated financial statements are required to be filed.
Exhibit 4.1	Summary of Employment Arrangements between Bayer AG and Werner Wenning.
Exhibit 4.2	Summary of Employment Arrangements between Bayer AG and Dr. Udo Oels.
Exhibit 4.3	Summary of Employment Arrangements between Bayer AG and Klaus Kühn.
Exhibit 4.4	Summary of Employment Arrangements between Bayer AG and Dr. Richard Pott.
Exhibit 8.1	Significant subsidiaries as of the end of the year covered by this report as defined in rule 1-02(w) of Regulation S-X: See Item 4, <i>Information on the Company Organizational Structure</i> .
Exhibit 12.1	Certification of the Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
Exhibit 12.2	Certification of the Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
Exhibit 13.1	Certification in accordance with 18 U.S.C. § 1350 as adopted by § 906 of the Sarbanes-Oxley Act of 2002.

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**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

**BAYER AG**

/s/ WERNER WENNING

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Name: Werner Wenning  
Title: Chairman of the Board of Management

/s/ DR. ROLAND HARTWIG

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Name: Dr. Roland Hartwig  
Title: General Counsel

Date: April 6, 2004

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**BAYER GROUP**

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**Report of Independent Auditors**

To the Board of Directors

and Stockholders of Bayer AG

We have audited the accompanying consolidated balance sheets of Bayer AG and its subsidiaries (the Group) as of December 31, 2003 and 2002, and the related consolidated statements of income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2003. These financial statements are the responsibility of the Group's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with International Standards on Auditing and auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Group at December 31, 2003, and 2002, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2003 in conformity with International Financial Reporting Standards.

International Financial Reporting Standards vary in certain significant respects from accounting principles generally accepted in the United States of America. Information relating to the nature and effect of such differences is presented in Note 44 to the consolidated financial statements.

Essen, Germany

March 11, 2004, except for Note 45, as to which the date is March 31, 2004

PwC Deutsche Revision

Aktiengesellschaft  
Wirtschaftsprüfungsgesellschaft

/s/ ALBRECHT

/s/ LINKE

\_\_\_\_\_  
P. Albrecht  
(Certified Public Accountant)

\_\_\_\_\_  
V. Linke  
(Certified Public Accountant)

**Table of Contents****Bayer Group****Consolidated Statements of Income**

	Note	2001	2002	2003
			( million)	
<b>Net sales</b>	[1]	30,275	29,624	28,567
<i>of which discontinuing operations</i>	[6]	8,573	7,586	6,389
Cost of goods sold		(17,228)	(17,680)	(16,834)
<b>Gross profit</b>		13,047	11,944	11,733
Selling expenses	[2]	(7,205)	(6,933)	(6,484)
Research and development expenses	[3]	(2,559)	(2,577)	(2,414)
General administration expenses		(1,037)	(1,460)	(1,690)
Other operating income	[4]	885	2,706	1,158
Other operating expenses	[5]	(1,139)	(2,070)	(3,506)
<b>Operating result</b>	[7]	1,676	1,610	(1,203)
<i>of which discontinuing operations</i>	[6]	210	760	(1,652)
Income (Expenses) from investments in affiliated companies net	[8]	54	223	(93)
Interest expense net	[9]	(349)	(449)	(353)
Other non-operating expenses net	[10]	(266)	(428)	(345)
<b>Non-operating results</b>		(561)	(654)	(791)
<b>Income/loss before income taxes</b>		1,115	956	(1,994)
Income taxes	[11]	(154)	107	645
<b>Income/loss after taxes</b>		961	1,063	(1,349)
Minority Stockholders interest	[13]	4	(3)	(12)
<b>Net income/loss</b>		965	1,060	(1,361)
<b>Basic and diluted earnings/loss per share ( )</b>	[14]	1.32	1.45	(1.86)

The accompanying notes are an integral part of the financial statements

**Table of Contents****Bayer Group****Consolidated Balance Sheets**

	Note	Dec. 31, 2002	Dec. 31, 2003
( million)			
<b>ASSETS</b>			
<b>Noncurrent assets</b>			
Intangible assets	[18]	8,879	6,514
Property, plant and equipment	[19]	12,436	9,937
Investments	[20]	2,198	1,781
		<u>23,513</u>	<u>18,232</u>
<b>Current assets</b>			
Inventories	[21]	6,342	5,885
Receivables and other assets			
Trade accounts receivable	[22]	5,542	5,071
Other receivables and other assets	[23]	4,210	3,854
		<u>9,752</u>	<u>8,925</u>
<b>Liquid assets</b>	[24]		
Marketable securities and other instruments		29	129
Cash and cash equivalents		767	2,734
		<u>796</u>	<u>2,863</u>
		<u>16,890</u>	<u>17,673</u>
<b>Deferred taxes</b>	[11]	967	1,298
<b>Deferred charges</b>	[25]	322	242
		<u>41,692</u>	<u>37,445</u>
<i>of which discontinuing operations</i>	[35]	6,904	5,655
<b>STOCKHOLDERS EQUITY AND LIABILITIES</b>			
<b>Stockholders equity</b>			
Capital stock of Bayer AG		1,870	1,870
Capital reserves of Bayer AG		2,942	2,942
Retained earnings		10,076	10,479
Net income		1,060	(1,361)
Other Comprehensive Income			
Currency translation adjustment		(593)	(1,699)
Miscellaneous items		(20)	(18)
	[26]	<u>15,335</u>	<u>12,213</u>
<b>Minority Stockholders interest</b>	[27]	120	123
<b>Liabilities</b>			
Long-term liabilities			



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Long-term financial obligations	[30]	7,318	7,113
Miscellaneous long-term liabilities	[32]	92	98
Provisions for pensions and other post-employment benefits	[28]	4,925	5,072
Other long-term provisions	[29]	1,215	1,343
		<u>13,550</u>	<u>13,626</u>
<b>Short-term liabilities</b>			
Short-term financial obligations	[30]	2,841	2,313
Trade accounts payable	[31]	2,534	2,265
Miscellaneous short-term liabilities	[32]	2,138	2,361
Short-term provisions	[29]	2,257	2,448
		<u>9,770</u>	<u>9,387</u>
		<u>23,320</u>	<u>23,013</u>
<i>of which discontinuing operations</i>	<i>[35]</i>	<u>2,769</u>	<u>2,933</u>
<b>Deferred taxes</b>	[11]	<u>2,453</u>	<u>1,462</u>
<b>Deferred income</b>	[34]	<u>464</u>	<u>634</u>
<b>Total stockholders equity and liabilities</b>		<u>41,692</u>	<u>37,445</u>

The accompanying notes are an integral part of the financial statements

**Table of Contents****Bayer Group****Consolidated Statements of Changes in Stockholders Equity**

	Number of shares	Capital stock of Bayer AG	Capital reserves of Bayer AG	Retained earnings	Net income/ loss	Currency translation adjustment	Miscellaneous items		Total Stockholders equity
							Fair-value remeasurement of securities	Cash flow hedges	
( million, except share data)									
<b>Jan. 1, 2001</b>	730,341,920	1,870	2,942	9,047	1,816	465	1,339	95	17,574
<b>Changes in stockholders equity resulting from capital contributions and dividend payments</b>									
Dividend payments					(1,022)				(1,022)
					(1,022)				(1,022)
<b>Other changes in stockholders equity not recognized in income</b>									
Exchange differences						294			294
Other differences of which realized (gains) losses							(785)	(104)	(889)
							(25)	(68)	(93)
						294	(785)	(104)	(595)
<b>Changes in stockholders equity recognized in income</b>									
Allocation to retained earnings				794	(794)				0
Income after taxes for 2001					965				965
				794	171				965
<b>Dec. 31, 2001</b>	730,341,920	1,870	2,942	9,841	965	759	554	(9)	16,922
<b>Changes in stockholders equity resulting from capital contributions and dividend payments</b>									
Dividend payments					(657)				(657)
					(657)				(657)
<b>Other changes in stockholders equity not recognized in income</b>									
Exchange differences						(1,352)			(1,352)
Other differences of which realized (gains) losses							(561)	(4)	(565)
							(154)	9	(145)
						(1,352)	(561)	(4)	(1,917)
<b>Changes in stockholders equity recognized in income</b>									
Allocation to retained earnings				235	(308)				(73)
Income after taxes for 2002					1,060				1,060

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				235	752				987
<b>Dec. 31, 2002</b>	730,341,920	1,870	2,942	10,076	1,060	(593)	(7)	(13)	15,335
<b>Changes in stockholders equity resulting from capital contributions and dividend payments</b>									
Dividend payments					(657)				(657)
					(657)				(657)
<b>Other changes in stockholders equity not recognized in income</b>									
Exchange differences						(1,106)			(1,106)
Other differences of which realized (gains) losses							20	(18)	2
							1	3	4
						(1,106)	20	(18)	(1,104)
<b>Changes in stockholders equity recognized in income</b>									
Allocation to retained earnings				403	(403)				0
Income after taxes for 2003					(1,361)				(1,361)
				403	(1,764)				(1,361)
<b>Dec. 31, 2003</b>	730,341,920	1,870	2,942	10,479	(1,361)	(1,699)	13	(31)	12,213

The accompanying notes are an integral part of the financial statements

**Table of Contents****Bayer Group****Consolidated Statements of Cash Flows**

	Note	2001	2002	2003
			( million)	
Operating result		1,676	1,610	(1,203)
Income taxes		(616)	(301)	(607)
Depreciation and amortization		2,516	3,312	4,735
Change in long-term provisions		(193)	(135)	421
Gains on retirements of noncurrent assets		(374)	(1,401)	(102)
<b>Gross cash provided by operating activities</b>		<b>3,009</b>	<b>3,085</b>	<b>3,244</b>
<i>of which discontinuing operations</i>	[42]	433	416	228
(Increase) Decrease in inventories		146	(55)	(49)
(Increase) Decrease in trade accounts receivable		638	546	115
Increase (Decrease) in trade accounts payable		73	419	(143)
Changes in other working capital		14	463	126
<b>Net cash provided by operating activities</b>	[39]	<b>3,880</b>	<b>4,458</b>	<b>3,293</b>
<i>of which discontinuing operations</i>	[42]	850	461	33
Cash outflows for additions to property, plant and equipment		(2,617)	(2,239)	(1,653)
Cash inflows from sales of property, plant and equipment		521	2,114	1,644
Cash inflows from sales of investments		109	903	258
Cash outflows for acquisitions less acquired cash		(502)	(7,776)	(72)
Interest and dividends received		138	402	366
Cash inflows from marketable securities		219	26	(83)
<b>Net Cash provided by (used in) investing activities</b>	[40]	<b>(2,132)</b>	<b>(6,570)</b>	<b>460</b>
<i>of which discontinuing operations</i>	[42]	184	973	(186)
Bayer AG dividend and dividend payments to minority stockholders		(1,028)	(662)	(664)
Issuances of debt		2,514	7,427	1,621
Retirements of debt		(2,551)	(3,890)	(1,936)
Interest paid		(505)	(704)	(782)
<b>Net cash (used in) provided by financing activities</b>	[41]	<b>(1,570)</b>	<b>2,171</b>	<b>(1,761)</b>
<i>of which discontinuing operations</i>	[42]	(148)	(60)	153
<b>Change in cash and cash equivalents due to business activities</b>		<b>178</b>	<b>59</b>	<b>1,992</b>
<b>Cash and cash equivalents at beginning of year</b>		<b>491</b>	<b>719</b>	<b>767</b>
Change in cash and cash equivalents due to changes in scope of consolidation		42	4	1
Change in cash and cash equivalents due to exchange rate movements		8	(15)	(26)
<b>Cash and cash equivalents at end of year</b>	[43]	<b>719</b>	<b>767</b>	<b>2,734</b>
Marketable securities and other instruments		52	29	129

<b>Liquid assets as per balance sheets</b>	<u>771</u>	<u>796</u>	<u>2,863</u>
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The accompanying notes are an integral part of the financial statements

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group****Key Data by Business Segment**

Business Segments	Pharmaceuticals, Biological Products		Consumer Care, Diagnostics		Animal Health		Crop Science		Plastics, Rubber		Polyurethanes, Coatings, Fibers		Chemicals	
	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003
( million)														
Net sales	4,767	4,745	3,755	3,336	850	790	4,697	5,764	5,210	4,813	5,213	5,084	4,322	3,400
Change in	(16.8%)	(0.5%)	(8.5%)	(11.2%)	(0.9%)	(7.1%)	65.5%	22.7%	(3.4%)	(7.6%)	(1.2%)	(2.5%)	(16.9%)	(21.3%)
Change in local currencies	(12.4%)	11.4%	(1.5%)	(0.3%)	5.8%	4.7%	72.4%	32.4%	(0.5%)	(0.8%)	(2.9%)	6.2%	(11.7%)	(16.3%)
Intersegment sales	33	51	2	4	1	8	90	69	115	76	78	207	409	370
Other operating income	120	100	321	383	9	25	328	329	79	41	60	51	1,042	57
Operating result	(186)	(425)	602	589	170	170	(108)	324	76	(666)	(134)	(514)	1,057	(499)
Return on sales	(3.9%)	(9.0%)	16.0%	17.7%	20.0%	21.5%	(2.3%)	5.6%	1.5%	(13.8%)	(2.6%)	(10.1%)	24.5%	(14.7%)
Gross cash flow	4	191	827	668	182	143	516	924	420	368	710	661	473	291
Capital invested	4,095	3,001	3,152	2,891	592	409	10,085	8,033	5,772	4,862	6,913	5,852	4,823	4,051
CFRoI	0.1%	5.0%	23.9%	21.5%	30.5%	26.9%	6.6%	10.3%	6.8%	6.8%	9.3%	10.4%	8.5%	6.7%
Net cash flow	484	(163)	951	719	140	226	1,212	1,165	457	198	710	844	590	199
Equity-method income (loss)										1	(3)	(23)	8	(143)
Equity-method investments	16	4							10	2	728	703	341	161
Total assets	4,221	4,632	3,352	3,207	637	575	13,462	10,745	5,165	4,460	5,912	4,512	3,500	3,438
Capital expenditures	178	185	272	201	26	21	297	413	504	290	506	283	285	203
Amortization and depreciation	350	555	339	300	49	32	628	749	435	903	916	1,170	432	762
Liabilities	2,130	2,279	1,236	961	304	207	2,944	2,808	1,377	1,579	1,615	1,179	1,315	1,518
Research and development expenses	1,072	966	235	211	80	72	598	727	125	146	173	153	145	122
Number of employees (as of Dec. 31)	21,900	20,700	12,700	11,000	3,000	2,900	20,700	19,400	15,800	14,500	10,100	9,200	14,800	14,100

Business Segments	Reconciliation		Bayer Group		Of which Discontinuing Operations	
	2002	2003	2002	2003	2002	2003
( million)						
Net sales (external)	810	635	29,624	28,567	7,586	6,389
Change in			(2.2%)	(3.6%)		
Change in local currencies			2.6%	5.0%		

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Intersegment sales	(728)	(785)				
Other operating income	747	172	2,706	1,158		
Operating result	133	(182)	1,610	(1,203)	760	(1,652)
Return on sales			5.4%	(4.2%)		
Gross cash flow	(47)	(2)	3,085	3,244	416	228
Capital invested	1,280	5,298	36,712	34,397		
CFRoI			8.3%	9.2%		
Net cash flow	(86)	105	4,458	3,293	461	33
Equity-method income (loss)			5	(165)		
Equity-method investments			1,095	870		
Total assets	5,443	5,876	41,692	37,445	6,904	5655
Capital expenditures	315	143	2,383	1,739		
Amortization and depreciation	163	264	3,312	4,735	706	1,685
Liabilities	15,316	14,578	26,237	25,109	3,143	3,153
Research and development expenses	149	17	2,577	2,414	244	215
Number of employees (as of Dec. 31)	23,600	23,600	122,600	115,400	22,900	22,000

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****Key Data by Business Segment**

Business Segments	Pharmaceuticals, Biological Products		Consumer Care, Diagnostics		Animal Health		Crop Science		Plastics, Rubber		Polyurethanes, Coatings, Fibers		Chemicals	
	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
( million)														
Net sales (external)	5,729	4,767	4,104	3,755	858	850	2,838	4,697	5,396	5,210	5,275	5,213	5,201	4,322
Change in	(6.7%)	(16.8%)	5.6%	(8.5%)	(1.7%)	(0.9%)	9.9%	65.5%	(4.8%)	(3.4%)	(0.6%)	(1.2%)	(2.4%)	(16.9%)
Change in local currencies	(6.7%)	(12.4%)	5.0%	(1.5%)	(1.7%)	5.8%	10.2%	72.4%	(5.7%)	(0.5%)	(1.1%)	2.9%	(2.4%)	(11.7%)
Intersegment sales	38	33	2	2	4	1	102	90	116	115	138	78	456	409
Other operating income	63	120	50	321	13	9	128	328	93	79	59	60	416	1,042
Operating result	52	(186)	342	602	162	170	490	(108)	214	76	153	(134)	527	1,057
Return on sales	0.9%	(3.9%)	8.3%	16.0%	18.9%	20.0%	(17.3%)	(2.3%)	4.0%	1.5%	2.9%	(2.6%)	10.1%	24.5%
Gross cash flow	230	4	535	827	153	182	586	516	562	420	681	710	470	473
Capital invested	5,352	4,095	3,799	3,152	579	592	3,950	10,085	6,405	5,772	8,496	6,913	5,721	4,823
CFRoI	4.2%	0.1%	14.0%	23.9%	24.2%	30.5%	14.5%	6.6%	8.5%	6.8%	8.4%	9.3%	7.0%	8.5%
Net cash flow	343	484	577	951	190	140	428	1,212	924	457	1,063	710	513	590
Equity-method income (loss)												(3)	12	8
Equity-method investments	21	16							27	10	772	728	346	341
Total assets	5,303	4,221	3,956	3,352	734	637	3,488	13,462	5,867	5,165	7,722	5,912	5,036	3,500
Capital expenditures	375	178	238	272	45	26	199	297	536	504	468	506	501	285
Amortization and depreciation	364	350	291	339	39	49	248	628	482	435	594	916	455	432
Liabilities	1,869	2,130	1,271	1,236	379	304	1,130	2,944	1,339	1,377	2,385	1,615	2,030	1,315
Research and development expenses	1,242	1,072	252	235	91	80	299	598	134	125	194	173	177	145
Number of employees (as of Dec. 31)	22,000	21,900	12,800	12,700	3,100	3,000	8,400	20,700	16,400	15,800	10,300	10,100	19,000	14,800

Business Segments	Reconciliation		Bayer Group		Of which Discontinuing Operations	
	2001	2002	2001	2002	2001	2002
( million)						
Net sales (external)	874	810	30,275	29,624	8,573	7,586
Change in			(2.2%)	(2.2%)		
Change in local currencies			(2.5%)	2.6%		



