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TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
FORWARD-LOOKING INFORMATION	2
PART I	3
Item 1. Identity of Directors, Senior Management and Advisers*	3
Item 2. Offer Statistics and Expected Timetable*	3
Item 3. Key Information	3
Selected Financial Data	3
Exchange Rates	4
Dividends	5
Risk Factors	5
Item 4. Information on SAP	18
Description of the Business	18
Description of Property	33
Capital Expenditures	34
Item 5. Operating and Financial Review and Prospects	38
Critical Accounting Policies	38
New Accounting Pronouncements	39
Overview	40
Exchange Rate Exposure	41
Interest Rate Exposure	42
Inflation	42
Changes to German Tax Law	42
Operating Results	42
Liquidity and Capital Resources	47
Research and Development	49
Item 6. Directors, Senior Management and Employees	50
Supervisory Board	50
Executive Board	51
Compensation of Directors and Officers	52
Employees	52
Share Ownership	53
Item 7. Major Shareholders and Related Party Transactions	55
Major Shareholders	55
Related Party Transactions	57
Item 8. Financial Information	57
Consolidated Financial Statements	57
Other Financial Information	57
Dividend Policy	58
Significant Changes	58

	<u>Page</u>
Item 9. The Offer and Listing	58
Nature of Trading Market	58
Item 10. Additional Information	62
Articles of Incorporation	62
Material Contracts	66
Exchange Controls and Other Limitations Affecting Security Holders	66
Taxation	66
Documents on Display	73
Item 11. Quantitative and Qualitative Disclosures About Market Risk.....	73
Foreign Currency Risk	74
Interest Rate Risk	75
Equity Price Risk	76
Item 12. Description of Securities Other than Equity Securities*	77
PART II	77
Item 13. Defaults, Dividend Arrearages and Delinquencies*	77
Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds*.....	77
Item 15. [Reserved]	77
Item 16. [Reserved]	77
PART III.....	77
Item 17. Financial Statements**	77
Item 18. Financial Statements	77
Item 19. Exhibits	77

* Omitted because the Item is not applicable or the answer is negative.

** The Registrant has responded to Item 18 in lieu of this Item.



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INTRODUCTION

SAP Aktiengesellschaft Systeme, Anwendungen, Produkte in der Datenverarbeitung, is a German stock corporation (*Aktiengesellschaft*) and is referred to in this Annual Report on Form 20-F as SAP AG and, together with its subsidiaries, as SAP, or as “we”, “our”, or “us”. Our consolidated financial statements included in “Item 18. Financial Statements” in this Annual Report on Form 20-F have been prepared in accordance with accounting principles generally accepted in the United States, referred to as U.S. GAAP.

In this Annual Report on Form 20-F: (i) references to “U.S.\$,” “\$,” or “Dollars” are to U.S. Dollars; (ii) references to “DM” or “Marks” are to German Deutsche Marks; and (iii) references to “€” or “euro” are to the euro, a currency of the countries currently participating in the European Economic Monetary Union (“EMU”). Certain amounts that appear in this Annual Report on Form 20-F may not sum because of rounding adjustments. In this Annual Report on Form 20-F, except as otherwise specified, financial information with respect to SAP has been expressed in euros and/or Dollars. The fixed exchange rate for euros converted to Marks is DM 1.95583 per € 1.00 (“Official Fixed Conversion Rate”). Effective as of January 1, 1999, we adopted the euro as our financial and reporting currency. Effective February 26, 1999, all of SAP AG’s share capital was converted from Marks to the euro.

Unless otherwise specified herein, all euro financial data that has been converted into Dollars have been converted at the noon buying rate in New York City for cable transfers in foreign currencies as certified for customs purposes by the Federal Reserve Bank of New York (the “Noon Buying Rate”) on December 31, 2001, which was € 1.00 per \$ 0.8901. No representation is made that such euro amounts actually represent such Dollar amounts or that such euro amounts could have been or could be converted into Dollars at that or any other exchange rate on such date or on any other dates. For information regarding recent rates of exchange between euros and Dollars, see “Item 3. Key Information — Exchange Rates.” At March 20, 2002, the Noon Buying Rate for converting euros to Dollars was U.S.\$ 0.8836 per € 1.00.

Unless the context otherwise requires, references in this Annual Report on Form 20-F to ordinary shares are to SAP AG’s ordinary shares, without nominal value, and references to preference shares are to SAP AG’s non-voting preference shares, without nominal value, which were converted to ordinary shares as of June 18, 2001. References in this Annual Report on Form 20-F to “ADSs” are to SAP AG’s American Depositary Shares, each representing one-fourth of an ordinary share.

Pursuant to resolutions adopted at our annual general shareholders’ meeting and a special meeting of holders of the preference shares on May 3, 2001, we effected on June 18, 2001 a conversion of the preference shares into ordinary shares on a share for share basis. The amount of subscribed capital for ordinary shares was therefore increased by the amount of the outstanding preference shares on the effective date of the conversion. In the context of the conversion of the preference shares into ordinary shares, the annual general shareholders’ meeting on May 3, 2001 authorized the Executive Board to amend the 1994 convertible bonds and the convertible bonds and stock options issued on or before March 16, 2001 under the SAP AG 2000 Long Term Incentive Plan (the “LTI Plan”), in each case to reflect the fact that references in those instruments to preference shares are changed to refer to ordinary shares.

Pursuant to resolutions adopted at our annual general shareholders’ meeting and a special meeting of holders of the preference shares on May 5, 2000, we effected on June 26, 2000 a division of our capital stock by means of a three-for-one stock split of the ordinary shares and the preference shares. In order to achieve an attributable subscribed capital of € 1 per ordinary share and preference share, we transferred approximately € 46.5 million from additional paid-in-capital to subscribed capital immediately preceding the effectiveness of the stock split. Contemporaneously with the stock split, we reduced the ratio of ADSs to preference shares from 12:1 to 4:1. All references to subscribed capital, ordinary shares, preference shares, shares outstanding, average number of shares outstanding, convertible bonds, stock options or per share amounts in this Annual Report on Form 20-F prior to the effectiveness of the stock split have been restated to reflect the three-for-one stock split on a retroactive basis.

“SAP,” the “SAP logo,” “R/2,” “R/3,” “mySAP,” “mySAP.com,” “EnjoySAP” and other SAP product and service names mentioned herein are registered trademarks of SAP AG in Germany and in several

other countries. “MarketSet” and “Enterprise Buyer” are jointly owned trademarks of SAP Markets, Inc. and Commerce One, Inc. (“Commerce One”). This Annual Report on Form 20-F also contains product and service names of companies other than SAP that are trademarks of their respective owners.

FORWARD-LOOKING INFORMATION

This Annual Report on Form 20-F contains forward-looking statements based on beliefs of our management. Any statements contained in this Annual Report on Form 20-F that are not historical facts are forward-looking statements as defined in the U.S. Private Securities Litigation Reform Act of 1995. We have based these forward-looking statements on our current expectations and projections about future events, including:

- general economic and business conditions;
- attracting and retaining personnel;
- competition in the software and Internet industry;
- implementing our business strategy;
- developing and introducing new services and products;
- obtaining and expanding market acceptance of our services and products; and
- meeting our requirements with customers.

The words “anticipate,” “believe,” “estimate,” “expect,” “forecast,” “intend,” “may,” “plan,” “project,” “predict,” “should” and “will” and similar expressions as they relate to us are intended to identify such forward-looking statements. Such statements reflect our current views and assumptions and all forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. The factors that could affect our future financial results are discussed more fully under “Item 3. Key Information — Risk Factors,” as well as elsewhere in this Annual Report on Form 20-F and in our other filings with the U.S. Securities and Exchange Commission (“SEC”). Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates. We undertake no obligation to publicly update or revise any forward-looking statements.

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not Applicable.

Item 2. Offer Statistics and Expected Timetable

Not Applicable.

Item 3. Key Information

Selected Financial Data

The following table represents selected consolidated financial information of SAP. The table should be read together with “Item 5. Operating and Financial Review and Prospects.” The selected consolidated financial data of SAP is a summary of, is derived from and is qualified by reference to, our consolidated financial statements and notes thereto audited as of and for the years ended 2001, 2000, 1999, 1998 and 1997 by ARTHUR ANDERSEN Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft mbH, independent public accountants. The audited consolidated income statements, consolidated statements of cash flows and consolidated statements of changes in shareholders’ equity for the years ended December 31, 2001, 2000 and 1999, and the consolidated balance sheets at December 31, 2001 and 2000 are included in “Item 18. Financial Statements.” Certain reclassifications have been made to prior year amounts to conform to the current year’s presentation.

SELECTED FINANCIAL DATA

	Year Ended December 31, (in thousands, except per share and exchange rate data)					
	2001	2001	2000 ⁽²⁾	1999	1998	1997
	U.S.\$ ⁽¹⁾	€	€	€	€	€
Income Statement Data:						
Total revenue	6,534,050	7,340,804	6,264,595	5,110,213	4,315,614	3,021,773
Operating income	1,168,144	1,312,374	802,658	796,180	900,794	775,229
Income before income taxes	951,301	1,068,757	1,012,869	980,347	931,952	796,425
Net income	517,269	581,136	615,732	601,001	526,944	446,651
Earnings per share						
Basic ⁽³⁾	1.65	1.85	1.96	1.92	1.68	1.43
Diluted ⁽³⁾	1.65	1.85	1.95	1.90	1.67	1.41
Other Data:						
Weighted average number of shares outstanding ⁽⁴⁾ :						
Basic	314,309	314,309	314,423	313,815	313,302	311,508
Diluted	314,412	314,412	315,737	315,750	315,750	315,750
Balance Sheet Data:						
Total assets	5,514,707	6,195,604	5,618,971	4,826,889	3,445,935	2,755,168
Shareholders’ equity	2,767,778	3,109,513	2,517,081	2,559,355	1,818,267	1,451,077
Subscribed capital	280,227	314,826	314,715	267,805	267,315	266,645
Short-term bank loans and overdrafts	407,903	458,266	146,877	24,600	96,290	83,409
Long-term financial debt ⁽⁵⁾	6,564	7,375	6,543	32,913	26,457	2,621

(1) Amounts in the column are unaudited and translated at € 1.00 to U.S.\$ 0.8901, the Noon Buying Rate for converting € 1.00 into Dollars on December 31, 2001. See “— Exchange Rates” for recent exchange rates between the euro and the Dollar.

- (2) The 2000 figures have been adjusted for the effect of the change in the investment in Commerce One to the equity method. See note 1 of “Item 18. Financial Statements”.
- (3) Amounts are adjusted for our 1-for-1 conversion of preference shares to ordinary shares in 2001 and the 3-for-1 stock split in 2000.
- (4) Includes preference and ordinary shares for periods prior to June 18, 2001, the effective date of the conversion of the preference shares into ordinary shares on a share-for-share basis.
- (5) Long-term financial debt represents financial liabilities with a remaining life beyond one year consisting of long-term financial debt, which is comprised of bank loans and overdrafts due in more than one year, the outstanding 1994 Bonds issued to SAP employees and convertible bonds issued pursuant to the LTI Plan. See “Item 6. Directors, Senior Management and Employees — Share Ownership — Stock-Based Compensation Plans — LTI Plan” and “— 1994 Bonds.”

Exchange Rates

After the introduction of the euro on January 1, 1999, the Federal Reserve Bank of New York ceased to quote a Noon Buying Rate for the Mark. Accordingly, the following table sets forth, for the periods after January 1, 1999, the average, high, low and period-end Noon Buying Rates for the euro expressed as Dollars per € 1.00. For 1997 and 1998, the table reflects the average, high, low and period-end Noon Buying Rates for the Mark, shown after conversion into euros at the Official Fixed Conversion Rate and expressed in Dollars per € 1.00.

<u>Year</u>	<u>Average⁽¹⁾</u>	<u>High</u>	<u>Low</u>	<u>Period-End</u>
1997	1.1259	1.2689	1.0398	1.0871
1998	1.1120	1.2178	1.0548	1.1733
1999	1.0588	1.1812	1.0016	1.0070
2000	0.9207	1.0335	0.8270	0.9388
2001	0.8909	0.9535	0.8370	0.8901

<u>Month</u>	<u>High</u>	<u>Low</u>	<u>Period-End</u>
2001			
July	0.8797	0.8370	0.8752
August	0.9194	0.8775	0.9090
September	0.9310	0.8868	0.9099
October	0.9181	0.8893	0.8993
November	0.9044	0.8770	0.8958
December	0.9044	0.8773	0.8901
2002			
January	0.9031	0.8594	0.8594
February	0.8778	0.8613	0.8658
March (through March 20, 2002)	0.8836	0.8652	0.8836

(1) The average of the applicable Noon Buying Rates on the last day of each month during the relevant period.

On March 20, 2002, the Noon Buying Rate for converting Dollars to euros was U.S.\$ 0.8836 per € 1.00.

The prices for ordinary shares traded on German stock exchanges are denominated in euros. Fluctuations in the exchange rate between the euro and the Dollar will affect the Dollar equivalent of the euro price of the ordinary shares traded on the German stock exchanges and, as a result, will affect the price of the ADSs in the United States. In addition, SAP AG pays cash dividends, if any, in euros, so that such exchange rate fluctuations will also affect the Dollar amounts received by the holders of ADSs on the conversion into Dollars of cash dividends paid in euros on the ordinary shares represented by the ADSs.

A significant portion of our revenue and expenses is denominated in currencies other than the euro. Therefore, our consolidated financial position, results of operations and cash flows may be materially affected by movements in the exchange rate between the euro, on the one hand, and the respective currencies to which we are exposed, on the other hand. See “Item 5. Operating and Financial Review and Prospects — Exchange Rate Exposure.”

Dividends

Dividends are jointly proposed by SAP AG’s Supervisory Board (*Aufsichtsrat*) and Executive Board (*Vorstand*) based on SAP AG’s year-end financial statements, subject to approval by holders of ordinary shares, and are officially declared for the prior year at SAP AG’s annual general shareholders’ meeting. Dividends paid to holders of the ADSs may be subject to German withholding tax. See “Item 8. Financial Information — Dividend Policy” and “Item 10. Additional Information — Taxation.”

The following table sets forth in Marks for 1997 and in euros for 1998, 1999, 2000 and 2001, the annual dividends paid or proposed to be paid per ordinary share and preference share in respect of each of the years indicated.

Year Ended December 31,	Dividend Paid per Ordinary Share			Dividend Paid per Preference Share		
	€	DM	U.S.\$	€	DM	U.S.\$
1997.....	0.48 ⁽¹⁾	0.93	0.53 ⁽²⁾	0.49 ⁽¹⁾	0.95	0.54 ⁽²⁾
1998.....	0.52	N/A	0.56 ⁽³⁾	0.53	N/A	0.57 ⁽³⁾
1999.....	0.52	N/A	0.47 ⁽³⁾	0.53	N/A	0.48 ⁽³⁾
2000.....	0.57	N/A	0.52 ⁽³⁾	0.58	N/A	0.53 ⁽³⁾
2001.....	0.58 ⁽⁴⁾	N/A	0.51 ⁽⁴⁾⁽⁵⁾	N/A	N/A	N/A

- (1) Translated for the convenience of the reader from Marks into euros at the Official Fixed Conversion Rate.
- (2) Translated for the convenience of the reader from Marks into Dollars at the Noon Buying Rate for converting Marks to Dollars on the dividend payment date.
- (3) Translated for the convenience of the reader from euros into Dollars at the Noon Buying Rate for converting euros into Dollars on the dividend payment date.
- (4) Subject to approval of the holders of ordinary shares at the SAP AG annual general shareholders’ meeting to be held on May 3, 2002.
- (5) Translated for the convenience of the reader from euros into Dollars at the Noon Buying Rate for converting euros into Dollars on March 20, 2002 of U.S.\$ 0.8836 per € 1.00.

The amount of dividends paid on the ordinary shares depends on the amount of SAP AG profits to be distributed by SAP AG, which depends in part upon our performance. For years prior to 2001, a holder of preference shares was entitled to a cumulative annual preferred dividend which exceeded the annual dividend paid to holders of ordinary shares by an amount equal to € 0.01 per preference share, but in no event less than a minimum dividend equal to € 0.01 per preference share. The timing and amount of future dividend payments will depend upon our future earnings, capital needs and other relevant factors in each case as proposed by the Executive Board and the Supervisory Board of SAP AG and approved at the annual general shareholders’ meeting.

Risk Factors

We operate in a dynamic and rapidly changing environment that involves numerous risks and uncertainties, many of which are beyond our control. An investor should carefully consider the risks described below before purchasing SAP AG’s ordinary shares or ADSs. If any of the following risks actually occur, our business, financial condition or results of operations could be materially adversely affected, and the trading price of our ordinary shares or ADSs could decline and you may lose all or part of your investment.

Substantial, prolonged declines in the U.S. and global technology and software markets resulting from general adverse economic conditions may cause our revenues and profitability to suffer.

Implementation of SAP software products can constitute a major portion of our customers’ overall corporate services budget, and the amount customers are willing to invest in acquiring and implementing SAP products and the timing of our customers’ investment has tended to vary due to economic or financial crises or other business conditions. Prolonged economic slowdowns may result in customers requiring us to renegotiate existing contracts resulting in less advantageous terms than those currently in place. A recession or other difficulty in the economies where we license our products, including North America, Latin America, Europe

and Asia, could have a material adverse effect on our business, financial position, operating results or cash flows. In particular, our profitability may be significantly adversely affected by a prolonged economic slowdown in the United States or Europe because we derive a substantial portion of our revenue from software licenses and services in those markets.

If we were to lose the services of members of management and employees who possess specialized market knowledge and technology skills, we may not be able to manage our operations effectively or develop new products and services.

Our operations could be adversely affected if senior managers or other skilled personnel were to leave and qualified replacements were not available. Despite recent adverse economic trends, competition for managerial and skilled personnel in the software industry remains intense. Such personnel in certain regions (including the United States and Europe) are in short supply. Moreover, private companies are able to offer equity incentives that may provide the potential of greater compensation in connection with an initial public offering. As a result, technology firms have been, and may continue to be, required to increase compensation and incentives in order to continue to recruit and retain this talent. We expect continued increases in compensation costs in order to attract and retain senior managers and skilled employees. In addition, most of our current key employees are subject to employment agreements or conditions that (i) do not contain post employment non-competition provisions and (ii) in the case of most of our existing employees outside of Germany, permit the employees to terminate their employment on relatively short notice. There can be no assurance that we will continue to be able to attract and retain the personnel we require to develop and market new and enhanced products and to market and service our existing products and conduct our operations successfully.

Due to intense competition, our market share and financial performance could suffer.

The software and Internet industry is intensely competitive. As part of our business strategy, we have focused our efforts in the business-to-business and Internet application areas of our business where the market is expected to grow more rapidly than in the area of traditional enterprise resource planning (“ERP”) software. In particular, we have expanded our focus on markets for customer relationship management, supply chain management, portal and e-marketplace solutions. Our expansion from the traditional ERP market into the e-commerce business exposes us to new markets and new competitors. Competition, including with respect to pricing, product quality and consulting and support services, could increase substantially and result in price reductions, cost increases or loss of market share.

We compete with a wide range of global, regional and local competitors. Some of our competitors and many of our potential competitors are involved in a wider range of businesses, and some competitors and potential competitors have a larger installed customer base for their products and services, or have significantly greater financial, technical, marketing and other resources than us, enhancing their ability to compete with us. There are many other companies engaged in the research, development and marketing of integrated e-business solutions, standard business application software and associated applications development tools, decision support products and services. Some of these companies may develop (or may have already developed) an overall concept or individual product offerings, which may be perceived to be as good as or better than our product offerings.

New distribution methods (e.g. electronic channels) and opportunities presented by the Internet and electronic commerce have removed many of the barriers to entry to the markets in which we compete. Historically, most of our competitors provided solutions which covered certain functional areas offering the customer a software application product designed for a specific business or manufacturing process. Such products compete with individual functions offered by us. Our competitors have already broadened, or are implementing plans to broaden, the scope of their business activities into other areas of the market. A competitor may be able to capitalize upon the success of a niche product by developing and marketing broader system applications in competition with us. Niche competitors may also benefit from alternative delivery systems, such as the Internet, to become more competitive with us.

Current and potential competitors have established or may establish cooperative relationships among themselves or with third parties to increase the ability of their products to address customer needs. In addition,

we believe that competition will increase as a result of industry consolidations. Accordingly, it is possible that new competitors or alliances among competitors may emerge and rapidly acquire significant market share.

Among the competitive advantages that are factors in predicted revenue growth is the fact that we are one of the largest companies in our industry. Significant mergers and/or acquisitions could alter the competitive environment and impact SAP's future financial position and results of operation.

We believe that our experience with business process applications, our increasingly flexible, component-based installation options and our focus on Internet and industry solutions give us a strong competitive position. However, there can be no assurance that our strategies will prove to be successful.

If we do not effectively manage our growth, our existing personnel and systems may be strained and our business may not operate efficiently.

We have a history of rapid growth and will need to effectively manage our future growth to be successful. In order to support our future growth, we expect to continue to incur significant costs to increase headcount, explore and/or enter new markets and build infrastructure ahead of anticipated revenue. Although revenue on a per employee basis remained flat from 2000 to 2001, there can be no assurance that significant increases in employees and infrastructure will result in growth in revenue or operating results in the future. There can be no assurance that we can effectively retain and utilize our personnel, accurately forecast revenue and control costs, maintain and control adequate levels of quality of service (especially of our partners or other third parties) or implement and improve our operational and financial infrastructure.

The market in which we compete continues to evolve and, if it does not grow rapidly, our business will be adversely affected.

SAP is investing significant resources in further developing and marketing new and enhanced products and services to address opportunities presented by the Internet, e-commerce and business-to-business. The areas of customer relationship management, supply chain management, marketplaces and enterprise portals are expected to experience higher growth rates than the traditional ERP market. In addition, SAP has dedicated resources to further enhance, develop and market business-to-business marketplaces and procurement processes. Demand and market acceptance for recently introduced products and services in these new market areas are subject to a high level of uncertainty, especially where acquisition of SAP software products requires a large capital commitment or other significant commitment of resources. This uncertainty is compounded by the risks that consumers and enterprises will not accept the mySAP.com solutions. Moreover, appropriate demand and infrastructure necessary to support increased commerce and communication on the Internet may fail to develop. Adoption of mySAP.com solutions, particularly by those individuals and enterprises that have historically relied upon traditional means of commerce and communication, will require a broad acceptance of new and substantially different methods of conducting business and exchanging information. These products and services involve a new approach to the conduct of business and, as a result, we have invested in, and intend to continue to pursue, intensive marketing and sales efforts to educate prospective customers regarding the uses and benefits of these products and services in order to generate demand. The markets for these products and services may not develop, or SAP may not develop acceptable solutions in a timely or cost-effective manner.

If we are unable to keep up with rapid technological changes, we may not be able to compete effectively.

Our future success will depend in part upon our ability to:

- continue to enhance and expand our existing products and services;
- provide best-in-class e-business solutions and services; and
- develop and introduce new products and provide new services that satisfy increasingly sophisticated customer requirements, that keep pace with technological developments (including, in particular, developments related to the Internet) and that are accepted in the market.

There can be no assurance that we will be successful in anticipating and developing product enhancements or new solutions and services to adequately address changing technologies and customer requirements. Any such enhancements, solutions or services may not be successful in the marketplace or may not generate increased revenue. We may fail to anticipate and develop technological improvements, to adapt our products to technological change, emerging industry standards and changing customer requirements or to produce high-quality products, enhancements and releases in a timely and cost-effective manner in order to compete with applications offered by our competitors.

We are subject to pricing pressure.

In response to competition, we have been required in the past, and may be required in the future, to furnish additional discounts to customers or otherwise modify our pricing practices. These developments have and may increasingly negatively impact our revenue and earnings. We generally license our products in individual software components or a suite of software components on a “right to use” basis pursuant to a perpetual license providing for an initial license fee based on the number and types of identified users or the other applicable criteria. Changes in our pricing model or any other future broadly-based changes to our prices and pricing policies could lead to a decline or delay in sales as our sales force and our customers adjust to the new pricing policies.

We, together with certain business partners, offer certain SAP software products to small and midsize customers as a component of our hosted solutions or rental offerings, in which license and maintenance fees or rental payments may be paid to us on a per user, per month or similar subscription basis rather than an upfront license fee payment as under our standard pricing models. While revenues from the hosted solutions and rental programs have not generated significant revenues through 2001, we expect that these programs will generate incremental revenue from small and midsize customers. There can be no assurance that such programs will be successful or, if successful, that they will not negatively impact our standard pricing models. The proliferation of outsourcing of enterprise business applications or business processes could result in increased competition through the entry of systems integrators, consulting firms, telecommunications firms, computer hardware vendors and other application-hosting providers. In addition, the distribution of applications through application service providers may reduce the price paid for our products or adversely affect other sales of our products.

We, together with certain business partners, offer software products for marketplace exchanges for which license fees and fees based on transaction volume, revenue generated by the marketplace exchange or another relevant metric are paid to us. There can be no assurance that these new pricing models will be successful or, if successful, that they will not negatively impact our standard pricing models.

Our joint product development relationships may not be successful.

We have entered into relationships with various companies to jointly develop and market new software products. In connection with these relationships, we occasionally make equity investments. In particular, SAP AG and SAP Markets, Inc. entered into an agreement in 2000, as amended in 2001, with Commerce One to jointly develop and market a comprehensive software solution for business-to-business electronic commerce marketplaces. These joint development and marketing relationships can be difficult to implement and may not succeed for various reasons, including:

- operating differences between the companies or between their respective employees;
- financial difficulties experienced by the partners;
- difficulties in coordinating sales and marketing efforts;
- technical obstacles to combining existing software products or developing new compatible products; and
- the need to divert significant management attention, technical and sales personnel and capital to these relationships.

There can be no assurance that these joint development and marketing relationships will lead to successful new products, greater market penetration or increased revenue for us. Should these joint developments efforts fail, amounts we have invested, including equity investments, may not be recoverable, resulting in adverse effects on our financial position and results of operations.

Undetected errors or delays in new products may result in increased costs to us and delayed market acceptance of our products.

To achieve market acceptance, new products and product enhancements can require long development and testing periods, which may result in delays in scheduled introduction. Generally, first releases are licensed to a controlled group of customers. Such new products and product enhancements may contain a number of undetected errors or “bugs” when they are first released. As a result, in the first year following the introduction of certain releases, we generally devote significant resources, primarily consulting and development services, to work with early customers to correct such errors. There can be no assurance, however, that all such errors can be corrected to the customer’s satisfaction, with the result that certain customers may bring claims for cash refunds, damages, replacement software or other concessions. The risks of errors and their adverse consequences may increase as we seek simultaneously to introduce a variety of new software product, in greater numbers than ever before.

Although we test each new product and product enhancement release before introducing it to the market, there can be no assurance that significant errors will not be found in existing or future releases of SAP software products, with the possible result that significant resources and expenditures may be required in order to correct such errors or otherwise satisfy customer demands. In addition, the possibility cannot be excluded that customers may bring actions for damages, make claims for replacement of software, or demand other concessions from SAP. Significant undetected errors or delays in new products or product enhancements may affect market acceptance of SAP software products.

Customer implementation and installation involves significant resources and is subject to significant risks.

Implementation of SAP software is a process that often involves a significant commitment of resources by our customers and is subject to a number of significant risks over which we have little or no control. Some of our customers have incurred significant third-party consulting costs and experienced protracted implementation times in connection with the purchase and installation of SAP software products. We believe that these costs and delays were due in many cases to the fact that, in connection with the implementation of the SAP software products, these customers conducted extensive business re-engineering projects involving complex changes relating to business processes within the customer’s own organization. We offer accelerated installation support and/or fixed fees for certain SAP software products installation projects. However, criticisms regarding these additional costs and protracted implementation times have been directed at us, and there have been, from time to time, shortages of our trained consultants available to assist customers in the implementation of our products. In addition, the success of new SAP software products introduced by us may be adversely impacted by the perceived time and cost to implement existing SAP software products or the actual time and cost to implement such new products. We can not provide assurance that protracted installation times or criticisms of us will not continue, that shortages of our trained consultants will not occur or that the costs of installation projects will not exceed the fixed fees being charged by us.

Our sales are subject to quarterly fluctuations.

Our revenue and operating results can vary, sometimes substantially, from quarter to quarter. Our revenue in general, and in particular our software revenue, is difficult to forecast for a number of reasons, including:

- the relatively long sales cycles for our products;
- the size and timing of individual license transactions;
- the timing of the introduction of new products or product enhancements by us or our competitors;

- the potential for delay of customer implementations of SAP software products;
- changes in customer budgets;
- seasonality of a customer’s technology purchases; and
- other general economic and market conditions.

As is common in the software industry, our business has historically experienced its highest revenue in the fourth quarter of each year, due primarily to year-end capital purchases by customers. Such factors have resulted in 2001, 2000, and 1999 first quarter revenue being lower than revenue in the prior year’s fourth quarter. We believe that this trend will continue in the future and that our revenue will peak in the fourth quarter of each year and decline from that level in the first quarter of the following year.

Because our operating expenses are based upon anticipated revenue levels and because a high percentage of our expenses are relatively fixed in the near term, any shortfall in anticipated revenue or delay in recognition of revenue could result in significant variations in our results of operations from quarter to quarter. We significantly increased in 1999 through 2001, and plan throughout 2002 to continue to increase, the following expenditures:

- expenditures to fund continued development of our operations;
- new products and product enhancements;
- greater levels of research and development;
- a larger direct and indirect sales and marketing staff;
- development of new distribution and resale channels; and
- broader customer support capability.

