

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

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
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 W1

Kaiser-Wilhelm-Allee

51368 Leverkusen, GERMANY

(Address of principal executive offices)

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:

American Depositary Shares representing Bayer AG

ordinary shares of no par value New York Stock Exchange

Bayer AG ordinary shares of no par value New York Stock Exchange**

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

None

(Title of class)

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, 2001, 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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Forward-Looking Information

This annual report contains forward-looking statements that reflect our plans and expectations. These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance, achievements or financial position to be materially different from any future results, performance, achievements or financial position expressed or implied by these forward-looking statements. These factors include:

- Cyclicalities 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 which may affect our actual results, performance, achievements or financial position is contained in Item 3, *Key Information — Risk Factors*, Item 5, *Operating and Financial Review and Prospects* and elsewhere in this annual report.

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.

If you wish to execute in Germany the judgment of a foreign court, 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.

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, 2001, from our consolidated financial statements. We have prepared our consolidated financial statements in accordance with International Accounting Standards, or IAS and where indicated, in accordance with U.S. Generally Accepted Accounting Standards or U.S. GAAP. Note 44 to our consolidated financial statements included in Item 18 of this annual report describes the reconciliation of significant differences between IAS and U.S. GAAP.

Since January 1, 1999, we have prepared our financial statements in European Union euros (€). We originally prepared our consolidated financial statements for the years ending December 31, 1997 and 1998, in German marks (*Deutsche Mark*, or DM). We have restated these financial statements in euros, converting German mark values to euro values at the irrevocably fixed conversion rate of DM 1.95583 = €1.00. These restated financial statements depict the same trends and relationships among our financial accounts as do the corresponding original financial statements that we reported in German mark amounts prior to the introduction of the euro. Unless otherwise indicated, we have expressed all monetary amounts (except per share amounts) in the consolidated financial statements and in the notes in millions of euros.

In this annual report we have translated certain euro amounts into U.S. dollar amounts at the rate of \$0.8901 = €1.00, the noon buying rate of the Federal Reserve Bank of New York on December 31, 2001. 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.

Consolidated Income Statement Data

	Year ended December 31,					
	2001 \$	2001 €	2000 €	1999 €	1998(1) €	1997(1) €
	(in millions, except per share data)					
IAS:						
Net sales	26,948	30,275	30,971	27,320	28,062	28,124
Of which discontinuing operations	1,190	1,337	2,356	3,748	6,418	6,522
Operating result	1,434	1,611	3,287	3,357	3,155	3,077
Of which discontinuing operations	328	369	223	1,218	409	520
Non-operating result	(442)	(496)	(297)	(521)	(427)	(465)
Income before income taxes	992	1,115	2,990	2,836	2,728	2,612
Income taxes	(137)	(154)	(1,148)	(818)	(1,113)	(1,102)
Income after taxes	855	961	1,842	2,018	1,615	1,510
Minority stockholders' interest	4	4	(26)	(16)	(1)	(6)
Net income	859	965	1,816	2,002	1,614	1,504
Average number of shares in issue	730	730	730	730	730	727
Basic net income per share	1.17	1.32	2.49	2.74	2.21	2.07
Diluted net income per share	1.17	1.32	2.49	2.74	2.21	2.07
Dividends per share	0.80	0.90	1.40	1.30	1.02	0.97
U.S. GAAP:						
Net income	711	800	1,783	1,967	—	—
Basic and diluted net income per share	0.97	1.10	2.44	2.69	—	—

(1) The 1998 and 1997 figures have been restated from German marks into euro at the irrevocably fixed conversion rate of DM 1.95583 = €1.00.

Consolidated Balance Sheet Data

	December 31,					
	2001 \$	2001 €	2000 €	1999 €	1998(1) €	1997(1) €
	(in millions, except per share data)					
IAS:						
Total Assets	32,968	37,039	36,451	31,279	29,377	27,697
Of which discontinuing operations	934	1,049	2,000	1,749	5,513	5,757
Stockholders' equity	15,062	16,922	16,140	15,006	12,568	12,009
Liabilities	17,819	20,019	20,074	16,097	16,598	15,465
Of which long-term financial obligations	2,733	3,071	2,803	2,359	2,404	2,150
Of which discontinuing operations	273	307	821	688	2,462	2,302
U.S. GAAP:						
Stockholders' equity	16,288	18,300	19,110	17,177	—	—
Total assets	33,673	37,831	38,740	32,769	—	—

(1) The 1998 and 1997 figures have been restated from German marks into euro at the irrevocably fixed conversion rate of DM 1.95583 = €1.00.

Dividends

The following table indicates the dividends per share paid from 1997 to 2001. 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>2000</u>	<u>1999</u>	<u>1998</u>	<u>1997</u>
Total dividend (€ in millions)	657	1,022	949	747	710
Dividend per share (€)	0.90	1.40	1.30	1.02	0.97

See also “Dividend Policy and Liquidation Proceeds” in Item 8, *Financial Information*.

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. For periods prior to the introduction of the euro on January 1, 1999, we have converted the then-prevailing German mark/U.S. dollar rates to a notional euro/dollar rate at the irrevocably fixed euro/mark rate of €1.00 = DM 1.95583. 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>
1997	1.0871	1.1287	1.2690	1.0398
1998	1.1733	1.1132	1.2178	1.0548
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
<u>Previous six months</u>			<u>High</u>	<u>Low</u>
December 2001			0.9044	0.8773
January 2002			0.9031	0.8594
February 2002			0.8778	0.8613
March 2002			0.8836	0.8652
April 2002			0.9028	0.8750
May 2002			0.9373	0.9022

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 not the only ones that may exist. 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.

Cyclicality may reduce our operating margins or cause operating losses

Several of the industries in which Bayer operates are cyclical. In particular, these industries include chemicals and polymers. 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. We cannot assure you that future growth in demand will be sufficient to absorb current overcapacity or future capacity additions without significant downward pressure on prices and adverse effects on operating results.

The agriculture sector is moreover subject to seasonal and weather factors and fluctuations in crop prices, which can make its operations less predictable than those of our other business segments.

Advances in biotechnology may reduce demand for some of our older products

The growing importance of biotechnology, especially in the pharmaceutical and crop protection fields, could reduce market demand for some traditional products. In particular, new agrochemical compounds that achieve similar or improved results with less toxicity and smaller doses may reduce market demand for traditional chemical products.

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 those of the European Union. A proposed new EU chemicals policy could mandate a significant increase in the testing and assessment of basic chemicals and chemical intermediates, 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, we cannot assure you that stricter regulatory regimes will not delay product development or restrict marketing and sales.

Our Pharmaceuticals and Consumer Care & Diagnostics segments 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. For example, 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, as in the case of our cerivastatin anti-cholesterol drugs.

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.

Similarly, international negotiations currently ongoing at the World Trade Organization may affect the agriculture policy of the European Union. For example, a change in EU agricultural policy leading to an increase in “set aside” acreage could reduce the overall market for agricultural products in the European Union. Additionally, a radical review and reduction of pricing support in the European Union could affect customer and pricing structure and harm our operating results. It is impossible at present to determine precisely what changes, if any, may occur or when. We expect the operating results of our Crop Protection and Animal Health segments to reflect the uncertainties of this industry.

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 for 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.

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

We are or could become involved in a number of 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, we could be required to pay substantial damages and related liabilities.

In addition, we are currently subject to an investigation of alleged underpayment of rebates to U.S. federal health programs. This investigation could lead to criminal or civil proceedings against us. If such proceedings are commenced and result in an adverse verdict, we would likely be required to pay substantial damages and fines. In the worst case, we could be disqualified from participating in U.S. federal health programs.

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. We believe that these provisions (together with insurance proceeds in cases where our liability would be covered by insurance) would substantially cover judgments for damages against us in these cases. We may also establish provisions for additional cases, if we believe that developments in those proceedings make it appropriate to do so. We cannot assure you, however, that our litigation provisions will be adequate or that we will fully recover claims under our insurance policies. As a result, adverse decisions in the legal proceedings in which we are involved could harm our results of operations or cash flows in any given year.

The loss of patent protection may result in loss of sales to competing products

During the life of its patent, 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 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 addition, in an effort to control public health crises, some developing countries, such as South Africa and Brazil, have recently announced plans for substantial reductions in scope of patent protection for pharmaceutical products. 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. Furthermore, in response to anthrax bioterror attacks in the United States in 2001, the U.S. and Canadian governments contemplated compulsory licensing of our ciprofloxacin antibiotic — in effect, permission to generic manufacturers to market ciprofloxacin before the expiry of our patent rights. Although we reached agreements with the two governments intended to ensure adequate supplies of ciprofloxacin while preserving our existing patent rights, we cannot assure you that these or other governments would not impose compulsory licensing in future in response to renewed or increased bioterror attacks. 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 void 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, Polyurethanes, Coatings & Colorants and Chemicals segments), 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.

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.

In October 2001, we announced the acquisition, subject to regulatory approval, of Aventis CropScience from Aventis SA and Schering AG for €7.25 billion. This price consists of both cash that we paid to Aventis and Schering and outstanding debt of Aventis CropScience that we have assumed. This acquisition marks the single largest acquisition in our history, and the integration of Aventis CropScience with our Crop Protection segment will pose formidable management challenges. Any failure to combine these businesses successfully could harm our operating results. Also, the antitrust authorities whose approval to consummate this acquisition we received have made their approval conditional on our divesting a portion of the assets we acquire from Aventis. To the extent that assets we are required to divest were an important part in our assumptions about the business of the combined enterprise, we might not be able to fully realize our objectives for the combined enterprise even if we successfully implement the other aspects of our plan.

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 and achieve substantial 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.

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 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. 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, we cannot assure you that this insurance will be adequate to cover fully all potential hazards incident to our business.

For more detailed information on environmental issues, see Item 4, *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, or
- where waste from our operations was disposed.

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, *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.

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.

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, 2001, we had entered into forward foreign exchange contracts and currency swaps with a total notional value of €2.75 billion. See Item 11, *Quantitative and Qualitative Disclosures About Market Risk*.

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. In this annual report, “Bayer AG” refers solely to the ultimate parent company of the consolidated Bayer Group.

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. Reference to our website does not incorporate the information contained on the website into this annual report.

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 Weskott. 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. Farbenindustries AG. 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 1999, we have incurred capital expenditures as follows:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Pharmaceuticals	415	553	525
Consumer Care & Diagnostics	267	192	205
Crop Protection	215	233	184
Animal Health	49	50	33
Plastics & Rubber	592	652	575
Polyurethanes, Coatings & Colorants	492	359	446
Chemicals	483	424	461

In 1999, we spent €0.4 billion on acquisitions. Major projects in 1999 included the acquisition of the plastic sheet businesses of the chemical companies DSM-Axxis N.V. and Sheffield Plastics; the purchase of the business and assets of Elastochem Inc.; and an 11.3 percent equity investment in LION Bioscience AG. In 2000, we spent a total of €4.2 billion on acquisition activity, mainly in further aligning our polymers and chemicals activities toward specialties through the acquisitions of Lyondell Chemical Company’s polyols business, Sybron, CSM Holding, Inc. and Cyttec’s sizing and strength paper chemicals business. In the life science area we strengthened

our crop protection business by acquiring the Flint® strobilurin product line. 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 October 2001, we entered into an agreement to acquire Aventis CropScience from Aventis and Schering. The consummation of this transaction is conditioned upon approvals of antitrust and competition authorities in the United States and the European Union. The European Commission approved the transaction in April 2002, and the United States Federal Trade Commission gave its preliminary approval of the transaction under the terms of a consent order on May 30, 2002. Both approvals are subject to the condition that we divest or out-license some of the combined enterprise's products. See below, — *Crop Protection — Segment Strategy*. The transaction was closed on June 3, 2002.

In 1999, our major divestments included our flotation of 70 percent of the former Agfa business segment; we sold the remaining 30 percent in June 2002. In 2000, the addition of a new partner in the DyStar joint venture reduced our capital share in that joint venture to 35 percent; since then we consider DyStar a non-core business and classify it under “Discontinuing Operations”. We continued to streamline our portfolio through 2000, divesting our animal health biologicals, acrylic fibers and solar-grade silicon businesses, Troponwerke, and Basics, our generic pharmaceuticals business in Germany. We divested our investments in Myriad Genetics Inc. and in Schein Pharmaceuticals, a U.S. generics business. In the first half of 2001, we also sold our acrylic fiber product line and classified the remainder of our Fibers business group under “Discontinuing Operations”. In May 2002, we reclassified Fibers as part of our continuing operations. See Item 5, *Operating and Financial Review and Prospects — Overview*. In May 2001, we sold our interest in the EC Erdölchemie joint venture, which we had previously classified under “Discontinuing Operations”. In December 2001, our Supervisory Board approved plans to divest a number of non-core businesses, including Haarmann & Reimer, Rhein Chemie and our 50 percent interest in PolymerLatex.

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 comprises the parent company, Bayer AG of Leverkusen, Germany, and over 250 consolidated subsidiaries. We are organized into seven business segments — Pharmaceuticals; Consumer Care & Diagnostics; Crop Protection; Animal Health; Plastics & Rubber; Polyurethanes, Coatings & Colorants; and Chemicals.

At their annual meeting in April 2002, Bayer AG's shareholders approved a plan to transform Bayer AG into a management holding company structure. The new holding company structure, which evolves out of our historical "four pillar" strategy, calls for the division of our business operations among four new, wholly-owned operating subsidiaries. Each of these will comprise one or more current business segments. The new subsidiaries:

- *Bayer HealthCare AG* (which will comprise the current Pharmaceuticals, Consumer Care & Diagnostics and Animal Health segments);
- *Bayer CropScience AG* (consisting of our Crop Protection segment);
- *Bayer Polymers AG* (which will comprise the current Plastics & Rubber and Polyurethanes, Coatings & Colorants segments); and
- *Bayer Chemicals AG* (which will comprise our current Chemicals segment).

Under the plan, we have also created three additional subsidiaries. These will act as service companies that support the four operating subsidiaries, as well as Bayer AG.

Under our plan for this new structure, we expect to transfer most of Bayer AG's assets to the new subsidiaries. As a matter of German law, Bayer AG's shareholders must approve these transfers. At the April 2002 meeting, the shareholders approved the transfer of assets to Bayer CropScience AG, with economic effect from January 1, 2002. At the annual shareholders' meeting for 2003, we expect to ask shareholders to approve the transfer of assets to the other three operating companies, as well as to the three service companies. Subject to shareholder approval, our transformation to the new holding company structure will be complete when these asset transfers have been entered into the commercial register following the 2003 shareholders' meeting. However, for tax and accounting purposes, the transformation would have retroactive economic effect as from January 1, 2003.

Under the new structure, Bayer AG's Board of Management would continue to determine the overall strategy of the Bayer Group and control resource allocation. Bayer AG would nominate the management of the subsidiary Group companies and set each company's performance criteria. These new entities will be wholly owned by Bayer AG, although we may consider strategic partnerships, particularly for our Health Care and Chemicals businesses. If we do form any strategic partnerships, we would expect to maintain both majority ownership and operational control.

For the year ended December 31, 2001, Bayer reported total sales of €30.3 billion, an operating result of €1.6 billion, and net income of €965 million. Sales from continuing operations amounted to €28.9 billion. As of December 31, 2001, we employed 116,900 people worldwide, including employees in our discontinuing operations.

The following table shows a breakdown by region of our sales in 2001:

<u>Region</u>	<u>Sales</u>	
	<u>(euros in millions)</u>	<u>(percentage of total)</u>
Europe	12,999	44.9
North America	9,806	33.9
Asia/Pacific	3,817	13.2
Latin America/Africa/Middle East	2,316	8.0

By continuing to align our portfolio strategically in favor of the more profitable life sciences, we aim to increase Bayer's overall operating margin to above 15 percent. We plan to achieve this shift in our portfolio

through both organic growth and selective life science acquisitions like those of Chiron, Gustafson and Flint as well as the expected acquisition of Aventis CropScience and the planned joint venture with Aventis Behring in the biological products field. In our Health Care businesses we are aiming to win market share and grow profitability without stifling our growth potential at the same time.

We will strive to continue expanding the strong market position of our Polymers businesses. After integrating Lyondell's polyol business, our main focus will be on expansion in Asia, where we see opportunities for above-average growth, and on developing new applications for our products. In the Chemicals segment, we plan to focus on further improving our earnings potential. Our plan for achieving this goal calls for the further streamlining of our portfolio and the expansion of our specialties, including by means of selected acquisitions.

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.

PHARMACEUTICALS

Overview

Our Pharmaceuticals segment focuses on the development and marketing of ethical pharmaceuticals (medications requiring a physician's prescription and sold under a specific brand name) as well as biological products (for example, blood plasma products). The following table shows the segment's performance for the last three years.

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
External net sales	5,729	6,140	5,003
Percentage of total sales (continuing operations).....	20.4	22.1	21.9
Intersegment sales	38	39	51
Operating result before exceptional items	383	1,165	922
Percentage of total operating result (continuing operations).....	18.2	33.5	30.0

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

<u>Product</u>	<u>2001</u>		<u>2000</u>		<u>1999</u>	
	<u>Revenue (euros in millions)</u>	<u>Percentage of segment revenue</u>	<u>Revenue (euros in millions)</u>	<u>Percentage of segment revenue</u>	<u>Revenue (euros in millions)</u>	<u>Percentage of segment revenue</u>
Cipro	1,964	34.3	1,785	29.1	1,519	30.4
Adalat.....	975	17.0	1,155	18.8	1,021	20.4

Segment Strategy

We plan to hold all our Health Care businesses (including Pharmaceuticals, Consumer Care & Diagnostics and Animal Health) through a single new, wholly-owned subsidiary of Bayer AG. See — *Business*. From January 1, 2002, we have organized the Pharmaceuticals segment into two business groups, Pharmaceutical Products and Biological Products.

Bayer AG and Aventis S.A. have signed a non-binding letter of intent to establish a joint venture for biological products. The proposed joint venture would combine the operations of our Biological Products business group with those of the Aventis subsidiary Aventis Behring L.L.C. Bayer would own a majority interest in, and have operational control over the joint venture. We would also have the option of acquiring the remaining

interest in the business at a later date. Currently, it is contemplated that Bayer would have a call option in the fourth year of the venture, while Aventis would have a put option in year five. No other options are currently contemplated. The joint venture would have marketing rights in Kogenate and related recombinant Factor VII blood-clotting products, which Bayer would continue to manufacture. At present Bayer and Aventis are contemplating the proposed transaction, but neither is obligated to proceed with these plans. If both companies elect to proceed, we would expect to enter into a binding final agreement during the summer of 2002, with closing expected in late 2002 or in the first quarter of 2003, subject to any required regulatory approvals.

Our strategic priorities for the Pharmaceuticals segment include:

- Completing the organizational adjustments made necessary by our voluntary withdrawal of Baycol/Lipobay. Our strategy calls for us to evaluate potential strategic partnerships in order to maintain our costs, especially for research and development, at an acceptable level without stifling our potential for long-term growth.
- Preparing for the expected launch of our vardenafil erectile dysfunction product.
- Carrying out our planned biological products joint venture with Aventis Behring.

In addition to our immediate priorities, life cycle management remains a continuous element of our strategy. Successful life cycle management enables us to extend the commercial success of established products.

Major Products

Ciprofloxacin, marketed under the trademark *Cipro*[®] in the United States and *Ciproxin*[®], *Ciproxine*[®], *Ciprobay*[®] 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. Cipro is our leading pharmaceutical product.

Avelox[®] (moxifloxacin), marketed in Germany under the name *Avalox*[®], is an antibiotic used to treat common bacterial respiratory tract infections. We currently market Avelox in 61 countries. Avelox 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. In May 2002, the product was approved for Germany; we expect to be launching the product in the near term.

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.

Kogenate[®] FS (*Kogenate*[®] Bayer in the EU) is a genetically engineered recombinant version of the protein Factor VIII (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. 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*[®]. We produce recombinant fVIII under licenses from Genentech and another licensor, which together give us worldwide production rights.

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.

Gamimune[®]/*Polyglobin*[®] is a plasma-derived concentrate of human antibodies (*Intra-Venous Immunoglobulin G*, or IVIG) registered in 33 countries 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[®] (α 1-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 α 1-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.

We launched *Nimotop*[®] (nimodipine) globally in the mid-1980s. A member of the dihydropyridine class of calcium antagonists developed by Bayer researchers, Nimotop improves the stability and function of nerve cells following certain types of hemorrhage in the brain by inhibiting calcium influx into the cells. Physicians use Nimotop to treat aneurysmatic sub-arachnoid hemorrhage, a serious condition involving bleeding in the brain beneath its outer protective membrane following the rupture of a blood vessel.

We derive our *Plasbumin*[®] and *Plasmanate*[®] fluid management products from fraction V of human plasma. These products draw fluid from body tissues into the bloodstream, thereby helping to stabilize blood pressure and circulation in patients who have lost large amounts of blood through trauma, disease or surgery. Health care professionals use our fraction V products primarily in treating shock victims.

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.

Marketing withdrawal of cerivastatin products

Baycol[®]/*Lipobay*[®] (cerivastatin) is a statin, one of a class of medications used to lower elevated blood levels of cholesterol and other lipids, or fatty substances. We launched cerivastatin in its lower original dosages in 1997. We later obtained regulatory marketing approval for higher dosages, up to 0.8 mg.

Statin are powerful medications that can reduce the risk of coronary heart disease. However, they can also cause significant side effects, including rhabdomyolysis. This is a serious condition which, in its most severe form, can lead to life-threatening kidney failure. Rhabdomyolysis has been reported more frequently in patients taking cerivastatin than other statins. This was particularly true in patients taking cerivastatin in combination with gemfibrozil, another lipid-lowering medication, and in patients taking cerivastatin in the 0.8 mg dosage. We are currently aware of approximately one hundred patients diagnosed with rhabdomyolysis while taking cerivastatin who have died, as well as approximately 1,600 patients assessed with non-fatal cases of rhabdomyolysis.

We had provided prescription information that warned of the risk of rhabdomyolysis and contained strong warnings and a contraindication against the combination of cerivastatin and gemfibrozil. However, we continued to receive reports of this condition in patients who had been taking cerivastatin. Accordingly, we voluntarily ceased marketing cerivastatin in August 2001 and do not intend to reintroduce the drug.

Kogenate production issues

In late 2000 we received reports from the U.S. Food and Drug Administration following FDA inspections at our Berkeley, California and Clayton, North Carolina facilities. The FDA highlighted data validation, management and record-keeping practice as the principal areas of concern, as well as technical production issues. In responding to the reports, we conducted follow-up investigations that identified certain technical problems affecting the manufacture of recombinant fVIII products. In July 2001, after receiving our response, the FDA issued a Warning Letter, identifying items requiring further action. As a result of these issues, our total production of recombinant fVIII products for 2001 was significantly less than in 2000, leading to periods of shortage in these products on the market. We are continuing to take action to rectify these issues. Although we cannot currently state when we will be able to return to full production capacity, we expect an improvement in the supply of these products by mid-2002.

Microbial resistance to antibiotics

The development by microbes of resistance to antibiotics has been a cause of concern for the medical and pharmaceutical communities in recent years. Resistance development is a natural process. It is almost certainly impossible to eliminate it altogether. Emergent ciprofloxacin or moxifloxacin resistance could become a problem on an isolated, individual-patient basis. Nevertheless, 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 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. We have initiated the LIBRAINITIATIVE.COM project to provide physicians and patients with information on how they can use antibiotics appropriately.

Ciprofloxacin: increased demand and governmental agreements following bioterror attacks

Cipro (ciprofloxacin) has been approved for the treatment of anthrax since 2000 in the United States and, since November 2001, in Germany. In response to higher demand for Cipro following anthrax bioterror attacks in the United States, we increased our global production of this antibiotic to provide the quantities required. We have entered into agreements with the governments of several countries, including the United States and Canada, to provide high volumes of Cipro if these countries require them.

Markets and Distribution

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Europe	1,629	1,698	1,571
North America	2,637	2,812	2,135
Asia/Pacific	1,022	1,159	883
Latin America/Africa/Middle East	441	471	414
Total	<u>5,729</u>	<u>6,140</u>	<u>5,003</u>

The following table sets forth the segment's sales for the last three years, broken down by key products.

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Cipro/Ciprobay	1,964	1,785	1,519
Adalat	975	1,155	1,021
Baycol/Lipobay	367	636	350
Gamimune N	343	350	287
Glucobay	312	311	277
Kogenate	250	491	377
Avelox	181	132	12
Trasylol	136	104	74
Prolastin	131	140	74
Nimotop	120	129	127
Fraction V products	101	118	109
<i>Sum of top eleven products</i>	<u>4,880</u>	<u>5,351</u>	<u>4,227</u>
<i>All other products</i>	<u>849</u>	<u>789</u>	<u>776</u>
Total	<u>5,729</u>	<u>6,140</u>	<u>5,003</u>

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;
- in Europe, currency effects resulting from transactions in countries outside the euro zone;
- competition from large pharmaceutical companies in the North America market with substantial resources for research, product development and promotion;
- in Japan, regulation of pharmaceutical prices and mandatory price reductions stipulated by the Japanese Ministry of Health and Welfare;
- in Japan, extensive periods of time required historically for the development and the approval of new drug applications by the Japanese Ministry of Health and Welfare.

We currently produce the active ingredients for our ethical pharmaceutical products almost exclusively 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; Berkeley, California and West Haven, Connecticut; and Shiga, Japan.

We obtain the raw materials for our ethical active ingredients partly from Bayer's Chemicals business segment and partly from third parties in Europe and Asia. Strategic reserves of our products as well as the planned long-term buildup of our production capacity help us ensure an unbroken 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 produce biological raw materials 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. The availability of raw plasma depends on the available donor base, purchases from other fractionators, regulatory procedures and ongoing consolidation with larger collectors.

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 our erectile-dysfunction medication vardenafil, currently in late-stage development. We plan to introduce vardenafil to the market in the near to medium term, subject to obtaining regulatory approvals following the U.S. Food and Drug Administration's assessment. We expect the results of this assessment in the second half of 2002.

We encounter competition in all of our geographical markets from large national and international competitors. In the antibacterial products market, our main competitors are GlaxoSmithKline, Pfizer and Abbott Laboratories. Pfizer, Merck & Co. and AstraZeneca dominate the area of hypertension and coronary heart disease therapy. The market leader for oral antidiabetics is Bristol-Myers Squibb. Baxter, Bayer and Aventis are the leaders in the blood coagulation market. Together with Novartis, these three companies also play the major role in the markets for proteinase inhibitors and immunoglobulins.

Research and Development

We allocate the largest portion of our research and development budget to the Pharmaceuticals segment. Within this segment, 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 bacterial infections as well as cardiovascular diseases and related disorders such as lipid abnormalities and diabetes. Our current research and development portfolio also includes the following therapeutic areas: cancer, respiratory diseases (chronic obstructive pulmonary disease — COPD — and asthma); neurological disorders (stroke, traumatic brain injury, chronic pain), neurodegenerative disorders (Parkinson’s disease and Alzheimer’s disease), benign prostate hyperplasia/urinary incontinence and viral infections (with a particular focus on HIV, cytomegalovirus and hepatitis), as well as such promising newly evolving markets as the treatment of erectile dysfunction.

In recent years we have supplemented our internal research activities, especially in the pharmaceuticals field, through research collaborations with third parties. As a result of these collaborations, we have significantly increased the number of new development candidates that we identify each year, while reducing our research costs per candidate. See Item 4, *Information on the Company — Research and Development — Research Cooperations*.

The segment’s largest research and development facilities are located in Wuppertal, Germany; West Haven, Connecticut; Berkeley, California and Kyoto, Japan.

Life cycle management

We have adopted life cycle management measures to optimize our return on investment for current major drugs. Life cycle management influences our planning long before patents expire. These measures have contributed to the maintenance of our leading position in antibacterials (Ciprofloxacin) as well as in the cardiovascular area (Adalat). Adalat is a prime example of successful life cycle management: the drug generated €975 million in sales 16 years after the patent protection for nifedipine, its key component, expired.

New products

In September 2001, we submitted our vardenafil product for the treatment of erectile dysfunction to the U.S. FDA for approval. In December 2001, we filed applications for approval in Japan and the European Union. FDA approval is expected in the second half of 2002.

Additional drug candidates in late Phase II and Phase III of clinical development are Repinotan, Faropenem and a PDE IV inhibitor. The respective indications are:

<u>Product/Brand name</u>	<u>Principal application</u>	<u>Status</u>
Repinotan	Acute ischemic stroke and traumatic brain injury	In phase III
Faropenem	Bacterial infections	In phase III
PDE IV inhibitor	Chronic Obstructive Pulmonary Disease	Phase II complete

Bayer AG licenses Faropenem from Suntory Limited on an exclusive basis outside Japan and on a semi-exclusive basis in Japan. For Repinotan a further efficacy study will be conducted before broadening the Phase III program to a larger patient population is considered. Phase III clinical development of Faropenem is progressing to further determine its efficacy and safety across various types of bacterial infections. The Phase II program for the PDE IV inhibitor in COPD has been completed. Various strategies for subsequent Phase III development are under consideration.

CONSUMER CARE & DIAGNOSTICS

Overview

Our Consumer Care & Diagnostics segment comprises the Consumer Care and Diagnostics business groups.

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
External net sales	4,104	3,888	3,364
Percentage of total sales (continuing operations)	14.6	14.0	14.7
Intersegment sales	2	—	1
Operating result before exceptional items	388	311	173
Percentage of total operating result (continuing operations)	18.5	8.9	5.6

Segment Strategy

We plan to hold all our Health Care businesses (including Consumer Care & Diagnostics, Pharmaceuticals and Animal Health) through a single new wholly-owned subsidiary of Bayer AG. See — *Business*.

Our strategic priorities for the Consumer Care & Diagnostics segment are improving profitability and gaining market share. In the Consumer Care business group in particular, our goal is to achieve cost savings in the medium term by consolidating production. We are also preparing for the divestment of Consumer Care's household insecticide product lines.

Consumer Care

Overview

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

Major Products

Analgesics

The analgesics market comprises pain relief products both in oral form (for example, pills and tablets) and for topical use (for example, creams 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 the prevention of second 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. Bayer now markets Aleve in the United States through a joint venture with its producer, Roche Laboratories. 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 unique product positions, e.g., Maximum Strength Menstrual Formula, Teen Formula and Night Time Formula. We sell Midol products only in the United States and Canada.

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 (e.g., 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. In late 2000, in response to a recommendation from the U.S. Food and Drug Administration to all manufacturers of products containing phenylpropanolamine, we discontinued marketing Alka-Seltzer Plus and similar products containing phenylpropanolamine in all of Consumer Care's markets. We completed our launch of reformulated products with Alka-Seltzer Plus in the United States in 2001 and expect to complete the worldwide relaunch during 2002.

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.

Mycelex[®] is a treatment for vaginal yeast infections. Mycelex was previously available only with a prescription; it became an OTC medication in 1992.

Rid[®] is a topical head lice treatment. 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 (e.g., anti-diarrheal brands extending or re-positioning to cover the antacid segment) and possible future preventative or curative therapies (e.g., products that eradicate or manage the ulcer-causing bacterium *H. pylori*).

Alka-Seltzer[®] was developed in the late 1920s by Miles Laboratories, Inc. and began U.S. national distribution 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.

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 (e.g., 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) and herbals 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 1998, One-A-Day

introduced a line of multivitamin/herbals blends to target specific health concerns (e.g., Energy, Tension, Prostate and Menopause).

Flintstones® are multivitamin dietary supplements containing (depending on type) 10-19 essential nutrients for children ages 2-12. They were introduced nationally in the U.S. 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.

Markets and Distribution

Our Consumer Care business group now 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 business group's sales by region and total for the past three years are as follows:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Europe	467	465	434
North America	894	749	685
Asia/Pacific	222	207	156
Latin America/Africa/Middle East	<u>512</u>	<u>502</u>	<u>408</u>
Total	<u>2,095</u>	<u>1,923</u>	<u>1,683</u>

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Analgesics	775	731	640
Cough/Cold	177	110	150
Dermatologicals	246	225	172
Gastrointestinals	266	239	199
Nutritionals	197	179	163
Other(1)	<u>434</u>	<u>439</u>	<u>359</u>
Total	<u>2,095</u>	<u>1,923</u>	<u>1,683</u>

(1) *Includes Household products expected to be divested.*

Although the business group is not generally subject to seasonality, the tendency of consumers to purchase more OTC medications in the cough/cold area can have an impact on this business in the United States, Canada, Mexico and Argentina, where these products form a significant part of our local OTC product portfolio.

Consumer Care procures many high-volume raw materials internally from other Bayer business groups and companies. Our major externally procured high-volume raw materials are sodium citrate, sodium bicarbonate, citric acid and ascorbic acid. These are readily available commodities 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, aerosol cans and aluminum foil. We diversify our raw materials sources internationally to help balance currency exchange rate risk.

The typical sales and marketing channels of the business group worldwide are supermarket chains and other mass marketers. In Europe, however, pharmacies are the usual distribution channel for OTC products.

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

Research and Development

The Consumer Care business group focuses its research and development activities on developing and implementing products and programs to contribute to business growth, including:

- efficient development of new products to support current brands; and
- aggressive clinical and regulatory strategies to creatively pursue ingredient prescription-to-OTC transitions and technology programs.

The business group’s primary research and development facilities are located in Morristown, New Jersey and Leverkusen and Monheim, Germany.

We currently have four products in late stages of development. Depending on approval by regulatory authorities and completion of internal prelaunch activities, we expect to launch these products during 2002. These products are:

<u>Product/Brand name</u>	<u>Principal application</u>	<u>Status</u>
Aspirin Dry Granules	Pain relief	Registration approved, launch expected in 2002
Aspirin + Pseudoephedrine	Congestion, pain relief	Registration file submitted
Bayer Women’s Aspirin Plus Calcium	Osteoporosis and heart regimen	Launched in 2002
Alka-Seltzer Plus Nose + Throat	Runny nose, sore throat	Launch expected in 2002

Bayer Corporation is involved in a 50 percent joint venture with Hoffmann-LaRoche to market and sell Aleve, Mycelex, Femstat, Vanquish and Midol in the United States. Both partners are actively involved in research and development planning for these products.

Diagnostics

Overview

With approximately 7,000 employees worldwide, Bayer 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 central laboratory, near patient testing, 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.

Major Products

Central Laboratory Testing

The ADVIA® family of products is the centerpiece of our laboratory testing portfolio, which provides a wide range of solutions for the central 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.

In addition to our ADVIA products, we also offer the ACS:180® and Bayer Immuno 1® immunodiagnostic analyzers as well as the Clinitek Atlas® urine chemistry system for high volume urinalysis 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. Our Versant products represent our main focus in the field of nucleic acid diagnostics, or NAD testing. NAD techniques detect nucleic acids such as DNA and RNA to diagnose infections and other diseases.

Near Patient Testing

We offer 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, electrolytes and coagulation.

In the field of urinalysis, we offer the *Multistix*[®] family of reagent strips for visual reading of up to 10 parameters and the *Clinitek*[®] line of instruments for automated readings. We also offer the *DCA 2000+*[®] for use in physicians' offices to complement our diabetes self-testing products. The DCA 2000+ analyzer allows doctors to rapidly assess the effectiveness of diabetic patients' self-monitoring over a period of time.

Self-Testing

Our key self-testing products include the *Glucometer Dex/Esprit*[®] blood glucose meter that incorporates a 10-test cartridge to provide more convenience to patients who test their blood sugar levels several times per day, and our best-selling diagnostics product, the *Glucometer Elite*[®], a versatile blood glucose meter that serves a wide spectrum of patient needs.

Markets and Distribution

Our Diagnostics business group 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.

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Europe	697	700	607
North America	880	868	716
Asia/Pacific	276	307	301
Latin America/Africa/Middle East	156	90	57
Total	<u>2,009</u>	<u>1,965</u>	<u>1,681</u>

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Laboratory testing (excl. NAD)	791	776	674
NAD testing	86	65	63
Near patient testing	407	419	352
Self-testing	722	705	592
Other	3	—	—
Total	<u>2,009</u>	<u>1,965</u>	<u>1,681</u>

We market our laboratory testing and NAD products, as well as most of our near patient testing products, directly to customers, which are primarily laboratories and hospitals. We channel our self-testing products to the consumer market through distributors and large pharmacy and retail chains. In the near patient testing segment, we market urine chemistry strips primarily through distributors.

We manufacture or assemble a significant portion of our own products, relying on a vendor management process to supply both raw materials and sub-assemblies. In addition, we source a number of products from original equipment manufacturer, or OEM, suppliers. Diagnostics sales typically slow down in the third calendar quarter due to traditional vacation time in Europe and North America, but show strong performance in the fourth quarter as customers push to spend budgeted funding before the end of the year.

Our primary competitors in the diagnostics market are:

- *Laboratory testing:* Abbott, Roche, Beckman Coulter, Dade Behring and Johnson & Johnson;
- *NAD testing:* Roche and Abbott;
- *Near patient testing:* Roche and Radiometer; and
- *Self-testing:* Roche, Johnson & Johnson (Lifescan) and Abbott.

Research and Development

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

- In Laboratory Testing, through internal development and in-sourcing of the ADVIA family of systems and in the expansion of high value assays.
- In NAD testing, through menu expansion of assays for infectious disease and cancer testing.
- In Near Patient Testing; through enhancements of our Rapid systems, a new hospital point-of-care platform, and new chemistry strips for urinalysis.
- In Self-Testing, through internal development and in-sourcing of mass market, user-friendly whole blood glucose systems and by focusing research in minimally- and non-invasive technologies.

The business group’s primary research and development facilities are located in the United States: in Medfield and Cambridge, Massachusetts; Tarrytown, New York; Elkhart, Indiana; and Emeryville, California.

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:

<u>Product/Brand name</u>	<u>Principal application</u>	<u>Status</u>
ADVIA IMS® Integrated Modular System	Modular platform, combining immunodiagnostic and clinical chemistry on a single instrument with a broad assay menu	Launch planned for 2003
ADVIA Centaur® and ACS:180® menu extension	Extension of immunoassay menu for disease diagnosis	Launch planned for 10 additional methods in 2002
VERSANT HIV 3.0.	Quantitative detection of HIV	Awaiting FDA approval trials
VERSANT HCV 3.0.	Quantitative detection of hepatitis C	Undergoing FDA clinical trials; approved outside the United States
VERSANT HCV TMA	Qualitative detection of hepatitis C	Undergoing FDA clinical trials; approved outside the United States
RapidLab 800 Enhancement	Blood gas/electrolyte analyzer for laboratory testing	Launch planned for 2003
Multistix PRO	Addition of proprietary microalbumin and creatine reagent pads for improved screening for kidney dysfunction	Released in US in February 2002
Next-generation Glucometer systems	“Less Pain” whole blood glucose system	Launch planned for 2003

CROP PROTECTION

Overview

Our Crop Protection segment develops and markets conventional chemical crop protection products (insecticides, fungicides and herbicides). Using functional genomics, a discipline that analyses the functional effects of differing genetic structures, we also develop new chemical structures for conventional active ingredients, creating new modes of action for enhanced effectiveness against pests, weeds and fungi. The following table shows the segment's performance for the last three years.

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
External net sales	2,708	2,456	2,177
Percentage of total sales (continuing operations)	9.6	8.8	9.5
Intersegment sales	102	97	83
Operating result before exceptional items	453	401	383
Percentage of total operating result (continuing operations)	21.6	11.5	12.4

The following table shows our revenue during the past three years from the product that we regard as material to the revenue of the Crop Protection segment as a whole.

<u>Product</u>	<u>2001</u>		<u>2000</u>		<u>1999</u>	
	<u>Revenue (euros in millions)</u>	<u>Percentage of segment revenue</u>	<u>Revenue (euros in millions)</u>	<u>Percentage of segment revenue</u>	<u>Revenue (euros in millions)</u>	<u>Percentage of segment revenue</u>
Imidacloprid (Confidor, Gaucho, Admire, Provado)*	608	22.5	560	22.8	464	21.3

* Also used in our Animal Health segment's Advantage product.

Segment Strategy

We plan to incorporate our Crop Protection business as a separate wholly-owned subsidiary of Bayer AG, to be named *Bayer CropScience AG*. See — *Business*. Bayer CropScience will combine our current business and the business that we expect to acquire upon completion of the Aventis CropScience acquisition (see below).

We intend to continue expanding our crop protection franchise through ongoing life cycle management. In the Home Garden Market we seek to be a market leader by fully utilizing our existing portfolio and product pipeline, as well as through strategic joint ventures and acquisitions.

Historically, we concentrated our product development activities on research in innovative chemistry. With the consummation of the Aventis CropScience acquisition, we will complement our historical expertise with an additional agrobiological emphasis.

In October 2001, we agreed to acquire Aventis CropScience from its current owners, Aventis and Schering. In April 2002, the European Commission gave its approval for the transaction and, on May 30, 2002, the United States Federal Trade Commission gave its preliminary approval of the transaction under the terms of a consent order. Both approvals are subject to the condition that we divest or out-license a number of products. These conditions require us, among other things, to: divest Aventis CropScience's Fipronil business worldwide, with a right to obtain a co-exclusive license for non-agricultural uses worldwide, except for Europe; divest five Aventis fungicides in Europe and grant a world-wide, non-exclusive license for the Aventis seed treatment products; divest the sugar beet herbicide Metamitron in Europe; divest the broad-spectrum pyrethroid insecticides Cyfluthrin (*Baythroid*®) and beta-cyfluthrin (*Bulldock*®); divest the sugar beet herbicide (*Goltix*®); divest the insecticide Acetamiprid in Europe and North America; divest the wheat herbicide Everest worldwide; and divest Aventis CropScience's cotton defoliant business Folex in the U.S. The total sales value of all divestments is about

€650 to 700 million of which about 25 percent comes from the former Bayer Crop Protection business and 75 percent from the former Aventis CropScience. The acquisition of Aventis CropScience was closed on June 3, 2002, and we do not expect to make additional major acquisitions in our Crop Protection segment in the near term.