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Intersegment sales	(856)	(728)				
Other operating income	63	747	885	2,706		
Operating result	(264)	133	1,676	1,610	210	760
Return on sales			5.5%	5.4%		
Gross cash flow	(208)	(47)	3,009	3,085	433	416
Capital invested	556	1,280	34,858	36,712		
CFRoI			8.4%	8.3%		
Net cash flow	(158)	(86)	3,880	4,458	850	461
Equity-method income (loss)	14		26	5		
Equity-method investments			1,166	1,095		
Total assets	4,933	5,443	37,039	41,692	8,813	6,904
Capital expenditures	255	315	2,617	2,383		
Amortization and depreciation	43	163	2,516	3,312	742	706
Liabilities	9,616	15,316	20,019	26,237	3,489	3,143
Research and development expenses	170	149	2,559	2,577	304	244
Number of employees (as of Dec. 31)	24,900	23,600	116,900	122,600	26,900	22,900

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****Key Data by Business Region**

Regions	Europe			North America			Asia/Pacific			Latin America/ Africa/Middle East		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
( million)												
Net sales (external)												
by market	12,383	12,266	12,162	9,720	9,005	8,636	4,826	4,901	4,529	3,346	3,452	3,240
Net sales (external)												
by point of origin	13,837	13,894	13,518	10,067	9,135	8,763	3,930	4,010	3,913	2,441	2,585	2,373
<i>Of which</i>												
<i>discontinuing</i>	4,665	4,147	3,717	2,627	2,322	1,848	836	727	564	445	390	260
Change in	(6.4%)	0.4%	(2.7%)	0.8%	(9.3%)	(4.1%)	1.9%	2.0%	(2.4%)	3.7%	5.9%	(8.2%)
Change in local												
currencies	(6.5%)	0.5%	(2.7%)	(2.2%)	(3.9%)	11.4%	7.6%	7.6%	10.2%	2.7%	33.3%	11.1%
Interregional sales	3,157	3,181	3,833	1,946	1,961	1,876	227	227	266	116	139	151
Other operating												
income	717	2,447	812	70	90	64	48	86	84	50	83	198
Operating result	1,859	1,891	(277)	(283)	(676)	(1,247)	240	207	65	214	410	433
<i>Of which</i>												
<i>discontinuing</i>	629	1,050	(839)	(481)	(388)	(772)	52	34	(53)	10	64	12
Return on sales	13.4%	13.6%	(2.0%)	(2.8%)	(7.4%)	(14.2%)	6.1%	5.2%	1.7%	8.8%	15.9%	18.2%
Gross cash flow	2,017	1,843	1,639	641	740	899	324	360	342	249	363	398
Capital invested	16,938	21,338	20,000	13,449	11,594	9,325	2,781	2,460	2,258	1,705	1,322	1,197
CFRoI	11.7%	8.6%	7.9%	4.5%	5.9%	8.6%	11.2%	12.6%	14.5%	15.0%	25.4%	31.6%
Equity-method												
income (loss)	26	5	(166)									1
Equity-method												
investments	527	572	452	616	505	412	2	2	2	21	16	4
Total assets	17,887	23,694	22,400	12,898	11,565	9,045	3,227	3,225	2,731	1,953	1,734	1,627
Capital expenditures	1,684	1,422	1,047	560	676	496	255	188	138	118	97	58
Amortization and												
depreciation	1,280	1,746	2,351	969	1,344	1,963	155	153	333	108	64	69
Liabilities	9,949	14,370	15,898	6,490	6,390	5,253	1,403	1,613	1,189	695	945	675
Research and												
development												
expenses	1,786	1,801	1,674	696	708	650	68	51	74	9	17	16
Number of												
employees (as of												
Dec. 31)	68,400	70,600	66,700	24,000	24,600	23,300	13,000	15,400	13,900	11,500	12,000	11,500

Regions	Reconciliation			Bayer Group		
	2001	2002	2003	2001	2002	2003
( million)						
Net sales (external) by market				30,275	29,624	28,567
Net sales (external) by point of origin				30,275	29,624	28,567
<i>Of which discontinuing</i>				8,573	7,586	6,389
Change in				(2.2%)	(2.2%)	(3.6%)
Change in local currencies				(2.5%)	2.6%	5.0%
Interregional sales	(5,446)	(5,508)	(6,126)			
Other operating income				885	2,706	1,158
Operating result	(354)	(222)	(177)	1,676	1,610	(1,203)
<i>Of which discontinuing</i>				210	760	(1,652)
Return on sales				5.5%	5.4%	(4.2%)

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Gross cash flow	(222)	(221)	(34)	3,009	3,085	3,244
Capital invested	(15)	(2)	1,617	34,858	36,712	34,397
CFRoI				8,4%	8,3%	9,2%
Equity-method income (loss)				26	5	(165)
Equity-method investments				1,166	1,095	870
Total assets	1,074	1,474	1,642	37,039	41,692	37,445
Capital expenditures				2,617	2,383	1,739
Amortization and depreciation	4	5	19	2,516	3,312	4,735
Liabilities	1,482	2,919	2,094	20,019	26,237	25,109
Research and development expenses				2,559	2,577	2,414
Number of employees (as of Dec. 31)				116,900	122,600	115,400

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**Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

**Accounting policies**

The consolidated financial statements of the Bayer Group are prepared pursuant to Article 292a of the German Commercial Code in accordance with the rules of the International Accounting Standards Board (IASB), London, in effect at the closing date, and are approved by the Supervisory Board for publication on March 18, 2004. They comply with the European Union's guidelines on consolidation of financial statements (Directive 83/349/EEC).

A Declaration of Conformity with the German Corporate Governance Code has been issued pursuant to §161 of the German Stock Corporation Act and made available to stockholders.

The financial statements of the consolidated companies are prepared according to uniform recognition and valuation principles. Valuation adjustments made for tax reasons are not reflected in the Group statements. The individual companies' statements are prepared as of the closing date for the Group statements.

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 income statement is prepared using the cost-of-sales method.

In the income statement and balance sheet, certain items are combined for the sake of clarity, as explained in the Notes. A distinction is made in the balance sheet between long-term and short-term liabilities in accordance with IAS 1 (Presentation of Financial Statements). Liabilities are classified as short-term if they mature within one year. Certain prior year amounts have been reclassified to conform with the current year presentation.

The preparation of financial statements requires estimates and assumptions to be made. These affect the classification and valuation of assets, liabilities, income, expenses and contingent liabilities. The actual values may vary from the estimates.

Since 2002 the term International Financial Reporting Standards (IFRS) has been used to refer to the body of accounting and reporting standards compiled by the International Accounting Standards Board (IASB), London. It thus replaces the term International Accounting Standards. However, standards issued prior to the name change continue to be referred to as IAS.

**Effect of new accounting pronouncements**

The consolidated financial statements of the Bayer Group for the 2003 fiscal year comply with the following new International Accounting Standard (IAS) published by the International Accounting Standards Board (IASB):

IAS 41 (Agriculture) prescribes the accounting treatment, financial statement presentation and disclosures related to agricultural activity. This standard stipulates, among other things, the accounting treatment for biological assets during the period of growth, degeneration, production and procreation, and for the initial measurement of agricultural produce at the point of harvest. It prescribes that biological assets be included at fair value less estimated point-of-sale costs, provided that fair value can be measured reliably. Agricultural produce harvested from such biological assets is also recognized at fair value at the point of harvest less estimated point-of-sale costs.

The adoption of this new standard did not have any material impact on Bayer's financial position or results of operations in 2003 or on the comparability of the consolidated financial statements for 2003 and 2002.

In December 2003 the IASB issued 15 revised international accounting standards (IAS) as part of its Improvements Project to eliminate redundancies and conflicts between existing standards. The revised standards are to be applied for fiscal years starting on or after January 1, 2005. The Bayer Group is currently examining whether to introduce them earlier and what impact they will have on the Group's net worth, financial position and results of operations.



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**Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

**Basic principles of the Group financial statements**

*Consolidation methods*

Capital consolidation is performed according to IAS 22 (Business Combinations) by offsetting investments in subsidiaries against the underlying equity at the dates of acquisition. The identifiable assets and liabilities of subsidiaries and joint ventures are included at their fair values in proportion to Bayer's interest. Remaining differences are recognized as goodwill. Fair value adjustments of the assets and liabilities concerned are amortized together with the corresponding assets and liabilities in subsequent periods.

Where the statements of individual consolidated companies reflect write-downs or write-backs of investments in other consolidated companies, these are reversed for the Group statements.

Intragroup sales, profits, losses, income, expenses, receivables and payables are eliminated.

Deferred taxes are recognized for temporary differences related to consolidation entries.

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

The consolidated financial statements include the accounts of those material subsidiaries in which Bayer AG directly or indirectly, has a majority of the voting rights, over which it exercises uniform control, or from which it is able to derive benefit by virtue of its power to govern corporate financial and operating policies, generally through an ownership interest greater than 50 percent. Inclusion of such companies' 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. Subsidiaries and joint ventures that do not have a material impact on assets and earnings either individually or in aggregate are not consolidated. They are recognized at the lower of cost of acquisition or fair value.

Investments in material entities in which Bayer AG exerts significant influence, generally through an ownership interest between 20 and 50 percent, are accounted for by the equity method. The cost of acquisition of a company included at equity is adjusted annually by the percentage of any change in its stockholders' equity corresponding to Bayer's percentage interest in the company. Any goodwill arising from the first-time inclusion of companies at equity is accounted for in the same way as goodwill relating to fully consolidated companies. Intercompany profits and losses on transactions with companies included at equity were immaterial in 2003 and 2002.

*Foreign currency translation*

In the financial statements of the individual consolidated companies, foreign currency receivables and payables are translated at closing rates, irrespective of whether they are exchange-hedged. Forward contracts that, from an economic point of view, serve as a hedge against fluctuations in exchange rates are stated at fair value.

The majority of consolidated companies outside the euro zone are to be regarded as foreign entities since they are financially, economically and organizationally autonomous. Their functional currencies according to IAS 21 (The Effects of Changes in Foreign Exchange Rates) are thus the respective local currencies. The assets and liabilities of these companies are therefore translated at closing rates, income and expense items at average rates for the year.

Where the operations of a company outside the euro zone are integral to those of Bayer AG, the functional currency is the euro. Property, plant and equipment, intangible assets, investments in affiliated companies and other securities included in investments are translated at the historical exchange rates on the dates of addition, along with any relevant amortization, depreciation and write-downs. All other balance sheet items are translated at closing rates. Income and expense items (except amortization, depreciation and write-downs) are translated at average rates for the year.

Companies operating in hyperinflationary economies prepare their statements in Euro and thus, in effect, by the temporal method described above.



**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

Exchange differences arising from the translation of foreign companies' balance sheets are shown in a separate stockholders' equity item.

In case of divestiture, the respective exchange differences are reversed and recognized in income.

The exchange rates for major currencies against the euro varied as follows:

		Closing rate			Average rate		
		2001	2002	2003	2001	2002	2003
( 1 )							
Argentina	ARS	0.88	3.53	3.70	0.90	2.97	3.33
Brazil	BRL	2.05	3.71	3.66	2.10	2.78	3.47
U.K.	GBP	0.61	0.65	0.70	0.62	0.63	0.69
Japan	JPY	115.33	124.39	135.05	108.74	118.06	130.96
Canada	CAD	1.41	1.66	1.62	1.39	1.48	1.58
Mexico	MXN	8.06	10.99	14.18	8.36	9.15	12.22
Switzerland	CHF	1.48	1.45	1.56	1.51	1.47	1.52
U.S.A.	USD	0.88	1.05	1.26	0.90	0.95	1.13

**Recognition and valuation principles***Net sales and other operating income*

Sales are recognized upon delivery of goods or rendering of services to third parties and are reported net of sales taxes and rebates. Revenues from contracts that contain customer acceptance provisions are deferred until customer acceptance occurs or the contractual acceptance period has lapsed. Allocations to provisions for rebates to customers are recognized in the period in which the related sales are recorded based on the contract terms. Payments relating to the sale or outlicensing of technologies or technological expertise – once the respective agreements have become effective – are immediately recognized in income if all rights 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 recorded in line with the actual circumstances. Revenues such as license and rental revenues, and dividend and interest income, are recognized according to the same principles.

*Research and development expenses*

According to IAS 38 (Intangible Assets), research costs cannot be capitalized; development costs can only be capitalized if specific conditions are fulfilled. Development costs must be capitalized if it is sufficiently certain that the future economic benefits to the company will cover not only the usual production, selling and administrative costs but also the development costs themselves. There are also several other criteria relating to the development project and the product or process being developed, all of which have to be met to justify asset recognition. As in previous years, these conditions are not satisfied.

*Intangible assets*

Acquired intangible assets other than goodwill are recognized at cost and amortized by the straight-line method over a period of 4 to 15 years, depending on their estimated useful lives. Write-downs are made for impairment losses. Assets are written back if the reasons for previous years' write-downs no longer apply. Scheduled amortization for 2003 has been allocated to the cost of goods sold, selling expenses, research and development expenses or general administration expenses.

Goodwill, including that resulting from capital consolidation, is capitalized in accordance with IAS 22 (Business Combinations) and amortized on a straight-line basis over a maximum estimated useful life of 20 years. The value of goodwill is reassessed regularly based on impairment indicators and written down if necessary. In





**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

compliance with IAS 36 (Impairment of Assets), such write-downs of goodwill are measured by comparison to the discounted cash flows expected to be generated by the assets to which the goodwill can be ascribed. Amortization and write-downs of capitalized goodwill is recorded as other operating expense.

Self-created intangible assets generally are not capitalized. Certain development costs relating to the application development stage of internally developed software are, however, capitalized in the Group balance sheet. These costs are amortized over the useful life of the software from the date it is placed in service.

*Property, plant and equipment*

Property, plant and equipment is carried at the cost of acquisition or construction. Assets subject to depletion are depreciated over their estimated useful lives. Write-downs are made for any declines in value that go beyond the depletion reflected in depreciation. In compliance with IAS 36 (Impairment of Assets), such write-downs are measured by comparing the carrying amounts to the discounted cash flows expected to be generated by the respective assets. Where it is not possible to estimate the impairment loss for an individual asset, the loss is assessed on the basis of the discounted cash flow for the cash-generating unit to which the asset belongs. Assets are written back if the reasons for previous years' write-downs no longer apply.

The cost of construction of self-constructed property, plant and equipment comprises the direct cost of materials, direct manufacturing expenses, appropriate allocations of material and manufacturing overheads, and an appropriate share of the depreciation and write-downs of assets used in construction. It includes the shares of expenses for company pension plans and discretionary employee benefits that are attributable to construction.

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.

Expenses for the repair of property, plant and equipment are normally charged against income, but they are capitalized if they result in an enlargement or substantial improvement of the respective assets.

Property, plant and equipment is depreciated by the straight-line method, except where the declining-balance method is more appropriate in light of the actual utilization pattern. Depreciation for 2003 has been allocated to the cost of goods sold, selling expenses, research and development expenses or general administration expenses.

When assets are closed down, sold, or abandoned, the difference between the net proceeds and the net carrying amount of the assets is recognized as a gain or loss in other operating income or expenses, respectively.

The following depreciation periods, based on the estimated useful lives of the respective assets, are applied throughout the Group:

Buildings	20 to 50 years
Outdoor infrastructure	10 to 20 years
Plant installations	6 to 20 years
Machinery and apparatus	6 to 12 years
Laboratory and research facilities	3 to 5 years
Storage tanks and pipelines	10 to 20 years
Vehicles	5 to 8 years
Computer equipment	3 to 5 years
Furniture and fixtures	4 to 10 years

In accordance with IAS 17 (Leases), assets leased on terms equivalent to financing a purchase by a long-term loan (finance leases) are capitalized at the lower of their fair value or the present value of the minimum lease payments at the date of addition. The leased assets are depreciated over their estimated useful lives except where subsequent transfer of title is uncertain, in which case they are depreciated over their estimated useful lives or the respective lease terms, whichever are shorter. The future lease payments are recorded as financial obligations.



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**Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

*Investments*

Investments in securities of companies in which Bayer does not exercise significant influence are classified as held-to-maturity investments or available-for-sale financial assets and recognized in compliance with IAS 39 (Financial Instruments: Recognition and Measurement) at amortized cost or fair value depending on whether a quoted market price exists for the securities. Where evidence exists that such assets may be impaired, they are written down as necessary on the basis of an impairment test. Investments are written back if the reasons for previous years write-downs no longer apply.

Investments in companies included at equity are recognized at amounts corresponding to Bayer's shares in their equities.

Loans receivable that are interest-free or bear low rates of interest are carried at present value; other loans receivable are carried at amortized cost.

*Financial instruments*

Financial instruments entail contractual claims on financial assets. Under IAS 32 (Financial Instruments: Disclosure and Presentation), financial instruments include both primary instruments, such as trade accounts receivable and payable, investments, and financial obligations; and derivative financial instruments, which are used to hedge risks arising from changes in currency exchange and interest rates. Further details of financial instruments are given in Note 38.

*Inventories*

In accordance with IAS 2 (Inventories), inventories encompass assets (finished goods and work in process) held for sale in the ordinary course of business, in the process of production for such sale (unfinished goods) 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 usually valued by the weighted-average method and recognized at the lower of cost or net realizable value, that is, the estimated normal selling price less the estimated production and selling expenses.

The cost of production comprises the direct cost of materials, direct manufacturing expenses and appropriate allocations of fixed and variable material and manufacturing overheads, where these are attributable to production.

It also includes the shares of expenses for company pension plans and discretionary employee benefits that are attributable to production. Administrative costs are included where they are attributable to production.

In view of the production sequences characteristic of the Bayer Group, work in process and finished goods are grouped together.

*Other receivables and assets*

Other receivables and other assets are carried at amortized cost. Any necessary write-downs are made on the basis of the probability of default.

*Deferred taxes*

Deferred taxes are calculated in accordance with IAS 12 (Income Taxes). Deferred taxes arise from temporary differences between the carrying amounts of assets or liabilities in the accounting and tax balance sheets, from consolidation measures and from realizable tax loss carryforwards. 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.

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**Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

A valuation allowance is recognized against tax loss carryforwards when it is not sufficiently certain that this income will be realized.

*Provisions*

Other provisions are valued in accordance with IAS 37 (Provisions, Contingent Liabilities and Contingent Assets) and, where appropriate, IAS 19 (Employee Benefits), using the best estimate of the extent of the obligation. Long-term portions of provisions are discounted to their present value insofar as the extent and timing of the obligation can be assessed with a reasonable degree of certainty. Further details of pension provisions are given in Note 28.

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 cost of goods sold, selling expenses, research and development expenses or general administration expenses as appropriate.