Such increases in expenditures will depend, among other things, upon ongoing results and evolving business needs. To the extent such expenses precede or are not subsequently followed by increased revenue, our quarterly operating results would be materially adversely affected and may vary significantly from preceding or subsequent quarters.

The market price for our ADSs and ordinary shares may be volatile.

The trading prices of the ADSs and the ordinary shares have experienced and may continue to experience significant volatility. The current trading price of the ADSs and the ordinary shares reflect certain expectations about the future performance and growth of SAP, particularly on a quarterly basis. However, our revenue can vary, sometimes substantially, from quarter to quarter, causing significant variations in operating results during certain quarters and in growth rates compared to prior periods. Any shortfall in revenue or earnings from levels projected by us or quarterly or other projections made by securities analysts could have an immediate and significant adverse effect on the trading price of the ADSs or the ordinary shares in any given period. Additionally, we may not be able to confirm any such shortfalls until late in the quarter or following the end of the quarter because license agreements are often executed late in a quarter. Finally, the stock prices for many companies in the software sector have experienced wide fluctuations, which have often not been directly related to individual company’s operating performance. The trading price of the ADSs or the ordinary shares may fluctuate in response to the announcement of new products or product enhancements by us or our competitors, technological innovation by us or our competitors, quarterly variations in our competitors’ results of operations, changes in revenue and revenue growth rates on a consolidated basis or for specific geographic areas, business units, products or product categories, speculation in the press or analyst community and general market conditions specific to particular industries. In the past, companies that have experienced volatility in the market price of their stock have been the object of securities class action litigation. Any such securities class action litigation against us, with or without merit, could result in substantial costs and the diversion of management’s attention and resources.

Our sales forecasts may not be accurate.

We use a “pipeline” system, a common industry practice, to forecast sales and trends in our business. Our sales personnel monitor the status of proposals, including the date when they estimate that a customer will make a purchase decision and the potential revenue from the sale. We aggregate these estimates periodically in order to generate a sales pipeline. We compare the pipeline at various points in time to look for trends in our business. While this pipeline analysis may provide us with some guidance in business planning and budgeting, these pipeline estimates are necessarily speculative and may not consistently correlate to revenue in a particular quarter or over a longer period of time. A variation in the conversion of the pipeline into revenue or in the pipeline itself could cause us to improperly plan or budget and thereby adversely affect our business or results of operations. In particular, a slowdown in the economy may cause customer purchasing decisions to be delayed, reduced in amount or cancelled, which will in turn reduce the overall license pipeline conversion rates in a particular period of time.

Our revenue mix may vary and may negatively affect our profit margins.

In 2000, our software and maintenance revenue increased, while service revenue decreased, as a percentage of total revenue. For fiscal years 2001 and 1999, our service and maintenance revenue increased, while software revenue decreased, as a percentage of total revenue. Variances or slowdowns in our licensing activity may negatively impact our current and future revenue from services and maintenance since such services and maintenance revenue typically lag license fee revenue. In addition, growth in service revenue will depend on our ability to compete effectively in obtaining customer engagements to provide services related to SAP software products. On average, our profit margins on service and maintenance revenue historically are less than our profit margin on software revenue. Any decrease in the percentage of our total revenue derived from software licensing could have a material adverse effect on our business, financial position, results of operations or cash flows.

Our failure to develop new relationships and enhance existing relationships with third-party distributors, software vendors and value-added resellers that help sell our services and products may adversely affect our revenues.

We have entered into agreements with a number of leading computer software and hardware vendors and telecommunications providers to cooperate and ensure that certain of the software and hardware products produced by such vendors are compatible with SAP software products. We have also supplemented our consulting and support services (in the areas of product implementation, training and maintenance) through “alliance partnerships” with third-party hardware and software vendors, systems integrators, major accounting firms and other consulting firms. Most of these agreements and partnerships are of relatively short duration and all are non-exclusive. In addition, we have established relationships relating to the resale of certain SAP software products by third parties. These third parties include certain value-added resellers and, in the area of application hosting services, certain computer hardware vendors, systems integrators and telecommunications providers.

There can be no assurance that these third parties or partners, most of which have similar arrangements with our competitors and some of which also produce their own standard application software in competition with us, will continue to cooperate with us when such agreements or partnerships expire or are up for renewal. In addition, there can be no assurance that such third parties or partners will provide high-quality products or services or that actions taken or omitted to be taken by such parties will not adversely affect us. There can be no assurance that the potential for a slowing economy will not affect such third parties or partners or the products and services that they provide pursuant to the agreements with us. The failure to obtain high quality products or services or to renew such agreements or partnerships could adversely affect our ability to continue to develop product enhancements and new solutions which keep pace with anticipated changes in hardware and software technology and telecommunications, or could adversely affect the market for SAP software products.

We depend on technology licensed to us by third parties, and the loss of this technology could delay implementation of our products or force us to pay higher license fees.

We license numerous critical third-party software products that we incorporate into our existing products. There can be no assurance that the licenses for such third-party software will not be terminated or that we will be able to license critical third-party software for future products. In addition, we may be unable to renegotiate acceptable third-party license terms to reflect changes in our pricing models. Changes in or the loss of a license could lead to a material increase in the costs of licensing or to SAP software products becoming inoperable or their performance being materially reduced, with the result that we may need to incur additional development costs to ensure continued performance of our products.

We may not be able to protect our intellectual property rights, which may cause us to incur significant costs in litigation and an erosion in the value of our brands and products.

We rely on a combination of the protections provided by applicable trade secret, copyright, patent and trademark laws, license and non-disclosure agreements and technical measures to establish and protect our rights in our products. There can be no assurance that these protections will be adequate or that our competitors will not independently develop technologies that are substantially equivalent or superior to our technology. Despite our efforts, it may be possible for third parties to copy certain portions of our products or reverse-engineer or otherwise obtain and use information that we regard as proprietary. In addition, the laws of certain countries do not protect our proprietary rights to the same extent as do the laws of the United States or Germany. Accordingly, there can be no assurance that we will be able to protect our proprietary software against unauthorized third party copying or use, which could adversely affect our competitive position.

Some of our competitors may have been more aggressive than us in applying for or obtaining patent protection for innovative proprietary technologies. Although we have been issued patents under our patent program and have a number of patent applications pending for inventions claimed by us, there can be no assurance that, in the future, patents of third parties will not preclude us from utilizing a technology in our products or require us to enter into royalty and licensing arrangements on terms that are not favorable to us.

Although we do not believe that we are infringing any proprietary rights of others, third parties have claimed and may claim in the future that we have infringed their intellectual property rights. We expect that our software products will increasingly be subject to such claims as the number of products and competitors in our industry segment grows, as we expand our products into new industry segments and as the functionality of products overlap. There can be no assurance that, in the future, a third party will not assert that our technology violates its patents, copyrights or trade secrets. Any claims, with or without merit, could be time-consuming, result in costly litigation, cause product shipment delays or require us to enter into royalty or licensing agreements. Royalty or licensing agreements, if required, may not be available on terms acceptable to us or at all.

Because our products are critical to the operations of our customers' businesses, we could incur substantial costs as a result of warranty or product liability claims.

The use of SAP software products by customers in business-critical applications and processes creates the risk that customers or other third parties may pursue warranty or other claims against us in the event of actual or alleged failures of SAP software products, the provision of services or application hosting. We have in the past been, and may in the future continue to be, subject to such warranty or other claims. In addition, certain of our Internet browser-enabled products include security features that are intended to protect the privacy and integrity of customer data. Despite these security features, our products may be vulnerable to break-ins and similar problems caused by Internet users, such as hackers bypassing firewalls and misappropriating confidential information. Such break-ins or other disruptions could jeopardize the security of information stored in and transmitted through the computer systems of our customers. Addressing problems and claims associated with such actual or alleged failures could have a material adverse effect on our business, financial position, results of operations or cash flows.



Although our agreements generally contain provisions designed to limit our exposure as a result of actual or alleged failures of SAP software products, the provision of services or application hosting or security features, such provisions may not cover every eventuality or be effective under applicable law. Any claim, regardless of its merits, could entail substantial expense and require the devotion of significant time and attention by key management personnel.

Our insurance coverage may not be sufficient to avoid negative impacts on our financial position or results of operations resulting from the settlement of claims.

We maintain extensive insurance coverage for protection against many risks of liability. The extent of insurance coverage is under continuous review and is modified if we deem it necessary. Our goal of insurance coverage is to ensure that the financial effects, to the largest extent possible, resulting from risk occurrences are excluded or at least limited considering the costs associated with the insurance coverage. Despite these measures, it is possible that claims may have a significant adverse impact on our financial position or results of operations.

Our principal shareholders will be able to exert significant control over our future direction and operations.

As of March 20, 2002, the beneficial holdings of SAP's three principal shareholders and the holdings of entities controlled by certain of the three principal shareholders, constituted in the aggregate 34.706% of the outstanding ordinary shares. The related entities of the three principle shareholders have informed us that they are parties to a certain pooling agreement (the "Pooling Agreement"), pursuant to which they have agreed to vote 26.686% of the outstanding ordinary shares as a block. The Pooling Agreement also contains certain restrictions on transfer, and may have the effect of delaying or preventing a change in control of SAP or other significant changes to SAP or its capital structure. See "Item 7. Major Shareholders and Related Party Transactions — Major Shareholders."

Sales of ordinary shares by our principal shareholders could adversely affect the price of our capital stock.

As stated, three principal shareholders and the related entities own beneficially approximately 34.706% of the outstanding ordinary shares as of March 20, 2002. The sale of a large number of ordinary shares by any of the three principal shareholders could have a negative effect on the trading price of the ADSs or the ordinary shares. Except for certain transfer restrictions and rights of first refusal contained in the Pooling Agreement, SAP is not aware of any restrictions on the transferability of the shares owned by the principal shareholders, any of their immediate family members or any related entity.

Because we conduct our operations throughout the world, our results of operations may be affected by currency fluctuations.

Although the euro has been our financial and reporting currency since January 1, 1999, a significant portion of our business is conducted in currencies other than the euro. Approximately 63% of our consolidated revenue in 2001 was attributable to operations in non-EMU member states and translated into euros. As a consequence, period-to-period changes in the average exchange rate in a particular currency can significantly affect reported revenue and operating results. In general, appreciation of the euro relative to another currency has a negative effect on reported results of operations, while depreciation of the euro has a positive effect.

Because a significant portion of our revenue is from countries other than EMU member states and denominated in currencies other than the euro, we have significant exposure to the risk of currency fluctuations, especially to fluctuations in the value of the Dollar, the Japanese yen, the British pound, the Swiss franc, the Canadian dollar, the Brazilian real, and the Australian dollar. Conversely, increases in the value of the Dollar or other currencies relative to the euro may positively affect earnings, although such positive effects may be only short-term in nature.

We continually monitor our exposure to currency risk and pursue a company-wide foreign exchange risk management policy and may hedge such risks with certain financial instruments. However, there can be no



assurance that our hedging activities will be effective. See “Item 11. Quantitative and Qualitative Disclosure about Market Risk — Foreign Currency Risk.”

Currency fluctuations may impact on the value of the ADSs

The currency in which the ordinary shares are traded is the euro. While the currency in which the ADSs are traded is the Dollar, the trading price of the ADSs is expected to be largely based upon the trading price of the underlying ordinary shares in its principal trading market in the Frankfurt Stock Exchange. Cash dividends payable to holders of ADSs will be paid to the depositary (the “Depositary”) pursuant to the Amended and Restated Deposit Agreement between SAP AG and the Depositary (the “Deposit Agreement”) in euros and, subject to certain exceptions, will be converted by the Depositary into Dollars for payment to such holders. The amount of dividends received by the holders of ADSs, therefore, will also be affected by fluctuations in exchange rates as well as by the specific exchange rate used by the Depositary (which may incorporate fees charged).

Because we expect to continue to expand globally, we may face special economic and regulatory challenges that we may not be able to meet.

Our products and services are currently marketed in over 120 countries, with Europe, Middle East and Africa (“EMEA”) and North and Latin America (“Americas”) regions being our principal markets. In 2001, revenue derived from outside Germany totaled € 5,872.1 million, representing approximately 80% of our total revenue. Sales in our principal markets are subject to risks inherent in international business activities, including, in particular:

- general economic or political conditions in each country;
- overlap of differing tax structures;
- management of an organization spread over various jurisdictions;
- unexpected changes in regulatory requirements;
- exchange rate fluctuations; and
- compliance with a variety of foreign laws and regulations.

Other general risks associated with international operations include import and export licensing requirements, trade restrictions, changes in tariff and freight rates and travel and communication costs. There can be no assurance that our international operations will continue to be successful or that we will be able to manage effectively the increased level of international operations.

Management’s use of estimates may affect our results of operations and financial position.

Our financial statements are based upon the accounting policies as described in note 3 of our consolidated financial statements and included in “Item 18. Financial Statements” in this Annual Report on Form 20-F. Such policies may require management to make significant estimates and assumptions. Facts and circumstances which management uses in making estimates and judgments may change from time to time and may result in significant variations, including adverse effects on our results of operation or financial position. See “Item 5. Operating and Financial Review and Prospects — Critical Accounting Policies”.

Our internal risk management policies and procedures may not be sufficient for us to identify, analyze and respond appropriately in a timely manner.

We believe we have a system comprising multiple mechanisms across the SAP group to recognize and analyze risks early and respond appropriately. These mechanisms include recording, monitoring and controlling internal enterprise processes using internal reporting functions, a number of management and controlling systems and a planning process that is uniform throughout our group. Further elements of the system include our internal audit function, comprehensive published reports and the work of the Supervisory

Board in monitoring and controlling the Executive Board. SAP’s Principles of Corporate Governance, ratified by our Supervisory Board at the end of 2001, constitute the remaining component in the system. They comprise, among others, standards and guidelines for the work of the Executive Board and Supervisory Board, and for the cooperation between them.

Although we believe our risk management policies and procedures are sufficient, there is no guarantee that all risks will be identified, analyzed or responded to appropriately in a timely manner, especially those which are outside of our control.

Terrorist attacks could adversely impact our business.

Further attacks like those of September 11, 2001 could damage the world economy and affect our investment and our customers’ investment decisions over an extended period of time. As a vendor of software solutions, which are effectively capital goods, we operate in a sector of the economy that may be impacted by the effects of any such attack.

Revenue recognition accounting pronouncements may affect our policies on recognition of revenue.

In October 1997, the American Institute of Certified Public Accountants (“AICPA”) issued Statement of Position 97-2, as amended by Statement of Position No. 98-4 and Statement of Position No. 98-9 (collectively, “SOP 97-2”), which provides guidance on applying generally accepted accounting principles for software revenue recognition transactions. In December 1999, the SEC issued Staff Accounting Bulletin No. 101, “Revenue Recognition in Financial Statements” (“SAB 101”), which provides the SEC’s interpretations of existing recognition rules. In addition, the SEC issued a Frequently Asked Questions and Answers document in October 2000 to provide additional details. Our accounting policies are consistent with the SEC’s clarification, and accordingly, there was no material impact upon the adoption of SAB 101. We believe that our accounting policies are in accordance with SOP 97-2 and SAB 101. However, the accounting profession continues to review certain provisions of SOP 97-2 and SAB 101, with the objective of providing additional guidance on implementing its provisions. Depending upon the outcome of these reviews and the issuance of implementation guidelines and interpretations, we may be required to modify our revenue recognition policies and business practices. Our existing revenue recognition policies are described in note 3 of our consolidated financial statements included in “Item 18. Financial Statements” of this Annual Report on Form 20-F.

If we acquire other companies, we may not be able to integrate their operations effectively and, if we enter into joint ventures, we may not work successfully with our joint venture partners.

In order to complement or expand our business, SAP has made and expects to continue to make acquisitions of additional businesses, products and technologies, and has entered into, and expects to continue to enter into, joint venture arrangements. Management’s negotiations of potential acquisitions or joint ventures and management’s integration of acquired businesses, products or technologies could divert its time and resources. In addition, risks commonly encountered in such transactions include:

- difficulty of assimilating the operations and personnel of the combined companies;
- risk that we may not be able to integrate the acquired technologies or products with our current products and technologies;
- potential disruption of our ongoing business;
- inability to retain key technical and managerial personnel;
- inability of management to maximize our financial and strategic position through the successful integration of acquired businesses;
- adverse impact on our annual effective tax rate;



- dilution of existing equity holders caused by capital stock issuances to the stockholders of acquired companies or capital stock issuances to retain employees of the acquired companies;
- assumption of unknown material liabilities of acquired companies;
- incurrence of debt;
- difficulty in maintaining controls, procedures and policies;
- potential adverse impact on our relationships with partner companies or third-party providers of technology or products;
- impairment of relationships with employees and customers; and
- issues with product quality, product architecture, legal contingencies, product development issues or other significant issues that may not be detected through the due diligence process.

In addition, acquisitions of additional businesses may require large write-offs of any in-process research and development costs related to companies being acquired, costs incurred with the impairment of goodwill, amortization costs or impairment charges of other intangible assets valued in the combination with companies. Such write-offs and ongoing amortization charges may have a significant negative impact on operating margins and net income in the quarter of the combination and for several subsequent years. In addition, we have and expect to continue to enter into joint venture agreements for the purpose of developing new products and services. There can be no assurances that any such products or services will be successfully developed or that we will not incur significant unanticipated liabilities in connection with such arrangements. We may not be successful in overcoming these risks or any other problems encountered in connection with any such transactions and may therefore not be able to receive the intended benefits of those acquisitions or joint ventures.

We may incur losses in connection with strategic and venture capital investments including our investment in Commerce One.

SAP acquires equity interests in or makes advances to technology-related companies, many of which generate net losses. Such activities may involve significant capital outlay. Most of the concerned companies in question are recently established with their prospects assessed only to a limited extent prior to investment. It is possible that changes in market conditions, the performance of companies in which we hold investments in or made advances to or other factors will not negatively impact our results of operations or our ability to recognize gains from the sale of marketable equity securities. On a continuous basis, but no less frequently than at the end of each quarterly reporting period, we evaluate the carrying value of our ownership interests in and advances to each of the companies in which we invest for possible impairment, including associated companies. The fair value of SAP's ownership interests in and advances to privately held companies is generally determined based on the value at which independent third parties have invested or have committed to invest in such companies. A write-down in the value through a charge to finance expense occurs if a decline in the market value is deemed to be other than temporary, that is, if the fair market value remains below cost for an extended period for cost method investments. For equity method investments in associated companies we consider additional factors in determining other than temporary impairment including significant or prolonged declines in share price, if publicly traded, the ability to recover the carrying amount of the investment or the ability of the investee to sustain an earnings capacity which would justify the carrying amount of the investment. An impairment of our investments including SAP AG's investment in Commerce One, on an other than temporary basis may adversely impact our financial position and results of operations. See "Item 5. Operating and Financial Review and Prospects — Critical Accounting Principles". Additionally, due to changes in German tax laws ("Steuersenkungsgesetz"), capital losses or write-downs of equity securities may negatively impact our effective tax rate going forward.

The cost of derivative instruments for hedging of the STAR Plan may exceed the benefits of those arrangements.

Under our Stock Appreciation Rights Plan (the “STAR Plan”), stock appreciation rights (“SARs”) are granted to eligible executives and employees of SAP. The SARs are primarily granted in the first quarter of each year and generally give the participants the right to a portion of the appreciation in the market price of the ordinary shares for the relevant measurement period. We have entered into in the past, and expect to enter into in the future, derivative instruments to hedge all or a portion of the anticipated cash flows in connection with the SARs in the event cash payments to participants are required as a result of an increase in the market price of the ordinary shares. We believe hedging anticipated cash flows in connection with the SARs limits the potential exposure associated with the STAR Plan, including potentially significant cash outlays and resulting compensation expense. There can be no assurance that the benefits achieved from hedging our STAR Plan exceed the related costs.

Our encryption technology may be breached or compromised.

Consumers have significant concerns about secure transmissions of confidential information, especially financial information, over public networks like the Internet. This remains a significant barrier to general acceptance of e-commerce and other aspects of SAP’s business. We rely on encryption, authentication technology and firewalls, to provide the necessary security for the confidential information transmitted to and from us over the Internet. Advances in computer capabilities, new discoveries in the field of cryptography or other events or developments could result in compromises or breaches of our security systems or those of other Web sites to protect proprietary information. If any compromises of security were to occur, it could have the effect of substantially reducing the use of the Web for commerce and communications. Anyone who circumvents our security measures could misappropriate proprietary information or cause interruptions in our services or operations. The Internet is a public network, and data is sent over this network from many sources. In the past, computer viruses, software programs that disable or impair computers, have been distributed and have rapidly spread over the Internet. Computer viruses could be introduced into our systems or those of our customers or suppliers, which could disrupt our network or make it inaccessible to customers or suppliers. Our security measures may be inadequate to prevent security breaches, and our business would be harmed if we do not prevent them. In addition, we may be required to expend significant capital and other resources to protect against the threat of security breaches or to alleviate problems caused by breaches.

Increasing government regulation of the Internet could harm our business.

As Internet commerce evolves, we expect that U.S. federal, U.S. state, German, European Union or other foreign governments will adopt laws or regulations covering issues such as taxation, user privacy, pricing, content and quality of products and services. For example, the United States Telecommunications Act sought to prohibit transmitting various types of information and content over the Internet. Several telecommunications companies have petitioned the U.S. Federal Communications Commission to regulate Internet service providers and other online service providers in a manner similar to long distance telephone carriers and to impose access fees on those companies. This could increase the cost of transmitting data over the Internet. Moreover, it may take years to determine the extent to which existing laws relating to issues such as property ownership, libel and personal privacy are applicable to the Internet. It is possible such laws or regulation could expose companies involved in electronic commerce to liability, which could limit the growth of electronic commerce generally. In addition, such regulation could dampen the growth in Internet usage and decrease our acceptance as a communications and commercial medium. If enacted, these laws or regulations could limit the market for our products and services.

U.S. judgments may be difficult or impossible to enforce against us.

SAP AG is a stock corporation organized under the laws of Germany. All members of SAP AG’s Supervisory Board and Executive Board are non-residents of the United States. A substantial portion of the assets of SAP and such persons are located outside the United States. As a result, it may not be possible to effect service of process within the United States upon such persons or us or to enforce against them

judgments obtained in U.S. courts predicated upon the civil liability provisions of the securities laws of the United States. In addition, awards of punitive damages in actions brought in the United States or elsewhere may be unenforceable in Germany.

Item 4. Information on SAP

SAP Aktiengesellschaft Systeme, Anwendungen, Produkte in der Datenverarbeitung is the legal corporate name, which is translated in English to SAP Corporation, Systems, Applications and Products in Data Processing. As mentioned earlier, we refer to our corporation as SAP AG. SAP AG was incorporated under the laws of the Federal Republic of Germany in 1972. Where the context requires, in the discussion below, SAP AG refers to our predecessors, Systemanalyse und Programmentwicklung GdbR (1972-1976) and SAP, Systeme, Anwendungen, Produkte in der Datenverarbeitung GmbH (1976-1988). SAP AG became a stock corporation (*Aktiengesellschaft*) in 1988. Our principal executive offices, headquarters and registered office are located at Neurottstrasse 16, 69190 Walldorf, Germany. Our telephone number is 49-6227-7-47474. SAP AG’s agent in the United States is Wolfgang Kemna. He can be reached c/o SAP America, Inc. at 3999 West Chester Pike, Newtown Square, PA 19073. For a list of our subsidiaries, associated companies and other investments see page F-54 through F-58.

Description of the Business

Overview

SAP is the world’s leading inter-enterprise software company and the world’s third largest independent software supplier overall. Headquartered in Walldorf, Germany, SAP employs more than 28,500 people in more than 50 countries. SAP consists of SAP AG and our network of 91 operating subsidiaries and has a presence or a representation in more than 120 countries. As of December 31, 2001, we had more than 44,500 software installations at over 17,500 customers and more than 12 million users all over the world. Our customers include multinational enterprises as well as small and midsize businesses. With more than 900 partners offering complementary software, services and hardware, we have established a wide-ranging partner system.

SAP offers the mySAP.com e-business platform, which is a family of software and service solutions that are designed to empower customers, partners and employees to work together in an open collaborative Internet environment. SAP operating segments are structured under three lines of business: product, which consists of software and maintenance, consulting and training. For 2001, total revenues grew 17.2% over 2000 to € 7,340.8 million (2000: € 6,264.6 million). Net income for 2001 decreased 5.6% to € 581.1 million (2000: € 615.7 million). In 2001, revenues by operating segment were as follows; products accounted for € 4,701.8 million (64.1%), consulting for € 2,082.9 million (28.4%) and training for € 466.2 million (6.4%). The products operating segment consisted of software which represented € 2,580.5 million (35.2%) and maintenance, which contributed € 2,121.3 million (28.9%) for 2001.

Products

The mySAP.com e-business platform provides an open, collaborative Internet platform that supports various business applications including but not limited to enterprise portals, customer relationship management, supply chain management, exchanges, supplier relationship management, product lifecycle management, business intelligence, financials and human resources. The platform enables its users to conduct commerce, access personalized content, and interact and collaborate in professional communities composed of an organization, its suppliers, customers and shareholders. We also offer enterprise portals and mobile applications that are customizable and offer direct access to our software solutions as well as third-party applications and services.

We perform maintenance and information services that provide customers with technical support, as well as enhancements to our SAP software solutions. We provide support 24 hours per day, seven days per week for all “priority 1” customer problems. Customers around the globe are covered by one of SAP’s major

support hubs. In addition, remote connectivity enables customers to take advantage of the productive and proactive services offered by SAP.

Consulting

We provide business solutions consulting and solution operations services, which are designed to enable companies to transition from conventional business processes to collaborative e-business processes. SAP offers project planning, usage tests, analyses, organizational consulting, system adaptation, system optimization, system implementation, and interface set-up services. Recently we have initiated a global professional service organization providing expert guidance in design, implementation and ongoing optimization of new and existing SAP solutions. The organization currently employs over 7,000 consultants worldwide. In 2001, we established the Global Professional Services Organization or Global PSO, to more efficiently address the consulting needs of major multinational corporations. The Global PSO supports the international projects of SAP customers that are globally active, offering a service that is consistent worldwide because it applies uniform methodologies and procedural standards.

Training

We are one of the largest training providers for business software in the world. SAP offers over 280 courses through 80 training centers worldwide, or at customer sites. We also offer training live or in recorded form over the Internet, and as self-paced courses over the Internet.

Geographic Regions

SAP operates in three geographic regions: EMEA, the Americas and Asia-Pacific (“APA”), as discussed further in this item and note 36 to our consolidated financial statements.

Evolution of SAP’s e-business platform

We introduced our first generation of software in 1973, a modest financial accounting application. SAP’s efforts to integrate and streamline the way companies do business began with the development of materials resource planning solutions, referred to as “MRP” solutions, allowing for the optimization of operational activities.

Expanding from MRP solutions, we developed integrated, cross-functional, multi-language, multi-currency business process solutions applicable to other business processes. These Enterprise Resource Planning (“ERP”) systems sought ways to integrate all aspects of business, including distribution centers, field operations centers, corporate headquarters and sales offices. In 1981, we introduced our second generation of application software, the SAP R/2 system, which could be installed on an enterprise-wide basis without substantial customization. We believe that SAP R/2 also reduced bottlenecks by improving and accelerating user access to data.

In 1988, we anticipated and capitalized upon growth in the use of a new hardware technology, known as client/server technology. During this period, we designed the initial version of the SAP R/3 system to offer the functionality of SAP R/2 in an open, client/server environment. SAP R/3 was brought to the market in the early 1990s and quickly became the market leader in ERP systems. We believe that SAP R/3 not only optimized manufacturing, but also distribution, finance, sales, procurement, inventory and human resources. In the years following the introduction of SAP R/3, we introduced several new business software applications and enhanced existing products to operate independently of SAP R/3.

Emerging customer needs led SAP to create several solutions designed to solve particular business issues and foster cross-enterprise cooperation across different enterprises. These mySAP.com solutions (such as mySAP Customer Relationship Management or mySAP Human Resources) consist technically of a number of components that work together due to the underlying mySAP Technology and are supported by mySAP Services. The solutions bundled together form the mySAP.com e-business platform.

The mySAP.com e-business platform offers extended functionality beyond traditional ERP that not only links together disparate enterprises but also enables collaboration across different organizations. The mySAP.com e-business platform is designed to enable companies to participate in a larger collaborative community of customers, suppliers and partners. This collaborative community permits customers, suppliers and partners to shift functions and responsibilities as needed. It also transforms the sequential supplier-to-customer value chain into a collaborative dialogue, allowing companies to work in parallel with their customers, suppliers and business partners, each defining their needs in the relevant business process.

The mySAP.com e-business platform is designed to help organizations take advantage of new business opportunities, while reducing costs, satisfying customers, and building both customer and employee loyalty. The mySAP.com e-business platform, and solutions are designed to help organizations:

- Collaborate more freely: mySAP.com is designed to help companies, employees, customers, suppliers, and business partners work together across enterprise boundaries.
- Integrate all aspects of a business: The mySAP.com e-business platform is designed to enable integration not only between users, processes, and data within an enterprise, but also among enterprises and private and public exchanges.
- Empower an organization: The mySAP.com e-business platform is designed to provide access to the relevant information, applications, and services needed to optimize job performance.

ERP functionality still provides a part of the “back bone” functionality for any e-business solution, and SAP R/3 remains an important part of the mySAP.com e-business platform and the individual mySAP.com solutions.