Major Products

Insecticides

Imidacloprid is an active ingredient in a new class of chemicals (chloronicotinyls syn. neonicotinoids). It helps control many 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. We use imidacloprid in our *Gaucho*[®], *Confidor*[®], *Admire*[®] and *Provado*[®] brand products. We launched imidacloprid in 1991 and now market it in more than 120 countries for use on over 140 crops.

Cyfluthrin (*Baythroid*[®]) and beta-cyfluthrin (*Bulldock*[®]) are broad-spectrum pyrethroid insecticides. Although used primarily against biting insects, they are also effective against various sucking pests. Cyfluthrin and beta-cyfluthrin are registered for use on cotton as well as a broad range of other crops, including potatoes, soybeans, cereals, sugarcane and sunflowers. Both products are being divested in Europe under the commitments given to the European Commission.

Fungicides

Folicur[®] and *Raxil*[®] contain tebuconazole, a fungicide compound that prevents the targeted fungus from synthesizing vital components of its cell membrane. Tebuconazole can be used as spray (*Folicur* and related product brands), as a seed treatment (*Raxil*) 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 raising certain crops, particularly oilseed rape.

Flint[®] contains trifloxystrobin, a strobilurin-type fungicide used primarily to protect cereals, and a variety of other crops. Strobilurins are a class of broad-spectrum fungicide developed from a chemical originally isolated from the mushroom *Strobilurus tenacellus*. Trifloxystrobin represents an important new addition to Bayer's fungicide portfolio, supplementing our triazole-based products and extending our capabilities in the specialty cereal fungicide sector.

Herbicides

Sencor[®] is our major brand of metribuzin herbicide. Introduced in 1972, metribuzin is used against broadleaf weeds and grasses. The product can be used on potatoes, tomatoes and more than 36 different crops. Despite metribuzin's maturity, we have extended its lifecycle by using the product as a mix partner with other key herbicides.

Flufenacet[®], introduced in 1998, is effective in low dosages to protect numerous crops, including corn, soybeans, potatoes, cereals and rice, against grass weeds. *Axiom*[®], *Domain*[®] and *Epic*[®], our major flufenacet brands in the United States, are innovative solutions for a changing market environment. For example, *Domain*, a flufenacet/metribuzin mix, is a specific herbicide developed for the protection of "Roundup Ready" soybeans, which have been genetically modified to resist certain herbicides.

Goltix[®], launched in 1978, is a specialty herbicide used primarily on sugar beets to control a range of broadleaf and some grass weeds. *Goltix* is being divested in Europe under the commitments given to the European Commission.

Garden/Professional Care (GPC)

Premise[®] is an imidacloprid-based termiticide launched in 1996 in the United States. *Premise* provides excellent termite control with low toxicity, has favorable soil characteristics and is odorless. Our goal is to establish *Premise* as the leading liquid termiticide worldwide.

We launched *Merit*[®], an imidacloprid-based compound for the turf and ornamental market, in 1994 in the United States. *Merit* is a low-toxicity insecticide of the new chloronicotinyl class. It is broad-spectrum, systemic and effective in low doses in controlling soil-inhabiting and crown-inhabiting insects on turf grass, as well as sucking and biting insects on ornamental plants.

Markets and Distribution

Europe has traditionally been Bayer's strongest crop protection market, accounting for 38 percent of our sales in 2001. We are seeking to achieve sales balance by increasing our market significance in other, non-European markets. For example, in 2001 the NAFTA region accounted for 25 percent of our Crop Protection business, up from 19 percent as recently as 1998.

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Europe	1,022	886	881
North America	614	557	442
Asia/Pacific	527	517	399
Latin America/Africa/Middle East	545	496	455
Total	<u>2,708</u>	<u>2,456</u>	<u>2,177</u>

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Insecticides	1,059	1,026	929
Fungicides	821	722	638
Herbicides	538	451	416
GPC	290	257	194
Total	<u>2,708</u>	<u>2,456</u>	<u>2,177</u>

Because nearly 80 percent of Bayer's crop protection business is located in the northern hemisphere, our business is affected by the seasonality of the various crop cycles.

We obtain the bulk of our raw materials from within the Bayer Group. We also enter into minor long-term contracts with non-Bayer companies.

We typically market our Crop Protection products through a one- to two-step marketing distribution system. Under this system, we sell to wholesalers, who in turn sell to retailers, as well as to large-scale retailers. The retailers supply end users with our products as well as with advice on their use. We believe that our new e-commerce platform, launched in the United States in late 2000, will fit well into this marketing strategy, helping us to improve service while satisfying customer demand.

Our main competitors in the insecticide, fungicide and herbicide businesses are Syngenta, Monsanto, BASF, Dow AgroSciences and DuPont. Scotts is our primary competitor in the home garden business while Syngenta and Dow AgroSciences are our main competitors in professional garden care products.

Research and Development

The Crop Protection segment focuses its research and development activities on developing new active ingredients for insecticides, fungicides and herbicides. We also seek to develop new formulations for existing active ingredients, expanding their applicability to additional crops and countries and thereby augmenting their sales potential.

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

During 2001, we began the launch process of four new active ingredients. We expect to launch two additional active ingredients in 2002. These products are:

<u>Product/ Brand name</u>	<u>Application</u>	<u>Status</u>
Iprovalicarb	Fungicide	Launched in 2001
Thiacloprid	Insecticide	Launched in 2001
Fentrazamide	Herbicide	Launched in 2001
Flucarbazone-Sodium	Herbicide	Launched in 2001
Propoxycarbazone-Sodium (proposed)	Herbicide	Launch expected in 2002
Methoxyfenozide	Insecticide	Launch expected in 2002

ANIMAL HEALTH

Overview

Our Animal Health segment develops and markets such animal health products as veterinary medicines, environmental health products and nutritional products for the health care of both companion animals and commercial livestock/poultry. In addition, the segment develops products for insect and rodent control. The following table shows the segment's performance for the last three years.

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
External net sales	988	999	917
Percentage of total sales (continuing operations)	3.5	3.6	4.0
Intersegment sales	5	6	6
Operating result before exceptional items	172	157	137
Percentage of total operating result (continuing operations)	8.2	4.5	4.5

Segment Strategy

We plan to hold all our Health Care businesses (including Animal Health, Pharmaceuticals and Consumer Care & Diagnostics) through a single new wholly-owned subsidiary of Bayer AG. We expect that, during 2002, our new Bayer CropScience subsidiary will take responsibility for distributing the environmental health products that are currently part of Animal Health's portfolio. See — *Business*.

Animal Health plans to cooperate closely with the Pharmaceuticals segment in research and development efforts in order to bring to the market new active ingredients and products to combat disease in animals.

Major Products

Parasiticides

Advantage[®] is a flea control product in easy-to-use, spot-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.

Biologicals

The *Bayovac*[®] vaccine family comprises two 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. Because animals vaccinated using traditional products cannot be distinguished from animals exposed to the natural disease (and thus potential carriers), many countries bar them from import.

Environmental health products

Our family of Cyfluthrin products, which comprises several distinct brands such as *Blattanex*[®] and *Tempo*[®], targets various flying insects.

Markets and Distribution

The Animal Health business covers worldwide markets, including emerging markets such as China, Vietnam and others in South-East Asia. We organize the activities of the segment along the lines of its market activities, into livestock, companion animal and environmental health.

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Europe	278	267	268
North America	362	356	329
Asia/Pacific	163	184	157
Latin America/Africa/Middle East	<u>185</u>	<u>192</u>	<u>163</u>
Total	<u>988</u>	<u>999</u>	<u>917</u>

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Parasiticides	455	443	390
Antimicrobials	208	191	167
Biologicals	45	81	95
Environmental health products	130	125	99
Nutritionals	69	78	68
Others	<u>81</u>	<u>81</u>	<u>98</u>
Total	<u>988</u>	<u>999</u>	<u>917</u>

On a worldwide basis, the activities of the Animal Health segment are not subject to any significant seasonal effects. Other business entities belonging to the Bayer Group are the primary suppliers of materials for Animal Health.

Depending on local legislation, Animal Health products may be available to end users on a prescription or non-prescription basis. End users purchase prescription products from veterinarians or pharmacies. Non-prescription products are available through retailers, cooperatives or directly to integrators in the livestock segment; to pet shops and other specialized channels in the companion animal market; and on the mass markets. We often use third-party distributors in these markets.

Our main competitors in the animal health business are Merial, Pfizer Animal Health and Intervet.

Research and Development

The Animal Health segment focuses its research and development activities on antimicrobials, parasiticides and pain and cancer remedies. A particular goal of our research and development efforts is to provide the segment with 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 see our greatest current challenge in the highly competitive but attractive field of parasiticides, where we are developing various treatments and treatment combinations for a variety of indications.

We currently have four products or product families in late stages of development. Subject to regulatory approval, we expect to launch these products by 2002-2003. These products are:

<u>Product/Brand name</u>	<u>Indication</u>	<u>Status</u>
Baycox Piglet	Coccidiosis control in swine	In registration
Pyrethroid spray	Tick control in dogs	Phase III
Endoparasiticide and ectoparasiticide combinations	Control of fleas, heartworm and roundworm in cats and dogs	Phase III
Cancer remedy	Cancer therapy in dogs	Phase III

PLASTICS & RUBBER

Overview

Our Plastics & Rubber segment comprises the business groups Plastics and Rubber. The following table shows the segment's performance for the last three years.

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
External net sales	5,581	5,816	4,627
Percentage of total sales (continuing operations)	19.9	20.9	20.3
Intersegment sales	116	122	114
Operating result before exceptional items	288	560	443
Percentage of total operating result (continuing operations)	13.7	16.1	14.4

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

Segment Strategy

We plan to hold our Plastics & Rubber and Polyurethanes, Coatings & Colorants segments through a single new wholly-owned subsidiary of Bayer AG that will be responsible for all Bayer's Polymers businesses. See — Business.

Our goal is to continue expanding our global leadership 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 sifting out any weaknesses in our existing product portfolio, implementing efficient cost structures, eliminating capacity constraints and further exploiting our regional growth potential.

Plastics

Overview

With its broad product portfolio, our Plastics business group is one of the leading global suppliers and manufacturers of engineering thermoplastics. 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

Amorphic thermoplastics

Polycarbonates

Polycarbonates are plastics that are highly stable across a wide temperature range. Polycarbonates almost completely dominate the field of optical data storage media, such as recordable CDs and DVDs, and are widely used throughout the electrical/electronics segments in general. The construction industry is also a major user of polycarbonates. *Makrolon*[®] is our leading polycarbonate product. Its key characteristics include high transparency, heat resistance and toughness. It can be both sterilized and recycled. Our other polycarbonates include the *APEC*[®] range.

Styrenics

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. *Novodur*[®], an acrylonitrile/butadiene/styrene copolymers, is our leading styrenic. Other styrenics include *Lustran SAN*[®], *Bayblend*[®], *Triax*[®] and *Centrex*[®].

Fabricated Products

We also produce plastic films and sheeting with a broad range of characteristics for a wide variety of applications. These materials consist of polycarbonate, polycarbonate blends and mixtures of polycarbonates with other engineering thermoplastics. We market these materials under trade names as *Makrofol*[®], *Bayfol*[®], and *Solartuff*[®].

Semi-crystalline polymers

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 ABS systems. *Durethan*[®] is our range of engineering thermoplastics based on PA 6, PA 66 and their copolyamides. The products in our *Pocan*[®] range are semicrystalline thermoplastic polyesters that show high resistance to chemicals, heat distortion and stress cracking.

Thermoplastic polyurethanes

Thermoplastic polyurethanes, or TPUs, belong to the high-performance thermoplastic elastomers family. A key TPU property is the high abrasion- and wear-resistance of TPU articles. TPU's abrasion- and wear-resistance properties are substantially superior to those of abrasion-resistant rubber compounds. Its 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.

Markets and Distribution

We sell the products of our Plastics business group to some 6,500 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 group's external sales, by region and total, for the past three years are as follows:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Europe	1,572	1,574	1,352
North America	846	994	768
Asia/Pacific	735	730	495
Latin America/Africa/Middle East	<u>221</u>	<u>222</u>	<u>155</u>
Total	<u>3,374</u>	<u>3,520</u>	<u>2,770</u>

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Amorphous polymers (polycarbonates, styrenics and structural fabricates)	2,767	2,918	2,247
Semi-crystalline polymers (polyamides, polyesters and thermoplastic polyurethanes)	<u>607</u>	<u>602</u>	<u>523</u>
Total	<u>3,374</u>	<u>3,520</u>	<u>2,770</u>

The market for engineering thermoplastics is characterized by constant pressure on margins and growing price competition due to globalization, consolidation and increasing customer purchasing power. Outside the polycarbonates market, the primary driver of competition is price. Our major customers also expect global presence, 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, overcapacity remains a problem for manufacturers worldwide. Although several producers have cancelled or postponed expansion plans, capacity continues to increase. We expect that the industry will continue to consolidate and that new, low-cost technologies will replace small, increasingly obsolete facilities.

Bayer does not produce basic petrochemicals. The principal raw materials of our Plastics business group 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, obtain a portion of the chlorine for our polycarbonates from within the Bayer Group. We produce Bisphenol-A (another key polycarbonate component) 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, listing 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 are coming to rely increasingly on e-commerce. For example, together with such other leading thermoplastics suppliers as BASF, Dow, DuPont and Celanese/Ticona, Bayer created omnexus, a neutral market place offering products and services across the full spectrum of technical thermoplastics business, from injection molding to extrusion.

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.

Research and Development

The Plastics business group focuses its research and development activities on process development in polycarbonates, styrenics and semi-crystalline thermoplastics. We are introducing a new poly carbonate manufacturing process to mass production, standardizing worldwide processes for the manufacture of emulsion ABS, and 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.

This business group's primary research and development facilities are located in Krefeld and Dormagen, Germany; Pittsburgh, Pennsylvania; Springfield, Massachusetts; and Moxi, India.

We currently have seven products in late stages of development. We expect to launch these products during 2002. These products are:

<u>Product/Brand name</u>	<u>Application</u>	<u>Status</u>
Surface-modified Makrolon	Automotive, construction	Start commercialization
Melt polycarbonate	Optical/ophthalmic lenses	Start commercialization
Bayblend FR 3000 series	Business machines/information technology	Start commercialization
Durethan with structural Viscosity . . .	Automotive	Start commercialization
Reinforced Pocan blends	Automotive exterior parts	Start commercialization
Structural hybrid components	Automotive	Start commercialization
Light-stable Desmopan	Instrument panels	Start commercialization

Rubber

Overview

As a leading supplier of raw materials, our Rubber business group is 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 from our subsidiary Rhein Chemie and latices from PolymerLatex, a joint venture with Degussa AG. We are currently contemplating divesting Rhein Chemie as well as our interest in PolymerLatex.

Major Products

Solid Rubber

We produce a wide range of synthetic rubber products. Our customers may process our rubber materials into end products, or blend them with other synthetic rubbers or natural rubber to form additional compounds. Our products offer customers an array of varying characteristics, including workability, hardness, flexibility and wear, heat and chemical resistance, to suit their specific needs. The tire industry is a major user of our rubber products. Our rubber products also serve a wide variety of other applications, from hoses, cable and wire sheathing through footwear soles to 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 through heat, oxidation and chemicals, and to alter the consistency and properties of rubber products.

PolymerLatex and Rhein Chemie

PolymerLatex produces an extensive range of high-grade polymer dispersions for a wide variety of applications. Our subsidiary Rhein Chemie produces a wide variety of substances used in rubber manufacture and processing. We no longer regard PolymerLatex and Rhein Chemie as part of our core Rubber business.

Markets and Distribution

The main markets for the Rubber business group are Europe and North America. The tire and automotive industries generate about 60 percent of the business group's revenue, both from new car production and replacement tires.

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Europe	1,060	1,033	920
North America	720	762	559
Asia/Pacific	307	367	275
Latin America/Africa/Middle East	<u>120</u>	<u>134</u>	<u>103</u>
Total	<u>2,207</u>	<u>2,296</u>	<u>1,857</u>

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Solid Rubber	1,420	1,468	1,168
Rubber Chemicals	288	314	280
PolymerLatex	190	184	156
Rhein Chemie	293	318	230
Other	<u>16</u>	<u>12</u>	<u>23</u>
Total	<u>2,207</u>	<u>2,296</u>	<u>1,857</u>

Our Rubber business group is not subject to significant seasonality.

In procuring many of our chemical raw materials, we benefit from integration with the other companies of the Bayer Group.

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

- *Solid Rubber*: Goodyear, Exxon, Enichem, DOW and Nippon Zeon; and
- *Rubber Chemicals*: Flexsys and Crompton.

Research and Development

The Rubber business group focuses its research and development activities on creating new products, improving processing technology and improving testing methods. The business group's primary research and development facilities are located in Leverkusen and Dormagen, Germany, and Sarnia, Ontario.

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 tire field, we concentrate on improvements in rolling resistance, wet grip and wear. In the non-tire automotive industry, the primary goal is developing rubber parts that have longer durability at higher operating temperatures.

We currently have five products in late stages of development. We expect to launch these products during 2002. These products are:

<u>Product/ Brand name</u>	<u>Application</u>	<u>Status</u>
Therban HT	Heat stabilizing system	Field test through end users
Therban XT	Improved hot abrasion and Adhesion	Sampling to customers and initial sales
Therban LT.....	Improved low temperature performance for seals and belts	Field test through end users and initial sales
Vulcuren	Natural Rubber/Truck tire	Trial product, sampling to customers
Modified S-SBR.....	Tire tread	First plant trials

POLYURETHANES, COATINGS & COLORANTS

Overview

Our Polyurethanes, Coatings & Colorants segment comprises the Polyurethanes and the Coatings and Colorants business groups. The following table shows the segment's performance for the last three years.

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	<u>(euros in millions)</u>		
External net sales	5,207	5,076	3,904
Percentage of total sales (continuing operations).....	18.6	18.3	17.1
Intersegment sales	138	462	482
Operating result before exceptional items	146	518	657
Percentage of total operating result (continuing operations)	6.9	14.9	21.4

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

Segment Strategy

We plan to hold Polyurethanes, Coatings & Colorants and the Plastics & Rubber segment through a single new wholly-owned subsidiary of Bayer AG that will be responsible for all Bayer's Polymers businesses. See — *Business*.

Our goal is to continue expanding our global position in high-value added polymers. In 2000 we balanced our existing portfolio by acquiring Lyondell's polyol business. We now plan to focus on capacity expansion in Asia, where we see opportunities for above-average growth.

Polyurethanes

Overview

Our Polyurethanes business group focuses on the development, production and marketing of raw materials, 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 raw materials 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, which 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 raw materials include furniture, mattresses, automotive components, sport and leisure equipment and construction.

Markets and Distribution

Europe and the NAFTA nations remain the primary markets for our Polyurethanes business group, although Asia is growing in importance.

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Europe	1,340	1,218	984
North America	1,237	1,175	781
Asia/Pacific	416	394	198
Latin America/Africa/Middle East	<u>200</u>	<u>343</u>	<u>212</u>
Total	<u>3,193</u>	<u>3,130</u>	<u>2,175</u>

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
TDI	575	583	446
MDI	1,177	980	886
Polyethers	953	1,226	529
Others	<u>488</u>	<u>341</u>	<u>314</u>
Total	<u>3,193</u>	<u>3,130</u>	<u>2,175</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 business group's 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 of our are commodity petrochemical products. We typically purchase these on the open market, 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 Polyurethanes business group sells its 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.

Our main competitors are DOW, BASF and Huntsman.

Research and Development

The Polyurethanes business group focuses its 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;
- new applications for polyurethanes and polyurethane raw materials; and
- reducing costs and improving quality in production processes.

The business group's primary research and technical development facilities are located in Dormagen and Leverkusen, Germany, Pittsburgh, Pennsylvania, and South Charleston, West Virginia.

The main field of innovation in the polyurethane field is currently the development of new or improved polyether polyol types and blends as well as new processes. The business group concentrates its research and development efforts with respect to aromatic isocyanates on improving existing products and technologies for their manufacture.

We currently have various polyether polyol products in late stages of development. We expect to launch these products during 2002.

Coatings and Colorants

Overview

Our Coatings and Colorants business group develops and markets a wide variety of products that serve as raw materials for lacquers, coatings, sealants and adhesives and colorants for plastics and building materials.

Major Products

Resins and Hardeners

Lacquers are formed through the combination of a resin with a hardener. We offer a variety of resins (e.g., *Desmophen*[®] and *Bayhydrol*[®]) and hardeners (e.g., *Desmodur L*[®], *Desmodur N*[®], *Bayhydur*[®], and *Creelan*[®]). This variety enables us to provide custom-tailored solutions for a number of different applications.

Special raw materials

Our special raw material unit produces such specialty products as *Impranil*[®]/*Imprafix*[®], our polyurethane coating systems for textiles.

Adhesive raw materials

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

Colorants

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

Markets and Distribution

Our Coatings and Colorants business group is a major producer of raw materials for lacquers and adhesives as well as of organic and inorganic dyes and pigments. The primary ultimate end-users of our products are the automotive, furniture and plastics industries; other users include the textile, shoe, paint and building industries.

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Europe	961	934	886
North America	555	523	433
Asia/Pacific	336	311	257
Latin America/Africa/Middle East	162	178	153
Total	<u>2,014</u>	<u>1,946</u>	<u>1,729</u>

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Resins	253	211	185
Aliphatic isocyanates	553	543	469
Aromatic isocyanates	230	223	199
Special raw materials	186	161	141
Adhesive raw materials	242	240	212
Colorants	<u>550</u>	<u>568</u>	<u>523</u>
Total	<u>2,014</u>	<u>1,946</u>	<u>1,729</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, 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 are not significantly dependent on any single raw material or supplier of raw materials.

We coordinate and carry out our sales and marketing from our head office in Leverkusen, Germany, as well as through our various national subsidiaries. In addition, e-commerce is becoming increasingly important in our marketing activities. Our key account managers handle our globally active major customers directly.

We regard the following companies as the chief competitors of our Coatings and Colorants business group:

- *Lacquer hardeners:* Solutia;
- *Aliphatic isocyanates:* Rhodia;
- *Organic pigments:* Ciba and Clariant; and
- *Inorganic pigments:* Rockwood, formerly known as Laporte.

Research and Development

The Coatings and Colorants business group focuses its research and development activities on developing new technologies for the production of our lacquer resins as well as our aliphatic and aromatic isocyanates that are environmentally friendly and sparing in their use of natural resources. We are also exploring ways of reducing

the amount of solvent needed for our aliphatic isocyanates and optimizing the production of our iron-oxide based inorganic pigments.

The business group's primary research and development facilities are located in Leverkusen, Dormagen and Uerdingen, Germany and in Bushy Park, South Carolina and Pittsburgh, Pennsylvania.

CHEMICALS

Overview

The Chemicals segment comprises the Basic and Fine Chemicals, Specialty Products, H.C. Starck and Wolff Walsrode business groups.

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
External net sales	3,749	3,410	2,855
Percentage of total sales (continuing operations)	13.4	12.3	12.5
Intersegment sales	456	466	478
Operating result before exceptional items	271	370	360
Percentage of total operating result (continuing operations)	12.9	10.6	11.7

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 the further improvement of our margins. We aim to achieve this goal by streamlining our portfolio and by expanding our specialties, including by means of selected acquisitions. Recent examples are H.C. Starck's acquisition of the U.S.-based CSM Holding, Inc. as well as our acquisition of the sizing and strength paper chemicals business of Cytec Industries Inc., with which we expect to give our Specialty Products business group access to the U.S. market for process chemicals, thereby strengthening its global position in paper sizing agents. In keeping with our strategy of focusing on our core activities in 2001, we sold our non-core H-acid dyestuff intermediates business as well as our intellectual property in solar-grade silicon production. In December 2001, we announced plans to divest the Haarmann & Reimer business group, as we no longer consider it to be part of the Chemical's segments core activities.

Basic and Fine Chemicals

Overview

Our Basic and Fine Chemicals business group focuses on the development, manufacture and marketing of a wide range of basic chemicals as well as a growing range of high specification, customized fine chemicals for use in advanced industrial sectors such as life sciences.

"Basic" chemicals are produced in bulk quantities using few synthesis steps. Their raw materials are basic organic and inorganic substances (e.g. benzene or sodium chloride). We produce most of our basic chemicals in dedicated, continuous-process manufacturing plants using advanced technologies to optimize production and quality.

"Fine" chemicals are high added-value, multi-step synthesis products made to exact specifications by sophisticated and complex chemical synthesis processes. Fine 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 partnership as well as custom-tailored research and manufacturing; typical examples are life science intermediates for the pharmaceutical and agrochemical industries.

The product range of the Basic and Fine Chemicals business group contains approximately 2,700 individual products and articles for thousands of applications.

Markets and Distribution

The business group's principal markets are industrial intermediates, custom manufacturing and fine chemicals for the photographic, electronics and life science industries.

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Europe	666	622	560
North America	167	194	184
Asia/Pacific	122	129	86
Latin America/Africa/Middle East	70	61	56
Total	<u>1,025</u>	<u>1,006</u>	<u>886</u>

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Fine chemicals	282	343	289
Basic chemicals	518	509	460
Inorganic basic chemicals	<u>225</u>	<u>154</u>	<u>137</u>
Total	<u>1,025</u>	<u>1,006</u>	<u>886</u>

Our Basic and Fine Chemicals business group is not seasonal. Basic chemicals are more influenced by fluctuations in raw material prices (e.g. toluene, benzene) than are fine chemicals, primarily because our basic chemical operations make greater use of petrochemicals, whose prices are driven by changing oil prices.

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

The business group's chief competitors in the various industrial intermediates segments are Solutia, Clariant, BASF and Tessenderlo. In various fine chemicals segments, we compete against Lonza, DSM, Clariant and Rhodia.

Research and Development

The Basic and Fine Chemicals business group's focus on research and development is twofold. In the field of bulk chemicals, our priority is the improvement of the manufacturing process of industrial intermediates. In life science intermediates and biodegradable polymers, we concentrate both on improving the manufacturing process and on developing new technologies and applications.

The business group's primarily research and development facilities are located in Leverkusen, Germany.

Specialty Products

Overview

In contrast to other chemicals business lines, our Specialty Products typically display a high degree of "custom tailoring" for the specific needs of their users. Specialty Products serves a broad range of industries, including textile and paper manufacture; leather, plastic and wood products; agricultural products; pharmaceuticals; and water treatment.

Specialty Products offers its customers thousands of compounds designed to fulfil their specific needs. We have a variety of broad product families, each of which contains several product lines. Each product line represents numerous individual compounds that are related as to general chemical composition and area of function.

Markets and Distribution

The specialty chemicals market is highly segmented. Market participants range from small local suppliers to multinational concerns. In recent years this market has been consolidating, with heavy mergers and acquisition activity. We believe that this business group's products are, because of their specialized nature, less subject to commoditization than other chemical products, and that Specialty Products' profitability may be more sustainable than that of the broader chemicals market.

Given the individualized nature of its products, the business group's marketing activities focus on individual customer requirements. Specialty Products has a worldwide network of local subsidiaries and production sites. This network uses an internal sales force. Technicians back up our marketing efforts by assisting customers in creating tailor-made solutions and providing them with commercial and technical assistance.

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Europe	644	607	565
North America	379	239	204
Asia/Pacific	244	257	210
Latin America/Africa/Middle East	<u>202</u>	<u>209</u>	<u>170</u>
Total	<u>1,469</u>	<u>1,312</u>	<u>1,149</u>

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Textile, paper and leather chemicals	1,040	891	782
Polymer additives, material protection, ion exchange resins and water treatment chemicals	<u>429</u>	<u>421</u>	<u>367</u>
Total	<u>1,469</u>	<u>1,312</u>	<u>1,149</u>

The market for specialty chemicals is not generally subject to seasonality. Fluctuations in the business cycle and rising oil prices affect this market to a lesser degree than they affect the market for basic chemicals.

Specialty Products acquires a major part of the raw materials it uses internally, from other companies 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. The Specialty Products business has not historically been affected by shortages; rising oil prices have thus far had a moderate impact on production cost.

We regard Avecia, BASF, Ciba Specialty Chemicals, Clariant, Rhodia and Rohm & Haas as our principal competitors across a number of the Specialty Products business group's activities.

Research and Development

The Specialty Products business group focuses its research and development activities on:

- new products for the textile industry;
- high-performance data storage media for information technology;
- improved ion exchange resins for waste treatment and metal recovery;

- new surface sizing agents for the paper industry;
- new biocides for material protection; and
- environmentally friendly formulations of products for the paper and leather industries.

The business group's primary research and development facilities are located in Leverkusen, Germany; Ede, the Netherlands; and Woodbridge, Connecticut.

We currently have approximately 160 products in late stages of development. We expect to launch these products during 2002 and 2003.

H.C. Starck

Overview

Our subsidiary H.C. Starck GmbH develops, produces and markets metallic and ceramic powders and mill products for various markets and applications. In a major expansion in November 2000, H.C. Starck acquired CSM Holding, Inc., bringing the group seven new production sites, primarily for molybdenum and tungsten products. In November 2001, we also created H.C. Starck Ceramics GmbH & Co. KG from the merger of our existing industrial ceramics subsidiary with TeCe Technical Ceramics of Selb, Germany, which we had acquired in January 2001. Beginning in January 2002, we are concentrating all of Bayer's electronic chemicals business in the H.C. Starck business group.

Major Products

Metallic products

We produce a wide range of products from such metals as tungsten, molybdenum, tantalum and niobium and their various compounds for industrial customers. Our customers use these products in making machine tools, electrical components, and a variety of specialized products, from medical devices through lamp filaments to optical lenses.

Battery intermediates

Ampergy[®] is our trade name for our nickel hydroxide and cobalt suboxide battery intermediates. Our customers in the electrochemical industry use Ampergy in making rechargeable batteries for modern communications devices as well as in large-scale industrial batteries.

Metallic chemical products

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

Amperkat[®] is the trade name for our line of chemical catalysts. The chemical industry uses these products in a variety of applications, such as plastics production, hydration processes and the desulphurization of exhaust gases in coal-burning power stations.

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 are primarily from the machine tool and aeronautics industries.

Ceramic products

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 component intermediates for use in advanced ceramics.

Markets and Distribution

World tungsten demand is growing. The hard metals market in the United States and Japan, however, is declining. Although the market for battery intermediates continues to grow, extreme from nickel hydroxide alternatives is currently causing a dramatic price decrease. However, we do not believe this phenomenon will affect the growth of our newly developed nickel dihydroxide and lithium nickelate intermediates.

Beginning in 1999, the mobile communications, computer, entertainment and automotive industries fuelled a rapid increase in demand for passive electronic components (e.g., capacitors and surface filters) made from tantalum, niobium and ceramic. In response, manufacturers increased capacity during 2000. This increase caused a corresponding increase in demand for our metallic powders, especially tantalum, during the first half of 2001. More recently, however, the worldwide electronics market has weakened, leading to decreases in sales of these metals. We cannot predict when this market may recover.

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

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Europe	325	280	193
North America	234	143	109
Asia/Pacific	208	196	106
Latin America/Africa/Middle East	<u>44</u>	<u>46</u>	<u>27</u>
Total	<u>811</u>	<u>665</u>	<u>435</u>

China is the primary source for the raw materials for tungsten products. In the past, China has 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. Our acquisition of CSM Holding substantially strengthened our procurement channels for molybdenum.

H.C. Starck has its own internal 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 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. We expect to open a new liaison office in Italy in early 2002. 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:* Bergla, Cabot Group (including its associated joint ventures), Molymet, OMG, Osram Sylvania, Union Minière;
- *Battery intermediates:* OMG, Tanaka;
- *Chemical catalysts:* Activated Metals, Degussa, Grace;
- *Ceramic products:* ACC, Denky Kagaku, SB Boron; and
- *Thermal spray powders:* Praxair, Sulzer Metco, Woka.

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 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 secondary batteries, fuel cells and other energy storage and power generation applications.

The business group's primary research and development facilities are located in Germany, the United States (tantalum products) and Japan (tantalum products and battery intermediates).

We currently have three products in late stages of development, and expect to begin their launch during 2002. These products are:

<u>Product/Brand name</u>	<u>Application</u>
Niobium powder	Capacitors
High-capacity tantalum powder	Capacitors
Alternative (ferrous, nickel, cobalt) binders	Diamond tools and hard metals

Wolff Walsrode

Overview

We operate the Wolff Walsrode business group primarily through Wolff Walsrode AG, our wholly-owned subsidiary, assisted by other companies of the Bayer Group. The business group develops and markets cellulose derivatives, primarily for use in building materials, industrial coatings and inks, pharmaceuticals, food and health care products, as well as various plastic films.

To prepare for divestments of a significant portion of Wolff's films businesses, we have organized the business group into five new operating subsidiaries. These subsidiaries are owned by Wolff Walsrode AG, which now serves as a holding company. In 2001, we sold Covexx, which had been responsible for our former Combithen and Combitherm food packaging film lines. In January 2002, Wolff's former Epurex thermoplastic polyurethane films business was integrated into Bayer's Plastics business group.

Major Products

Cellulose Derivatives

Walocel M[®] is an additive that regulates moisture 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.

Plastic films

Walothén[®] is a class of films for food and cigarette packaging and paper lamination.

Walopur[®] is a class of films with high elasticity, mechanical strength and resistance against chemicals. Our customers use Walopur in automobile engines and for many other technical applications.

Walotex[®] is a membrane film for textile lamination. It permits water vapor transmission through the textile, making the textile "breathable".

Walsroder[®] is a casing for the production of a wide range of sausages.

Markets and Distribution

Wolff competes in the building materials, industrial coatings, flexible packaging ink and life sciences markets as well as in specialized industrial fields. We market our plastic films primarily for use in food packaging, including sausage casings, and for technical applications in the automotive and textile industries.

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Europe	301	295	293
North America	79	76	55
Asia/Pacific	20	19	14
Latin America/Africa/Middle East	44	37	23
Total	<u>444</u>	<u>427</u>	<u>385</u>

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

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(euros in millions)		
Cellulose derivatives	210	195	166
Plastic films	221	229	216
Other	13	3	3
Total	<u>444</u>	<u>427</u>	<u>385</u>

Wolff generally conducts direct sales operations in Germany and the United States for its cellulose products and in Germany for its plastic films. Outside these areas, we ordinarily sell through Bayer's worldwide sales organization, although we do sometimes use independent distributors.

The main raw material for our cellulose derivatives is chemical-grade cellulose derived from wood pulp. Because pulp producers have been expanding capacity in recent years, we have not had any significant problems with availability. The raw materials for our plastic films include a variety of polymers. These polymers are readily available, but can be subject to price volatility caused by fluctuation in the price of oil.

Because many of its customers are producers of building materials, our cellulose derivatives business has traditionally been subject to seasonality tied to the seasonality of the building trade. Our sales outside Europe, however, have tended increasingly to balance this effect. Although our plastic films business is not generally seasonal, our sales of Walsroder sausage casings are strongest in autumn.

Our chief competitors in the cellulose derivatives business are Hercules (Aqualon), Dow, Clariant, Bergerac NC/SNPE, NEC/ICI, TNC, Nitroquímica Brasileira, Noviant and Akzo. In the plastic films business, our main competitors are Exxon Mobil (BOPP films), Alusuisse (converted films), J.P. Stevens (TPU films) and Kalle Nalo (sausage casings).

Research and Development

In addition to conducting research and development for its core businesses, Wolff Walsrode is the Bayer Group's competence center for cellulose chemistry. Cellulose is a natural product made from renewable materials. The research and development challenge is to convert this substance into Wolff's derivative specialty products while continually improving production processes. In response, Wolff has created a new polysaccharide pilot plant facility to serve as an interface between the laboratory, manufacturing and the market.

Wolff's primary research and development facilities are in Bomlitz, Germany, near its traditional home base of Walsrode. In addition, we carry out a portion of the application development work for our films business in

South Deerfield, Massachusetts. We currently have eight products in late stages of development. We expect to launch these products during 2002. These products are:

<u>Product/Brand name</u>	<u>Application</u>	<u>Status</u>
New Walocel M additive (based on methyl cellulose)	High performance tile adhesives	Pilot plant, application testing
New Walocel M additive (based on methyl cellulose)	Joint compounds (wall board setting)	Pilot plant, application testing
New grade of methyl cellulose . . .	Formulation of pharmaceuticals	Pilot plant, application testing
Very high viscous carboxymethyl cellulose (Walocel C)	Additives for pet food	Pre-marketing
Phthalate-free plastified nitrocellulose	Wood coatings and printing inks	Pre-marketing
Free-flowing nitrocellulose	Wood coatings and printing inks	In market introduction
Breathable membrane films based on polyurethanes	Textiles, leisurewear	Pre-marketing
High-strength polyurethane films	Automotive airbags	In-marketing introduction

RESEARCH AND DEVELOPMENT

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. Focusing primarily on the life sciences, and especially on pharmaceuticals research, our research collaboration program brings together over 20 major research partners to create a pool of expertise covering the entire research cycle, from discovery of biological mechanisms through characterization of new active compounds to identification of a novel development candidate. We regard research collaboration as indispensable to maintain of a continuous flow of innovative active ingredients for human and animal health and crop protection products.

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

<u>Research Cycle</u>	<u>Discipline/Technique</u>	<u>Partners</u>
Understanding the disease mechanism; <i>identifying new targets for pharmaceutical research; designing the new molecular target</i>	Genomics (<i>mapping the expression of a gene in an organism or tissue</i>); Functional genomics (<i>functional analysis of genetic data</i>); Proteomics (<i>mapping protein expression and function in an organism or tissue</i>)	Millennium; Genome Therapeutics; Incyte; Affymetrix; CuraGen; Oxford Glycoscience; Exelixis; Paradigm
	Bioinformatics (<i>applying the tools of information technology to biological data analysis</i>)	LION Bioscience; Incyte Exelixis; Paradigm
Screening the candidate substances	High throughput screening, or HTS (<i>rapid, automated testing of compounds for potential effectiveness against a given target</i>) Toxicology-CuraGen Pharmacogenomics (<i>increasing the quality and probability of success of drug candidates</i>)	CyBio; Novalon; Greiner
Increasing the pool of potential drug candidates by small-chemical molecules and macromolecules (<i>proteins, peptides</i>)	Combinatorial chemistry/ Substance synthesis (<i>techniques for increasing the number and diversity of test compounds</i>)	ArQule; ComGenex; Oxford Asymmetry; Genzyme
	Pool of Bayer biomolecules (<i>e.g., soluble proteins, monoclonal antibodies</i>)	Genzyme; Morphosys

In recent years we have created a framework of research collaborations to which we have committed expenses totaling approximately €1 billion. These collaborations together with our internal research efforts have given us access to nearly one million substances; the HTS 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.

Three of our partnerships — those with Millennium Inc., LION Bioscience and CuraGen — are of particular importance. Although our relationship with each of our individual research partners is important to us, it is the cooperative structure as a whole that is a key element of our strategy. With the exception of the three collaborations mentioned above, we do not regard our arrangements with any single partner as material from a financial or business perspective for the Bayer Group as a whole.

Millennium

Together with Millennium, we have created what we believe to be the world's biggest collaborative effort to use the tools of genomics to identify new drug targets. Through this collaboration, we expect Millennium to provide us with 225 disease-relevant proprietary target genes and approximately 100 complete assay systems for high-throughput screening. Our goal is to produce approximately 30 development candidates for new treatments in areas relevant to Bayer's pharmaceutical research.

We expect to spend up to \$465 million in our collaboration with Millennium. This includes our \$96 million equity investment in the company as well as payments under a five-year, performance-dependent research. This agreement has a maximum value of \$369 million, consisting of an initial \$44 million payment for technology transfer at the commencement of the collaboration and yearly payments thereafter in an aggregate amount of up to \$325 million. The agreement is scheduled to expire on October 31, 2003, though we have the option of terminating it earlier in case of non-performance by Millennium. One goal of our collaboration is to obtain technology and know-how to enable us continue the genomics program independently after the completion of the collaboration.

LION Bioscience

We have established two collaboration projects with LION Biosciences, 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 works exclusively for Bayer, providing our life sciences effort with a strong IT platform and software development program and allowing us to review drug-relevant target gene data for further use in our laboratories. In its first twelve months of operations, LBRI delivered more than 200 disease-related targets 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 of biological and chemical data.

We expect to invest a total of \$82.5 million in our collaborations with LION. Under the first agreement, which is scheduled to end in 2004, we acquired an 11 percent equity stake in LION for \$30 million. LION also receives annual payments that will total \$25 million as well as more than \$6 million in license fees for developing software. We have an option to acquire LBRI when both collaboration projects are complete. Under the second project, scheduled to end in 2003, LION receives an aggregate payment of \$21.5 million to develop software.

CuraGen

We have initiated two collaborative projects with CuraGen. In the first project, CuraGen has agreed to provide 80 drug targets during an initial five years period. The goal is to bring approximately 12 candidates for obesity and diabetes treatment to clinical development over a 15-year period. During this period, we will share the risks and expenses of pre-clinical and clinical development (up to \$1.34 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. The five-year project has a total expected value of \$124 million, consisting of our \$85 million equity investment in, and \$39 million in committed funding to, CuraGen.

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 pharmaceutical 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, Avalox, Cipro 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.

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:

- later-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, Avalox, Cipro, and Imidacloprid.

<u>Product</u>	<u>Market</u>							
	<u>Germany</u>	<u>France</u>	<u>U.K.</u>	<u>Italy</u>	<u>Spain</u>	<u>Japan</u>	<u>U.S.A.</u>	<u>Canada</u>
Adalat								
Crystal patent (Retard)	—	—	—	2003	—	—	2010	—
Adalat CC (Coat Core)	2008	2008	2008	2008	2008	2008	2008	2009
Gits/Oros excl. license (Alza)	2004	2004	2003	2004	2004	2004	—	2004
Avalox								
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
Cipro								
Active ingredient	—	2004	2002	2009	—	—	2003	2004*
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

* *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 and Rid, 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.