Personnel commitments mainly include annual bonus payments, service awards and other personnel costs. Reimbursements to be received from the German government under the senior work program are recorded as receivables and recognized in income as soon as the criteria for such reimbursements are fulfilled. Trade-related commitments mainly include rebates, as well as obligations relating to services already received but not yet invoiced.

The Group sets up and maintains provisions for ongoing or probable litigations where reasonable estimates are possible. These provisions include all estimated legal fees and costs of expected settlements. The amounts are based upon information and cost estimates provided by the Group's attorneys. The provisions are reviewed with the Group's attorneys and updated at regular intervals not exceeding three months.

*Liabilities*

Short-term liabilities are recognized at payment or redemption amounts. Long-term liabilities and financial obligations that are not the hedged item in a permissible hedge accounting relationship are carried at amortized cost. Liabilities relating to finance leases are carried at the present value of the future lease payments.

*Deferred income*

In accordance with IAS 20 (Accounting for Government Grants and Disclosure of Government Assistance), grants and subsidies that serve to promote investment are reflected in the balance sheet as deferred income. The amounts are gradually reversed to income during the useful lives of the respective assets.

*Cash flow statement*

The cash flow statement shows how the liquidity of the Bayer Group was affected by the inflow and outflow of cash and cash equivalents during the year. The effects of acquisitions, divestitures and other changes in the scope of consolidation are eliminated. Cash flows are classified by operating, investing and financing activities in accordance with IAS 7 (Cash Flow Statements). Cash and cash equivalents shown in the balance sheet comprise cash, checks, balances with banks and securities with original maturities of up to three months. An adjustment is shown to reconcile cash and cash equivalents at the end of the year to the liquid assets reflected in the balance sheet.

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 balance sheet. The effect of changes in exchange rates on cash and cash equivalents is shown separately.

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****Procedure used in global impairment testing and its impact**

In the fourth quarter of 2003, the Bayer Group conducted an impairment test on its global assets in accordance with IAS 36. In the industrial business areas in particular, this was triggered, first, by the strategic realignment of the Bayer Group, including the plans to dispose of certain of the polymers and chemicals activities, and, second, by the sustained deterioration in business conditions in some areas of operation. These conditions mainly consist of an accumulation of adverse external factors such as sustained unfavorable price trends, especially higher raw materials prices that cannot be passed on fully to customers, lower volume growth as a result of tougher competition caused partly by global overcapacities, lower economic growth forecasts and continued unfavorable currency trends.

Assets were tested for impairment by comparing the carrying amount of each cash generating unit (CGU) to the recoverable amount, which is the higher of the net selling price or value in use.

In line with the definition of cash generating units, those of the Bayer Group were identified as being the strategic business entities, since these are the next financial reporting levels below the segments.

In fiscal 2003, impairment tests were performed for the Polyurethanes, Coatings, Fibers; Plastics, Rubber; Chemicals; and Pharmaceuticals, Biological Products segments and their strategic business entities, which are as follows:

<b>Polyurethanes, Coatings, Fibers</b>	<b>Plastics, Rubber</b>	<b>Chemicals</b>	<b>Pharmaceuticals, Biological Products</b>
Polyether	Styrenics	Textile Processing Chemicals	Plasma
Fibers Polyester, TPU, Films	Rubber Chemicals BR/ Butyl Technical Rubber Products	Paper Fine Chemicals Inorganic Pigments	

Where the carrying amount of a cash generating unit exceeded the recoverable amount, an impairment loss was recognized for the difference. First, the goodwill of the relevant strategic business entity was written down. Any remaining impairment loss was allocated among the other assets of the strategic business entity, based on the net carrying amounts of each asset on December 31, 2003.

The value in use was determined from the present value of future cash flows, based on continuing use of the asset by the strategic business entity and its retirement at the end of its useful life. The cash flow forecasts were derived from the current long-term planning for the Bayer Group.

The discount rate was determined from in-house analyses of the weighted average cost of capital (WACC). The model used for this is based on the option pricing theory and takes account of country, credit and interest rate risks arising from the volatility of business operations and the capital structure of the respective subgroup.

A capital structure was determined for each subgroup by first calculating its theoretical stockholders' equity on the basis of the market capitalization of Bayer AG, taking into account sector-specific financing structures. For the global strategic business entities subjected to impairment testing, the WACC used to discount the estimated cash flows varied between 6 and 10 percent, depending on the specific risk intrinsic to the respective asset.

The following capital cost bands were applied to the segments tested for impairment:

<b>Polyurethanes, Coatings, Fibers</b>	<b>Plastics, Rubber</b>	<b>Chemicals</b>	<b>Pharmaceuticals, Biological Products</b>
6%-8%	6%-9%	7%-8%	9%



**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

The following impairment losses were recognized on the noncurrent assets of the Bayer Group and its reporting segments:

	<u>2002</u>	<u>2003</u>
	( million)	
Goodwill	5	167
<i>of which Polyurethanes, Coatings, Fibers</i>	5	88
<i>of which Plastics, Rubber</i>		79
<i>of which Chemicals</i>		
Intangible assets, excluding goodwill	200	511
<i>of which Polyurethanes, Coatings, Fibers</i>	200	430
<i>of which Plastics, Rubber</i>		55
<i>of which Chemicals</i>		26
Property, plant and equipment	84	1,131
<i>of which Polyurethanes, Coatings, Fibers</i>	84	153
<i>of which Plastics, Rubber</i>		408
<i>of which Chemicals</i>		371
<i>of which Pharmaceuticals, Biological Products</i>		199
<b>Total</b>	<b>289</b>	<b>1,809</b>
<i>of which Polyurethanes, Coatings, Fibers</i>	289	671
<i>of which Plastics, Rubber</i>		463
<i>of which Chemicals</i>		476
<i>of which Pharmaceuticals, Biological Products</i>		199

**Scope of consolidation**

The financial statements of the Bayer Group as of December 31, 2003 include Bayer AG and 65 German and 260 foreign consolidated subsidiaries in which Bayer AG, directly or indirectly, has a majority of the voting rights, over which it exercises uniform control, or from which it is able to derive benefit by virtue of its power to govern corporate financial and operating policies. There was virtually no change in the total number of consolidated companies compared with the previous year (2002: 59 German and 268 foreign consolidated subsidiaries). Excluded from consolidation are 142 subsidiaries that in aggregate are immaterial to the net worth, financial position and earnings of the Bayer Group; they account for less than 1 percent of Group sales.



**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

We have included eight joint ventures in 2003 – three fewer than in the previous year – by proportionate consolidation in compliance with IAS 31 (Financial Reporting of Interests in Joint Ventures). The effect of joint ventures on the Group balance sheet and income statement is as follows:

	<u>million</u>
Noncurrent assets	135
Current assets	85
Pension provisions	(1)
Other provisions	(4)
Financial obligations	(45)
Remaining liabilities	(59)
	<u>—</u>
<b>Net assets</b>	<b>111</b>
	<b>—</b>
Income	330
Expenses	306
	<u>—</u>
<b>Income after taxes</b>	<b>24</b>
	<b>—</b>

While nine companies are stated at equity, 51 companies that in aggregate are of minor importance are stated at their carrying amounts.

Consolidated for the first time are 35 companies, while 40 companies have been deconsolidated. The increase is largely due to carve-outs of businesses to separate legal entities in Germany and the United States. The companies no longer consolidated are mainly those of the divested PolymerLatex group and those eliminated by the merger of former Aventis CropScience companies with Bayer companies, and five other companies.

**Acquisitions/ Divestitures**

**Acquisitions** are accounted for by the purchase method. Accordingly, the results of operations of the acquired businesses are included in the consolidated financial statements as from the respective dates of acquisition. The purchase prices of acquisitions outside the euro zone are translated at the exchange rates in effect at the respective dates of acquisition.

In 2003 a total of 72 million was spent on acquisitions, translated at the exchange rates in effect on the respective dates of acquisition. They were paid for in cash. These acquisitions led to goodwill of 52 million. The goodwill amounts are being amortized by the straight-line method over periods not exceeding 10 years.

At the start of July 2003 Bayer acquired the remaining interest in the Bayer Polymers Sheet Europe group (formerly Makroform), headquartered in Darmstadt, Germany, for 59 million. Bayer previously held an interest of 54.5 percent in this joint venture, which was set up in mid-2000. The other 45.5 percent was held by Röhm GmbH. Acquired goodwill of 45 million will be amortized over its anticipated useful life of 10 years. The acquired Group comprises Bayer Polymers Sheet GmbH, Darmstadt, Germany, Bayer Polymers Sheet N.V., Tiel, Belgium, and Bayer Polymers Sheet SpA, Milan, Italy. Bayer Polymers Sheet Europe develops, manufactures and markets Makrolon® polycarbonate sheet, Axpel® and Vivak® polyester sheet and Bayloy® sheet made of high-quality polymers. Areas of application for these products in the construction sector include sports stadiums, railroad stations and greenhouses. Other uses include visual communications, where plastic sheets are used to protect displays, billboards, traffic signs and price signs, and industrial applications such as protective visors, machine covers, light diffusers and housings.

The following significant **divestitures** were made in 2003:

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By the end of fiscal 2003, the conditions set by the European, U.S. and Canadian antitrust authorities for the acquisition of Aventis CropScience Holding S.A., France, as of June 1, 2002 had been met in full, except for those relating to propoxycarbazone. In compliance with these regulatory conditions, Bayer CropScience AG sold

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**Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

the insecticide active ingredients fipronil (worldwide, except China) and ethiprole, and the attendant rights to BASF AG, Ludwigshafen, Germany, together with a number of fungicidal active ingredients (principally in Europe, though the transaction also included a non-exclusive license for seed treatments outside Europe). The 1,330 million transaction also included inventories, as well as production facilities in Elbeuf, France. Adjusted for the back-licensing of these products in accordance with the conditions set by the E.U. and the FTC to give Bayer CropScience access to certain non-agricultural markets, the selling price totaled 1,185 million. The Bayer CropScience subgroup also divested a large number of low-volume products and inventories for a total of 118 million to comply with antitrust conditions.

As part of the streamlining of the Bayer HealthCare portfolio, initiated in 2002, the Bayer Group sold the remaining parts of the Consumer Care Business Group's household insecticides business to SC Johnson & Son Inc., of the United States, for 339 million after obtaining the necessary approvals from the respective local antitrust authorities. Alongside inventories, SC Johnson acquired marketing rights to products such as Baygon®, Autan®, Bayclin® and Bayfresh®. Bayer will continue to manufacture the active ingredients for these products, which it will supply to SC Johnson and other users. The divestiture of the household insecticides business had already generated proceeds of 386 million in 2002.

The successful five-year research cooperation between Bayer HealthCare AG and Millennium Pharmaceuticals Inc., U.S.A. was terminated in the fourth quarter of 2003. At the same time, Bayer AG sold its 6.6 percent interest in Millennium Pharmaceuticals to the investment bank CSFB for 272 million.

In fiscal 2003 the Bayer Group sold further real estate in Germany, Belgium and Spain for a total of 122 million, continuing the streamlining of its portfolio. In 2002 it had already sold its interest in Bayer WoGe GmbH, together with land and buildings owned by this company, for 528 million.

Effective April 1, 2003 Bayer sold its 50 percent interest in the PolymerLatex Group, which is based in Marl, Germany, to Soros Private Equity Partners for 118 million. Comprised of seven companies, PolymerLatex is a leading supplier of latex products for paper, carpets/molded foam and specialty applications.

At the end of January 2003 the Bayer Group's organic pigments business was sold to the Sun Chemicals Group, of the United States, for 46 million.

In December 2003, Bayer HealthCare AG sold its rights to the Bayovac (IBR marker vaccines) and Baypamun (immunomodulator) brands to Pfizer for a total of 32 million. This transaction included a toll manufacturing agreement under which Bayer will continue to manufacture these products for a transition period of three years. This divestiture does not include the foot-and-mouth vaccines, which Bayer HealthCare will continue to manufacture and market.

In the fourth quarter of 2003, Bayer AG sold its subsidiary Walothen GmbH, Walsrode, Germany, to the Wihuri Group, of Finland, for 9 million. This company manufactures high-quality polypropylene films for the following market segments: films for the tobacco industry, films for print lamination, overwrap films and standard films. It was formerly part of the Bayer Chemicals subgroup.

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

Acquisitions and divestitures of businesses affected the Group's assets and liabilities as of the dates of acquisition or divestiture as follows:

	<u>Acquisitions</u>	<u>Divestitures</u>
	( million)	
<b>2003</b>		
Noncurrent assets	52	239
Current assets (excluding liquid assets)		1,262
Liquid assets		5
	<u>—</u>	<u>—</u>
<b>Assets</b>	<b>52</b>	<b>1,506</b>
	<u>—</u>	<u>—</u>
Pension provisions		(10)
Other provisions		(11)
Financial obligations		(8)
Remaining liabilities		(28)
	<u>—</u>	<u>—</u>
<b>Liabilities</b>		<b>(57)</b>
	<u>—</u>	<u>—</u>
<b>2002</b>		
Noncurrent assets	6,449	537
Current assets (excluding liquid assets)	5,101	481
Liquid assets	353	29
	<u>—</u>	<u>—</u>
<b>Assets</b>	<b>11,903</b>	<b>1,047</b>
	<u>—</u>	<u>—</u>
Pension provisions	578	74
Other provisions	133	47
Financial obligations	2,545	170
Remaining liabilities	2,725	124
	<u>—</u>	<u>—</u>
<b>Liabilities</b>	<b>5,981</b>	<b>415</b>
	<u>—</u>	<u>—</u>

Lists of Bayer AG's direct and indirect holdings have been included in the Cologne commercial register. They also are available directly from Bayer AG on request.

The principle companies included in the consolidated financial statements are listed in the following table:

<u>Company Name and Place of Business</u>	<u>Bayer's interest</u>
	(%)
<b>Germany</b>	
Bayer Chemicals AG, Leverkusen	100
Bayer CropScience AG, Monheim	100

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Bayer CropScience Deutschland GmbH, Langenfeld	100
Bayer CropScience GmbH, Frankfurt am Main	100
Bayer HealthCare AG, Leverkusen	100
Bayer MaterialScience AG, Leverkusen	100
Bayer Vital GmbH, Leverkusen	100
H. C. Starck GmbH, Goslar	100
Wolff Cellulosics GmbH & Co. KG, Bomlitz	100

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

Company Name and Place of Business	Bayer's interest
	(%)
<b>Other European Countries</b>	
Bayer Antwerpen N.V., Belgium	100
Bayer Biologicals S.r.l., Italy	100
Bayer CropScience France S.A., France	100
Bayer CropScience Holding S.A., France	100
Bayer CropScience Limited, U.K.	100
Bayer CropScience S.r.l., Italy	100
Bayer CropScience S.A., France	100
Bayer Diagnostics Europe Ltd., Ireland	100
Bayer International S.A., Switzerland	100
Bayer Pharma S.A., France	99.8
Bayer Polimeros S. L., Spain	100
Bayer Public Limited Company, U.K.	100
Bayer Rubber N.V., Netherlands	100
Bayer S.p.A., Italy	100
Quimica Farmaceutica Bayer, S.A., Spain	100
<b>North America</b>	
Bayer CropScience LP, USA	100
Bayer HealthCare LLC, USA	100
Bayer Inc., Canada	100
Bayer Pharmaceuticals Corporation, USA	100
Bayer Polymers LLC, USA	100
<b>Asia/Pacific</b>	
Bayer (India) Ltd., India	71.2
Bayer Australia Ltd., Australia	100
Bayer CropScience K.K., Japan	100
Bayer Medical Ltd., Japan	100
Bayer Polymers Co. Ltd., Hong Kong	100
Bayer South East Asia Pte Ltd., Singapore	100
Bayer Thai Company Ltd., Thailand	100
Bayer Yakuhin Ltd., Japan	100
Sumika Bayer Urethane Co., Ltd., Japan	60
<b>Latin America/Africa/Middle East</b>	
Bayer (Proprietary) Ltd., South Africa	100
Bayer CropScience Ltda., Brazil	100
Bayer de México, S.A.de C.V., Mexico	100
Bayer S.A., Argentina	100
Bayer S.A., Brazil	100

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

Also included in the consolidated financial statements are the following material associated companies:

Company Name and Place of Business	Bayer's interest
	(%)
DyStar Textilfarben GmbH, Frankfurt am Main, Germany	35
DyStar Textilfarben GmbH & Co. Deutschland KG, Frankfurt am Main, Germany	35
Lyondell Bayer Manufacturing Maasvlakte VOF, Netherlands	50
PO JV, LP, United States	42.7

The following domestic subsidiaries availed themselves in 2003 of certain exemptions granted under Articles 264, paragraph 3 and 264 b, No. 4 of the German Commercial Code regarding the preparation, auditing and publication of financial statements:

Company Name and Place of Business	Place of Business
Bayer Beteiligungsverwaltungsgesellschaft mbH	Leverkusen
Bayer Bitterfeld GmbH	Greppin
Bayer Buna GmbH	Marl
Bayer Business Services GmbH	Leverkusen
Bayer CropScience AG	Monheim
Bayer CropScience Deutschland GmbH	Langenfeld
Bayer CropScience Vermögensverwaltungsgesellschaft mbH	Hattersheim
Bayer Distribution Service GmbH	Leverkusen
Bayer Faser GmbH	Dormagen
Bayer Gastronomie GmbH	Leverkusen
Bayer Gesellschaft für Beteiligungen mbH	Leverkusen
Bayer HealthCare AG	Leverkusen
Bayer Industrieprodukte GmbH & Co. KG	Leverkusen
Bayer Innovation Beteiligungsgesellschaft mbH	Leverkusen
Bayer Kautschuk GmbH	Dormagen
Bayer Polymers Customer Services GmbH & Co. KG	Leverkusen
Bayer Technology Services GmbH	Leverkusen
Bayer-Handelsgesellschaft mbH	Leverkusen
Bayer-Kaufhaus GmbH	Leverkusen
CaseTech GmbH & Co. KG	Bomlitz
Chemion Logistik GmbH	Leverkusen
DYNEVO GmbH	Leverkusen
EPUREX Films GmbH & Co. KG	Bomlitz
Erste K-W-A Beteiligungsgesellschaft mbH	Leverkusen
Euroservices Bayer GmbH	Leverkusen
Generics Holding GmbH	Leverkusen
GVW Garnveredelungswerke GmbH	Goch
H.C.Starck Ceramics GmbH & Co. KG	Selb
H.C. Starck Hermsdorf Vermögensverwaltungs-GmbH & Co. KG	Hermsdorf
IAB Ionenaustauscher GmbH Bitterfeld	Greppin
ISL-Chemie GmbH & Co. KG	Kürten
KVP Pharma + Veterinär-Produkte GmbH	Kiel