Industry Overview

The worldwide enterprise applications industry is one of the most dynamic segments of the Information Technology industry. Leading technology analysts predict a value of \$40 billion for this market in 2002 driven by the following solution areas: Enterprise Resource Planning (ERP), Supply Chain Management (SCM), Customer Relationship Management (CRM), Product Lifecycle Management (PLM), e-procurement, and Business-to-Business (B2B) commerce platform. For the upcoming years until 2005, analysts expect an annual growth of 7% in the already wide spread ERP area, whereas internet-based applications like CRM, SCM and e-procurement are predicted to grow at a significantly higher pace. Additionally, the CRM sector is expected to be the biggest market for enterprise applications by 2005. Geographically, the strongest growth is expected in the most underdeveloped markets, such as Asia and Latin America, while the developed markets, North America and Europe are expected to grow from 13% to 14%. Nevertheless, North America is expected to continue to account for the largest market share at 44%.

We believe the current market environment can be characterized by several trends.

- Despite gloomy economic forecasts, enterprises continue to spend vigorously on Information Technology, and 77% of respondents in a recent CIO survey plan to begin new application projects in 2002 with 63% indicating feeling “positive” about business prospects.
- The Internet remains the most important factor to extend business processes beyond company boundaries, referred to as e-business. In a recent study, 84% of the largest companies worldwide identified the importance of electronically connecting their suppliers, their partners, and their customer within the next 12 months using Web technology.
- Companies are focusing on fully integrated suites of solutions that cover the whole product life cycle. The benefits of these solutions include less product set fragmentation, greater product set completeness and simplicity, greater ease of product administration, better communication between members of product sets, and unified management of customization for geographical regions and locales. Such benefits translate into lower lifecycle costs for product maintenance, upgrades, customization, and administration as well as better communication and collaboration between suppliers and customers. As a result of this trend towards integration, vendors focusing on one area of

the enterprise applications space, referred to as “best-of-breed” market players, will need to extend their alliances and consolidate to be competitive.

- Enterprise portals are quickly becoming the central point of access within the user community. These personalized, browser-based, user interfaces enable access to such components as intranet, extranet, business applications, groupware, knowledge management, and engines. Furthermore, applications to extend the enterprise portal towards mobile devices like personal digital assistants (“PDA’s”), mobile phones and pagers, will be key developments in the future.
- Specializations will continue in vertical markets to align new technologies to sectors like finance, manufacturing, and government.
- Application integration will become increasingly more important and attract more spending as e-business processes have to span heterogeneous systems to bring maximum value to a company.

SAP’s Strategy

SAP’s business and product solution strategy is designed to grow our value and the size of our business including revenues, profitability and customer base by extending SAP’s footprint of e-business applications into existing customer implementations and attract new customers with solutions that can bring more value, be implemented faster, attain better integration, meet the needs of core customers and reach new customer segments. Our business strategy is to increase our profitability and market share by offering e-business software and service solutions to enable our large existing customer base and new customer prospects to increase value. We expect to leverage our large customer base to generate revenues through licenses of additional e-business solutions, either individually by solution, or collectively as mySAP.com.

We believe we can increase our profitability by extending our solutions beyond our core competencies in traditional ERP systems, such as basic finance, human resources and logistics applications, to our mySAP.com e-business platform, extending functionality and enabling inter-enterprise integration and collaboration. mySAP Technology will play an increasing role by offering the possibilities to integrate heterogeneous systems from a user (portal) and process (exchange) perspective.

SAP also focuses on growing new service offerings such as mySAP Hosted Solutions, including application hosting, marketplace hosting and application service provider solutions (“ASP”). SAP expects to exploit new market opportunities in the small and midsize business segment by leveraging our hosted solutions capabilities.

We intend to continue our growth both organically, as well as through selected acquisitions, designed to enhance our range of products and increase our installed customer base, our industry knowledge and our geographic penetration.

The mySAP.com e-Business Platform — Products and Services

The mySAP.com e-business platform consists of various SAP software solutions, based on mySAP Technology and supported by mySAP Services. These solutions and services allow companies to minimize enterprise boundaries and participate in a global marketplace.

mySAP Technology is a Web-based infrastructure designed for reliable, mission-critical e-business solutions. It facilitates collaborative business within and beyond company boundaries using shared, collaborative knowledge. mySAP Technology delivers a portal infrastructure for employee-based collaboration, a Web Application Server for Web services provisioning and an exchange infrastructure for process-based collaboration providing connectivity among people, application systems, and devices positioned in disparate locations and different business units across an entire virtual enterprise.

The mySAP.com e-business platform is based on this open, scalable and flexible architecture, which is built on fundamental industry standards, such as HTTP and XML, ensuring openness and interoperability with databases, applications, operating systems and hardware platforms from almost every major vendor.

mySAP.com Software Solutions

SAP software solutions consist of the following cross industry e-business solutions: mySAP Enterprise Portals, mySAP Customer Relationship Management, mySAP Supply Chain Management, mySAP Exchanges, mySAP Supplier Relationship Management (formerly mySAP E-Procurement), mySAP Product Lifecycle Management, mySAP Business Intelligence, mySAP Financials, mySAP Human Resources and mySAP Mobile Business. In addition, SAP software solutions include various industry specific functionality spanning over 20 different industries and core infrastructure.

We license components of our solutions on an individual user basis, either for a single solution as identified below, or as mySAP.com, a complete set of e-business solutions. On top of the user licenses for a solution, some specialized functionality and software engines (not user specific) are licensed separately. The mySAP.com e-business platform can be deployed either centrally on a single computer system or distributed in a heterogeneous but integrated infrastructure.

mySAP Enterprise Portals (formerly mySAP Workplace)

mySAP Enterprise Portals is an integral part of all SAP’s software solutions, but it can be licensed separately. mySAP Enterprise Portals is provided by SAP Portals, Inc., founded in June 2001 in connection with our acquisition of TopTier, together with its European and Israeli subsidiaries (“SAP Portals”) (see “Acquisitions” below). SAP Portals develops and markets comprehensive, open enterprise portal, knowledge management and business intelligence solutions. SAP Portals employs more than 800 people around the world to develop and market employee-based solutions. SAP Portals currently has approximately 2,000 customers and more than 6 million licensed users.

mySAP Enterprise Portals unifies various types of enterprise information; such as applications, data warehouses, stored documents, and Internet information. It facilitates users’ role-based access to and action upon business critical information within the extended enterprise allowing faster and easier resolution of business issues.

mySAP Enterprise Portals provides value-added content, which transforms static data into proactive, “actionable” information. This includes iViews, which are dynamic snapshots of business information that automatically generate answers to critical questions, as well as content from Internet sources, such as Yahoo! With knowledge management functionality consisting of Web content management, retrieval and classification and collaboration, users can collaborate through portals, regardless of location, time zone, or physical device.

mySAP Customer Relationship Management

mySAP Customer Relationship Management, referred to as mySAP CRM, is designed to align all areas of an organization to be more customer focused. It offers functionality to drive customer value across all interaction channels and removes enterprise boundaries to better serve customers.

The solutions within mySAP CRM are aligned with the various phases of the customer interaction cycle:

- In the customer engagement phase including,
 - marketing analytics,
 - campaign management,
 - telemarketing, e-marketing, and
 - lead management.
- In the business transaction phase, mySAP CRM capabilities focus on sales, providing support for activities and processes related to selling and taking orders,
 - sales analytics,
 - account and contact management,

- opportunity management (provides sales tracking and sales forecasting, helps plan and manage sales approaches, identifies key decision makers, and estimates potential-to-buy and potential closing dates),
 - telesales,
 - field sales (mobile sales and handheld sales),
 - e-selling (delivered by SAP Markets for internet sales),
 - internet pricing, and
 - configuration and order acquisition.
 - The order fulfillment phase involves monitoring the complete order life-cycle process, including,
 - fulfillment analytics,
 - logistics management,
 - credit management, and
 - billing.
 - The customer service phase focuses on service capabilities, comprehensively addressing customer service and support, including,
 - customer self-service,
 - customer care and help desk,
 - contracts and installed base management,
 - enterprise intelligence,
 - field service, and
 - dispatch (mobile service and handheld service) and e-service.
- mySAP CRM also includes capabilities that are interwoven with the entire customer interaction cycle. These capabilities are:
- The interaction center, which facilitates inbound and outbound communications mainly in the areas of Telesales, Telemarketing and Service (customer interactions can be blended across all remote channels including telephony, Web, chat, and e-mail).
 - Customer contacts can be conducted, tracked, monitored, and enhanced for multi-channel communication.
 - Analysis and planning capabilities, consisting of customer and channel analytics includes,
 - customer behavior modeling,
 - customer value analysis,
 - customer profitability,
 - customer lifetime analysis,
 - customer portfolio analysis, and
 - channel analytics includes multi-channel analytics, Web analytics and interaction center analytics.

mySAP Supply Chain Management

mySAP Supply Chain Management, referred to as mySAP SCM, integrates extended supply chains to enable intelligent e-business processes. mySAP SCM permits customers and business partners to collaborate

and communicate more directly and to share more information as work is completed. It helps transform supply chain management from a linear, sequential process into an adaptive supply chain network in which customers, partners and suppliers can synchronize their supply chain activities.

mySAP SCM allows companies and their supply chain partners to easily view supplier and customer allocations, inventory levels, orders, forecasts, production plans and key performance indicators to collaboratively plan for an optimal supply chain. In addition to visibility, mySAP SCM facilitates an open, interactive, Internet-based dialogue between supply chain partners using open internet standards.

Key functions of mySAP SCM include planning, execution, networking and coordination.

- *Planning* — Supports the strategic design of the supply chain (companies are enabled to immediately react to changing market conditions) as well as the collaborative demand and supply planning to forecast and plan demand by considering market behavior and sales objectives.
- *Execution* — Integrates the direct procurement of mySAP Supplier Relationship Management (formerly E-Procurement) and SAP Markets Enterprise Buyer, (a core element of mySAP E-Procurement), through collaborative procurement capabilities, supports collaborative manufacturing for the discrete and process industries and allows the automated sourcing of production relevant goods. In addition, collaborative fulfillment allows companies to commit to delivery dates in real time and automates the order cycle of all channels through available-to-promise, warehousing and transportation planning and scheduling capabilities.
- *Networking* — Supports the user-centric management of all supply chain activities on users’ desktops (via an enterprise portal) as well as through mobile supply chain management. Private exchanges seamlessly integrate original equipment manufacturers (“OEM’s”) and their distributors.
- *Coordination* — Analyzes and displays relevant supply chain data and key performance indicators using supply chain performance management and supports the supply chain event management that allows a responsive monitoring of various stages and milestones in the supply chain.

mySAP Exchanges

Companies today must transcend regional and company boundaries and generate value through automated, streamlined and integrated business processes, along with increased control and visibility across their entire value chain.

Electronic exchanges are needed to transform the way business is done. For buyers, exchanges mean the right products at the right time. For sellers, exchanges mean access to new customers. For all participants, electronic exchanges bring the benefits of true integration and real-time collaboration — reduced costs, compressed product development cycles and shorter time from order to delivery.

Public exchanges from SAP Markets help market makers to provide services for value chain collaboration to an open market in a selected industry or region. Public exchanges from SAP Markets are delivered via MarketSet, a joint product of SAP Markets and Commerce One. Public exchanges help companies tap into the potential of a given market through a collaboration platform that drives business processes across multiple organizations bringing potential significant cost-savings to established and potential business relationships. The open architecture, powerful applications and integrated business services provided by SAP Markets public exchanges create an environment conducive to a spectrum of collaborative processes, including planning, sourcing, analysis and procurement of indirect goods and commodities.

Private exchanges from SAP Markets are designed to allow organizations to maximize the return on all their business relationships. Private exchanges integrate formerly isolated functions and IT environments into a single process flow across systems, companies and business units. The results are reduced costs, faster time to market and greater overall efficiency in a Company’s supplier, customer and partner interactions.

We believe mySAP Exchanges provide greater visibility and control across the value chain, driving sustainable competitive advantages in managing growth and risk, improving time to market and fulfilment, and realizing significant cost and process efficiencies.

In 2000, SAP Markets and Commerce One have entered into a strategic alliance to deliver e-marketplaces. This strategic alliance resulted in the development of MarketSet, a joint solution for public exchanges. Commerce One technology is part of mySAP Technology, and as such, also supports SAP's efforts in creating private exchanges. In particular, Commerce One contributes technology that allows exchange-based business-to-business integration of various companies.

mySAP Supplier Relationship Management (incorporates and extends mySAP E-Procurement functionality)

mySAP Supplier Relationship Management, referred to as mySAP SRM, helps organizations maximize return on relationships with all suppliers on a continuous basis. mySAP SRM, which is generally available in 2002, incorporates mySAP E-Procurement which was introduced in 1999. mySAP SRM extends existing e-procurement capabilities (delivered through the SAP Markets Enterprise Buyer component) with e-sourcing capabilities. mySAP SRM integrates heterogeneous systems and provides significant extension of scope to our e-procurement solution through collaborative business processes to evaluate, enable and engage not only a few suppliers, but the entire supply base. mySAP SRM is designed to provide timely, relevant information for every facet of the procurement and sourcing strategy, creating value through higher compliance and control throughout operations. This enables organizations to develop mutually beneficial relationships with suppliers — regardless of their size or technological sophistication.

Where in the past companies have focused on connecting and transacting efficiently with only their top suppliers, the true value of profitable supplier relationships can now be realized through technology that allows them to connect suppliers and optimize relationships across the entire supply base.

mySAP SRM provides comprehensive functionality in the areas of supply strategy development, supplier qualification, supplier selection and contract negotiation and management. In addition, mySAP SRM provides a set of tools and techniques to manage the flow of content between multiple trading partners. This is designed to result in improved visibility across the entire supply base, reduced risk of supply deficiency and shorter cycle times.

mySAP SRM enables suppliers of all sizes to integrate and collaborate with their customers, easily and cost-effectively. Integrating into collaborative design solutions, mySAP SRM directly uses collaboratively created documents within the sourcing activities. In addition, mySAP SRM provides a set of tools and techniques to manage the flow of content between multiple trading partners, leading to shorter sourcing and procurement cycle times.

mySAP SRM provides extensive functionalities for self-service procurement, plan driven procurement and relationship monitoring. These features allow decentralized purchasing processes while maintaining central control, integrating supply chain management with execution and fulfillment, monitoring total spending and benchmarking supplier relationships against operational performance.

mySAP Product Lifecycle Management

mySAP Product Lifecycle Management, referred to as mySAP PLM, is designed to create a collaborative environment for managing the complete product life cycle, including first product idea, design and engineering, production ramp up, product change management and service and maintenance. mySAP PLM provides a holistic view of all product related business processes and needed information over the complete product and asset life cycle, through the extended supply chain. mySAP PLM enables companies to get the right product to market at the right time, at the right cost.

mySAP PLM is typically applicable to industries that require product innovation, speedy product development, short times-to-volume, and less time-to-value of product related investments. These requirements are typical for discrete industries, such as high-tech, engineering and construction, aerospace and defense and automotive. Process, consumer product and service industries can also take advantage of the functions of

mySAP PLM. mySAP PLM’s asset life-cycle management capabilities are applicable to all industries in which maintenance costs and equipment reliability directly affect profitability, as well as all industries that require preventive maintenance, facility management, and quality management of technical assets. These industries include oil and gas, utilities, chemicals, pharmaceuticals, automotive, mining, manufacturing, and transportation.

The key functional areas of mySAP PLM include:

- Life-cycle data management: provides integrated product and process engineering capabilities for managing requirements, bill-of-materials, routing and resource data, recipes, CAD models, and related technical documentation. It also provides sophisticated change management capabilities, (from engineering to production to service) ensuring consistency of product knowledge;
- Life-cycle collaboration: integrates business partners, customers, and suppliers to communicate data, such as project plans, documents, service bulletins, parts information, and product structures across virtual teams;
- Program and project management: provides advanced capabilities to plan, manage, and control product portfolios as well as the complete product development process; allowing project managers to control project structures, schedules, costs, and resources;
- Quality management: provides integrated total quality management for all industries, throughout the entire product life cycle;
- Asset life-cycle management: manages physical assets and equipment over the complete life cycle of an asset to improve plant performance and equipment availability; and
- Environment, health and safety (EH&S): Provides a comprehensive solution for environmental health and product safety issues by assisting companies to comply with government regulations and risk management.

mySAP Business Intelligence

mySAP Business Intelligence, referred to as mySAP BI, supports daily and long-term decision making through assisting in the interpretation of business information. mySAP BI allows for the extraction of the large amount of data inherent in a company’s systems, combines it with external data, and then aggregates and converts this data into meaningful business-oriented information. mySAP BI combines data warehousing with comprehensive analytics and analytical capabilities.

mySAP BI supplies information in context, and according to users’ tasks and decision-making needs. This information could include multiple key performance indicators, alerts, unstructured news or any other predefined business content. Information, reports and analysis options are available to knowledge users almost immediately. Because the information is tailored to individual roles, business content provides the information needed and allows users to personalize that information. mySAP BI is delivered via the mySAP Enterprise Portals solution. mySAP BI integrates information across SAP’s software solutions, which include the mySAP.com offering, and non-SAP components. mySAP BI offers integrated, Web-enabled capabilities that help companies measure their performance.

mySAP Financials

mySAP Financials helps companies improve their ability to process and interpret financial and business data, handle financial transactions and communicate with their shareholders. It enables company-wide control and integration of financial and business information that is essential for strategic decision-making.

mySAP Financials gives companies the ability to track financial accounting data within an international framework of multiple companies, languages, currencies and books of accounts. mySAP Financials is designed to comply with various international accounting standards such as U.S. GAAP and International Accounting Standards. We believe that it also fulfills the local legal requirements of many countries and reflects the legal

and accounting changes resulting from European market and currency unification. Although financial accounting transactions are processed individually, they are integrated with all other relevant financial areas. mySAP Financials contains the general ledger, the special purpose ledger, (including comprehensive sub ledger functions) and comprehensive cost management and profitability analysis tools for both financial and management accounting.

In addition, mySAP Financials provides advanced financial and business analytics to support the strategic enterprise management process from strategic planning and defining of strategic objectives and responsibilities, through budgeting, consolidating, performance monitoring and rolling forecasting, to communicating with shareholders and other stakeholders.

mySAP Financials helps companies streamline their financial supply chain from billing and collection of accounts receivable, through treasury and financing, to payment. This also includes support for payment, settlement, and financing models.

mySAP Financials provides tools for management accounting and financial analysis designed for knowledge-based businesses and the collaborative business models such as economic chains, communities and e-business networks. In addition, it allows companies to reflect e-business transactions accurately in accounting systems.

mySAP Human Resources

mySAP Human Resources, referred to as mySAP HR, is a set of integrated processes for automating and optimizing human resources management. mySAP HR encompasses substantially all facets of human resources (“HR”) management: organizational management; benefits administration; time management; payroll administration and employee development. It also provides standard language, currency, regulatory, HR, payroll, benefits and time-management capabilities for use in more than 35 countries.

mySAP HR shifts the focus of HR from individual employee transactions to the entire employee experience. To make this new approach possible, the key functional areas of mySAP HR include the following:

- Core functions: Facilitates operational efficiency by streamlining essential administrative management processes and supporting regulatory compliance issues;
- Strategy: Supports total reward (compensation and benefits), competency and skills inventory management, performance measurements, training and employee development, and recruiting;
- Analytics: Provides data analysis and reporting tools, as well as strategic enterprise management capabilities, to support informed HR policy- and decision-making; and
- Enabling solutions: Collaborative communication, knowledge management and portal technology are designed to enhance the HR service delivery.

mySAP Mobile Business

mySAP Mobile Business is a solution for enterprise mobility, serving the power of the information and applications from enterprise systems to all popular mobile devices in both online and offline environments.

mySAP Mobile Business enables companies to better leverage their existing enterprise systems by delivering mobile applications and technology that establish new ways to interact with enterprise systems via phones, PDAs, pagers and other mobile devices, and that empower new user communities to participate in collaborative business processes. mySAP Mobile Business is designed to allow companies to deliver greater levels of service and support to their employees, customers, and partners regardless of time and location resulting in increased customer satisfaction, profitability and competitive advantage.

mySAP Mobile Business delivers both cross-industry and industry-specific applications that leverage the business expertise of SAP, providing an end-to-end mobile solution that allows collaboration and integration between all business partners. Examples include:

- CRM Handheld Sales;
- CRM Handheld Service;
- Handheld Direct Store Delivery/Van Sales;
- Mobile Enterprise Buyer;
- Mobile and Handheld Business Intelligence;
- Mobile Time and Travel;
- Handheld Asset Life-Cycle Management;
- Mobile Supply Chain Management; and
- Mobile Quality Management.

mySAP Mobile Business delivers the technology infrastructure, including middleware and development tools, needed to support mobile applications. An online and offline technology architecture enables complete business mobility whether users are directly connected over a wireless network (online) or working completely autonomously on a device and later synchronizing (offline).

Industry Solutions

The mySAP.com e-business platform can be tailored to suit the requirements of most industries. Industry solutions employ our substantial industry experience acquired over years of providing industry-specific business solutions. We believe that we are the industry leader in providing industry-specific expertise within our e-business solutions. Tailored industry solutions use the entire scope of the mySAP.com e-business platform solutions. SAP’s industry solutions are packaged and configured with detailed features based on industry best practices. We organized our industry business units (IBUs), which develop our industry solutions, into two industry business sectors (IBSs), named IBS Manufacturing and IBS Services, in order to align them more closely with field operations and facilitate our accumulation of industry expertise. The industry solutions developed by these two IBSs are further divided into the six industry sectors below.

Process Industries

- mySAP Chemicals
- mySAP Mill Products
- mySAP Oil & Gas
- mySAP Pharmaceuticals
- mySAP Mining

Discrete Industries

- mySAP Aerospace & Defense
- mySAP Automotive
- mySAP Engineering & Construction
- mySAP High Tech

Consumer Industries

- mySAP Consumer Products
- mySAP Retail

Service Industries

- mySAP Media
- mySAP Service Providers
- mySAP Telecommunications
- mySAP Utilities

Financial Services

- mySAP Banking
- mySAP Insurance
- mySAP Financial Service Provider

Public Services

- mySAP Healthcare
- mySAP Higher Education & Research
- mySAP Public Sector

See “Item 4. Description of Business — Revenue by Industry Sector” and note 36 to our consolidated financial statements for further details on revenues by industry sector.

mySAP Services

In addition to our software solution portfolio, SAP provides service offerings such as mySAP Hosted Solutions, business solutions consulting, solution operations services, educational services and support services that include project planning, implementation assistance, ongoing post-implementation support activities and virtual classroom training for new and existing customers.

We have expanded our consulting, support and training organization over the last several years. As of December 31, 2001, 13,014 employees were committed to consulting, support and training services, an increase of 16.4% from December 31, 2000. Key functional areas of mySAP Services are described below.

Support Services

SAP performs maintenance and information services that provide customers with technical support. We also provide an online service system as part of the SAP Service Marketplace, which is supported in a “bulletin board” format, allowing customers to monitor the progress of their requests for assistance, to access information about solutions provided to other customers and to obtain information such as release planning, application descriptions, SAP publications and training course dates. In the event that a solution or program patch is not readily available, SAP’s technical support staff can remotely access the customer’s system and analyze the problem directly. Customer problem communication is also possible via phone, fax and the Internet.

With the announcement of MaxAttention in March 2002, we offer two premium support service levels, MaxAttention ServiceLevel and MaxAttention OnSite, in addition to our standard support services. MaxAttention provides a comprehensive, premium support offering enhancing SAP’s standard support services. Fees charged for support services are based upon fixed percentages, which vary for each service level, calculated on the basis of the initial license fee paid by the customer.

SAP’s standard support services are provided 24 hours per day, seven days per week for all “priority 1” customer problems which enables coverage of all customers throughout the globe by one of our major support hubs. SAP’s support is strategically staffed to provide coverage for all of the mySAP.com business solutions. An escalation team offers critical intervention services and provides customers with a liaison to development for those cases requiring the expertise of program authors.

Remote connectivity enables customers to take advantage of the productive and proactive services offered by SAP. As part of maintenance, SAP delivers remote service sessions that analyze the customer’s system performance, stability and load by monitoring a large number of parameters and by transmitting reports to the customer with recommended actions.

Enriching the standard support services with truly premium support, MaxAttention ServiceLevel defines initial response times as well as the dispatching time for an on-site team in case of mission-critical, priority-one issues. In addition to the services provided with our standard support, MaxAttention ServiceLevel coverage includes technical risk management for up to two mission-critical projects, plus named contacts at SAP and expert back office support accessible through customer self-services from SAP.

MaxAttention OnSite includes the entire MaxAttention ServiceLevel package plus on-site expert knowledge from dedicated support personnel permanently at the customer site. The individuals on-site can, for example, manage the maintenance process of mySAP.com solutions and perform root-cause analysis of problems.

mySAP Hosted Solutions

For many companies, the cost of implementing new solutions or changing a company’s technical infrastructure can be a roadblock on the way to the networked economy. This is particularly true for many small and midsize companies. mySAP Hosted Solutions help solve this problem by allowing companies to move to mySAP.com quickly, easily and cost effectively. To address this growing market opportunity, SAP AG created a subsidiary, SAP Hosting AG & Co. KG (“SAP Hosting”), to focus on developing and operating hosting solutions for SAP AG customers and partners. The goal is to enable enterprises of all sizes to

access the capabilities of mySAP.com without costly equipment expenditures and technical infrastructure changes. With mySAP Hosted Solutions, customers may choose hosting solutions directly from SAP AG, through SAP Hosting or from certified hosting partners.

Application hosting provides infrastructure, implementation, operational and ongoing support for selected applications. Marketplace hosting includes hosting of marketplaces, private exchanges, auction sites and specific, customized applications. Application service provider (“ASP”) solutions combine software, infrastructure, service, support and rapid implementation for turnkey solutions and deliver them as services to customers from a single provider. With ASP, customers do not obtain a perpetual license, they subscribe to the application service.

Business Solutions Consulting

Business solutions consulting provides assistance throughout the mySAP.com product life cycle. Business solutions consulting enables the customer to achieve benefits that include:

- Improved business strategy based on streamlined business processes;
- IT strategy and environment tailored to customers requirements;
- Faster, more reliable and more cost-effective implementations; and
- Continuous improvement of mySAP.com and business processes for greater competitiveness.

Business solutions consulting provides guidance in design of business solutions, project management and business improvement. Key capabilities include:

- Identifying business opportunities and selecting the solution that best fits the customers’ business strategy;
- Managing programs and projects;
- Designing business processes, information architectures, portals and user roles, as well as traditional solution elements such as software, technology, services and content organizational change management; and
- Managing quality and risk.

Solution Operations Services

Solution operations services offer implementation assistance and operations planning that cover issues encountered throughout the product life cycle. Key capabilities include:

- System architecture planning;
- Implementation services for the technical implementation of business processes;
- Custom-developed solutions for the unique requirements of the individual customer;
- Integration of existing customer systems with SAP solutions;
- Planning and performing daily operations; and
- Technical optimization services including upgrades.

Educational Services

SAP is one of the largest training providers for business software in the world. The curriculum includes more than 280 different courses, which are offered at more than 80 training centers worldwide or at customer sites. SAP’s training courses include three levels suited for the increasing competence of users as they progress through the training sequence. All courses are built in modules so that they can be adapted to suit unique training needs. SAP also offers training and certification for SAP’s consulting partners to ensure the

availability of competent SAP specialists. SAP also offers our customers “portable classrooms” which permit training to be accomplished at their own site. SAP focuses on training project team members of our customers who, in turn, typically train end-users, frequently with the support of SAP and our implementation partners. SAP also trains end-users. SAP’s standard training documents form the basis for effective in-house training on customer- and project-specific topics.

SAP delivers a growing number of live training sessions over the Internet. SAP’s e-learning initiative now includes three different types of online training: e-Learning Live, e-Learning Recorded and e-Learning Self-Paced. Live or recorded course broadcasts combine with Web-based tutorials to form a comprehensive offering to meet the increasing demand for on-line training. e-Learning Self-Paced allows users to train offline, at their own convenience. The integrated Internet Demo and Education System helps companies develop an understanding of SAP’s business processes.

Sales, Marketing and Distribution

We generally handle our own marketing, sales, distribution and technical support training. SAP AG primarily uses its worldwide network of subsidiaries to market and distribute SAP’s products and services locally. Those subsidiaries have entered into license agreements with SAP AG pursuant to which the subsidiary acquires the right to sublicense SAP AG’s products to customers within a specific territory and agrees to provide primary support to those customers. Under these agreements, the subsidiaries retain a certain percentage of the revenue generated by the sublicensing activity. In the United States, we began operating in 1988 through SAP America, Inc., a wholly owned subsidiary. Since then, the United States has become one of our most important markets. In certain countries, we have established distribution agreements with independent resellers rather than with subsidiaries.

In addition to our subsidiaries’ sales forces, SAP has developed an independent sales and support force through value-added resellers who assume responsibility for the licensing, implementing and supporting SAP solutions. We have also entered into alliances with major system integration firms, telecommunication firms and computer hardware providers to offer certain mySAP.com solutions.

We supplement certain of our consulting and support services through alliances with hardware and software vendors, systems integrators and third-party consultants with the goal of providing customers with a wide selection of third-party competencies. The role of the alliance partner ranges from pre-sales consulting for e-business solutions to the implementation of our software products to project management and end-user training for customers and, in the case of certain hardware and software vendors, to technology support.