GOVERNMENTAL REGULATION

Our business is subject to significant government regulation. Many of our products must be examined and approved by regulatory agencies for safety and effectiveness before we may market them. In addition, all our operations must comply with applicable environmental regulations.

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 FDA regulates many of our products, primarily in our Health Care businesses. In addition, our pharmaceutical facilities typically require regulatory approval and are subject to periodic re-inspection.

Pharmaceutical Products

Pharmaceutical products must receive regulatory approval before they can be marketed in most countries. 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 typically takes approximately 10 years. After identifying a candidate pharmaceutical compound, the manufacturer tests it in clinical Phase I on a small group of healthy volunteers for safety, side effects and pharmacological profile. In clinical Phase II, a pharmaceutical compound is tested on a limited number of volunteers (both patients and healthy persons) for safety, efficacy and appropriate dosage. In clinical Phase III, a pharmaceutical compound is tested in a larger diverse group of patient volunteers to assess safety, efficacy, side effects and dosage in a statistically significant fashion. The results of these clinical trials are then submitted to appropriate regulatory authorities to obtain approval to sell the drug. After commercial launch, the manufacturer is typically required to monitor adverse reactions and report any to the appropriate authorities.

In the United States, the FDA administers and executes requirements covering the testing, approval, safety, effectiveness, manufacturing, labeling and marketing of prescription pharmaceuticals. Over the years, FDA requirements have increased the amount of time and money necessary to develop new products and bring them to market. In 1997, the U.S. Congress enacted the Food and Drug Administration Modernization Act to streamline regulatory procedures and improve the regulation of drugs, medical devices and food. The legislation was principally designed to expedite the premarket review process for new products. A key provision of the legislation is the re-authorization of the Prescription Drug User Fee Act of 1992, which permits the continued collection of user fees from prescription drug manufacturers to augment FDA resources earmarked for the review of human drug applications. This helps provide the resources necessary to ensure the timely approval of safe and effective new drugs.

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). Each member state of the European Union has two members on each committee. The committee makes a recommendation based on a review by appointed officials known as the rapporteur and co-rapporteur, who are part of the CPMP/CVMP. Following the committee's recommendation, the European Commission issues its formal decision, which is valid throughout the European Union without further action. If successful, the drug may be marketed within all member states of the European Union. The other method is the Mutual Recognition

Procedure, in which one country makes the principal evaluation. The other member states then have 90 days to decide if they accept or reject the decision made by the reference member state. If a country does not follow the decision of the reference country, the applicant may refer the process to the CPMP for review as in the centralized procedure, or may withdraw that country from the procedure. The formal decision will be made by the European Commission based on this evaluation.

In Japan, two issues complicate the approval process 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. Due to these issues, parts of Phase II and of Phase III of the clinical program generally need to be repeated in Japan. This could mean a delay of two or three years in introducing a drug developed outside of Japan to the Japanese market.

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.

In recent years, the European Union, 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. The process is called the International Conference on Harmonization. For the foreseeable future, however, we will need to obtain approval in each market.

Consumer Care and Diagnostics products

Many of the products of Consumer Care, such as over-the-counter medications, are subject to regulations similar to those in the Pharmaceuticals segment. In the United States, the FDA and, in part, the Federal Trade Commission oversee the marketing, manufacturing and labeling of dietary supplements, including vitamins.

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, 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 European Union, 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*, i.e., 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.

Crop Protection and Animal Health Products

The FDA's Center for Veterinary Medicine is responsible for ensuring that animal drugs and medicated feeds 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 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 Western Europe. In the United States, the EPA registers chemicals released into the environment, whether they are used for crop protection or for public health. The EPA concentrates on the effects of crop protection products on the environment and on the safety of fish, wildlife and water resources. The USDA regulates plant-based crop protection products for environmental safety, while the FDA regulates them for food safety.

Because humans may be exposed to these products (e.g., 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 agency for product approval. There are no statutory time frames in the United States for registration of new crop protection products. The standard time frames for a pesticide not regulated under an EPA priority are typically 36 to 48 months. For a pesticide with an EPA priority, this time frame is shortened to an average of 24 months.

Proposed new EU Regulations

The European Union is currently contemplating a new policy for basic chemicals and chemical intermediates. This would require companies that manufacture and import chemicals to compile dossiers on chemical substances, describing exposure during production and application and noting potential risks, such as environmental or health risks. Although we cannot accurately predict the final form of the new regulations or the related costs we would incur in complying with them, we expect that these costs would be substantial.

Environmental Regulation

The production and distribution of many Bayer products involves the use, storage, transportation 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 waste; and
- maintenance of safe conditions in the workplace.

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 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.

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. 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 do not believe that any of our German sites have unexpected levels of contamination. Nevertheless, we could discover unexpected contamination, especially given that some sites have been in operation for over 100 years. Consistent with German law and agreements with governmental agencies, we are addressing known contamination in Germany. We record a provision for known environmental liabilities when we are obligated to remediate a facility. This provision includes all costs that we are likely to incur and that we can reasonably estimate. We do not record provisions for potential liabilities because we cannot accurately estimate the costs for investigation and clean-up. If we discover such liabilities, the costs for removal or clean-up could be significant. See Note 29 to our consolidated financial statements.

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, 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 and information related to individual sites. Taking into consideration our experience and currently known facts, we currently known, 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, 2001, 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.

ORGANIZATIONAL STRUCTURE

Bayer AG is the ultimate parent company of the Bayer Group. The Group currently operates in seven segments comprising 14 business groups. In addition to its seven segments, Bayer has 17 central divisions, comprised of corporate and central service divisions, that provide key support and administrative services. The corporate divisions/staffs are Corporate Planning and Controlling; Finance; Legal, Patents, Licenses and Insurance; Corporate Communications; Information Management; Executive Personnel; Corporate Auditing; Quality, Environment and Safety Policy; Taxes and eCommerce. The central service divisions consist of Procurement and Logistics; Information Systems; Human Resources; Enterprise Accounting and Reporting, Site Services, Central Research; and Central Technology.

At their annual meeting in April 2002, Bayer AG's shareholders approved plans to transform Bayer AG into a management holding company structure. Subject to obtaining the necessary additional shareholder approvals, we expect to complete implementation of this new structure during 2003. See "— *Business.*" Under the new structure, our businesses will be divided among four independent subsidiaries. In addition to these four operating companies, we will have three new service companies. The tasks of the current central service divisions and various corporate divisions will be divided in part among the three new service companies and in part among the headquarters staff of each operating company and the holding company.

Subsidiaries

The following table lists Bayer AG's principal consolidated subsidiaries and its beneficial ownership interest in each.

<u>Company Name and Place of Business</u>	<u>Bayer's interest (%)</u>
Germany	
H.C. Starck GmbH, Goslar	100
Wolff Walsrode AG, Walsrode	100
Bayer Chemie Service GmbH, Leverkusen	100
Bayer Vital GmbH, Leverkusen	100
Bayer Industrieprodukte GmbH & Co. KG, Leverkusen	100
Bayer Buna GmbH, Marl	100
Other European Countries	
Bayer Hispania, S.A., Spain	100
Bayer S.p.A., Italy	100
Química Farmacéutica Bayer, S.A., Spain	100
Bayer Rubber N.V., Belgium	100
Bayer plc, U.K.	100
Bayer Antwerpen N.V., Belgium	100
Bayer Pharma S.A., France	99.9
Bayer International S.A., Switzerland	99.7
Bayer S.A., France	99.9
Bayer B.V., Netherlands	100
Bayer A/S, Denmark	100
North America	
Bayer Corporation, United States	100
Bayer Inc., Canada	100
Asia / Pacific	
Bayer (India) Ltd., India	55.3
Bayer Yakuhin Ltd., Japan	100
Sumika Bayer Urethane Co., Ltd., Japan	60

<u>Company Name and Place of Business</u>	<u>Bayer's interest (%)</u>
Bayer Ltd., Japan	100
Bayer Australia Ltd., Australia	99.9
Bayer (South East Asia) Pte Ltd., Singapore	100
Nihon Bayer Agrochem K.K., Japan	99.5
Bayer Thai Co. Ltd., Hong Kong	100
Bayer China Co., Ltd., Hong Kong	99.3
Latin America / Africa / Middle East	
Bayer de México, S.A. de C.V., Mexico	100
Bayer S.A., Argentina	99.9
Bayer S.A., Brazil	99.9
Bayer (Proprietary) Ltd., South Africa	100

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, the Americas, 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 does ownership (e.g., German-law hereditary building rights or *Erbbaurechte* and granted land-use rights in Asian countries).

E-COMMERCE

The "New Economy" emphasizes the use of new technologies to improve existing business relationships and generate new ones. The internet is revolutionizing sales and procurement channels and significantly changing the way we co-operate with our partners across the entire process and value chain, (e.g., in research and development, engineering, marketing and logistics).

We have charged our core worldwide team of more than 100 e-commerce experts to guide the Bayer Group to leadership in this emerging field. By year-end 2001, we had achieved an e-commerce based transactional volume of more than €250 million. We expect this figure to grow significantly over the next few years.

As a company organized under the laws of an EU member state, we are required to comply with the EU Directive on Legal Aspects of Information Society Services (The Electronic Commerce Directive), Directive 2000/31/EC and the Directive of the European Parliament and of the Council concerning the processing of personal data and the protection of privacy in the telecommunications sector, Directive 1997/66/EC. We believe that we comply with these directives. Compliance has not had a material impact on our business.

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 IAS, 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.

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 250 consolidated subsidiaries. We are organized into seven business segments — Pharmaceutical & Biological Products; Consumer Care & Diagnostics; Crop Protection; Animal Health; Plastics & Rubber; Polyurethanes, Coatings & Colorants; and Chemicals. Over the course of the next year, we expect to complete the implementation of plans to transform Bayer AG into a holding company that will hold our operating businesses through four newly-formed direct operating subsidiaries. See “Business” in Item 4, *Information on the Company*.

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 1999, we spent €0.4 billion on acquisitions, including the plastic sheet businesses of DSM-Axxis, N.V. and Sheffield Plastics Inc.; the purchase of Elastochem Inc.; and an 11.3 percent equity investment in Lion Bioscience. In 2000, we spent a total of €4.2 billion to acquire Lyondell Chemical Company's polyols business, Sybron Chemicals Inc., CSM Holding, Inc. and Cytec Industries Inc.'s sizing and strength paper chemicals business. In the life sciences area we also acquired the Flint line of strobilurin fungicides and the remaining outstanding shares of Misung Ltd. 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. In April 2002, the European Commission gave its approval for the transaction, and in May 2002, the United States Federal Trade Commission gave its preliminary approval of the transaction. Both approvals are subject to the condition that we divest or out-license a number of products. See “Segment Strategy” in Item 4, *Information on the Company — Crop Protection*. We closed this transaction on June 3, 2002.

We selectively divest businesses and assets that no longer fit in our strategic plan. In 1999, we sold 70 percent of our former Agfa photographic business segment, primarily in an initial public offering of Agfa shares, and we sold our remaining 30 percent stake on June 4, 2002 for a gain of about €200 million. In 2000, we reduced our interest in the DyStar textile dyes joint venture to 35 percent when BASF became a joint venture partner. We now consider DyStar a non-core business and classify it under “Discontinuing Operations”. We continued to streamline our portfolio through 2000, divesting our animal health biologicals and solar-grade silicon businesses as well as our generic pharmaceuticals businesses in the United States and Germany, and in Myriad Genetics Inc. and Troponwerke. 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 also sold our former acrylic fiber product lines and classified the remainder of the Fibers business group as “Discontinuing

Operations". In May 2002, we decided to retain our Fibers business as part of polymers. We will include the Fibers business in our continuing operations for all periods beginning with the second quarter of 2002. In December 2001, our Supervisory Board approved plans to divest a number of non-core businesses, including Haarmann & Reimer, Rhein Chemie and our 50 percent interest in PolymerLatex.

OPERATING RESULTS 2001, 2000 and 1999

We derive revenue primarily from the sale of consumer and industrial products and, to a lesser extent, from the sale of services. The primary factors that affect our revenue include the introduction of new products and our ability to manage the life-cycles of existing products. Our business during 2001 was affected by widespread economic weakness in the world markets as well as, more specifically, strong downward pressure on prices. Despite the general price trend, however, in certain markets we were able to continue the previous year's achievement of price increases, which contributed one percent to our growth in sales. See below, — *2001 compared with 2000 — Net sales*. We recognize sales upon delivery of goods or rendering of services to third parties. We defer revenues from contracts that contain customer acceptance provisions until customer acceptance occurs or the contractual acceptance period has lapsed. Mergers and acquisition activities also affect our revenue. As a diversified global company we often enter into numerous merger and acquisition transactions that, taken as a whole, can have a significant effect. Fluctuations of exchange rates between the euro and non-euro currencies can affect our revenue. In recent years these fluctuations (especially in the euro-U.S. dollar exchange rate) have had a significant and generally positive effect on our revenue. For a description of measures that we have adopted for controlling exchange rate risk, see Item 11, *Quantitative and Qualitative Disclosures about Market Risk*.

The single most important factor that affects our costs 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 joint venture partner. We had classified EC Erdölchemie as a discontinuing operation in 1999. 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. Other significant factors that affect our costs include labor as well as trigger or milestone payments under various joint ventures and cooperations. In recent years, the integration of an enterprise management system has increased our general administration expenses. We began this integration in 1998 and expect to complete it by 2004.

Acquisitions and divestitures during 2001 and 2000 had a positive effect on net sales of €0.9 billion. This activity affected the comparison between the two years' sales figures as follows:

	<u>Change in 2001 from 2000</u> (euros in millions)
<i>Acquisitions</i>	
Sybron Chemicals Inc. (acquired 2000)	206
Polyols business of Lyondell (acquired 2000)	202
CSM Group (acquired 2000)	133
Fungicide product lines, especially Flint®	104
Full consolidation of Sumika Bayer Urethane Co. Ltd.	99
Paper chemicals business of Cytec Industries (acquired 2000)	83
Mikado® corn herbicide	46
Other	<u>110</u>
	983

	<u>Change in 2001 from 2000</u> (euros in millions)
<i>Divestitures</i>	
Covexx Films	(61)
U.S. livestock vaccines business	(30)
Other	(33)
	<u>(124)</u>
Net effect on sales from continuing operations	<u>859</u>

We spent €214 million on restructuring in 2001, €200 million in 2000 and €449 million in 1999. Our largest single restructuring expense in 2001, €43 million, related to the restructuring of our styrenics business in North America and Europe. €39 million related to the ongoing integration of the Lyondell polyols business. Our program to improve profitability in the Pharmaceuticals segment resulted in a restructuring charge of €26 million. In 2000, €61 million of our restructuring expenses related to the continuing integration of Chiron Diagnostics, which we acquired in 1998, and €48 million to our integration of the Lyondell polyols business, which we acquired in spring 2000. The streamlining of the styrenics activities of our Plastics business group required a further €32 million in 2000. In 1999, our integration of Chiron accounted for €111 million of restructuring expense, while we spent €169 million on streamlining our styrenics business.

We recognize research and development costs in accordance with IAS 38.

Bayer Group

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

	<u>2001</u>	<u>Change from Previous Year (%)</u>	<u>2000</u>	<u>Change from Previous Year (%)</u>	<u>1999</u>
	(euros in millions)				
Net sales	30,275	(2.2)	30,971	13.4	27,320
Gross profit	12,851	(10.2)	14,318	15.5	12,396
as percentage of sales(%)	42.4	—	46.2	—	45.4
Operating result	1,611	(51.0)	3,287	(2.1)	3,357
as percentage of sales(%)	5.3	—	10.6	—	12.3
Income before income taxes	1,115	(62.7)	2,990	5.4	2,836
Net income	965	(46.9)	1,816	(9.3)	2,002
as percentage of sales(%)	3.2	—	5.9	—	7.3

The following table shows a geographical breakdown of our sales from continuing operations.

	<u>2001</u>	<u>Change from Previous Year (%)</u>	<u>2000</u>	<u>Change from Previous Year (%)</u>	<u>1999</u>
	(euros in millions)				
Europe	11,659	3.2	11,299	11.7	10,116
North America	9,473	1.3	9,352	27.4	7,338
Asia/Pacific	4,660	(3.3)	4,819	36.5	3,531
Latin America/Africa/Middle East	3,146	0.3	3,145	21.6	2,587

2001 compared with 2000

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.

Our net sales from continuing operations increased by €0.3 billion in 2001, a growth of 1.1 percent. The primary internal factors that contributed to sales growth were portfolio changes and price increases. In 2001, portfolio changes accounted for €0.8 billion of the increase in net sales. This effect also included sales from businesses we acquired during the previous year, which therefore generated income for us during only part of 2000. Additionally, price increases accounted for approximately €0.3 billion of the increase in net sales. These positive developments were reduced by lower volumes of €0.9 billion. However, we did increase sales despite the many negative developments during 2001. We estimate that the withdrawal of Lipobay/Baycol reduced our sales by approximately €0.7 billion. Including discontinuing operations, our net sales decreased 2.2 percent from 2000.

Sales in our Pharmaceuticals segment decreased 6.7 percent in 2001 to €5.7 billion. Sales in our Consumer Care & Diagnostics segment increased 5.6 percent to €4.1 billion. Sales in our Crop Protection segment increased 10.3 percent, to €2.7 billion, while the Animal Health segment declined 1.1 percent to €988 million. Sales in our Plastics & Rubber segment decreased 4.0 percent to €5.6 billion. Sales in the Polyurethanes, Coatings & Colorants segment increased 2.6 percent to €5.2 billion. Our Chemicals segment achieved sales of €3.7 billion, an increase of 9.9 percent. See below, — *Segment Data*, for a more detailed discussion of the results of each of our business segments.

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.

Despite a sales increase of 1.1 percent, our gross profit from continuing operations decreased 8.4 percent in 2001. Cost of goods sold, which increased 9.7 percent, cut into our margins.

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.

Our result from continuing operations in 2001 before exceptional items decreased by €1.4 billion, or 42.2 percent, from the previous year, to €1.9 billion. We attribute this decrease primarily to unfavorable world economic conditions generally, as well as to adverse factors affecting our Health Care businesses, primarily the withdrawal of Lipobay/Baycol, which caused a decrease of €0.3 billion. After net exceptional charges of €0.6 billion, the decrease in operating result was 59.5 percent. We attribute two thirds of these exceptional items to our Health Care businesses, largely also to our withdrawal of Lipobay /Baycol, and spent most of the remainder on restructuring and site consolidation.

Our operating result of €0.4 billion from discontinuing operations comprised €73.0 million from Haarmann & Reimer, a loss of €37 million from our Fibers business, and €333 million from EC Erdölchemie (made up of a €17 million share of the joint venture's results prior to the sale and €0.3 billion resulting from the sale of our interest in May 2001). We plan to divest Haarmann & Reimer. The sale of our interest in EC Erdölchemie in April 2001 added €0.3 billion to our €17 million share of the joint venture's results prior to the sale. Combining continuing and discontinuing operations, our operating result for 2001 declined 51.0 percent.

In 2001, our selling expenses increased 5.2 percent, while research and development expenses increased 7.3 percent and general administration expenses increased 11.6 percent. The primary causes of these developments were the implementation of a strategic marketing organization at Pharma and a general increase of advertisement expenses for selling expenses; life-cycle management and increase of strategic R&D know-how in the United States for research and development expenses; and higher SAP expenses and additional expenses for new business and companies for general administration expenses. Research and development activities in our Pharmaceuticals segment contributed disproportionately to our increase in research and development expense. We allocate the largest portion of our research and development budget to Pharmaceuticals, and this segment often shows the greatest increase from year to year as well. Given the particularly strong emphasis on research, we expect that this segment will continue to be the primary driver of our overall research and development costs. Our

other net operating expenses increased 10.3 percent, largely because of higher restructuring expenses and additional write-downs of receivables.

Non-Operating Result

Non-operating result represents income and expenses from investments in affiliated companies, interest result and other non-operating result.

Our non-operating loss for 2001 increased 67.0 percent over the previous year, largely because our income (net) from investments in affiliated companies was lower. Our net interest expense rose from €311 million to €349 million. This increase reflected reduced interest income, rather than an increase in interest expense. Our net exchange gain of €49.0 million in 2001, compared with a net exchange loss of €21 million in the previous year, offset the effect of our increased net interest expense.

Income Before Income Taxes

Our income before taxes from continuing operations in 2001 decreased 73.1 percent from the previous year to €0.8 billion. Including discontinuing operations, the decrease in income was 62.7 percent.

Income Taxes

Our income tax expense decreased 86.6 percent during 2001, due to our lower earnings as well as to tax-free income. Our effective tax rate fell to 13.8 percent from the 2000 rate of 38.4 percent. With respect to our taxable income only, our effective tax rate during 2001 was 34.0 percent.

Net Income

After a net income from minority interests of €26 million in 2000, we reported a net loss of €4 million in 2001, reflecting lower earnings. After minority interests, our net income from continuing operations decreased €1.0 billion, or 61.0 percent, to €0.6 billion (€0.88 per share) from €1.6 billion (€2.26 per share) in 2000. Including discontinuing operations, our net income in 2001 decreased 46.9 percent.

2000 compared with 1999

Net Sales

Our net sales from continuing operations increased 21.4 percent in 2000, to €29 billion. The primary internal factors contributing to this increase were increased sales volumes, accounting for 7.0 percent of the increase; acquisition activity, primarily our acquisition of Lyondell's polyols business, which contributed 3.2 percent; and increased sales prices, which contributed 2.3 percent. In addition, translation of non-euro denominated revenue caused more than one third of this growth in net sales. Including discontinuing operations, our net sales increased 13.4 percent from 1999.

Sales in our Pharmaceuticals segment increased 22.7 percent in 2000. Sales in our Consumer Care & Diagnostics segment increased 15.6 percent to €3.9 billion. Sales in our Crop Protection segment increased 12.8 percent. Sales in our Animal Health segment increased 8.9 percent in 2000. Sales in our Plastics & Rubber segment advanced 25.7 percent in 2000. Sales in our Polyurethanes, Coatings & Colorants segment increased 30.0 percent. Sales in our Chemicals segment increased 19.4 percent.

Gross Profit

Our gross profit from continuing operations increased 22.0 percent in 2000. The primary causes of this increase were an increase in unit volume coupled with higher selling prices. Our margin improved despite a sharp increase in raw materials prices. These increases affected all our segments, primarily those with Polymers and Chemicals activities. Increases in the price of crude oil were the primary cause of the increased cost of our raw materials, although the effect on the market for individual raw materials varied. Prices for several of our raw materials, including acrylonitrile, benzol, butadiene, phenol and styrol, more than doubled from the beginning of

1999. Increased raw materials costs caused more than half of the 20.9 percent increase in our costs of goods sold in 2000. Currency translation effects also added significantly to this increase.

Operating Result

Our result from continuing operations in 2000 before exceptional items increased €0.5 billion, or 18.7 percent, from the previous year, to €3.2 billion. We attribute this increase primarily to the performance of our Pharmaceuticals segment. Currency translation effects also contributed significantly to this increase. After net exceptional charges of €145 million, mainly for restructuring, the increase was 43.2 percent.

Our result from discontinuing operations comprised €99 million from Erdölchemie GmbH, €68 million from Haarman & Reimer, €51 million from the Fibers business and €5 million from DyStar. Combining continuing and discontinuing operations, our operating result for 2000 declined 2.1 percent. This decline from the operating result for 1999 reflected the exceptional gain in that year of €1.03 billion from our sale of shares in Agfa's IPO.

In 2000, our selling expenses increased 22.2 percent, while research and development expenses increased 11.7 percent and general administration expenses increased 24.6 percent. Currency translation effects caused approximately half of these increases. Increased costs for shipping and advertising were additional factors in our increased selling expenses. Integration of a new enterprise management system contributed to the increase in general administration expenses. By contrast, our other net operating expenses decreased 14.5 percent, largely because of a decline in restructuring expenses.

Non-Operating Result

Our non-operating loss for 2000 decreased 43.0 percent over the previous year. This improvement was due to an increase of €314 million in income from affiliated companies, primarily as a result of gains from the sale of our interests in Schein Pharmaceutical and Myriad Genetics. This increase was offset, in part, by an increase in net interest expense of €115 million due to issuances of debt securities, particularly commercial paper, to finance capital expenditures and acquisitions.

Income Before Income Taxes

Our income before taxes from continuing operations in 2000 increased €1.1 billion, or 68.3 percent, from the previous year, to €2.8 billion due primarily to lower exceptional expenses in 2000. Including discontinuing operations, the increase in income was 5.4 percent.

Income Taxes

Our income tax expense increased 40.3 percent from 1999. Our effective tax rate increased to 38.4 percent from the 1999 rate of 28.8 percent. We attribute this increase primarily to the fact that the 1999 effective tax rate reflected tax-free income from the sale of Agfa shares.

Net Income

Minority shareholders' interest in 2000 increased 62.5 percent from 1999. The primary reason for this change was improved profitability from our partly-owned subsidiaries, particularly Bayer Yakuhin Ltd., a Japanese pharmaceutical producer in which we had a 75.6 percent interest in 2000 (and which has since become our wholly-owned subsidiary). Bayer Yakuhin achieved significant increases in both net sales and net income.

After minority interests, our net income from continuing operations in 2000 increased €0.8 billion, or 86.8 percent, to €1.6 billion (€2.26 per share) in 2000 from €0.9 billion (€1.21 per share) in 1999. Including discontinuing operations, our net income in 2000 decreased 9.3 percent.

Segment Data

Pharmaceuticals

	<u>2001</u>	<u>Change from Previous Year (%)</u>	<u>2000</u>	<u>Change from Previous Year (%)</u>	<u>1999</u>
	(euros in millions)				
Net sales (external)	5,729	(6.7)	6,140	22.7	5,003
Intersegment sales	<u>38</u>	<u>(2.6)</u>	<u>39</u>	<u>(23.5)</u>	<u>51</u>
Operating result before exceptional items	383	(67.1)	1,165	26.4	922
Operating result	51	(95.6)	1,160	39.4	832

2001 compared with 2000

Sales in our Pharmaceuticals segment decreased 6.7 percent in 2001. Sales in the ethical pharmaceuticals area, which makes up the bulk of the segment, decreased 3.0 percent to €4.8 billion. Our withdrawal of Lipobay/Baycol was the most significant factor in this decline. Sales in the smaller biological products area declined 21.9 percent to €0.95 billion, reflecting a €24 million decline in sales volume for plasma products. Our Kogenate production problems were the primary cause of this decline. Disregarding the effect of the Lipobay/Baycol withdrawal and the Kogenate production problems, Pharmaceuticals' sales increased 2.1 percent, reflecting strong growth of in sales of Avelox. Demand for Cipro also increased during the fourth quarter of 2001, with worldwide sales up 10.0 percent for the year as a whole. We believe that a large portion of this increased demand resulted from Cipro's approval for the treatment of anthrax, which was used in bioterrorist attacks against the United States last year. Sales of Adalat declined 16.0 percent to €975 million due to generic competition.

The segment's operating result before exceptional items decreased to €383 million in 2001, a change of 67.1 percent from 2000. We attribute this development primarily to the problems with biological products and the market withdrawal of Lipobay/Baycol. This event, together with the other exceptional items, led to net charges amounting to €332 million. We expect to divest our holdings in several generic pharmaceutical companies.

2000 compared with 1999

Sales in our Pharmaceuticals business group increased 22.7 percent in 2000 to €6.1 billion. Of this amount, €4.9 billion represented sales of ethical pharmaceuticals, an increase of 22.1 percent from 1999. We attributed this increase largely to new products and new dosage formulations of existing products. Sales of our three best-selling ethical pharmaceutical products alone — Ciprobay/Cipro, Adalat and Lipobay/Baycol — were €3.6 billion. Approximately €1.2 billion of 2000 sales were of biological products, up 25.5 percent from the previous year.

The operating result before exceptional items increased to 1.2 billion in 2000, an increase of 26.4 percent over 1999. We incurred net exceptional charges of €5 million in 2000.

Consumer Care & Diagnostics

	<u>2001</u>	<u>Change from Previous Year (%)</u>	<u>2000</u>	<u>Change from Previous Year (%)</u>	<u>1999</u>
	(euros in millions)				
Net sales (external)	4,104	5.6	3,888	15.6	3,364
Intersegment sales	<u>2</u>	<u>—</u>	<u>0</u>	<u>—</u>	<u>1</u>
Operating result before exceptional items	388	24.8	311	79.8	173
Operating result	341	92.7	177	—	16

2001 compared with 2000

Sales in our Consumer Care & Diagnostics segment increased 5.6 percent. Of this amount, €2.1 billion reflected sales in Consumer Care, an increase of 8.9 percent. We attribute this growth to the successful launch of a reformulated Alka-Seltzer Plus in North America and the continued growth in demand for Aleve Cold & Sinus. The Diagnostics business group achieved sales of €2.0 billion, up 2.2 percent from the previous year, primarily through growth in the business group's nucleic acid diagnostics activities.

In 2001 we continued the segment's cost-cutting efforts. Because Diagnostics operates primarily in the United States while a large proportion of its sales are outside the United States, the relatively high value of the U.S. dollar requires us to contain costs effectively. The segment's operating result before exceptional items increased to €388 million in 2001, a change of 24.8 percent from 2000. We attribute this development primarily to the recovery of the Alka-Seltzer-Plus net sales after the withdrawal of Alka-Seltzer-Plus in 2000 and its subsequent re-launch in the United States during 2001. We expect to complete the worldwide re-launch of our reformulated products that formerly contained phenylpropanolamine during 2002. We incurred net exceptional charges of 47 million, compared to 134 million in 2000, which were primarily for restructuring measures partly also related to Alka-Seltzer-Plus.

2000 compared with 1999

Consumer Care & Diagnostics posted sales of €3.9 billion in 2000, an increase of 15.6 percent from the previous year. Of this amount, €1.9 billion was from our Consumer Care business group, an increase of 14.3 percent from 1999. We attribute these sales increases primarily to the introduction of new products, chiefly Aleve Cold & Sinus, Alka-Seltzer Heartburn and Aspirin Migraine. The Diagnostics business group's sales were €2.0 billion, a 16.9 percent increase from 1999. The major cause of this increase was a growth in revenue from former Chiron products.

We initiated cost-cutting measures in this segment, eliminating less productive facilities and divesting unprofitable product lines. The operating result before exceptional items increased to €0.3 billion in 2000, an increase of 79.8 percent over 1999. We incurred net exceptional charges of €134 million. These charges resulted from restructuring charges and from our decision to stop marketing Alka-Seltzer Plus and similar cold remedies containing phenylpropanolamine. Our restructuring measures also resulted in exceptional income of €20 million from several smaller divestitures, which partly offset the exceptional charges.

Crop Protection

	<u>2001</u>	<u>Change from Previous Year (%)</u>	<u>2000</u>	<u>Change from Previous Year (%)</u>	<u>1999</u>
			(euros in millions)		
Net sales (external)	2,708	10.3	2,456	12.8	2,177
Intersegment sales	<u>102</u>	<u>5.2</u>	<u>97</u>	<u>16.9</u>	<u>83</u>
Operating result before exceptional items	453	13.0	401	4.7	383
Operating result	453	12.7	402	(6.9)	432

2001 compared with 2000

In 2001, Crop Protection's sales increased 10.3 percent. We attribute more than half this increase to our acquisitions of the Flint line of fungicides and the corn herbicide Mikado.

The segment's operating result before exceptional items increased to €453 million in 2001, a change of 13.0 percent from 2000. We attribute this development primarily to higher sales and an additional income stemming from a patent dispute with Syngenta.

2000 compared with 1999

In 2000, as in the previous year, stiff competition, low commodity prices and depressed farm incomes created difficulties in the agricultural sector. Nevertheless, Crop Protection's sales increased 12.8 percent to €2.5 billion. In addition to currency exchange rate fluctuations, we attribute this increase primarily to growth in demand for Confidor and Gaucho, our imidacloprid-based insecticides.

The operating result before exceptional items increased 4.7 percent in 2000. The primary factors driving this positive development were our imidacloprid products.

Animal Health

	<u>2001</u>	Change from Previous Year (%)	<u>2000</u>	Change from Previous Year (%)	<u>1999</u>
(euros in millions)					
Net sales (external)	988	(1.1)	999	8.9	917
Intersegment sales	<u>5</u>	<u>(16.7)</u>	<u>6</u>	<u>—</u>	<u>6</u>
Operating result before exceptional items	172	9.6	157	14.6	137
Operating result	172	(5.5)	182	80.2	101

2001 compared with 2000

Animal Health's sales declined 1.1 percent. Most of this decrease resulted from the divestiture of our U.S. biological products business. The BSE crisis in Europe and Japan and the foot and mouth disease crisis in Europe and Latin America also had a negative impact on sales. Growth in sales of our Advantage parasiticide in North America and Japan helped mitigate the effect of these negative developments.

The segment's operating result before exceptional items increased to €172 million in 2001, a change of 9.6 percent from 2000. We attribute this development primarily to higher sales for Advantage.

2000 compared with 1999

Animal Health's sales grew 8.9 percent, to €999 million. We attribute this increase primarily to demand for the anti-flea preparation Advantage. Increased generic competition drove down prices, however. These lower prices slightly offset our sales growth. The effects of divesting our U.S. biologicals business were offset by the strengths of the segment's other U.S. activities.

Animal Health's operating result before exceptional items increased 14.6 percent in 2000. This increase reflected improvements in Animal Health. The primary factors driving this positive development were our products for livestock.

Plastics & Rubber

	<u>2001</u>	Change from Previous Year (%)	<u>2000</u>	Change from Previous Year (%)	<u>1999</u>
(euros in millions)					
Net sales (external)	5,581	(4.0)	5,816	25.7	4,627
Intersegment sales	<u>116</u>	<u>(4.9)</u>	<u>122</u>	<u>7.0</u>	<u>114</u>
Operating result before exceptional items	288	(48.6)	560	26.4	443
Operating result	238	(53.8)	515	102.8	254

2001 compared with 2000

Sales of our Plastics & Rubber segment declined 4.0 percent. Plastics, with 2001 sales of €3.4 billion, and Rubber, with sales of €2.2 billion, accounted for approximately equal proportions of this decrease. Plastics sales declined due to lower volumes in North America and price pressure in Europe and Asia. Rubber declined due to business conditions in North America and Asia.

The segment's operating result before exceptional items decreased to €288 million in 2001, a change of 48.6 percent from 2000. We attribute this development primarily to a fall in prices, a decrease in volume and idle plant expenses. We incurred net exceptional charges of €50 million. These charges were primarily for the restructuring of our styrenics business.

2000 compared with 1999

Sales of our Plastics & Rubber segment increased 25.7 percent to 5.8 billion. Of this amount, €3.5 billion, or an increase of 27.1 percent, was in Plastics while €2.3 billion, or an increase of 23.6 percent, was in Rubber. Increased demand and volumes as well as currency exchange rate fluctuations caused most of the increase. In addition, we were able to implement price increases in the Plastics business group, although prices held stable or declined slightly in Rubber.

We achieved a 26.4 percent increase in the operating result before exceptional items despite lower demand and weak pricing in many of the markets that this segment serves. Severe increases in raw material and energy costs (which we were able to pass on to customers only to a limited extent) were the primary obstacle to a more substantive increase. Because of a rise in crude oil prices, our most severe price increases were for energy and petrochemical-derived raw materials.

Polyurethanes, Coatings & Colorants

	<u>2001</u>	<u>Change from Previous Year (%)</u>	<u>2000</u>	<u>Change from Previous Year (%)</u>	<u>1999</u>
	(euros in millions)				
Net sales (external)	5,207	2.6	5,076	30.0	3,904
Intersegment sales	<u>138</u>	<u>(70.1)</u>	<u>462</u>	<u>(4.1)</u>	<u>482</u>
Operating result before exceptional items	146	(71.8)	518	(21.2)	657
Operating result	46	(90.3)	473	(23.6)	619

2001 compared with 2000

Sales of our Polyurethanes, Coatings & Colorants segment grew by 2.6 percent. The Polyurethanes business group contributed €3.2 billion, an increase of 2.0 percent from 2000, while Coatings and Colorants contributed €2.0 billion, up 3.5 percent from the previous year. Our acquisition of Lyondell helped mitigate the effects of increasingly stiff polyurethanes competition. Our acquisition of Sybron Chemicals enabled us to increase Coatings and Colorant's sales despite below-expectation sales performance in North America and, in the second half of the year, in Europe.

The segment's operating result before exceptional items decreased to €146 million in 2001, a change of 71.8 percent from 2000. We attribute this development primarily to price increases in raw materials and a decrease in volumes. We incurred net exceptional charges of €100 million. These charges were primarily for restructuring programs in the United States.

2000 compared with 1999

Sales of our Polyurethanes, Coatings & Colorants segment grew by 30.0 percent to €5.1 billion. Of this amount, €3.1 billion represented sales in the Polyurethanes business group, an increase of 44.0 percent from 1999. Coatings and Colorants' sales increased by 12.6 percent to €1.9 billion. Increased demand and volumes as

well as currency exchange rate fluctuations caused a significant part of the increase, while prices generally held stable or declined slightly. Sales in Polyurethanes increased due our acquisition of Lyondell's polyols business. Other factors contributing to the segment's growth were increased sales volumes of existing products as well as our ability to increase prices for certain products.

Resulting from lower demand and weak pricing in many of the markets that this segment serves, the operating result before exceptional items of Polyurethanes, Coatings & Colorants decreased 21.2 percent. Increases in raw material and energy costs, primarily related to the price of crude oil, limited operating profit. We also bore additional expenses arising from integrating Lyondell's polyols business.

Chemicals

	<u>2001</u>	<u>Change from Previous Year (%)</u>	<u>2000</u>	<u>Change from Previous Year (%)</u>	<u>1999</u>
(euros in millions)					
Net sales (external)	3,749	9.9	3,410	19.4	2,855
Intersegment sales	<u>456</u>	<u>(2.1)</u>	<u>466</u>	<u>(2.5)</u>	<u>478</u>
Operating result before exceptional items	271	(26.8)	370	2.8	360
Operating result	203	(48.5)	394	27.9	308

2001 compared with 2000

Our Chemicals segment comprises the Basic and Fine Chemicals, Specialty Products, H.C. Starck and Wolff Walsrode business groups.

The segment's 9.9 percent increase in sales during 2001 was chiefly the result of acquisitions in the business group Specialty Products. The Basic and Fine Chemicals business group increased sales 1.9 percent to €1.0 billion. We attribute this increase largely to the strong performance of the business group's Inorganic Basic Chemicals unit, as well as to increase in products synthesized for the agrochemical and pharmaceutical markets. Specialty Products achieved an increase in sales of 12.0 percent to €1.5 billion as the result of our acquisitions of Sybron Chemicals and the paper chemicals business of Cytec Industries. Our H.C. Starck business group increased sales 22.0 percent to €811 million. This increase was due to acquisitions, which offset a decline in sales to the electronics and optics industries caused by significant consolidation in the electronics market. Wolff Walsrode achieved a sales increase of 4.0 percent to €444 million. Wolff's growth in market share in the United States, Latin America and Eastern Europe, especially in the methylcellulose business, more than offset declines in western Europe.

The segment's operating result before exceptional items decreased 26.8 percent in 2001 to €271 million. We attribute this decrease to adverse cyclical effects and to write-downs of tantalum inventory at H.C. Starck. We incurred net exceptional charges of €68 million. These charges were primarily in connection with the sale of our interest in ChemDesign Corporation.

2000 compared with 1999

The Chemicals segment's 19.4 percent increase in sales during 2000 reflects sales growth across its business groups that was generally moderate and steady. The exception to this pattern was H.C. Starck, which in relative terms significantly outperformed the other groups within the segment. In the segment's Basic and Fine Chemicals business group, sales rose to €1.0 billion (a 13.5 percent increase); Specialty Products' sales increased to €1.3 billion (up 14.2 percent). Sales increased at H.C. Starck to €665 million (52.9 percent) and at Wolff Walsrode to €427 million (10.9 percent). Throughout the segment, higher volumes and increased demand contributed to sales growth of €555 million, as did currency exchange rate fluctuations, which accounted for approximately a third of this increase. The product families contributing most significantly to this trend were H.C. Starck's tantalum products as well as chemicals for the electronics industry. The continuing strong growth in sales of chemicals for the microelectronics and telecommunications sectors, which particularly benefited the

segment's H.C. Starck business group, offset the effect of disappointing sales of life sciences intermediates, a market weakened by unfavorable conditions in the agricultural sector. Despite growth in volume and demand, prices for our products generally remained stable or eroded. We were able to pass the increasing expense of raw materials on to customers only in exceptional cases.

Growth in the Chemicals segment's operating result before exceptional items lagged behind its growth in sales at 2.8 percent. The primary factor affecting the operating result of the Chemicals segment was a severe increase in raw materials prices, which had a particularly strong adverse effect on our Basic and Fine Chemicals business group.