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

Company Name and Place of Business	Place of Business
PharmAgro GmbH	Leverkusen
Probis GmbH	Bomlitz
Travel Board GmbH	Leverkusen
Wolff Cellulosics GmbH & Co. KG	Bomlitz
Wolff Walsrode Aktiengesellschaft	Walsrode
Zweite K-W-A Beteiligungsgesellschaft mbH	Leverkusen

**Notes to the Statements of Income****[1] Net sales**

Total reported sales declined by 1,057 million (-3.6 percent) compared with 2002, to 28,567 million (2001: 30,275 million). A 1,433 million increase in volumes (+4.8 percent) was offset by a negative effect of 2,545 million (-8.6 percent) from adverse shifts in exchange rates. Changes in selling prices contributed an extra 150 million (+0.5 percent) compared with the previous year and thus had a negligible effect on total sales. The net effect of acquisitions and divestitures diminished sales by 95 million. Acquisitions and divestitures during 2003 and 2002 affected the comparison between the two years' sales figures by the following amounts:

	2003
	million
<b>Acquisitions</b>	
Aventis CropScience Holding S.A., Lyon, France (acquired in 2002)	1,450
Visible Genetics Inc., Canada (acquired in 2002)	9
Tectrade A/S, Copenhagen, Denmark (acquired in 2002)	6
Other	1
	1,466
<b>Divestitures</b>	
Haarmann & Reimer Group (divested in 2002)	(666)
Compliance with antitrust conditions by Bayer CropScience	(435)
Household insecticides business of Bayer HealthCare	(272)
PolymerLatex Group	(117)
Organic Pigments	(54)
Walothén GmbH	(10)
Other	(7)
	(1,561)
<b>Net effect of portfolio changes</b>	(95)



**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

In 2002, total reported sales declined by 651 million compared with 2001, to 29,624 million. A 54 million increase in volumes was offset by negative contributions of 715 million from lower selling prices and 1,421 million from adverse shifts in exchange rates. The net effect of acquisitions and divestitures raised sales by 1,870 million. Acquisitions and divestitures during 2002 and 2001 affected the comparison between the two years' sales figures by the following amounts:

	<b>2002</b>
	<b>million</b>
<b>Acquisitions</b>	
Aventis CropScience Holding S.A., Lyon, France	1,977
Tectrade A/S, Copenhagen, Denmark	12
Other	3
	<hr/>
	1,992
<b>Divestitures</b>	
ChemDesign Corporation (divested in 2001)	(56)
Covexx Films (divested in 2001)	(42)
Sale of the generics business	(16)
Other	(8)
	<hr/>
	(122)
	<hr/>
<b>Net effect of portfolio changes</b>	<b>1,870</b>
	<hr/>

Reported sales declined 2001 by 696 million, to 30,275. A 1,168 million decrease due to lower volumes was offset by positive contributions of 274 million from higher selling prices, 84 million from favorable shifts in exchange rates and 859 million from the net effect of acquisitions and divestitures. Acquisitions and divestitures during 2001 and 2000 affected the comparison between the two years' sales figures by the following amounts:

	<b>2001</b>
	<b>million</b>
<b>Acquisitions</b>	
Sybron Chemicals Inc. (polymers and specialty chemicals) (acquired in 2000)	206
Polyols business of Lyondell Chemical Company (acquired in 2000)	202
CSM Group (acquired in 2000)	133
Fungicide product lines, primarily FLINT (acquired in 2000)	104
Full consolidation of Sumika Bayer Urethane Co. Ltd., Japan	99
Paper chemicals business of Cytec Industries Inc. (acquired in 2000)	83
MIKADO corn herbicide	46
Other	110
	<hr/>
	983
	<hr/>
<b>Divestitures</b>	
Covexx Films	(61)
U.S. livestock vaccines business to Intervet International (divested in 2000)	(30)
Other	(33)
	<hr/>

	(124)
<b>Net effect an sales from continuing operations</b>	<b>859</b>

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

Breakdowns of net sales by segment and by region are given in the table on page F-7.

**[2] Selling expenses**

Selling expenses include 792 million in shipping and handling costs in 2003 (2002: 797 million; 2001: 789 million). They also include advertising and promotion costs, expensed in the period in which they are incurred. These costs amount to 1,030 million (2002: 1,051 million; 2001: 1,392).

**[3] Research and development expenses**

Because of their importance in the Bayer Group, research and development expenses are recognized separately alongside the cost of goods sold, selling expenses and general administration expenses.

**[4] Other operating income**

	<u>2001</u>	<u>2002</u>	<u>2003</u>
		( million)	
Sideline operations	24	56	60
Gains from sales of property, plant and equipment/portfolio adjustments	316	2,039	583
Reversals of unutilized provisions	68	154	115
Write-backs of receivables and other assets	14	23	68
Recognition of exchange rate hedges	65	36	114
Other operating income	398	398	218
	<u>885</u>	<u>2,706</u>	<u>1,158</u>

The cost of goods sold incurred for sideline operations has been offset against the corresponding revenues to more clearly reflect the earnings position.

**[5] Other operating expenses**

	<u>2001</u>	<u>2002</u>	<u>2003</u>
		( million)	
Amortization and write-downs of acquired goodwill	(115)	(205)	(366)
Write-downs of trade accounts receivable	(91)	(101)	(106)
Losses from sales of property, plant and equipment	(15)	(42)	(108)
Impairment write-downs, excluding goodwill		(284)	(1,642)
Other operating expenses	(918)	(1,438)	(1,284)
	<u>(1,139)</u>	<u>(2,070)</u>	<u>(3,506)</u>

In fiscal 2003 the global impairment charges in the Polymers, Chemicals and HealthCare subgroups resulted in additional other operating expense of 1,134 million, 476 million and 199 million respectively.

In the previous year, impairment write-downs of intangible assets, property, plant and equipment of the polyols and fibers operations in the Polymers subgroup together accounted for expenses of 289 million.

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In fiscal 2001 there were no impairment write-downs.

408 million (2002: 427 million; 2001: 214 million) was spent on restructuring. Further details of restructuring expenses are given in Note 29.

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****[6] Discontinuing operations**

In connection with the realignment of the Bayer Group, we are planning to transfer certain activities of the Polymers and Chemicals subgroups that we no longer define as part of our core business to a separate company named Lanxess, which we plan to list on the Frankfurt Stock Exchange by early 2005. These activities are shown as discontinuing operations. They essentially include the Bayer Chemicals subgroup with the exception of H.C. Starck and Wolff Walsrode along with the solid rubber and rubber chemicals operations (including RheinChemie), semi-crystalline polymers, ABS/ SAN and fibers activities of the former Bayer Polymers subgroup.

In addition, we are planning to divest the plasma operations of the Biological Products Division of our HealthCare subgroup. These activities are also shown under discontinuing operations. This decision does not affect the Kogenate® operations.

In the context of its ongoing portfolio management, Bayer divested the Haarmann & Reimer business group, headquartered in Holzminden, Germany, in 2002. This wholly owned subsidiary, manufacturing fragrances and flavors, was sold to the financial investor EQT Northern Europe Private Equity Funds. The earnings of this subsidiary up to the date of divestiture were recognized in income for 2002, as was the gain from the sale of this business in 2002.

The amounts shown in the notes to the consolidated financial statements of the Bayer Group under discontinuing operations relate to the plasma operations and all assets, liabilities, income and expenses of the activities that are to be transferred to Lanxess, based on the current status of our planning. Slight modifications may be made to the allocation of assets, liabilities, income and expenses. These data are presented from the viewpoint of the Bayer Group and should be viewed as parts of the Group by analogy to our segment reporting. The purpose is not to provide separate overviews of the Lanxess activities or of the operations that are to remain in the Bayer Group. The presentation thus follows the principles set out in IAS 35 for reporting discontinuing operations.

The earnings of Lanxess, the plasma business and Haarmann & Reimer, and the related income taxes, are reflected in the respective income statement items.

A breakdown of the results of discontinuing operations is given below.

	Polyurethanes, Coatings, Fibers			Plastics, Rubber		
	2001	2002	2003	2001	2002	2003
	( million)					
<b>Net sales</b>	228	199	167	3,689	3,337	3,096
Cost of goods sold	(170)	(187)	(144)	(2,878)	(2,631)	(2,681)
Selling expenses	(42)	(32)	(26)	(540)	(457)	(389)
Research and development expenses	(8)	(8)	(5)	(91)	(71)	(84)
General administration expenses	(7)	(6)	(10)	(129)	(125)	(136)
Other operating income (expense) net	(18)	(65)	(49)	(45)	(101)	(522)
<b>Operating result from discontinuing operations</b>	(17)	(99)	(67)	6	(48)	(716)
Non-operating result						
<b>Income (loss) before income taxes</b>						
Income taxes						
<b>Income (loss) after taxes</b>						

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

	Chemicals			Reconciliation		
	2001	2002	2003	2001	2002	2003
			( million)			
<b>Net sales</b>	2,856	2,705	2,513			
Cost of goods sold	(2,084)	(1,938)	(1,867)			
Selling expenses	(528)	(498)	(480)			
Research and development expenses	(93)	(76)	(82)			
General administration expenses	(81)	(52)	(102)			
Other operating income (expense) net	(116)	(103)	(498)			
<b>Operating result from discontinuing operations</b>	(46)	38	(516)			
Non-operating result	12	8	(144)	(83)	(54)	(80)
<b>Income (loss) before income taxes</b>						
Income taxes				51	62	548
<b>Income (loss) after taxes</b>						

	Total Lanxess			Plasma		
	2001	2002	2003	2001	2002	2003
			( million)			
<b>Net sales</b>	6,773	6,241	5,776	695	679	613
Cost of goods sold	(5,132)	(4,756)	(4,692)	(621)	(653)	(519)
Selling expenses	(1,110)	(987)	(895)	(177)	(97)	(86)
Research and development expenses	(192)	(155)	(171)	(49)	(44)	(44)
General administration expenses	(217)	(183)	(248)			
Other operating income (expense) net	(179)	(269)	(1,069)	13	4	(317)
<b>Operating result from discontinuing operations</b>	(57)	(109)	(1,299)	(139)	(111)	(353)
Non-operating result	(71)	(46)	(224)		(15)	
<b>Income (loss) before income taxes</b>	(128)	(155)	(1,523)	(139)	(126)	(353)
Income taxes	51	62	548			123
<b>Income (loss) after taxes</b>	(77)	(93)	(975)	(139)	(126)	(230)

	Haarmann & Reimer			Erdölchemie		
	2001	2002	2003	2001	2002	2003
			( million)			
<b>Net sales</b>	872	666	233			
Cost of goods sold	(481)	(376)	(196)			
Selling expenses	(199)	(147)	(16)			
Research and development expenses	(63)	(45)				
General administration expenses	(38)	(27)	(3)			
Other operating income (expense) net	(18)	909	315			
<b>Operating result from discontinuing operations</b>	73	980	333			
Non-operating result	(4)	(11)	(1)			
<b>Income (loss) before income taxes</b>	69	969	332			
Income taxes	(35)	(15)	(6)			

<b>Income (loss) after taxes</b>	<u>34</u>	<u>954</u>	<u>—</u>	<u>326</u>	<u>—</u>	<u>—</u>
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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

	Total		
	2001	2002	2003
	( million)		
<b>Net sales</b>	8,573	7,586	6,389
Cost of goods sold	(6,430)	(5,785)	(5,211)
Selling expenses	(1,502)	(1,231)	(981)
Research and development expenses	(304)	(244)	(215)
General administration expenses	(258)	(210)	(248)
Other operating income (expense) net	131	644	(1,386)
<b>Operating result from discontinuing operations</b>	210	760	(1,652)
Non-operating result	(76)	(72)	(224)
<b>Income (loss) before income taxes</b>	134	688	(1,876)
Income taxes	10	47	671
	<u>144</u>	<u>735</u>	<u>(1,205)</u>

The other operating expense for Lanxess and the plasma operations in fiscal 2003 includes charges of 989 million and 199 million respectively arising from the global impairment tests carried out by the Bayer Group. The non-operating result of Lanxess in 2003 also includes one-time equity-method expense of 137 million in connection with the planned sale of the financial interest in the DyStar Group.

**[7] Operating result**

Breakdowns of the operating result by segment and by region are given in the table on page F-7. Starting in fiscal 2003, the results of foreign currency hedges for planned or pending operating business are recognized in operating result. The prior-year figures have been adjusted by 36 million (2002) and 65 million (2001) to conform to the current year presentation.

**[8] Income (expense) from investments in affiliated companies net**

This comprises the following items:

	2001	2002	2003
	( million)		
Dividends and similar income	15	25	5
of which 3 million (2002: 23 million; 2001: 12 million) from subsidiaries			
Income from profit and loss transfer agreements	*	1	2
of which 1 million (2002: 1 million; 2001: less than 1 million) from subsidiaries			
Equity-method income (expense)	26	5	(165)
Gains from the sale of investments in affiliated companies	16	274	191
Losses from the sale of investments in affiliated companies	(3)		(2)
Write-downs of investments in affiliated companies		(82)	(124)
	<u>54</u>	<u>223</u>	<u>(93)</u>

\* less than 1 million



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Gains from investments in affiliated companies include the 190 million gain from the sale of the interest in Millennium Pharmaceuticals Inc., United States, to the investment bank CSFB. In fiscal 2002 this item contained

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

gains from the sale of the remaining stake in Agfa-Gevaert N.V., Belgium, to the investment bank Goldman Sachs for 259 million. Equity method expense for 2003 included 137 million relating to the planned divestiture of our financial interest in the DyStar Group.

**[9] Interest expense net**

Interest income and expense comprises:

	<u>2001</u>	<u>2002</u>	<u>2003</u>
		( million)	
Income from other securities and loans included in investments	9	8	17
Other interest and similar income	108	459	513
of which 2 million (2002: 2 million; 2001: 1 million) from subsidiaries			
Interest and similar expenses	(466)	(916)	(883)
of which 5 million (2002: 13 million; 2001: 5 million) to subsidiaries			
	<u>(349)</u>	<u>(449)</u>	<u>(353)</u>

Finance leases are capitalized under property, plant and equipment in compliance with IAS 17 (Leases). The interest portion of the lease payments, amounting to 30 million (2002: 34 million; 2001: 9 million), is reflected in interest expense.

Interest expense incurred to finance the construction phase of major investment projects is not included here. Such interest expense, amounting in 2003 to 18 million (2002: 22 million; 2001: 30 million), is capitalized as part of the cost of acquisition or construction of the property, plant or equipment concerned, based on an average capitalization rate of 5 percent (2002: 5 percent).

**[10] Other non-operating expenses net**

This item comprises:

	<u>2001</u>	<u>2002</u>	<u>2003</u>
		( million)	
Interest portion of interest-bearing provisions	(274)	(296)	(281)
Net Exchange gain (loss)	(16)	(5)	(31)
Miscellaneous non-operating expenses	(28)	(174)	(69)
Miscellaneous non-operating income	52	47	36
	<u>(266)</u>	<u>(428)</u>	<u>(345)</u>

Miscellaneous non-operating expenses contain 12 million in write-downs of other securities included in investments (2002: 81 million), and 0 million in write-downs of marketable securities (2002: 16 million).

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****[11] Income taxes**

This item comprises the income taxes paid or accrued in the individual countries, plus deferred taxes.

The breakdown of pre-tax income and income tax expense by origin is as follows:

	<u>2001</u>	<u>2002</u>	<u>2003</u>
	( million)		
Income before income taxes			
Germany	971	1,392	(1,298)
Other countries	144	(436)	(696)
	<u>1,115</u>	<u>956</u>	<u>(1,994)</u>
Income taxes paid or accrued			
Germany	(122)	(129)	(178)
Other countries	(502)	(169)	(429)
	<u>(624)</u>	<u>(298)</u>	<u>(607)</u>
Deferred taxes			
from temporary differences	272	185	1,156
from tax loss carry-forwards	198	220	96
	<u>470</u>	<u>405</u>	<u>1,252</u>
	<u>(154)</u>	<u>107</u>	<u>645</u>

In fiscal 2003 changes in tax rates decreased deferred tax expense by 2 million, while in fiscal 2002 deferred tax expense was not impacted by a change in tax rates. In 2001, changes in tax rates diminished deferred tax expense by 8 million.

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

The deferred tax assets and liabilities are allocable to the various balance sheet items as follows:

	Dec. 31, 2001		Dec. 31, 2002		Dec. 31, 2003	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
	( million)					
Intangible assets	438	177	416	1,589	453	1,228
Property, plant and equipment	243	1,672	419	1,558	602	1,426
Investments	20	88	52	106	56	54
Inventories	267	86	308	75	348	72
Receivables	122	53	113	70	120	135
Other current assets	11	189	52	242	11	391
Pension provisions	357	247	328	225	525	206
Other provisions	166	74	254	66	451	58
Other liabilities	158	30	55	172	304	33
Tax loss carryforwards	282		743		723	
Valuation allowance for tax loss carryforwards	(78)		(123)		(154)	
	<u>1,986</u>	<u>2,616</u>	<u>2,617</u>	<u>4,103</u>	<u>3,439</u>	<u>3,603</u>
<i>of which long-term</i>	<i>1,174</i>	<i>1,911</i>	<i>1,439</i>	<i>2,954</i>	<i>1,996</i>	<i>2,608</i>
Set-off*	<u>(1,378)</u>	<u>(1,378)</u>	<u>(1,650)</u>	<u>(1,650)</u>	<u>(2,141)</u>	<u>(2,141)</u>
	<u>608</u>	<u>1,238</u>	<u>967</u>	<u>2,453</u>	<u>1,298</u>	<u>1,462</u>

\* According to IAS 12 (Income Taxes), deferred tax assets and deferred tax liabilities should, under certain conditions, be offset if they relate to income taxes levied by the same taxation authority.

In 2003, deferred tax assets of 2 million (2002: 331 million; 2001: 9 million) and deferred tax liabilities of 2 million (2002: 1,340 million; 2001: 10 million) relate to changes in the scope of consolidation. Utilization of tax loss carryforwards from previous years diminished the amount of income taxes paid or accrued in 2003 by 165 million (2002: 11 million; 2001: 88 million).

The value of existing tax loss carryforwards by expiration date is as follows:

	Dec. 31, 2001	Dec. 31, 2002	Dec. 31, 2003
	( million)		
One year	6	17	23
Two years	11	4	7
Three years	16	17	41
Four years	50	17	104
Five years and thereafter	653	1,936	1,674
	<u>736</u>	<u>1,991</u>	<u>1,849</u>

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Deferred tax assets of 569 million (2002: 620 million; 2001: 204 million) are recognized on the 1,735 million (2002: 1,731 million; 2001: 540 million) in tax loss carryforwards that represent income likely to be realized in the future. Recognition of these deferred tax assets results in deferred tax income of 96 million (2002: 220 million; 2001: 198 million).