During 2000, we restructured our global marketing operations and laid the foundations for more effective communication of both our position as a leading e-business solution provider and the quality of our solution offerings. Subsequent to this reorganization, we ran a broad-based campaign including television spots and newspaper advertisements in more than 40 countries.

SAP’s marketing and product development efforts cover large, multinational concerns as well as smaller and midsize companies. We believe our solutions and services meet important needs of all kinds of customers and are not dependent on the size or industry of the customer.

Capitalizing on the new possibilities of the Internet, we actively make use of online marketing. Solutions such as the mySAP Enterprise Portals can be tested online via the Internet Demonstration and Evaluation System, which also offers special services to introduce customers and prospects to new solutions and services.

Small Medium Business Enterprises

We recently announced our new Smart Business Solutions program for the small and medium business (SMB) market. The program addresses distinct segments of this market based on the degree of IT sophistication customers require with regard to industry- and customer-specific application functionality. For “sophisticated” SMBs with a high need for individualization and industry-specific functionality, SAP is globally expanding its existing strategy of offering industry-specific SMB solutions. These are based on mySAP.com and are tailored, configured and complemented by SAP channel partners. For “advanced”

SMBs, which require less sophisticated individualization and industry-specific functionality from their IT solutions, SAP is introducing a new application that it will indirectly market to this segment. In charge of the development and support of these SMB solutions will be a newly formed Business Unit at SAP. SAP will support its channel partners by providing training and by facilitating the transfer of relevant customization and development knowledge, creating synergies and efficiencies worldwide. In addition, the existing SAP indirect sales organization will also strengthen its support to channel partners with their international marketing and lead-generation activities in this market segment. The solution will be based on TopManage, a product currently developed and marketed by Israeli software company Menahel-Management Data and Business Accounting Ltd., which is also known as TopManage Financial Solutions Ltd. SAP recently entered into an agreement to acquire the assets from TopManage Financial Solutions which is subject to customary closing conditions.

Partnerships and Strategic Alliances

Partnerships and strategic alliances are a key element of broadening the solutions and services offered to SAP customers. SAP’s close collaboration with partners across the life cycle of a customer solution is a key element in enhancing customer satisfaction. We characterize our partnerships and strategic alliances into eight categories that together constitute what we refer to as the SAP Partner Value Net. Depending on the category, our partners may achieve the status of a local or global partner. We expect our alliance partnerships to provide customers with joint strategic solutions. Our partners generally have a strong position in a particular line of business or cross-industry and complement the range of SAP solutions in these areas. The partner categories are: Services Partners, Technology Partners, Software Partners, Hosting Partners, Channel Partners, Content Partners, Education Partners and Support Partners. In addition to these categories, SAP Portals and SAP Markets have established specialized partnerships to cover business areas of portals and exchanges.

SAP has entered into agreements with a number of leading software and hardware vendors to cooperate and ensure that certain of the software, technology and services products produced by such vendors complement SAP software products. Our partner network includes more than 900 companies.

In June 2001, SAP AG announced the expansion of its strategic alliance with Commerce One, which included an additional equity investment in the common stock of Commerce One in an approximate amount of U.S.\$ 225 million in connection with establishing a collaborative relationship to develop internet based product solutions. The strategic alliance focuses on jointly delivering next-generation e-business marketplace solutions for the Internet economy. The increase in SAP AG’s stake in Commerce One is expected to widen the existing relationship between SAP AG, SAP Markets and Commerce One.

Following the additional investment finalized on August 6, 2001, and considering shares previously acquired, SAP AG owns approximately 20% of Commerce One’s outstanding common stock, and accordingly accounts for such investment under the equity method. We were also required to retroactively apply the equity method of accounting resulting in the restatement of the 2000 consolidated financial statements. Under the terms of the strategic alliance agreement, SAP AG has certain registration rights and pro-rata rights to purchase additional shares of Commerce One’s common stock in the future, as well as the right to have a representative of SAP AG appointed to Commerce One’s board of directors. Effective June 2001, SAP AG has the right to have a selected participant observe Commerce One’s board of directors’ meetings without any voting power. As of March 2002, SAP has named an observer to attend the board of directors’ meetings. SAP AG has also agreed to certain limitations on our ability to transfer our shares of Commerce One common stock, our ability to acquire more than 23% of Commerce One’s outstanding common stock or to attempt to acquire Commerce One in a transaction not approved by Commerce One’s board of directors.

Recent Acquisitions

SAP AG acquired all of the outstanding shares of TopTier Software, Inc. in April 2001 for approximately € 379 million in cash, excluding cash acquired. TopTier, renamed SAP Portals, Inc., has become a wholly-owned subsidiary of SAP AG and is now the parent company of SAP Portals Europe GmbH. TopTier generated approximately U.S. \$ 20 million of revenue in 2000. SAP Portals, is a leading provider of enterprise

information portal software and products that integrate information residing in a business’s internal and external enterprise applications, databases, documents, Web sites, and other data sources. The Enterprise Unification Platform™ software products sold by SAP Portals are designed to enable a business’s extended enterprise of customers, vendors, suppliers and employees to directly access, navigate and manipulate integrated information using an intuitive and effective portal interface. With the patented HyperRelational® technology sold by SAP Portals, users can access, interconnect, update, edit and delete information from multiple software applications and data sources through a simple Drag & Relate™ process. By doing so, SAP Portals products enable organizations to create collaborative advantage for their enterprise by driving a real time, frictionless flow of information between employees, partners and customers.

Intellectual Property, Proprietary Rights and Licenses

SAP relies on a combination of the protections provided by applicable trade secret, copyright, patent and trademark laws, license and non-disclosure agreements and technical measures to establish and protect our rights in our software products.

We generally license our products to customers pursuant to a perpetual license. These license agreements are generally in standard form, although each license is individually negotiated and may contain variations. The licenses generally restrict the use of SAP software products to authorized users, which may include (usually on a screen-only basis) access by a customer’s dealers, distributors and suppliers, and prohibit a customer from disseminating or distributing SAP software products to any unauthorized person. The licenses are generally non-transferable or, if transferable, the transfer is subject to our reasonable approval. SAP software products are licensed to end-users not only by SAP but also by independent third-party distributors or by hosted solution providers and ASPs. Although we seek to establish the conditions under which such distributors and solution providers license our products, there can be no assurance that such distributors or solution providers license the SAP software products solely in compliance with such conditions. Some SAP software products contain third-party intellectual property that we license or otherwise acquire.

SAP software products are generally provided to end-users in a combination of object code and certain source code. In addition, certain licensed end-users of SAP software products can be beneficiaries of a master source code in escrow for our products, pursuant to which the source code will be released to end-users upon the occurrence of certain events, such as the commencement of bankruptcy or insolvency proceedings by or against us, or certain material breaches of the maintenance agreement by us. We have the right to object to the release of source code in any such circumstance, and to submit the matter to dispute resolution procedures. In the event of any release of the source code from escrow, the end-user’s license is limited to use of the source code to maintain, support and customize SAP software products.

SAP actively pursues trademark registrations and patents in countries in which SAP software products are licensed and used and in which our services are performed. We believe that the trademarks, which are material to our business, are registered in the countries in which we have significant sales. We continually review new developments for possible patent applications.

Description of Property

Our principal executive, administrative, marketing and sales, consulting, training, customer support and research and development facilities are located in Walldorf, Germany, 60 miles south of Frankfurt. We own our principal Walldorf facilities, which are currently being expanded. This expansion commenced in 2000 and is expected to be completed in 2002. The primary reason for the expansion is to provide additional space for our research and development activities. The cost to complete this expansion, together with expansions to other facilities, is not expected to exceed € 76.3 million in 2002. In addition, during 2001, we commenced expansion of our data center in St Leon Rot, Germany. The cost associated with this expansion is not expected to exceed € 83.1 million in 2002. We have financed such expansions through working capital and existing credit facilities described herein under “Item 5. Operating and Financial Review and Prospects — Liquidity and Capital Resources.” We own a site in Newtown Square, Pennsylvania, for use as our U.S. headquarters for the Americas as well as for regional operations for administration, marketing, sales, consulting, training,

customer support and research and development. We own and/or lease, sufficient undeveloped land to expand the facilities in Newtown Square as required for currently foreseeable future needs.

The location of each of our other facilities in excess of 40,000 square feet, all of which are leased (unless otherwise indicated), is set forth below:

<u>Country, City</u>	<u>Facility Description</u>
Austria, Vienna	Sales, consulting and training
Belgium, Brussels	Sales, consulting and training
Brazil, São Paulo	Sales, consulting and training
Canada, North York, Ontario	Sales, consulting and training
Czech Republic, Prague	Sales, consulting and training
Denmark, Broendy	Sales, consulting and training
France, Paris	Sales, consulting and training
Germany	
Alsbach (owned)	Sales and consulting
Freiberg	Sales and consulting
Munich	Research and development, sales, consulting and training
Ratingen	Sales, consulting and training
St. Ingbert (owned)	Research and development, sales, consulting
St. Leon-Rot (owned)	Research and development, consulting and training
Hungary, Budapest	Sales, consulting, training and customer support
India, Bangalore	Research and development
Ireland, Dublin	Customer support
Italy, Milan	Sales, consulting and training
Japan, Tokyo	Research and development, sales, marketing and training
Mexico, Mexico City	Sales and consulting
The Netherlands, 's-Hertogenbosch	Sales, consulting and training
Portugal, Lisbon	Sales, consulting and training
Singapore, Singapore	Sales, consulting, training and customer support
South Africa, Johannesburg	Sales, consulting and training
Spain, Madrid	Sales, consulting and training
Sweden, Stockholm	Sales and consulting
Switzerland, Biel (owned)	Sales and marketing
United Kingdom	
Feltham (owned)	Sales and consulting
Hayes	Training
United States	
Palo Alto, California	Research and development and sales
Waltham, Massachusetts	Sales, marketing, consulting and training
Chicago, Illinois	Sales, marketing, consulting and training
Foster City, California	Sales, marketing, consulting and training
Atlanta, Georgia	Sales, marketing, consulting and training

SAP believes that our facilities are in good operating condition and adequate for their present and anticipated usage.

Capital Expenditures

SAP’s capital expenditures for intangible assets and property, plant and equipment, excluding amounts acquired as part of 2001 Top Tier acquisition, for the years ending December 31, 2001, 2000 and 1999 were € 377.8 million, € 285.4 million and € 354.2 million, respectively. Principal areas of investment during 2001 related to construction of buildings, primarily in Germany, and to the purchase of computer hardware to support ongoing increases in employees and global operations. See note 36 in “Item 18. Financial Statements”

for capital expenditures by region included herein. During 2002, we expect to spend approximately € 145 million for the purchase of computer hardware and other business equipment to support the increased number of employees and approximately € 159.4 million primarily to fund the development of additional corporate campuses primarily in Germany. See “Item 5. Operating and Financial Review and Prospects” and note 36 to our consolidated financial statements for further details regarding capital expenditures.

Seasonality

As is common in the software industry, our business has historically experienced our highest revenue in the fourth quarter of each year, due primarily to year-end capital purchases by customers. Such factors have resulted in 2001, 2000 and 1999 first quarter revenue being lower than revenue in the prior year’s fourth quarter. We believe that this trend will continue in the future and that our revenue will peak in the fourth quarter of each year and decline from that level in the first quarter of the following year.

Revenue by Geographic Region

We operate our business in three principal geographic regions, namely EMEA, the Americas and Asia-Pacific. We allocate revenue amounts to the region in which the customer is located. See note 36 to our consolidated financial statements included herein for additional information with respect to operations by geographic region.

The following table sets forth, for the years indicated, the total revenue attributable to each of our three principal geographic regions.

	2001	2000	1999
	(in millions of €)		
Germany	1,468.7	1,237.4	1,067.3
Rest of EMEA	2,317.5	1,836.5	1,407.4
Total EMEA	3,786.2	3,073.9	2,474.7
United States	2,084.1	1,848.3	1,638.3
Rest of Americas	640.0	587.3	507.5
Total Americas	2,724.1	2,435.6	2,145.8
Asia-Pacific	830.5	755.1	489.7
Total revenue	7,340.8	6,264.6	5,110.2

EMEA. Approximately 51.6% of our 2001 revenue was derived from the EMEA region compared to 49.1% in 2000. Approximately 38.8% of the revenue for the EMEA region in 2001 was derived from Germany compared to 40.3% in 2000. The remainder of the revenue for the EMEA region in 2001 was derived primarily from the United Kingdom, Switzerland, France, Italy and the Netherlands. The number of employees in the EMEA region increased by 20.7% from 15,628 at December 31, 2000 to 18,860 at December 31, 2001. In Germany, the number of employees increased by 18.4% to 12,356 at December 31, 2001 compared to 10,432 at December 31, 2000.

Americas. Approximately 37.1% of our 2001 revenue was derived from the Americas region compared to 38.8% in 2000. Revenue from the United States represented approximately 76.5% and 75.9% of SAP’s total for the Americas region for 2001 and 2000, respectively. The slowing of the global economy was felt earliest in the United States, and was expected to impact SAP’s business there. The events of September 11 heightened further economic uncertainty. Our increased efforts, especially in the final quarter, overcame these factors, and total U.S. sales revenues improved 12.8% to € 2,084.1 million in 2001. Excluding the currency exchange effect, revenue from the United States increased in 2001 by 10% compared to 2000. The rest of the Americas region posted revenues of € 640.0 million, a 9.0% increase from 2000, and revenues for the entire region increased 11.9% to € 2,724.1 million.

The remainder of revenue for the Americas region was derived primarily from Canada, Brazil, Mexico, Venezuela and Argentina. The number of employees in the Americas region increased by 11.1% from 6,077 to 6,750 at December 31, 2000 and 2001, respectively.

Asia-Pacific. Approximately 11.3% of our 2001 revenue was derived from the Asia-Pacific region, compared to 12.1% in 2000. In 2001, SAP’s revenue from the Asia-Pacific region was derived primarily from Japan, Australia, South Korea, Singapore, Malaysia and India. The effect of our organizational restructuring in Japan in 1999 contributed to the 10.0% rise in total revenue in the Asia-Pacific region in 2001 compared to 2000. After adjustments for the negative currency exchange effect, revenue from the Asia-Pacific region increased in 2001 by 17% compared to 2000. The 25% growth posted in Japan (37% excluding currency effects) to € 345 million was particularly significant. SAP believes that the successful reorganization implemented there in 1999 put the Japan operation back on track for sustained progress.

In the Asia-Pacific region, the number of employees increased 17.8% from 2,775 to 3,268 at December 31, 2000 and 2001, respectively.

Software Revenue by Solution

In 2001, we allocated software revenues to specific software solutions for the first time. These allocations include revenues from contracts for specific solutions and for integrated solution contracts, which are mostly allocated based on usage surveys provided by our customers. Such surveys reflect the customer’s expected use of the various solutions within their integrated contract. Customers’ actual use may differ from their expectations at the time they complete the surveys and we have no ability to monitor differences between actual and amounts reported. Nevertheless, for management purposes, we allocate revenues based upon the number of users and user type by solution as specified in the customer surveys. Revenues recognized are allocated to each applicable solution based upon weighted average values per solution resulting from the number of each user type per solution, as provided by the customer, multiplied by the respective price per user type as set forth in our standard price list. We then allocate the recognized revenue for the software license based upon each solution’s weighted average values. The remainder of revenues, which relate to R/3, industry solutions and software engines are specifically identified in the license if applicable, and are allocated to the specific software solutions at fixed ratios based upon the functional capabilities to which they relate. This methodology is applied to each individual mySAP.com contract. Although we believe this methodology in allocating revenue to specific software solution to be reasonable, and we apply this methodology on a consistent basis for informational purposes only, there can be no assurance that such calculated amounts reflect the amounts that would result from the individual licensing of each software solution.

	2001 (in millions of €)
mySAP SCM.....	582.9
mySAP CRM	444.9
mySAP PLM.....	196.0
mySAP BI/mySAP Enterprise Portals — mySAP e-Procurement/mySAP Marketplaces.....	415.9
mySAP Financials — mySAP	
Human Resources	940.8
Total revenue	<u>2,580.5</u>

Revenue by Industry Sector

We established six industry sectors in order to focus our product development efforts on key industries of our existing and potential customers and to provide best business practices and integrated business solutions specific to those industries. The following table sets forth the total sales revenue attributable to each sector for

the years ended December 31, 2001, 2000 and 1999. Prior year amounts have been reclassified for comparative purposes.

	<u>2001</u>	<u>2000</u>	<u>1999</u>
	(in millions of €)		
Process Industries	1,524.3	1,342.1	1,027.2
Discrete Industries	1,807.5	1,582.7	1,441.8
Consumer Industries	1,186.8	999.3	776.2
Service Industries	1,849.8	1,578.8	1,266.5
Financial Services	448.2	336.0	247.5
Public Services	524.2	425.7	351.0
Total revenue	<u>7,340.8</u>	<u>6,264.6</u>	<u>5,110.2</u>

As the above table indicates, the service industry sector slightly overtook the discrete industry sector to become the single biggest source of revenue. It also shows that the steepest rates of revenue growth were achieved in the financial services and public services sector. The increased effort SAP invested in these sectors in recent years is thus showing a return.

Euro Currency

Effective January 1, 1999, the euro was introduced in the member states of the European Union (including Germany) participating in the EMU as a common legal currency for “paperless” transactions, pending the substitution of euro bank notes and coins for the national currencies of the participating EMU states. As of January 1, 1999, fixed exchange rates were introduced, according to which funds denominated in the currency of one participating EMU state are convertible into the currency of another participating EMU state. Beginning March 1, 2002, business in participating member states is conducted exclusively in the euro. As a result, companies operating in or conducting business in these participating EMU states will need to ensure that their financial and other software systems are capable of processing transactions and properly handling the euro currency.

Products. The transition to the euro involves changing budgetary, accounting and fiscal systems in companies and public administration, as well as the simultaneous handling of parallel currencies and conversion of legacy data. Additional programs are necessary to convert legacy data. SAP’s software products are designed to fully accommodate the implementation of the euro. SAP’s euro solution offers functionality that converts existing SAP software components to the euro and handles the dual currency phase-in by enabling applications to present values in both the euro and the customer’s national currency. However, there can be no assurance that SAP software products will contain all euro currency requirements. Any inability of the SAP software products to comply with euro requirements could have a material adverse effect on our business, financial position, results of operations or cash flows.

Competitive Implications. The introduction of the euro on January 1, 1999 did not have a material effect on the pricing of our products and services or on the markets for SAP software products. We believe that the introduction of the euro currency as legal tender on March 1, 2002 has not and will not have a material adverse effect on our business, financial position, results of operations or cash flows.

Systems. Effective as of January 1, 1999, we adopted the euro as our financial accounting and reporting currency. SAP’s internal business information systems primarily comprise the same commercial application software products generally offered for license by SAP to end-user customers. We did not experience any material problems to date as a result of the euro conversion.

Currency and Foreign Exchange Exposure. The introduction of fixed exchange rates among the participating EMU states and the ultimate transition to the euro has eliminated the impact on our consolidated financial statements of foreign currency translation from the participating EMU states’ national currencies and foreign currency exchange risk associated with transactions involving the participating EMU states’ national currencies. In addition, interest rate differences and the associated risk between the participating EMU states have also disappeared. As a result, the basis for hedging and other derivative

transactions with respect to such national currencies have been eliminated, thereby creating opportunities for cost savings.

Item 5. *Operating and Financial Review and Prospects*

Critical Accounting Policies

Our financial statements are based on the accounting policies as described in note 3 of our consolidated financial statements in “Item 18. Financial Statements” in this Annual Report on Form 20-F. Such policies may require management to make significant estimates and assumptions. We believe that the following are some of the more critical judgment areas in the application of our accounting policies that currently affect our consolidated results of operations and financial position.

In accordance with SOP 97-2, software license fee revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the license fee is fixed and determinable and the collection of the fee is probable. We allocate a portion of our software revenue to post-contract support activities or other services or products provided to the customer free of charge or at non-standard discounts when provided in conjunction with the licensing arrangement. Amounts allocated are based upon standard prices charged for those services or products. Software license fees for resellers or other members of the indirect sales channel are based on a fixed percentage of our standard prices. We recognize software license revenue for such contracts based upon the terms and conditions provided by the reseller to its customer.

Revenue from post-contract support is recognized ratably over the term of the contract on a straight-line basis. Consulting and training service revenue is generally recognized at the time the service is performed. Fees from licenses sold together with consulting services are generally recognized upon shipment provided that the contract has been executed, delivery of the software has occurred, fees are fixed and determinable and collection is probable. In instances where the aforementioned criteria have not been met, both the license and the consulting fees are recognized under the percentage of completion method of contract accounting. We provide for sales returns and allowances.

In limited instances, we will enter into fixed fee contracts for which revenue is recognized using the percentage of completion method. The accounting for such arrangements requires judgment which impacts the timing of revenue recognition and provision for estimated losses, if applicable.

Accounts receivable are stated at their nominal value and are reduced, based upon estimates, to their net realizable value through the recording of allowances. Such allowances are subject to judgment in assessing specific customer and regional economic risk.

The carrying value of our approximate 20% ownership in Commerce One is approximately € 425 million at December 31, 2001, which exceeded the quoted market value at such date. We review our investments in associated companies on a quarterly basis with regards to impairment. Factors considered in determining other than temporary impairment are significant or prolonged declines in share price, if publicly traded, based upon available market prices. Additional consideration is given to the ability to recover the carrying amount of the investment or ability of the investee to sustain an earnings capacity which would justify the carrying amount of the investment. As a result of this evaluation, we do not believe a write-down of our investment in Commerce One was necessary as of December 31, 2001.

Commerce One announced a restructuring plan in the second and fourth quarter of 2001, primarily focusing on reductions in workforce and facilities, improving organizational alignment around core business objectives and realigning their sales force, professional services and general and administrative functions. We understand that Commerce One plans on investing in research and development in order to deliver solutions that match customers’ evolving needs. Additionally, Commerce One’s business model is shifting to focus increasingly on enterprise software solutions in addition to those for e-marketplaces. The industry in which Commerce One participates has experienced significant pressure as companies showed greater reluctance to spend on e-marketplace solutions in a period of economic slowdown. As such, Commerce One’s ability to balance cost control and cash flows while continuing to develop, market and sell products which the market demands is a critical factor in their successful execution of the restructuring plan. Consequently, Commerce

One’s future operating results, including our proportionate share and our ability to recover the full amount of our investment in Commerce One could be adversely affected if Commerce One is not able to successfully implement its restructuring plan. As of March 20, 2002, the fair value of our investment in Commerce One based upon available market prices was approximately U.S. \$ 100 million.

We currently have significant deferred tax assets, which are subject to periodic recoverability assessments. Realization of our deferred tax assets is principally dependent upon our achievement of projected future taxable income. Our judgments regarding future profitability are based upon market conditions and other facts and circumstances that currently exist. An adverse change to the underlying facts may require a reduction of the recorded deferred tax asset balances.

We have significant intangible assets related to goodwill and other intangibles. The determination of estimated useful lives and whether such assets are impaired involves significant judgments. Changes to strategy, market conditions or other relevant factors could significantly impact these judgments and require adjustments to recorded asset balances.

New Accounting Pronouncements

In June 2001, the Financial Accounting Standards Board approved the issuance of Statements of Financial Accounting Standards No. 141, “Business Combinations” (“SFAS No. 141”) and No. 142 (“SFAS No. 142”).

SFAS No. 141 requires the use of the purchase method of accounting for all business combinations initiated after June 30, 2001. For acquisitions accounted for under the purchase method which are consummated on or after July 1, 2001, SFAS No. 141 requires acquired intangible assets obtained through contractual or legal right, or are capable of being separately sold, transferred, licensed, rented or exchanged, be recognized as an asset apart from goodwill.

Under SFAS No. 142, goodwill and intangibles with indefinite lives will no longer be subject to amortization but will be subject to at least an annual assessment for impairment. Impairment testing specific to goodwill is determined by applying a fair value based test on a reporting unit level, which is defined as an operating segment or one level lower. Additionally, goodwill on equity method investments will no longer be amortized; however, it will continue to be tested for impairment in accordance with APB No. 18, “The Equity Method of Accounting for Investments in Common Stock”. All other intangible assets will continue to be amortized over their estimated useful lives. SFAS No. 142 is effective for fiscal years beginning after December 15, 2001 although goodwill and intangible assets with an indefinite life acquired in business combinations consummated on or after July 1, 2001 will not be amortized.

SAP is currently quantifying the impact of implementing SFAS No. 141 and No. 142 and has not yet determined whether or the extent to which they will effect the financial statements. As of December 31, 2001 the company has goodwill and intangible assets with a carrying amount of € 342.3 million and € 157.1 million, respectively, which are subject to the provisions of SFAS No. 142. Amortization of goodwill was € 62.9 million, € 33.5 million and € 16.7 million for the years ended December 31, 2001, 2000 and 1999, respectively.

In June 2001, the FASB issued Statement of Financial Accounting Standards No. 143, “Accounting for Asset Retirement Obligations” (“SFAS No. 143”). SFAS No. 143 addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs. SFAS No. 143 is effective for financial statements issued for fiscal years beginning after June 15, 2002. SAP does not anticipate that the adoption of SFAS No. 143 will have a material impact on its consolidated financial statements.

In August 2001, the FASB issued Statement of Financial Accounting Standards No. 144, “Accounting for the Impairment or Disposal of Long-Lived Assets” (“SFAS No. 144”). The statement supersedes SFAS No. 121, “Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of”, and the accounting and reporting provisions of APB Opinion No. 30, “Reporting the Results of Operations — Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions”, for the disposal of a segment of a business. SFAS No. 144

retains the fundamental provisions of SFAS No. 121 for recognition and measurement of the impairment of long-lived assets to be held and used and for measurement of long-lived assets to be disposed of by sale. It requires recognition of an impairment loss for long-lived assets to be held and used only if the carrying amount of the asset is not recoverable from its undiscounted cash flows. The impairment loss continues to be measured as the difference between the carrying amount and fair value of the asset. SFAS No. 144 is effective in its entirety for financial statements issued for fiscal years beginning after December 15, 2001. Adoption of SFAS No. 144 is not expected to have a significant effect on our consolidated financial statements.

In November 2001, the Emerging Issues Task Force (“EITF”) reached a consensus on EITF No. 01-9, “Accounting for Consideration Given by a Vendor to a Customer or a Reseller of the Vendor’s Products”. EITF No. 01-9 applies to vendors that derive their revenue from sales of services as well as those that derive their revenue from sales of products. Consideration includes sales incentive offers labeled as discounts, coupons, rebates, and free products or services. EITF No. 01-9 is effective for financial statements issued for fiscal years beginning after December 15, 2001, but earlier adoption is encouraged. SAP’s accounting policies are consistent with the practices outlined in EITF No. 01-9 and accordingly, EITF No. 01-9 is not expected to have a significant effect on our consolidated financial statements.

Overview

For the year ended December 31, 2001, our revenue and income before income taxes were approximately € 7.34 billion and € 1,068.8 million, respectively, as compared with € 6.26 billion and € 1,012.9 million, respectively, for the year ended December 31, 2000. Net income was € 581.1 million and € 615.7 million for the years ended December 31, 2001 and 2000, respectively. SAP consists of SAP AG and our network of 91 operating subsidiaries and has a presence or a representation in over 120 countries.

We operate in three geographic regions, namely EMEA, the Americas and Asia-Pacific. SAP has three lines of business operating segments: products, consulting and training. Furthermore, SAP is organized by industry sector. For a discussion of our geographic regions and industry sectors, see “Item 4. Information on SAP — Description of the Business — Revenue by Geographic Region”, “— Revenue by Industry Sector” and note 36 to our consolidated financial statements included herein.

SAP’s principal sources of revenue are product revenue and service revenue. Product revenue consists primarily of software license fees and maintenance fees. License fees are derived from the licensing of SAP software products to customers. SAP provides optional maintenance for a fixed percentage calculated on the basis of the initial license fee paid by the customer. Maintenance entitles the customer to upgrades and enhancements through new product releases, versions and correction levels, telephone support on the use of the products and assistance in resolving problems, remote support, access to online bulletin board support services as well as a world-wide remote monitoring and diagnosis service for the mySAP.com e-business platform. Our service revenue consists of consulting and training revenue, which is derived primarily from the services rendered with respect to implementation, consulting and training of customer project teams and end-users in connection with the installation of SAP software products in customers’ enterprises, as well as training third-party consultants with respect to SAP software products.

We generally license our products in individual software components or a suite of software components on a “right to use” basis pursuant to a perpetual license providing for an initial license fee based on the number and types of identified users or the other applicable criteria. Additional license fees are charged when the designated number of users or another relevant metric is increased. In addition, SAP, together with certain of our business partners, offers certain SAP software products to small and midsize companies as a component of application hosting offerings in which license and maintenance fees may be paid to SAP on a per user, per month or similar subscription basis (rather than an upfront license payment). We also offer SAP software pursuant to leasing terms.

Pronounced global downturn

Global economic growth was at its steepest for more than a decade through 2000, but slowed at the end of that year and maintained a downward course all through 2001. The downturn in growth was so evident that

many countries — notably the United States and Japan, followed by Germany — slipped toward recession, and in the rest of the euro zone output growth also nearly came to a standstill. In late summer a return to growth seemed apparent. However, this changed after the September attacks in the United States, and economists calculate global growth to have been only 1% for the fiscal year 2001.

Recession impacts industry progress

The slowdown in world economic growth impacted the software industry, and in particular the e-business software segment in which SAP is active, on a number of levels.

Overall, information technology demand declined tangibly. In light of economic and political uncertainties, many companies postponed decisions about substantial information technology investments. Research by financial services provider Morgan Stanley indicated that more than 50% of companies revised their information technology budgets downward in the course of the year. Consequently, information technology budgets grew only 1.5% overall, compared to 12% in the previous year.