LIQUIDITY AND CAPITAL RESOURCES 2001, 2000 and 1999

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. We use cash in financing activities primarily to retire debt and pay dividends. At December 31, 2001, we had cash, cash equivalents and working capital totaling €9.0 billion. We believe that our working capital is sufficient for our present requirements. 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 (%)	2000	Change from Previous Year (%)	1999
(euros in millions)					
Gross operating cash flow	2,923	(29.8)	4,164	30.5	3,192
<i>Thereof discontinuing operations</i>	97	(69.4)	317	(11.5)	358
Changes in working capital	936	—	(1,073)	—	1
Net cash provided by operating activities	3,859	24.8	3,091	(3.2)	3,193
<i>Thereof discontinuing operations</i>	159	(47.4)	302	(5.0)	318
Net cash provided by (used in)					
investing activities	(2,132)	(65.6)	(6,189)	—	71
<i>Thereof discontinuing operations</i>	295	—	(298)	—	2,165
Net cash provided by (used in)					
financing activities	(1,549)	—	772	—	(1,669)
<i>Thereof discontinuing operations</i>	36	—	11	(94.4)	198
Change in cash and cash equivalents	178	—	(2,326)	—	1,595
Cash and cash equivalents at beginning					
of period	491	(82.5)	2,812	137.5	1,184
Change in scope of consolidation	42	—	(3)	—	19
Exchange rate movements	8	—	8	(42.9)	14
Cash and cash equivalents at end of year	719	46.4	491	(82.5)	2,812
Marketable securities and other instruments	52	(75.6)	213	(35.1)	328
Liquid assets as per balance sheets	771	9.5	704	(77.6)	3,140

Cash from Operating Activities

Cash from operating activities was €2.9 billion in 2001, €4.2 billion in 2000 and €3.2 billion in 1999. Gross cash decreased 29.8 percent, mainly due to lower operating results. In 2000, the gross cash provided by operating activities increased 30.5 percent from 1999. We attribute this increase mainly to the higher operating result from continuing operations in 2000.

Due to a €0.9 billion reduction in working capital, net operating cash flow in 2001 increased to €3.9 billion or 24.8 percent. We achieved this improvement primarily through our project, begun in 2001, to reduce inventories and improve the collection of receivables.

In 2000, business expansion led to a substantial increase in working capital and thus a reduction of €0.1 billion, or 3.2 percent, in net cash provided by operating activities. The higher working capital reflected both growth in inventories of 0.8 billion and an increase in trade accounts receivable to €0.5 billion. An increase in trade accounts payable to €0.4 billion partly offset these two factors. In 1999, net cash provided by operating activities increased 15.3 percent from the previous year, primarily because working capital had been higher in 1998 than in 1999. Total working capital increased by €1.1 billion during 2000, having remained essentially stable from 1998 to 1999.

Investing activities

Bayer's principal liquidity requirement in recent years has been for acquisitions and for purchases of property, plant and equipment. During the same period, our primary sources of cash inflows from investing activities have been sales of property, plant and equipment; interest and dividends received; and marketable securities. 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 interest and dividend receipts and from marketable securities amounted to €0.5 billion. In 2000, we had a net cash outflow for investing activities of €6.2 billion. We had cash receipts of €0.6 billion from sales of property, plant and equipment and from inflows from interest and dividend receipts and from marketable securities. This figure only slightly offset our €4.1 billion for acquisitions and €2.6 billion for additions to property, plant, equipment and investments during 2000. There was a net cash inflow from investing activities of €0.1 billion in 1999. The €2.2 billion in proceeds from our sale of Agfa shares and our €0.6 billion in proceeds from the sale of companies formerly owned by Agfa-Gevaert N.V. at the beginning of 1999 led to a net cash inflow of €2.6 billion. This inflow plus €0.4 billion in interest receipts and proceeds from redemptions of marketable securities offset cash outflows of €2.6 billion for capital expenditures and €0.3 billion for acquisitions.

Financing Activities

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. Financing activities in 2000 provided us with a net cash inflow of €0.8 billion, with net borrowings of €2.1 billion and dividend and interest payments of €1.3 billion. In 1999, we had a net cash outflow of €1.7 billion from financing activities. We used part of the operating cash flow to reduce net borrowings by €0.6 billion. Bayer Corporation, Bayer AG's wholly-owned U.S. subsidiary, redeemed on maturity \$300 million of 7.75 percent Notes issued in 1994. Disbursements for payment of Bayer AG's dividend for 1998 came to €0.8 billion; interest payments totaled €0.3 billion.

See “— Borrowings” below for a discussion of the times our existing debt will mature and of our potential plans for obtaining future financing by issuing new debt.

We believe that we have sufficient borrowing capacity to meet our foreseeable needs. 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 in 2001. Our committed and uncommitted bank lines of credit at the end of 2001 amounted to more than 5 billion. In addition to these sources of funding, we may issue debt securities in the capital markets to meet our longer-term funding requirements.

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 €2.6 billion in each of 2001, 2000 and 1999.

Our major capital expenditures since 1999 included:

<u>Year</u>	<u>Segment</u>	<u>Description</u>
2001	Pharmaceuticals	— Construction of a facility for packaging and storage of biological products, Berkeley, California
		— Construction of research facility in West Haven, Connecticut, United States and Kyoto, Japan (completed 2001)
	Consumer Care & Diagnostics	— Expansion of solids plants, Bitterfeld, Germany and Lerma, Mexico
		Crop Protection
	Plastics & Rubber	
		— 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 & Colorants	— 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, Bornlitz, Germany	
2000	Pharmaceuticals	— Expansion of the molybdenum facility, Laufenburg, Germany
		— Construction of process development pilot plant, Wuppertal, Germany (completed 2000)
	Consumer Care & Diagnostics	— Expansion of solids plant, Bitterfeld, Germany
		Crop Protection
	Plastics & Rubber	
		— Expansion of polycarbonate capacities (Makrolon® and bisphenol A), Map Ta Phut, Thailand
		— Construction of Therban® facility, Leverkusen, Germany (completed 2000)
	Polyurethanes, Coatings & Colorants	— Facility for continuous production of long chain polyethers by our proprietary IMPACT process, Channelview, Texas
		— Expansion of coating raw materials production, Leverkusen, Germany
	Chemicals	— Construction of sulfuric acid facility, Leverkusen, Germany
— Expansion/modification of electrolysis plant, Leverkusen, Germany		
— Construction of polyaspartic acid facility, Leverkusen, Germany		
— Expansion of tantalum production at H.C.Starck, Germany and Japan		

<u>Year</u>	<u>Segment</u>	<u>Description</u>
1999	Pharmaceuticals	— Expansion of capacities for Kogenate®, Berkeley, California — Modernization and expansion of blood plasma facilities, Clayton, North Carolina — Launch of plant for Avelox®/Avalox®, Leverkusen, Germany (Completed 1999)
	Consumer Care & Diagnostics	— Expansion of production capacities for urine chemistry systems, Mishawaka, Indiana
	Crop Protection	— Construction of multi-purpose facility for crop protection products, Dormagen, Germany
	Animal Health	— Expansion and start-up of new production facilities for animal health products in Shawnee, Kansas (completed 1999)
	Plastics & Rubber	— Expansion of bisphenol A and Makrolon® capacities, Antwerp, Belgium — Modernization/Expansion of (halo)butyl rubber facilities, Sarnia, Ontario
	Polyurethanes, Coatings & Colorants Chemicals	— Expansion of TDA/TDI capacity, Baytown, Texas — Expansion of fine chemicals production, Leverkusen, Germany — Modernization and expansion of tantalum/niobium facility, Map Ta Phut, Thailand (completed 1999) — Ion exchange resin facility, Bitterfeld, Germany (completed 1999)

Commitments

Off Balance Sheet Arrangements

The Group does not have any non-consolidated special-purpose entities or other off-balance sheet arrangements.

Contractual Obligations and Commercial Commitments

The tables below summarize all of the Group's contractual and commercial obligations. The timing of payments for collaborative agreements assumes that milestones or other conditions are met.

<u>Contractual Obligations</u>	<u>Total</u>	<u>1 year</u>	<u>2 years</u>	<u>3 years</u>	<u>4 years</u>	<u>5 years</u>	<u>After 5 years</u>
Long-term Debt, including Capital Leases	7,380	4,309	291	1,665	355	86	674
Operating Leases	557	188	91	69	56	86	67
Capital Expenditures	354	354	—	—	—	—	—
Total Contractual Obligations	8,291	4,851	382	1,734	411	172	741

<u>Other Commercial Commitments</u>	<u>Total</u>	<u>1 year</u>	<u>2 years</u>	<u>3 years</u>	<u>4 years</u>	<u>5 years</u>	<u>After 5 years</u>
Collaborative Agreements	732	218	215	88	81	84	46

Payments for guarantees and endorsements of bills and of warranties of €193 million have been excluded from the other commercial commitments table above, as we do not expect to make any payments under these commercial commitments.

Investments

We expect to spend €7.25 billion (including the assumption of debt of €1.9 billion) to acquire Aventis' CropScience business. In addition to the effect of the CropScience acquisition, we expect that our capital expenditures will increase slightly over the next several years in order to maintain existing facilities, to meet changing regulatory, health, safety and environmental law requirements, to achieve process improvement and to facilitate the launch and manufacture of new products.

For 2001, we had originally planned investments totaling €3.1 billion. In light of world economic developments in that year, our actual spending was €2.6 billion. As in recent years, the main focus of our capital spending was in our Polymers business, in particular the expansion of polycarbonates capacities in Asia, Europe and North America.

Other Commitments

In 2001, our minimum non-discounted future lease payments relating to long-term lease and rental arrangements totaled €1.73 billion, compared with €883 million in the previous year. Of this amount, €1.17 billion represented future payments under financial leases (€285 million in 2000).

Our financial commitment for orders placed under purchase agreements relating to planned or ongoing capital expenditure projects totaled €354 million in 2001. We expect to pay the majority of this amount in 2002. In 2000, this figure was €446 million and in 1999, €391 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 other specific conditions by our research partners. In 2001, the total amount of these commitments was €732 million. For 2000, the figure had been €683 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.

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. We do not use derivative instruments for trading or other speculative purposes.

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 use interest rate swaps to convert a small portion of our floating rate investments into, in effect, fixed rate investments. Short-term interest rate hedging contracts (including interest and principal currency swaps) totaled €2.0 billion in 2001, €0.3 billion in 2000 and €1.3 billion in 1999. In 2001, hedges maturing in more than one year represented €2.5 billion, in 2000, €3.2 billion and in 1999, €1.4 billion, respectively.

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 effects of currency fluctuations have been positive in recent years, increasing our total sales by €0.1 billion in 2001, €2.2 billion in 2000 and €0.6 billion in 1999. This effect was mainly due to an increase of the value of the U.S. dollar compared to the euro (the average relative value of one euro in 2001 was \$0.90, compared with average values of \$0.93 in 2000 and \$1.07 in 1999).

We hedge a portion of our 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, 2001, we had entered into forward foreign exchange contracts and currency swaps with a nominal value of €2.75 billion, compared to €3.42 billion in 2000 and €2.34 billion in 1999.

Our aggregate direct transaction risk from sales and purchases in foreign currencies was approximately €3.4 billion at December 31, 2001, consisting primarily of dollars (\$2.3 billion), Japanese yen (¥70 billion) and British pounds sterling (£0.1 billion). Since the introduction of the euro on January 1, 1999, we no longer face transaction risk in member currencies of the euro zone.

For more information, see Item 11, *Quantitative and Qualitative Disclosures about Market Risk* and Item 12, *Descriptions of Securities Other Than Equity Securities*.

Inflation, Seasonality and Cyclicity

Inflation has not had a material effect on our operating results in recent years. Seasonality affects only a few of our business lines, and does not materially affect our business as a whole. However, a number of our business groups are subject to cyclicity, either directly or because of the effect of cyclicity on their customers' businesses, especially in agricultural products. A general slowdown in worldwide agriculture has affected our Crop Protection and Animal Health segments as well as our Chemicals segment's sales to customers in the agrochemicals business. Nevertheless, our diversified palette provides some protection from cyclicity. In recent years, for example, strong demand for our Chemicals products from the electronics industry has offset weakening demand from the agricultural sector.

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>2000</u>	<u>Change from Previous Year (%)</u>	<u>1999</u>
Research and development expenditure:					
Amount (in millions of euros)	2,559	6.9	2,393	6.3	2,252
As a percentage of sales	8.5	—	7.7	—	8.2

We typically allocate the largest portion of our research and development expenses to our Health Care businesses, primarily in the Pharmaceuticals segment. In 2001, Pharmaceuticals accounted for 48.5 percent of our total research and development spending (2000: 45.8 percent; 1999: 42.3 percent).

For a more detailed discussion of our research and development activities and policies, see Item 4, *Information on the Company — Research and Development* as well as 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 the International Accounting Standards, or IAS, issued by the International Accounting Standards Board (IASB). See Note 44 to our consolidated financial statements for a reconciliation of the significant differences between IAS and U.S. GAAP.

New Accounting Standards

IAS

The following new or revised accounting standards and interpretations were implemented in 2001:

IAS 12 (revised 2000)	Income Taxes
IAS 19 (revised 2000)	Employee Benefits
IAS 39	Financial Instruments: Recognition and Measurement
IAS 40	Investment Property
SIC 17	Equity-Cost of an Equity Transaction
SIC 19	Reporting Currency: Measurement and Presentation

IAS 12 (revised 2000) “Income Taxes” requires that current and deferred income taxes be measured at the tax rates applicable to undistributed earnings. The income tax consequences of dividends should be recognized when the related dividend is recognized in the financial statements.

IAS 19 (revised 2000) “Employee Benefits” requires that plan assets should include certain assets for insurance policies that satisfy the same conditions as other plan assets, and that have economic effects similar to those other plan assets.

IAS 39 “Financial Instruments: Recognition and Measurement” requires that all financial assets and financial liabilities, including derivatives, be recognized on the balance sheet. This will involve recording on the balance sheet the unrealized gains on the available-for-sale and derivative portfolios. As of the adoption of IAS 39 on January 1, 2001, the after tax amount added to stockholders’ equity was €0.9 billion.

IAS 40 “Investment Property” prescribes the accounting treatment for investment property and related disclosure requirements.

SIC 17 “Equity — Cost of an Equity Transaction” requires that we account for transaction costs of an equity transaction as a deduction from equity, net of any related income tax benefit, unless the transaction fails to be completed, in which case it should be expensed.

SIC 19 “Reporting Currency — Measurement and Presentation of Financial Statements under IAS 21 and IAS 29” provides additional guidance on determining the reporting currencies of foreign subsidiaries.

The adoption of these standards did not have a material impact on our financial position or results of operation in 2001.

U.S. GAAP

In June 2001, the Financial Accounting Standards Board approved SFAS 141 “Business Combinations” and SFAS 142 “Goodwill and Other Intangible Assets”. SFAS 141 requires the purchase method of accounting to be used for all business combinations initiated after June 30, 2001, establishes specific criteria for the recognition of intangible assets separately from goodwill, and requires unallocated negative goodwill to be written off immediately as an exceptional gain. We will apply SFAS 141 to all business combinations for which purchase agreements are signed after June 30, 2001. SFAS 142 addresses the accounting for goodwill and identifiable intangible assets subsequent to their acquisition. Amortization of goodwill will discontinue upon adoption of SFAS 142. In addition, goodwill recorded as a result of business combinations completed during the six-month period ended December 31, 2001 will not be amortized. All goodwill and intangible assets will be tested for impairment in accordance with the provision of this statement. We began applying the provisions of SFAS 142 on January 1, 2002. We have not completed our analysis of these standards and, accordingly, has not determined what effect the adoption of SFAS 141 and 142 will have on the Group’s financial position, results of operations or cash flows.

In June 2001, the Financial Accounting Standards Board approved SFAS 143 “Accounting for Asset Retirement Obligations”. SFAS 143 requires that the fair value of a liability for an asset retirement obligation be

recognized in the period in which it is incurred if a reasonable estimate of fair value can be made. The associated asset retirement costs are capitalized as part of the carrying amount of the long-lived asset. SFAS 143 is effective for fiscal periods beginning after June 15, 2002. Early adoption is encouraged and initial application of this Statement shall be as of the beginning of an entity's fiscal year. We began applying SFAS 143 beginning January 1, 2003. We have not completed our analysis of this standard and, accordingly, have not determined what effect the adoption of SFAS 143 will have on our financial position, results of operations or cash flows.

In August 2001, the Financial Accounting Standards Board approved SFAS 144 "Accounting for the Impairment or Disposal of Long-Lived Assets". SFAS 144 retains the requirements of SFAS 121 to recognize an impairment loss only if the carrying amount of a long-lived asset is not recoverable from its undiscounted cash flows and measure an impairment loss as the difference between the carrying amount and fair value of the asset. SFAS 144 requires a probability-weighted cash flow estimation approach and establishes a "primary-asset" approach to determine the cash flow estimation period for groups of assets and liabilities. SFAS 144 is effective for fiscal years beginning after December 15, 2001, and interim periods within those fiscal years, with early application encouraged. We began applying SFAS 144 on January 1, 2002. We have not completed our analysis of this standard and, accordingly, have not determined what effect the adoption of SFAS 144 will have on our financial position, results of operations or cash flows.

In 2001, the Emerging Issues Task Force (EITF) reached consensus on EITF 00-14 "Accounting for Certain Sales Incentives" and EITF 00-25 "Vendor Income Statement Characterization of Consideration Paid to a Reseller of the Vendor's Products", which address the recognition, measurement and income statement presentation classification of certain sales incentives, and the statement of earnings of consideration from a vendor to an entity that purchases the vendor's products for resale, respectively. We have not yet completed our analysis of the impact of these statements on our financial information presented in accordance with U.S. GAAP.

Currency of Presentation

On January 1, 1999, the euro became the common currency of the 11 member states of the European Union (including Germany) participating in the European Monetary Union. The conversion rates between the euro and the national "legacy" currencies were irrevocably fixed; the official German mark/euro rate was DM 1.95583 per €1.00. Legacy currency banknotes and coins remained in circulation during an initial transition period. On January 1, 2002, new euro-denominated notes and coins entered circulation and the legacy currencies were withdrawn from circulation. Euro notes and coins are now the sole legal tender in these countries.

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 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 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.

Although we believe that our estimates of useful lives and estimations of discounted future cash flows are appropriate, changes in assumptions or circumstances could impact our future reported results.

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 44 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 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. We believe that is unlikely that the ultimate outcome of such pending litigation will be decided unfavorably to us. Accordingly, we do not believe that the outcome of legal proceedings will have a material adverse effect on our financial position, profitability or liquidity.

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 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.

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 appoints and supervises the members of the Board of Management. 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 by the Supervisory Board 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, profitability and on the current business of Bayer AG, as well as on any exceptional matters which 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.

Committees of the Board of Management oversee various aspects of the management of Bayer as a whole, with the committee chairmen holding primary responsibility. Individual Board members serve as representatives with primary responsibility for our various business segments and as representatives for the various geographic regions in which we operate.

The following table shows the members of the Board of Management, their ages, positions and the years in which their current terms expire.

<u>Name and Age</u>	<u>Position</u>	<u>Current term expires</u>
Werner Wenning (55)	Chairman	2007
Dr. Attila Molnar (53)	Director	2002
Dr. Frank Morich (48)	Director	2002
Dr. Udo Oels (58)	Director	2006
Werner Spinner (53)	Director	2008
Klaus Kühn (50)	Director	2007
Dr. Richard Pott (48)	Director	2007

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 Dresdner Bank Lateinamerika AG, Gerling-Konzern Versicherungs-Beteiligungs AG and Rheinyp Rheinische Hypothekenbank AG. Until May 2001, he served as a member of the supervisory board of Gerling-Konzern Allgemeine Versicherungs-AG. He is also the vice president of the Deutsches Aktieninstitut e.V. and a member of the Presidium of the Cologne Chamber of Industry and Commerce.

Dr. Attila Molnar has served on the Board of Management since 1999. Currently, he chairs the Human Resources Committee and is a member of the Technology and Environment Committee. He is the representative of the Board of Management responsible for the North America and Mexico regions. Dr. Molnar also represents the Agriculture businesses. Prior to joining the Board, Dr. Molnar was the general manager of Bayer's former Organic Chemicals business group from 1996 to 1999 and became the general manager of the Basic and Fine Chemicals business group in 1999, before joining the Board of Management later that year. We expect Dr. Molnar to leave the Board of Management in July 2002 in order to become president of Bayer Corporation, our U.S. subsidiary, as well as Senior Bayer Executive with responsibility for the United States.

Dr. Frank Morich has been a member of the Board of Management since 2000. He is chairman of the Research and Development Committee and a member of the Marketing and Logistics and the Technology and Environment Committees. He represents the Health Care businesses on the Board. Dr. Morich served as head of product development for our Pharmaceuticals segment from 1995 to February 1998 and then, until he joined the Board, as head of our Consumer Care business group. We expect Dr. Morich to leave the Board of Management in July 2002 in order to become chairman of the board of Bayer HealthCare AG, the new subsidiary that we plan to incorporate to operate our Pharmaceuticals, Consumer Care, Diagnostics, Biological Products and Animal Health businesses.

Dr. Udo Oels joined the Board of Management in 1996 and currently chairs the Technology and Environment Committee. He is also a member of the Research and Development and the Corporate Coordination Committees. He is the representative for the China region.

Werner Spinner has been a member of the Board of Management since 1998. He currently chairs the Marketing and Logistics Committee and is a member of the Finance Committee. He also represents the Polymers businesses as well as the Far East region. Prior to joining the Board, Mr. Spinner was the general manager of the Consumer Care business group from 1994 to 1998.

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. Mr. Kühn is also a member of the board of directors of Agfa-Gevaert N.V.

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 is slated to oversee strategy and human resources when Bayer makes the transition to its planned holding company structure.

Supervisory Board

Under the German Stock Corporation law, 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 appoint and supervise the Board of Management. 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, including:

- the acquisition or disposition of investments above a specified threshold;
- the acquisition, disposition or encumbrance of real property;
- the creation of new business units or the disposition of existing units;
- the issuance of bonds, entering into of credit agreements, or grant of guaranties, sureties (*Bürgschaften*) and loans, except to subsidiaries; and
- the establishment of branch offices (*Zweigniederlassungen*).

Our shareholders elect 10 members of the Supervisory Board at the annual meeting of shareholders. Pursuant to the Co-Determination Act of 1976, our employees elect the remaining 10 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.

Any member elected by the shareholders in 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 relevant class of employees. Unless not 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 and in such vote the chairman of the Supervisory Board has a second vote. In order to constitute a quorum at least half of the total members of the Supervisory Board must be present in the meeting or participate in the voting by giving a written vote.

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.

The following table shows the current members of the 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</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	Lathe operator	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
*Petra Brayer	Member	Chemical laboratory assistant	1999
*Karl-Josef Ellrich	Member	Business administrator, health insurance fund	2000
Prof. Dr. Hans-Olaf Henkel	Member	President of the Leibniz Association	2002
*Karl-Heinz Huchthausen	Member	Business administrator	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	Chemical Laboratory Assistant	2000
*Rolf Nietzard	Member	Chemical Laboratory Technician	1996
Dr. Heinrich von Pierer	Member	President and Chief Executive Officer of Siemens AG	1993
Dr. Wolfgang Reitzle	Member	Member of the management board, Linde AG	2002
*Wolfgang Schenk	Member	Engineer	2002
*Waltraud Schlaefke	Member	Chemical laboratory technician	1992
*Hubertus Schmoldt	Member	Chairman of German Mine, Chemical and Power Workers' Union	1995
*Dieter Schulte	Member	Chairman of German Unions Federation	1997
*Dr. Eugen Velker	Member	Chemist	2000
*Siegfried Wendlandt	Member	North Rhine District Secretary of German Mine, Chemical and Power Workers' Union	2001
*Reinhard Wendt	Member	Insurance administrator	2002
*Thomas de Win	Member	Business administrator	2002
Prof. Dr. Ernst-L. Winnacker	Member	President of German Research Association	1997
Dr. Hermann Wunderlich	Member	Former Vice Chairman of management board	1996

Supervisory Board Committees

Currently, the Supervisory Board has the following committees:

- The nomination committee (*Vermittlungsausschuss*), established pursuant to § 27 (3) of the Co-Determination Act, consists of the chairman and vice chairman of the Supervisory Board, as well as one shareholder representative and one employee representative. 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 § 5 (1) of the Standard Operating Procedures (*Geschäftsordnung*) of the Supervisory Board, the *Vermittlungsausschuss* also serves as the Presidium, i.e. a sub-body of the Supervisory Board to which the Supervisory Board may delegate some of its functions. Among the Presidium's responsibilities in this capacity is to advise the Supervisory Board as a whole in connection with the Supervisory Board's function as audit committee. The current members of the nomination committee are Mr. Schneider, Mr. Gipperich, Mr. von Pierer and Mr. Schmoltdt.

- The personnel committee (*Personalausschuss*) established pursuant to § 5 (2) 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, Mr. Gipperich, Mr. Kohlhaussen and Mr. de Win.
- The investment committee (*Beteiligungsausschuss*) established pursuant to § 5 (3) of the Standard Operating Procedures of the Supervisory Board. This committee consists of four members of the Supervisory Board; its primary purpose is to make recommendations to the Supervisory Board with respect to the acquisition or disposal of investments, where the Standard Operating Procedures of the Board of Management condition these transactions on the Supervisory Board's approval. The investment committee may grant preliminary approval to such transactions, thereby permitting the Board of Management to proceed with a transaction subject to final approval by the Supervisory Board.
- The social policy committee (*sozialpolitischer Ausschuss*) established pursuant to § 5(6) of the Standard Operating Procedures of the Supervisory Board. The social policy committee advises the Supervisory Board on developments in social policy in Germany and abroad that could be important for Bayer.

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 who beneficially owns shares of Bayer AG owns one percent or more of all outstanding shares.

Compensation

In 2001, we paid salary and bonus compensation totaling €8,153,562 (2000: €10,387,801) to the members of our Board of Management. Of this amount, €3,780,301 represented base salary and fixed bonus and €4,373,261 represented variable bonus. The variable bonus for a given year is tied to the amount of Bayer AG's dividend for that year. Emoluments to retired members of the Board of Management and their surviving dependents amounted to €8,355,270 (2000: €8,923,934). We paid €1,293,750 (2000: €2,078,680) in compensation to the members of the Supervisory Board.

In 2000, we implemented our Stock Option Program, under which we may grant "option rights" to members of the Board of Management. The number of shares 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. See below, "— Employee Option Plans — Stock Option Program".

There were no loans to members of the Board of Management or Supervisory Board outstanding as of December 31, 2001.

We pay retired former members of the Board of Management a monthly pension equal to 80 percent of the monthly base salary received while in service. If we increase the base salary of current Board members, we adjust the pension payments to retired members accordingly.

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 for 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 discounted present value of the compensation they would have received through the normal expiration date of their employment contracts. In addition, they would receive a severance payment equal to their annual compensation for a period of from two to four years. 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 would retain full pension rights.

Employee option plans

In May 2000, we implemented a three-tier program to provide employees and management 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 be eligible for the stock option and stock incentive programs and for Module 1 of the stock participation program, 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, 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, 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 one option right for each 20 shares deposited. These deposited shares are "locked up"; 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 he or she has fulfilled the performance criteria. Any unexercised option rights expire at the end of this two-year period.

We apply three criteria to determine whether the participant is eligible to exercise option rights granted in any given tranche and, if so, the number of shares received upon exercise. Two of these criteria measure the relative performance of the Bayer AG share; the third measures the individual contribution of the participant.

- If the Bayer AG share's total return has been at least 30 percent from the starting date of the tranche, each option right entitles the participant to one share for each three percentage points of total return, up

to a maximum of 50 shares. This number may be modified by the application of the third, individual performance-based criterion.

- If the Bayer AG share's total return exceeds the total return of the Dow Jones Euro Stoxx 50^(SM) performance index since the starting date of the tranche, each option right entitles the participant to one share for each percentage point by which the Bayer AG share has outperformed the index, up to a maximum of 50 shares. Again, this number is subject to modification by the third criterion.
- We calculate the cash value the participant has added to the business operations for which he or she is responsible. We do this by comparing the average growth in cash value for these operations over that tranche's holding period with the average growth in cash value for the Bayer Group as a whole during the three years prior to the starting date of the tranche. The result of this calculation is a factor between 0 and 2.

We multiply the number of the participant's option rights by the number of shares to which he is or she is entitled under each the first two criteria. We then multiply the result by the factor produced by the third criterion. If the participant is not entitled to any shares under the first and second criteria, or if the factor produced by the third criterion is 0, the participant receives no shares under the program.

In 2001, participants in our stock option program have received a total of 1,639 option rights. The number of shares that these participants may receive upon exercise of their option rights would vary between a minimum of zero shares and, assuming maximum results for all participants on all three performance criteria described above, a maximum of 327,800 shares.

German law generally requires specific shareholder approval for the issuance of shares to members of a corporation's board of management. To the extent that we are unable to issue shares under the stock option program to participating members of our Board of Management at the time they are entitled to exercise their option rights, therefore, the option rights would function as share appreciation rights. Instead of shares, the participant would receive the cash value of the shares to which the option rights would otherwise entitle him or her, based on the trading price of the Bayer AG share at the time of exercise.

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 his or her performance-related bonus for the preceding fiscal year. The number of incentive shares the participant receives depends on the number of Bayer AG shares deposited at the start of the tranche as well as on the total return 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.

Each tranche of the stock incentive program has a ten-year term. There are three incentive share distribution dates during this period. On these dates, the participant receives incentive shares as follows:

<u>Distribution date at end of</u>	<u>Incentive shares received (per 10 deposited shares)</u>
Second year	2
Sixth year	4
Tenth year	4

Participants receive incentive shares only if the total return of the Bayer AG share has outperformed the Dow Jones Euro Stoxx 50^(SM) performance 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 2001, participants are eligible to receive a total of 80,380 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 number of bonus shares 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.

Each tranche of Module 1 has a term of ten years and entitles the participant to receive incentive shares 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 incentive shares as follows on the distribution dates:

<u>Distribution date at end of</u>	<u>Incentive shares received (per 10 deposited shares)</u>
Second year	1
Sixth year	2
Tenth year	2

Based on the number of Bayer AG shares that participants in Module 1 of the stock participation program have deposited in the tranche for 2001, participants are eligible to receive a total of 322,180 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 Module 2 each participant may purchase 10 Bayer AG shares per year at a tax-free discount of €15.34 per share under the then market price. 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 2001, 2000 and 1999 by area of primary activity and an approximate breakdown of employees as of December 31, 2001, 2000 and 1999 by geographical region:

<u>Employees by Activity</u>				<u>Breakdown by Region</u>			
	<u>Average for</u>				<u>As of December 31,</u>		
	<u>2001</u>	<u>2000</u>	<u>1999</u>		<u>2001</u>	<u>2000</u>	<u>1999</u>
Technology	60,168	59,923	59,356	Europe	64,600	65,700	65,800
Marketing	33,768	33,191	33,186	North America	23,200	24,100	23,100
Administration	8,972	9,426	9,567	Asia/Pacific	12,600	12,100	11,100
Research	11,150	11,007	11,520	Latin America/ Africa/Middle East	11,000	11,400	11,500
Total	<u>114,058</u>	<u>113,547</u>	<u>113,629</u>	Corporate	600	600	700

Labor Relations

The union-organized workers at our German facilities belong to several unions, the most important of which is IG BCE, the German Mine, Chemical and Power Workers' Union. We do not negotiate collective bargaining agreements with these unions to cover our workers. 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 and unions generally negotiate collective bargaining agreements annually. The current agreement that covers our workers has a term of 13 months, beginning April 2002. It grants workers a lump-sum payment of €85 in the first month of the agreement and a subsequent 3.3 percent pay increase over the life of the agreement. A German collective bargaining agreement governs the employment of all workers of the categories organized in the relevant union, whether or not the individual worker is a union member.

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 contracts, are organized in six pay grades.

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 us and our staff at the facility level. A joint works council (*Gesamtbetriebsrat*) serves a similar purpose at the company-wide level. The rights and responsibilities of works councils are set forth in the German Works Council Constitution Act (*Betriebsverfassungsgesetz*). Members of our works councils share responsibility with us for managing staff-related issues as well as such working conditions as:

- working hours;
- vacation guidelines;
- employee facilities (e.g., subsidized cafeterias); and
- distribution guidelines for performance-related bonuses.

A works council has no authority, however, to negotiate with an employer on wage and salary compensation or other issues covered by the collective bargaining agreements between employers' associations and labor unions. Under German labor law, employees may legally strike only in an effort to obtain more favorable terms in the collective bargaining process. Accordingly, works councils have no legal authority to call a work stoppage.

On December 12, 2000 we entered into an agreement (*Standortsicherungsvereinbarung*) with our joint works council to further job stability at several of our most important German sites. This agreement became effective on January 1, 2001. Under the agreement, the joint works council agreed to the reduction or elimination of certain social benefits that we previously provided. These included additional vacation days, additional payments and paid breaks. The council also granted us increased flexibility in setting working hours. In exchange, 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, 2004. If exceptional circumstances arise that are beyond our control and lead to employee overcapacity, we have agreed to negotiate with the joint works council to create a solution that will serve the interests of company and 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 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*) are entitled to receive an additional monthly pension payment (*Zusatzrente*). As of December 2001, this salary threshold was €53,378. Bayer AG finances these additional pension payments in total by pension reserves.

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 Versicherungs-Aktiengesellschaft, has informed us that it holds 5.92 percent of Bayer AG's outstanding shares. No other shareholder has notified us that it has crossed any of the Securities Trading Act's thresholds.

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 "Share Ownership" in Item 6, *Directors, Senior Management and Employees*.

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;
- enterprises in which we have significant influence or which have significant influence over us;
- 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.

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 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. 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.

Patent validity challenges and infringement proceedings; patent-related antitrust actions

In the United States, Bayer AG and its U.S. subsidiary Bayer Corporation are plaintiffs or co-plaintiffs 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 containing the active ingredients ciprofloxacin or nifedipine 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 had 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 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 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 expires 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 else to make quarterly cash payments. Since concluding the settlement agreement, we have opted to make payments. Shortly after settling this suit, we applied to the U.S. Patent and Trademark Office for a reexamination of our patent. The Patent and Trademark Office reissued the patent in February 1999.

In April 1999, Danbury Pharmacal Inc., an affiliate of Schein Pharmaceutical, Inc., filed an ANDA (IV) alleging that our ciprofloxacin patent was invalid. Mylan Pharmaceuticals, Inc., an affiliate of Mylan Laboratories, Inc., filed an ANDA (IV) challenging our ciprofloxacin patent in September 1999. To protect and enforce our patent rights, Bayer AG together with Bayer Corporation as licensee filed two lawsuits against Danbury Pharmacal and Schein Pharmaceutical and one lawsuit against Mylan Pharmaceuticals and Mylan Laboratories in 1999, and a second lawsuit against Mylan Pharmaceuticals and Mylan Laboratories in 2000. Reddy Cheminor, Inc. intervened as an additional defendant in the Danbury/Schein suits. All these suits were consolidated for pre-trial proceedings and trial before the U.S. federal District Court for the District of New Jersey.

In their responses the defendants alleged the invalidity and unenforceability of our reexamined patent on several grounds. They then moved for summary judgment on the invalidity issue, and we filed a cross-motion for partial summary judgment. In February 2001, the district court denied the defendants' motion and granted our cross-motion. The court subsequently entered a final judgment in our favor, confirming the validity and enforceability of the patent. The defendants appealed this judgment to the Court of Appeals for the Federal Circuit, which heard oral arguments on January 7, 2002.

In addition, Bayer AG and Bayer Corporation filed a patent infringement action in May 2001 against Carlsbad Technology, Inc., arising from Carlsbad's ANDA (IV) filing seeking regulatory approval of its generic version of Cipro®. Carlsbad filed two motions for summary judgment. The first motion alleged as a matter of patent procedure that Bayer's patent as it relates to ciprofloxacin should expire in October 2002 and not, as determined by the Patent and Trademark Office, in December 2003. Bayer filed a cross-motion for summary judgment that the expiration date is in December 2003. In its second motion, Carlsbad alleged that ciprofloxacin was obvious in light of the prior art. The federal District Court for the Southern District of California denied both Carlsbad motions in October, 2001 and granted summary judgment to Bayer on its cross-motion. Carlsbad has appealed the decision denying the first motion to the Court of Appeals for the Federal Circuit. A trial regarding the arguments of obviousness raised in Carlsbad's second motion was held in April and May 2002. The court has not yet made a ruling. Carlsbad has withdrawn all other defenses it had originally raised challenging the validity and enforceability of Bayer AG's ciprofloxacin patent.

If we lost our patent protection for ciprofloxacin, or if the expiration of the patent were accelerated to October 2002, we believe that we would forego significant revenue. We intend to continue taking vigorous action to maintain our ciprofloxacin patent rights in the United States through their normal expiry in December 2003.

Antitrust actions. 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 defendant in twenty of these cases, including the individual lawsuit and the consumer protection group lawsuit; it has been served with process in the individual lawsuit and twelve of the putative class action lawsuits. In addition, Barr Laboratories, Aventis S.A., Hoechst Marion Roussel, Inc., Rugby Laboratories, Inc. and Watson Pharmaceuticals, Inc. have each been named as 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 defendants violated various federal antitrust and state business, antitrust, unfair trade practices and consumer protection statutes, and seek treble damages and injunctive relief.

These proceedings are at an early stage. None of the relevant courts have certified a class. The Judicial Panel for Multidistrict Litigation, or MDL Panel, transferred 35 of these cases to the U.S. federal District Court for the Eastern District of New York for coordinated pre-trial proceedings. The federal court ordered nine of those cases remanded to various state courts in October 2001. Nine cases are currently pending in a California state court. Bayer is also involved in state court proceedings occurring in Florida, New York, Kansas, Tennessee and Wisconsin.

The Barr settlement is also the subject of ongoing antitrust investigations by the U.S. Federal Trade Commission and a number of state attorneys general.

Because these cases 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 material to our results of operations and 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.

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.

In August 1997, Bayer AG and Bayer Corporation filed a patent infringement suit against Elan Pharmaceutical Research Corp. and Elan's parent company, Elan Corp., plc, arising from Elan's ANDA (IV) for a drug product containing nifedipine in a 30mg dosage form. In March 1999, the U.S. federal District Court for the Northern District of Georgia granted summary judgment against us, holding that the particular generic product for which Elan sought marketing approval as described in its ANDA would not violate our patent. In May 2000, the U.S. Court of Appeals for the Federal Circuit affirmed this decision.

In March 2001, the same district court granted summary judgment against Bayer AG and Bayer Corporation in a second ANDA (IV) related suit (60 mg dosage form) that we had filed against Elan and later in another action that we had filed against Elan, Biovail Labs, Inc., Biovail Corp. International and Teva Pharmaceuticals USA, Inc., arising from these parties' commercial sale of an allegedly bio-equivalent nifedipine product. We appealed these decisions to the Court of Appeals for the Federal Circuit. The Federal Circuit vacated these decisions of the District Court and remanded the cases to the District Court for further proceedings.

Bayer AG and Bayer Corporation have also filed four ANDA (IV) related lawsuits against Biovail and two lawsuits arising from the commercial sale of nifedipine products by Biovail and Teva. These suits are currently stayed before the U.S. federal District Court for the District of Puerto Rico.

As defendants have prevailed in some of these lawsuits, it is possible that they may also prevail in the trials and appeals that may take place in the future. We believe, however, that we have meritorious claims in the pending cases, and intend to prosecute these claims vigorously. Because some of our nifedipine dosages have already begun to face generic competition, we do not believe that an adverse result in the pending cases would result in a material amount of additional foregone revenue.

Antitrust actions. Biovail has filed an antitrust lawsuit against Bayer AG, Bayer Corporation and Pfizer in the U.S. federal District Court for the District of Western Pennsylvania. Biovail is seeking a declaratory judgment that Bayer's nifedipine patents are invalid. Biovail also seeks damages under federal and state antitrust statutes

alleging, among other things, that Bayer illegally asserted its patent rights. The district court has stayed this litigation pending resolution of the nifedepine-related patent infringement actions against Biovail.

This proceeding is at an early stage. However, we believe that we have meritorious defenses to the antitrust allegations, and we intend to defend this case vigorously.

Product liability proceedings

HIV-related actions. During the past decade, our U.S. subsidiary 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 also satisfactorily settled nearly 400 lawsuits by plaintiffs who opted out of the class action. Seven 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.

Although 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. These provisions are not material to the Bayer Group.

Cerivastatin-related actions. In August 2001, we voluntarily ceased marketing our cerivastatin anticholesterol products in response to reports of serious side effects in some patients. See Item 4, *Information about the Company — Health Care — Pharmaceuticals — Products*. Since this withdrawal, about 1,700 lawsuits, many of them putative class actions, have been initiated in the United States against Bayer Corporation and Bayer AG. The actions in the United States have been 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 are being transferred to the U.S. federal District Court for the District of Minnesota for coordinated discovery and other pre-trial proceedings. In addition, several actions have been initiated against other companies of the Bayer Group in other countries. We expect additional lawsuits to be filed in the United States and elsewhere. If the plaintiffs in these actions were to be successful, it is possible that the ultimate liability could be material to our results of operations and cash flows. We believe that we have meritorious defenses in these actions and are defending them vigorously. Without acknowledging any liability, we have settled a small 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 any litigation.

Phenylpropanolamine (PPA) actions. In late 2000, Bayer Corporation discontinued marketing Alka-Seltzer Plus effervescent medicines containing PPA in the United States, Canada and various Latin American countries in response to a recommendation from the U.S. Food and Drug Administration to all manufacturers of drugs and medicines containing PPA. 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. More than 540 class and individual lawsuits have been initiated in the United States against Bayer Corporation. The MDL Panel has assigned management of the federal court cases to the U.S. federal District Court for the Western District of Washington. It is probable that additional actions will be initiated there or in other jurisdictions where products containing PPA were marketed. Bayer Corporation believes it has meritorious defenses to these actions and intends to defend them vigorously.

Medicaid Rebate Program allegations

Our U.S. subsidiary, Bayer Corporation, is currently under investigation by the U.S. Attorney's Office for the District of Massachusetts. The investigation, which is assisted by the Department of Health & Human Services, focuses primarily on allegations that Bayer Corporation improperly underpaid rebates under the Medicaid Rebate Program during a period from 1995 to 2000.