Deferred tax liabilities have not been recognized for temporary differences associated with investments in foreign subsidiaries of 3,639 million (2002: 3,327 million; 2001: 3,030 million) as Bayer has determined that

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

the profits concerned will not be distributed in the foreseeable future. If deferred taxes were recognized for these temporary differences, the liability would be based on the respective withholding tax rates only, taking into account the German tax of 5 percent on corporate dividends where applicable.

The actual tax income for 2003 is 645 million (2002: 107 million; 2001: 154 million). This figure differs by 107 million (2002: 465 million; 2001: 259 million) from the tax income of 752 million (2002: tax expense of 358 million; 2001: 413 million) that would result from applying to the pre-tax loss of the Group a tax rate of 37.7 percent (2002: 37.5 percent; 2001: 37.1 percent), which is the weighted average of the theoretical tax rates for the individual Group companies.

The reconciliation of theoretical to actual income tax income (expense) for the Group is as follows:

	2001		2002		2003	
	million	%	million	%	million	%
Theoretical income tax income (expense)	413	100	358	100	(752)	100
Reduction in taxes due to tax-free income						
Relating to the divestiture of EC Erdölchemie	(131)	(32)				
Relating to the divestiture of Haarmann & Reimer			(342)	(95)		
Relating to the divestiture of Baywoge			(131)	(37)		
Relating to the divestiture of the remaining interest in Agfa-Gevaert			(104)	(29)		
Relating to the divestiture of Millennium					(76)	10
Other	(152)	(37)	(100)	(28)	(103)	14
Increase in taxes due to non-tax-deductible expenses						
Write-downs on investments			22	6	49	(7)
Amortization of goodwill	30	7	68	19	62	(8)
Impairment charges			2	0	124	(16)
Other	17	4	103	29	38	(5)
Other tax effects	(23)	(5)	17	5	13	(2)
<b>Actual tax income (expense)</b>	<b>154</b>	<b>37</b>	<b>(107)</b>	<b>(30)</b>	<b>(645)</b>	<b>86</b>
Effective tax rate in %		13.8		(11.2)		(32.3)

**[12] Other taxes**

Other taxes amounting to 303 million (2002: 221 million; 2001: 247 million) are included in the cost of production, selling expenses, research and development expenses or general administration expenses. These are mainly taxes related to property, as well as taxes on electricity and other utilities.

**[13] Minority Stockholders interest**

Minority interest in income amounts to 19 million (2002: 12 million; 2001: 6 million), and minority interest in losses to 7 million (2002: 9 million; 2001: 10 million).

**[14] Earnings per share**

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

In 2003, as in 2002 and in 2001, the number of shares remained constant at 730,341,920. Loss per share was 1.86 (2002: Earnings per share of 1.45; 2001: Earnings per share of 1.32).



**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

There were no subscription rights outstanding in 2003, 2002 or 2001 and therefore no dilutive potential shares.

**[15] Cost of materials**

The total cost of materials amounted to 12,247 million (2002: 11,614 million; 2001: 11,590 million), comprising 11,520 million (2002: 11,024 million; 2001: 10,874 million) in expenses for raw materials, supplies and goods purchased for resale, and 727 million (2002: 590 million; 2001: 716 million) in expenses for purchased services.

The cost of materials for discontinuing operations was 2,616 million (2002: 3,022 million; 2001: 3,674 million). This was split as follows:

	<u>2001</u>	<u>2002</u>	<u>2003</u>
	( million)		
Polyurethanes, Coatings, Fibers	63	62	52
Plastics, Rubber	1,673	1,507	1,473
Chemicals	1,084	865	759
	<u>          </u>	<u>          </u>	<u>          </u>
<b>Total Lanxess</b>	2,820	2,434	2,284
	<u>          </u>	<u>          </u>	<u>          </u>
Plasma business	357	320	332
Haarmann & Reimer	344	268	
EC Erdölchemie	153		
	<u>          </u>	<u>          </u>	<u>          </u>
<b>Total discontinuing operations</b>	3,674	3,022	2,616
	<u>          </u>	<u>          </u>	<u>          </u>

**[16] Personnel expenses**

Personnel expenses declined by 186 million to 7,990 million in 2003 (2002: 8,176 million; 2001: 7,872 million). Of this decrease, 555 million was due to currency translations. Personnel expenses include wages and salaries totaling 6,077 million (2002: 6,455 million; 2001: 6,243 million) and social expenses of 1,913 million (2002: 1,721 million; 2001: 1,629 million), of which 855 million (2002: 544 million; 2001: 446 million) were pension expenses.

Total personnel expenses include the following expenses for the discontinuing operations:

	<u>2001</u>	<u>2002</u>	<u>2003</u>
	( million)		
Polyurethanes, Coatings, Fibers	56	51	50
Plastics, Rubber	702	722	619
Chemicals	648	611	600
	<u>          </u>	<u>          </u>	<u>          </u>
<b>Total Lanxess</b>	1,406	1,384	1,269
	<u>          </u>	<u>          </u>	<u>          </u>
Plasma business	118	109	90
Haarmann & Reimer	235	175	
EC Erdölchemie	23		
	<u>          </u>	<u>          </u>	<u>          </u>
<b>Total discontinuing operations</b>	1,782	1,668	1,359
	<u>          </u>	<u>          </u>	<u>          </u>



Of which social expenses

(393)

(354)

(327)

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****[17] Number of employees**

The average number of employees, classified by corporate functions, was as follows:

	<u>2001</u>	<u>2002</u>	<u>2003</u>
Marketing	33,875	35,985	34,765
Technology	61,055	66,051	62,850
Research	11,206	12,521	11,602
Administration	9,091	10,035	9,063
	<u>115,227</u>	<u>124,592</u>	<u>118,280</u>
<i>Of which trainee</i>	<u>2,646</u>	<u>2,564</u>	<u>2,680</u>

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 our joint ventures in 2003 was 401 (2002: 1,102; 2001: 1,075). The decline was mainly due to the divestiture of the PolymerLatex Group.

The average number of employees in the discontinuing operations was as follows:

	<u>2001</u>	<u>2002</u>	<u>2003</u>
Polyurethanes, Coatings, Fibers	1,013	925	844
Plastics, Rubber	10,285	10,275	9,664
Chemicals	10,732	10,260	9,915
<b>Total Lanxess</b>	<u>22,030</u>	<u>21,460</u>	<u>20,423</u>
Plasma business	1,185	1,403	1,545
Haarmann & Reimer	3,660		
<b>Total discontinuing operations</b>	<u>26,875</u>	<u>22,863</u>	<u>21,968</u>

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****[18] Intangible assets**

Changes in intangible assets in 2003 were as follows:

	Acquired concessions, industrial property rights, similar rights and assets, and licenses thereunder	Acquired goodwill	Advance payments	Total
	( million)			
Gross carrying amounts, Dec. 31, 2002	7,923	3,306	58	11,287
Exchange differences	(553)	(291)	(10)	(854)
Changes in scope of consolidation	42	1		43
Acquisitions		52		52
Capital expenditures	217		78	295
Retirements	(192)	(48)	(43)	(283)
Subsequent adjustments relating to the Aventis Crop Science acquisition	(112)	(375)		(487)
Transfers	58	14	(23)	49
<b>Gross carrying amounts, Dec. 31, 2003</b>	<b>7,383</b>	<b>2,659</b>	<b>60</b>	<b>10,102</b>
Accumulated amortization and write-downs, Dec. 31, 2002	1,966	442		2,408
Exchange differences	(231)	(48)		(279)
Changes in scope of consolidation	6			6
Amortization and write-downs in 2003	1,334	366	49	1,749
<i>of which write-downs</i>	<i>[578]</i>	<i>[167]</i>	<i>[49]</i>	<i>[794]</i>
Write-backs				
Retirements	(184)	(18)	(43)	(245)
Transfers	(32)	(19)		(51)
<b>Accumulated amortization and write-downs Dec. 31, 2003</b>	<b>2,859</b>	<b>723</b>	<b>6</b>	<b>3,588</b>
<b>Net carrying amounts, Dec. 31, 2003</b>	<b>4,524</b>	<b>1,936</b>	<b>54</b>	<b>6,514</b>
Net carrying amounts, Dec. 31, 2002	5,957	2,864	58	8,879

The exchange differences are the differences between the carrying amounts at the beginning and the end of the year that result from translating the figures of companies outside the euro zone at the respective different exchange rates and changes in their assets during the year at the average rate for the year. This translation method generally also applies to acquisition-related goodwill and remeasurement amounts reflected in the statements of companies outside the euro zone.

In connection with the acquisition of Aventis CropScience Holding S.A., France, in fiscal 2002, the carrying amounts of acquired and identifiable assets have been adjusted in accordance with IAS 22 (Business Combinations) to reflect material evidence obtained after December 31, 2002 which altered the allocation of the purchase price to intangible assets, property, plant and equipment. The retirement of acquired goodwill essentially relates to the agreement reached with Aventis S.A. to reduce the purchase price paid for Aventis CropScience retroactively by 327 million.



**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****[19] Property, plant and equipment**

Changes in property, plant and equipment in 2003 were as follows:

	<b>Land and buildings</b>	<b>Machinery and technical equipment</b>	<b>Furniture, fixtures and other equipment</b>	<b>Construction in progress and advance payments to vendors and contractors</b>	<b>Total</b>
	( million)				
Gross carrying amounts, Dec. 31, 2002	8,061	18,590	2,245	1,309	30,205
Exchange differences	(445)	(997)	(103)	(63)	(1,608)
Changes in scope of consolidation	8	143		66	217
Acquisitions					
Capital expenditures	87	390	170	797	1,444
Retirements	(228)	(911)	(312)	(37)	(1,488)
Subsequent adjustments relating to the Aventis Crop Science acquisition	61	110			171
Transfers	354	690	94	(1,187)	(49)
<b>Gross carrying amounts, Dec. 31, 2003</b>	<b>7,898</b>	<b>18,015</b>	<b>2,094</b>	<b>885</b>	<b>28,892</b>
Accumulated depreciation and write-downs Dec. 31, 2002	4,052	12,176	1,540	1	17,769
Exchange differences	(158)	(566)	(70)		(794)
Changes in scope of consolidation					
Depreciation and write-downs in 2003 <i>of which write-downs</i>	617 [368]	2,046 [885]	312 [42]	33 [33]	3,008 [1,328]
Write-backs					
Retirements	(113)	(690)	(263)	(13)	(1,079)
Transfers	142	(141)	51	(1)	51
<b>Accumulated depreciation and write-downs, Dec. 31, 2003</b>	<b>4,540</b>	<b>12,825</b>	<b>1,570</b>	<b>20</b>	<b>18,955</b>
<b>Net carrying amounts, Dec. 31, 2003</b>	<b>3,358</b>	<b>5,190</b>	<b>524</b>	<b>865</b>	<b>9,937</b>
Net carrying amounts, Dec. 31, 2002	4,009	6,414	705	1,308	12,436

The exchange differences are as defined for intangible assets.

In connection with the acquisition of Aventis CropScience Holding S.A., France, in fiscal 2002, the carrying amounts of acquired and identifiable assets have been adjusted in accordance with IAS 22 (Business Combinations) to reflect material evidence obtained after December 31, 2002 which altered the allocation of the purchase price to intangible assets, property, plant and equipment.

Capitalized property, plant and equipment includes assets with a total net value of 344 million (2002: 504 million) held under finance leases. The gross carrying amounts of these assets total 937 million (2002: 1,106 million).

These assets are mainly machinery and technical equipment with a carrying amount of 230 million (gross amount: 745 million) and buildings with a carrying amount of 102 million (gross amount: 139 million). In the case of buildings, either the present value of the minimum

lease payments covers substantially all of the cost of acquisition, or title passes to the lessee on expiration of the lease.

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

Also included are products leased to other parties under operating leases with a carrying amount of 183 million (2002: 232 million). The gross carrying amount of these assets was 452 million (2002: 500 million); their depreciation in 2003 amounted to 72 million (2002: 83 million). However, if under the relevant agreements the lessee is to be regarded as the economic owner of the assets and the lease therefore constitutes a finance lease as defined in IAS 17 (Leases), a receivable is recognized in the balance sheet in the amount of the discounted future lease payments.

**[20] Investments**

Changes in investments in 2003 were as follows:

	Investments in subsidiaries	Loans to subsidiaries	Investments in other affiliated companies		Loans to other affiliated companies	Other securities	Other loans	Total
			Associated companies	Other companies				
( Million)								
Gross carrying amounts, Dec. 31, 2002	139		1,205	391	7	252	411	2,405
Exchange differences	(6)		(86)	(7)		(20)	(11)	(130)
Changes in scope of consolidation	(33)		(23)				2	(54)
Changes of fair value				112		2		114
Acquisitions								
Other additions	6		50	7		77	42	182
Retirements	(9)		(175)	(194)		(2)	(29)	(409)
Transfers	11					(17)	17	11
<b>Gross carrying amounts, Dec. 31, 2003</b>	<b>108</b>	<b>—</b>	<b>971</b>	<b>309</b>	<b>7</b>	<b>292</b>	<b>432</b>	<b>2,119</b>
Accumulated write-downs, Dec. 31, 2002	9		46	66	2	76	8	207
Exchange differences	2		(1)	(8)		(9)		(16)
Changes in scope of consolidation								
Write-downs in 2003	4		21	99		12	1	137
Write-Backs	(1)					1	(1)	(1)
Retirements								
Transfers	11							11
<b>Accumulated write-downs, Dec. 31, 2003</b>	<b>25</b>	<b>—</b>	<b>66</b>	<b>157</b>	<b>2</b>	<b>80</b>	<b>8</b>	<b>338</b>
<b>Net carrying amounts, Dec. 31, 2003</b>	<b>83</b>	<b>—</b>	<b>905</b>	<b>152</b>	<b>5</b>	<b>212</b>	<b>424</b>	<b>1,781</b>
Net carrying amounts, Dec. 31, 2002	130		1,159	325	5	176	403	2,198

The exchange differences are as defined for intangible assets.

The difference between the equity interest in the underlying net assets of companies included at equity and their at-equity accounting values is 39 million (2002: 34 million). It mainly relates to goodwill. The net carrying amount of companies included at equity is 870 million (2002: 1,095 million). Retirements of investments in associated companies related principally to the write-down of 137 million on the financial interest in the DyStar Group. Retirements of investments in other companies mainly relate to the divestiture of the





**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

6.6 percent interest in Millennium Pharmaceuticals to the investment bank CSFB for 272 million, which is recognized at fair value.

**[21] Inventories**

Of the 5,885 million in inventories carried as of December 31, 2003 (2002: 6,342 million), 1,311 million (2002: 833 million) represents inventories carried at net realizable value.

Inventories comprise the following:

	<u>Dec. 31, 2002</u>	<u>Dec. 31, 2003</u>
	( million)	
Raw materials and supplies	1,362	1,013
Work in process, finished goods and goods purchased for resale	4,963	4,865
Advanced payments	17	7
	<u>6,342</u>	<u>5,885</u>

The changes in inventory write-downs are as follows:

	<u>Dec. 31, 2002</u>	<u>Dec. 31, 2003</u>
	( million)	
Balance at the beginning of the year	(434)	(457)
Additions charged to expense	(282)	(408)
Exchange differences	33	6
Changes in scope of consolidation	(82)	1
Deductions due to utilization	308	381
	<u>(457)</u>	<u>(477)</u>

**[22] Trade accounts receivable**

Trade accounts receivable include write-downs of 302 million (2002: 345 million) for amounts unlikely to be recovered.

Trade accounts receivable as of December 31, 2003 include 5,066 million (2002: 5,529 million) maturing within one year and 5 million (2002: 13 million) maturing after one year. Of the total, 16 million (2002: 47 million) is receivable from subsidiaries, 42 million (2002: 60 million) from other affiliated companies and 5,013 million (2002: 5,435 million) from other customers.

Changes in write-downs of trade accounts receivable are as follows:

	<u>Dec. 31, 2002</u>	<u>Dec. 31, 2003</u>
	( million)	
Balance at beginning of year	(222)	(345)
Additions charged to expense	(101)	(106)
Exchange differences	49	13

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Changes in scope of consolidation	(384)	1
Deductions due to utilization	313	135
	<u>          </u>	<u>          </u>
Balance at end of year	(345)	(302)
	<u>          </u>	<u>          </u>

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****[23] Other receivables and other assets**

Other receivables and other assets are carried at amortized cost, less write-downs of 20 million (2002: 4 million).

They are comprised as follows:

	<b>Dec. 31, 2002</b>	<b>Dec. 31, 2003</b>
	( million)	
Claims for tax refunds	677	697
Pension assets in excess of obligations	555	599
Receivables from derivative financial instruments	502	646
Interest receivable on loans	98	160
Short-term loans	85	64
Short-term loans from clearing	51	24
Lease payments receivable	48	67
Payroll receivables	14	17
Other receivables	2,180	1,580
	<u>4,210</u>	<u>3,854</u>

Interest receivable on loans consists mainly of interest earned in the fiscal year but not due to be received until after the balance sheet date.

Total other receivables and other assets include 47 million (2002: 47 million) pertaining to subsidiaries and 20 million (2002: 60 million) pertaining to other affiliated companies.

Total other receivables and other assets in the amount of 707 million (2002: 711 million) have maturities of more than one year. Of this amount, 28 million (2002: 29 million) pertains to subsidiaries.

Lease agreements in which the other party, as lessee, is to be regarded as the economic owner of the leased assets (finance leases) give rise to accounts receivable in the amount of the discounted future lease payments. These receivables amount to 67 million (2002: 48 million), while the interest portion pertaining to future years amounts to 6 million (2002: 9 million). The lease payments are due as follows:

	<b>Lease payments</b>	<b>Of which interest</b>	<b>Account receivable</b>
	( million)		
2004	36	3	33
2005	14	1	13
2006	11	1	10
2007	7	1	6
2008	3		3
After 2008	2		2
	<u>73</u>	<u>6</u>	<u>67</u>

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****[24] Liquid assets**

	<u>Dec. 31, 2002</u>	<u>Dec. 31, 2003</u>
	( million)	
Marketable securities and other instruments	29	129
Cash and cash equivalents	<u>767</u>	<u>2,734</u>
	<u>796</u>	<u>2,863</u>

Securities are recognized at fair value in compliance with IAS 39 (Financial Instruments: Recognition and Measurement). Their total fair value at the closing date amounts to 129 million (2002: 29 million), which is 16 million (2002: 14 million) less than their cost of acquisition. Financial instruments with original maturities of up to three months are recognized as cash equivalents in view of their high liquidity.

**[25] Deferred charges**

Total deferred charges include 218 million (2002: 261 million) that is expected to be used up in 2004.