Because of the lower level of demand, the e-business software segment failed to grow as anticipated. Independent research organizations IDC and Gartner Group estimate that growth in 2001 was less than 10%, whereas at the beginning of the year growth rates of a little over 20% had been expected.

The “new economy” continued to suffer. Reasons for the decline included greater caution among venture capital investors, accompanied by a slump in the concerned segments of the equity markets. The software industry experienced a growing reluctance among customers to procure their software requirements from any vendor lacking either a mature solution offering or a secure financial outlook. Many smaller software companies fell into financial difficulties and had to close down their business.

Encouraged chiefly by the low market capitalization of small software companies, many larger vendors made acquisitions, which drove changes in the structure of the supplier-side of the market for e-business software. Microsoft Corp., for example, now has software components for the ERP market at its disposal for the first time as a result of its acquiring Great Plains Software, Inc.

The decline of the “new economy” also reduced prior year’s excess demand on those labor markets in which SAP competes for its employees. It was, however, not enough to completely balance the shortage of qualified information technology employees.

The economic slow down prompted many companies to intensify their efforts to identify and realize potential cost savings. In part companies focused on information technology investments that support cost savings and enable appreciable efficiency gains. Many customers identified deficiencies of systems’ integration as an area offering significant improvements. This led customers to increase interest in software solutions that enable quick and simple integration of applications from different manufacturers, speeding up the return on investments already made.

Exchange Rate Exposure

Although SAP’s financial accounting and reporting currency is the euro, a significant portion of our business is nevertheless conducted in currencies other than the euro. International sales are primarily made through our subsidiaries in the respective regions and are generally denominated in the local currency, although in certain countries where exchange rate exposure is considered high, some sales may be denominated in euros or Dollars. Expenses incurred by the subsidiaries are generally denominated in the local currency. Accordingly, the functional currency of our subsidiaries is the local currency or the euro for countries that participate in the EMU. Therefore, movements in the exchange rate between the euro, on the one hand, and the respective local currencies to which our subsidiaries are exposed, on the other hand, may materially affect our consolidated financial position, results of operation and cash flows. In general, appreciation of the euro relative to another currency has a negative effect on results of operations, while depreciation of the euro has a positive effect. As a consequence, period-to-period changes in the average exchange rate in a particular currency can significantly affect revenue and operating results. The principal currencies in which our subsidiaries conduct business that are subject to the risks described in this paragraph

are the Dollar, the Japanese Yen, the British Pound, the Swiss Frank, the Brazilian Real, the Canadian Dollar and the Australian Dollar.

Of SAP’s consolidated revenue in 2001 and 2000, approximately 63% and 66%, respectively, were attributable to operations in non-EMU participating countries and translated into euros. Fluctuations in the value of the euro had positive/ (negative) effects on our consolidated revenue, income before income taxes and net income of € (64.7) million, € (55.9) million and € (52.2) million, respectively, for 2001 and € 436.0 million, € 31.9 million and € 10.4 million, respectively, for 2000. See “Item 11. Quantitative and Qualitative Disclosures About Market Risk — Foreign Currency Risk.”

Interest Rate Exposure

SAP invests our cash primarily in bank time deposits and marketable securities, including fixed and variable rate marketable debt securities. The majority of such investments are denominated in euros and Dollars. Cash held by foreign subsidiaries is generally held in short-term time deposits denominated in the local currency.

Net interest income decreased to € 33.7 million in 2001 compared to € 59.2 million and € 31.2 million in 2000 and 1999, respectively. The decrease in net interest income was due primarily to increased levels of bank loans, decreased interest rates and our decreased liquidity during 2001 resulting from our increased investing activities.

While we are exposed generally to fluctuations in the interest rates of many of the world’s leading industrialized countries, our interest income and expense is most sensitive to fluctuations in the level of U.S. and EMU interest rates. The fair market values of both fixed and variable rate investments are exposed to such interest rate risk. To the extent that interest rates rise, fixed interest securities may be adversely impacted, whereas a decline in interest rates may decrease the anticipated interest income for variable rate investments. See “Item 11. Quantitative and Qualitative Disclosures About Market Risk — Interest Rate Risk.”

Inflation

The rates of inflation on an average basis in Germany during 2001, 2000 and 1999 were 2.5%, 1.9% and 0.6%, respectively. The inflation rates on an annual average basis in the United States for those years were 2.8%, 3.4% and 2.2%, respectively. The effects of inflation on our operations have not been significant in recent years.

Changes to German Tax Law (“Steuersenkungsgesetz — StSenkG”)

Changes to German tax laws (“Steuersenkungsgesetz — StSenkG”), effective in 2001, were enacted in October 2000. The new tax laws reduce the existing German corporate tax rates from 30% for distributed earnings and 40% for undistributed earnings to 25% for both, effective 2001. Additionally, capital gains and losses on equity investments are or will no longer be tax effective depending upon the location of the investee. The changes in the corporate tax rates and treatment of capital gains and losses which are no longer tax effective reduced our 2001 tax expense by approximately € 86 million. In 2000, the changes in tax law did not materially impact earnings and resulted in a net deferred tax asset increase of approximately € 13.4 million at December 31, 2000. This included reductions of deferred tax liabilities associated with unrealized capital gains for which we do not expect to incur a tax liability under the new laws. See “Item 10. Additional Information — Taxation.”

Operating Results

Year Ended December 31, 2001 Compared with Year Ended December 31, 2000

Total Revenue

Total revenue increased from € 6,264.6 million for 2000 to € 7,340.8 million for 2001, representing an increase of € 1,076.2 million or 17.2%. Total revenue consists of product revenue (software and maintenance) and service revenue (consulting and training). The growth in 2001 total revenue was due to increases in product revenue of 13.9%, consulting revenue of 26.6% and training revenue of 16.4% compared to 2000.

Product Revenue. Product revenue increased from € 4,129.1 million for 2000 to € 4,701.8 million for 2001, representing an increase of € 572.7 million or 13.9%. Software revenue increased from € 2,458.7 million in 2000 to € 2,580.5 million in 2001, representing an increase of € 121.8 million or 5.0%. For a summary of software revenue by solution in 2001 see “Item 4. Information on SAP — Software Revenue by Solution.” Based on orders booked, the installed customer base accounted for 68% of SAP’s 2001 software revenue, with the remaining 32% coming from new customers (66% and 34% respectively in 2000). During 2001 mySAP.com accounted for 76% of software based on order entry values, thus continuing to be our main source of sales revenue since being made available in October 1999. Fourth-quarter mySAP.com sales generated 75% of software revenue for the quarter, twelve percentage points higher than the corresponding quarter in 2000. Maintenance revenue increased from € 1,670.4 million in 2000 to € 2,121.3 million in 2001, representing an increase of € 450.9 million or 27.0%. This strong growth was due primarily to the significant growth of 2000 software sales.

Product revenue as a percentage of total revenue decreased from 65.9% in 2000 to 64.1% in 2001. This decrease was due primarily to strong growth in our 2001 service revenue, the relatively flat growth of software revenue and a decline in maintenance revenue growth from 43.7% in 2000 to 27% in 2001.

Service Revenue. Service revenue increased by € 503.3 million, or 24.6%, from € 2,045.8 million for 2000 to € 2,549.1 million for 2001. Consulting revenue increased from € 1,645.2 million in 2000 to € 2,082.9 million in 2001, representing an increase of 26.6%. Consulting revenue as a percentage of total revenue increased from 26.3% in 2000 to 28.4% in 2001. Year-on-year consulting revenue growth in 2001 increased from the 6.4% year-on-year growth rate in 2000 due in part to establishment of a global consulting organization, the Global Professional Services Organization or Global PSO, to more efficiently address the consulting needs of major multinational corporations. The Global PSO supports the international projects of SAP customers that are globally active, offering a service that is consistent worldwide because it applies uniform methodologies and procedural standards. The increase in software sales in 2000 also had a positive impact on consulting revenues in 2001.

Training revenue increased by 16.4% from € 400.6 million in 2000 to € 466.2 million in 2001. This increase was a result of an increase in educational service providers as well as growth of the education solution consultants which identified revenue opportunities at existing customers.

Total Operating Expenses

Total operating expenses increased from € 5,461.9 million for 2000 to € 6,028.4 million for 2001, representing an increase of € 566.5 million or 10.4%. The impact of the employees stock-based compensation plans, primarily the SARs granted to eligible employees in May 1999 (the “1999 SARs”) under SAP’s STAR Plan, was € 98.4 million for 2001 operating expenses compared to € 440.8 million for 2000. Additionally, our acquisition of TopTier in 2001 resulted in additional operating expenses, primarily from the amortization of intangible assets. Disregarding expenses for the stock-based compensation plans and TopTier acquisition costs, the increase in operating expenses from 2000 to 2001 was 16.9%, just below the 17.2% increase in revenues. During 2001 SAP implemented costs-savings measures, which primarily impacted the fourth quarter. In addition, the increase in operating expenses resulted from the increase in sales and marketing costs associated with continued intensification of marketing activities. The increase in operating expenses also resulted from our investment in personnel, facilities and equipment in an effort to continue building a strong global infrastructure. The growth in total operating expenses was also due to our significant investment in the further development and support of the mySAP.com e-business platform.

Cost of Product. Cost of product consists of customer support costs and license fees and commissions paid to third parties for databases and the other complementary third-party products sublicensed by us to customers. Cost of product increased by 23.0% from € 721.6 million for 2000 to € 887.4 million for 2001. As a percentage of product revenue, cost of product increased from 17.5% in 2000 to 18.9% in 2001. As a result of closer organizational links between maintenance and development functions in 2001, SAP’s development employees provided more customer support activities. Consequently, the personnel expense relating to those maintenance services (approximately € 60 million) are considered cost of product, thus increasing such costs.

Excluding stock-based compensations and TopTier acquisition-related charges, cost of product rose 27% to € 852 million keeping pace with the increase in maintenance revenue to which it substantially corresponds. Without the altered allocation of efforts, the rise would have been 18% instead of 27%.

Cost of Services. Cost of services consists largely of consulting and training personnel expenses. Cost of services increased by 12.3% from € 1,750.5 million for 2000 to € 1,965.0 million for 2001. As a percentage of service revenue, cost of services decreased to 77.1% in fiscal 2001 from 85.6% in 2000. In 2001, SAP also shifted certain responsibilities from the development departments to the service area. Consequently, the associated expense of € 18 million was recorded not as a development expense but as a cost of service. Including this element, service expenses totaled € 1,965 million. The corresponding figure before stock-based compensation plans, which gives a better comparison with previous years, was € 1,944 million. It represents a 19% cost increase compared with 2000, which is significantly less than the 25% improvement in service revenues (that is, revenues from consulting and training).

Research and Development. SAP's research and development expenses include those personnel expenses related to research and development employees, expenditures on computer hardware used in research and development and expenditures on independent contractors retained by us to assist in our research and development. Research and development expenses decreased by € 71.1 million, or 7.3%, from € 969.4 million in 2000 to € 898.3 million in 2001. As a percentage of total revenue, research and development expenses decreased from 15.5% for 2000 to 12.2% for 2001. The number of research and development employees increased from 6,211 in 2000 to 7,665 in 2001, representing an increase of 23.4%. The percentage of employees working in the research and development department increased to 26.5% for 2001 from 25.4% in 2000. The primary reason for the decrease in 2001 research and development costs compared to 2000 is a € 79 million decline in stock-based compensation for those periods. Furthermore, the increase in maintenance work recorded by developers and the reassignment of the certain responsibilities to the customer support and services resulted in the associated costs being considered expenses other than for research and development. Finally, fewer external services were bought in 2001 than in 2000. Excluding both stock-based compensation and the effects from the reallocation of efforts and responsibilities, research and development expenses increased by 10% in 2001 and represented 12.9% and 13.7% as a percentage of revenue for 2001 and 2000, respectively.

Sales and Marketing. Sales and marketing expenses increased by 14.0% from € 1,577.3 million for 2000 to € 1,797.6 million for 2001, representing 25.2% and 24.5% of total revenue, respectively. Sales and marketing expenses, excluding stock-based compensation expenses, increased by approximately 19% to € 1,777 million. This percentage increase exceeded the rate of growth in the corresponding software revenues. The level of sales and marketing costs increased primarily due to the intensification of marketing activities to drive an improvement in awareness, which we expect will generate revenue benefits in the future. SAP regards the associated expense as an investment in the future and expects that in the medium term it will have an increasingly positive impact on the growth of the our business. The number of employees in sales and marketing grew by 18.9% from 4,266 in 2000 to 5,074 in 2001.

General and administration. General and administrative expenses decreased by 7.6% from € 417.6 million for 2000 to € 386.0 million for 2001, representing 6.7% and 5.3% of total revenue, respectively. These decreases were mainly attributable to the impact of the stock-based compensation expenses in 2000, as administrative expenses include senior management expenses for all SAP group companies. Excluding stock-based compensation expenses and TopTier acquisition-related charges, general and administration expenses were € 373 million in 2001, representing a 6.1% rise or € 21.3 million from € 352 million in 2000, which is well below SAP's revenue growth.

Finance Income, Net

Finance income, net is comprised primarily of (losses)/income from associated companies, (losses)/gains on sales of marketable equity securities and net interest income. Finance income, net decreased from € 265.6 million for 2000 to (€ 233.0) million for 2001, a decrease of € 498.6 million. In July 2001, we increased our investment in Commerce One to more than 20%. As a consequence, this investment is

accounted for using the equity method, and, to improve comparability, U.S. GAAP requires the retroactive application of the equity method of accounting. The negative effect on finance income was € 161.6 million in 2001 and € 18.6 million in 2000. In addition, a write down of some minority investments was necessary as the decline in the market value was deemed to be other than temporary. These investments were made primarily from SAP's venture capital activities.

Interest income and gains from the sale of securities were insufficient to offset these expenses. Finance income, net was further reduced by expenses in 2001 of € 50.9 million, compared to € 29.4 million, incurred in connection with various call options entered into for the purpose of hedging possible expenses in connection with the stock-based compensation plans.

Income Taxes

SAP's effective income tax rate increased from 38.7% for 2000 to 44.6% in 2001. This was primarily due to our share of Commerce One's net loss, which reduces income before income taxes, but does not affect income tax expense. Income before income taxes rose 5.5% to € 1,068.8 million. Excluding stock-based compensation and Commerce One and TopTier acquisition-related charges, income before income taxes was € 1,228 million, a 15% decrease from 2000. This decrease in income before income taxes is primarily the result of negative finance income due to equity market conditions. See note 9 to our consolidated financial statements included herein.

Net Income

Net income decreased from € 615.7 million in 2000 to € 581.1 million in 2001, representing a decrease of € 34.6 million or 5.6%. Net income as a percentage of total revenue decreased from 9.8% for 2000 to 7.9% for 2001. This decrease was due to expenses for the TopTier acquisition and our share of Commerce One's loss included in finance income, reduced gains on sales of securities, offset in part by the significant decreased impact of lower stock-based compensation in 2001. Basic earnings per share were € 1.85 in 2001 compared to € 1.96 in 2000. Excluding expenses for the TopTier acquisition and the impact of the Commerce One interest on finance income, basic earnings per share were € 2.53 in 2001 compared to € 2.02 in 2000.

Year Ended December 31, 2000 Compared with Year Ended December 31, 1999

Total Revenue

Total revenue increased from € 5,110.2 million for 1999 to € 6,264.6 million for 2000, representing an increase of € 1,154.4 million or 22.6%. The growth in 2000 total revenue was due to increases in product revenue of 33.4%, consulting revenue of 6.4% and training revenue of 1.5% compared to 1999.

Product Revenue. Product revenue increased from € 3,094.5 million for 1999 to € 4,129.1 million for 2000, representing an increase of € 1,034.6 million or 33.4%. Software revenue increased from € 1,932.4 million in 1999 to € 2,458.7 million in 2000, representing an increase of € 526.3 million or 27.2%. mySAP.com accounted for 52.7% (€ 1,295.8 million) of software revenue, thus becoming our main source of sales revenue since being made available in October 1999. Fourth-quarter mySAP.com sales generated 63% of software revenue for the quarter and were 412% higher than in the corresponding quarter in 1999. Software revenue for the products that were originally introduced as New Dimension applications totaled € 657 million in 2000, an increase of 251% compared to 1999. Software solutions for electronic marketplaces earned us € 63 million, or approximately 10% of the software revenue for the New Dimension applications, and approximately 2.6% of total software revenue.

Maintenance revenue increased from € 1,162.1 million in 1999 to € 1,670.4 million in 2000, representing an increase of € 508.3 million or 43.7%. This strong growth was due in part by a rise in the standard rate for maintenance charges implemented during 1999 and by the increase in our customer base.

Product revenue as a percentage of total revenue increased from 60.6% in 1999 to 65.9% in 2000. This increase was due primarily to the strong software and maintenance revenue growth combined with relatively flat growth in our 2000 service revenue compared to 1999.

Service Revenue. Service revenue increased by € 104.4 million, or 5.4%, from € 1,941.4 million for 1999 to € 2,045.8 million for 2000. Consulting revenue increased from € 1,546.9 million in 1999 to € 1,645.2 million in 2000, representing an increase of 6.4%. Consulting revenue as a percentage of total revenue decreased from 30.3% in 1999 to 26.3% in 2000. Year-on-year consulting revenue growth in 2000 declined from the 37.9% year-on-year growth rate in 1999 due to reduced demand for Year 2000 problem-related consulting services with the passing of the millennium date. In addition, we focused in 2000 on transitioning our consultants to meet the shift in customer demand toward e-business services. Consulting revenue for the fourth quarter of 2000 increased by approximately 27% compared to the corresponding period in 1999.

Training revenue increased by 1.5% from € 394.5 million in 1999 to € 400.6 million in 2000. Training revenue remained relatively consistent in 2000 compared to 1999 primarily due to our worldwide reorganization of this area, which resulted in more efficient provision of training. In addition, the improved user-friendliness of SAP software resulting from the EnjoySAP initiative led to a decreased need to train individual users.

Total Operating Expenses

Total operating expenses increased from € 4,314.0 million for 1999 to € 5,461.9 million for 2000, representing an increase of € 1,147.9 million or 26.6%. This increase in total operating expenses was due in part to the impact of the SARs granted to eligible employees in May 1999 (the “1999 SARs”) under SAP’s STAR Plan. Total operating expenses in 1999 included € 140.3 million related primarily to the 1999 SARs, while total operating expenses in 2000 included € 440.8 million for the 1999 SARs. Disregarding expenses for the 1999 SARs, the increase in operating expenses from 1999 to 2000 was 20.3%. In addition, the increase in operating expenses resulted from the increase in sales and marketing costs associated with intensification of marketing activities. The increase in operating expenses also resulted from our investment in personnel, facilities and equipment in an effort to continue building a strong global infrastructure. The growth in total operating expenses was also due to our significant investment in the further development of the mySAP.com e-business platform.

Cost of Product. Cost of product increased by 37.0% from € 526.7 million for 1999 to € 721.6 million for 2000. As a percentage of product revenue, cost of product increased from 17.0% in 1999 to 17.5% in 2000. Cost of product excluding STAR Plan expenses increased by 29.4% to € 668.5 million.

Cost of Services. Cost of services increased by 7.7% from € 1,625.1 million for 1999 to € 1,750.5 million for 2000. As a percentage of service revenue, cost of services increased to 85.6% in fiscal 2000 from 83.7% in 1999. Excluding STAR Plan expenses, cost of services in 2000 amounted to € 1,628.7 million, representing an increase over 1999 of 2.9%.

Research and Development. Research and development expenses increased by € 224.7 million, or 30.2%, from € 744.7 million in 1999 to € 969.4 million in 2000. As a percentage of total revenue, research and development expenses increased from 14.6% for 1999 to 15.5% for 2000. This increase resulted from the impact of the 1999 SARs and the significant investment made by us in 2000 in connection with the development of the mySAP.com e-business platform. The number of research and development employees increased from 5,403 in 1999 to 6,211 in 2000, representing an increase of 15.0%. The percentage of employees working in the research and development department increased to 25.4% for 2000 from 24.9% in 1999.

Sales and Marketing. Sales and marketing expenses increased by 39.4% from € 1,131.9 million for 1999 to € 1,577.3 million for 2000, representing 25.2% and 22.2% of total revenue, respectively. Sales and marketing expenses excluding STAR Plan expenses increased by approximately 35% to € 1,490 million. The level of sales and marketing costs increased primarily due to the intensification of marketing activities, which we expect will generate revenue benefits in the future. The number of employees in sales and marketing grew by 12.0% from 3,808 in 1999 to 4,266 in 2000.

General and administration. General and administrative expenses increased by 60.6% from € 260.1 million for 1999 to € 417.6 million for 2000, representing 5.1% and 6.7% of total revenue, respectively. These increases were mainly attributable to the impact of the 1999 SARs, as administrative expenses include senior

management expenses for all SAP group companies. Excluding STAR plan expenses, general and administration expenses increased by approximately 47% to € 352 million. The increase in general and administrative expenses is attributable in part to severance payments made by various subsidiaries in connection with restructuring charges.

Finance Income, Net

Finance income, net increased from € 235.2 million for 1999 to € 265.6 million for 2000, an increase of € 30.4 million. The primary reasons for this significant increase were gains of € 355.1 million recognized on the sale of marketable equity securities, offset in part by € 69.8 million of losses in 2000 related to our investment in Pandesic, LLC, an Internet joint venture with Intel Corp., which includes a charge of € 23.4 million for exit costs recorded in conjunction with the decision and plan design for Pandesic, LLC to cease operations, as well as € 18.6 million associated with our share of Commerce One's 2000 losses. Finance income, net was further reduced by the write down of investments held in small and medium size Internet companies, as well as by expenses in the amount of approximately € 29 million incurred in connection with various call options entered into for the purpose of hedging possible anticipated cash flows and related expenses in connection with the SARs granted in 2000 to eligible employees under SAP's STAR Plan (the "2000 SARs").

Income Taxes

SAP's effective income tax rate increased from 38.4% for 1999 to 38.7% in 2000. This increase was due primarily to our share of Commerce One's net losses and offset by the effects of changes in German tax laws enacted in October 2000, which were effective in 2001. The new laws reduce the existing German corporate tax rates from 30% for distributed earnings and 40% for undistributed earnings to 25% for both. Additionally, capital gains and losses realized on the sale of securities of German corporations are exempt beginning 2002. Deferred taxes arising from temporary differences have been computed based on the tax rates enacted for the years in which such differences are expected to reverse. See note 10 to our consolidated financial statements included herein.

Net Income

Net income increased from € 601.0 million in 1999 to € 615.7 million in 2000, representing an increase of € 14.7 million or 2.5%. Net income as a percentage of total revenue decreased from 11.8% for 1999 to 9.8% for 2000. This decrease was due to the increased impact of the 1999 SARs, higher relative operating expenses associated with our growth strategy, as well as € 18.6 million associated with our share of Commerce One's 2000 losses offset in part by the significant increase in finance income, net derived from the sale of marketable equity securities.

Liquidity and Capital Resources

Historically, we have funded most of our growth internally from cash flow from operations and the sale of marketable securities. Over the past several years, our principal use of cash has been to support continuing operations and capital additions resulting from our growth.

For the year ended December 31, 2001, SAP's cash provided by operations amounted to € 988.8 million, an increase of € 248.9 million, or 33.6%, from € 740.0 million for the year ended December 31, 2000. Net cash provided by operating activities was negatively impacted in 2001 by an increase of deferred tax assets. We expect these tax assets to result in positive cash flows in the periods they become reductions of our current tax obligations. Accounts receivable increased from € 2,194.5 million at December 31, 2000 to € 2,210.9 million at December 31, 2001, representing an increase of € 16.4 million or 0.8%. Days' sales outstanding increased marginally from 93 days in 2000 to 94 days in 2001 as a result of the continued effectiveness of credit and collection management. STAR Plan obligations decreased by € 273.5 million from € 366.5 at December 31, 2000 to € 93 million at December 31, 2001 as significant amounts associated with the 1999 SARs were earned during 2000 and paid during 2001. Other obligations to employees increased by € 82.8 million from € 457.4 at December 31, 2000 to € 540.2 at December 31, 2001. Accounts payable during the same period increased by



10.0%, or € 35.7 million, to € 391.2 million at December 31, 2001 from € 355.5 million at December 31, 2000. Additionally, a reduction of other reserves and accrued liabilities resulting primarily from our 2001 final payment of the 1999 STAR obligation, further reduced the net cash provided by operating activities. In 2000, the increase in 1999 STAR accruals increased our operating cash flow.

Investing activities used € 1,040.0 million of cash in 2001, an increase of € 594.8 million from € 445.3 million in 2000. Capital expenditures during 2001 for intangible assets and property, plant and equipment excluding amounts acquired as part of the TopTier acquisition, were € 377.8 million, an increase of € 92.4 million from € 285.4 million in 2000. In 2001, we used cash to invest in Commerce One and acquire TopTier. Additionally, during 2001 we increased our investment in SAP Systems Integration AG (SAP SI), an affiliate from 53.7% to 60.4%. We also invested € 295.3 million in property, plant and equipment, mainly additional IT infrastructure and office facility construction during 2001 to keep pace with the overall growth in business activities and related headcount increases. In 2001, we utilized cash provided by financing activities to fund a portion of the significant investments made during the year. During 2002, we expect to spend approximately € 145 million for the purchase of computer hardware and other business equipment to support the increased number of employees and approximately € 159.4 million primarily to fund the development of additional corporate campuses in Germany. The cash flow impact of our continued venture capital and strategic investment activities, including our investment in Commerce One and acquisition of TopTier was partially offset by cash received upon sale of marketable securities in 2001.

Financing activities used cash of € 126.3 million in 2001, a decrease of € 167.2 million from the € 40.9 million of cash provided from financing activities during 2000. The cash flow impact of dividend payments, which continued to be the primary use of cash for financing activities, was offset by cash receipts from borrowings under lines of credit and long-term debt. At December 31, 2001, we had outstanding long-term financial debt of € 7.4 million and outstanding short-term financial debt of approximately € 458.3 million, consisting primarily of amounts borrowed by SAP AG under lines of credit and the outstanding bonds issued in connection with the various employee stock-based compensation plans. Additionally we spent approximately € 94.2 million to purchase 500,000 of our own shares, which are held in treasury at December 31, 2001.

Certain of our foreign subsidiaries have lines of credit available that allow them to borrow in the local currency, generally to the extent SAP AG has guaranteed such amounts. At December 31, 2001, we had approximately € 1,216.4 million available through such arrangements under which we may borrow on an overdraft or short-term basis. Interest under these lines of credit is determined at the time of borrowing based on current market rates. As of December 31, 2001, SAP AG had € 430.0 million borrowed against these lines of credit. SAP AG has provided guarantees for the subsidiaries' lines of credit, including unused amounts, and other commitments of approximately € 210.7 million.

We also have available sources of cash through authorized and contingent capital. By resolution of the Annual General Shareholders' Meeting held May 3, 2001, the Executive Board was authorized, subject to the consent of the Supervisory Board, to increase subscribed capital up to € 60 million through May 1, 2006 through the issuance of additional ordinary shares in return for contributions in cash or in kind. Subject to certain preconditions and the consent of the Supervisory Board, the Executive Board is authorized to exclude the shareholders' preemptive rights. The Annual General Shareholders' Meeting held on May 3, 2001 allows for the issuance of bonds with detachable warrants and/or convertible bonds carrying warrant rights or convertible rights, as appropriate, with respect to ordinary voting shares up to a maximum of € 25 million through May 1, 2006. Shareholders' preemptive rights may be excluded. No ordinary shares have been issued as of December 31, 2001 with regards to the aforementioned authorized or contingent capital.

We have not entered into any significant transactions, arrangements or other relationships with unconsolidated, limited purpose entities. As of December 31, 2001, we have commitments under rental and operating lease agreements, guarantees for unused lines of credit and other commitments totaling approximately € 984.3 million as further described in the notes to the Financial Statements.

We believe that cash flow from operations, existing cash and cash equivalents, short-term marketable securities and available financing sources will be sufficient to meet our working capital needs and currently planned capital expenditure requirements for the next twelve months. However, there can be no assurance that

a downturn in the economy worldwide, or in a particular region, or for our products and services in general, will not change this outlook.

In order to complement or expand our business, we expect to make acquisitions of additional businesses, products and technologies, and to enter into joint venture arrangements. These acquisitions or joint venture arrangements may require additional financing. In addition, continued growth in our business may from time to time require additional capital. There can be no assurance that additional capital will be available to us if and when required, or that such additional capital will be available on acceptable terms to us.

Research and Development

Since our inception, we have devoted significant resources to research and development. Research and development expenses for the years ending December 31, 2001, 2000 and 1999 were € 898.3 million, € 969.4 million and € 744.7 million, respectively. Research and development expenses as a percentage of revenue were 12.2%, 15.5% and 14.6% for the years ended December 31, 2001, 2000 and 1999, respectively. During each of 2001, 2000 and 1999, the percentage of employees devoted to research and development was 26.5%, 25.4% and 25.0%, respectively. A major focus of the research and development effort has been to anticipate and use technological changes in the data processing industry to develop new business solutions. We have also entered into agreements with a number of leading computer software and hardware vendors and telecommunications providers to co-operate and enable certain of the software and hardware products produced by such vendors to be compatible with our solutions.

In 2000, we restructured our development area, orienting development efforts more closely to market and customer needs. We set up six general business units for application development and six industry business units to develop industry solutions. Three other general business units are dedicated to special technology projects.