These investigations could lead the government to bring criminal or civil actions, or both, against Bayer Corporation. If the government brought such actions and obtained a conviction or verdict against Bayer Corporation, we would likely be required to reimburse the government the amount of the alleged underpayment. We would also become liable to pay civil and/or criminal fines or penalties, which could be substantial. Although we believe this outcome to be unlikely, in the worst case a conviction or adverse verdict could result in the exclusion of Bayer Corporation from participation in federal health programs. Bayer Corporation is providing information to the government and otherwise cooperating with the investigation. Bayer Corporation believes that its practices complied in all material respects with all applicable laws and is therefore seeking to persuade the government to discontinue its investigation. If the government does bring civil or criminal charges against Bayer Corporation, Bayer Corporation intends to defend itself vigorously.

Average wholesale price manipulation proceedings

Seven pending lawsuits allege that a number of pharmaceutical companies, including Bayer Corporation, manipulated the average wholesale 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 attorney's fees. We expect that six of these actions will be consolidated before the U.S. federal court for the District of Massachusetts. The remaining case, in which the State of Nevada is plaintiff, has been removed to federal court in Nevada but may be subject to remand to a state court. Bayer Corporation has not yet responded to the complaints in these actions, but intends to defend itself vigorously.

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 allocate to retained earnings (*Gewinnrücklagen*) up to 50 percent of the net income of Bayer AG for the fiscal year that remains after deducting amounts to be allocated to legal and statutory reserves and losses carried forward. 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.

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 "Dividends" in Item 3, *Key Information*.

Item 9. The Listing

Listing Details

Bayer AG's shares trade on the New York Stock Exchange under the symbol BAY in the form of American Depositary Shares, or ADSs. Each ADS represents one share. The ADSs are evidenced by American Depositary Receipts (ADRs) issued by The Bank of New York, as Depositary, under a Deposit Agreement dated as of January 16, 2002, among us, the Depositary and the registered holders of ADRs from time to time.

The primary market for trading in Bayer AG shares has previously been the Frankfurt Stock Exchange. The shares are also listed on the other seven German stock exchanges as well as most European stock exchanges and the Tokyo Stock Exchange.

The table below sets forth, for the periods indicated, the reported high and low quoted prices per Bayer AG share on the Frankfurt Stock Exchange and on the New York Stock Exchange.

	Frankfurt Stock Exchange		New York Stock Exchange	
	High	Low	High	Low
	(in euros)		(in dollars)	
1997	41.16	28.12		
1998	49.80	29.40		
1999	47.65	29.74		
2000:				
First quarter	49.40	39.51		
Second quarter	47.63	38.52		
Third quarter	49.17	40.20		
Fourth quarter	56.50	41.82		
2001:				
First quarter	58.00	44.79		
Second quarter	50.15	42.42		
Third quarter	47.25	23.90		
Fourth quarter	39.00	29.41		
2002:				
First quarter(1)	40.80	33.90	36.00	28.91
Previous six months:				
December 2001	37.30	34.42		
January 2002(1)	38.60	35.30	34.50	30.75
February 2002	37.38	33.30	32.56	28.91
March 2002	40.80	37.35	36.00	32.00
April 2002	40.10	35.70	35.85	31.86
May 2002	36.81	34.20	33.51	32.17

(1) From January 24, 2002 for New York Stock Exchange.

The average daily volume of Bayer shares traded on the Frankfurt Stock Exchange for the years 2001, 2000 and 1999 was 3,495,113; 2,549,929 and 2,182,661, respectively. The average daily trading volume during the first quarter of 2002 was 3,281,609 on the Frankfurt Stock Exchange and (from January 24) 36,987 on the New York Stock Exchange.

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 our Registration Statement on Form 20-F as filed with the Securities and Exchange Commission on January 15, 2002.

Because the current authorized capital I and II as described in the Registration Statement were scheduled to expire on April 30, 2002, our shareholders created a new authorized capital I and II at their annual meeting on April 26, 2002. The new authorized capital I is in the amount of €150,000,000 and the new authorized capital II is in the amount of €100,000,000. Both authorizations are valid through April 26, 2007. The terms of the new authorized capital I and II are otherwise substantially identical to those described in our Registration Statement. The new authorized capital I and II will become effective upon recordation of the shareholders' resolutions in the commercial register. We expect that the district court (*Amtsgericht*) at Leverkusen, which maintains the commercial register that includes Bayer, will effect the recording of our authorized capital within approximately 8 to 10 weeks after the shareholders' meeting.

At their April 26, 2002 annual meeting, the shareholders also extended until October 25, 2003 the Board of Management's authorization to repurchase Bayer AG shares. 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. See "Employee option plans" in Item 6, *Directors, Senior Management and Employees — Compensation*.

Material contracts

In connection with our planned acquisition of Aventis CropScience, we entered into two Stock Purchase Agreements, each dated October 2, 2001, with the current shareholders of Aventis CropScience. The first agreement was with Aventis S.A. and Hoechst AG. The second was with Schering AG and SCIC Holdings LLC. Exhibits 4.1 and 4.2 to this Annual Report incorporate by reference these agreements as previously filed with the Commission.

We are not otherwise 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.

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

As of January 1, 2002, we are required to withhold tax on dividends in respect of the 2001 fiscal year 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. The surtax amounts to 1.375 percent (5.5 percent x 25 percent) of the gross dividend amount. The surtax will equal 1.1 percent (5.5 percent x 20 percent) of the gross dividend paid out in 2002 and thereafter. 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. 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.

Under Section 904(g) of the U.S. Internal Revenue Code of 1986, as amended (the “Code”), dividends paid by a foreign corporation that is treated as more than 50 percent owned by U.S. persons may be treated as U.S. source income (rather than foreign source income). Such treatment may adversely affect Qualified Holders’ ability to use foreign tax credits. It is possible that we may be treated as more than 50 percent owned by United States persons for the purposes of Section 904(g) of the Code.

The United States Treasury has expressed concerns that parties to whom ADSs are released may be taking actions that are inconsistent with the claiming of foreign tax credits for Qualified Holders of ADSs. Accordingly, the creditability of German withholding tax on dividends could be affected by future actions that may be taken by the United States Treasury.

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.

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 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. The Internal Revenue Service will send the certification directly to the German tax authorities. 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 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 deductibility of capital losses is subject to significant limitations. If you are an individual Qualified Holder of Bayer AG shares, capital gains generally will be subject to tax at preferential rates, provided certain holding periods are met.

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 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 at a current rate of up to 30 percent unless you (1) are a corporation or other exempt recipient or (2) provide a taxpayer identification number and certifies 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 withholdings 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.

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 euro and the British pound.
- *Interest rate fluctuations.* We are exposed to changes in interest rates. Our primary interest rate exposure is to fluctuations in short-term U.S. interest rates, especially commercial paper market rates.
- *Credit risk.* We are exposed to credit risk with respect to the counterparties in our transactions, and
- *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. These risks are similar to the risks to which we were exposed in the prior year.

From time to time, we enter into hedging arrangements to mitigate our exposure to currency and interest risks. 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 limited extent. If increasing liquidity and lower fees render these hedging arrangements less costly, we would consider using them more often.

Our primary tools for hedging 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 derivatives. We use these instruments only to hedge risks arising from our business operations and from related investments and financing transactions. We do not use derivatives for trading or other speculative purposes. In 2000, we began to manage foreign currency risks on anticipated or pending transactions.

Sensitivity Analysis

The sensitivity analyses included in the risk sections below present the hypothetical loss in pre-tax income, cash flows or fair value of the financial instruments and derivative financial instruments that we held as of December 31, 2001 and 2000, and 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 of a financial instrument will change due to movements in market rates of interest. This risk primarily affects receivables and payables 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 investments and 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. Because their rates are fixed, these loans are exposed to interest rate fluctuation risk. We do not make these loans for financial purposes, however, and therefore do not hedge their interest rate risk.

Derivative financial instruments

Derivative financial instruments are our main method of interest rate hedging. We use interest rate swaps to convert a small portion of our floating rate investments into, in effect, fixed rate investments. 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.

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 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, 2001 and 2000; the fair values quoted disregard any opposite movements in the values of the underlying transactions.

	<u>Notional amount</u>		<u>Fair value</u>	
	<u>December 31,</u>			
	<u>2001</u>	<u>2000</u>	<u>2001</u>	<u>2000</u>
	<u>(euros in millions)</u>			
Interest rate hedging contracts	4,485	3,495	(60)	(133)

At December 31, 2001, the notional amount of our short-term interest rate hedging contracts (including interest and principal currency swaps) totaled €2.0 billion (2000: €0.3 billion); those maturing after more than one year totaled €2.5 billion (2000: €3.2 billion).

Sensitivity Analysis

An estimated hypothetical negative effect of 100 basis points, or one percent per year, in interest rates would result in an increase in interest cost per year of approximately €45 million (2000: €40 million) based on our debt position at year-end.

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. Upon the introduction of the euro on January 1, 1999, however, the relative values between the “legacy” currencies of the EU member states participating in the third stage of European Monetary Union were irrevocably fixed. Although these legacy currencies are scheduled to remain in circulation until July 2002, we no longer face currency-related risks in relation to member currencies of the Euro Zone.

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 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. 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 as long as prices remain unchanged.

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 income 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 British pound sterling and the Japanese yen. 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 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 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 to use a mixture of instruments, basing the specific mix at any time on our technical and fundamental analysis of market conditions.

The table below shows the notional amounts and fair values of the currency derivatives we held as of December 31, 2001 and 2000:

	<u>Notional amount</u>		<u>Fair value</u>	
	<u>December 31,</u>			
	<u>2001</u>	<u>2000</u>	<u>2001</u>	<u>2000</u>
	(euros in millions)			
Forward exchange contracts and currency swaps	2,749	3,415	(28)	133
Currency options	279	87	*	1

* Less than €1 million

At December 31, 2001, we estimated that our aggregate annual direct transaction risk from sales and purchases in foreign currencies was approximately €3.4 billion, which consisted primarily of U.S. dollars (\$2.3 billion), Japanese yen (¥70 billion) and British pounds sterling (£0.1 billion). For 2002, we do not anticipate a significant change in these levels of risk with respect to our current business operations. However, the businesses that we would acquire upon consummation of the Aventis CropScience transaction could be exposed to higher levels of risk associated with sales and purchases in foreign currencies.

The following table shows the effective exchange rates (including hedging cost and premium) between the euro and the major world currencies with respect to which we contracted hedging transactions, compared with the market average rates for these currencies for 2001 and 2000:

<u>Currency vs. euro</u>	<u>2001</u>				<u>2000</u>	
	<u>Effective</u>	<u>% Change vs. 2000</u>	<u>Market Average</u>	<u>% Change vs. 2000</u>	<u>Effective</u>	<u>Market Average</u>
U.S. dollar	0.9014	(3.7)	0.8956	(3.0)	0.9359	0.9236
Japanese yen	108.34	9.1	108.68	9.3	99.31	99.47
British pound sterling	0.6177	1.1	0.6219	2.0	0.6108	0.6095

Sensitivity Analysis

Applying a hypothetical adverse change of 10 percent in foreign currency exchange rates, we estimate the hypothetical loss in cash flows of derivative and non-derivative financial instruments and foreign currency denominated balance sheet positions at December 31, 2001 to be approximately €50 million (2000: 120 million).

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 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, buying additional quantities on the spot markets as needed. The most important of our raw materials affected by price fluctuations are:

1.3-butadiene	ACN	Benzene	Cyclohexane
Phenol	Propylene oxide	Styrene	Toluene

These products are derived from crude oil, therefore their prices are affected by the market price of crude oil.

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.

We did not hold any significant market risk sensitive commodity instruments at December 31, 2001.

Item 12. Description of Securities Other Than Equity Securities

Debt Securities

As of December 31, 2001 the following debt securities, issued by our wholly-owned subsidiaries, were outstanding:

<u>Issuer(1)</u>	<u>Security</u>	<u>Currency</u>	<u>Amount</u> (in millions)	<u>Interest Rate</u> (%)	<u>Term</u>
Bayer Capital Corp. B.V., Netherlands	Bonds with warrants attached(2)	Swiss francs	250	2.5	2002
Bayer Corp.	Notes	U.S. dollar	400	6.5	2002
Bayer Corp.	Notes	U.S. dollar	200	7.125	2015
Bayer Corp.	Bonds	Swiss francs	200	Floating(3)	2002
Bayer Corp.	Revenue Bonds	U.S. dollar	20.6	3.5	2009
Bayer Corp.	Revenue Bonds	U.S. dollar	25	4.0	2027
Bayer Corp.	Notes	U.S. dollar	350	6.65	2028
Bayer Corp.	Bonds	U.S. dollar	250	6.24	2028
Bayer Corp.	Money Market Puttable Reset Securities	U.S. dollar	500	4.75	2011
Bayer Ltd., Japan	Bonds	Swiss francs	400	3.75	2005
Bayer AG(5)	European Medium-Term Notes	various	864(6)	—	—

(1) Bayer AG guarantees the principal amount and interest payments of the debt securities issued by Bayer Capital Corp. B.V. and Bayer Ltd. described in the table above. Bayer AG and Bayer Corporation have entered into support agreements with respect to the debt securities issued by Bayer Corporation. Under these agreements, Bayer Corporation can obtain funds from Bayer AG to make payments on these securities if unable to make the payments itself.

- (2) The warrants entitling bondholders to exchange these bonds for shares of Bayer AG expired on August 28, 1997.
- (3) At December 31, 2001, these bonds bore interest at 2.1663%. They matured and were paid in April 2002.
- (4) This interest rate will be reset after February 15, 2008.
- (5) Under our European MTN program, Bayer AG as well as Bayer Corporation, Bayer Capital Corp. B.V. and Bayer Ltd. (Japan) can issue a variety of debt securities in all major currencies.
- (6) The figure listed in the table above is the principal amount in euros of securities issued under our European MTN (or EMTN) program outstanding at December 31, 2001. In October 2001, we filed a registration statement with the Luxembourg exchange in connection with the increase of the maximum outstanding principal amount under this program from €2 billion to €8 billion. Under this program, Bayer AG and the three subsidiaries named in Note 5 may issue debt securities in tranches up to a maximum of €8 billion in principal amount outstanding (or its equivalent in other currencies).

On April 10, 2002, we issued two series of debt securities under our EMTN program in total principal amounts of €3 billion and €2 billion. The first series of securities is due April 10, 2007 and bears interest at an annual rate of 5.375 percent. The second series is due April 10, 2012 and bears interest at an annual rate of 6.000 percent. Including these two series, the total principal amount outstanding under our EMTN program is €5.9 billion.

Warrants and Rights

For a description of the option and stock participation plans that we have established for management and employees, see Item 6, *Directors, Senior Management and Employees — Compensation — Employee Option Plans*. There are otherwise no currently outstanding warrants, rights or other securities convertible into or exchangeable for shares of Bayer AG.

Other Securities

None.

American Depositary Shares

Bayer AG, The Bank of New York, as Depositary, and the registered holders of American Depositary Receipts, or ADRs, and the owners of a beneficial interest in book-entry ADRs, will enter into a Deposit Agreement under which the ADSs are to be issued. The following section summarizes the material terms of the Deposit Agreement. The following is only a summary and does not purport to be complete and is subject to and qualified in its entirety by reference to the Deposit Agreement, including the form of ADRs. Terms used in this summary and not otherwise defined will have the meanings provided for in the Deposit Agreement. The following is a summary of the agreement. Because it is a summary, it does not contain all the information that may be important to you. For more complete information, you should read the entire agreement and the ADR. Copies of these documents are available for inspection at the Corporate Trust Office of The Bank of New York, 101 Barclay Street, New York, NY 10286 (temporarily located at One Wall Street, New York, New York 10286).

American Depositary Receipts

The Bank of New York will issue the ADSs. The ownership interest in each share will be represented by one ADS. The shares (or the right to receive shares) will be deposited by Bayer AG with Dresdner Bank AG, its Custodian in Germany. Each ADS will also represent securities, cash or other property deposited with The Bank of New York but not distributed to ADR holders. The Deposit Agreement refers to the deposited shares together with these other securities, cash or property as “deposited securities”. The principal executive office of the Depositary is located at One Wall Street, New York, NY 10286.

You may hold ADRs either directly or indirectly through your broker or other financial institution. If you hold ADRs directly, you are an ADR holder. This description assumes you hold your ADRs directly. If you hold the ADRs indirectly, you must rely on the procedures of your broker or other financial institution to assert the

rights of ADR holders described in this section. You should consult with your broker or financial institution to find out what those procedures are.

Because The Bank of New York will actually hold the shares, you must rely on it to exercise the rights of a shareholder. The obligations of Bayer AG and The Bank of New York are set out in a deposit agreement among Bayer AG, The Bank of New York and you, as an ADR holder. The agreement and the ADRs are generally governed by New York law.

Share Dividends And Other Distributions

The Bank of New York has agreed to pay to you the cash dividends or other distributions it or the custodian receives on shares or other deposited securities after deducting its fees and expenses. You will receive these distributions in proportion to the number of shares your ADRs represent.

Cash. The Bank of New York will convert any cash dividend or other cash distribution Bayer AG pays on the shares into U.S. dollars, if it can do so on a reasonable basis and can transfer the U.S. dollars to the United States. If that is not possible or if any approval from any government is needed and can not be obtained, the agreement allows The Bank of New York to distribute the foreign currency only to those ADR holders to whom it is possible to do so. It will hold the foreign currency it cannot convert for the account of the ADR holders who have not been paid. It will not invest the foreign currency and it will not be liable for the interest.

Before making a distribution, any withholding taxes that must be paid under German law will be deducted. See Item 10, *Additional Information — Taxation — Taxation of Dividends*. The Bank of New York will distribute only whole U.S. dollars and cents and will round fractional cents to the nearest whole cent. *If the exchange rates fluctuate during a time when The Bank of New York cannot convert the foreign currency, you may lose some or all of the value of the distribution.*

Shares. The Bank of New York may distribute new ADRs representing any shares Bayer AG may distribute as a dividend or free distribution, if Bayer AG furnishes it promptly with satisfactory evidence that it is legal to do so. The Bank of New York will only distribute whole ADRs. It will sell shares which would require it to use a fractional ADR and distribute the net proceeds in the same way as it does with cash. If The Bank of New York does not distribute additional ADRs, each ADR will also represent the new shares.

Rights to receive additional shares. If Bayer AG offers holders of its ordinary shares any rights to subscribe for additional shares or any other rights, The Bank of New York may, after consultation to the extent practicable with Bayer AG, make these rights available to you. Bayer AG must first instruct The Bank of New York to do so and furnish it with satisfactory evidence that it is legal to do so. If Bayer AG does not furnish this evidence and/or give these instructions, and The Bank of New York decides it is practical to sell the rights, The Bank of New York will sell the rights and distribute the proceeds, in the same way as it does with cash. The Bank of New York may allow rights that are not distributed or sold to lapse. In that case, you will receive no value for them.

If The Bank of New York makes rights available to you, upon instruction from you, it will exercise the rights and purchase the shares on your behalf. The Bank of New York will then deposit the shares and issue ADSs to you. It will only exercise rights if you pay it the exercise price and any other charges the rights require you to pay.

U.S. securities laws may restrict the sale, deposit, cancellation and transfer of the ADRs issued after exercise of rights. For example, you may not be able to trade the ADRs freely in the United States. In this case, The Bank of New York may issue the ADRs under a separate restricted deposit agreement which will contain the same provisions as the agreement, except for the changes needed to put the restrictions in place.

Other Distributions. The Bank of New York will send to you anything else Bayer AG distributes on deposited securities by any means it thinks is legal and fair, as promptly as practicable and after consultation, to the extent practicable, with Bayer AG. If it cannot make the distribution in that way, The Bank of New York has a choice. It may decide to sell what Bayer AG distributed and distribute the net proceeds in the same way as it does with cash or it may decide to hold what Bayer AG distributed, in which case the ADSs will also represent the newly distributed property.

The Bank of New York is not responsible if it decides that it is unlawful or impractical to make a distribution available to any ADR holders. Bayer AG has no obligation to register ADRs, shares, rights or other securities under the Securities Act. Bayer AG also has no obligation to take any other action to permit the distribution of ADSs, shares, rights or anything else to ADR holders. This means that you may not receive the distribution Bayer AG makes on its shares or any value for them if it is illegal or impractical for Bayer AG to make them available to you.

Deposit, Withdrawal and Cancellation

The Bank of New York will issue ADRs if you or your broker deposit shares or evidence of rights to receive shares with the Custodian. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, The Bank of New York will register the appropriate number of ADRs in the names you request and will deliver the ADRs at its Corporate Trust Office to the persons you request.

You may turn in your ADRs at The Bank of New York's Corporate Trust Office. Upon payment of its fees and expenses and of any taxes or charges, such as stamp taxes or stock transfer taxes or fees, The Bank of New York will deliver (1) the underlying shares to an account designated by you and (2) any other deposited securities underlying the ADR at the office of the Custodian. Or, at your request, risk and expense, The Bank of New York will deliver the deposited securities at its Corporate Trust Office.

Voting Rights

Upon receipt of notice from Bayer AG, The Bank of New York will notify you of the upcoming vote and arrange to deliver Bayer AG's voting materials to you. The materials will (1) describe the matters to be voted on and (2) explain how you, on a certain date, may instruct The Bank of New York to vote the shares or other deposited securities underlying your ADRs as you direct. For instructions to be valid, The Bank of New York must receive them on or before the date specified. The Bank of New York will try, as far as practical, subject to German law and the provisions of Bayer AG's Articles of Association, to vote or to have its agents vote the shares or other deposited securities as you instruct. The Bank of New York will only vote or attempt to vote as you instruct. However, if The Bank of New York does not receive your voting instructions, it will give a proxy to vote your shares to a designated representative of Bayer AG.

Bayer AG cannot assure you that you will receive the voting materials in time to ensure that you can instruct The Bank of New York to vote your shares. In addition, The Bank of New York and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions. This means that you may not be able to exercise your right to vote and there may be nothing you can do if your shares are not voted as you requested.

Fees and Expenses

ADR holders must pay:

\$5.00 (or less) per 100 ADSs

\$.02 (or less) per ADS

Registration or Transfer Fees

Expenses of The Bank of New York

Taxes and other governmental charges The Bank of New York or the Custodian have to pay on any ADR or share underlying an ADR, for example, stock transfer taxes, stamp duty or withholding taxes

For:

Each issuance of an ADS, including as a result of a distribution of shares or rights or other property
Each cancellation of an ADS, including if the agreement terminates

Any cash payment

Transfer and registration of shares on the share register of the Foreign Registrar from your name to the name of The Bank of New York or its agent when you deposit or withdraw shares

Conversion of foreign currency to U.S. dollars

Cable, telex and facsimile transmission expenses

As necessary

Payment of Taxes

You will be responsible for any taxes or other governmental charges payable on your ADRs or on the deposited securities underlying your ADRs. The Bank of New York may refuse to transfer your ADRs or allow you to withdraw the deposited securities underlying your ADRs until such taxes or other charges are paid. It may apply payments owed to you or sell deposited securities underlying your ADRs to pay any taxes owed and you will remain liable for any deficiency. If it sells deposited securities, it will, if appropriate, reduce the number of ADRs to reflect the sale and pay to you any proceeds, or send to you any property, remaining after it has paid the taxes.

Reclassifications, Recapitalizations and Mergers

If Bayer AG:

Changes the nominal or par value of its shares
Reclassifies, splits up or consolidates any of the deposited securities

Distributes securities on the shares that are not distributed to you

Recapitalizes, reorganizes, merges, liquidate, sells all or substantially all of its assets, or takes any similar action

Then:

The cash, shares or other securities received by The Bank of New York will become deposited securities. Each ADR will automatically represent its equal share of the new deposited securities.

The Bank of New York may, and will if Bayer AG asks it to, distribute some or all of the cash, shares or other securities it received. It may also issue new ADRs or ask you to surrender your outstanding ADRs in exchange for new ADRs, identifying the new deposited securities.

Amendment and Termination

Bayer AG may agree with The Bank of New York to amend the agreement and the ADRs without your consent for any reason. If the amendment adds or increases fees or charges, except for taxes and other governmental charges or registration fees, cable, telex or facsimile transmission costs, delivery costs or other such expenses, or prejudices an important right of ADR holders, it will only become effective 30 days after The Bank of New York notifies you of the amendment. At the time an amendment becomes effective, you are considered, by continuing to hold your ADR, to agree to the amendment and to be bound by the ADRs and the agreement is amended.

The Bank of New York will terminate the agreement at the direction of Bayer AG by mailing notice of termination to registered holders at least 30 days prior to the date fixed for termination in the notice. The Bank of New York may also terminate the agreement if The Bank of New York has told Bayer AG that it would like to resign and Bayer AG has not appointed a new depositary bank within 60 days.

After termination, The Bank of New York and its agents will be required to do only the following under the agreement: (1) collect distributions on the deposited securities and (2) deliver shares and other deposited securities upon cancellation of ADRs. At any time after the expiration of one year after the date of termination, The Bank of New York may sell any remaining deposited securities by public or private sale. After that, The Bank of New York will hold the proceeds of the sale, as well as any other cash it is holding under the agreement for the pro rata benefit of the ADR holders that have not surrendered their ADRs. It will not invest the money and will have no liability for interest. The Bank of New York's only obligations will be to account for the proceeds of the sale and other cash. After termination our only obligations will be with respect to indemnification and to pay certain amounts to The Bank of New York.

Limitations on Obligations and Liability to ADR Holders

The agreement expressly limits Bayer AG's obligations and the obligations of The Bank of New York, and it limits Bayer AG's liability and the liability of The Bank of New York. Bayer AG and The Bank of New York:

- are only obligated to take the actions specifically set forth in the agreement without negligence or bad faith;
- are not liable if either is prevented or delayed by law or circumstances beyond their control from performing their obligations under the agreement;
- are not liable if either exercises discretion permitted under the agreement;
- have no obligation to become involved in a lawsuit or other proceeding related to the ADRs or the agreement on your behalf or on behalf of any other party; and
- may rely upon any documents they believe in good faith to be genuine and to have been signed or presented by the proper party.

In the agreement, Bayer AG and The Bank of New York agree to indemnify each other under certain circumstances.

Requirements for Depositary Actions

Before The Bank of New York will issue or register transfer of an ADR, make a distribution on an ADR, or withdrawal of shares, The Bank of New York may require:

- payment of stock transfer or other taxes or other governmental charges and transfer or registration fees charged by third parties for the transfer of any shares or other deposited securities;
- production of satisfactory proof of the identity and genuineness of any signature or other information it deems necessary; and
- compliance with regulations it may establish, from time to time, consistent with the agreement, including presentation of transfer documents.

The Bank of New York may refuse to deliver, transfer, or register transfers of ADRs generally when the books of The Bank of New York or Bayer AG are closed, or at any time if The Bank of New York or Bayer AG thinks it advisable to do so.

You have the right to cancel your ADRs and withdraw the underlying shares at any time except:

- when temporary delays arise due to closing of the transfer books of The Bank of New York or Bayer AG or the deposit of Shares in connection with voting at a shareholders' meeting, or the payment of dividends;

- when you or other ADR holders seeking to withdraw shares owe money to pay fees, taxes and similar charges; or
- when it is necessary to prohibit withdrawals in order to comply with any laws or governmental regulations that apply to ADRs or to the withdrawal of shares or other deposited securities.

This right of withdrawal may not be limited by any other provision of the agreement.

Pre-Release of ADRs

In certain circumstances, subject to the provisions of the agreement, The Bank of New York may issue ADRs before deposit of the underlying shares. This is called a pre-release of the ADR. The Bank of New York may also deliver shares upon cancellation of pre-released ADRs (even if the ADRs are cancelled before the pre-release transaction has been closed out). A pre-release is closed out as soon as the underlying shares are delivered to The Bank of New York. The Bank of New York may receive ADRs instead of shares to close out a pre-release. The Bank of New York may pre-release ADRs only under the following conditions: (1) before or at the time of the pre-release, the person to whom the pre-release is being made must represent to The Bank of New York in writing that it or its customer owns the shares or ADRs to be deposited; (2) the pre-release must be fully collateralized with cash or other collateral that The Bank of New York considers appropriate; and (3) The Bank of New York must be able to close out the pre-release on not more than five business days' notice. In addition, The Bank of New York will limit the number of ADRs that may be outstanding at any time as a result of pre-release, although The Bank of New York may disregard the limit from time to time, if it thinks it is appropriate to do so.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

None.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

Not applicable.

Item 15. [Reserved]

Item 16. [Reserved]

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-66, incorporated herein by reference.

Item 19. Exhibits

Documents filed as exhibits to this Annual Report:

- Exhibit 1.1 Articles of Association (Satzung) of Bayer AG, as amended to date, in English translation.*
- Exhibit 2.2 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. We agree to furnish 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 Stock Purchase Agreement dated October 2, 2001 among Aventis S.A., Hoechst AG, and Bayer AG.**
- Exhibit 4.2 Stock Purchase Agreement dated as of October 2, 2001, among Schering Aktiengesellschaft, SCIC Holdings LLC and Bayer AG.***
- Exhibit 8.1 Subsidiaries as of the end of the year covered by this report: See “Organizational Structure” in Item 4, *Information on the Company*. We agree to furnish to the Securities and Exchange Commission upon request by the Commission a list or diagram of our subsidiaries indicating as to each subsidiary named: (a) its country or other jurisdiction of incorporation or organization, (b) its relationship to Bayer AG, and (c) the percentage of voting securities owned or other basis of control by its immediate parent if any.

* Incorporated by reference to Exhibit 1.1 to the Registration Statement on Form 20-F of Bayer AG filed with the Commission on January 15, 2002.

** Incorporated by reference to Exhibit 2.3 to the Annual Report on Form 20-F of Aventis, SEC File Number 001-10378, filed with the Commission on April 8, 2002, for which confidential treatment was requested.

*** Incorporated by reference to Exhibit 1 to the Report on Form 6-K of Schering AG, SEC File Number 001-16143, filed with the Commission on March 13, 2002, for which confidential treatment was requested.

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

Name: Werner Wenning

Title: Chairman of the Board of Management

/s/ ROLAND HARTWIG

Name: Dr. Roland Hartwig

Title: General Counsel

Date: June 24, 2002

BAYER GROUP

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Independent Auditors' Report

To the Board of Directors
and Stockholders of Bayer AG

We have audited the accompanying consolidated balance sheet of Bayer AG and its subsidiaries (the "Group") as of December 31, 2001 and 2000, and the related consolidated statements of income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2001. 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 Bayer AG at December 31, 2001, and 2000, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2001 in conformity with International Accounting Standards.

International Accounting Standards vary in certain significant respects from accounting principles generally accepted in the United States. The application of the latter would have affected the determination of consolidated net income for the years ended December 31, 2001, 2000 and 1999, and the determination of consolidated stockholders' equity as of December 31, 2001 and 2000, to the extent summarized in Note 44 to the consolidated financial statements.

Essen, Germany
February 26, 2002
(June 21, 2002, as to Note 44)

PwC Deutsche Revision
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft

/s/ ALBRECHT

P. Albrecht
Wirtschaftsprüfer

/s/ SCHILLING

J. Schilling
Wirtschaftsprüfer

Bayer Group Consolidated Statements of Income

	Note	2001	2000	1999
			(€ million)	
Net sales	[1]	30,275	30,971	27,320
<i>Net sales from discontinuing operations</i>	[6]	(1,337)	(2,356)	(3,748)
Net sales from continuing operations		28,938	28,615	23,572
Cost of goods sold		(16,542)	(15,077)	(12,473)
Gross Profit		12,396	13,538	11,099
Selling expenses	[2]	(6,980)	(6,637)	(5,433)
Research and development expenses	[3]	(2,488)	(2,319)	(2,077)
General administration expenses		(988)	(885)	(710)
Other operating income	[4]	480	425	659
Other operating expenses	[5]	(1,178)	(1,058)	(1,399)
Operating result from continuing operations		1,242	3,064	2,139
<i>Operating result from discontinuing operations</i>	[6]	369	223	188
<i>Income from the Agfa divestiture</i>				1,030*
Operating result	[7]	1,611	3,287	3,357
Income (Expenses) from investments in affiliated companies — net	[8]	54	283	(31)
Interest expense — net	[9]	(349)	(311)	(196)
Other non-operating expenses — net	[10]	(201)	(269)	(294)
Non-operating result		(496)	(297)	(521)
Income before income taxes		1,115	2,990	2,836
Income taxes	[11]	(154)	(1,148)	(818)
Income after taxes		961	1,842	2,018
Minority stockholders' interest	[13]	4	(26)	(16)
Net income		965	1,816	2,002
Basic and diluted earnings per share (€)	[14]	1.32	2.49	2.74

* The income from the sale of Agfa-Gevaert shares was tax-free.

Bayer Group Consolidated Balance Sheets

	<u>Note</u>	<u>Dec. 31, 2001</u>	<u>Dec. 31, 2000</u>
(€ million)			
ASSETS			
Noncurrent assets			
Intangible assets	[18]	5,014	4,843
Property, plant and equipment	[19]	13,543	13,345
Investments	[20]	<u>3,145</u>	<u>2,156</u>
		<u>21,702</u>	<u>20,344</u>
Current assets			
Inventories	[21]	5,818	6,095
Receivables and other assets			
Trade accounts receivable	[22]	5,415	6,244
Other receivables and other assets	[23]	<u>2,447</u>	<u>2,414</u>
		<u>7,862</u>	<u>8,658</u>
Liquid assets	[24]		
Marketable securities and other instruments		52	213
Cash and cash equivalents		<u>719</u>	<u>491</u>
		<u>771</u>	<u>704</u>
		<u>14,451</u>	<u>15,457</u>
Deferred taxes	[11]	<u>608</u>	<u>413</u>
Deferred charges	[25]	<u>278</u>	<u>237</u>
		<u>37,039</u>	<u>36,451</u>
<i>of which discontinuing operations</i>	[35]	<u>1,049</u>	<u>2,000</u>
STOCKHOLDERS' EQUITY AND LIABILITIES			
Stockholders' equity			
Capital stock of Bayer AG		1,870	1,870
Capital reserves of Bayer AG		2,942	2,942
Retained earnings		9,841	9,047
Net income		965	1,816
Other Comprehensive Income			
Currency translation adjustment		759	465
Miscellaneous items		<u>545</u>	<u>0</u>
	[26]	<u>16,922</u>	<u>16,140</u>
Minority stockholders' interest	[27]	<u>98</u>	<u>237</u>
Liabilities			
Long-term liabilities			
Long-term financial obligations	[30]	3,071	2,803
Miscellaneous long-term liabilities	[32]	140	196
Provisions for pensions and other post-employment benefits	[28]	4,407	4,254
Other long-term provisions	[29]	<u>1,288</u>	<u>1,208</u>
		<u>8,906</u>	<u>8,461</u>
Short-term liabilities			
Short-term financial obligations	[30]	4,309	3,862
Trade accounts payable	[31]	1,993	2,016
Miscellaneous short-term liabilities	[32]	1,832	2,274
Short-term provisions	[29]	<u>1,477</u>	<u>1,701</u>
		<u>9,611</u>	<u>9,853</u>
		<u>18,517</u>	<u>18,314</u>
<i>of which discontinuing operations</i>	[35]	<u>307</u>	<u>821</u>
Deferred taxes	[11]	<u>1,238</u>	<u>1,595</u>
Deferred income	[34]	<u>264</u>	<u>165</u>
		<u>37,039</u>	<u>36,451</u>

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	Currency translation adjustment	Miscellaneous items	Total Stockholders' equity
(€ million, except share data)								
Dec. 31, 1998	730,341,920	1,867	2,945	7,121	1,614	(979)	0	12,568
Changes in stockholders' equity resulting from capital contributions and dividend payments								
Capital contributions		3	(3)					0
Dividend payments					(747)			(747)
		3	(3)		(747)			(747)
Other changes in stockholders' equity not recognized in income								
Exchange differences						1,206		1,206
Other differences				(23)			0	(23)
				(23)		1,206		1,183
Changes in stockholders' equity recognized in income								
Allocation to retained earnings				867	(867)			0
Income after taxes for 1999					2,002			2,002
				867	1,135			2,002
Dec. 31, 1999	730,341,920	1,870	2,942	7,965	2,002	227	0	15,006
Changes in stockholders' equity resulting from capital contributions and dividend payments								
Capital contributions								
Dividend payments					(949)			(949)
					(949)			(949)
Other changes in stockholders' equity not recognized in income								
Exchange differences						238		238
Other differences				29			0	29
				29		238		267
Changes in stockholders' equity recognized in income								
Allocation to retained earnings				1,053	(1,053)			0
Income after taxes for 2000					1,816			1,816
				1,053	763			1,816
Dec. 31, 2000	730,341,920	1,870	2,942	9,047	1,816	465	0	16,140
Changes in stockholders' equity resulting from capital contributions and dividend payments								
Capital contributions								
Dividend payments					(1,022)			(1,022)
					(1,022)			(1,022)
Other changes in stockholders' equity not recognized in income								
Exchange differences						294		294
Other differences							545	545
						294	545	839
Changes in stockholders' equity recognized in income								
Allocation to retained earnings				794	(794)			0
Income after taxes for 2001					965			965
				794	171			965
Dec. 31, 2001	730,341,920	1,870	2,942	9,841	965	759	545	16,922

Bayer Group Consolidated Statements of Cash Flows

	Note	2001	2000	1999
		(€ million)		
Operating result		1,611	3,287	3,357
Income taxes currently payable		(637)	(873)	(834)
Depreciation and amortization		2,516	2,139	1,811
Change in long-term provisions		(193)	(316)	(167)
Gains on retirements of noncurrent assets		(374)	(73)	(975)
Gross cash provided by operating activities		2,923	4,164	3,192
(Increase) Decrease in inventories		146	(750)	134
(Increase) Decrease in trade accounts receivable		638	(548)	(459)
Increase (Decrease) in trade accounts payable		73	351	(11)
Changes in other working capital		79	(126)	337
Net cash provided by operating activities	[39]	3,859	3,091	3,193
<i>of which discontinuing operations</i>	[42]	159	302	318
Cash outflows for additions to property, plant and equipment		(2,617)	(2,647)	(2,632)
Cash inflows from sales of property, plant and equipment		521	322	63
Cash inflows and outflows related to investments		109	(45)	2,632
Cash outflows for acquisitions		(502)	(4,125)	(347)
Interest and dividends received		138	191	146
Cash inflows from marketable securities		219	115	209
Net cash provided by (used in) investing activities	[40]	(2,132)	(6,189)	71
<i>of which discontinuing operations</i>	[42]	295	(298)	2,165
Capital contributions		0	2	10
Bayer AG dividend and dividend payments to minority stockholders ..		(1,028)	(953)	(770)
Issuances of debt		2,514	3,952	1,222
Retirements of debt		(2,551)	(1,893)	(1,831)
Interest paid after taxes		(484)	(336)	(300)
Net cash provided by (used in) financing activities	[41]	(1,549)	772	(1,669)
<i>of which discontinuing operations</i>	[42]	36	11	198
Change in cash and cash equivalents due to business activities . . .		178	(2,326)	1,595
Cash and cash equivalents at beginning of year		491	2,812	1,184
Change in cash and cash equivalents due to changes in scope of consolidation		42	(3)	19
Change in cash and cash equivalents due to exchange rate movements		8	8	14
Cash and cash equivalents at end of year	[43]	719	491	2,812
Marketable securities and other instruments		52	213	328
Liquid assets as per balance sheets		771	704	3,140

Notes to the Consolidated Financial Statements of the Bayer Group

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. They comply with the European Union's guidelines on consolidation of financial statements (Directive 83/349/EEC).

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.

In compliance with IAS 37, provisions are established for contingent liabilities if available information indicates that an asset has been impaired or a liability has been incurred, and the amount of the impairment loss can be estimated with sufficient reliability.

Certain income statement and balance sheet 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 stated as short-term if they mature within one year. Income received such as royalties, rental income, interest income or dividend income is recognized on an accrual basis.

Changes in recognition and valuation principles are explained in the Notes. The previous year's figures are restated accordingly. Accounting policies for individual categories of items in the income statement and balance sheet are included in the relevant notes.

In a few instances, estimates and assumptions have 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.

Effects of New Accounting Pronouncements

The consolidated financial statements of the Bayer Group for the 2001 fiscal year comply with the following new or revised International Accounting Standards (IAS) and interpretations of the Standing Interpretations Committee (SIC) that the Group implemented for the first time in 2001:

IAS 12 (Revised 2000)	Income Taxes
IAS 19 (Revised 2000)	Employee Benefits
IAS 39	Financial Instruments: Recognition and Measurement
IAS 40	Investment Property
SIC-17	Equity — Cost of an Equity Transaction
SIC-19	Reporting Currency — Measurement and Presentation of Financial Statements under IAS 21 and IAS 29

The adoption of these standards did not have any significant impact on Bayer's financial position or its results of operations during 2001 or on the comparability of its 2001 and 2000 consolidated financial statements.

The following new interpretations will be implemented in 2002. Those applicable for the first time as of December 31, 2001 (marked *) did not have any effect on the 2001 financial statements.

SIC-27	Evaluating the Substance of Transactions Involving the Legal Form of a Lease*
SIC-28	Business Combinations — "Date of Exchange" and Fair Value of Equity Instruments*
SIC-29	Disclosure — Service Concession Arrangements*

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

SIC-30	Reporting Currency — Translation from Measurement Currency to Presentation Currency
SIC-31	Revenue — Barter Transactions Involving Advertising Services*
SIC-33	Consolidation and Equity Method — Potential Voting Rights and Allocation of Ownership Interests

A series of related transactions legally amounting to a lease contract should be accounted for as a single transaction according to SIC-27 (Evaluating the Substance of Transactions Involving the Legal Form of a Lease). This applies particularly in cases where the substance of the transactions cannot be adequately understood without reference to the series of transactions as a whole.

If a company pays for an acquisition with its own shares, determination of the “date of exchange” is crucial to valuation. According to SIC-28 (Business Combinations — “Date of Exchange” and Fair Value of Equity Instruments), the “date of exchange” is the day on which the agreed transaction is executed and the acquirer gains control over the net assets and business activities of the acquired unit. The cost of acquisition is based on the publicly quoted price of the equity instruments on that day.