**[26] Stockholders equity**

The capital stock of Bayer AG amounts to 1,870 million, as in the previous year, and is divided into 730,341,920 no-par bearer shares of a single class.

Further authorized capital totaling 250 million was approved by the Annual Stockholders Meeting on April 26, 2002. It expires on April 26, 2007. The authorized capital can be used to increase the capital stock by issuing new shares against cash contributions. The Board of Management is authorized to exclude subscription rights with respect to 100 million of this authorized capital; however, in this case the issue price of the new shares must not be significantly below the market price. Exclusion of subscription rights for a further 150 million is only possible in specific cases.

Authorized capital in the amount of 374 million was approved by the Annual Stockholders Meeting on April 27, 2001. This authorized capital, which expires on April 27, 2006, can be used to increase the capital stock by issuing new shares against non-cash contributions. Subscription rights for existing stockholders are excluded.

Conditional capital of 83 million existed on December 31, 2002. This capital may only be utilized to the extent necessary to issue the requisite number of shares as and when conversion or subscription rights are exercised by the holders of convertible bonds or of warrants conferring subscription rights, respectively, that may be issued by Bayer AG or a wholly owned direct or indirect subsidiary through April 29, 2004.

Capital reserves include the paid-in surplus from the issuance of shares and subscription rights by Bayer AG.

The retained earnings contain prior years undistributed income of consolidated companies.

Changes in fair values of financial instruments are recognized in miscellaneous items of other comprehensive income. Among other factors affecting these items in 2003 was the sale of our interest in Millennium Pharmaceuticals Inc., United States, to the investment bank CSFB.

The changes in the various components of stockholders equity during 2003 and 2002 are shown in the statements of changes in stockholders equity.

The dividend per share paid for the 2002 fiscal year was 0.90 (2001: 0.90).

**[27] Minority stockholders' interest**

Minority stockholders' interest mainly comprises third parties' shares in the equity of the consolidated subsidiaries Sumika Bayer Urethane Co. Ltd., Japan; Bayer (India) Ltd., Bayer ABS Ltd., Bilag Industries Private Ltd., India; and Bayer CropScience Nufarm Ltd., United Kingdom.

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**Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

**[28] Provisions for pensions and other post-employment benefits**

Group companies provide retirement benefits for most of their employees, either directly or by contributing to independently 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 insurance plans on a mandatory, contractual or voluntary basis. Once the contributions have been paid, the company has no further payment obligations.

The regular contributions constitute net periodic costs for the year in which they are due and as such are included in the cost of goods sold, selling expenses, research and development expenses or general administration expenses, and thus in the operating result. In 2003, these expenses totaled 298 million (2002: 339 million; 2001: 312 million). The decline is attributable to a drop in the average number of employees and to currency effects.

All other retirement benefit systems are **defined benefit plans**, which may be either unfunded, i.e. financed by provisions (accruals), or funded, i.e. financed through pension funds. In 2003, expenses for defined benefit plans amounted to 747 million (2002: 521 million; 2001: 301 million). These net periodic costs – except for the interest portion – are generally included in the cost of goods sold, selling expenses, research and development expenses, general administration expenses or other operating income and expenses.

Provisions are also set up under this item for the obligations of Group companies, particularly in the United States, to provide health care to their retirees. For health care costs, the valuation is based on the assumption that they will increase at an annual rate of 5 percent in the long term. Early retirement and certain other benefits to retirees are also included, since these obligations are similar in character to pension obligations. Like pension obligations, they are valued in line with international standards. In 2003, provisions for early retirement and other post-employment benefits amounted to 661 million (2002: 629 million). The resulting expenses for 2003 amounted to 212 million (2002: 114 million), comprising 173 million (2002: 87 million) for service cost, 57 million (2002: 57 million) for interest cost, 20 million (2002: 26 million) for expected return on plan assets, 7 million for actuarial losses (2002: 4 million for actuarial gains) and a 5 million gain (2002: 0 million) from subsequent adjustments of pension entitlements.

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

The periodic expense for the plans comprise the following:

*Germany*

	Pension benefits			Other Post-Employment Benefits		
	2001	2002	2003	2001	2002	2003
	( million)					
<b>Benefit cost</b>						
Service cost	121	138	141	4	57	144
Flat-rate tax on employer contributions	7					
Interest cost	474	480	480	11	7	4
Expected return on plan assets	(356)	(333)	(284)			
Employee contributions	(39)					
Amortisation of unrecognized prior service cost	9	10	21			
Amortization of transition obligation	(46)					
Amortisation of actuarial (gains) losses	9	7	53			
Gains (losses) from settlements						
<b>Net periodic benefit cost</b>	<b>179</b>	<b>302</b>	<b>411</b>	<b>15</b>	<b>64</b>	<b>148</b>

*Other countries*

	Pension benefits			Other Post-Employment Benefits		
	2001	2002	2003	2001	2002	2003
	( million)					
<b>Benefit cost</b>						
Service cost	144	164	194	19	30	29
Flat-rate tax on employer contributions						
Interest cost	195	247	255	47	50	53
Expected return on plan assets	(252)	(274)	(221)	(31)	(26)	(20)
Employee contributions						
Amortisation of unrecognized prior service cost	1	2	11			(5)
Amortization of transition obligation						
Amortisation of actuarial (gains) losses	3	60	38	13	(4)	7
Gains (losses) from settlements		20	59			
<b>Net periodic benefit cost</b>	<b>91</b>	<b>219</b>	<b>336</b>	<b>48</b>	<b>50</b>	<b>64</b>

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)***Total*

	Pension benefits			Other Post-Employment Benefits		
	2001	2002	2003	2001	2002	2003
	( million)					
<b>Benefit cost</b>						
Service cost	265	302	335	23	87	173
Flat-rate tax on employer contributions	7					
Interest cost	669	727	735	58	57	57
Expected return on plan assets	(608)	(607)	(505)	(31)	(26)	(20)
Employee contributions	(39)					
Amortisation of unrecognized prior service cost	10	12	32			(5)
Amortization of transition obligation	(46)					
Amortisation of actuarial (gains) losses	12	67	91	13	(4)	7
Gains (losses) from settlements		20	59			
<b>Net periodic benefit cost</b>	<b>270</b>	<b>521</b>	<b>747</b>	<b>63</b>	<b>114</b>	<b>212</b>

The pension provisions for defined benefit plans are calculated in accordance with IAS 19 (Employee Benefits) by the projected unit credit method. The future benefit obligations are valued by actuarial methods on the basis of an appropriate assessment of the relevant parameters. Funds and benefit obligations are valued on a regular basis at least every three years. For all major funds, comprehensive actuarial valuations are performed annually.

Benefits expected to be payable after retirement are spread over each employee's entire period of employment, allowing for future changes in remuneration.

The legally independent fund Bayer Pensionskasse VvaG (Bayer Pensionskasse) is a private insurance company and is therefore subject to the German Law on the Supervision of Private Insurance Companies. Since Bayer guarantees the commitments of the Bayer Pensionskasse, it is classified as a defined benefit plan for IFRS purposes. The fair value of the plan assets includes real estate leased by Bayer which is recognized at a fair value of 66 million (2002: 70 million).

The investment policy of Bayer Pensionskasse is geared to complying with regulatory provisions governing the risk structure of its obligations. In the light of capital market movements, Bayer Pensionskasse has therefore developed a target investment portfolio aligned to an appropriate risk structure. Its investment strategy focuses principally on stringent management of downside risks rather than on maximizing absolute returns. It is anticipated that this investment policy can generate a return that enables it to meet its long-term commitments.

All defined benefit plans necessitate actuarial computations and valuations. These are based not only on life expectancy but also on the following parameters, which vary from country to country according to economic conditions:

*Germany*

Parameters used	
Dec. 31, 2002	Dec. 31, 2003



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Discount rate	6.00%	5.50%
Projected future remuneration increases	2.75%	2.50%
Projected future pension increases	1.75%	1.50%
Projected employee turnover (according to age and gender)	Empirical data	
Expected return on plan assets	6.25%	6.00%

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

Obligations to pay early retirement benefits are calculated on the basis of expected mid-term utilization using a discount rate of 3.50% (2002: 3.75%).

*Other countries*

	<b>Parameters used</b>	
	<b>Dec. 31, 2002</b>	<b>Dec. 31, 2003</b>
Discount rate	2.50% to 7.00%	2.00% to 6.25%
Projected future remuneration increases	2.00% to 5.10%	2.50% to 5.00%
Projected future pension increases	1.70% to 3.30%	2.00% to 3.25%
Projected employee turnover (according to age and gender)	Empirical data	
Expected return on plan assets	1.5% to 8.5%	2.00% to 8.25%

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

The status of unfunded and funded defined benefit obligations, computed using the appropriate parameters, is as follows:

*Germany*

	Pension benefits		Other post-employment benefits	
	Dec. 31, 2002	Dec. 31, 2003	Dec. 31, 2002	Dec. 31, 2003
	( million)			
<b>Defined benefit obligation</b>				
Benefit obligation at start of year	7,920	8,165	146	143
Service cost	138	141	57	144
Interest cost	480	480	7	4
Employee contributions	39	38		
Plan amendments				
Plan settlements				
Actuarial (gain) loss	(42)	469		
Foreign currency translation				
Benefits paid	(396)	(415)	(64)	(57)
Mergers & acquisitions	98			
Divestitures	(83)	(16)	(3)	(1)
Plan curtailments	11	21		
	<u>8,165</u>	<u>8,883</u>	<u>143</u>	<u>233</u>
<b>Benefit obligation at year end</b>				
<b>Fair value of plan assets</b>				
Plan assets at start of year	5,209	4,573		
Actual return on plan assets	(420)	302		
Mergers & acquisitions				
Divestitures	(122)	(12)		
Plan settlements				
Foreign currency translation				
Employer contributions	263	320	64	57
Employee contributions	39	38		
Benefits paid	(396)	(415)	(64)	(57)
<b>Plan assets at year-end</b>	<u>4,573</u>	<u>4,806</u>	<u>—</u>	<u>—</u>
<b>Funded status</b>	<u>(3,592)</u>	<u>(4,077)</u>	<u>(143)</u>	<u>(233)</u>
Unrecognized prior service cost				
Unrecognized transition obligation				
Unrecognized actuarial (gain) loss	1,559	1,957		
Asset limitation due to uncertainty of obtaining future benefits	(1,187)	(1,186)		
<b>Net recognized liability</b>	<u>(3,220)</u>	<u>(3,306)</u>	<u>(143)</u>	<u>(233)</u>
Amounts recognized in the balance sheet				
Prepaid benefits assets	469	507		
Accrued benefit liability	(3,689)	(3,813)	(143)	(233)
<b>Net amount recognized</b>	<u>(3,220)</u>	<u>(3,306)</u>	<u>(143)</u>	<u>(233)</u>



**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)***Other countries*

	Pension benefits		Other post-employment benefits	
	Dec. 31, 2002	Dec. 31, 2003	Dec. 31, 2002	Dec. 31, 2003
	( million)			
<b>Defined benefit obligation</b>				
Benefit obligation at start of year	3,383	4,249	811	818
Service cost	164	194	30	29
Interest cost	247	255	50	53
Employee contributions	7	7		
Plan amendments	7	3		42
Plan settlements	(33)	(83)		
Actuarial (gain) loss	5	247	46	240
Foreign currency translation	(531)	(531)	(149)	(159)
Benefits paid	(190)	(233)	(39)	(43)
Mergers & acquisitions	1,192		69	
Divestitures	(5)		(1)	
Plan curtailments	3	(12)	1	
	4,249	4,096	818	980
<b>Fair value of plan assets</b>				
Plan assets at start of year	2,917	2,933	337	257
Actual return on plan assets	(248)	442	(18)	49
Mergers & acquisitions	790			
Divestitures	55			
Plan settlements	(8)	(74)		
Foreign currency translation	(478)	(381)	(51)	(46)
Employer contributions	88	246	28	46
Employee contributions	7	6		
Benefits paid	(190)	(233)	(39)	(43)
<b>Plan assets at year-end</b>	2,933	2,939	257	263
<b>Funded status</b>	(1,316)	(1,157)	(561)	(717)
Unrecognized prior service cost	7	2	(68)	(13)
Unrecognized transition obligation	2			
Unrecognized actuarial (gain) loss	786	656	143	302
Asset limitation due to uncertainty of obtaining future benefits		(7)		
<b>Net recognized liability</b>	(521)	(506)	(486)	(428)
Amounts recognized in the balance sheet				
Prepaid benefits assets	86	92		
Accrued benefit liability	(607)	(598)	(486)	(428)
<b>Net amount recognized</b>	(521)	(506)	(486)	(428)

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)***Total*

	Pension benefits		Other post-employment benefits	
	Dec. 31, 2002	Dec. 31, 2003	Dec. 31, 2002	Dec. 31, 2003
	( million)			
<b>Defined benefit obligation</b>				
Benefit obligation at start of year	11,303	12,414	957	961
Service cost	302	335	87	173
Interest cost	727	735	57	57
Employee contributions	46	45		
Plan amendments	7	3		42
Plan settlements	(33)	(83)		
Actuarial (gain) loss	(37)	716	46	240
Foreign currency translation	(531)	(531)	(149)	(159)
Benefits paid	(586)	(648)	(103)	(100)
Mergers & acquisitions	1,290		69	
Divestitures	(88)	(16)	(4)	(1)
Plan curtailments	14	9	1	
	<u>12,414</u>	<u>12,979</u>	<u>961</u>	<u>1,213</u>
<b>Benefit obligation at year end</b>				
<b>Fair value of plan assets</b>				
Plan assets at start of year	8,126	7,506	337	257
Actual return on plan assets	(668)	744	(18)	49
Mergers & acquisitions	790			
Divestitures	(67)	(12)		
Plan settlements	(8)	(74)		
Foreign currency translation	(478)	(381)	(51)	(46)
Employer contributions	351	566	92	103
Employee contributions	46	44		
Benefits paid	(586)	(648)	(103)	(100)
<b>Plan assets at year-end</b>	<u>7,506</u>	<u>7,745</u>	<u>257</u>	<u>263</u>
<b>Funded status</b>	<u>(4,908)</u>	<u>(5,234)</u>	<u>(704)</u>	<u>(950)</u>
Unrecognized prior service cost	7	2	(68)	(13)
Unrecognized transition obligation	2			
Unrecognized actuarial (gain) loss	2,345	2,613	143	302
Asset limitation due to uncertainty of obtaining future benefits	(1,187)	(1,193)		
<b>Net recognized liability</b>	<u>(3,741)</u>	<u>(3,812)</u>	<u>(629)</u>	<u>(661)</u>
Amounts recognized in the balance sheet				
Prepaid benefits assets	555	599		
Accrued benefit liability	(4,296)	(4,411)	(629)	(661)
<b>Net amount recognized</b>	<u>(3,741)</u>	<u>(3,812)</u>	<u>(629)</u>	<u>(661)</u>

4,829 million (2002: 4,267 million) of the defined benefit obligation for pensions relates to unfunded benefit obligations while 8,150 million (2002: 8,147 million) relates to funded benefit obligations. 410 million



**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

(2002: 374 million) of the defined benefit obligation for other post-employment benefits relates to unfunded obligations while 803 million (2002: 587 million) relates to funded obligations.

Of the funded pension plans, total overfunding of individual plans amounts to 404 million while underfunding amounts to 851 million. Similarly, other funded post-employment benefit obligations in individual plans are underfunded by 541 million.

The adjustments, as yet unrecognized in the income statement, represent the difference between the defined benefit obligation after deducting the fair value of plan assets and the net liability recognized in the balance sheet. They arise mainly from actuarial gains or losses caused by differences between actual and previously assumed trends in employee turnover and remuneration. Pension assets in excess of the obligation are reflected in other receivables, subject to the asset limitation specified in IAS 19 (Employee Benefits). In accordance with IAS 19, the amounts reflected in the balance sheet will be recognized in the income statement over the expected average remaining working lives of existing employees. The portion of the net actuarial gain or loss to be recognized in the income statement is determined by the corridor method.

The net recognized liability is reflected in the following balance sheet items:

	2002	2003
	( million)	
Provisions for pensions and other post-employment benefits	(4,925)	(5,072)
Other assets	555	599
<b>Net recognized liability</b>	<b>(4,370)</b>	<b>(4,473)</b>

Provisions for pensions and other post-employment benefits changed as follows:

	( million)
Balance at beginning of year	4,925
Allocations	913
Utilisation	(669)
Currency effects	(88)
Changes in scope of consolidation	(9)
Reversal	
Balance at end of year	5,072

**[29] Other provisions**

The breakdown of other provisions is as follows:

	Dec. 31, 2002		Dec. 31, 2003	
	Total	Maturing in 2003	Total	Maturing in 2004
	( million)			
Provisions for taxes	650	426	863	710



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Provisions for personnel commitments	976	411	1,337	645
Provisions for environmental remediation	202	23	200	9
Provisions for restructuring	230	189	238	192
Provisions for trade-related commitments	694	649	531	528
Other provisions	720	559	622	364
	<u>3,472</u>	<u>2,257</u>	<u>3,791</u>	<u>2,448</u>

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Changes in provisions were as follows:

	Jan. 1, 2003	Changes in scope of consolidation	Currency effects	Allocation	Utilization	Reversal	Dec. 31, 2003
	( million)						
Provisions for taxes	650	(1)	(14)	642	(400)	(14)	863
Provisions for personnel commitments	976	(5)	(35)	795	(335)	(59)	1,337
Provisions for environmental remediation	202		(14)	49	(24)	(13)	200
Provisions for restructuring	230		(28)	189	(135)	(18)	238
Provisions for trade-related commitments	694	(2)	(66)	697	(663)	(129)	531
Other provisions	720	(1)	(28)	579	(570)	(78)	622
	<u>3,472</u>	<u>(9)</u>	<u>(185)</u>	<u>2,951</u>	<u>(2,127)</u>	<u>(311)</u>	<u>3,791</u>

**Stock compensation program**

Bayer's three-tier stock compensation program was first launched in 2000. It consists of a Stock Option Program for the members of the Board of Management and other Group Executives, a Stock Incentive Program for other senior managers, and a Stock Participation Program for junior management. To be eligible for the Stock Option Program, Stock Incentive Program or Module 1 of the Stock Participation Program, participants must place Bayer AG shares of their own into a special deposit account.

Provided participants retain these shares for the full term of the Stock Incentive Program or Stock Participation Program, they receive specific payments from the company after defined retention periods. Under Module 2 of the Stock Participation Program, employees have the opportunity to purchase shares at a discounted price.

*Stock Option Program*

Members of the Board of Management and Group Executives who wish to participate in the Stock Option Program must place Bayer AG shares of their own in a special deposit account. We determine on an individual basis the maximum number of shares each participant may deposit; the participant receives between one and three options (depending on individual performance) for each share deposited.