Significant areas of current and future research and development include:

- SAP’s Internet strategy and SAP software solutions offering, including mySAP CRM, mySAP SCM, mySAP Enterprise Portals, mySAP Exchanges, mySAP Hosted Solutions and mySAP Mobile Business;
- New SAP software solutions and the improvement of SAP software solutions comprising the mySAP.com e-business platform;
- The continuous innovation of Industry Solutions;
- The enhancement of the flexibility and openness of our framework architectures (mySAP Technology) through broader integration capabilities with distributed business systems and through access to business content provided by third parties; and
- Through the focus on new and innovative technologies.

SAP maintains research and development facilities, in Germany, the United States, Japan, France, India, Israel, Bulgaria and Russia. Through this regional diversification, we maximize the efficient use of local resources and leverage access to industry expertise and customers.

Item 6. Directors, Senior Management and Employees

Supervisory Board

The current members of the Supervisory Board of SAP AG, each such member’s principal occupation, the year in which each was first elected and the year in which the term of each expires, respectively, are as follows:

Name	Age	Principal Occupation	Year First Elected	Year Term Expires
Dietmar Hopp, Chairman ⁽¹⁾⁽²⁾⁽³⁾ ..	61	Former Chairman of SAP AG’s Executive Board; (Managing Director, Dietmar Hopp Foundation)	1998	2002
Prof. Dr. Wilhelm Haarmann ⁽¹⁾⁽³⁾⁽⁴⁾⁽⁵⁾	51	Attorney at Law, Certified Public Auditor and Certified Tax Advisor; Haarmann, Hemmelrath & Partner	1988	2002
Klaus-Dieter Laidig ⁽¹⁾	59	Managing Partner, Laidig Business Consulting GmbH	1996	2002
Hartmut Mehdorn ⁽¹⁾	59	Chairman of Executive Board, Deutsche Bahn AG	1998	2002
Dr. Dieter Spoeri ⁽¹⁾	58	Head of Corporate Representation Federal Affairs, DaimlerChrysler AG	1998	2002
Dr. h.c. Klaus Tschira ⁽¹⁾⁽²⁾⁽⁴⁾	61	Managing Director, Klaus Tschira Foundation	1998	2002
Helga Classen, Vice Chairman ⁽⁶⁾	52	Employee, Development Architect	1993	2002
Willi Burbach ⁽⁶⁾	39	Employee, Developer	1993	2002
Bernhard Koller ⁽⁴⁾⁽⁶⁾	52	Employee, Manager of Idea Management	1989	2002
Dr. Gerhard Maier ⁽³⁾⁽⁶⁾	48	Employee, Development Manager	1989	2002
Dr. Barbara Schennerlein ⁽⁶⁾	45	Employee, Consultant	1998	2002
Alfred Simon ⁽⁶⁾	60	Employee, Documentation Shipping Associate	1993	2002

(1) Elected by SAP AG’s shareholders on May 7, 1998.

(2) Member controls one or more entities that is a party to the Pooling Agreement. See “Item 7. Major Shareholders and Related Party Transactions — Major Shareholders.”

(3) Member of the Compensation Committee.

(4) Member of the Audit Committee.

(5) Prof. Dr. Wilhelm Haarmann is a partner in Haarmann Hemmelrath & Partner, which serves as special German tax counsel to SAP AG and counsels SAP AG with regard to other legal matters.

(6) Elected by SAP AG’s employees on April 3, 1998.

The current members of the Supervisory Board of SAP AG that are members on other supervisory boards and comparable governing bodies of enterprises, other than SAP’s, in Germany and other countries as of December 31, 2001 is set forth in the note 37 to our consolidated financial statements included herein. SAP AG has not entered into contracts with any member of the Supervisory Board that provide for benefits upon a termination of the employment of service of the member.

The Supervisory Board maintains the following standing committees:

- The *Compensation Committee* determines salaries and incentive compensation awards for members of the Executive Board and establishes corporate goals for performance-based compensation plans.
- The *Audit Committee* reviews the scope of external audit services. The Audit Committee also reviews the annual financial statements of SAP AG and the consolidated annual and half-year financial statements, taking into account the results of the audits and reviews performed by the independent auditors.

Pursuant to the German Co-determination Act of 1976 (*Mitbestimmungsgesetz*), SAP shall be required to increase the amount of members on the Supervisory Board to sixteen members, which shall be comprised of eight members for the shareholders and eight members for the employees. German law requires this increase since SAP AG now employs more than 10,000 employees in Germany. All employees elected must be 18 years of age or older, must have been in the employment of SAP AG for at least one year and must fulfill the other qualifications for election in Section 8 of the German Works Council Constitution Act. Pursuant to the above law, the term of all members of the Supervisory Board will expire on the date of the annual general shareholders’ meeting and eight of the members will be elected by shareholders at the meeting and the remaining eight will be appointed by employee representatives.

Executive Board

The current members of the Executive Board, the year in which each such member was first appointed and the year in which the term of each expires, respectively, are as follows:

<u>Name</u>	<u>Year First Appointed⁽¹⁾</u>	<u>Year Current Term Expires</u>
Prof. Dr. h.c. Hasso Plattner, Co-Chairman	1988	2002
Prof. Dr. Henning Kagermann, Co-Chairman	1991	2002
Dr. Peter Zencke	1993	2002
Prof. Dr. Claus Heinrich	1996	2005
Gerhard Oswald	1996	2005
Dr. Werner Brandt	2001	2005

(1) SAP AG became a stock corporation (Aktiengesellschaft) with an Executive Board in 1988.

A description of the management responsibilities, backgrounds and the positions held in other corporations of the current members of the Executive Board are as follows.

Prof. Dr. h.c. Hasso Plattner, Co-Chairman, 58 years old, engineering graduate. Prof. Dr. h.c. Plattner is one of the founders of SAP AG. He became Vice Chairman of the Executive Board in 1988 and Co-Chairman in 1997. He is responsible for the mySAP.com internet strategy, industry solution development, basis technology, marketing and corporate communications.

Prof. Dr. Henning Kagermann, Co-Chairman, 54 years old, mathematics and physics graduate. Prof. Dr. Kagermann joined SAP AG in 1982. He became a member of the Executive Board in 1991 and Co-Chairman in 1998. He is responsible for sales, distribution, consulting and global customer relations, industry solutions and strategic development projects.

Dr. Peter Zencke, 52 years old, mathematics and economics graduate. Dr. Zencke joined SAP AG in 1984 and became a member of the Executive Board in 1993. He is responsible for the development of industry solutions, development of mySAP.com solutions, e-business and coordination of global research.

Prof. Dr. Claus Heinrich, 46 years old, business management and operations research graduate. Prof. Dr. Heinrich joined SAP AG in 1987 and became a member of the Executive Board in 1996. He is responsible for human resources, the development of industry solutions, and development of mySAP.com solutions.

Gerhard Oswald, 48 years old, economics graduate. Mr. Oswald joined SAP AG in 1981 and became a member of the Executive Board in 1996. Mr. Oswald is responsible for global support and the information-technology infrastructure.

Dr. Werner Brandt, 48 years old, business administration graduate. Dr. Brandt joined SAP on February 1, 2001 as the Chief Financial Officer and member of the Executive Board. He is responsible for finance and administration.

The current members of the Executive Board of SAP AG that are members on other supervisory boards and comparable governing bodies of enterprises, other than SAP's, in Germany and other countries as of December 31, 2001 is set forth in note 37 to our consolidated financial statements.

Compensation of Directors and Officers.

See note 37 of our consolidated financial statements in “Item 18. Financial Statements” in this Annual Report on Form 20-F. Subject to the adoption of the dividend resolution at the annual general shareholders’ meeting on May 3, 2002, the total annual remuneration of the Supervisory Board for the year ended December 31, 2001, will amount to € 560,000. This consists of an annual fixed payment, which amounts to € 10,226 for the Chairman, € 7,669 for the Vice Chairman and € 5,113 for all other members of the Supervisory Board, plus a variable payment equal to € 2,100 per percentage point of distributed profits or dividends in relation to the share capital outstanding. Notwithstanding the foregoing, the Chairman, the Vice Chairman and the other members of the Supervisory Board will not receive annual remuneration in excess of 14 times the fixed remuneration (for the Chairman), 10.5 times the fixed remuneration (for the Vice Chairman) and seven times the fixed remuneration (for the other members of the Supervisory Board). In addition, Supervisory Board members are reimbursed for out-of-pocket expenses.

The total annual remuneration of the Executive Board for the year ended December 31, 2001 was € 8,043,000. This amount includes € 2,419,000 fixed and € 5,624,000 variable remuneration including non-recurring expense of € 1,120,000 in 2001 for the 1999 SARs. See note 37 to our consolidated financial statements included herein for additional information with respect to the issuance of convertible bonds and stock options to members of the Executive Board under the 2000 LTI Plan.

As of December 31, 2001, 2000 and 1999, we did not provide any loans, warranties or guaranties to the Executive Board. The pension accrual as of December 31, 2001, for former Executive Board members was € 1,396,000.

Employees

At December 31, 2001, we employed 28,878 people worldwide, which represented an increase of 18.0% from December 31, 2000. Of the total employees, 12,356 employees were based in Germany and 5,228 in the United States. The following table sets forth the number of employees at December 31, 2001, 2000 and 1999:

	Employees as of December 31,											
	2001				2000 ⁽¹⁾				1999 ⁽¹⁾			
	Total	EMEA	Americas	Asia	Total	EMEA	Americas	Asia	Total	EMEA	Americas	Asia
Customer Service & Support	13,014	8,159	3,311	1,544	11,177	6,169	3,202	1,286	10,199	5,523	3,451	1,225
Research & Development	7,665	5,849	1,122	694	6,211	5,383	726	622	5,403	4,269	678	456
Sales & Marketing	5,074	2,865	1,539	667	4,266	2,373	1,333	560	3,808	1,906	1,253	649
General & Administrative	<u>3,128</u>	<u>1,987</u>	<u>778</u>	<u>363</u>	<u>2,826</u>	<u>1,703</u>	<u>816</u>	<u>307</u>	<u>2,289</u>	<u>1,376</u>	<u>623</u>	<u>290</u>
SAP Group	<u>28,878</u>	<u>18,860</u>	<u>6,750</u>	<u>3,268</u>	<u>24,480</u>	<u>15,628</u>	<u>6,077</u>	<u>2,775</u>	<u>21,699</u>	<u>13,074</u>	<u>6,005</u>	<u>2,620</u>

(1) Certain reclassifications were made to these years to conform them to the 2001 presentation.

Sales revenue per average employee equaled € 267,405 for the year ended December 31, 2001, down from € 268,464 for the year ended December 31, 2000.

None of our employees are subject to a collective bargaining agreement. We have never experienced a work stoppage and believe that our employee relations are excellent.

Share Ownership

Beneficial Ownership of Shares

The ordinary shares beneficially owned by Dietmar Hopp (Chairman of the Supervisory Board), Hasso Plattner (Co-Chairman of the Executive board) and Klaus Tschira (Member of the Supervisory Board) are disclosed in “Item 7. Major Shareholders and Related Party Transactions — Major Shareholders.” We believe each of the other members of the Supervisory Board and the Executive Board beneficially owns less than 1% of the ordinary shares as of March 20, 2002.

Stock-Based Compensation Plans

LTI Plan

On January 18, 2000, SAP’s shareholders approved the LTI Plan. The LTI Plan is a stock-based compensation program providing members of the SAP AG Executive Board, members of subsidiaries’ executive boards and selected employees a choice between convertible bonds, stock options or 50% of each. Under the LTI Plan, 15 million convertible bonds or 18.75 million stock options are authorized, and a maximum of 18.75 million ordinary shares are authorized pursuant to a contingent capital increase for issuance upon conversion of the convertible bonds and exercise of the stock options granted under the LTI Plan. Upon conversion of the convertible bonds and exercise of the stock options, we will be required to provide ordinary shares in return for payment of the conversion or exercise price, as the case may be, which will be less than the market price for the ordinary shares at the time of such conversion or exercise.

After consideration of resolutions passed at the annual general shareholders’ meeting on May 3, 2001, we are authorized to purchase up to 17.4 million of our ordinary shares and to use such repurchased ordinary shares to satisfy our obligations upon conversion of the convertible bonds or exercise of the stock option. Although these repurchases of Preference Shares are expected to reduce the dilutive effects on earnings per share, our cash flows will be negatively impacted. In addition, we have repurchased 28,430 ordinary shares and issued them to stock option holders who have exercised stock options under the LTI Plan in March 2002.

SAP AG intends to grant awards under the LTI Plan through at least 2002. As of March 20, 2002, SAP AG has issued a total of 8.68 million convertible bonds and 3.63 million stock options under the LTI Plan.

The convertible bond program is considered a fixed plan under Accounting Principles Board Opinion No. 25, “Accounting for Stock Issued to Employees” (“APB 25”), and will result in no compensation expense under the current terms of the LTI Plan. Under APB 25, the stock option program is a variable plan because the exercise price varies depending upon the criteria described above. As such, compensation expense will be recorded over the vesting period equal to the difference between the exercise price of the stock options and the market value of the ordinary share. Stock options may negatively impact our results of operations and both stock options and convertible bonds may negatively impact our earnings per share and cash flows.

STAR Plan

The STAR Plan provides for the grant of SARs to eligible executives and employees of SAP AG and our majority owned subsidiaries. The STAR Plan is administered by SAP AG’s Executive Board with respect to eligible employees and by SAP AG’s Supervisory Board with respect to Executive Board members. Beginning with the introduction of the LTI Plan in 2000, LTI Plan participants may not receive SARs under the STAR Plan in the same fiscal year. The Executive Board or the Supervisory Board, as applicable, has the authority to determine: (i) the persons to whom grants may be made under the STAR Plan; (ii) the size and other terms and conditions of each grant; (iii) the time when the grants will be made and the duration of any applicable exercise or restriction period, including the criteria for vesting and the acceleration of vesting; and (iv) any other matters arising under the STAR Plan.

2002 SARs. As of March 20, 2002, we granted 3.5 million 2002 SARs to selected employees who are not participants in the LTI Plan. The 2002 SARs grant value of € 158.80 is based upon the average fair market value of one ordinary share over the 20 business days from the day after the announcement of our 2001

preliminary results on January 23, 2002. The valuation of the 2002 SARs is calculated quarterly, over a period of two years. Each quarterly valuation is weighted as follows in determining the final valuation of the 2002 SARs:

<u>Quarter Ended</u>	<u>Weighting Factor</u>	<u>Quarter Ended</u>	<u>Weighting Factor</u>
March 31, 2002	5%	March 31, 2003	10%
June 30, 2002	5%	June 30, 2003	10%
September 30, 2002	10%	September 30, 2003	10%
December 31, 2002	20%	December 31, 2003	30%

The valuations for the quarterly periods ending December 31 are based on the amount by which the grant price of € 158.80 is exceeded by the average fair market value of one ordinary share as quoted on the XETRA trading system over the 20 consecutive business days commencing on the day after the announcement of our preliminary annual results for 2002 and 2003. The other quarterly valuations are based on the amount by which the grant price of € 158.80 is exceeded by the average fair market value of an ordinary share quoted on the XETRA trading system over the five consecutive business days commencing on the day after the announcement of our quarterly results. Because each quarterly valuation is measured independently, it will be unaffected by any other quarterly valuation.

The cash payout value of each 2002 SAR will be calculated quarterly as follows: (i) 100% of the first € 50 value appreciation for such quarter; (ii) 50% of the next € 50 value appreciation; and (iii) 25% of any additional value appreciation. Participants will receive payments with respect to the 2002 SARs on March 31, 2004 and January 31, 2005, each payment equal to 50% of the total payout amount. Participants will receive 2002 SAR payments provided that (subject to certain exceptions) they continue to be actively employed by us on the payment dates.

2001 SARs. In 2001, we granted 3.4 million 2001 SARs to selected employees who are not participants in the LTI Plan. Additional information regarding the 2001 SARs is included in note 23 of “Item 18. Financial Statements”.

2000 SARs. In 2000, we granted approximately 3.3 million 2000 SARs (after consideration of the 3-for-1 stock split) to selected employees who did not participate in the LTI Plan and were employed by us on or prior to January 1, 1998. Because the grant price of the 2000 SARs was higher than the price of the preference shares during the measurement period, no payments will be made with respect to the 2000 SARs.

1999 SARs. In May 1999, the Executive Board granted approximately 1.5 million 1999 SARs to: (i) employees who were employed by us on or prior to January 1, 1997 (the “1999 Employee SARs”); and (ii) certain executives who were employed by us on or prior to January 1, 1997 (the “1999 Executive SARs”). The Supervisory Board determined the allocation of the 1999 Executive SAR grants to the Executive Board. The grant price of the 1999 SARs was € 337 (which was the average mid-session auction price of a preference share over the 10 calendar days beginning with the announcement on April 21, 1999 of our 1999 first quarter earnings and ending on April 30, 1999). The end price for the 1999 Employee SARs was € 822 (which was the average mid-session auction price of a preference share over the 20 business days immediately following the date of the announcement of our preliminary results for the fiscal year 1999). The terms of the 1999 Executive SARs were modified during 1999 to mirror those of the 1999 Employee SARs. For each 1999 SAR awarded, the eligible participants are entitled to receive cash equal to 100% of the appreciation in the price of the preference shares during the measurement period between the grant price and the end price, equal to € 161.67 after consideration of the 3-for-1 stock split. Payments with respect to the 1999 SARs were made in three equal installments in July 2000, January 2001 and July 2001, provided that (subject to certain exceptions) the participating employee continued to be actively employed by us on the payment dates.

1994 Bonds

SAP has outstanding convertible bonds issued in 1994 to eligible participants, each of which is convertible into three preference shares (the “1994 Bonds”). After the conversion of the preference shares into ordinary shares, each bond is convertible into three ordinary shares. The conversion rights of the 1994



Bonds became exercisable for the first time on September 30, 1996 and are thereafter exercisable on each June 30, July 31, August 31, September 30, October 31 and November 30, until June 30, 2004. At December 31, 2001, 7.7% of the 1994 Bonds remained outstanding, and 921,000 ordinary shares would be issued upon the conversion thereof. See notes 21 and 23 to our consolidated financial statements included herein.

German Employee Stock Purchase Plans

SAP AG maintains two employee stock purchase plans for our German employees: (i) an ongoing payroll deduction plan (the “German Payroll Deduction Plan”); and (ii) an annual purchase plan (the “German Annual Purchase Plan”). Under the German Payroll Deduction Plan, an eligible German employee is able to purchase ordinary shares through payroll deductions of up to 10% of the gross monthly salary of the employee and SAP contributions of 15% of the ordinary share purchase price as well as the assumption of ancillary purchase expenses. As soon as the amount available for an employee is sufficient together with our contribution to purchase an ordinary share, such purchase is effected at the market price and credited to the employee’s account. The acquired shares are not subject to a holding period. Under the German Annual Purchase Plan, eligible German employees may buy a determined number of ordinary shares per year on a set date. Under such plan, SAP contributes € 260 per year. The employee provides any additional amounts, if necessary, to avoid the purchase of fractional shares. The acquired shares are transferred to a special account of the participating employee, and, as a result of a 2001 change in German law, they are not subject to a holding period. Employees must elect each year to participate in the German Annual Purchase Plan.

U.S. Employee Stock Purchase Plans

We maintain three plans which allow for our U.S. employees to acquire equity securities of SAP AG as follows: (i) an Employee Discount Stock Purchase Plan (“U.S. Discount Plan”); (ii) an employee non-discount purchase plan (the “U.S. Non-discount Plan”); and (iii) the ADR Stock Fund (the “ADR Stock Fund”) available under the SAP America, Inc. 401(k) Profit Sharing Plan and Trust (“401(k) Plan”). Under the U.S. Discount Plan, eligible employees are able to purchase ADRs through payroll deductions of up to 10% of their annual compensation or \$ 21,250, whichever is less, and we contribute 15% of the ADR’s purchase price as well as the assumption of ancillary purchase expenses. Under the U.S. Non-discount Plan, an administrator makes open market purchases of ADRs for the accounts of participating employees on a semi-monthly basis. Such purchases are made out of amounts deducted from each participating employee’s salary. We do not make any contributions in connection with the U.S. Non-discount Plan. The ADR Stock Fund was introduced in 2000 as an investment option provided to certain U.S. employees under the 401(k) Plan. U.S. employees may contribute up to 15% of their pretax and after tax payroll under the 401(k) Plan, and we will contribute 50% of the contributed amounts up to 6% of the pretax and after tax pay (not to exceed \$ 3,000 per year). Both employee and employer contributions are submitted to a plan administrator who provides various investment fund options at the election of each participant. In 2000, the participants were provided with an option to invest in a fund consisting of primarily ADRs. Contributions to the ADR Stock Fund are subject to the same terms as 401(k) Plan limitations.

Other Foreign Stock Purchase Plans

Although we maintain and are in the process of introducing various employee stock purchase plans similar to our German and U.S. plans in the majority of our remaining foreign subsidiaries, the combined impact of these plans on our results of operations, net income and cash flows is not material.

Item 7. Major Shareholders and Related Party Transactions

Major Shareholders

The share capital of SAP AG consists of ordinary shares, which are issued only in bearer form. Accordingly, SAP AG generally has no way of determining who our shareholders are or how many shares a particular shareholder owns. However, under Section 21 of the German Securities Trading Act (*Wertpapier-*

handelsgesetz), holders of voting securities of a German company admitted to official trading on a stock exchange within the European Union or the European Economic Area are obligated to notify a company of the level of their holdings whenever such holdings reach, exceed or fall below certain thresholds, which have been set at 5%, 10%, 25%, 50% and 75% of a company’s outstanding voting rights.

The following table sets forth certain information regarding the beneficial ownership of the ordinary shares as of March 20, 2002 of: (i) each person or group known by SAP AG to own beneficially 5% or more of the outstanding ordinary shares; and (ii) the beneficial ownership of all members of the Supervisory Board and all members of the Executive Board, individually and as a group, in each case as reported to SAP AG by such persons.

Principal Shareholders	Ordinary Shares Beneficially Owned	
	Number	% of Outstanding
Dietmar Hopp		
Chairman Supervisory Board	33,028,795 ⁽¹⁾	10.491%
Dietmar Hopp Stiftung GmbH	28,017,300 ⁽²⁾	8.899%
Prof. Dr. h.c. Hasso Plattner		
Co-Speaker, Executive Board	37,240,500 ⁽³⁾	11.828%
Hasso Plattner GmbH & Co.		
Beteiligungs-KG	31,240,500 ⁽⁴⁾	9.923%
Hasso Plattner Foerderstiftung, gGmbH	6,000,000 ⁽⁵⁾	1.906%
Dr. h.c. Klaus Tschira		
Member, Supervisory Board	38,987,460 ⁽⁶⁾	12.383%
Dr. h.c. Tschira Beteiligungs GmbH & Co. KG	15,832,660 ⁽⁷⁾	5.029%
Klaus Tschira Stiftung gGmbH	21,154,800 ⁽⁸⁾	6.719%
Pooling Shareholders	84,017,300 ⁽⁹⁾	26.686%
Executive Board Members and Supervisory Board Members, as a group (18 persons)	109,270,512	34.706%

(1) Includes: (i) 28,017,300 ordinary shares owned by Dietmar Hopp Stiftung GmbH, and (ii) 5,011,495 ordinary shares owned by Golfplatz St. Leon-Rot GmbH & Co. Beteiligungs-KG, as to which Mr. Hopp exercises sole voting and dispositive power. Mr. Hopp disclaims beneficial ownership with respect to 8,721,100 ordinary shares owned in the aggregate by Mr. Hopp’s immediate family and such shares are not included above. Effective as of June 18, 2001, Mr. Dietmar Hopp and Mr. Oliver Hopp were no longer a party to the Pooling Agreement.

(2) The Dietmar Hopp Stiftung GmbH is a party to the Pooling Agreement described below.

(3) Consists of: (i) 31,240,500 ordinary shares owned by Hasso Plattner GmbH & Co. Beteiligungs-KG, as to which Dr. Plattner exercises sole voting and dispositive power; and (ii) 6,000,000 ordinary shares owned by Hasso Plattner Foerderstiftung, gGmbH, as to which Dr. Plattner exercises sole voting and dispositive power. Effective as of December 7, 1998, Dr. Plattner was no longer a party to the Pooling Agreement described below, and the Hasso Plattner GmbH & Co. Beteiligungs-KG and the Hasso Plattner Foerderstiftung, gGmbH became parties to such Pooling Agreement.

(4) Dr. Plattner owns a 100% partnership interest in and controls the Hasso Plattner GmbH & Co. Beteiligungs-KG. The Hasso Plattner GmbH & Co. Beteiligungs-KG is a party to the Pooling Agreement described below, and 23,000,000 such ordinary shares are subject to the Pooling Agreement described below.

(5) The Hasso Plattner Foerderstiftung, gGmbH is a party to the Pooling Agreement described below.

(6) Includes 21,154,800 ordinary shares owned by Klaus Tschira Stiftung gGmbH, as to which Dr. Tschira exercises shared voting and dispositive power. Dr. Tschira disclaims beneficial ownership with respect to 2,133,840 ordinary shares owned in the aggregate by Dr. Tschira’s immediate family and such shares are not included above. Effective as of December 2001, Dr. Tschira is no longer a party to the Pooling Agreement

(7) Effective as of December 2001, the Dr. h.c. Tschira Beteiligungs GmbH & Co. KG is a party to the Pooling Agreement described below.

- (8) The Klaus Tschira Stiftung gGmbH is a party to the Pooling Agreement described below.
- (9) See description of Pooling Agreement below.

We have been informed that entities controlled by certain shareholders (the “Pooling Shareholders”), who in the aggregate beneficially hold 109,256,755 ordinary shares (which represent 34.702% of the outstanding ordinary shares as of March 20, 2002), are parties to a pooling agreement most recently amended and restated as of December 31, 2001 (the “Pooling Agreement”) with respect to ordinary shares owned by them that constitute in the aggregate 26.686% of the outstanding ordinary shares (the “Pooled Shares”). Each of the individuals controlling the Pooling Shareholders disclaims beneficial ownership with respect to ordinary shares owned by immediate family members. Pursuant to the Pooling Agreement, the Pooling Shareholders have agreed to vote their Pooled Shares jointly with respect to certain matters coming before SAP AG’s general shareholders’ meetings, including the election of the members of the Supervisory Board elected by SAP AG’s shareholders. The Pooling Agreement contains restrictions on the transfer of the Pooled Shares to non-Pooling Shareholders and provides for a right of first refusal in the event a Pooling Shareholder wishes to transfer their Pooled Shares. Any Pooling Shareholder may terminate their participation in the Pooling Agreement by giving six months’ notice prior to either June 30 or December 31 of any year.

Related Party Transactions

We enter into transactions in the ordinary course of business with entities with which certain members of the Supervisory Board, Executive Board or their relatives are affiliated. We do not consider the amount involved in such transactions to be material to the business of SAP or the entities involved.

Item 8. Financial Information

Consolidated Financial Statements

See “Item 18. Financial Statements” and pages F-1 through F-58 and S-1.

Other Financial Information

Legal Proceedings

The German Federal Supervisory Office for Securities Trading (*Bundesaufsichtsamt für den Wertpapierhandel*) announced in January 1999 that it had initiated an investigation regarding possible insider trading by certain SAP AG employees prior to the release on January 5, 1999 of our preliminary results for 1998. We have cooperated with this investigation. Although the outcome of such investigation cannot be predicted with certainty, we currently believe that the German Federal Supervisory Office for Securities Trading and the Public Prosecutor have discontinued this investigation without seeking judgments against the persons under investigation.

The bankruptcy trustee of the U.S. company FoxMeyer Corp. (“FoxMeyer”) instituted legal proceedings against SAP AG and SAP America Inc., the U.S. subsidiary of SAP AG, in 1998. FoxMeyer was a pharmaceutical wholesaler that filed for bankruptcy protection in 1996. The discovery phase of the litigation is now proceeding. While the ultimate outcome of this matter cannot be presently determined with certainty, we believe that FoxMeyer’s claims in this action are without merit. We are vigorously defending against the claims, and believe that this action is not likely to have a material effect on our business, results of operations, financial condition or cash flows.

We are subject to legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. Although the outcome of these proceedings and claims cannot be predicted with certainty, management does not believe that the outcome of any of these matters will have a material adverse effect on our business, results of operations, financial position or cash flows. Any litigation, however, involves potential risk and potentially significant litigation costs, and therefore there can be no assurance that any litigation which is now pending or which may arise in the future would not have such a material adverse effect on our business, financial position, results of operations or cash flows.

Dividend Policy

Dividends are jointly proposed by SAP AG’s Supervisory Board and Executive Board based on SAP AG’s year-end financial statements, subject to approval at the annual general shareholders’ meeting and are officially declared for the prior year at SAP AG’s annual general shareholders’ meeting. SAP AG’s annual general shareholders’ meeting usually convenes during the second quarter of each year. Since ordinary shares are in bearer form, dividends are remitted to the custodian bank on behalf of the shareholder within one business day following the annual general shareholders’ meeting. Record holders of the ADSs on the dividend record date will be entitled to receive payment in full of the dividend declared in respect of the year for which it is declared. Cash dividends payable to such holders will be paid to the Depositary in euros and, subject to certain exceptions, will be converted by the Depositary into Dollars. The amount of dividends received by holders of ADSs may be affected by fluctuations in exchange rates. See “Item 3. Key Information — Exchange Rates.”