The disclosure requirements for agreements under which the reporting enterprise is granted a concession to provide public services such as drinking water supplies are defined in SIC-29 (Disclosure — Service Concession Arrangements). All aspects of such concession arrangements should be disclosed.

Where a company’s financial statements are published in a currency other than the measurement currency, SIC-30 (Reporting Currency — Translation from Measurement Currency to Presentation Currency) provides that the statements be translated by the method specified in IAS 21 for foreign companies whose activities are not an integral part of those of the reporting enterprise (“foreign entities”).

Rules for realizing revenues from advertising-related barter transactions are given in SIC-31 (Revenue — Barter Transactions Involving Advertising Services).

According to SIC-33 (Consolidation and Equity Method — Potential Voting Rights and Allocation of Ownership Interests), potential voting rights that currently can be exercised without restriction, such as those conferred by stock subscription rights or stock purchase options, must be taken into account in determining whether one company controls or significantly influences another. However, the actual ownership interests held must continue to be used for the consolidation.

The adoption of these new interpretations is not expected to have a material effect on Bayer’s financial statements.

Companies Consolidated

The financial statements of the Bayer Group as of December 31, 2001 include Bayer AG and 49 German and 189 foreign consolidated subsidiaries in which Bayer AG, directly or indirectly, has a majority of the voting rights. The total number of consolidated companies has risen by 10 from the previous year. Excluded from consolidation are 85 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.

We have included 12 joint ventures — 29 fewer in total than in the previous year — by proportionate consolidation in compliance with IAS 31 (Financial Reporting of Interests in Joint Ventures). The decline in the number of included joint ventures is due mainly to the inclusion of DyStar GmbH, Frankfurt am Main, Germany,

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

by the equity method starting in 2001. The effect of joint ventures on the Group balance sheet and income statement is as follows:

	<u>€ million</u>
Noncurrent assets	230
Current assets	184
Pension provisions	(7)
Other provisions	(10)
Financial obligations	(77)
Remaining liabilities	<u>(78)</u>
Net assets	<u>242</u>
Income	499
Expenses	<u>443</u>
Income after taxes	<u>56</u>

While 11 companies are stated at equity, 58 companies that in aggregate are of minor importance are stated at their carrying amounts.

Consolidated for the first time are 27 companies, including those that belonged to the Cleveland, Ohio-based CSM group, which we acquired at the end of 2000. As a consequence of divestitures and mergers the number of consolidated companies was reduced by 47.

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 of the respective dates of acquisition. The purchase prices of the foreign acquisitions are translated at the exchange rates in effect at the respective dates of acquisition.

In 2001 a total of €514 million was spent on acquisitions, which were paid for in cash, not with shares of the company. These acquisitions led to goodwill of €50 million, including €45 million in additional goodwill resulting from the Lyondell polyols acquisition. The goodwill amounts are being amortized by the straight-line method over periods not exceeding 20 years.

In June 2001, Bayer Corporation, United States, acquired at a cost of €116 million development, manufacturing and distribution rights for products to detect antibodies to the hepatitis C virus (HCV) and HIV from the strategic cooperation between Ortho-Clinical Diagnostics Inc., Raritan, New Jersey, and Chiron Corporation, Emeryville, California. This acquisition expands the Diagnostics Business Group's portfolio of immunodiagnostic agents, strengthening its laboratory testing segment. The rights are being amortized over an estimated useful life of 12 years.

Bayer expanded its crop protection business in Europe on February 1, 2001 by acquiring MIKADO®, a leading corn herbicide, from Syngenta AG, Basel, Switzerland, for €115 million. The transaction covers business in the European Union and EFTA (European Free Trade Association) countries as well as patents, registrations, trademark rights, and production and formulation expertise. The acquired intangible assets are being amortized over an estimated useful life of 10 years.

Bayer AG has purchased a €93 million equity interest in CuraGen Corporation, New Haven, Connecticut, a leading biotech company. The objective of the collaboration agreement concluded with CuraGen in mid-January 2001 is to jointly develop and market novel drugs to treat obesity and diabetes. The intention is also to use special genomics-based technologies to evaluate substances in Bayer's early pharmaceutical research pipeline regarding their suitability for further clinical development.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

On May 1, 2001, Bayer Corporation, United States, increased its equity ownership in PharmaNetics Inc., Raleigh, North Carolina, by a further €25 million for the Diagnostics Business Group. The existing distribution agreement with PharmaNetics was expanded to cover Theranostic tests (rapid diagnostic testing during drug therapy), a core component of the technology platform offered by PharmaNetics Inc. The agreement includes non-exclusive rights in the U.S. and exclusive rights elsewhere for the Diagnostics Business Group to distribute Theranostic tests.

In February 2001, Bayer acquired a €17 million equity interest in PPL Therapeutics plc, Edinburgh, United Kingdom. PPL Therapeutics is a biotech company involved in the discovery, development, production and marketing of genetically modified proteins for therapeutic purposes and food products. The Pharmaceuticals Business Group and PPL Therapeutics have concluded an agreement under which Bayer will pursue the clinical development of, and acquire, global exclusive marketing rights to the company's major product, rAAT (recombinant alpha-1-antitrypsin). PPL Therapeutics intends to manufacture the product in a new facility currently scheduled for construction.

On February 12, 2001, the Pharmaceuticals Business Group purchased a €16 million equity interest in Avigen Inc., Alameda, California, a leading biotech company. The investment gives Bayer global, exclusive marketing and distribution rights to the gene therapy Coagulin-B™ developed by Avigen Inc. for the treatment of hemophilia B by gene transfer. Avigen Inc. intends to meet global demand for Coagulin-B™ from manufacture in a new production facility scheduled for construction.

On March 15, 2001, Bayer Corporation concluded an agreement on HIV and hepatitis C virus (HCV) tests with the biotech company Innogenetics N.V., Ghent, Belgium, for the Diagnostics Business Group. For €12 million Bayer acquired exclusive worldwide distribution and marketing rights, including rights to further developments in the future, for the HIV and HCV product lines manufactured by Innogenetics. These intangible assets are being amortized over an estimated useful life of 10 years.

H.C. Starck GmbH, Goslar, Germany, a subsidiary of Bayer AG, acquired TeCe Technical Ceramics GmbH & Co. KG, Selb, Germany from Deutsche Shell GmbH for €9 million effective January 1, 2001. The acquisition complements H.C. Starck's activities in surface technology and ceramics. The very good manufacturing conditions and geographical advantages support H.C. Starck's aim of expanding its position in the U.S. market. The acquired goodwill of €4 million is being amortized in the Bayer Group financial statements over an estimated useful life of 5 years.

In December 2001, the Consumer Care Business Group of Bayer's Mexican subsidiary Bayer de México, S.A. de C.V. purchased the marketing rights to Cevalin®, a leading vitamin C brand, and the well-known disinfectant Merthiolate® from Eli Lilly. The rights will be amortized over an estimated useful life of 10 years.

Significant **divestitures** in 2001 were as follows:

Bayer sold its 50 percent interest in EC Erdölchemie GmbH, Cologne, Germany to the other joint venture partner Deutsche BP AG, Hamburg, Germany, effective May 1, 2001, following approval from the E.U. Commission. The proceeds of the sale amounted to €476 million. Future raw material supplies from Erdölchemie to Bayer are contractually assured, as is the provision of services by Bayer to Erdölchemie.

Bayer Group company Wolff Walsrode AG sold its subsidiary Covexx Films, Walsrode, Germany, a company specializing in high-performance films, to Wipak, part of the Wihuri group of Finland, effective June 1, 2001.

Effective April 1, 2001, Bayer AG sold the H-acid production facilities on its Brunsbüttel site to Rütgers Elbechemie GmbH, a subsidiary of Rütgers VTF AG. Bayer sold its interest in ChemDesign Corporation, Fitchburg, Massachusetts, to Chestnut Acquisition Corporation, Mendham, New Jersey, a subsidiary of Chestnut Investments LLC, Mendham, New Jersey, effective November 30, 2001. ChemDesign manufactures organic chemicals mainly for the agrochemical and photographic industries.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

As part of the planned divestiture of Bayer's fibers activities, the Dralon® business was sold to the Fraver group of Biella, Italy, at the beginning of the year.

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)	
2001		
Noncurrent assets	505	366
Current assets (excluding liquid assets)	18	357
Liquid assets	—	—
Assets	<u>523</u>	<u>723</u>
Pension provisions	—	(88)
Other provisions	(1)	(50)
Financial obligations	—	(5)
Remaining liabilities	<u>(8)</u>	<u>(12)</u>
Liabilities	<u>(9)</u>	<u>(155)</u>
	<u>Acquisitions</u>	<u>Divestitures</u>
	(€ million)	
2000		
Noncurrent assets	3,846	136
Current assets (excluding liquid assets)	728	90
Liquid assets	39	—
Assets	<u>4,613(*)</u>	<u>226</u>
Pension provisions	15	29
Other provisions	51	2
Financial obligations	188	—
Remaining liabilities	<u>159</u>	<u>48</u>
Liabilities	<u>413(**)</u>	<u>79</u>

(*) including €2,623 million from Lyondell

(**) including €39 million from Lyondell

Lists of Bayer AG's direct and indirect holdings have been included in the Leverkusen commercial register. They also are available directly from Bayer AG on request.

The principal 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>
Germany	
H. C. Starck GmbH, Goslar	100
Wolff Walsrode AG, Walsrode	100
Bayer Chemie Service GmbH, Leverkusen	100
Bayer Vital GmbH, Leverkusen	100
Bayer Industrieprodukte GmbH & Co. KG, Leverkusen	100
Bayer Buna GmbH, Marl	100

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

<u>Company Name and Place of Business</u>	<u>Bayer's interest (%)</u>
Other European Countries	
Bayer Hispania, S.A., Spain	100
Bayer S.p.A., Italy	100
Química Farmacéutica Bayer, S.A., Spain	100
Bayer Rubber N.V., Belgium	100
Bayer plc, U.K	100
Bayer Antwerpen N.V., Belgium	100
Bayer Pharma S.A., France	99.9
Bayer International S.A., Switzerland	99.7
Bayer S.A., France	99.9
Bayer B.V., Netherlands	100
Bayer A/S, Denmark	100
North America	
Bayer Corporation, United States	100
Bayer Inc., Canada	100
Asia/Pacific	
Bayer (India) Ltd., India	55.3
Bayer Yakuhin Ltd., Japan	100
Sumika Bayer Urethane Co., Ltd., Japan	60
Bayer Ltd., Japan	100
Bayer Australia Ltd., Australia	99.9
Bayer (South East Asia) Pte Ltd., Singapore	100
Nihon Bayer Agrochem K.K., Japan	99.5
Bayer Thai Co. Ltd., Thailand	100
Bayer China Co., Ltd., Hong Kong	99.3
Latin America/Africa/Middle East	
Bayer de México, S.A. de C.V., Mexico	100
Bayer S.A., Argentina	99.9
Bayer S.A., Brazil	99.9
Bayer (Proprietary) Ltd., South Africa	100

Foreign currency translation

The financial statements for 2001 are drawn up in euros (€).

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 foreign consolidated companies 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. Goodwill as well as any fair value adjustments arising on the acquisition of entities located outside the European Monetary Union are treated as assets and liabilities of such entities and translated at closing rates.

Where the operations of a foreign company 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 rate on the date of addition, along with any relevant amortization, depreciation and write-downs. All other balance sheet items are translated at closing rates.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Income and expense items (except amortization, depreciation and write-downs) are translated at average rates for the year.

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	2000	1999	2001	2000	1999
		(€1)					
U.S.A.	USD	0.88	0.93	1.00	0.90	0.93	1.07
U.K.	GBP	0.61	0.62	0.62	0.62	0.61	0.66
Japan	JPY	115.33	106.92	102.73	108.74	99.74	121.05
Canada	CAD	1.41	1.40	1.46	1.39	1.37	1.59
Switzerland	CHF	1.48	1.52	1.61	1.51	1.56	1.60

Consolidation methods

Capital consolidation is performed according to IAS 22 (Business Combinations) by offsetting investments in subsidiaries against the underlying equities 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.

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 is able to exercise operational control, generally through an ownership interest greater than 50 percent.

The equity method is used to account for investments in material entities in which Bayer AG exerts significant influence, generally through an ownership interest between 20 and 50 percent.

Intercompany profits and losses on transactions with companies included at equity were immaterial in 2001, 2000 and 1999.

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). 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 foreign consolidated companies 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.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Notes to the Statements of Income

[1] Net sales

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.

While total reported sales declined 2001 by €0.7 billion, to €30.3 billion (2000: €31.0 billion; 1999: €27.3 billion), sales from continuing operations increased by €0.3 billion to €28.9 billion (2000: €28.6 billion; 1999: €23.6 billion). In 2001, a €0.9 billion decrease due to lower volumes was offset by positive contributions of €0.3 billion from higher selling prices, €0.1 billion from favorable shifts in exchange rates and €0.8 billion 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:

<u>2001</u>	<u>€ million</u>
Acquisitions	
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	<u>110</u>
	<u>983</u>
Divestitures	
Covexx Films	(61)
U.S. livestock vaccines business to Intervet International (divested in 2000)	(30)
Other	<u>(33)</u>
	<u>(124)</u>
Net effect on sales from continuing operations	<u><u>859</u></u>

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

2000 sales increased by €3.7 billion compared with 1999, to €31.0 billion. Sales from continuing operations advanced by €5.0 billion, to €28.6 billion. The increase in 2000 comprised €1.6 billion from higher volumes, €0.5 billion from improvement in selling prices, €2.2 billion from favorable shifts in exchange rates and €0.7 billion from the net positive effect of acquisitions and investitures. Acquisition and divestitures during 2000 and 1999 affected the comparison between the two years-sales figures by the following amounts:

<u>2000</u>	<u>€ million</u>
Acquisitions	
Polyols business (from Lyondell)	646
Plastic sheet business (from DSM on April 1, 1999)	80
Purchase of further interest in Misung Ltd., Pyongtaek, South Korea	58
Sybron Chemicals Inc., Birmingham, New Jersey, United States	35
Paper chemicals business (from Cytex Industries)	14
	<u>833</u>
Divestitures	
U.S. livestock vaccines business to Intervet International	(27)
Troponwerke GmbH & Co. KG	(24)
Other	(34)
	<u>(85)</u>
Net effect on sales from continuing operations	748
Sale of 70 percent of the shares of the Agfa-Gevaert group (May 31, 1999)	(1,801)
	<u>(1,053)</u>

1999 sales declined by 0.7 billion compared with 1998, to €27.3 billion. Sales growth of €1.4 billion from higher volumes and €0.6 billion from exchange rate fluctuations was offset by declines of €0.5 billion from price changes and €2.2 billion from the net effect of acquisitions and divestitures, which is comprised as follows:

<u>1999</u>	<u>€ million</u>
Acquisitions	
Chiron Diagnostics (from Chiron in 1998)	504
Plastic sheet business (from DSM)	72
Seed treatment business in U.S.A. and Canada (from Gustafson in 1998)	49
pbi Home & Garden Limited, U.K. (from Sumitomo Corporation)	18
Elastochem Inc., U.S.A.	11
Other	14
	<u>668</u>
Divestitures	
Agfa-Gevaert group	(2,548)
Titanium dioxide (placed into joint venture with Kerr-McGee in 1998)	(131)
Silicones (placed into joint venture with GE Plastics in 1998)	(113)
Citric acid (to Tate & Lyle in 1998)	(102)
Other	(19)
	<u>(2,913)</u>
Other changes in companies consolidated	78
	<u>(2,167)</u>

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

[2] Selling expenses

Selling expenses include €782 million (2000: €776 million; 1999: €609 million) in shipping and handling costs.

They also include advertising and promotion costs, expensed in the period in which they are incurred. These costs amount to €1,389 million (2000: €1,331 million; 1999: €1,083 million).

[3] 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.

[4] Other operating income

Among the items of other operating income from continuing operations for 2001 are €68 million (2000: €83 million; 1999: €117) from reversals of unutilized provisions, €74 million (2000: €74 million; 1999: €15 million) from retirements of noncurrent assets, and €25 million (2000: €25 million; 1999: €34 million) from sideline operations.

The cost of goods sold incurred for sideline operations has been offset against the corresponding revenues to more clearly reflect the earnings position. Also included here is €45 million in income resulting from an agreement concluded with Syngenta to settle a patent dispute over thiomethoxam.

[5] Other operating expenses

Included in other operating expenses for continuing operations in 2001 are €90 million (2000: €35 million; 1999: €52 million) in write-downs of receivables, €94 million (2000: €77 million; 1999: €139 million) in amortization of acquired goodwill and €15 million (2000: €25 million; 1999: €53 million) in losses from the sale of property, plant and equipment.

In addition, €214 million (2000: €200 million; 1999: €449 million) was spent on restructuring. Further details of restructuring expenses are given in Note 29.

[6] Discontinuing operations

Bayer sold its 50 percent interest in EC Erdölchemie GmbH, Cologne, to the joint venture partner Deutsche BP AG, Hamburg, effective May 1, 2001. The operating result of Erdölchemie for 2001 shown in the following table comprises the result of the business group's operations up to the date of divestiture and the income from the sale of the 50 percent interest.

In April 2001 Bayer decided to divest the remaining activities of its Fibers Business Group, including the production facilities for Dorlastan[®] spandex fibers and Perlon[®] monofilaments.

In the course of its reorganization Bayer plans to divest the Haarmann & Reimer business group, whose activities it now regards as non-core. It is therefore intended to sell the wholly owned subsidiary Haarmann & Reimer GmbH, a manufacturer of fragrances and flavors based in Holzminden, Germany.

The non-operating results and the income taxes attributable to Haarmann & Reimer, Fibers, Erdölchemie, DyStar and Agfa are reflected in the corresponding items of the income statement.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

A breakdown of the results of discontinuing operations is given below.

	EC			FS			HR		
	2001	2000	1999	2001	2000	1999	2001	2000	1999
	(€ million)								
Net sales	233	635	456	232	506	391	872	865	775
Cost of goods sold	(196)	(481)	(368)	(205)	(383)	(307)	(481)	(489)	(437)
Selling expenses	(16)	(45)	(44)	(26)	(50)	(45)	(199)	(197)	(157)
Research and development expenses	0	(2)	(1)	(8)	(9)	(9)	(63)	(54)	(54)
General administration expenses	(3)	(9)	(8)	(11)	(8)	(11)	(38)	(39)	(44)
Other operating income	316	7	17	1	10	9	23	14	17
Other operating expenses	(1)	(6)	(6)	(20)	(15)	(5)	(41)	(32)	(60)
Operating result from discontinuing operations	333	99	46	(37)	51	23	73	68	40
Non-operating result	(1)	(1)	(2)	(1)	1	(4)	(4)	(6)	(4)
Equity-method income (loss)									
Income (Loss) before income taxes	332	98	44	(38)	52	19	69	62	36
Income taxes	(6)	0	(10)	(3)	(2)	0	(35)	(30)	(20)
Income (Loss) after taxes	326	98	34	(41)	50	19	34	32	16

	Dystar			Agfa		Total		
	2001	2000	1999	2000	1999	2001	2000	1999
	(€ million)							
Net sales		350	325		1,801	1,337	2,356	3,748
Cost of goods sold		(223)	(241)		(1,098)	(882)	(1,576)	(2,451)
Selling expenses		(68)	(65)		(388)	(241)	(360)	(699)
Research and development expenses		(9)	(10)		(101)	(71)	(74)	(175)
General administration expenses		(21)	(27)		(81)	(52)	(77)	(171)
Other operating income		6	4		1,055	340	37	1,102
Other operating expenses		(30)	(10)		(55)	(62)	(83)	(136)
Operating result from discontinuing operations		5	(24)		1,133	369	223	1,218
Non-operating result		(18)	(7)		(6)	(6)	(24)	(23)
Equity-method income (loss)	6			72	(17)	6	72	(17)
Income (Loss) before income taxes	6	(13)	(31)	72	1,110	369	271	1,178
Income taxes	(3)	1	(4)	(26)	(24)	(47)	(57)	(58)
Income (Loss) after taxes	3	(12)	(35)	46	1,086	322	214	1,120

[7] Operating result

In accordance with IAS 14 (Segment Reporting), a breakdown of certain data in the financial statements is given by segment and geographical region. The segments and regions are the same as those used for internal reporting. The aim is to provide users of the financial statements with information regarding the profitability and future prospects of the Group's various activities. To allow a more accurate appraisal of continuing operations, the discontinuing operations are shown separately.

The Bayer Group is managed on the basis of business groups, which are aggregated into reportable segments according to economic characteristics, products, production processes, customer relationships and methods of distribution. There are currently 14 business groups, which are aggregated here into 7 reportable segments.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

The segments shown as **continuing operations** embrace the following activities:

<u>Segment</u>	<u>Activity</u>
Healthcare	
Pharmaceutical & Biological Products	Development and marketing of ethical pharmaceuticals
Consumer Care & Diagnostics	Development and marketing of over-the-counter medications, nutritional supplements, insecticides and insect repellants and products for central laboratory, near patient testing, and self-testing applications
Agriculture	
Crop Protection	Development and marketing of chemical insecticides, fungicides and herbicides
Animal Health	Development and marketing of veterinary medicines, environmental health products, and nutritionals for the health care of companion animals and commercial livestock/poultry
Polymers	
Plastics & Rubber	Manufacture and supply of engineered plastics and supplier of raw materials, rubber chemicals and modifiers to the rubber and tire industry
Polyurethanes and Coatings & Colorants	Development, production and marketing of raw materials, formulations and systems used in producing polyurethane polymers, lacquers, coatings, sealants, adhesives and colorants.
Chemicals	Manufacture and marketing of bulk and specialty chemicals, metal and ceramic powders and cellulose derivatives

The reconciliation line reflects intersegment items and income and expenses not allocable to the segments, such as central R&D expenses, corporate costs, and revenues and expenses from sideline operations. The intersegment sales reflect intragroup transactions effected at transfer prices fixed on an arm's-length basis. The reconciliation line also reflects those assets and liabilities that cannot be allocated to the reportable segments.

Business activities which Bayer has already divested or intends to divest are shown as discontinuing operations. These are the worldwide DyStar business group; the Erdölchemie business group located in Europe, the worldwide Agfa business segment, the worldwide Fibers business and the worldwide Haarmann & Reimer business.

The business segment and regional data are calculated as follows:

- The intersegment and interregional sales reflect intragroup transactions effected at transfer prices fixed on an arm's-length basis.
- The other operating income comprises that reflected in the income statement, including such income from discontinuing operations.
- Comparability of the operating results of different years may be restricted by exceptional items relating particularly to restructuring measures and acquisitions or divestitures of companies or businesses. For this reason the operating result before exceptional items is shown in addition.
- The return on sales before exceptional items is the ratio of the operating result before exceptional items to external sales.
- Expenses included in exceptional items mainly relate to restructuring measures affecting the operating business.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

- The return on sales including exceptional items is the ratio of the operating result including exceptional items to external sales.
- Gross cash flow is the excess of cash receipts over cash disbursements before application of funds.
- The capital invested comprises all the assets that serve a business segment and are required to yield a return, less interest-free liabilities. It is stated as of December 31.
- The CFROI is the ratio of the gross cash flow to the average capital invested for the year.
- The equity items are those reflected in the balance sheet and income statement. They are allocated to the business segments where possible. Equity-method income reconciles to the income statement line item “Income (Expenses) from investments in affiliated companies -net”, as follows:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(€ million)		
Equity-method income	26	71	(28)
Dividends and similar income	15	18	9
Income from profit and loss transfer agreements	*	1	1
Gains from the sale of investments in affiliated companies	16	204	0
Losses from the sale of investments in affiliated companies	(3)	(1)	(2)
Write-downs of investments in affiliated companies	<u>0</u>	<u>(10)</u>	<u>(11)</u>
Income (Expenses) from investments in affiliated companies (net)	<u>54</u>	<u>283</u>	<u>(31)</u>

* less than €1 million

- Capital expenditures, amortization and depreciation relate to intangible assets, property, plant and equipment.
- The research and development expenses are those reflected in the income statement.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Key Data by Business Segment

Business Segments	Pharmaceuticals & Biological Products		Consumer Care & Diagnostics		Crop Protection		Animal Health		Plastics & Rubber		Polyurethanes, Coatings & Colorants		Chemicals	
	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000
	(€ million)													
Net sales (external)	5,729	6,140	4,104	3,888	2,708	2,456	988	999	5,581	5,816	5,207	5,076	3,749	3,410
— Change in €	(6.7%)	22.7%	5.6%	15.6%	10.3%	12.8%	(1.1%)	8.9%	(4.0%)	25.7%	2.6%	30.0%	9.9%	19.4%
— Change in local currencies	(6.7%)	11.9%	5.0%	5.4%	10.7%	3.9%	(1.1%)	(1.4%)	(5.0%)	19.5%	2.1%	23.4%	10.0%	13.3%
Intersegment sales	38	39	2	0	102	97	5	6	116	122	138	462	456	466
Other operating income	62	90	49	51	102	38	13	41	87	28	51	42	53	35
Operating result before exceptional items	383	1,165	388	311	453	401	172	157	288	560	146	518	271	370
Return on sales before exceptional items	6.7%	19.0%	9.5%	8.0%	16.7%	16.3%	17.4%	15.7%	5.2%	9.6%	2.8%	10.2%	7.2%	10.9%
Exceptional items	(332)	(5)	(47)	(134)	0	1	0	25	(50)	(45)	(100)	(45)	(68)	24
Operating result	51	1,160	341	177	453	402	172	182	238	515	46	473	203	394
Return on sales including exceptional items	0.9%	18.9%	8.3%	4.6%	16.7%	16.4%	17.4%	18.2%	4.3%	8.9%	0.9%	9.3%	5.4%	11.6%
Gross cash flow	229	1,048	534	371	550	397	163	160	587	802	614	754	379	497
Capital invested	5,352	5,267	3,799	3,650	3,884	3,664	645	725	6,405	6,456	8,051	8,011	4,774	4,665
CFROI	4.2%	21.3%	14.0%	10.4%	13.9%	14.0%	22.8%	20.0%	8.9%	12.7%	7.5%	10.7%	7.7%	11.0%
Equity-method income	0	0	0	0	0	0	0	0	0	(1)	0	0	0	5
Equity-method investments	16	20	0	0	0	0	0	0	27	23	773	616	13	18
Total assets	5,303	5,291	3,956	3,480	3,488	3,218	734	768	5,867	6,176	7,493	7,568	4,216	4,421
Capital expenditures	415	553	267	192	215	233	49	50	592	652	492	359	483	424
Amortization and depreciation	364	273	291	256	247	143	40	40	482	446	604	466	334	293
Liabilities	1,869	2,202	1,271	1,158	1,130	947	379	337	1,339	1,696	2,311	1,737	1,797	1,813
Research and development expenses	1,242	1,096	252	266	292	276	98	94	134	128	186	151	114	105
Number of employees (as of Dec. 31)	26,800	27,200	14,900	15,100	10,900	11,000	3,900	3,900	17,900	18,500	15,100	16,100	19,500	20,500

Business Segments	Reconciliation		Continuing Operations		Discontinuing Operations		Bayer Group	
	2001	2000	2001	2000	2001	2000	2001	2000
Net sales (external)	872	830	28,938	28,615	1,337	2,356	30,275	30,971
— Change in €			1.1%	21.4%			(2.2%)	13.4%
— Change in local currencies			0.8%	12.1%			(2.5%)	4.5%
Intersegment sales	(857)	(1,192)						
Other operating income	63	100	480	425	340	37	820	462
Operating result before exceptional items	(246)	(273)	1,855	3,209	76	247	1,931	3,456
Return on sales before exceptional items			6.4%	11.2%			6.4%	11.2%
Exceptional items	(16)	34	(613)	(145)	293	(24)	(320)	(169)
Operating result	(262)	(239)	1,242	3,064	369	223	1,611	3,287
Return on sales including exceptional items			4.3%	10.7%			5.3%	10.6%
Gross cash flow	(230)	(182)	2,826	3,847	97	317	2,923	4,164
Capital invested	556	441	33,466	32,879	1,392	2,183	34,858	35,062
CFROI			8.3%	12.6%			8.2%	12.7%
Equity-method income	12	(5)	12	(1)	14	72	26	71
Equity-method investments	158	182	987	859	179	487	1,166	1,346
Total assets	4,933	3,529	35,990	34,451	1,049	2,000	37,039	36,451
Capital expenditures	40	23	2,553	2,486	64	161	2,617	2,647
Amortization and depreciation	41	73	2,403	1,990	113	149	2,516	2,139
Liabilities	9,616	9,363	19,712	19,253	307	821	20,019	20,074
Research and development expenses	170	203	2,488	2,319	71	74	2,559	2,393
Number of employees (as of Dec. 31)	3,000	1,600	112,000	113,900	4,900	8,200	116,900	122,100

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Key Data by Business Segment

Business Segments	Pharmaceutical & Biological Products		Consumer Care & Diagnostics		Crop Protection		Animal Health		Plastics & Rubber		Polyurethanes, Coatings & Colorants		Chemicals	
	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999
	(€ million)													
Net sales (external)	6,140	5,003	3,888	3,364	2,456	2,177	999	917	5,816	4,627	5,076	3,904	3,410	2,855
— Change in €	22.7%	15.3%	15.6%	25.1%	12.8%	6.5%	8.9%	3.5%	25.7%	6.8%	30.0%	7.6%	19.4%	0.2%
— Change in local currencies	11.9%	11.2%	5.4%	21.7%	3.9%	3.5%	(1.4%)	0,2%	19.5%	5.6%	23.4%	5.5%	13.3%	2.0%
Intersegment sales	39	51	0	1	97	83	6	6	122	114	462	482	466	478
Other operating income	90	105	51	33	38	98	41	12	28	116	42	84	35	100
Operating result before exceptional items	1,165	922	311	173	401	383	157	137	560	443	518	657	370	360
Return on sales before exceptional items	19.0%	18.4%	8.0%	5.1%	16.3%	17.6%	15.7%	14.9%	9.6%	9.6%	10.2%	16.8%	10.9%	12.6%
Exceptional items	(5)	(90)	(134)	(157)	1	49	25	(36)	(45)	(189)	(45)	(38)	24	(52)
Operating result	1,160	832	177	16	402	432	182	101	515	254	473	619	394	308
Return on sales including exceptional items	18.9%	16.6%	4.6%	0.5%	16.4%	19.8%	18.2%	11.0%	8.9%	5.5%	9.3%	15.9%	11.6%	10.8%
Gross cash flow	1,048	828	371	245	397	395	160	134	802	555	754	681	497	382
Capital invested	5,267	4,723	3,650	3,438	3,664	2,346	725	794	6,456	6,129	8,011	4,557	4,665	4,350
CFROI	21.3%	19.5%	10.4%	7,1%	14.0%	17.6%	20.0%	17.7%	12.7%	9.8%	10.7%	15.7%	11.0%	9,1%
Equity-method income	0	(8)	0	0	0	2	0	0	(1)	0	0	0	5	0
Equity-method investments	20	25	0	0	0	10	0	0	23	13	616	0	18	7
Total assets	5,291	4,535	3,480	3,247	3,218	2,410	768	812	6,176	5,163	7,568	4,178	4,421	3,814
Capital expenditures	553	525	192	205	233	184	50	33	652	575	359	446	424	461
Amortization and depreciation	273	268	256	260	143	95	40	59	446	425	466	243	293	177
Liabilities	2,202	1,661	1,158	1,090	947	744	337	208	1,696	1,535	1,737	1,337	1,813	1,822
Research and development expenses	1,096	953	266	240	276	277	94	93	128	119	151	127	105	92
Number of employees (as of Dec. 31)	27,200	27,100	15,100	15,200	11,000	10,700	3,900	4,100	18,500	18,100	16,100	15,300	20,500	20,200

Business Segments	Reconciliation		Continuing Operations		Discontinuing Operations		Bayer Group	
	2000	1999	2000	1999	2000	1999	2000	1999
Net sales (external)	830	725	28,615	23,572	2,356	3,748	30,971	27,320
— Change in €			21.4%	8.9%			13.4%	(2.6%)
— Change in local currencies			12.1%	6.4%			4.5%	(4.7%)
Intersegment sales	(1,192)	(1,215)						
Other operating income	100	111	425	659	37	72	462	731
Operating result before exceptional items	(273)	(372)	3,209	2,703	247	1,231	3,456	3,934
Return on sales before exceptional items			11.2%	11.5%			11.2%	14.4%
Exceptional items	34	(51)	(145)	(564)	(24)	(13)	(169)	(577)
Operating result	(239)	(423)	3,064	2,139	223	1,218	3,287	3,357
Return on sales including exceptional items			10.7%	9.1%			10.6%	12.3 %
Gross cash flow	(182)	(386)	3,847	2,834	317	358	4,164	3,192
Capital invested	441	522	32,879	26,859	2,183	2,119	35,062	28,978
CFROI			12.6%	11.0%			12.7%	11.3%
Equity-method income	(5)	(5)	(1)	(11)	72	(17)	71	(28)
Equity-method investments	182	210	859	265	487	448	1,346	713
Total assets	3,529	5,371	34,451	29,530	2,000	1,749	36,451	31,279
Capital expenditures	23	30	2,486	2,459	161	173	2,647	2,632
Amortization and depreciation	73	89	1,990	1,616	149	195	2,139	1,811
Liabilities	9,363	7,012	19,253	15,409	821	688	20,074	16,097
Research and development expenses	203	176	2,319	2,077	74	175	2,393	2,252
Number of employees (as of Dec. 31)	1,600	1,500	113,900	112,200	8,200	8,200	122,100	120,400

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	2000	1999	2001	2000	1999	2001	2000	1999	2001	2000	1999
	(€ million)											
Net sales (external) — by market	11,659	11,299	10,116	9,473	9,352	7,338	4,660	4,819	3,531	3,146	3,145	2,587
Net sales (external) — by point of Origin . . .	12,999	12,916	11,590	9,806	9,699	7,482	3,817	3,761	2,644	2,316	2,239	1,856
— Change in €	0.6%	11.4%	2.1%	1.1%	29.6%	17.2%	1.5%	42.2%	32.4%	3.4%	20.6%	(3.0%)
— Change in local currencies	0.5%	10.9%	2.1%	(1.9%)	14.1%	13.4%	7.3%	26.5%	17.2%	2.5%	7.8%	(6.2%)
Interregional sales	3,154	3,018	2,452	1,927	1,603	1,062	226	228	152	116	98	61
Other operating income	312	256	547	70	62	33	48	64	37	50	43	42
Operating result before exceptional Items . . .	1,707	2,216	2,182	23	729	578	241	404	209	219	213	133
Return on sales before exceptional Items . . .	13.1%	17.2%	18.8%	0.2%	7.5%	7.7%	6.3%	10.7%	7.9%	9.5%	9.5%	7.2%
Exceptional items	(272)	20	(241)	(278)	(144)	(203)	(14)	(21)	(12)	(30)	0	(57)
Operating result	1,435	2,236	1,941	(255)	585	375	227	383	197	189	213	76
Return on sales including exceptional Items . .	11.0%	17.3%	16.7%	(2.6%)	6.0%	5.0%	5.9%	10.2%	7.5%	8.2%	9.5%	4.1%
Gross cash flow	2,037	2,096	2,076	632	1,521	864	312	357	169	225	228	148
Capital invested	16,355	15,849	13,228	12,808	13,025	10,019	2,711	2,628	2,192	1,607	1,433	1,386
CFROI	12.5%	15.2%	16.0%	4.7%	12.2%	9.1%	11.3%	14.3%	9.0%	14.5%	16.4%	11.2%
Equity-method income	12	0	(5)	0	0	(8)	0	(1)	2	0	0	0
Equity-method investments	351	255	197	618	582	39	2	2	11	16	20	18
Total assets	17,298	15,988	15,248	12,652	12,859	9,331	3,132	3,085	2,683	1,834	1,723	1,588
Capital expenditures	1,620	1,440	1,363	560	749	874	255	199	127	118	98	94
Amortization and depreciation	1,227	971	736	918	818	659	150	118	94	104	83	124
Liabilities	9,769	8,736	7,408	6,407	6,627	4,461	1,382	1,489	1,512	673	672	731
Research and development expenses	1,559	1,342	1,215	690	681	601	68	83	72	9	10	13
Number of employees (as of Dec. 31)	64,600	65,700	65,800	23,200	24,100	23,100	12,600	12,100	11,100	11,000	11,400	11,500

Regions	Reconciliation			Continuing Operations			Discontinuing Operations			Bayer Group		
	2001	2000	1999	2001	2000	1999	2001	2000	1999	2001	2000	1999
	(€ million)											
Net sales (external) — by Market				28,938	28,615	23,572	1,337	2,356	3,748	30,275	30,971	27,320
Net sales (external) — by point of origin				28,938	28,615	23,572	1,337	2,356	3,748	30,275	30,971	27,320
— Change in €				1.1%	21.4%	8.9%				(2.2%)	13.4%	(2.6%)
— Change in local currencies				0.8%	12.1%	6.4%				(2.5%)	4.5%	(4.7%)
Interregional sales	(5,423)	(4,947)	(3,727)									
Other operating income				480	425	659	340	37	72	820	462	731
Operating result before exceptional Items	(335)	(353)	(399)	1,855	3,209	2,703	76	247	1,231	1,931	3,456	3,934
Return on sales before exceptional Items				6.4%	11.2%	11.5%				6.4%	11.2%	14.4%
Exceptional items	(19)	0	(51)	(613)	(145)	(564)	293	(24)	(13)	(320)	(169)	(577)
Operating result	(354)	(353)	(450)	1,242	3,064	2,139	369	223	1,218	1,611	3,287	3,357
Return on sales including exceptional items				4.3%	10.7%	9.1%				5.3%	10.6%	12.3%
Gross cash flow	(380)	(355)	(423)	2,826	3,847	2,834	97	317	358	2,923	4,164	3,192
Capital invested	(15)	(56)	34	33,466	32,879	26,859	1,392	2,183	2,119	34,858	35,062	28,978
CFROI				8.3%	12.6%	11.0%				8.2%	12.7%	11.3%
Equity-method income				12	(1)	(11)	14	72	(17)	26	71	(28)
Equity-method investments				987	859	265	179	487	448	1,166	1,346	713
Total assets	1,074	796	680	35,990	34,451	29,530	1,049	2,000	1,749	37,039	36,451	31,279
Capital expenditures	0	0	1	2,553	2,486	2,459	64	161	173	2,617	2,647	2,632
Amortization and depreciation	4	0	3	2,403	1,990	1,616	113	149	195	2,516	2,139	1,811
Liabilities	1,481	1,729	1,297	19,712	19,253	15,409	307	821	688	20,019	20,074	16,097
Research and development expenses	162	203	176	2,488	2,319	2,077	71	74	175	2,559	2,393	2,252
Number of employees (as of Dec. 31)	600	600	700	112,000	113,900	112,200	4,900	8,200	8,200	116,900	122,100	120,400

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

[8] Income from investments in affiliated companies — net

This comprises the following items:

	<u>2001</u>	<u>2000</u> (€ million)	<u>1999</u>
Dividends and similar income	15	18	9
• of which €12 million (2000: €8 million; 1999: €2 million) from subsidiaries			
Income from profit and loss transfer agreements	*	1	1
• of which less than €1 million (2000: €1 million; 1999: €1 million) from subsidiaries			
Income (Expense) from companies included at equity	26	71	(28)
Gains from the sale of investments in affiliated companies	16	204	0
Losses from the sale of investments in affiliated companies	(3)	(1)	(2)
Write-downs of investments in affiliated companies	<u>0</u>	<u>(10)</u>	<u>(11)</u>
	<u>54</u>	<u>283</u>	<u>(31)</u>

* less than €1 million

In the previous year this item contained the €65 million gain from the sale of the 11 percent interest in Myriad Genetics, Salt Lake City, Utah, €142 million gain from the sale of the 25 percent interest in Schein Pharmaceutical Inc., Florham Park, New Jersey and the equity income from the Agfa-Gevaert group.

[9] Interest expense — net

Interest income and expense comprises:

	<u>2001</u>	<u>2000</u> (€ million)	<u>1999</u>
Income from other securities and loans included in investments	9	10	16
Other interest and similar income	108	143	150
• of which €1 million (2000: €4 million; 1999: €3 million) from subsidiaries			
Interest and similar expenses	(466)	(464)	(362)
• of which €5 million (2000: €24 million; 1999: €4 million) to subsidiaries			
	<u>(349)</u>	<u>(311)</u>	<u>(196)</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 €9 million in 2001, 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 2001 to €30 million (2000: €28 million; 1999: €32 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.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

[10] Other non-operating expense — net

This item comprises:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(€ million)		
Interest portion of interest-bearing provisions	(274)	(272)	(275)
Net Exchange gain (loss)	49	(21)	(27)
Miscellaneous non-operating expenses	(28)	(18)	(13)
Miscellaneous non-operating income	<u>52</u>	<u>42</u>	<u>21</u>
	<u>(201)</u>	<u>(269)</u>	<u>(294)</u>

Miscellaneous non-operating income includes €25 million (2000: €18 million; 1999: €9 million) in gains from the sale of marketable securities.

[11] Income taxes

This item comprises the income taxes paid or accrued in the individual countries, plus deferred 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 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.

The breakdown of pre-tax income and income tax expense by origin is as follows:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(€ million)		
Income before income taxes			
— Germany	971	1,482	2,087
— Other countries	<u>144</u>	<u>1,508</u>	<u>749</u>
	<u>1,115</u>	<u>2,990</u>	<u>2,836</u>
Income taxes paid or accrued			
— Germany	122	442	71
— Other countries	<u>502</u>	<u>321</u>	<u>429</u>
	624	763	500
Deferred taxes			
— from temporary differences	(272)	383	305
— from loss carry-forwards	<u>(198)</u>	<u>2</u>	<u>13</u>
	<u>(470)</u>	<u>385</u>	<u>318</u>
	<u>154</u>	<u>1,148</u>	<u>818</u>

A valuation allowance is recognized against tax loss carryforwards when it is not sufficiently certain that this income will be realized.