The deposited shares are blocked for three years and may not be sold or transferred during that time. Thereafter, a two-year exercise period begins. During this period, the participant may exercise the option rights if he or she has fulfilled the performance criteria.

Any unexercised option rights expire at the end of this two-year period. To determine whether the participant is eligible to exercise option rights and, if so, the cash payment he or she receives upon exercise, we apply two performance criteria based on the absolute and relative performance of Bayer AG stock. If the minimum criteria are not met, the participant receives no payment under the program. At December 31, 2003, no options were exercisable. No options expired, nor were any options canceled, during fiscal 2003.

*Stock Incentive Program*

Like the Stock Option Program, our Stock Incentive Program for senior managers other than Group Executives requires participants to deposit Bayer AG shares of their own in a special deposit account. Each participant may deposit shares with a maximum aggregate value of half his or her performance-related bonus for the preceding fiscal year. The incentive payment received depends on the number of shares deposited at the launch of the program as well as on the overall performance of Bayer stock. Unlike the Stock Option Program, there is no lock-up period for the shares deposited under the Stock Incentive Program. Participants may sell their deposited shares during the term of the program, but any deposited shares they sell are no longer counted when calculating the incentive payment on subsequent distribution dates. The Stock Incentive Program has a ten-year



**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

term. There are three incentive distribution dates during this period. On these dates, the participant receives incentive payments as follows:

*Incentive payments to employees under the Stock Incentive Program*

	<b>Incentive payments received (per 10 deposited shares)</b>
<b>Distribution date at end of</b>	
Second year	2
Sixth year	4
Tenth year	4
	—
<b>Total</b>	<b>10</b>

Participants receive incentive shares only if Bayer stock has outperformed the Dow Jones EURO STOXX 50<sup>SM</sup> index on the relevant distribution dates, as calculated from the beginning of the program.

*Stock Participation Program*

Our Stock Participation Program has two components, Module 1 and Module 2. Employees not covered by the Stock Option Program or Stock Incentive Program may normally participate in both Module 1 and Module 2. The Module 1 program, like the Stock Incentive Program, requires participants to deposit Bayer AG shares of their own in a special account. As with the Stock Incentive Program, participants in the Stock Participation Program may sell their deposited shares during the term of the program; any shares they sell are no longer counted in calculating the incentive payment on subsequent distribution dates.

Module 1 has a term of ten years and entitles the participant to receive incentive payments on three distribution dates on the basis of the number of shares he or she has deposited. Unlike the payments under the Stock Incentive Program, those made under Module 1 of the Stock Participation Program are not dependent on any share performance criteria.

The participant receives incentive payments as follows:

*Incentive payments to employees in the Stock Participation Program*

	<b>Incentive payments received (per 10 deposited shares)</b>
<b>Distribution date at end of</b>	
Second year	1
Sixth year	2
Tenth year	2
	—
<b>Total</b>	<b>5</b>

In addition, under Module 2 each participant may purchase up to 20 Bayer AG shares per year at a tax-free discount. In 2003 this discount amounted to 7.70 per share on the market price for a maximum of 20 shares (2002: 15.40 per share for a maximum of 10 shares). Participants

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may not include shares purchased under Module 2 among the shares they deposit under Module 1. Each participant may take up both modules up to a maximum aggregate value of half his or her performance-related bonus for the preceding fiscal year.

The Stock Option Program, the Stock Incentive Program and Module 1 of the Stock Participation Program are accounted for as follows: Since participants are entitled to receive a payment equivalent to the market price of Bayer AG stock, subject in some cases to certain performance criteria, an expense for possible disbursements is recorded when there is a reasonable basis on which to estimate whether these performance criteria will ultimately be met. Compensation expense is recorded at each balance sheet date by multiplying the estimated number of

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**Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

rights outstanding by the current quoted market price of Bayer AG shares. The related personnel provisions on December 31, 2003 amounted to 8 million.

For Module 2 of the Stock Participation Program, the difference between the quoted market price of Bayer AG stock and the discounted price paid by participants at the date of purchase is expensed immediately. During the year ended December 31, 2003, participants in Module 2 received 441,280 shares at a total price of \$5.4 million, resulting in personnel expenses of \$3.4 million. The discount to the price of Bayer AG stock was 39 percent.

**Environmental provisions**

The Group's activities are subject to extensive laws and regulations in the jurisdictions in which it does business and maintains properties. Our compliance with environmental laws and regulations may require us to remove or mitigate the effects of the disposal or release of chemical substances at various sites. Under some of these laws and regulations, a current or previous owner or operator of property may be held liable for the costs of removal or remediation of hazardous substances on, under, or in its property, without regard to whether the owner or operator knew of, or caused the presence of the contaminants, and regardless of whether the practices that resulted in the contamination were legal at the time they occurred. As many of our production sites have an extended history of industrial use, it is impossible to predict precisely what effect these laws and regulations will have on us in the future.

As is typical for companies involved in the chemical and related industries, soil and groundwater contamination has occurred in the past at some of our sites, and might occur or be discovered at other sites. We are subject to claims brought by United States Federal or State regulatory agencies and other private entities and individuals regarding the remediation of sites that we own, formerly owned or operated, where materials were produced specifically for us by contract manufacturers or where waste from our operations was treated, stored or disposed of.

In particular, we have a potential liability under the U.S. Federal Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund, the U.S. Resource Conservation and Recovery Act and related state laws for investigation and remediation costs at a number of sites. At most of these sites, numerous companies, including Bayer, have been notified that the U.S. Environmental Protection Agency, state governing body or private individuals consider such companies to be potentially responsible parties under Superfund or related laws. At other sites, Bayer is the sole responsible party. The proceedings relating to these sites are in various stages. In most cases remediation measures have already been initiated.

Provisions for environmental remediation as of December 31, 2003 amounted to \$200 million (2002: \$202 million). The material components of the provisions for environmental remediation costs primarily relate to land reclamation, rehabilitation of contaminated sites, recultivation of landfills, and redevelopment and water protection measures. The provisions for environmental remediation costs are recorded on a discounted basis where environmental assessments or clean-ups are probable, the costs can be reasonably estimated and no future economic benefit is expected to arise from these measures. The above amount of provisions represents anticipated future remediation payments totaling \$267 million (2002: \$270 million), discounted at risk-free rates of 0.5 percent to 5.5 percent.

These discounted amounts will be paid out over the period of remediation of the relevant sites, which is expected to be 15 years. Costs are estimated based on significant factors such as previous experience in similar cases, environmental assessments, development of current costs and new circumstances with major influences on expenses, our understanding of current environmental laws and regulations, the number of other potentially responsible parties at each site and the identity and financial position of such parties in light of the joint and several nature of the liability, and the remediation methods expected to be employed.

It is difficult to estimate the future costs of environmental protection and remediation because of many uncertainties, particularly with regard to the status of laws, regulations and the information available about

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

conditions in the various countries and at the individual sites. Subject to these factors, but taking into consideration our experience to date regarding environmental matters of a similar nature, we believe that the provisions are adequate based upon currently available information. However, given the inherent difficulties in estimating liabilities in this area, it cannot be guaranteed that additional costs will not be incurred beyond the amounts accrued. It is possible that the final resolution of these matters may require us to make expenditures in excess of established provisions, over an extended period of time and in a range of amounts that 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, results of operations or cash flows.

**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, patent disputes, tax assessments, competition and antitrust law, and environmental matters. The outcome of any current or future proceedings cannot be predicted with certainty. It is therefore possible that legal 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.

Increased risks currently result from litigation commenced in the United States following the voluntary withdrawal of the statin Lipobay/Baycol from the market and the voluntary cessation in the marketing of products containing PPA. Without acknowledging any liability, the company had settled 2,224 Baycol cases in the United States as of March 5, 2004, resulting in settlement payments totaling approximately US\$ 842 million. As of that date, 9,948 cases were pending in the U.S. Where facts have been developed in the course of the litigation, it so far appears that the vast majority of plaintiffs did not suffer serious side-effects. Should the U.S. plaintiffs in the Baycol litigation or in the phenylpropanolamine (PPA) product liability litigation substantially prevail despite the existing meritorious defenses, it is possible that Bayer could face payments that exceed its insurance coverage. The same is true should an unexpectedly sharp increase in settlement cases occur in the Baycol litigation. Due to the considerable uncertainty associated with the proceedings, it is currently not possible to estimate potential liability. For this reason, provisions for any amount by which liability in this regard might exceed insurance coverage have not presently been made. Depending on the progress of the litigation, we will continue to regularly reconsider the need to establish provisions, which may have a negative effect on financial results. PPA, which was widely used as an active ingredient in appetite suppressants and cough-and-cold medications by many manufacturers, was voluntarily replaced by Bayer and other producers in the U.S. after a recommendation in 2000 by the U.S. Food and Drug Administration.

In negotiations with the insurance companies concerning the Lipobay/Baycol litigation, a final agreement has been reached with the majority of the insurers. The insurers had previously proceeded only on a provisional basis under a customary reservation of rights. The insurers that are parties to this agreement have now withdrawn the reservation of rights. Thus, Bayer expects the insurance coverage for Lipobay/Baycol to be approximately US\$1.2 billion. In consideration of expenses already incurred and quantifiable expenses expected to be incurred in this connection in the future, the company has taken 300 million charge to the operating result.

Risks also exist because Bayer AG and some of its domestic and foreign affiliated companies are the subject of investigations by the E.U. Commission and the U.S. and Canadian antitrust authorities for alleged anticompetitive conduct involving products of the former Rubber Business Group. The effects of these proceedings and their eventual conclusion cannot be predicted at this time. Civil actions are also pending in the United States in connection herewith.

**Restructuring charges**

Restructuring charges of 408 million were incurred in 2003 for closures of facilities and relocation of business activities, including 189 million in provisions that are expected to be utilized as the respective restructuring measures are implemented. The total charges include 182 million in severance payments, a total 145 million in accelerated amortization/depreciation and write-downs of intangible assets, property, plant and

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

equipment, and 81 million in other expenses. Most of the charges taken for severance payments and other expenses in 2003 will lead to disbursements in 2004.

Restructuring was once again a major focus of activity in fiscal 2003.

As part of the repositioning of the pharmaceuticals business, it was decided in the fourth quarter of 2003 to close the research centers in Kyoto, 92 million in write-downs of assets no longer used, 4 million for severance payments and 23 million for other expenses. For the closure of the research center in Berkeley we incurred charges of 20 million, of which write-downs accounted for 9 million, severance payments for 6 million and other expenses for 5 million.

A further 21 million comprised asset write-downs at production facilities scheduled for closure at West Haven, Connecticut, United States. An additional 8 million went for severance payments, while other expenses totaled 3 million.

The continued integration of the Aventis CropScience operations, acquired in 2002, led primarily to charges for redundancy plans amounting to 53 million in France and 25 million in the United States. In addition, 13 million was incurred for the planned shutdown of the production site in Wolfenbüttel, Germany, comprising 11 million in severance payments and 2 million in write-downs. Additionally, severance payments totaling 11 million were made in connection with further restructuring in Spain and the United Kingdom.

Restructuring expenses of 19 million related to the closure of the polyols production site at Institute, West Virginia, United States. Of this amount, 12 million was for write-downs on property, plant and equipment, 3 million for severance payments and 4 million for other expenses relating to the termination of existing contractual agreements. A further 52 million was incurred for personnel adjustments in connection with the reorganization in the Polymers segment.

Further ongoing restructuring programs to improve the profitability of the subgroups and integrate acquisitions gave rise to total charges of 64 million, comprising 9 million in severance payments, 9 million in write-downs and 46 million in other expenses.

Changes in provisions for restructuring were as follows:

	<u>Severance payments</u>	<u>Other Costs</u>	<u>Total</u>
	( million)		
<b>Balance at January 1, 2002</b>	79	66	145
Additions	193	68	261
Utilization	(99)	(49)	(148)
Exchange differences	(15)	(13)	(28)
<b>Balance at December 31, 2002</b>	158	72	230
Additions	125	64	189
Utilization	(124)	(29)	(153)
Exchange differences	(13)	(15)	(28)
	<u>          </u>	<u>          </u>	<u>          </u>
<b>Balance at December 31, 2003</b>	146	92	238
	<u>          </u>	<u>          </u>	<u>          </u>

The other costs are mainly demolition expenses and other charges related to the abandonment of production facilities.



**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****[30] Financial obligations**

Financial obligations comprise the following:

	Dec. 31, 2002		Dec. 31, 2003	
	Total	Maturing in 2003	Total	Maturing in 2004
	( million)			
Debentures	6,742	477	6,440	396
Liabilities to banks	1,023	873	532	377
Liabilities under lease agreements	708	121	575	86
Liabilities from the issuance of promissory notes	78	78	59	59
Commercial paper	1,084	1,084	852	852
Liabilities from derivative financial instruments	86	85	116	114
Other financial obligations	438	123	852	429
	10,159	2,841	9,426	2,313

The maturities of financial obligations existing at December 31, 2003 were as follows:

	( million)
<b>Maturing in</b>	
2004	2,313
2005	388
2006	373
2007	3,085
2008	36
2009 or later	3,231
	9,426

Financial obligations in U.S. dollars amounted to 2.0 billion (2002: 3.3 billion) and account for 22 percent (2002: 32 percent) of total financial obligations.

Short-term borrowings (excluding the short-term portion of debentures) amounted to 2.0 billion (2002: 2.4 billion) with a weighted average interest rate of 6.2 percent (2002: 7.9 percent). The Bayer Group's financial obligations are primarily unsecured and of equal priority.

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

Debentures include the following:

Effective Rate	Stated Rate		Volume	Dec. 31, 2002	Dec. 31, 2003
( million)					
<b>Bayer AG</b>					
5.515%	5.375%	Eurobonds 2002/2007	EUR 3,000 million	3,081	3,039
5.108%	6.000%	Eurobonds 2002/2012	EUR 2,000 million	2,102	2,097
<b>Bayer Corporation</b>					
7.180%	7.125%	Eurobonds 1995/2015	USD 200 million	191	158
1.200%	3.500%	Eurobonds 1997/2009	USD 20.6 million	20	16
6.670%	6.650%	Eurobonds 1998/2028	USD 350 million	334	277
6.210%	6.200%	Eurobonds 1998/2028	USD 250 million	238	198
6.375%	6.375%	Eurobonds 2001/2011	USD 500 million	476	397
<b>Bayer Ltd., Japan</b>					
3.750%	3.750%	Eurobonds 2000/2005	CHF 400 million	300	258
				6,742	6,440

In April 2002 Bayer AG launched two Eurobond issues under its 8 billion European Medium Term Note (EMTN) program. One of these issues, in the nominal volume of 3 billion, carries a 5.375% coupon and has a term of 5 years, maturing in 2007. Interest is payable annually in arrears. The issue price was 99.402%. The other Eurobond issue has a nominal volume of 2 billion and a term of 10 years, so it matures in 2012. The bonds carry a 6% coupon. Again, all interest is payable annually in arrears. The issue price was 99.45%.

In October 1995, Bayer Corporation issued USD 200 million of 7.125% Notes to qualified institutional buyers. The Notes have a term of 20 years and mature in October 2015. Interest is paid semi-annually in April and October. The Group recorded a discount of USD 2.4 million, which includes commissions paid to underwriters.

In March 1997, Bayer Corporation issued USD 20.6 million of Revenue Bonds to U.S. institutional buyers. The interest rate is reset daily with monthly interest payments. The Revenue Bonds have a term of 12 years and mature in May 2009.

In February 1998, Bayer Corporation issued USD 350 million of 6.65% Notes to qualified institutional buyers. The Notes have a term of 30 years and mature in February 2028. Interest is paid semi-annually in August and February. The Group recorded a discount of USD 1.9 million, which includes commissions paid to underwriters. The Notes will be redeemable, in whole or in part, at the option of Bayer Corporation at any time, upon not less than 30 but not more than 60 days notice, at a redemption price equal to the greater of (i) 100% of the principal amount or (ii) as determined by an independent investment banker.

In February 1998, Bayer Corporation issued USD 250 million of 6.20% Bonds to qualified institutional buyers. The Bonds have combined call and put options giving the lead manager the right to repurchase them, and the investors the right to cash them, after 10 years. At that time the lead manager can reset the interest rate and remarket the Bonds for a further period of 20 years such that they would mature in 2028. If the lead manager does not exercise its call option and the investors exercise their put option, the Bonds will be redeemed in 2008. Interest is paid semi-annually in August and February. The Group recorded a discount of USD 0.6 million which includes commissions paid to underwriters. The redemption provision on the 1998 6.65% Notes also applies for these Bonds.

In April 2000, Bayer Ltd., Japan, issued CHF 400 million of 3.75% Bonds in Switzerland. The Bonds have a term of 5 years and mature in April 2005. Interest is paid annually in April. The Group recorded a discount of CHF 1.2 million. The debt was swapped into yen at a floating interest rate.

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

In March 2001, Bayer Corporation issued USD 500 million of 4.75% Money Market Puttable Reset Securities to qualified institutional buyers, due in 2011. The Bonds have combined call and put options giving the lead manager the right to repurchase them, and the investors the right to cash them, on each anniversary date of the original marketing of the securities.

At December 31, 2003, the Group had approximately 5.8 billion (2002: 6.2 billion) of total lines of credit, of which 0.5 billion (2002: 1.0 billion) was used and 5.3 billion (2002: 5.2 billion) was unused and available for borrowing on an unsecured basis.

Liabilities under finance leases are recognized as financial obligations if the leased assets are capitalized under property, plant and equipment. They are stated at present values. Lease payments totaling 760 million (2002: 899 million), including 185 million (2002: 191 million) in interest, are to be made to the respective lessors in future years.

The liabilities associated with finance leases mature as follows:

	<u>Lease payments</u>	<u>Of which interest</u>	<u>Liability</u>
	( million)		
2004	106	20	86
2005	77	18	59
2006	76	18	58
2007	60	22	38
2008	32	15	17
After 2008	409	92	317
	<u>760</u>	<u>185</u>	<u>575</u>

Lease payments in 2003 in connection with operating leases amounted to 124 million (2002: 191 million; 2001: 244 million).

The other financial obligations include 7 million (2002: 4 million) to non-consolidated subsidiaries.

**[31] Trade accounts payable**

Trade accounts are payable mainly to third parties. As last year, the entire amount totaling 2,265 million (2002: 2,534 million) is due within one year.

Of this total, 33 million (2002: 4 million) is payable to subsidiaries, 12 million (2002: 18 million) to other affiliated companies and 2,220 million (2002: 2,512 million) to other suppliers.