The amount of dividends paid on the ordinary shares depends on the amount of profits to be distributed by SAP AG, which depends in part upon our performance. The timing and amount of future dividend payments will depend upon our future earnings, capital needs and other relevant factors.

Significant Changes

No significant change has occurred since the dates of the annual financial statements included in this Annual Report on Form 20-F.

Item 9. The Offer and Listing

Nature of Trading Market

General

The ordinary shares are listed on each of the Frankfurt Stock Exchange, the Berlin Stock Exchange and the Stuttgart Stock Exchange. The ordinary shares are also listed on the Zurich Stock Exchange. In addition, the ordinary shares are traded in the over-the-counter markets (*Freiverkehr*) in Germany. The principal trading market for the ordinary shares is the Frankfurt Stock Exchange. The ordinary shares are issued only in bearer form.

Pursuant to resolutions adopted at our annual general shareholders’ meeting and a special meeting of holders of the preference shares on May 3, 2001, we effected on June 18, 2001 a conversion of the preference shares into ordinary shares on a share for share basis. The amount of subscribed capital for ordinary shares was therefore increased by the amount of preference shares converted on the effective date of the conversion. Due to the conversion, the ordinary shares are registered and listed on the various stock exchanges in Europe.

Effective August 3, 1998, the ADSs were listed on the New York Stock Exchange (“NYSE”) originally representing a fraction of a preference share. Due to the conversion, ordinary shares were registered with the NYSE as the underlying security for the ADSs. The ADSs trade on the NYSE under the symbol “SAP” and currently each represents one-fourth of one ordinary share. The Depositary for the ADSs pursuant to the Deposit Agreement is The Bank of New York.

Trading on the Frankfurt Stock Exchange

The Frankfurt Stock Exchange is the largest of the eight German stock exchanges. The aggregate annual turnover of the Frankfurt Stock Exchange in 2001 of € 3.8 trillion (based on the Frankfurt Stock Exchange’s practice of separately recording the sale and purchase components involved in any trade) for both equity and debt instruments. At December 31, 2001, the equity securities of 5,777 corporations, including 4,865 foreign corporations, were traded on the Frankfurt Stock Exchange.

Prices are continuously quoted on the Frankfurt Stock Exchange floor each business day between 9:00 a.m. and 8:00 p.m. Central European Time for the ordinary shares and for other actively traded securities. Markets in listed securities are generally of the auction type, but listed securities also change hands in inter-

bank dealer markets off the Frankfurt Stock Exchange. Price formation on the Frankfurt Stock Exchange is determined by open outcry by state-appointed specialists (*amtliche Kursmakler*) who are themselves exchange members, but who do not, as a rule, deal with the public. Transactions on the Frankfurt Stock Exchange are settled on the second business day following trading. Transactions off the Frankfurt Stock Exchange (which may be the case if one of the parties to the transaction is foreign) are generally also settled on the second business day following trading (although a different period may be agreed upon by the parties). A quotation can be suspended by the Frankfurt Stock Exchange if orderly stock exchange trading is temporarily endangered or if a suspension is necessary in order to protect the public interest. Under German law, customers' orders to buy or sell listed securities must be executed on a stock exchange unless the customer gives other specific instructions for an individual transaction or an indeterminate number of transactions.

The ordinary shares are also traded on XETRA, a computerized trading system of the Frankfurt Stock Exchange. The trading hours for XETRA are from 9:00 a.m. until 8:00 p.m. Central European Time on each business day. Securities traded on XETRA include the securities of the 30 companies comprising the Deutsche Aktienindex ("DAX"), the leading index of trading on the Frankfurt Stock Exchange, as well as other high-volume shares, equity warrants, government obligations and government agency securities. The preference shares were included in the DAX since September 15, 1995 and were replaced by ordinary shares upon the conversion on June 18, 2001.

The table below sets forth, for the periods indicated, the high and low closing sales prices for the ordinary shares and for the preference shares, prior to June 18, 2001, on the Frankfurt Stock Exchange, as provided by the Deutsche Boerse AG, together with the closing highs and lows of the DAX. Since January 4, 1999, the first official trading day of 1999, the share prices of shares traded on the German stock exchanges have been quoted in euros.

	Price Per Ordinary Share ⁽¹⁾		Price Per Preference Share ⁽¹⁾⁽²⁾		DAX ⁽³⁾	
	High	Low	High	Low	High	Low
	(in €)		(in €)			
Annual Highs and Lows						
1997 ⁽⁴⁾	95.78	35.53	101.41	35.94	4,438.93	2,848.77
1998 ⁽⁴⁾	207.75	87.94	224.12	95.78	6,171.43	3,896.08
1999	166.00	78.67	208.33	89.67	6,958.14	4,678.72
2000	286.33	112.65	349.96	140.94	8,064.97	6,200.71
2001	180.90	100.00	N/A	N/A	6,795.14	3,787.23
Quarterly Highs and Lows						
2000						
First Quarter	286.33	138.20	349.96	172.67	8,064.97	6,474.92
Second Quarter	197.67	140.07	248.00	178.20	7,555.92	6,834.88
Third Quarter	241.80	152.00	309.48	193.40	7,480.14	6,682.92
Fourth Quarter	226.30	112.65	284.20	140.94	7,136.30	6,200.71
2001						
First Quarter	167.41	100.00	210.00	125.10	6,795.14	5,388.02
Second Quarter	180.90	108.25	181.00	110.00	6,278.90	5,553.46
Third Quarter	171.60	100.49	N/A	N/A	6,109.50	3,787.23
Fourth Quarter	156.11	111.30	N/A	N/A	5,271.29	4,239.97
Monthly Highs and Lows						
2001						
July	166.00	138.89	N/A	N/A	6,109.50	5,582.76
August	171.60	148.50	N/A	N/A	5,835.23	5,162.40
September	145.26	100.49	N/A	N/A	5,208.10	3,787.23
October	135.10	111.30	N/A	N/A	4,820.26	4,239.97
November	138.00	116.85	N/A	N/A	5,185.10	4,583.31
December	156.11	140.01	N/A	N/A	5,271.29	4,909.42
2002						
January	168.90	143.18	N/A	N/A	5,318.73	4,984.20
February	162.80	148.99	N/A	N/A	5,097.06	4,745.58
March (through March 20)	176.30	158.90	N/A	N/A	5,462.55	5,097.41

(1) Since January 1, 2000, ordinary share prices are obtained from XETRA. Similarly preference share prices between January 1, 2000 and June 18, 2001 were obtained from XETRA.

(2) All amounts for the preference shares shown reflect the highs and lows through June 18, 2001 due to the conversion of preference shares to ordinary shares.

(3) The DAX is a continuously updated, capital-weighted performance index of 30 German blue chip companies. In principle, the shares included in the DAX are selected on the basis of their stock exchange turnover and the issuer's market capitalization. Adjustments to the DAX are made for capital changes, subscription rights and dividends. Subsequent to June 18, 1999, the highs and lows of the DAX are disclosed on XETRA.

(4) Translated for the convenience of the reader from Marks into euros at the Official Fixed Conversion Rate.

On March 20, 2002, the closing sales price per ordinary share on the Frankfurt Stock Exchange was € 169.49, as provided by the Deutsche Boerse AG.

Trading on the NYSE

At March 20, 2002, based upon information provided by the Depositary, there were 48,718,172 ADSs, representing approximately 12,179,543 ordinary shares, held of record by 1,030 registered holders. The ordinary shares underlying such ADSs represented 3.9% of the then-outstanding ordinary shares. Because the ordinary shares are issued in bearer form only, we are unable to determine the number of ordinary shares directly held by persons with U.S. addresses.

The table below sets forth, for the periods indicated, the high and low closing sales prices for the ADSs on the NYSE as reported on the NYSE Composite Tape.

	Price Per ADS	
	High	Low
	(in U.S.\$)	
Annual Highs and Lows		
1998 (commencing August 3)	59.56	31.00
1999	53.75	23.81
2000	83.94	31.75
2001	47.64	23.00
Quarterly Highs and Lows		
1998		
Third Quarter (commencing August 3)	59.56	38.94
Fourth Quarter	44.88	31.00
1999		
First Quarter	37.00	23.81
Second Quarter	36.81	24.63
Third Quarter	39.25	30.31
Fourth Quarter	53.75	33.13
2000		
First Quarter	83.94	44.87
Second Quarter	59.19	40.94
Third Quarter	67.81	46.06
Fourth Quarter	62.19	31.75
2001		
First Quarter	47.64	28.59
Second Quarter	40.99	24.39
Third Quarter	37.73	23.00
Fourth Quarter	34.80	25.09
Monthly Highs and Lows		
2001		
July	36.08	29.30
August	37.73	33.82
September	31.47	23.00
October	30.49	25.09
November	31.03	26.50
December	34.80	31.43
2002		
January	36.98	32.41
February	34.85	32.57
March (through March 20)	38.84	35.32

On March 20, 2002, the closing sales price per ADS on the NYSE was U.S.\$ 37.40, as reported on the NYSE Composite Tape.

Item 10. Additional Information

Articles of Incorporation

Organization and Register

SAP AG is a stock corporation organized in the Federal Republic of Germany under the Stock Corporation Law (*Aktiengesetz*). SAP AG is registered in the Commercial Register (*Handelsregister*) maintained by the local court in Heidelberg, Germany, under the entry number “HRB 269-Wie.” SAP AG’s official notices are published in the *Bundesanzeiger*.

Corporate Governance

In contrast to corporations organized in the United States, SAP AG, as a German stock corporation, is governed by three separate bodies: the Supervisory Board, the Executive Board and the annual general shareholders’ meeting. Their roles are defined by German law and by SAP AG’s Articles of Incorporation (*Satzung*), and may be described generally as follows:

The Supervisory Board

The Supervisory Board appoints and removes the members of the Executive Board and oversees the management of the corporation. Although prior approval of the Supervisory Board may be required in connection with certain significant matters, the law prohibits the Supervisory Board from making management decisions. The Supervisory Board is also responsible for representing SAP AG in connection with transactions between an Executive Board member and SAP AG.

The Supervisory Board currently consists of 12 members, of which six members are elected by SAP AG’s shareholders at a general shareholders’ meeting and six members are elected by SAP AG’s employees pursuant to the German Co-determination Act of 1976 (*Mitbestimmungsgesetz*). As the number of our employees in Germany exceeds 10,000, the Supervisory Board will be enlarged at the next shareholders’ meeting in May 2002, bringing the total number of members of the Supervisory Board to 16, of which eight will be elected by the shareholders and eight will be appointed by SAP employees. Any Supervisory Board member elected by the shareholders at the general shareholders’ meeting may be removed by two-thirds of the votes cast at a general shareholders’ meeting. Any Supervisory Board member elected by the employees may be removed by three-quarters of the votes cast by the employees.

The Supervisory Board chooses a Chairman and a Vice-Chairman from among its members by a majority vote of its members. If such majority is not reached on the first vote, the Chairman will be chosen solely by the members elected by the shareholders, and the Vice Chairman will be chosen solely by the members elected by the employees. Unless otherwise provided for by law, the Supervisory Board acts by simple majority. In the case of any deadlock, the Chairman has the deciding vote.

The members of the Supervisory Board are each elected for the same fixed term of approximately five years. The term expires at the end of the annual general shareholders’ meeting after the fourth fiscal year following the year in which the Supervisory Board was elected unless the annual general shareholders’ meeting specifies a shorter term of office when electing individual members of the Supervisory Board or the entire Supervisory Board. Reelection is possible. The term of a member of the Supervisory Board appointed by a court to cure a deficiency in the composition of the Supervisory Board ends at the time when such deficiency is cured. The term of a member of the Supervisory Board elected by the shareholders to succeed a departing member ends at the time when the term of the original member would have ended. A substitute member of the Supervisory Board may be elected by the shareholders at the same time as a member to replace such member in case he or she departs. The term of a substitute member who replaces a departing member ends with the conclusion of the next general shareholders’ meeting where members of the Supervisory Board are

elected or, at the latest, at the time when the term of the original member would have ended. The remuneration of the members of the Supervisory Board is determined by the Articles of Incorporation.

The Supervisory Board may appoint committees from among its members and may, to the extent permitted by law, vest committees with the authority to make decisions. Currently, seven committees exist: the Audit Committee (*Bilanzprüfungsausschuss*), the Compensation Committee (*Personalausschuss*), Technology Committee (*Technologie-Ausschuss*), Venture Capital Committee (*Venture-Capital-Ausschuss*), the Finance Committee (*Finanzausschuss*), the Mediation Committee (*Vermittlungsausschuss*) and the Corporate Governance Committee (*Corporate Governance-Ausschuss*).

The Executive Board

The Executive Board manages the corporation’s business and represents it in dealings with third parties. The Executive Board submits regular reports to the Supervisory Board about SAP operations and business strategies, and prepares special reports upon request. A person may not serve on the Executive Board and the Supervisory Board of a corporation at the same time.

Pursuant to the Articles of Incorporation, the Executive Board must consist of at least two members. Any two members of the Executive Board or one member of the Executive Board and the holder of a procuration (a power of attorney) may legally represent SAP AG. Each member of the Executive Board is appointed by the Supervisory Board for a maximum term of five years and is eligible for reappointment thereafter. Under certain circumstances, such as a serious breach of duty or a vote of no confidence (*Vertrauensentzug*) by a majority of shareholders at a general shareholders’ meeting, a member of the Executive Board may be removed by the Supervisory Board prior to the expiration of such term. A member of the Executive Board may not vote on matters relating to certain contractual agreements between such member and SAP and may be liable to SAP if such member has a material interest in any contractual agreement between SAP and a third party, which was not disclosed to, and approved by, the Supervisory Board.

Under German law, SAP AG’s Supervisory Board members and Executive Board members owe a duty of loyalty and care to SAP AG. They must exercise the standard of care of a prudent and diligent businessman and bear the burden of proving they did so if their actions are contested. Both boards must consider the interests of SAP AG’s shareholders and our workers and, to some extent, the common interest. Those who violate their duties may be held jointly and severally liable for any resulting damages, unless their actions were validly approved by resolution at a shareholders’ meeting.

The Annual General Shareholders’ Meeting

The annual general shareholders’ meeting ratifies the actions of SAP AG’s Supervisory Board and the Executive Board. It approves the amount of the appropriation of retained earnings, the appointment of an independent auditor and certain significant corporate transactions. Under German law, shareholders and employees elect or appoint an equal number of representatives to the Supervisory Board of all corporations with more than 2000 employees. The Executive Board or the Supervisory Board shall call the annual general shareholders’ meeting. The annual general shareholder’s meeting must be held within the first eight months of each fiscal year.

Objectives and Purposes

Section 2 of SAP AG’s Articles of Incorporation states that our objectives involve direct or indirect activity in the area of development, production and marketing of products and the provisions of services in the field of information technology, including:

- developing and marketing integrated product and service solutions for e-commerce;
- developing software for information technology and the licensing of our use to others;
- organization and deployment consulting as well as user training for e-commerce and other software solutions;

- selling, leasing, renting or arranging the procurement and provision of all other forms of use of information technology systems and related equipment; and
- making capital investments in enterprises active in the field of information technology to promote the opening and advancement of international markets in the field of information technology.

Additionally, SAP AG is authorized to delegate all of the above activities, in whole or in parts, to affiliated enterprises. SAP AG is authorized to establish branch offices in Germany and other countries, as well as to form, acquire or invest in other companies. SAP AG is authorized to invest in enterprises of all kinds for the purpose of placing financial resources and to manage and dispose of the investments. SAP AG is authorized to take all actions and measures consistent with the above objectives and purposes.

Share Capital

As of December 31, 2001 the share capital of SAP AG amounts to € 314,825,685, consisting of 314,825,685 no-par ordinary shares. The ordinary shares are issued only in bearer form.

SAP AG’s shareholders approved at the annual general shareholders’ meeting and a special meeting of holders of preference shares held on May 3, 2001 the conversion of each preference share into one ordinary share. The conversion was effective as of June 18, 2001.

Some of the significant provisions under German law and SAP AG’s Articles of Incorporation relating to the capital stock of SAP AG may be summarized as follows:

- *Capital Increases.* The capital stock may be increased in consideration of contributions in cash or in property, or by establishing authorized capital or contingent capital or by share capital reserves. Authorized capital provides the Executive Board with the flexibility to issue new shares for a period of up to five years, generally to preserve liquidity. Contingent capital allows the Executive Board to issue new shares for specified purposes, including employee stock option plans and the issuance of shares upon conversion of convertible bonds and exercise of stock options. Capital increases of ordinary shares require an amendment of the Articles of Incorporation approved by 75% of the issued shares present at the general shareholders’ meeting at which the increase is proposed. The Executive Board must also obtain the approval of the Supervisory Board before issuing new shares. SAP AG’s Articles of Incorporation do not contain conditions regarding changes in the capital stock that are more stringent than the law requires.
- *Authorized and Contingent Capital.* Information regarding our authorized and contingent capital is included in note 21 of our consolidated financial statements included herein.
- *Redemption.* The share capital may be reduced by an amendment of the Articles of Incorporation approved by 75% of the issued shares present at the general shareholders’ meeting.
- *Preemptive Rights.* Shareholders have preemptive rights for capital increases. Subject to an authorization of the shareholders’ meeting and consent of the Supervisory Board, these preemptive rights may be excluded by the Executive Board.
- *Liquidation.* If SAP AG were to be liquidated, any liquidation proceeds remaining after all of our liabilities were paid would be distributed to our shareholders in proportion to their shareholdings.
- *No Limitation on Foreign Ownership.* There are no limitations under German law or in SAP AG’s Articles of Incorporation on the right of persons who are not citizens or residents of Germany to hold or vote ordinary shares.

Voting Rights

Each ordinary share represents one vote.

Cumulative voting is not permitted under German law. SAP AG’s Articles of Incorporation provide that resolutions are passed at general shareholders’ meetings by a majority of votes cast, unless a higher vote is

required by law. Additionally, German law requires that the following matters, among others, be approved by the affirmative vote of 75% of the issued shares present at the general shareholders’ meeting at which the matter is proposed:

- changing the objectives provision in the articles of incorporation;
- capital increases and capital decreases;
- excluding preemptive rights of shareholders to subscribe for new shares;
- dissolution;
- a merger into, or a consolidation with, another stock corporation;
- a transfer of all or virtually all of the assets; and
- a change of corporate form.

Shareholder Meetings

The Supervisory Board or the Executive Board may call a special meeting of the shareholders. Additionally, shareholders of SAP AG holding in the aggregate at least 5% of SAP AG’s issued share capital may call a special meeting of the shareholders.

Among other things, the annual general meeting is asked to ratify the actions of the Board of Management and the Supervisory Board during the prior year, approve the distribution of Company profits and the appointment of an independent auditor. Shareholder representatives to the Supervisory Board are elected at the annual general meeting for terms of approximately five years.

Change in Control

There are no provisions in the Articles of Incorporation of SAP AG that would have an effect of delaying, deferring or preventing a change in control of SAP AG and that would only operate with respect to a merger, acquisition or corporate restructuring involving it or any of its subsidiaries.

On January 1, 2002, the German Takeover Act (*Wertpapiererwerbs- und Übernahmegesetz*) became effective. It requires, among other things, that a bidder seeking control of a company with its corporate seat in Germany and traded on a European Union stock exchange must publish advance notice of a tender offer; submit a draft offer statement to the Federal Supervisory Authority for Securities Trading (*Bundesaufsichtsammt für den Wertpapierhandel*) for review; and obtain certification from a qualified financial institution that adequate financing is in place to complete the offer. Once a bidder has acquired shares representing 30% of the voting power, it must make an offer for all remaining shares of the target. The Takeover Act requires the Executive Board of the target to refrain from taking any measures that may frustrate the success of the takeover offer. However, the target executive board is permitted to take any action which a prudent and diligent management of a company that is not the target of a takeover bid would also take. Moreover, the target executive board may search for other bidders and, with the prior approval of the supervisory board, may take other defensive measures, provided that both boards act within the parameters of their general authority under the German Stock Corporation Law. An executive board may also adopt specific defensive measures if such measures have been approved by the supervisory board and were specifically authorized by the shareholders no later than eighteen months in advance of a takeover bid by resolution of 75% of the votes cast.

Disclosure of Share Holdings

SAP AG’s Articles of Incorporation do not require shareholders to disclose their share holdings. The Securities Trading Act (*Wertpapierhandelsgesetz*), however, requires holders of voting securities of a corporation whose shares are listed on a stock exchange to notify SAP AG of the number of shares they hold if that number reaches, exceeds or falls below specified thresholds. These thresholds are 5%, 10%, 25%, 50% and 75% of the corporation’s outstanding voting rights.

Currency Conversion — Dividends

See “Item 3. Key Information — Dividends” and “Item 8. Financial Information — Dividend Policy.”

Material Contracts

We do not believe that any one particular contract if terminated would have a material adverse effect on our business, results of operations, financial condition or cash flows.

Exchange Controls and Other Limitations Affecting Security Holders

The euro is a fully convertible currency. At the present time, Germany does not restrict the export or import of capital, except for investments in certain areas in accordance with applicable resolutions adopted by the United Nations and the European Union. However, for statistical purposes only, every individual or corporation residing in Germany (“Resident”) must report to the German Central Bank (*Deutsche Bundesbank*), subject only to certain immaterial exceptions, any payment received from or made to an individual or a corporation resident outside of Germany if such payment exceeds € 12,500 (or the equivalent in a foreign currency). In addition, German Residents must report any claims against or any liabilities payable to non-residents if such claims or liabilities, in the aggregate, exceed DM 3 million (approximately € 1.5 million) (or the equivalent in a foreign currency) during any one month. For a discussion of the treatment of remittance of dividends, interest or other payments to Non-resident holders of ADSs or ordinary shares, see “— Taxation — German Taxation of Holders of ADSs or Ordinary Shares.”

There are no limitations imposed by German law or the Articles of Incorporation (*Satzung*) of SAP AG on the right of non-residents or foreign holders to hold the ADSs or ordinary shares.

Taxation

General

The following discussion summarizes certain German tax and U.S. federal income tax consequences of the acquisition, ownership and disposition of ADSs or ordinary shares. Although the following discussion does not purport to describe all of the tax considerations that may be relevant to a prospective purchaser of ADSs or ordinary shares, such discussion: (i) summarizes the material German tax consequences to a holder of ADSs or ordinary shares; and (ii) summarizes the material U.S. federal income tax consequences to a U.S. Holder (as hereinafter defined) of ADSs or ordinary shares that is not resident (in the case of an individual) or domiciled (in the case of a legal entity), as the case may be, in Germany (in either case, referred to herein as “not resident” or as a “non-resident”) and does not have a permanent establishment or fixed base located in Germany through which such ADSs or ordinary shares are held.

German Taxation of Holders of ADSs or Ordinary Shares

The following discussion generally summarizes the principal German tax consequences of the acquisition, ownership and disposition of ADSs or ordinary shares to a beneficial owner. This summary is based on the laws that are in force at the date hereof and is subject to any changes in German law, or in any applicable double taxation conventions to which Germany is a party, occurring after such date. In October 2000, the Tax Reduction Act (*Steuersenkungsgesetz*) was enacted in Germany as part of an extensive tax reform. In December 2001, the Act on Further Development of Company Taxation (*Gesetz zur Fortentwicklung des Unternehmenssteuerrechts*) was enacted as the second stage of the tax reform. For companies whose fiscal year is the calendar year, such as SAP AG, most of the regulations with regard to dividends, capital gains and other relevant provisions enter into effect for the tax year 2002. The following discussion addresses only those regulations, which are valid in the 2002 tax year. This discussion is also based, in part, on representations of the Depositary and assumes that each obligation of the Deposit Agreement and any related agreements will be performed in accordance with its terms.

The following discussion is not a complete analysis or listing of all potential German tax consequences to holders of ADSs or Ordinary Shares and does not address all tax considerations that may be relevant to all

categories of potential purchasers or owners of ADSs or Ordinary Shares. In particular, the following discussion does not address the tax consequences for: (i) a person that owns, directly or indirectly, 1% or more of SAP AG’s shares; (ii) a holding which forms part of a German permanent establishment of a person not resident in Germany; or (iii) a person that is resident in Germany and at the same time resident in another country.

OWNERS AND PROSPECTIVE PURCHASERS OF ADSs OR ORDINARY SHARES ARE URGED TO CONSULT THEIR OWN TAX ADVISORS CONCERNING THE OVERALL GERMAN TAX CONSEQUENCES OF THE ACQUISITION, OWNERSHIP AND DISPOSITION THEREOF.

For purposes of applying German tax law and the double tax conventions to which Germany is a party, a holder of ADSs will generally be treated as owning the ordinary shares represented thereby.

German Taxation of Dividends

With regard to the taxation of dividends, the full imputation system (tax credit system) was applicable in 2001 for the last time provided that the fiscal year of the distributing company equals the calendar year. Under the full imputation system the corporation tax paid by the distributing corporation could be credited against the income tax liability of shareholders resident in Germany. From 2002 onwards, the full imputation system is replaced by the half-income system. Under this system only half of the distributed profits of a corporation will be included in the personal income tax base of an individual shareholder resident in Germany. Therefore, it will no longer be possible to credit the corporation tax paid by the company against the shareholder’s income tax. Dividends received by corporate shareholders domiciled in Germany will be tax-exempt in order to avoid double taxation. These rules have some exceptions, which especially apply to financial institutions.

Based on these considerations the German taxation of dividends can be summarized as follows:

Under German domestic income tax laws, German corporations are required to withhold tax on dividends in an amount equal to 20% of the gross amount paid to resident and non-resident shareholders. As the basis for deduction of the withholding tax is the gross amount, withholding tax will be deducted on the taxable and tax-exempt portion of the dividend received. A 5.5% surtax on the German withholding tax is currently levied on dividend distributions paid by a German corporation, such as SAP AG. The surtax equals 1.1% (5.5% of 20%) of the gross amount of a cash dividend. Certain persons resident in Germany (*e.g.*, qualifying investment funds or tax-exempt organizations) may obtain a partial or full refund of such taxes.

The Tax Reduction Act decreased the withholding tax on dividends from 25% to 20% Accordingly, the respective surtax is reduced from 1.375% to 1.10%. For companies whose fiscal year is the calendar year such as SAP AG, the withholding tax rate of 20% will be effective the first time for regular dividend distributions made in the year 2002.

For an individual holder of ADSs or ordinary shares that is resident in Germany, according to German income tax law, half of the dividends received are subject to German income tax. For such a holder, the taxable amount will be the sum of: (i) half of the cash payment by SAP AG and (ii) half of the taxes withheld. For a corporate holder of ADSs or ordinary shares that is domiciled in Germany, according to German income tax law, dividends are exempt from corporation tax. These rules have some exceptions, which especially apply to financial institutions.

Subject to certain conditions, the tax withheld on the gross amount will be eligible for credit against the holder’s income tax or corporation tax. Exceeding amounts are refunded upon filing and assessment of the tax return. For holders subject to German trade tax, such tax is imposed in general only on the amount of the dividends received, which is subject to income tax. On the portion of the dividends received which is exempt from income tax or corporation tax, trade tax will become due if the holder of ADSs or ordinary shares does not own at least 10% of the shares in the distributing corporation for an uninterrupted period of 12 months since the beginning of the tax year.



Refund of German Tax to U.S. Holders

A partial refund of the 20% withholding tax equal to 5% of the gross amount of the dividend and a full refund of the surtax can be obtained by a U.S. Holder (as hereinafter defined) under the U.S.-German income tax treaty (Convention between the Federal Republic of Germany and the United States of America for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with respect to taxes on Income, German Federal Law Gazette 1991 II page 355) (the "Treaty"). Thus, for each U.S.\$100 of gross dividends paid by SAP AG to a U.S. Holder, the dividends after partial refund of the 20% withholding tax and a refund of the surtax under the Treaty will be subject to a German withholding tax of U.S.\$ 15.

U.S. Holders were entitled to a further refund equal to 5% of the gross amount of the dividend in accordance with the Treaty so long as the German imputation system provided German resident individual shareholders with a tax credit for corporation taxes with respect to dividends paid by German corporations. As mentioned above, the German full imputation system has been repealed with effect of the tax year 2002 for distributing companies whose fiscal year is the calendar year such as SAP AG.

To claim the refund of amounts withheld in excess of the Treaty rate, a U.S. Holder must submit (either directly or, as described below, through the Depositary) a claim for refund to the German tax authorities, with, in the case of a direct claim, the original bank voucher (or 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 refund are made on a special German claim for refund form, which must be filed with the German tax authorities: Bundesamt für Finanzen, 53221 Bonn, Germany. The German claim for refund form may be obtained from the German tax authorities at the same address where applications are filed, or from the Embassy of the Federal Republic of Germany, 4645 Reservoir Road, N.W., Washington, D.C. 20007-1998.

U.S. Holders must also submit to the German tax authorities certification of their most recently filed U.S. federal income tax return (IRS Form 6166). Certification is obtained from the office of the Director of the Internal Revenue Service Center by filing a request for certification with the Internal Revenue Service ("IRS"), Philadelphia Service Center Foreign Certification Request, P.O. Box 16347, Philadelphia, PA 19114-0447. Requests for certification are to be made in writing and must include the U.S. Holder's name, social security number or employer identification number, tax return form number, and tax period for which certification is requested. 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.

In accordance with arrangements under the Deposit Agreement, the Depositary (or a custodian as its designated agent) holds the ordinary shares and receives and distributes dividends to the U.S. Holders. The Depositary has agreed, to the extent practicable, to perform administrative functions necessary to obtain the refund of amounts withheld in excess of the Treaty rate for the benefit of U.S. Holders who supply the necessary documentation.