Changes in tax rates diminished deferred tax expense for 2001 by €8 million (2000: €21 million; 1999: €41 million increase).

Deferred taxes — computed according to IAS 12 (Income Taxes) — result primarily from temporary differences between the accounting and tax balance sheets of the individual consolidated companies with regard to the recognition and/or valuation of certain items.

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, 2000		Dec. 31, 1999	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
	(€ million)					
Intangible assets	438	177	87	72	101	28
Property, plant and equipment	243	1,672	68	1,745	18	1,409
Investments	20	88	2	79	10	40
Inventories	267	86	298	86	266	92
Receivables	122	53	116	51	76	28
Other current assets	11	189	51	132	5	74
Pension provisions	357	247	327	202	265	131
Other provisions	166	74	144	46	210	26
Other liabilities	158	30	163	40	150	32
Loss carry-forwards	282	—	82	—	76	—
Valuation allowance for loss carry-forwards	(78)	—	(67)	—	(67)	—
	1,986	2,616	1,271	2,453	1,110	1,860
Set-off*	(1,378)	(1,378)	(858)	(858)	(703)	(703)
	608	1,238	413	1,595	407	1,157

* 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 2001, deferred tax assets of €9 million and deferred tax liabilities of €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 2001 by €88 million (2000: €7 million; 1999: €9 million).

The value of existing loss carryforwards by expiration date is as follows:

	Dec. 31, 2001	Dec. 31, 2000	Dec. 31, 1999
	(€ million)		
One year	6	3	—
Two years	11	20	3
Three years	16	11	20
Four years	50	22	11
Five years and thereafter	653	196	174
	736	252	208

Deferred tax assets of €204 million (2000: €15 million; 1999: €9 million) are recognized on the €540 million (2000: €48 million; 1999: €27 million) of loss carryforwards that represent income likely to be realized in the future. Recognition of these deferred tax assets results in deferred tax income of €198 million.

Deferred tax liabilities have not been recognized for temporary differences associated with investments in foreign subsidiaries of €3,030 million (2000: €2,887 million, 1999: €2,617 million) as Bayer has determined that 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. For most countries, double taxation agreements ensure that any withholding taxes paid can be deducted from the tax base or the tax to be paid in Germany.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

The actual income tax expense for 2001 of €154 million (2000: €1,148 million, 1999: €818 million) is €259 million (2000: €31 million, 1999: €394 million) less than the €413 million (2000: €1,179 million, 1999: €1,212 million) that would result from applying to the pre-tax income of the Group a tax rate of 37.1 percent (2000: 39.5 percent, 1999: 42.7 percent), which is the weighted average of the theoretical tax rates for the individual Group companies.

The reconciliation of theoretical to actual income tax expense for the Group is as follows:

	2001		2000		1999	
	€ million	%	€ million	%	€ million	%
Theoretical income tax expense	413	100	1,179	100	1,212	100
Lower taxes due to tax-free income	(283)	(68)	(151)	(13)	(434)	(36)
Higher taxes due to non-tax-deductible expenses	47	11	93	8	90	7
Other tax effects	(23)	(5)	27	2	(50)	(4)
Actual income tax expense	<u>154</u>	<u>38</u>	<u>1,148</u>	<u>97</u>	<u>818</u>	<u>67</u>
Effective tax rate in %	<u>13.8</u>		<u>38.4</u>		<u>28.8</u>	

[12] Other taxes

Other taxes amounting to €247 million (2000: €229 million; 1999: €189 million) are included in the cost of goods sold, selling expenses, research and development expenses or general administration expenses. These are mainly property-related taxes.

[13] Minority stockholders' interest

Minority interest in income amounts to €6 million (2000: €29 million; 1999: €16 million), and minority interest in losses to €10 million (2000: €3 million; 1999: €0 million), adding €4 million to (2000: subtracting €26 million from; 1999: subtracting €16 million from) income after taxes.

[14] Earnings per share

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

In 2001, in 2000 and in 1999 the number of shares remained constant at 730,341,920. Earnings per share were €1.32 (2000: €2.49; 1999: €2.74).

There were no subscription rights outstanding in 2001, in 2000 or in 1999, and therefore no dilutive potential shares.

[15] Cost of materials

The total cost of materials for continuing operations amounted to €11,057 million (2000: €10,040 million; 1999: €7,041 million), comprising €10,361 million (2000: €9,380 million; 1999: €6,495 million) in expenses for raw materials, supplies and goods purchased for resale, and €696 million (2000: €660 million; 1999: €546 million) in expenses for purchased services.

The cost of materials for the discontinuing operations was €533 million (2000: €1,168 million; 1999: €2,101 million). While Erdölchemie incurred costs of €153 million (2000: €545 million; 1999: €371 million) entirely for raw materials and supplies, Haarmann & Reimer accounted for €344 million (2000: €393 million; 1999: €333 million), including €10 million (2000: €10 million; 1999: €4 million) for purchased services. Fibers accounted for €36 million (2000: €126 million; 1999: €92 million), including €10 million (2000: €23 million; 1999: €20 million) for purchased services. In 2000, DyStar accounted for €104 million (1999: €125 mil-

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

lion), which included €1 million (1999: €1 million) for purchased services. In 1999 Agfa accounted for €1,180 million, which included €14 million for purchased services.

[16] Personnel expenses

Personnel expenses for continuing operations rose in 2001 by €281 million to €7,576 million. Of the increase, €43 million is due to exchange rate fluctuations.

The breakdown of personnel expenses is as follows:

	Continuing Operations			Discontinuing Operations											
				EC			FS			HR			Dystar		Agfa
	2001	2000	1999	2001	2000	1999	2001	2000	1999	2001	2000	1999	2000	1999	1999
Wages and salaries	6,005	5,814	5,210	18	55	56	32	54	54	188	184	164	67	64	417
Social Expenses	1,571	1,481	1,347	5	15	22	6	13	12	47	39	30	13	12	161
Of which pension expenses	[430]	[397]	[353]	[2]	[5]	[12]	[*]	[3]	[1]	[14]	[8]	[1]	[3]	[3]	[76]
	<u>7,576</u>	<u>7,295</u>	<u>6,557</u>	<u>23</u>	<u>70</u>	<u>78</u>	<u>38</u>	<u>67</u>	<u>66</u>	<u>235</u>	<u>223</u>	<u>194</u>	<u>80</u>	<u>76</u>	<u>578</u>

* less than €1 million

[17] Number of employees

The average number of employees in continuing operations, classified by corporate functions, was as follows:

	2001	2000	1999
Marketing	33,768	33,191	33,186
Technology	60,168	59,923	59,356
Research	11,150	11,007	11,520
Administration	8,972	9,426	9,567
	<u>114,058</u>	<u>113,547</u>	<u>113,629</u>
<i>Of which trainees</i>	<u>2,641</u>	<u>2,667</u>	<u>2,618</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 2001 was 1,075 (2000: 1,048; 1999: 1,121).

The figures in the above table do not include people employed in discontinuing operations. In 2001, Haarmann & Reimer employed on average 3,660 people (2000: 3,742; 1999: 3,882); Fibers employed on average 1,169 people (2000: 1,643; 1999: 1,645).

[18] 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.

Goodwill, including that resulting from capital consolidation, is capitalized in accordance with IAS 22 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 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.

Self-created intangible assets are not capitalized.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Certain development costs relating to the application development stage of internally developed software are capitalized in the Group balance sheet. These costs are amortized over their useful life from the date they are placed in service. Changes in intangible assets in 2001 were as follows:

	Acquired concessions, industrial property rights, similar rights and assets, and licenses thereunder	Acquired goodwill (€ million)	Advance payments	Total
Gross carrying amounts, Dec. 31, 2000	4,566	1,289	71	5,926
Exchange differences	146	31	2	179
Changes in scope of consolidation	(17)	50	—	33
Acquisitions	266	50	—	316
Capital expenditures	362	—	44	406
Retirements	(155)	(22)	(2)	(179)
Transfers	<u>72</u>	<u>1</u>	<u>(73)</u>	<u>—</u>
Gross carrying amounts, Dec. 31, 2001	<u>5,240</u>	<u>1,399</u>	<u>42</u>	<u>6,681</u>
Accumulated amortization and write-downs, Dec. 31, 2000	772	311	—	1,083
Exchange differences	27	7	—	34
Changes in scope of consolidation	(9)	(3)	—	(12)
Amortization and write-downs in 2001	554	115	—	669
• <i>of which write-downs</i>	[2]	[—]	[—]	[2]
Write-backs	(1)	—	—	(1)
Retirements	(100)	(6)	—	(106)
Transfers	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Accumulated amortization and write-downs, Dec. 31, 2001	<u>1,243</u>	<u>424</u>	<u>—</u>	<u>1,667</u>
Net carrying amounts, Dec. 31, 2001	<u>3,997</u>	<u>975</u>	<u>42</u>	<u>5,014</u>
Net carrying amounts, Dec. 31, 2000	<u>3,794</u>	<u>978</u>	<u>71</u>	<u>4,843</u>

The exchange differences are the differences between the carrying amounts at the beginning and the end of the year that result from translating foreign companies' figures at the respective different exchange rates and changes in their assets during the year at the average rate for the year.

[19] 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. Writedowns 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.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

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.

When assets are retired, 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	4 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. The leased assets are depreciated over their estimated useful life except where subsequent transfer of title is uncertain, in which case they are depreciated over their estimated useful life or the respective lease term, whichever is shorter. The future lease payments are recorded as financial obligations.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Changes in property, plant and equipment in 2001 were as follows:

	<u>Land and buildings</u>	<u>Machinery and technical equipment</u>	<u>Furniture, fixtures and other equipment</u>	<u>Construction in progress and advance payments to vendors and contractors</u>	<u>Total</u>
	(€ million)				
Gross carrying amounts, Dec. 31, 2000	7,978	19,986	2,513	1,262	31,739
Exchange differences	91	318	20	32	461
Changes in scope of consolidation	(165)	(991)	(51)	(60)	(1,267)
Acquisitions	—	—	—	—	—
Capital expenditures	78	373	250	1,510	2,211
Retirements	(144)	(732)	(349)	(29)	(1,254)
Transfers	310	590	117	(1,017)	—
Gross carrying amounts, Dec. 31, 2001	<u>8,148</u>	<u>19,544</u>	<u>2,500</u>	<u>1,698</u>	<u>31,890</u>
Accumulated depreciation and write-downs, Dec. 31, 2000	4,092	12,583	1,712	7	18,394
Exchange differences	31	153	12	—	196
Changes in scope of consolidation	(114)	(811)	(41)	—	(966)
Depreciation and write-downs in 2001	274	1,276	286	11	1,847
• of which write-downs	[—]	[38]	[1]	[11]	[50]
Retirements	(118)	(710)	(296)	—	(1,124)
Transfers	3	(5)	2	—	—
Accumulated depreciation and write-downs, Dec. 31, 2001	<u>4,168</u>	<u>12,486</u>	<u>1,675</u>	<u>18</u>	<u>18,347</u>
Net carrying amounts, Dec. 31, 2001	<u>3,980</u>	<u>7,058</u>	<u>825</u>	<u>1,680</u>	<u>13,543</u>
Net carrying amounts, Dec. 31, 2000	<u>3,886</u>	<u>7,403</u>	<u>801</u>	<u>1,255</u>	<u>13,345</u>

The exchange differences are as defined for intangible assets.

Capitalized property, plant and equipment includes assets with a total net value of €588 million (2000: €199 million) held under finance leases. The gross carrying amounts of these assets total €1,229 million (2000: €277 million). These assets are mainly machinery and technical equipment with a carrying amount of €425 million (gross amount €975 million) and buildings with a carrying amount of €106 million (gross amount €141 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.

Also included are products leased to other parties under operating leases with a carrying amount of €381 million (2000: €247 million), the gross carrying amount of the assets concerned being €753 million (2000: €717 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

Investments in non-consolidated subsidiaries and other affiliated companies are generally carried individually at cost. Where other affiliated companies or other securities included in investments are classified as held-to-maturity investments or available-for-sale financial assets, they are recognized in compliance with IAS 39 (Financial Instruments: Recognition and Measurement) at amortized cost or fair value. Where evidence exists that

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

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.

The cost of acquisition of investments in companies included at equity is adjusted annually in line with any changes in these companies' total stockholders' equity. In the first-time consolidation, differences between the cost of acquisition and the underlying equities at the dates of acquisition of the investments are allocated to assets or liabilities by the same method applied to fully consolidated subsidiaries. Loans receivable that are interest-free or bear low rates of interest are carried at present value; other loans receivable are carried at nominal value.

Changes in investments in 2001 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, 2000	232	3	1,469	157	14	150	243	2,268
Fair value, January 1, 2001	—	—	—	1,328	—	4	—	1,332
Exchange differences	3	—	34	2	(1)	6	1	45
Changes in scope of consolidation	(98)	(3)	105	4	—	1	(13)	(4)
Changes of Fair Values	—	—	—	(768)	—	(4)	—	(772)
Acquisitions	8	—	24	140	—	—	—	172
Other additions	41	—	158	35	—	37	31	302
Retirements	(4)	—	(37)	(20)	—	(18)	(35)	(114)
Transfers	—	—	(463)	463	—	20	(20)	—
Gross carrying amounts, Dec. 31, 2001	182	—	1,290	1,341	13	196	207	3,229
Accumulated write-downs, Dec. 31, 2000	14	—	83	—	—	1	14	112
Exchange differences	—	—	—	—	—	—	(1)	(1)
Changes in scope of consolidation	—	—	(25)	—	—	—	—	(25)
Write-downs in 2001	—	—	2	—	—	2	—	4
Write-backs	—	—	(2)	—	—	—	(1)	(3)
Retirements	—	—	—	—	—	(3)	—	(3)
Transfers	—	—	—	—	—	3	(3)	—
Accumulated write-downs, Dec. 31, 2001	14	—	58	—	—	3	9	84
Net carrying amounts, Dec. 31, 2001	168	—	1,232	1,341	13	193	198	3,145
Net carrying amounts, Dec. 31, 2000	218	3	1,386	157	14	149	229	2,156

The exchange differences are as defined for intangible assets.

The additions to investments in associated companies relate mainly to a manufacturing company being established jointly with Lyondell and the first-time inclusion of DyStar GmbH at equity. The difference between the equity interest in the underlying net assets of companies included at equity and their at-equity accounting values is €45 million (2000: €91 million). It relates primarily to goodwill. Since Bayer no longer exerts significant influence over Agfa-Gevaert N.V., Belgium, Bayer's 30 percent interest in this company, which was previously valued at equity, is included at fair value under investments in other companies.

[21] Inventories

Raw materials, supplies, and goods purchased for resale are valued at the cost of acquisition; work in process and finished goods are valued at the cost of production. If the inventory values are lower at the closing date because of a drop in market prices, for example, the lower amounts are shown. Of the €5,818 million (2000: €6,095 million) in inventories carried as of December 31, 2001, €824 million (2000: €431 million) represents those included at their net realizable value.

Inventories are normally valued by the weighted-average method.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

The cost of production 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 for 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.

Work in process and finished goods are grouped together in light of the production sequences characteristic of the chemical industry. Inventories are comprised as follows:

	<u>Dec. 31, 2001</u>	<u>Dec. 31, 2000</u>
	(€ million)	
Raw materials and supplies	1,179	1,041
Work in process, finished goods and goods purchased for resale	4,626	5,046
Advance payments	<u>13</u>	<u>8</u>
	<u>5,818</u>	<u>6,095</u>

The changes in inventory write-downs are as follows:

	<u>Dec. 31, 2001</u>	<u>Dec. 31, 2000</u>
	(€ million)	
Balance at the beginning of the year	(241)	(248)
Additions charged to expense	(362)	(218)
Exchange differences	(2)	(9)
Changes in scope of consolidation	17	—
Deductions due to utilization	<u>154</u>	<u>234</u>
Balance at the end of year	<u>(434)</u>	<u>(241)</u>

[22] Trade accounts receivable

Trade accounts receivable are stated at nominal value, less write-downs of €222 million (2000: €204 million) for amounts unlikely to be recovered.

Trade accounts receivable as of December 31, 2001 include €5,413 million (2000: €6,236 million) maturing within one year and €2 million (2000: €8 million) maturing after one year. Of the total, €18 million (2000: €11 million) is receivable from subsidiaries, €66 million (2000: €87 million) from other affiliated companies and €5,331 million (2000: €6,146 million) from other customers.

[23] Other receivables and other assets

Other receivables and other assets are stated at nominal value, less write-downs of €4 million (2000: €4 million).

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

They are comprised as follows:

	Dec. 31, 2001	Dec. 31, 2000
	(€ million)	
Claims for tax refunds	448	662
Short-term loans	102	153
Lease payments receivable	94	96
Receivables from derivative financial instruments	72	—
Payroll-receivables	47	47
Short-term loans from clearing	41	87
Interest receivable on loans	19	23
Other receivables	<u>1,624</u>	<u>1,346</u>
	<u>2,447</u>	<u>2,414</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 €66 million (2000: €149 million) pertaining to subsidiaries and €124 million (2000: €44 million) pertaining to other affiliated companies.

Total other receivables and other assets in the amount of €444 million (2000: €442 million) mature in more than one year. Of this amount, €30 million (2000: €31 million) pertains to subsidiaries.

Changes in write-downs of receivables are as follows:

	Dec. 31, 2001	Dec. 31, 2000
	(€ million)	
Balance at the beginning of year	(204)	(173)
Additions charged to expenses	(94)	(42)
Exchange differences	(5)	(5)
Changes in scope of consolidation	5	—
Deductions due to utilization	<u>76</u>	<u>16</u>
Balance at the end of year	<u>(222)</u>	<u>(204)</u>

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 €94 million (2000: €96 million), while the interest portion pertaining to future years amounts to €29 million (2000: €23 million). The lease payments are due as follows:

	Lease payments	Of which interest	Account receivable
	(€ million)		
2002	41	8	33
2003	28	6	22
2004	23	6	17
2005	18	5	13
2006	11	4	7
After 2006	<u>2</u>	<u>0</u>	<u>2</u>
	<u>123</u>	<u>29</u>	<u>94</u>

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

[24] Liquid assets

	<u>Dec. 31, 2001</u>	<u>Dec. 31, 2000</u>
	(€ million)	
Marketable securities and other instruments	52	213
Cash and cash equivalents.....	<u>719</u>	<u>491</u>
	<u>771</u>	<u>704</u>

As of 2001, 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 €52 million (2000: €247 million) and exceeds the lower of cost and market by €13 million (2000: €34 million). Financial instruments with original maturities of up to three months are recognized as cash equivalents in view of their high liquidity.

[25] Deferred charges

Deferred charges as of December 31, 2001 include unamortized debt discounts of €9 million (2000: €17 million). The debt discounts are amortized annually over the lives of the underlying liabilities.

Total deferred charges include €183 million that is expected to be used up in 2002.

[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.

Authorized capital totaling €256 million was approved by the Annual Stockholders' Meeting on April 30, 1997. It expires on April 30, 2002. The authorized capital can be used to increase the capital stock by issuing new shares against cash contributions. Subscription rights for existing stockholders are excluded with respect to €102 million of this authorized capital.

Further 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 at December 31, 2001. 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.

The changes in the various components of stockholders' equity during 2001, 2000 and 1999 are shown in the statements of changes in stockholders' equity.

The dividend per share amounts paid for the 2000 and 1999 fiscal years were €1.40 and €1.30, respectively.

[27] Minority interest

Minority interest mainly comprises third parties' shares in the equity of the consolidated subsidiaries Sumika Bayer Urethane Co. Ltd., Japan; the Makroform GmbH group; Bayer (India) Ltd.; and Bayer ABS Ltd., India.

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 2001, these expenses totaled €312 million (2000: €437 million; 1999: €491 million).

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 2001, expenses for defined benefit plans amounted to €301 million (2000: €326 million; 1999: €359 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. For the most important defined benefit plans they are comprised as follows:

	<u>Dec. 31, 2001</u>	<u>Dec. 31, 2000</u>
	(€ million)	
Service cost	265	210
Past service cost	10	1
Interest cost	669	589
Return on plan assets	(640)	(526)
Amortization of actuarial amounts	<u>(34)</u>	<u>(14)</u>
	<u>270</u>	<u>260</u>

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.

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 IAS and U.S. GAAP purposes.

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:

	<u>Parameters</u>	
	<u>Dec. 31, 2001</u>	<u>Dec. 31, 2000</u>
Discount rate	2.5%-7.0%	3.0%-7.3%
Projected future remuneration increases	2.0%-4.8%	1.0%-7.0%
Projected future pension increases	2.0%-3.3%	1.0%-4.5%
Projected employee turnover (according to age and gender)	Empirical data	Empirical data
Projected return on plan assets	2.0%-8.5%	3.0%-8.5%

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:

	Dec. 31, 2001	Dec. 31, 2000
	(€ million)	
Defined benefit obligation	(11,303)	(9,535)
Fair value of plan assets	<u>8,126</u>	<u>7,847</u>
Funded status	(3,177)	(1,688)
Unrecognized transition liability (asset)	3	(11)
Unrecognized actuarial (gain) loss	1,366	(203)
Asset limitation due to uncertainty of obtaining future benefits	<u>(1,249)</u>	<u>(1,249)</u>
Net recognized liability	<u><u>(3,057)</u></u>	<u><u>(3,151)</u></u>

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 actual return on plan assets was a loss of €606 million for defined benefit plans providing pension and healthcare benefits. The net liability under these defined benefit plans changed as follows:

	Dec. 31, 2001	Dec. 31, 2000
	(€ million)	
Net liability recognized at the beginning of the year	(3,151)	(3,191)
Pension benefit (cost) income	(270)	(260)
Employer contributions	313	255
Divestitures	54	20
Change in asset limitation	—	12
Change in scope of consolidation	*	11
Change in currency translation	<u>(3)</u>	<u>2</u>
Net liability recognized at end of year	<u><u>(3,057)</u></u>	<u><u>(3,151)</u></u>

* less than €1 million

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.

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 2001, provisions for early retirement and other post-retirement benefits amounted to €635 million (2000: €637 million). The resulting expenses for 2001 amounted to €63 million (2000: €214 million), comprising €23 million (2000: €192 million) for service cost, €58 million (2000: €52 million) for interest cost, €31 million (2000: €30 million) for expected return on plan assets and €13 million (2000: €0 million) for actuarial losses.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

[29] Other 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. The Group sets up and maintains provisions for probable and on-going litigation cases when a reasonable estimate can be made. These provisions include all estimated legal fees and costs of settlement. The amounts are based upon written notification and reasonable settlement cost estimates provided by the Group's attorneys. Periodically, but at least quarterly, the provisions are reviewed with the Group's attorneys and updated.

The breakdown of provisions is as follows:

	Dec. 31, 2001		Dec. 31, 2000	
	Total	Maturing in 2002	Total	Maturing in 2001
	(€ million)			
Provisions for taxes	524	151	537	370
Provisions for personnel commitments	923	451	1,044	555
Provisions for environmental remediation	200	19	230	12
Provisions for restructuring	145	79	131	69
Provisions for trade-related commitments	438	426	411	397
Miscellaneous provisions	535	351	556	298
	<u>2,765</u>	<u>1,477</u>	<u>2,909</u>	<u>1,701</u>

Personnel commitments mainly include annual bonus payments, service awards and other personnel costs. Reimbursements to be received from the German government under the pre-retirement part-time 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.

Changes in provisions were as follows:

	Jan. 1, 2001	Changes in scope of consolidation	Currency effects	Allocation	Utilization	Reversal	Dec. 31, 2001
	(€ million)						
Provisions for taxes	537	1	—	465	(402)	(77)	524
Provisions for personnel commitments . . .	1,044	(24)	9	493	(560)	(39)	923
Provisions for environmental remediation	230	(15)	3	19	(34)	(3)	200
Provisions for restructuring	131	—	7	98	(91)	—	145
Provisions for trade-related commitments	411	(10)	10	583	(542)	(14)	438
Miscellaneous provisions	556	(17)	13	454	(425)	(46)	535
	<u>2,909</u>	<u>(65)</u>	<u>42</u>	<u>2,112</u>	<u>(2,054)</u>	<u>(179)</u>	<u>2,765</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 senior executives, a Stock Incentive Program for middle management and equivalent employees, and a Stock Participation Program for junior management and other employees. 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. Participants do not pay an exercise price for the shares they receive under these programs. Rather, they receive the

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

shares as bonus shares or, in the case of Module 2 of the Stock Participation Program, have the opportunity to purchase shares at a discounted price.

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 one option right for each 20 shares deposited. These deposited shares are “locked up”; the participant may not sell them during the following three years. After the end of these three years, 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 number of shares received upon exercise, we apply three performance criteria. Two of these measure the relative performance of the Bayer AG share; the third measures the individual contribution of the participant. If the participant fails to meet minimum standards under these criteria, he or she receives no shares under the program. At December 31, 2001, no options were exercisable. No options expired, nor were any options cancelled, during fiscal 2001.

If it is not possible to issue shares under the Stock Option Program to participants at the time they are entitled to exercise their option rights, the option rights would function as share appreciation rights. Instead of shares, the participant would receive the cash value of the shares to which the option rights would otherwise entitle him or her, based on the trading price of the Bayer AG share at the time of exercise.

Stock Incentive Program

Like the Stock Option Program, our Stock Incentive Program for middle management 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 number of incentive shares the participant receives depends on the number deposited at the launch of the program as well as on the overall performance of Bayer stock. 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 program, but any deposited shares they sell are no longer counted in calculating the number of incentive shares for subsequent distribution dates. The Stock Incentive Program has a ten-year term. There are three incentive share distribution dates during this period. On these dates, the participant receives incentive shares as follows:

Issuance of incentive shares to employees in the Stock Incentive Program

<u>Distribution date at end of</u>	<u>Incentive shares received (per 10 deposited shares)</u>
Second year	2
Sixth year	4
Tenth year	<u>4</u>
Total	<u>10</u>

Participants receive incentive shares only if Bayer stock has outperformed the Dow Jones EURO STOXX 50 index on the relevant distribution date, 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 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

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

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 number of bonus shares on subsequent distribution dates.

Module 1 has a term of ten years and entitles the participant to receive incentive shares 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 incentive shares as follows on the distribution dates:

Issuance of incentive shares to employees in the Stock Participation Program

<u>Distribution date at end of</u>	<u>Incentive shares received (per 10 deposited shares)</u>
Second year	1
Sixth year	2
Tenth year	<u>2</u>
Total	<u><u>5</u></u>

In addition, under Module 2 each participant may purchase 10 Bayer AG shares per year at a tax-free discount of €15.34 (2000: €15.34) per share to the market price. Participants may not include shares that they purchase 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 in the year he or she enters the program.

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 shares of Bayer AG stock bought in the capital market, subject to certain performance criteria, compensation expense for potential share distributions is recorded when there is a reasonable basis on which to estimate whether the performance criteria will ultimately be met. Compensation expense is recorded at each balance sheet date by estimating the number of rights outstanding multiplied by the current quoted market price of Bayer AG shares. The related personnel provisions on December 31, 2001 amounted to €12 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, 2001, participants in Module 2 received 252,652 shares at a total price of €7.8 million, resulting in personnel expenses of €3.9 million. The discount to the price of Bayer AG stock was 33.2 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

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

produced specifically for us by contract manufacturers or where waste from our operations was treated, stored or disposed. 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, 2001 amounted to €200 million (2000: €230 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 €265 million (2000: €304 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 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 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 heterogeneous business portfolio, Bayer is exposed to numerous legal risks, particularly in the areas of product liability, patent disputes, tax assessments, competition and antitrust law, and environmental matters. We cannot predict with certainty the outcome of any proceedings in which we are or may become involved. It is therefore possible that legal judgments give rise to expenses that are not fully covered by insurers’ compensation payments and significantly affect our revenues and earnings.

In the opinion of the management, however, currently pending litigation is unlikely to result in judgments that would materially affect the Group’s financial position or results of operations.

Restructuring charges

Charges incurred for restructuring programs during 2001 were €214 million, including €98 million in provisions that are expected to be used as the related actions under the plans are completed. The total charges comprise €57 million in severance payments, €61 million in accelerated amortization/depreciation and write-downs of intangible assets, property, plant and equipment, and €96 million in other expenses.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Of the restructuring charges in 2001, a total of €39 million is related to the integration of the polyols business acquired from Lyondell, with severance payments accounting for €13 million, other expenses for €19 million and asset write-downs for €7 million. The greater part of the severance payments and other expenses for 2001 will lead to disbursements in 2002.

The restructuring of our styrenics business in North America and Europe led to a further €43 million in charges, including €19 million for write-downs and €24 million for other expenses.

In the second half of 2001 we announced plans to restructure our styrenics operations in Camacari, Brazil, resulting in charges of €22 million, comprising €16 million in write-offs of assets no longer utilized and €6 million in other expenses.

In 2001, a further €15 million in restructuring charges was incurred in the U.S. for the restructuring of the Consumer Care Business Group in Elkhart, Indiana, including €9 million in write-downs and €6 million in other expenses.

In the second half of 2001 we initiated restructuring measures to enhance the efficiency of our U.S. production facilities in Baytown, Texas and New Martinsville, West Virginia. The €35 million in charges comprises €21 million in severance payments and €13 million in other expenses. We also announced plans to close down a facility in West Virginia, resulting in €10 million in write-offs of assets no longer utilized and €3 million in severance payments.

The ongoing restructuring programs to improve profitability in the Pharmaceuticals Business Group gave rise to €26 million in charges, comprising €7 million in severance payments and €19 million in other expenses.

Further charges relate to various small-scale restructuring programs. Changes in provisions and expenses for restructuring were as follows:

	<u>Employee termination costs</u>	<u>Tangible fixed asset impairment</u>	<u>Other third party costs</u>	<u>Total</u>
Balance at January 1, 2000	50	9	47	106
Additions	59	51	90	200
Cash payments	(26)	—	(108)	(134)
Reclassification to fixed assets	—	(47)	—	(47)
Translation gain (loss), net	<u>3</u>	<u>—</u>	<u>3</u>	<u>6</u>
Balance at December 31, 2000	86	13	32	131
Additions	57	61	96	214
Cash payments	(69)	—	(64)	(133)
Reclassification to fixed assets	—	(74)	—	(74)
Translation gain (loss), net	<u>5</u>	<u>0</u>	<u>2</u>	<u>7</u>
Balance at December 31, 2001	<u><u>79</u></u>	<u><u>0</u></u>	<u><u>66</u></u>	<u><u>145</u></u>

The other costs are mainly demolition expenses and other charges related to the abandonment of production facilities.

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[30] Financial obligations

Financial obligations that are not the hedged item in a permissible hedge accounting relationship are carried at the higher of nominal and redemption value. They comprise the following:

	Dec. 31, 2001		Dec. 31, 2000	
	Total	Maturing in 2002	Total	Maturing in 2001
	(€ million)			
Debentures	2,592	781	2,168	283
Liabilities to banks	1,122	829	1,458	932
Liabilities under lease agreements	881	99	199	34
Liabilities from the issuance of promissory notes	84	84	2	2
Commercial paper	1,365	1,365	1,812	1,812
Liabilities from derivative financial instruments	180	169	—	—
Other financial obligations	1,156	982	1,026	799
	7,380	4,309	6,665	3,862

The maturities of financial obligations existing at December 31, 2001 were as follows:

Maturing in

	€ million
2002	4,309
2003	291
2004	1,665
2005	355
2006	86
2007 or later	674
	7,380

The financial obligations are predominantly in U.S. dollars, which account for €5.1 billion (2000: €4.0 billion). U.S. dollar borrowings represent 69 percent (2000: 61 percent) of total financial obligations.

Short-term borrowings (excluding the short-term portion of debentures) amounted to €3,528 million (2000: €3,579 million) with a weighted average interest rate of 5.4 percent (2000: 6.6 percent) The Bayer Group's financial obligations are primarily unsecured and of equal priority.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Debentures include the following:

<u>Effective Rate</u>	<u>Stated Rate</u>		<u>Volume</u>	<u>Dec. 31, 2001</u>	<u>Dec. 31, 2000</u>
				<u>(€ million)</u>	
Bayer Capital Corporation B.V.					
2.820%	2.500%	Bonds with Warrants Attached 1987/2002	CHF 250.0 million	169	164
Bayer Corporation					
6.735%	6.500%	Notes 1995/2002	USD 400.0 million	454	430
7.323%	7.125%	Notes 1995/2015	USD 200.0 million	227	215
6.784%	6.750%	Notes 1996/2001	USD 250.0 million	—	269
2.166%	2.250%	Bonds 1997/2002	CHF 200.0 million	135	131
3.500%	3.500%	Revenue Bonds 1997/2009	USD 20.6 million	23	22
4.000%	4.000%	Revenue Bonds 1997/2027	USD 25.0 million	28	27
6.761%	6.650%	Notes 1998/2028	USD 350.0 million	397	376
6.391%	6.200%	Bonds 1998/2028	USD 250.0 million	284	269
4.750%	4.750%	Money Market Puttable Reset Securities 2001/2011	USD 500.0 million	568	269
Bayer Ltd., Japan					
3.869%	3.750%	Bonds 2000/2005	CHF 400.0 million	270	239
Other debentures				<u>37</u>	<u>26</u>
				<u>2,592</u>	<u>2,168</u>

The other debentures totaling €37 million are due between 2002 and 2011; their average interest rate is 10.9 percent.

In July 1987, Bayer Capital Corporation B.V. issued CHF 250 million of 2.50% Bonds with warrants in Switzerland. The Bonds have a term of 15 years and mature in July 2002. The issue price of the Bonds was 100%, and interest is paid annually in July. The warrants attached expired on August 28, 1997.

In October 1995, Bayer Corporation issued USD 400 million of 6.50% Notes to qualified institutional buyers. The Notes have a term of 7 years and mature in October 2002. Interest is paid semi-annually in April and October. The Group recorded a discount of USD 2.7 million, which includes commissions paid to underwriters.

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 April 1997, Bayer Corporation issued CHF 200 million of 2.25% Bonds in Switzerland. The Bonds have a term of 5 years and mature in April 2002. Interest is paid annually in April. The Group recorded a discount of USD 0.4 million, which includes commissions paid to underwriters. This debt was swapped into U.S. dollars at a floating interest rate. At December 31, 2001, the effective U.S. dollar interest rate was 2.17%. 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 May 1997, Bayer Corporation issued USD 25 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 30 years and mature in May 2027.

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

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

underwriters. The Notes will be redeemable, in whole or in part, at the option of Bayer Corporation at any time, upon 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.

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, 2001, the Group had approximately €6.2 billion (2000: €5.6 billion) in total lines of credit, of which €1.1 billion (2000: €1.5 billion) was used and €5.1 billion (2000: €4.1 billion) were 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 €1,174 million (2000: €285 million), including €293 million (2000: €86 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> (€ million)	<u>Liability</u>
2002	130	26	104
2003	149	38	111
2004	126	34	92
2005	101	26	75
2006	79	22	57
2007 or later	<u>589</u>	<u>147</u>	<u>442</u>
	<u>1,174</u>	<u>293</u>	<u>881</u>

Lease payments in 2001 in connection with operating leases amounted to €244 million (2000: €162 million; 1999: €154 million).

The other financial obligations include €85 million (2000: €42 million) to nonconsolidated subsidiaries.

[31] Trade accounts payable

Trade accounts are payable mainly to third parties; they are carried at the higher of nominal and redemption value. As last year, the entire amount is due within one year. Trade accounts payable as of December 31, 2001 include €1,991 million (2000: €2,013 million) maturing within one year and €2 million (2000: €3 million)

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maturing after one year. Of the total, €8 million (2000: €8 million) is payable to subsidiaries, €7 million (2000: €16 million) to other affiliated companies and €1,978 million (2000: €1,992 million) to other suppliers.

[32] Miscellaneous liabilities

Miscellaneous liabilities are carried at the higher of nominal and redemption value. They are comprised as follows:

	Dec. 31, 2001		Dec. 31, 2000	
	Total	Maturing in 2002	Total	Maturing in 2001
	(€ million)			
Payroll liabilities	443	320	537	422
Tax liabilities	281	280	291	289
Liabilities for social expenses	144	144	114	114
Accrued interest on liabilities	125	125	73	46
Advance payments received	25	25	24	24
Liabilities from the acceptance of drafts	17	17	14	14
License liabilities	56	56	32	32
Other miscellaneous liabilities	<u>881</u>	<u>865</u>	<u>1,385</u>	<u>1,333</u>
	<u>1,972</u>	<u>1,832</u>	<u>2,470</u>	<u>2,274</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.

The total of miscellaneous liabilities includes €42 million (2000: €76 million) to non-consolidated subsidiaries and €3 million (2000: €12 million) to other affiliated companies.

[33] Further information on other liabilities

Other liabilities (financial obligations, trade accounts payable and miscellaneous liabilities) include €1,779 million (2000: €1,636 million) maturing in more than five years.

Of the total, €334 million (2000: €283 million) was secured, mainly by mortgages of €256 million (2000: €256 million).

Included is €125 million (2000: €123 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

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 during the useful lives of the respective assets and recognized in income.

The main component of deferred income as of December 31, 2001 comprises €111 million (2000: €113 million) in such grants and subsidies received from governments; the amount reversed and recognized in income was €17 million (2000: €13 million).

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[35] Discontinuing operations

Assets and liabilities include the following amounts pertaining to the discontinuing operations of Haarmann & Reimer, Erdölchemie, Fibers and DyStar:

	Fibers		HR		EC	DyStar	Total	
	2001	2000	2001	2000	2000	2000	2001	2000
	(€ million as of Dec. 31)							
Noncurrent assets	130	143	419	423	200	89	549	855
Current assets (excluding liquid assets)	99	195	384	390	199	320	483	1,104
Liquid assets	—	—	17	30	—	11	17	41
Assets	<u>229</u>	<u>338</u>	<u>820</u>	<u>843</u>	<u>399</u>	<u>420</u>	<u>1,049</u>	<u>2,000</u>
Pension provisions	28	53	74	69	59	16	102	197
Other provisions	17	35	43	62	39	28	60	164
Financial obligations	—	—	12	15	5	76	12	96
Remaining liabilities	29	82	104	101	59	122	133	364
Liabilities	<u>74</u>	<u>170</u>	<u>233</u>	<u>247</u>	<u>162</u>	<u>242</u>	<u>307</u>	<u>821</u>

[36] Commitments and contingencies

Contingent liabilities as of December 31, 2001 — almost all of which exist toward third parties — amount to €193 million. They result from:

	Dec. 31, 2001	Dec. 31, 2000
	(€ million)	
Issuance and endorsement of bills	22	23
Guarantees	53	44
Warranties	118	148
	<u>193</u>	<u>215</u>

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. The warranties mainly relate to contractual terms encountered in the ordinary course of business.

In addition to provisions, other liabilities and contingent liabilities, there are other financial commitments resulting primarily from long-term lease and rental agreements. Minimum non-discounted future payments relating to operating leases total €557 million (2000: €598 million). The respective payment obligations mature as follows:

	€ million
2002	188
2003	91
2004	69
2005	56
2006	86
2007 or later	67
	<u>557</u>

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Financial commitments resulting from orders already placed under purchase agreements related to planned or ongoing capital expenditure projects total €354 million (2000: €446 million). The respective payments are due almost entirely in 2002.

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, 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 €732 million (2000: €683 million). At December 31, 2001, the remaining payments expected to be made to these parties, assuming the milestones or other conditions are met, were as follows:

<u>Maturing in</u>	<u>€ million</u>
2002	218
2003	215
2004	88
2005	81
2006	84
2007 or later	<u>46</u>
	<u>732</u>

[37] Related parties

Transactions with related persons and companies, which are invariably performed on an arm's length basis, are mainly trade transactions. The related receivables and payables have been included in the respective notes to the financial statements as required by European Union directives. The revenue and expenses related to these transactions are immaterial to the consolidated financial statements as a whole.

[38] 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.

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 fair value are recognized in stockholders' equity. In the event of impairment losses, the assets are written down and the write-downs are recognized in income. Financial instruments constituting liabilities are carried at the higher of nominal and redemption value.

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 on the basis of quoted prices, or in some cases by discounting future cash flows. Their total fair value is €83 million less than their carrying value. The remaining

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

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.

All 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 year end was as follows:

	Dec. 31, 2001	Dec. 31, 2000
	(€ million)	
Primary asset instruments exposed to currency risk	3,657	2,813
Primary liability instruments exposed to currency risk	2,314	2,159
Amount naturally hedged	(3,011)	(1,102)
Amount hedged through derivative financial instruments	<u>(2,527)</u>	<u>(2,205)</u>
Residual unhedged currency exposure	<u><u>433</u></u>	<u><u>1,665</u></u>

In some cases forecasted transactions are also hedged to further reduce the related anticipated currency risk. At December 31, 2001 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, 2002 — was €497 million, which is not included in the hedged amount of €2.5 billion. These hedging relationships amount to cash flow hedges as defined in IAS 39. The contracts are concluded monthly so that they run for one year and mature in the middle of each month. On these dates the results of the transactions are recognized in income. In 2001, the differences resulting from fair value measurement and initially recognized in equity amounted to €1.9 million.