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****[32] Miscellaneous liabilities**

Miscellaneous liabilities are carried at amortized cost. They are comprised as follows:

	Dec. 31, 2002		Dec. 31, 2003	
	Total	Maturing in 2003	Total	Maturing in 2004
	( million)			
Payroll liabilities	422	330	337	247
Tax liabilities	346	346	549	549
Liabilities for social expenses	170	170	172	166
Accrued interest on liabilities	308	308	315	315
Advance payments received	20	20	18	18
Liabilities from the acceptance of drafts	17	17	21	21
License liabilities	57	57	47	47
Other miscellaneous liabilities	890	890	1,000	998
	<u>2,230</u>	<u>2,138</u>	<u>2,459</u>	<u>2,361</u>

Tax liabilities include not only Group companies' own tax liabilities, but also taxes withheld for paying over to the authorities on behalf of third parties.

Liabilities for social expenses include, in particular, social insurance contributions that had not been paid over by the closing date.

The other miscellaneous liabilities comprise mainly guarantees, commissions to customers, and expense reimbursements.

Total miscellaneous liabilities include 12 million (2002: 19 million) liabilities to non-consolidated subsidiaries and 2 million (2002: 1 million) liabilities to other affiliated companies.

**[33] Further Information on other liabilities**

Other liabilities (financial obligations, trade accounts payable and miscellaneous liabilities) include 3,283 million (2002: 6,539 million) with maturities of more than five years.

Of the total, 394 million (2002: 146 million) was collateralised, including 33 million collateralised by mortgages.

The total amount includes 315 million (2002: 308 million) in accrued interest, representing expenses attributable to the fiscal year but not due to be paid until after the closing date.

**[34] Deferred income**

Deferred income as of December 31, 2003 includes 121 million (2002: 97 million) in grants and subsidies received from government. The amount reversed and recognized in income was 23 million (2002: 19 million).

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****[35] Discontinuing operations**

Assets and liabilities as of December 31, 2003 contain the following amounts relating to discontinuing operations (Lanxess and the plasma business):

	<b>Polyurethanes, Coatings, Fibers</b>		<b>Plastics, Rubber</b>	
	<b>2002</b>	<b>2003</b>	<b>2002</b>	<b>2003</b>
	( million)			
Noncurrent assets	113	33	1,576	888
Current assets (excluding liquid assets)	104	81	1,475	1,442
Liquid assets	—	—	—	—
<b>Assets</b>	<b>217</b>	<b>114</b>	<b>3,051</b>	<b>2,330</b>
Pension provisions	(33)	(34)	(187)	(183)
Other provisions	(21)	(33)	(184)	(170)
Financial obligations	—	—	—	—
Remaining liabilities	(40)	(71)	(600)	(621)
<b>Liabilities</b>	<b>(94)</b>	<b>(138)</b>	<b>(971)</b>	<b>(974)</b>

	<b>Chemicals</b>		<b>Reconciliation</b>	
	<b>2002</b>	<b>2003</b>	<b>2002</b>	<b>2003</b>
	( million)			
Noncurrent assets	1,659	902	39	103
Current assets (excluding liquid assets)	1,117	1,246	(191)	191
Liquid assets	—	—	150	150
<b>Assets</b>	<b>2,776</b>	<b>2,148</b>	<b>(2)</b>	<b>444</b>
Pension provisions	(159)	(201)	—	—
Other provisions	(177)	(248)	—	—
Financial obligations	—	—	(1,052)	(1,131)
Remaining liabilities	(439)	(629)	(161)	257
<b>Liabilities</b>	<b>(775)</b>	<b>(1,078)</b>	<b>(1,213)</b>	<b>(874)</b>

**Total Lanxess**

<b>2002</b>	<b>2003</b>
( million)	

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Noncurrent assets	3,387	1,926
Current assets (excluding liquid assets)	2,505	2,960
Liquid assets	150	150
	<u>        </u>	<u>        </u>
<b>Assets</b>	<b>6,042</b>	<b>5,036</b>
	<u>        </u>	<u>        </u>
Pension provisions	(379)	(418)
Other provisions	(382)	(451)
Financial obligations	(1,052)	(1,131)
Remaining liabilities	(1,240)	(1,064)
	<u>        </u>	<u>        </u>
<b>Liabilities</b>	<b>(3,053)</b>	<b>(3,064)</b>
	<u>        </u>	<u>        </u>

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**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

	<b>Plasma Business</b>		<b>Total</b>	
	<b>2002</b>	<b>2003</b>	<b>2002</b>	<b>2003</b>
	( million)			
Noncurrent assets	241	3	3,628	1,929
Current assets (excluding liquid assets)	621	616	3,126	3,576
Liquid assets			150	150
<b>Assets</b>	<b>862</b>	<b>619</b>	<b>6,904</b>	<b>5,655</b>
Pension provisions			(379)	(418)
Other provisions	(46)	(43)	(428)	(494)
Financial obligations			(1,052)	(1,131)
Remaining liabilities	(44)	(46)	(1,284)	(1,110)
<b>Liabilities</b>	<b>(90)</b>	<b>(89)</b>	<b>(3,143)</b>	<b>(3,153)</b>

**[36] Commitments and contingencies**

Contingent liabilities as of December 31, 2003 nearly all of which existed toward third parties amounted to 341 million. They result from:

	<b>Dec. 31, 2002</b>	<b>Dec. 31, 2003</b>
	( million)	
Issuance and endorsement of bills	6	4
Guarantees	104	130
Warranties	135	207
	<b>245</b>	<b>341</b>

The respective items refer to potential future obligations where the occurrence of the future events would create an obligation, the existence of which is uncertain at the balance sheet date. Group companies frequently enter into warranty obligations related to business transactions. These mainly comprise commitments undertaken by subsidiaries for a defined level of performance or the rendering of a specific service that go beyond the degree of liability commonly assumed in the respective sector. Guarantees comprise mainly bank guarantees where subsidiaries guarantee third parties liabilities to banks resulting from contractual agreements with those subsidiaries. A liability to perform under the guarantee arises if the debtor is in arrears with payments or is insolvent.

In addition to provisions, other liabilities and contingent liabilities, there are also other financial commitments. Bayer AG has undertaken to provide profit-sharing capital totaling 150 million for the Bayer Pensionskasse, which can be drawn up to December 31, 2010. Of this amount, 50 million was drawn in 2003, so the potential future obligation is now 100 million.

Further financial commitments also exist, mainly under long-term lease and rental agreements.

Minimum non-discounted future payments relating to operating leases total 478 million (2002: 619 million).

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

The respective payment obligations mature as follows:

	( million)
2004	124
2005	93
2006	76
2007	64
2008	55
2009 or later	66
	<hr/>
	478
	<hr/>

Financial commitments resulting from orders already placed under purchase agreements related to planned or ongoing capital expenditure projects total 181 million (2002: 286 million). Of the respective payments, 149 million almost the entire amount is due in 2004.

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 commitments based on the achievement of certain milestones or other specific conditions. The total amount of such funding and other commitments is 424 million (2002: 570 million). At December 31, 2003, the remaining payments expected to be made to these parties, assuming the milestones or other conditions are met, were as follows:

	million
<b>Maturing in</b>	
2004	129
2005	91
2006	55
2007	32
2008	22
2009 or later	95
	<hr/>
	424
	<hr/>

**[37] Related Parties**

In the course of our operating business, we source materials, inventories and services from a large number of business partners around the world. These include companies in which we hold an interest, and companies with which members of the Supervisory Board of Bayer AG are associated. Transactions with these companies are carried out on an arm's length basis. Business with such companies was not material from the viewpoint of the Bayer Group. The Bayer Group was not a party to any transaction of an unusual nature or structure that was material to us or to companies or persons closely associated with us, nor does it intend to be party to such transactions in the future.

**[38] Financial Instruments****Primary financial instruments**

Primary financial instruments are reflected in the balance sheet. In compliance with IAS 39 (Financial Instruments: Recognition and Measurement), asset instruments are categorized as held for trading, held to maturity or available for sale and, accordingly, recognized at fair value or amortized cost. Changes in the fair value of available-for-sale securities are recognized in stockholders' equity. In the event of impairment losses, the





**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

assets are written down and the write-downs are recognized in income. Financial instruments constituting liabilities are carried at amortized cost.

*Fair value*

The fair value of a primary financial instrument is the price at which it could be exchanged in a current transaction between knowledgeable, willing parties in an active market. The fair values of other securities included in investments and of marketable securities are derived from their market prices and reflected in the financial statements. Financial obligations are valued mainly by discounting future cash flows, or in some cases on the basis of quoted prices. Their total fair value reflected in the consolidated financial statements is 234 million above their carrying value. The remaining receivables and liabilities and the liquid assets have such short terms that there is no significant discrepancy between their fair values and carrying amounts.

*Credit risk*

Credit risk arises from the possibility of asset impairment occurring because counterparties cannot meet their obligations in transactions involving financial instruments.

Since we do not conclude master netting arrangements with our customers, the total of the amounts recognized in assets represents the maximum exposure to credit risk.

*Currency risk*

Currency risk is the potential decline in the value of financial instruments due to exchange rate fluctuations. Exposure to currency risk arises mainly when receivables and payables are denominated in a currency other than the company's local currency or will be denominated in such a currency in the planned course of business.

Such risks may be naturally hedged, as when a receivable in a given currency is matched, for example between Group companies, by one or more payables in the same amount, and having an equivalent term, in the same currency. They may also be hedged using derivative financial instruments.

Currency risks arising on financial transactions, including interest, are generally fully hedged. The instruments used are mainly currency swaps, interest and principal currency swaps and forward exchange contracts. Currency risks relating to operating activities are systematically monitored and analyzed. The level of hedging is regularly reviewed.

The position at the end of 2003 was as follows:

	<b>Dec. 31, 2002</b>	<b>Dec. 31, 2003</b>
	( million)	
Primary asset instruments exposed to currency risk	3,564	4,899
Primary liability instruments exposed to currency risk	3,154	983
Amount naturally hedged	(3,621)	(696)
Amount hedged through derivative financial instruments	(2,720)	(5,178)
<b>Residual unhedged currency exposure</b>	<b>377</b>	<b>8</b>

In some cases forecasted transactions are also hedged to further reduce the related anticipated currency risk. At December 31, 2003 the total notional amount of the hedging instruments concerned mainly forward exchange contracts for the sale of U.S. dollars or Japanese yen and all maturing before December 31, 2004 was 352 million, which is not included in the hedged amount of 5.2 billion. The contracts are concluded monthly so that they run for one year and mature in the middle of each month. Changes in fair value are recognized in the income statement.



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**Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

On the asset side, 50 percent of currency risks relate to the U.S. dollar. On the liabilities side, 36 percent of foreign currency risks relate to the U.S. dollar. The remaining exposure involves liabilities in British pounds (8 percent), Japanese yen (4 percent) and a number of other currencies outside of the dollar and euro zones. The U.S. dollar accounts for 51 percent of the asset volume hedged through derivative financial instruments, while the remaining 49 percent relates to a range of other currencies. Of the hedged liabilities, 21 percent are in U.S. dollars and 6 percent in British pounds. When hedging exchange rate risk on recorded foreign currency operating items, we do not aim for hedge accounting treatment. These items are thus treated as trading operations, the changes in the fair values of the hedging instruments normally being recognized immediately in the income statement.

The other securities included in investments are almost exclusively denominated in the currency used by the Group company making the investment, so no currency risk is involved. Similarly, the other loans are made only to borrowers in the same currency zone. Where intragroup loans are exposed to currency risk, they are hedged through derivative financial instruments.

*Interest rate risk*

An interest rate risk is the possibility that the value of a financial instrument will change due to movements in market rates of interest. It applies mainly to receivables and payables with maturities of over one year.

Items with such long maturities are not of material significance on the operating side but are relevant in the case of investments and financial obligations. Here, derivative financial instruments are used as the main method of interest rate hedging, though in some cases interest rate risk is not hedged if attractive fixed interest rates can be obtained.

The other securities included in investments are mostly floating rate investments at market rates of interest. Interest rate swaps are not used to convert floating rate investments into fixed rate investments.

The other loans chiefly comprise loans to employees, generally at market-oriented, fixed interest rates. Such loans are exposed to an interest rate risk which, however, is not hedged since it was entered into for specific reasons. More than three quarters of employee loans are for terms of more than five years.

**Derivative financial instruments**

The derivatives we use are mainly over-the-counter instruments, particularly forward foreign exchange contracts, option contracts, interest rate swaps, and interest and principal currency swaps. We deal only with banks of high credit standing. The instruments are employed according to uniform guidelines and are subject to strict internal controls. Their use is generally confined to the hedging of the operating business and of the related investments and financing transactions. Derivative transactions are also carried out on the commodities markets. Regular way purchases and sales of financial assets are recorded at the settlement date in compliance with IAS 39. The main objective in using derivative financial instruments is to reduce fluctuations in cash flows and earnings associated with changes in interest and foreign exchange rates.

*Market risk*

Market risk arises from the fact that the value of financial instruments may be positively or negatively affected by fluctuating prices on the financial markets. The fair values quoted are the current values of the derivative financial instruments, disregarding any opposite movements in the values of the respective hedged transactions. The fair value is the repurchase value of the derivatives on the closing date, based on quoted prices or determined by standard methods. The notional amount is the total volume of the contracted purchases or sales of the respective derivatives.

**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

The notional amounts and fair values of the derivative financial instruments held at the closing date were as follows:

	Notional amount		Fair value	
	Dec. 31, 2002	Dec. 31, 2003	Dec. 31, 2002	Dec. 31, 2003
		( million)		
Forward foreign exchange contracts	2,979	3,984	105	143
Currency options	239	266	9	11
Interest rate hedging contracts (including interest and principal currency swaps)	5,799	6,331	365	485
	9,017	10,581	479	639

Gains and losses from changes in fair values are immediately recognized in income, except where the strict conditions for the recognition of a hedge accounting relationship are present. This is also the case with fair value hedges, where the gain or loss on both the hedging contract and the hedged item are recognized in income. However, gains or losses incurred through cash flow hedge accounting are recognized initially in equity and subsequently in the income for the year in which the term of the respective hedging contract is completed.

*Credit risk*

Credit risk exposure is 733 million (2002: 578 million), this amount being the total of the positive fair values of derivatives that give rise to claims against the other parties to the instruments. It represents the losses that could result from non-performance of contractual obligations by these parties. We minimize this risk by imposing a limit on the volume of business in derivative financial instruments transacted with individual parties.

*Currency risk*

Exchange hedging instruments in the notional amount of 4.2 billion (2002: 3.2 billion) mature within one year. No contracts (2002: 8 million) have longer remaining terms.

*Interest rate risk*

Short-term interest rate hedging contracts (including interest and principal currency swaps) total 0.3 billion (2002: 0.5 billion). The notional volume of those with maturities of more than one year but less than five years totals 4.2 billion (2002: 3.2 billion) while the notional volume of those with maturity of more than five years total 1.8 billion (2002: 2.1 billion).

Most interest rate swaps and interest and principal currency swaps are performed to allow the company to maintain a target range of floating rate debt. In 2002 such contracts were mainly used in connection with bond issues in the amounts of 2 billion and 3 billion. A portion of these bonds was converted from fixed to floating rate debt by means of interest rate swaps. Changes in the fair values of derivatives that hedge interest rate risk are recorded as interest income or expense for the respective periods. The effective portion of fair value hedges amounts to 83 million while the ineffective portion is 7 million. Some interest rate or interest and principal currency instruments involve a swap from variable to fixed interest rates. Such contracts are accounted for as cash flow hedges as defined in IAS 39. The effective portion of such hedges totals 21 million while the ineffective portion amounts to 2 million.

*Procurement market risk*

The Bayer Group is exposed to changes in the market prices of commodities used for its business operations. In order to participate in commodity market fluctuations, we make use of derivative financial instruments according to our own assessments of the relevant markets. As of December 31, 2003 the total notional volume of commodity derivatives was 224 million. The total fair value of existing commodity contracts was 11 million.



**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)****[39] Net cash provided by operating activities**

The cash flow statement starts from the operating result. The gross cash flow for 2003 of 3.2 billion (2002: 3.1 billion; 2001: 3.0 billion) is the cash surplus from operating activities before any changes in working capital. Breakdowns of the gross cash flow by segment and region are given in the table on page F-7. The net cash flow of 3.3 billion (2002: 4.5 billion; 2001: 3.9 billion) takes into account changes in working capital. The gross and net operating cash flow figures for fiscal 2002 have been increased to reflect the reclassification of taxes on the non-operating result ( 38 million). These taxes are now reflected in income taxes whereas in 2002 they were shown as a separate item of financing cash flow.

**[40] Net cash provided by (used in) investing activities**

Additions to property, plant and equipment and intangible assets in 2003 resulted in a cash outflow of 1.7 billion (2002: 2.1 billion; 2001: 2.6 billion). Sales of property, plant and equipment led to a cash inflow of 1.6 billion (2002: 2.1 billion; 2001: 0.5 billion), while the cash inflow from the sale of investments and from interest and dividend receipts, including marketable securities, amounted to 0.6 billion (2002: 1.3 billion; 2001: 0.5 billion). Further information on acquisitions and divestments (2002: cash outflow of 7.8 billion, principally due to the acquisition of Aventis CropScience) can be found on page F-18. Net cash provided by investing activities came to 0.5 billion.

**[41] Net cash provided by (used in) financing activities**

In fiscal 2003 there was a net cash outflow for financing activities of 1.8 billion (2002: net cash inflow of 2.1 billion; 2001: net cash outflow 1.6 billion). Net repayment of debt resulted in an net outflow of 0.3 billion (2002: net inflow of 3.5 billion from net borrowings; 2001 net outflow of less than 0.1 billion). Dividend payments for 2002 and interest payments totaled 1.5 billion (2002: 1.4 billion; 2001: 1.5 billion).

**[42] Discontinuing operations**

Discontinuing operations affected the Group cash flow statements as follows:

	Polyurethanes, Coatings, Fibers			Plastics, Rubber		
	2001	2002	2003	2001	2002	2003
	( million)					
Net cash provided by (used in) operating activities	71	9	16	346	139	(3)
Net cash provided by (used in) investing activities						
Net cash provided by (used in) financing activities						
<b>Change in cash and cash equivalents</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

	Chemicals			Reconciliation		
	2001	2002	2003	2001	2002	2003
	( million)					
Net cash provided by (used in) operating activities	376	355	118			
Net cash provided by (used in) investing activities				(446)	(285)	(163)
Net cash provided by (used in) financing activities				(347)	(218)	32
<b>Change in cash and cash equivalents</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>





**Table of Contents****Notes to the Consolidated Financial Statements of the Bayer Group (Continued)**

	<b>Total Lanxess</b>			<b>Plasma Business</b>		
	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>
			( million)			
Net cash provided by (used in) operating activities	793	503	131	(74)	(129)	(98)
Net cash provided by (used in) investing activities	(446)	(285)	(163)	(48)		