On the asset side, 62 percent of currency risks relate to the U.S. dollar and 10 percent to the Japanese yen. On the liabilities side, 60 percent of foreign currency risks relate to the U.S. dollar, while only 4 percent relate to euro risk positions of subsidiaries domiciled outside the euro zone. The remaining exposure involves liabilities in British pounds (3 percent), Japanese yen (5 percent) and a number of other currencies outside the dollar and euro zones. The U.S. dollar accounts for 77 percent of the asset volume hedged through derivative financial instruments, while the pound accounts for 8 percent and the yen for 6 percent. Of the hedged liabilities, 59 percent are in U.S. dollars, 7 percent in yen, 5 percent in British pounds and 29 percent in other currencies. The need for hedging within the euro zone ceased at the beginning of 1999 due to the permanent fixing of exchange rates. When economically hedging exchange rate risk on recorded foreign currency operating items, we

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

do not aim for hedge accounting treatment. Changes in the fair values of the respective hedging instruments are therefore recognized immediately in income.

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 exposed to currency risk have no natural hedge, they are hedged through derivative financial instruments.

Interest rate risk

An interest rate risk — the possibility that the value of a financial instrument will change due to movements in market rates of interest — 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 commitments. 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 confined to the hedging of the operating business and of the related investments and financing transactions. “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.

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, 2001	Dec. 31, 2000	Dec. 31, 2001	Dec. 31, 2000
	(€ million)			
Forward foreign exchange contracts	2,740	3,219	(28)	145
Currency options	279	87	*	1
Currency swaps	9	196	*	(12)
Interest rate hedging contracts (including interest and principal currency swaps)	4,485	3,495	(60)	(133)
	<u>7,513</u>	<u>6,997</u>	<u>(88)</u>	<u>1</u>

* less than €1 million

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 €139 million (2000: €227 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 €2.7 billion (2000: €3.3 billion) mature within one year, while instruments in the amount of €0.3 billion (2000: €0.2 billion) have longer remaining terms.

Interest rate risk

Short-term interest rate hedging contracts (including interest and principal currency swaps) total €2.0 billion (2000: €0.3 billion). Those maturing after more than one year total €2.5 billion (2000: €3.2 billion).

Hedge accounting

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. All swap contracts amount to permissible hedge accounting relationships and there is no ineffectiveness related to these hedges. Changes in the fair values of derivatives that hedge interest rate risk are recorded as interest expense for the respective periods, as are offsetting changes in the fair value of the related hedged debt items. Fair value hedge accounting is not used in any other circumstances. 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. However, most of the cash flow hedges are entered into to protect future operating revenues against currency fluctuations, as explained earlier.

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 2001 of €2.9 billion (2000: €4.2 billion; 1999: €3.2 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 pages F-20 to F-22. The net cash flow of €3.9 billion (2000: €3.1 billion; 1999: €3.2 billion) takes into account changes in working capital.

[40] Net cash provided by (used in) investing activities

Additions to property, plant and equipment and intangible assets in 2001 resulted in a cash outflow of €2.6 billion (2000: €2.6 billion; 1999: €2.6 billion). Cash outflows for acquisitions amounted to €0.5 billion (2000: €4.1 billion; 1999: €0.3 billion). Sales of property, plant and equipment led to a cash inflow of €0.5 billion (2000: €0.3 billion; 1999: €0.1 billion), while that from interest and dividend receipts and from marketable securities amounted to €0.4 billion (2000: €0.3 billion; 1999: €0.4 billion).

[41] Net cash provided by (used in) financing activities

The net cash outflow of €1.5 billion in 2001 mainly comprises the €1.0 billion dividend payment for 2000 (2000: €1.0 billion dividend payment for 1999; 1999: €0.8 billion dividend payment for 1998) and €0.5 billion (2000: €0.3 billion; 1999: €0.3 billion) in interest payments.

[42] Discontinuing operations

Discontinuing operations affected the Group cash flow statements as follows:

	Erdölchemie			Fibers			HR			DyStar		Agfa	Total		
	2001	2000	1999	2001	2000	1999	2001	2000	1999	2000	1999	1999	2001	2000	1999
	(€ million)														
Net cash provided by operating activities	13	38	39	28	114	35	118	84	42	66	35	167	159	302	318
Net cash provided by (used in)															
investing activities	474	(87)	(62)	(16)	(30)	(62)	(163)	(116)	(308)	(65)	(16)	2,613	295	(298)	2,165
Net cash provided by (used in)															
financing activities	<u>0</u>	<u>0</u>	<u>(1)</u>	<u>(41)</u>	<u>*</u>	<u>*</u>	<u>77</u>	<u>(7)</u>	<u>227</u>	<u>18</u>	<u>(28)</u>	<u>—</u>	<u>36</u>	<u>11</u>	<u>198</u>
Change in cash and cash equivalents	<u>487</u>	<u>(49)</u>	<u>(24)</u>	<u>(29)</u>	<u>84</u>	<u>(27)</u>	<u>32</u>	<u>(39)</u>	<u>(39)</u>	<u>19</u>	<u>(9)</u>	<u>2,780</u>	<u>490</u>	<u>15</u>	<u>2,681</u>

* less than €1 million

[43] Cash and cash equivalents

Cash and cash equivalents as of December 31, 2001 amounted to €0.7 billion (2000: €0.5 billion; 1999: €2.8 billion). The liquid assets of €0.8 billion (2000: €0.7 billion; 1999: €3.1 billion) shown in the balance sheet also include marketable securities and other instruments.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

[44] U.S. GAAP Information

The Group's consolidated financial statements have been prepared in accordance with IAS, which as applied by the Group, differs in certain significant respects from U.S. GAAP. The effects of the application of U.S. GAAP to net income and stockholders' equity are set out in the tables below:

	<u>Notes</u>	<u>2001</u>	<u>2001</u>	<u>2000</u>	<u>1999</u>
		(\$ million(1))	(€ million)	(€ million)	(€ million)
Net income reported under IAS		859	965	1,816	2,002
Fair value of derivative financial instruments	a	(85)	(95)	95	—
Available for sale securities	b	(27)	(30)	—	—
Business combinations	c	(56)	(63)	(128)	(54)
Pensions	d	(21)	(24)	(24)	(24)
Other	e	(5)	(5)	33	54
Deferred tax effect on U.S. GAAP adjustments		<u>46</u>	<u>52</u>	<u>(9)</u>	<u>(11)</u>
Net income reported under U.S. GAAP		<u><u>711</u></u>	<u><u>800</u></u>	<u><u>1,783</u></u>	<u><u>1,967</u></u>
Basic and diluted earnings per share under					
U.S. GAAP		<u><u>0.97</u></u>	<u><u>1.10</u></u>	<u><u>2.44</u></u>	<u><u>2.69</u></u>

		<u>December 31,</u>		
	<u>Notes</u>	<u>2001</u>	<u>2001</u>	<u>2000</u>
		(\$ million(1))	(€ million)	(€ million)
Stockholders' equity reported under IAS		15,062	16,922	16,140
Fair value of derivative financial instruments	a	—	—	95
Available for sale securities	b	—	—	1,366
Business combinations	c	700	786	822
Pensions	d	784	881	1,105
Other	e	93	105	109
Deferred tax effect on U.S. GAAP adjustments		<u>(351)</u>	<u>(394)</u>	<u>(527)</u>
Stockholders' equity reported under U.S. GAAP		<u><u>16,288</u></u>	<u><u>18,300</u></u>	<u><u>19,110</u></u>

		<u>December 31,</u>		
		<u>2001</u>	<u>2001</u>	<u>2000</u>
		(\$ million(1))	(€ million)	(€ million)
Components of stockholders' equity in Accordance with				
U.S. GAAP:				
Capital stock of Bayer AG		1,664	1,870	1,870
Capital reserves of Bayer AG		2,619	2,942	2,942
Retained earnings		10,922	12,270	12,492
Accumulated other comprehensive income:				
— Unrealized market value adjustment on securities available for sale (net of taxes of \$37 million, €42 million, €14 million)		499	561	1,352
— Unrealized market value adjustment on cash flow hedges (net of taxes of \$1 million, €1 million, and € nil)		1	1	0
— Additional minimum pension liability (net of taxes of \$152 million, €171 million, and €90 million)		(217)	(244)	(124)
— Translation differences		<u>800</u>	<u>900</u>	<u>578</u>
Total		<u><u>16,288</u></u>	<u><u>18,300</u></u>	<u><u>19,110</u></u>

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

- (1) The 2001 U.S. dollar figures have been translated at an exchange rate of \$1.1235 = €1.00. Such translations should not be construed as representations that the euro amounts represent, or have been or could be converted into, United States dollars at that or any other rate.

a. Fair Value of Derivative Financial Instruments

Effective January 1, 2001, the Group began applying IAS 39 “Financial Instruments: Recognition and Measurement” and Statement of Financial Accounting Standard (“SFAS”) 133, “Accounting for Derivative Instruments and Hedging Activities.” As a result, derivative financial instruments are recorded in the balance sheet at their fair values under both IAS and US GAAP. The Group uses foreign currency forward contracts for hedging of anticipated transactions. These forward contracts were recorded at the lower of cost or market value under IAS and were marked to market through the income statement in accordance with U.S. GAAP applicable at the time. The €95 million difference between IAS and U.S. GAAP net income and equity for the year ended December 31, 2000 arose from the recognition of a €95 million gain relating to the anticipated cash flow forward contracts under U.S. GAAP.

During 2001, the fair value of the foreign currency forward contracts that had been entered into during 2000 declined to €68 million. As the hedged anticipated transactions were realized during 2001, this €68 million was recorded as gain under IAS. Conversely, under U.S. GAAP, the €27 million decline in value was recognized as an expense. Therefore, the reconciling item between net income under IAS and U.S. GAAP for the year ended December 31, 2001 of €95 million results from the difference between the €68 million gain under IAS compared to the €27 million expense under U.S. GAAP. Subsequent to the adoption of IAS 39 and SFAS 133, the accounting for new foreign currency forward contracts for hedging of anticipated transactions is consistent between IAS and U.S. GAAP.

b. Available for Sale Securities

Under IAS, unrealized losses on available-for-sale financial assets are recorded in income only when the decline in market value is considered permanent. Under U.S. GAAP, unrealized losses are recorded in income when they are judged to be other-than-temporary. All declines in market value are considered to be other-than-temporary if they have exceeded 20% over a continual period of 6 months and there is no indication of a significant increase in fair value in the short-term. Principally, other declines in fair value that do not meet these criteria may be considered other-than-temporary depending upon the circumstances surrounding the underlying investment.

Prior to the adoption of IAS 39 in 2001, investments in debt and certain equity securities were reflected in the balance sheet at nominal value less any necessary write-downs under IAS. Under U.S. GAAP, all investments that have been classified as available-for-sale are carried at fair value, with any unrealized gains or losses recorded as a separate component of equity.

c. Business Combinations

Prior to the adoption of IAS 22 (revised 1993) on January 1, 1995, the Group wrote-off all goodwill directly to equity in accordance with IAS existing at that time. The adoption of IAS 22 (revised 1993) did not require prior period restatement. Accordingly, a U.S. GAAP difference exists with respect to the recognition of goodwill and amortisation before January 1, 1995. For the purpose of the reconciliation to U.S. GAAP, the pre-1995 goodwill is being amortized through the income statement over estimated useful lives between 20 and 40 years. In addition to the normally recurring amortization expense on these amounts during 2001, the Group wrote-off €22 million of goodwill capitalized under U.S. GAAP. The write-off was due to the planned disposal of the entity to which the goodwill relates.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

d. Pension Provisions

Under IAS, pension costs and similar obligations are accounted for in accordance with IAS 19, “Employee Benefits”. For purposes of U.S. GAAP, pension costs for defined benefit plans are accounted for in accordance with SFAS No. 87 “Employers’ Accounting for Pensions”. Using an SEC accommodation to foreign private issuers, the Group adopted SFAS No. 87 on January 1, 1994, for its non-U.S. plans, which was also the date of adoption for IAS 19 for those plans. It was not feasible to apply SFAS No. 87 on the effective date specified in the standard. IAS 19 as applied by the Group from 1994 was substantially similar to the methodology required under SFAS No. 87. The adjustment between IAS and U.S. GAAP comprises amortization of the unrecognized transition obligation over the remaining average service lives of employees from 1994 of €238 million, the recognition of an asset limitation under IAS 19, which is not allowed under SFAS No. 87, and the recognition of an additional minimum liability under SFAS No. 87, which is not required under IAS 19.

Following is a reconciliation of the balance sheet and income statement amounts recognized for IAS and U.S. GAAP for both pension and post-retirement benefit plans:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(€ million)		
Pension benefits:			
Liability recognized for IAS	(3,057)	(3,151)	(3,191)
Asset limitation under IAS 19	1,249	1,249	1,261
Additional minimum liability under SFAS No. 87	(415)	(215)	(218)
Difference in unrecognized transition obligation	<u>47</u>	<u>71</u>	<u>95</u>
Liability recognized for U.S. GAAP	<u>(2,176)</u>	<u>(2,046)</u>	<u>(2,053)</u>
Net periodic benefit cost recognized for IAS	270	260	291
Amortization of transition obligation	<u>24</u>	<u>24</u>	<u>24</u>
Net periodic benefit cost recognized for U.S. GAAP	<u>294</u>	<u>284</u>	<u>315</u>

e. Other

There are also differences between IAS and U.S. GAAP in relation to (1) asset impairments, (2) restructuring provisions, (3) equity compensation, (4) other employee benefits and (5) in-process research and development. None of the differences are individually significant and they are therefore shown as a combined total.

Additional U.S. GAAP disclosures

Discontinued operations

Under IAS, the Group has classified DyStar, EC Erdölchemie, Haarmann & Reimer and the Fibers business group as discontinuing operations. Under U.S. GAAP, DyStar does not meet the requirements for classification as a discontinued operation, as the formal plan for disposal of these operations will not be completed within one year. The following U.S. GAAP income statement information excludes DyStar as a discontinued operation.

	<u>2001</u>	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(\$ million)	(€ million)	(€ million)	(€ million)
Income from continuing operations	427	481	1,603	1,898
Discontinued Operations — net of tax	<u>284</u>	<u>319</u>	<u>180</u>	<u>69</u>
Net income reported under U.S. GAAP	<u>711</u>	<u>800</u>	<u>1,783</u>	<u>1,967</u>

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

<u>Earnings per share</u>	<u>2001</u> (\$ million)	<u>2001</u> (€ million)	<u>2000</u> (€ million)	<u>1999</u> (€ million)
Basic and diluted:				
Income from continuing operations	0.58	0.66	2.19	2.60
Income from discontinued operations	0.39	0.44	0.25	0.09
Basic and diluted earnings per share	<u>0.97</u>	<u>1.10</u>	<u>2.44</u>	<u>2.69</u>

Financial assets and liabilities

The components of marketable securities under U.S. GAAP at December 31, 2001 and 2000 are the following:

	<u>Cost</u>	<u>Gross unrealized gains</u>	<u>Gross unrealized losses</u>	<u>Carrying value and estimated fair value</u>
		(€ million)		
As of December 31, 2001				
Available for sale securities:				
Equity securities	944	625	(35)	1,534
Debt securities	39	20	(7)	52
Total	<u>983</u>	<u>645</u>	<u>(42)</u>	<u>1,586</u>
As of December 31, 2000				
Available for sale securities:				
Equity securities	426	1,370	(6)	1,790
Debt securities	51	2	—	53
Total	<u>447</u>	<u>1,372</u>	<u>(6)</u>	<u>1,843</u>

Prior to the adoption of IAS 39, unrealized holding gains on available for sale securities were not recorded under IAS, and gross unrealized holding losses on available for sale securities were recorded in the *other financial expense* component of financial income, net. Under U.S. GAAP, unrealized holding gains and losses on available-for-sale-securities are recorded as a component of other comprehensive income in all periods presented.

Proceeds from sales of available for sale securities were €195 million, €296 million, and €71 million in 2001, 2000 and 1999, respectively. Gross realized gains were €25 million, €73 million, and €13 million on those sales in 2001, 2000 and 1999, respectively. Gross realized losses were €2 million in 1999 on those sales. There were no gross realized losses in 2001 or in 2000. The gain or loss on these sales was determined using the weighted average cost method.

The maturities of debt securities at December 31, 2001 are as follows:

	<u>Available for Sale</u> (€ million)
Within one year	33
Over one year through five years	19
Total	<u>52</u>

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Derivative financial instruments

The estimated fair values of derivative financial instruments are provided in Note 38 to the Consolidated Financial Statements of the Bayer Group. The use of derivatives is confined to the hedging of the operating business and of the related investments and financing transactions.

Fair Value Hedges

Changes in the fair value of derivatives that hedge interest rate risk are recorded in *interest expense-net* each period. The offsetting changes in the fair values of the related debt are also recorded in *interest expense-net*. Changes in the fair value of derivatives that hedge foreign exchange rate risks are recorded in *other non-operating expense-net* for each period. The offsetting changes in the fair values of the related debt are also recorded in *other non-operating expense-net*. The Group maintains no other fair value hedges.

Cash Flow Hedges

While each risk management program has a different time horizon, no program currently extends beyond the next one-year period. The effects of hedges of foreign currency-denominated cash receipts are reported in *other non-operating expense-net*, and the effects of hedges of payments are reported in the same line item of the underlying payment. There was no hedge ineffectiveness reported in earnings in the twelve-months ended December 1, 2001, and no amounts were reclassified to earnings for forecasted transactions that did not occur.

Cash flow hedge results are reclassified into earnings during the same period in which the related exposure impacts earnings. If it appears that a forecasted transaction will not materialize, reclassifications are made sooner.

Hedges of Net Investment in a Foreign Entity

The Group does not maintain any hedges of net investment in a foreign entity.

Non-derivative financial instruments

The U.S. GAAP carrying values are equivalent to the IAS carrying values for all non-derivative financial assets and liabilities, except for marketable securities before 2001, as described above. Non-derivative financial assets consist of cash and cash equivalents, time deposits, and marketable securities. Non-derivative liabilities consist of commercial paper, bank or other short-term financial debts, and long-term debt.

The carrying amount of cash and cash equivalents, time deposits, commercial paper, and bank and other short-term financial debts approximates their estimated fair values, due to the short-term nature of these instruments. The fair value for marketable securities are estimated based on listed market prices or broker or dealer price quotes. The fair value of long-term debt is estimated based on the current quoted market rates available for debt with similar terms and maturities.

Information concerning the fair values of long and short-term financial debt is provided in Note 38 to the Consolidated Financial Statements of the Bayer Group.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Comprehensive Income

SFAS No. 130 “Reporting Comprehensive Income” established standards for the reporting and display of comprehensive income and its components. Comprehensive income includes net income on all changes in equity during a period that arise from non-owner sources, such as foreign currency items and unrealized gains and losses on securities available-for-sale. The additional disclosures required under U.S. GAAP are as follows:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(€ million)	(€ million)	(€ million)
Net income under U.S. GAAP	800	1,783	1,967
Other comprehensive income:			
Unrealized market value adjustment on available-for-sale securities (net of taxes of €28 million, €3 and €7 million, respectively)	(816)	799	507
Unrealized market value adjustment on cash flow hedges (net of taxes of €1 million, € nil, and € nil)	1	0	0
Reclassification adjustment:			
Net realized gains on sales of securities (net of taxes of € nil, €4 million and €5 million, respectively)	25	(12)	(7)
Additional minimum pension liability (net of taxes of €80 million, €1 and €19 million, respectively)	(120)	2	27
Foreign currency translation adjustment	<u>322</u>	<u>288</u>	<u>1,304</u>
Comprehensive income under U.S. GAAP	<u><u>212</u></u>	<u><u>2,860</u></u>	<u><u>3,798</u></u>

Employee Benefit Plans

Presented below are the disclosures required by SFAS No. 132 “Employers’ Disclosures about Pensions and Other Post-Retirement Benefits”), which provide a roll forward of benefit obligations, plan assets and funded status of the plan:

	<u>Pension Benefits</u>		<u>Other Post- Employment Benefits</u>	
	<u>2001</u>	<u>2000</u>	<u>2001</u>	<u>2000</u>
	(€ million)			
Benefit obligation				
At beginning of year	10,684	10,161	949	864
Service cost	265	323	23	192
Interest cost	669	642	58	52
Spin-offs of subsidiaries	(184)	(91)	—	—
Acquisitions	2	—	2	7
Plan amendments	—		(94)	—
Plan settlements	(1)	(12)	—	—
Actuarial (gain) loss	305	51	84	(13)
Foreign currency translation	66	128	25	50
Benefit payments	<u>(503)</u>	<u>(518)</u>	<u>(90)</u>	<u>(203)</u>
Benefit obligation at end of year	<u><u>11,303</u></u>	<u><u>10,684</u></u>	<u><u>957</u></u>	<u><u>949</u></u>

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

	Pension Benefits		Other Post-Employment Benefits	
	2001	2000	2001	2000
	(€ million)			
Plan assets at fair value				
At beginning of year	8,790	8,407	389	337
Actual return on plan assets	(563)	355	(43)	24
Spin-offs of subsidiaries	(130)	(72)	—	—
Acquisitions	2	51	—	—
Foreign currency translation	178	155	9	26
Employer contribution	313	368	72	205
Employee contributions	39	44	—	—
Benefit payments	<u>(503)</u>	<u>(518)</u>	<u>(90)</u>	<u>(203)</u>
Plan assets at fair value at end of year	<u>8,126</u>	<u>8,790</u>	<u>337</u>	<u>389</u>
Funded status	(3,177)	(1,894)	(620)	(560)
Unrecognized transition obligation	50	79	—	—
Unrecognized prior service cost	16	3	(85)	5
Unrecognized actuarial (gains) losses	1,350	(130)	70	(82)
Additional minimum liability	<u>(415)</u>	<u>(215)</u>	<u>—</u>	<u>—</u>
Prepaid (accrued) benefit cost	<u>(2,176)</u>	<u>(2,157)</u>	<u>(635)</u>	<u>(637)</u>
Amounts recognized in the balance sheet				
Prepaid benefit cost	1,792	1,604	—	—
Accrued benefit liability	<u>(3,968)</u>	<u>(3,761)</u>	<u>(635)</u>	<u>(637)</u>
Net amount recognized	<u>(2,176)</u>	<u>(2,157)</u>	<u>(635)</u>	<u>(637)</u>
Benefit cost				
Service cost	265	323	23	192
Flat-rate tax on employer contributions	7	7	—	—
Interest cost	669	642	58	52
Expected return on plan assets	(608)	(592)	(31)	(30)
Employee contributions	(39)	(42)	—	—
Amortisation of unrecognized prior service cost	10	1	—	—
Amortisation of transition obligation	(22)	20	—	—
Amortisation of actuarial (gains) losses	<u>12</u>	<u>(9)</u>	<u>13</u>	<u>(1)</u>
Net periodic benefit cost	<u>294</u>	<u>350</u>	<u>63</u>	<u>213</u>
Other Post-Retirement Benefit Plans weighted-average assumptions as of December 31,			2001	2000
Discount rate			7.00%	7.00%
Rate of compensation increase			N/A	N/A
Expected return on plan assets			8.50%	8.50%

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

The assumed health care cost trend rate at December 31, 2001 was 8.0% gradually declining to 5.0% by the year 2004. A one-percentage-point change in the assumed health care cost trend rates compared to those used for 2001 would have the following effects:

	<u>1% point increase</u>	<u>1% point decrease</u>
	(€ million)	
Effects on total of service and interest cost components	13	(11)
Effect on post retirement benefit obligations	87	(75)

Pro Forma Net Income

The Group applies Accounting Principles Board Opinion No. 25 “Accounting for Stock Issued to Employees” and related interpretations in accounting for its stock compensation program. Statement of Financial Accounting Standards No. 123 “Accounting for Stock-Based Compensation” would result in the same accounting treatment for the Group’s stock incentive plans as was applied under APB No. 25. Hence the additional pro forma disclosures required under SFAS No. 123 do not apply.

Proportional Consolidation

The Group accounts for its investment in 12 joint ventures using the proportional consolidation method, which is the benchmark treatment specified under IAS 31. Under U.S. GAAP, investments in joint ventures generally are accounted for under the equity method. The differences in accounting treatment between proportionate consolidation and the equity method of accounting have no impact on the Group’s consolidated stockholders’ equity or net income. Rather, they relate solely to matters of classification and display. The United States Securities and Exchange Commission (SEC) permits the omission of such differences in classification and display in the reconciliation to U.S. GAAP provided certain criteria have been met.

Condensed financial information relating to the Group’s pro-rata interest in joint ventures accounted for using the proportionate consolidation method is as follows:

<u>Balance Sheet Information</u>	<u>Dec. 31, 2001</u>	<u>Dec. 31, 2000</u>
	(in million €)	
Current assets	175	582
Noncurrent assets	236	791
Short-term liabilities	128	(511)
Long-term liabilities	38	(189)
<u>Statement of Income Information</u>	<u>Dec. 31, 2001</u>	<u>Dec. 31, 2000</u>
	(in million €)	
Net sales	492	1,799
Operating result	63	132
Net income	55	118
<u>Statement of Cash Flow Information</u>	<u>Dec. 31, 2001</u>	<u>Dec. 31, 2000</u>
	(in million €)	
Net cash provided by operating activities	61	159
Net cash (used in) investing activities	(16)	(142)
Net cash (used in) financing activities	(44)	(29)

The reduction in joint venture amounts listed above relates to the inclusion of DyStar by the equity method starting in 2001.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Self-Insurance

Various Group companies are self-insured to different degrees. The maximum amount of any Group company's self-insurance is for general liability up to approximately €10 million per occurrence, and product liability up to €14 million per occurrence. For claims against our US subsidiary, the product liability self-insurance is limited to a maximum of €22 million per year. An estimate of the cost of settling existing claims is included under accrued liabilities.

Legal Proceedings

As discussed in Note 29, 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 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. 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 section, we describe what we believe to be the most significant of the proceedings in which Bayer AG or its subsidiaries are currently involved.

Patent validity challenges and infringement proceedings; patent-related antitrust actions

In the United States, Bayer AG and its U.S. subsidiary Bayer Corporation are plaintiffs or co-plaintiffs 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 containing the active ingredients ciprofloxacin or nifedipine 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 had 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 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 final FDA approval of the ANDA for a period of 30 months. The court may shorten or extend this period. If the

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

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 expires 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 else to make quarterly cash payments. Since concluding the settlement agreement, we have opted to make payments. Shortly after settling this suit, we applied to the U.S. Patent and Trademark Office for a reexamination of our patent. The Patent and Trademark Office reissued the patent in February 1999.

In April 1999, Danbury Pharmacal Inc., an affiliate of Schein Pharmaceutical, Inc., filed an ANDA (IV) alleging that our ciprofloxacin patent was invalid. Mylan Pharmaceuticals, Inc., an affiliate of Mylan Laboratories, Inc., filed an ANDA (IV) challenging our ciprofloxacin patent in September 1999. To protect and enforce our patent rights, Bayer AG together with Bayer Corporation as licensee filed two lawsuits against Danbury Pharmacal and Schein Pharmaceutical and one lawsuit against Mylan Pharmaceuticals and Mylan Laboratories in 1999, and a second lawsuit against Mylan Pharmaceuticals and Mylan Laboratories in 2000. Reddy Cheminor, Inc. intervened as an additional defendant in the Danbury/Schein suits. All these suits were consolidated for pre-trial proceedings and trial before the U.S. federal District Court for the District of New Jersey.

In their responses the defendants alleged the invalidity and unenforceability of our reexamined patent on several grounds. They then moved for summary judgment on the invalidity issue, and we filed a cross-motion for partial summary judgment. In February 2001, the district court denied the defendants' motion and granted our cross-motion. The court subsequently entered a final judgment in our favor, confirming the validity and enforceability of the patent. The defendants appealed this judgment to the Court of Appeals for the Federal Circuit, which heard oral arguments on January 7, 2002.

In addition, Bayer AG and Bayer Corporation filed a patent infringement action in May 2001 against Carlsbad Technology, Inc., arising from Carlsbad's ANDA (IV) filing seeking regulatory approval of its generic version of Cipro®. Carlsbad filed two motions for summary judgment. The first motion alleged as a matter of patent procedure that Bayer's patent as it relates to ciprofloxacin should expire in October 2002 and not, as determined by the Patent and Trademark Office, in December 2003. Bayer filed a cross-motion for summary judgment that the expiration date is in December 2003. In its second motion, Carlsbad alleged that ciprofloxacin was obvious in light of the prior art. The federal District Court for the Southern District of California denied both Carlsbad motions in October, 2001 and granted summary judgment to Bayer on its cross-motion. Carlsbad has appealed the decision denying the first motion to the Court of Appeals for the Federal Circuit. A trial regarding the arguments of obviousness raised in Carlsbad's second motion was held in April and May 2002. The Court has not yet made a ruling. Carlsbad has withdrawn all other defenses it had originally raised challenging the validity and enforceability of Bayer AG's ciprofloxacin patent.

If we lost our patent protection for ciprofloxacin, or if the expiration of the patent were accelerated to October 2002, we believe that we would forego significant revenue. We intend to continue taking vigorous action to maintain our ciprofloxacin patent rights in the United States through their normal expiry in December 2003.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Antitrust actions. 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 defendant in twenty of these cases, including the individual lawsuit and the consumer protection group lawsuit; it has been served with process in the individual lawsuit and twelve of the putative class action lawsuits. In addition, Barr Laboratories, Aventis S.A., Hoechst Marion Roussel, Inc., Rugby Laboratories, Inc. and Watson Pharmaceuticals, Inc. have each been named as 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 defendants violated various federal antitrust and state business, antitrust, unfair trade practices and consumer protection statutes, and seek treble damages and injunctive relief.

These proceedings are at an early stage. None of the relevant courts have certified a class. The Judicial Panel for Multidistrict Litigation, or MDL Panel, transferred 35 of these cases to the U.S. federal District Court for the Eastern District of New York for coordinated pre-trial proceedings. The federal court ordered nine of those cases remanded to various state courts in October 2001. Nine cases are currently pending in a California state court. Bayer is also involved in state court proceedings occurring in Florida, New York, Kansas, Tennessee and Wisconsin.

The Barr settlement is also the subject of ongoing antitrust investigations by the U.S. Federal Trade Commission and a number of state attorneys general.

Because these cases 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 material to our results of operations and 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.

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.

In August 1997, Bayer AG and Bayer Corporation filed a patent infringement suit against Elan Pharmaceutical Research Corp. and Elan's parent company, Elan Corp., plc, arising from Elan's ANDA (IV) for a drug product containing nifedipine in a 30 mg dosage form. In March 1999, the U.S. federal District Court for the Northern District of Georgia granted summary judgment against us, holding that the particular generic product for which Elan sought marketing approval as described in its ANDA would not violate our patent. In May 2000, the U.S. Court of Appeals for the Federal Circuit affirmed this decision.

In March 2001, the same district court granted summary judgment against Bayer AG and Bayer Corporation in a second ANDA (IV) related suit (60 mg dosage form) that we had filed against Elan and later in another action that we had filed against Elan, Biovail Labs, Inc., Biovail Corp. International and Teva Pharmaceuticals USA, Inc., arising from these parties' commercial sale of an allegedly bio-equivalent nifedipine product. We appealed these decisions to the Court of Appeals for the Federal Circuit. The Federal Circuit vacated these decisions of the District Court and remanded the cases to the District Court for further proceedings.

Bayer AG and Bayer Corporation have also filed four ANDA (IV) related lawsuits against Biovail and two lawsuits arising from the commercial sale of nifedipine products by Biovail and Teva. These suits are currently stayed before the U.S. federal District Court for the District of Puerto Rico.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

As defendants have prevailed in some of these lawsuits, it is possible that they may also prevail in the trials and appeals that may take place in the future. We believe, however, that we have meritorious claims in the pending cases, and intend to prosecute these claims vigorously. Because some of our nifedipine dosages have already begun to face generic competition, we do not believe that an adverse result in the pending cases would result in a material amount of additional foregone revenue.

Antitrust actions. Biovail has filed an antitrust lawsuit against Bayer AG, Bayer Corporation and Pfizer in the U.S. federal District Court for the District of Western Pennsylvania. Biovail is seeking a declaratory judgment that Bayer's nifedipine patents are invalid. Biovail also seeks damages under federal and state antitrust statutes alleging, among other things, that Bayer illegally asserted its patent rights. The district court has stayed this litigation pending resolution of the nifedipine-related patent infringement actions against Biovail.

This proceeding is at an early stage. However, we believe that we have meritorious defenses to the antitrust allegations, and we intend to defend this case vigorously.

Product liability proceedings

HIV-related actions. During the past decade, our U.S. subsidiary 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 also satisfactorily settled nearly 400 lawsuits by plaintiffs who opted out of the class action. Seven 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.

Although 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. These provisions are not material to the Bayer Group.

Cerivastatin-related actions. In August 2001, we voluntarily ceased marketing our cerivastatin anticholesterol products in response to reports of serious side effects in some patients. See Item 4, *Information about the Company — Health Care — Pharmaceuticals — Products*. Since this withdrawal, about 1,700 lawsuits, many of them putative class actions, have been initiated in the United States against Bayer Corporation and Bayer AG. The actions in the United States have been 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 are being transferred to the U.S. federal District Court for the District of Minnesota for coordinated discovery and other pre-trial proceedings. In addition, several actions have been initiated against other companies of the Bayer Group in other countries. We expect additional lawsuits to be filed in the United States and elsewhere. If the plaintiffs in these actions were to be successful, it is possible that the ultimate liability could be material to our results of operations and cash flows. We believe that we have meritorious defenses in these actions and are defending them vigorously. Without acknowledging any liability, we have settled a small 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 any litigation.

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

Phenylpropanolamine (PPA) actions. In late 2000, Bayer Corporation discontinued marketing Alka-Seltzer Plus effervescent medicines containing PPA in the United States, Canada and various Latin American countries in response to a recommendation from the U.S. Food and Drug Administration to all manufacturers of drugs and medicines containing PPA. 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. More than 540 class and individual lawsuits have been initiated in the United States against Bayer Corporation. The MDL Panel has assigned management of the federal court cases to the U.S. federal District Court for the Western District of Washington. It is probable that additional actions will be initiated there or in other jurisdictions where products containing PPA were marketed. Bayer Corporation believes it has meritorious defenses to these actions and intends to defend them vigorously.

Medicaid Rebate Program allegations

Our U.S. subsidiary, Bayer Corporation, is currently under investigation by the U.S. Attorney's Office for the District of Massachusetts. The investigation, which is assisted by the Department of Health & Human Services, focuses primarily on allegations that Bayer Corporation improperly underpaid rebates under the Medicaid Rebate Program during a period from 1995 to 2000.

These investigations could lead the government to bring criminal or civil actions, or both, against Bayer Corporation. If the government brought such actions and obtained a conviction or verdict against Bayer Corporation, we would likely be required to reimburse the government the amount of the alleged underpayment. We would also become liable to pay civil and/or criminal fines or penalties, which could be substantial. Although we believe this outcome to be unlikely, in the worst case a conviction or adverse verdict could result in the exclusion of Bayer Corporation from participation in federal health programs. Bayer Corporation is providing information to the government and otherwise cooperating with the investigation. Bayer Corporation believes that its practices complied in all material respects with all applicable laws and is therefore seeking to persuade the government to discontinue its investigation. If the government does bring civil or criminal charges against Bayer Corporation, Bayer Corporation intends to defend itself vigorously.

Average wholesale price manipulation proceedings

Seven pending lawsuits allege that a number of pharmaceutical companies, including Bayer Corporation, manipulated the average wholesale 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 attorney's fees. We expect that six of these actions will be consolidated before the U.S. federal court for the District of Massachusetts. The remaining case, in which the State of Nevada is plaintiff, has been removed to federal court in Nevada but may be subject to remand to a state court. Bayer Corporation has not yet responded to the complaints in these actions, but intends to defend itself vigorously.

Effect of New Accounting Pronouncements

U.S. GAAP

Statement of Financial Accounting Standards ("SFAS") No. 133 "Accounting for Derivative Instruments and Hedging Activities," as amended by SFAS No. 137 and No. 138, requires all derivative instruments be recorded on the balance sheet at their fair value. Changes in the fair value of derivatives are recorded each period in current earnings or other comprehensive income. The adoption of SFAS No. 133 as of January 1, 2001 did not have a material effect on the Group's financial position, results of operations or cash flows.

In June 2001, the Financial Accounting Standards Board approved SFAS 141 "Business Combinations" and SFAS 142 "Goodwill and Other Intangible Assets". SFAS 141 requires the purchase method of accounting to be used for all business combinations initiated after June 30, 2001, establishes specific criteria for the recognition of intangible assets separately from goodwill, and requires unallocated negative goodwill to be written off

Notes to the Consolidated Financial Statements of the Bayer Group — (Continued)

immediately as an extraordinary gain. Bayer will apply SFAS 141 to all business combinations for which purchase agreements are signed after June 30, 2001. SFAS 142 addresses the accounting for goodwill and identifiable intangible assets subsequent to their acquisition. Amortization of goodwill will discontinue upon adoption of SFAS 142. In addition, goodwill recorded as a result of business combinations completed during the six-month period ended December 31, 2001 will not be amortized. All goodwill and intangible assets will be tested for impairment in accordance with the provision of this statement. The Group will apply the provisions of SFAS 142 beginning January 1, 2002. Bayer has not completed its analysis of these standards and, accordingly, has not determined what affect the adoption of SFAS 141 and 142 will have on the Group's financial position, results of operations or cash flows.

In June 2001, the Financial Accounting Standards Board approved SFAS 143 "Accounting for Asset Retirement Obligations". SFAS 143 requires that the fair value of a liability for an asset retirement obligation be recognized in the period in which it is incurred if a reasonable estimate of fair value can be made. The associated asset retirement costs are capitalized as part of the carrying amount of the long-lived asset. SFAS 143 is effective for fiscal periods beginning after June 15, 2002. Early adoption is encouraged and initial application of this Statement shall be as of the beginning of an entity's fiscal year. The Group will apply SFAS 143 beginning January 1, 2003. Bayer has not completed its analysis of this standard and, accordingly, has not determined what effect the adoption of SFAS 143 will have on the Group's financial position, results of operations or cash flows.

In August 2001, the Financial Accounting Standards Board approved SFAS 144 "Accounting for the Impairment or Disposal of Long-Lived Assets". SFAS 144 retains the requirements of SFAS 121 to recognize an impairment loss only if the carrying amount of a long-lived asset is not recoverable from its undiscounted cash flows and measure an impairment loss as the difference between the carrying amount and fair value of the asset. SFAS 144 requires a probability-weighted cash flow estimation approach and establishes a "primary-asset" approach to determine the cash flow estimation period for groups of assets and liabilities. SFAS 144 is effective for fiscal years beginning after December 15, 2001, and interim periods within those fiscal years, with early application encouraged. The Group will apply SFAS 144 beginning January 1, 2002. Bayer has not completed its analysis of this standard and, accordingly, has not determined what effect the adoption of SFAS 144 will have on the Group's financial position, results of operations or cash flows.

In 2001, the Emerging Issues Task Force (EITF) reached consensus on EITF 00-14 "Accounting for Certain Sales Incentives" and EITF 00-25 "Vendor Income Statement Characterization of Consideration Paid to a Reseller of the Vendor's Products", which address the recognition, measurement and income statement presentation classification of certain sales incentives, and the statement of earnings of consideration from a vendor to an entity that purchases the vendor's products for resale, respectively. We have not yet completed our analysis of the impact of these statements on our financial information presented in accordance with U.S. GAAP.

[45] Subsequent Events (unaudited)

In October 2001, we entered into an agreement to acquire Aventis CropScience from Aventis and Schering for €7.25 billion. The European Commission approved the transaction in April 2002, and the United States Federal Trade Commission gave its preliminary approval of the transaction under the terms of a consent order on May 30, 2002. Both approvals are subject to the condition that we divest or out-license some of the combined enterprise's products. These conditions require us, among other things, to: divest Aventis CropScience's Fipronil business worldwide, with a right to obtain a co-exclusive license for non-agricultural uses worldwide, except for Europe; divest five Aventis fungicides in Europe and grant a world-wide, non-exclusive license for the Aventis seed treatment products; divest the sugar beet herbicide Metamitron in Europe; divest the broad-spectrum pyrethroid insecticides Cyfluthrin (*Baythroid*®) and beta-cyfluthrin (*Bulldock*®); divest the sugar beet herbicide (*Goltix*®); divest the insecticide Acetamiprid in Europe and North America; divest the wheat herbicide Everest worldwide; and divest Aventis CropScience's cotton defoliant business Folex in the U.S. The total sales value of all divestments is about €650 to 700 million of which about 25 percent comes from the former Bayer Crop protection business and 75 percent from the former Aventis CropScience. The acquisition of Aventis CropScience

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was closed on June 3, 2002, and we do not expect to make additional major acquisitions in our Crop Protection segment in the near term.

In April 2002, Bayer AG placed benchmark bonds in the European capital market. The total volume of the issue was €5 billion, split into two tranches of a five-year €3 billion bond and a ten-year €2 billion bond.

The tranches carry a 5.375% and a 6% coupon, respectively. The bond proceeds served to finance part of the costs of Bayer's acquisition of Aventis CropScience. The remaining price will be covered through the ongoing issuance of commercial paper.

In May 2002, we decided to retain our Fiber business as part of polymers, because presently the market is not prepared to pay an appropriate price for this business. We will include the Fiber business in our continuing operations for all periods beginning with the second quarter of 2002. Continuing the business offers better prospects for success than a divestment. As a result of the present review process of the fibers' activities, an impairment write-down affecting the operating results of polymers substantially may arise.

On June 4, 2001 we sold the remaining 30 percent stake in Agfa for a gain of approximately €200 million.

Total remuneration of the Board of Management and the Supervisory Board, advances and loans

The remuneration of the Board of Management for 2001 amounted to €8,153,562. Emoluments to retired members of the Board of Management and their surviving dependants amounted to €8,355,270.

Pension provisions for these individuals amounting to €69,341,493 are reflected in the balance sheet of Bayer AG.

The remuneration of the Supervisory Board amounted to €1,293,750.

There were no loans to members of the Board of Management or the Supervisory Board outstanding as of December 31, 2001, nor any repayments of such loans during the year.

Leverkusen, February 26, 2002
Bayer Aktiengesellschaft
The Board of Management