Under the Deposit Agreement, the Depositary has agreed to send to the U.S. Holders of ADSs a notice explaining how to claim a refund, the form required to obtain the IRS Form 6166 certification and the German claim for refund form. The notice will describe how to obtain the certification on IRS Form 6166. In order to claim a refund, the U.S. Holder should deliver the certification provided to it by the IRS to the Depositary along with the completed claim for refund form. In the case of ADSs held through a broker or other financial intermediary, the required documentation should be delivered to such broker or financial intermediary for forwarding to the Depositary. In all other cases, the U.S. Holders should deliver the required documentation directly to the Depositary. The Depositary will file the required documentation with the German tax authorities on behalf of the U.S. Holders.

The German tax authorities will issue the refunds, which will be denominated in Euros, in the name of the Depositary. The Depositary will convert the refunds into Dollars and issue corresponding refund checks to the U.S. Holders or their brokers.

Refund of German Tax to Holders of ADSs or Ordinary Shares in Other Countries

A holder of ADSs or ordinary shares resident in a country other than Germany or the United States that has a double taxation convention with Germany may obtain a partial refund of German withholding taxes. Rates and procedures may vary according to the applicable treaty. For details, such holders are urged to consult their own tax advisors.

Taxation of Capital Gains

Half of a capital gain derived from the sale or other disposition by an individual holder resident in Germany of ADSs or ordinary shares is subject to income tax if the ADSs or ordinary shares are held as part of his or her trade or business or if the ADSs or ordinary shares are sold within a period of one year after acquisition.

A capital gain derived from the sale or other disposition by a corporate holder domiciled in Germany of ADSs or ordinary shares in general is exempt from corporation tax. These rules have some exceptions, which especially apply to financial institutions.

Special rules apply for individual and corporate holders resident in Germany if the shares have been received in the course of a tax-exempt reorganization.

For holders subject to German trade tax, such tax is imposed in general only on the portion of the capital gain, which is subject to income tax.

The above mentioned half-income system therefore does apply to the taxation of dividends and capital gains. The half-income system enters into effect for capital gains derived in the 2002 tax year provided that the fiscal year of the company whose shares are sold equals the calendar year, such as SAP.

A holder resident or domiciled in a country other than Germany is not subject to German income or corporation tax on the capital gain derived from the sale or other disposition of ADSs or ordinary shares.

Other German Taxes

There are no German net worth, transfer, stamp or similar taxes on the holding, purchase or sale of ADSs or ordinary shares.

German Estate and Gift Taxes

A transfer of ADSs or ordinary shares by gift or by reason of death of a holder will be subject to German gift or inheritance tax, respectively, if one of the following persons is resident in Germany: the donor or transferor or his or her heir, or the donee or other beneficiary. If one of the aforementioned persons is resident in Germany and another is resident in a country having a treaty with Germany, regarding gift or inheritance taxes, different rules may apply. If none of the aforementioned persons is resident in Germany, the transfer is not subject to German gift or inheritance tax. For persons giving up German residence, special rules apply during the first five years, and under specific circumstances, during the first ten years, after the end of the year in which the person left Germany. In general, in the case of a U.S. Holder, a transfer of ADSs or ordinary shares by gift or by reason of death that would otherwise be subject to German gift or inheritance tax, respectively, will not be subject to such German tax by reason of the U.S.-German estate tax treaty (Convention between the Federal Republic of Germany and the United States of America for the Avoidance of Double Taxation with respect to Estate, Gift and Inheritance Taxes, German Federal Law Gazette 1982 II page 847, amended by the Protocol of September 15, 2000, German Federal Law Gazette 2000 II, page 1170 and as published on December 21, 2000, German Federal Law Gazette 2001 II, page 65) (the “Estate Tax Treaty”) unless the donor or transferor, or the heir, donee or other beneficiary, is domiciled in Germany for

purposes of the Estate Tax Treaty between the United States and Germany at the time of the making of the gift or at the time of the donor's or transferor's death.

In general, the Estate Tax Treaty 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 ADSs or ordinary shares are subject to German inheritance or gift tax and U.S. federal estate or gift tax.

U.S. Taxation of U.S. Holders of Ordinary Shares or ADSs

The following discussion generally summarizes certain U.S. federal income tax consequences of the acquisition, ownership and disposition of ADSs or ordinary shares to a beneficial owner: (i) who is an individual citizen or resident of the United States or a corporation organized under the laws of the United States or any political subdivision thereof; (ii) who is not resident in Germany for German tax purposes; (iii) whose holding of ADSs or ordinary shares does not form part of the business property or assets of a permanent establishment or fixed base in Germany; and (iv) who is fully entitled to the benefits of the Treaty in respect of such ADSs or ordinary shares (a "U.S. Holder").

This summary deals only with ADSs and ordinary shares that are held as capital assets and does not address tax considerations applicable to U.S. Holders that may be subject to special tax rules, such as dealers or traders in securities, financial institutions, life insurance companies, tax-exempt entities, real estate investment trusts, U.S. Holders that hold ordinary shares or ADSs as a part of a straddle, conversion transaction or other arrangement involving more than one position, U.S. Holders that own (or are deemed for U.S. tax purposes to own) 10% or more of the total combined voting power of all classes of voting stock of SAP AG, U.S. Holders that have a principal place of business or "tax home" outside the United States or U.S. Holders whose "functional currency" is not the Dollar.

The discussion below is based upon the U.S. Internal Revenue Code of 1986, as amended (the "Code"), the Treaty and regulations, rulings and judicial decisions there under at the date hereof. Any such authority may be repealed, revoked or modified, perhaps with retroactive effect, so as to result in federal income tax consequences different from those discussed below. No assurance can be given that the conclusions set out below would be sustained by a court if challenged by the IRS. The discussion below is based, in part, on representations of the Depositary, and assumes that each obligation in the Deposit Agreement and any related agreements will be performed in accordance with its terms.

For changes caused by the German Tax Reduction Act and the Act on Further Development of Company Taxation especially with regard to withholding taxes on dividends and the taxation of capital gains and foreign tax credits, please refer to the statements above in the section "— Taxation — German Taxation of Holders of ADSs or ordinary shares." As mentioned, in the case of SAP AG the new rules in principle will be effective from the tax year 2002.

THE DISCUSSION SET OUT BELOW IS INTENDED ONLY AS A SUMMARY OF CERTAIN U.S. FEDERAL INCOME TAX CONSEQUENCES OF AN INVESTMENT IN ADSs OR ORDINARY SHARES. PROSPECTIVE INVESTORS ARE URGED TO CONSULT THEIR OWN TAX ADVISORS AS TO THE APPLICATION TO THEIR PARTICULAR SITUATION OF THE TAX CONSIDERATIONS DISCUSSED BELOW, AS WELL AS THE APPLICATION OF STATE, LOCAL OR FOREIGN TAX LAW. THE STATEMENTS OF U.S. TAX LAW SET OUT BELOW ARE BASED ON THE LAWS IN FORCE AND INTERPRETATIONS THEREOF AT THE DATE OF THIS ANNUAL REPORT ON FORM 20-F AND ARE SUBJECT TO ANY CHANGES OCCURRING AFTER THAT DATE.

For U.S. federal income tax purposes, a U.S. Holder of ADSs will be considered to own the ordinary shares represented thereby.

Distributions

Subject to the discussion below under "Passive Foreign Investment Company Considerations," distributions made by SAP AG with respect to ordinary shares (other than distributions in liquidation and certain



distributions in redemption of stock), including the amount of German tax deemed to have been withheld in respect of such distributions, will be taxed to U.S. Holders as ordinary dividend income to the extent that such distributions do not exceed the current and accumulated earnings and profits of SAP AG as computed for U.S. federal income tax purposes. As discussed above, a U.S. Holder may obtain a refund of German withholding tax to the extent that the German withholding tax exceeds 15% of the amount of the associated distribution. For example, if SAP AG distributes a cash dividend equal to U.S.\$ 100 to a U.S. Holder, the distribution currently will be subject to German withholding tax of U.S.\$ 20 plus U.S.\$ 1.1 surtax, and the U.S. Holder will receive U.S.\$ 78.9. If the U.S. Holder obtains the Treaty refund, he will receive an additional U.S.\$ 6.1 from the German tax authorities. For U.S. tax purposes, such U.S. Holder will be considered to have received a total distribution of U.S.\$ 100, which will be deemed to have been subject to German withholding tax of U.S.\$ 15 (15% of U.S.\$100) resulting in the net receipt of U.S.\$ 85. Distributions, if any, in excess of SAP AG's current and accumulated earnings and profits will constitute a non-taxable return of capital to a U.S. Holder and will be applied against and reduce the U.S. Holder's tax basis in his or her ordinary shares. To the extent that such distributions exceed the tax basis of the U.S. Holder in his or her ordinary shares, the excess generally will be treated as capital gain.

In the case of a distribution in euros, the amount of the distribution generally will equal the Dollar value of the euros distributed (determined by reference to the spot currency exchange rate on the date of receipt of the distribution (receipt by the Depositary in the case of a distribution on ADSs)), regardless of whether the holder in fact converts the euro into Dollars, and the U.S. Holder will not realize any separate foreign currency gain or loss (except to the extent that such gain or loss arises on the actual disposition of foreign currency received).

Dividends paid by SAP AG generally will constitute "portfolio income" for purposes of the limitations on the use of passive activity losses (and, therefore, generally may not be offset by passive activity losses) and as "investment income" for purposes of the limitation on the deduction of investment interest expense. Dividends paid by SAP AG will not be eligible for the dividends received deduction generally allowed to U.S. corporations under Section 243 of the Code.

Under certain circumstances, a U.S. Holder may be deemed to have received a distribution for U.S. federal income tax purposes upon an adjustment, or the failure to make an adjustment, to the conversion price of the 1994 Bonds.

Sale or Exchange

In general, assuming that SAP AG at no time is a passive foreign investment company, upon a sale or exchange of ordinary shares to a person other than SAP AG, a U.S. Holder will recognize gain or loss in an amount equal to the difference between the amount realized on the sale or exchange and the U.S. Holder's adjusted tax basis in the ordinary shares. Such gain or loss will be capital gain or loss. Upon a sale of ordinary shares to SAP AG, a U.S. Holder may recognize capital gain or loss or, alternatively, may be considered to have received a distribution with respect to the ordinary shares, in each case depending upon the application to such sale of the rules of Section 302 of the Code.

Deposit and withdrawal of ordinary shares in exchange for ADSs by a U.S. Holder will not result in its realization of gain or loss for U.S. federal income tax purposes.

Foreign Tax Credit

In general, in computing its U.S. federal income tax liability, a U.S. Holder may elect for each taxable year to claim a deduction or, subject to the limitations on foreign tax credits generally, a credit for foreign income taxes paid or accrued by it. For U.S. foreign tax credit purposes, subject to the applicable limitations under the foreign tax credit rules, the 15% German tax that is treated as having been withheld from dividends paid to a U.S. Holder will be eligible for credit against the U.S. Holder's federal income tax liability. Thus, in the numerical example set out above, a U.S. Holder who receives a cash distribution of U.S.\$ 85 from SAP AG (U.S.\$ 100 of the initial distribution net of U.S.\$ 20 of German withholding tax and U.S.\$ 1.1 of surtax plus the Treaty refund of U.S.\$ 6.1) will be treated as having been subject to German withholding tax in the



amount of U.S.\$ 15 (15% of U.S.\$ 100) and will be able to claim the U.S. foreign tax credit, subject to applicable foreign tax credit limitations, in the amount of U.S.\$ 15.

For U.S. foreign tax credit purposes, dividends paid by SAP AG generally will be treated as foreign-source income and as “passive income” (or in the case of certain holders, as “financial services income”). Gains or losses realized by a U.S. Holder on the sale or exchange of ordinary shares generally will be treated as U.S.-source gain or loss.

The availability of foreign tax credits depends on the particular circumstances of each U.S. Holder. U.S. Holders are advised to consult their own tax advisors.

Foreign Personal Holding Company Considerations

SAP AG does not believe that it or any of its subsidiaries currently is a “foreign personal holding company” (an “FPHC”) for U.S. federal income tax purposes. SAP AG is not aware of any changes that would affect this conclusion in the foreseeable future. A foreign corporation is an FPHC for a taxable year if (i) at any time, more than 50% of its stock (by vote or by value) is owned (directly, indirectly or by attribution) by or for not more than five individuals who are citizens or residents of the United States (the “ownership requirement”) and (ii) at least 60% (50% in certain cases) of its gross income is FPHC income, which generally includes dividends, interest, royalties (except certain active business computer software royalties) and other types of investment income (the “income requirement”). If SAP AG or one of its subsidiaries were treated as an FPHC, then each U.S. Holder owning ADSs or ordinary shares on the last day in the taxable year on which the ownership requirement with respect to SAP AG or its subsidiary is met would be required to include currently in taxable income as a dividend, a *pro rata* share of SAP AG’s or the subsidiary’s undistributed FPHC income, which is, generally, SAP AG’s or the subsidiary’s taxable income with certain adjustments and after reduction for certain dividend payments.

SAP AG does not believe that the ownership requirement is met at the date hereof with respect to SAP AG or any of its subsidiaries. However, there can be no assurance that the ownership requirement will not be met at some later time. Whether the income requirement would be met with respect to SAP AG or any of its subsidiaries at any such later date would depend on the nature and sources of SAP AG’s and each subsidiary’s income at that time.

Passive Foreign Investment Company Considerations

Classification as a PFIC. Special and adverse U.S. tax rules apply to a U.S. Holder that holds an interest in a “passive foreign investment company” (a “PFIC”). In general, a PFIC is any non-U.S. corporation, if (i) 75% or more of the gross income of such corporation for the taxable year is passive income (the “income test”) or (ii) the average percentage of assets (by value) held by such corporation during the taxable year that produce passive income (*e.g.*, dividends, interest, royalties, rents and annuities) or that are held for the production of passive income is at least 50% (the “asset test”). A corporation that owns, directly or indirectly, at least 25% by value of the stock of a second corporation must take into account its proportionate share of the second corporation’s income and assets in applying the income test and the asset test.

Based on current projections concerning the composition of SAP AG’s income and assets, SAP AG does not believe that it will be treated as a PFIC for its current or future taxable years. However, because this conclusion is based on our current projections and expectations as to its future business activity, SAP AG can provide no assurance that it will not be treated as a PFIC in respect of its current or any future taxable years.

Consequences of PFIC Status. If SAP AG is treated as a PFIC for any taxable year during which a U.S. Holder holds ordinary shares, then, subject to the discussion of the qualified electing fund (“QEF”) and “mark-to-market” rules below, such U.S. Holder generally will be subject to a special and adverse tax regime with respect to any gain realized on the disposition of the ordinary shares and with respect to certain “excess distributions” made to it by SAP AG. The adverse tax consequences include taxation of such gain or excess distribution at ordinary-income rates and payment of an interest charge on tax, which is deemed to have been



deferred with respect to such gain or excess distributions. Under the PFIC rules, excess distributions include dividends or other distributions received with respect to the ordinary shares, if the aggregate amount of such distributions in any taxable year exceeds 125% of the average amount of distributions from SAP AG made during a specified base period.

In some circumstances, a U.S. Holder may avoid certain of the unfavorable consequences of the PFIC rules by making a QEF election in respect of SAP AG. A QEF election effectively would require an electing U.S. Holder to include in income currently its *pro rata* share of the ordinary earnings and net capital gain of SAP AG. However, a U.S. Holder cannot elect QEF status with respect to SAP AG unless SAP AG complies with certain reporting requirements and there can be no assurance that SAP AG will provide such information.

Effective for taxable years beginning after December 31, 1997, a U.S. Holder that holds “marketable” stock in a PFIC may, in lieu of making a QEF election, also avoid certain unfavorable consequences of the PFIC rules by electing to mark the PFIC stock to market at the close of each taxable year. SAP AG expects that the ordinary shares will be “marketable” for this purpose. A U.S. Holder that makes the mark-to-market election will be required to include in income each year as ordinary income an amount equal to the excess, if any, of the fair market value of the stock at the close of the year over the U.S. Holder’s adjusted tax basis in the stock. If, at the close of the year, the U.S. Holder’s adjusted tax basis exceeds the fair market value of the stock, then the U.S. Holder may deduct any such excess from ordinary income, but only to the extent of net mark-to-market gains previously included in income. Any gain from the actual sale of the PFIC stock will be treated as ordinary income, and any loss will be treated as ordinary loss to the extent of net mark-to-market gains previously included in income.

Taxation of Holders of ADSs or Ordinary Shares in Other Countries

HOLDERS OR POTENTIAL HOLDERS OF ADSs OR ORDINARY SHARES WHO ARE RESIDENT OR OTHERWISE TAXABLE IN COUNTRIES OTHER THAN GERMANY AND THE UNITED STATES ARE URGED TO CONSULT THEIR OWN TAX ADVISORS CONCERNING THE OVERALL TAX CONSEQUENCES OF THE ACQUISITION, OWNERSHIP AND DISPOSITION OF ADSs OR ORDINARY SHARES.

Documents on Display

SAP AG is subject to the informational requirements of the Securities Exchange Act of 1934, as amended. In accordance with these requirements, SAP files reports and other information as a foreign private issuer with the SEC. These materials, including this Annual Report on Form 20-F and the exhibits thereto, may be inspected and copied at the SEC’s Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. Copies of the materials may be obtained from the Public Reference Room of the SEC at 450 Fifth Street, N.W., Washington, D.C. 20549 at prescribed rates. The public may obtain information on the operation of the SEC’s Public Reference Room by calling the SEC in the United States at 1-800-SEC-0330. The SEC also maintains a Web site at <http://www.sec.gov> that contains reports, proxy statements and other information regarding registrants that file electronically with the SEC. SAP’s annual reports and some of the other information submitted by SAP to the SEC may be accessed through this Web site. In addition, material filed by SAP can be inspected at the offices of the New York Stock Exchange at 20 Broad Street, New York, New York 10005.

Item 11. *Quantitative and Qualitative Disclosures About Market Risk*

To ensure the adequacy and effectiveness of our foreign exchange hedge positions, and to monitor the risks and opportunities of our non-hedge portfolios, we continually monitor our foreign forward and option positions. In addition, we monitor our interest rate exposure, if any, both on a stand-alone basis and in conjunction with our underlying foreign currency risk, from an economic and an accounting perspective. However, there can be no assurance that the programs described below with respect to the management of currency exchange and interest rate risk will offset more than a portion of the adverse financial impact

resulting from unfavorable movements in either the foreign exchange rates or interest rates. In addition, we have entered into the past, and expect to enter into in the future, derivative instruments to hedge all or a portion of the anticipated cash flows in connection with the SARs in the event cash payments to participants are required as a result of an increase in the market price of the ordinary shares. There can be no assurance that the benefits achieved from hedging our STAR Plan exceed the related costs.

Foreign Currency Risk

Most of SAP AG’s subsidiaries have entered into license agreements with SAP AG pursuant to which the subsidiary has acquired the right to sublicense SAP software products to customers within a specific territory. Under these license agreements, the subsidiaries generally are required to pay SAP AG a royalty equivalent to a percentage of the product fees charged by them to their customers within 30 days following the end of the month (90 days in prior years) in which the subsidiary recognizes the revenue. These intercompany royalties payable to SAP AG are generally denominated in the respective subsidiary’s local currency in order to centralize foreign currency risk with SAP AG in Germany. Because these royalties are denominated in the local currencies of the various subsidiaries, whereas the functional currency of SAP AG is the euro, SAP AG’s anticipated cash flows are subjected to foreign exchange risks. In addition, the delay between the date when the subsidiary records revenue and the date when the subsidiary remits payment to SAP AG also exposes us to foreign exchange risk. See “Item 5. Operating and Financial Review and Prospects — Exchange Rate Exposure.”

We enter into derivative instruments, primarily foreign exchange forward contracts, to protect all or a portion of anticipated cash flows from foreign subsidiaries. Specifically, these foreign exchange contracts offset risks associated with fluctuations in anticipated cash flows and existing intercompany receivables relating to subsidiaries in countries with significant operations, including the United States, Japan, the United Kingdom, Switzerland, Australia and Canada. We use foreign exchange forwards that generally have maturities of twelve months or less, which are rolled over if necessary to provide continuing coverage until the applicable royalties are received.

Generally, anticipated cash flows represent expected intercompany amounts resulting from revenue generated within the next twelve months from the purchase date of the derivative instrument. However, management infrequently extends the future periods being hedged for a period of up to two years from the purchase date of the derivative instrument based on our forecasts and anticipated exchange rate fluctuations in various currencies.

The table below provides information about the derivative financial instruments we have entered into that are sensitive to foreign currency exchange rates, including foreign exchange forward contracts. The table presents fair values, notional amounts (at the contract exchange rates) and the respective weighted average contractual foreign currency exchange rates. The fair values do not reflect any foreign exchange gains or losses on the underlying intercompany receivables and payables. In addition, the table below does not include foreign currency risks associated with third-party receivables and payables denominated in currencies other than the functional currency of the reporting subsidiary. See our consolidated financial statements included in “Item 18. Financial Statements” for further information on our foreign exchange derivative instruments.

Foreign Currency Risk	€ Functional Currency (€ (000))	
	Contract Notional Amounts	Fair Value December 31, 2001 ⁽¹⁾
	Expected Maturity Date 2002	
Derivatives used to manage firm commitments		
(Receive euros Sell Local Currency)		
Foreign Currency Forward Contracts		
U.S. Dollars	118,426	(1,050)
Weighted Average Contractual Exchange Rate	0.8891	
British Pounds	28,198	(517)
Weighted Average Contractual Exchange Rate	0.6206	
Canadian Dollars	15,592	(24)
Weighted Average Contractual Exchange Rate	1.4110	
Australian Dollars	5,728	(45)
Weighted Average Contractual Exchange Rate	1.7457	
Japanese Yen	21,339	135
Weighted Average Contractual Exchange Rate	114.76	
Swiss Franks	28,577	174
Weighted Average Contractual Exchange Rate	1.4697	
Foreign Currency Forward Contracts		
(Receive Local Currency, Sell euros)		
U.S. Dollars	304,279	1,742
Weighted Average Contractual Exchange Rate	0.8861	
Australian Dollars	2,838	48
Weighted Average Contractual Exchange Rate	1.7616	
Japanese Yen	30,537	(66)
Weighted Average Contractual Exchange Rate	114.61	
Swiss Franks	30,626	(138)
Weighted Average Contractual Exchange Rate	1.4693	
Singapore Dollar	6,060	91
Weighted Average Contractual Exchange Rate	1.6500	
Foreign Currency Forward Contracts		
(Receive USD, Sell Brazilian Real)		
U.S. Dollars	5,467	(817)
Weighted Average Contractual Exchange Rate	2.7989	

(1) Amounts included on the consolidated balance sheet.

Interest Rate Risk

SAP invests cash primarily in bank time deposits, marketable equity securities and fixed and variable rate marketable debt securities. See “Item 5. Operating and Financial Review and Prospects — Interest Rate Exposure.” In 2001 and 2000, we invested in funds (“the Funds”) created by three creditworthy financial

institutions in which such financial institutions independently trade securities, subject to guidelines prescribed by us. Such guidelines limit investments in equity securities to 20% of the total value with remaining amounts in interest bearing securities. We do not expect changes in the quoted market prices of time deposits or fixed rate securities held within the Funds to have a material effect on results of operations or cash flows. We have in the past entered into, and in the future may enter into, interest rate swaps to better manage the interest income on our cash equivalents and marketable securities and to partially mitigate the impact of EMU interest rate fluctuations on these investments. We hold such derivative instruments for purposes other than trading. No swaps were outstanding at December 31, 2001.

The table below presents principal (or notional) amounts (in thousands of euros unless otherwise indicated), respective fair values at December 31, 2001 and related weighted average interest rates by year of maturity for SAP’s investment portfolio.

Marketable debt securities	Expected Maturity Date (€ (000), unless otherwise indicated)						Total	Fair Value December 31, 2001
	2002	2003	2004	2005	2006	Thereafter		
Fixed rate	—	—	51,129	—	—	—	51,129	53,097
Average interest rate	—	—	6.12%	—	—	—		
Variable rate	9,061	—	—	—	—	1,050	10,111	10,105
Average interest rate	—	—	—	—	—	5.3%		
Total investments	<u>9,061</u>	<u>—</u>	<u>51,129</u>	<u>—</u>	<u>—</u>	<u>1,050</u>	<u>61,240</u>	<u>63,202</u>

We have lines of credit available that allow us to borrow in the local currency. Interest under these lines of credit is determined at the time of borrowing based on current market rates. The table below presents principal amounts outstanding at December 31, 2001 (in thousands of euros unless otherwise indicated), and related weighted average interest rates by year of maturity for the bank loans outstanding under lines of credit and overdrafts. Because the maturities are short term and the amounts borrowed are rolled over as necessary at current market rates of interest at such time, fair values of bank loans and overdrafts approximate carrying values.

Bank loans and overdrafts	2002
Fixed rate	451,259
Average interest rate	3.86%

Equity Price Risk

We are exposed to equity price risks on the marketable portion of our equity securities including equity securities within the Funds. SAP’s available for sale securities consist of investments in the high-technology industry, which historically have experienced high volatility. We typically do not attempt to reduce or eliminate market exposure on these securities.

We hold such equity securities purchased through our venture operations and strategic global partnering programs. The purpose of venture investments is to provide funding to companies that, in the opinion of our management, have promising technologies. The venture funding represents an equity investment, and or loans, and does not represent a commitment of further business development initiatives by SAP. Investments made in conjunction with strategic global partnering differ from those of the venture operations since such investments are made in software and service partners who are expected to complement our existing or future product and/or service offerings. Frequently, SAP and our partners may also enter into development or sublicense agreements to further align the strategies of SAP and the partner.

In many instances, we invest in privately held companies in which an initial public offering is planned. Such investments are recorded at cost and therefore do not expose us to equity price risk as long as they are privately owned. During 2001, we recognized in finance income, net gains from the sale of marketable equity securities of approximately € 24 million and wrote down approximately 75.6 million of equity securities which

includes amounts determined to be other than temporarily impaired. There can be no assurance that changes in market conditions, the performance of companies in which we hold investments or other factors will not negatively impact our ability to recognize gains from the sale of marketable equity securities on conditions similar to those existing in 2001, or result in the loss of amounts invested.

Item 12. Description of Securities Other than Equity Securities

Not Applicable.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

Not Applicable

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

Not Applicable

Item 18. Financial Statements

Reference is made to pages F-1 through F-58, incorporated herein by reference.

The following consolidated financial statements are filed as part of this Annual Report on Form 20-F: Report of Independent Public Accountants.

Consolidated Statements of Income for the years ended 2001, 2000 and 1999.

Consolidated Balance Sheets as of December 31, 2001 and 2000.

Consolidated Statements of in Changes Shareholders' Equity for the years ended December 31, 2001, 2000 and 1999.

Consolidated Statements of Cash Flows for the years ended December 31, 2001, 2000 and 1999.

Notes to the Consolidated Financial Statements.

Schedule for the years ended December 31, 2001, 2000 and 1999:

Schedule II — Valuation and Qualifying Accounts and Reserves.

Item 19. Exhibits

- The following documents are filed as exhibits to this Annual Report on Form 20-F:
- 1 Articles of Incorporation (Satzung) of SAP AG, as amended to date (English translation).⁽¹⁾
 - 2.1 Form of global share certificate for ordinary shares (English translation).⁽²⁾
 - 2.2 Form of American Depositary Receipt.⁽³⁾
 - 3 Pooling Agreement, dated as of December 31, 2001, among Dietmar Hopp Stiftung GmbH, Hasso Plattner GmbH & Co Beteiligungs-KG, Hasso Plattner Förderstiftung gGmbH, Dr. Klaus Tschira (until December 20, 2001), Dr. Tschira Beteiligungs GmbH & Co. KG, Heidelberg and Klaus Tschira Stiftung gGmbH (English translation).

- 4.1

Form of Amended and Restated Deposit Agreement among SAP AG, The Bank of New York, as Depositary, and all owners and holders from time to time of American Depositary Receipts issued there under, including the form of American Depositary Receipts.⁽⁴⁾
- 4.2

Share Purchase Agreement by and among Commerce One, Inc., New Commerce One Holding Inc. and SAP AG, dated as of June 28, 2001.⁽⁵⁾
- 4.3

Amended and Restated Standstill and Stock Restriction Agreement by and among Commerce One, Inc., New Commerce One Holding, Inc. and SAP AG, dated as of June 28, 2001.⁽⁶⁾
- 4.4

Investor Rights Agreement by and among Commerce One, Inc., New Commerce One Holding, Inc. and SAP AG, dated as of June 28, 2001.⁽⁷⁾
- 4.5

Strategic Alliance Agreement by and among Commerce One, Inc., SAPMarkets, Inc. and SAP AG, dated as of September 18, 2000.⁽⁸⁾
- 4.6

Strategic Alliance Agreement Amendment No. 2 by and among Commerce One, Inc., SAPMarkets, Inc. and SAP AG, dated as of June 29, 2001.⁽⁹⁾
- 4.7

Strategic Alliance Agreement Amendment No. 3 by and among Commerce One, Inc., SAPMarkets, Inc. and SAP AG, dated as of June 29, 2001.⁽⁹⁾
- 8

Subsidiaries, Associated Companies and Other Investments of SAP AG (see pages F-54 through F-58).
- 23

Consent of Independent Public Accountants.
- 99

Letter from SAP AG to SEC regarding ARTHUR ANDERSEN Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft mbH pursuant to SEC Release No. 33-8070.

(1)

Incorporated by reference to Form 6-K of SAP AG, filed on June 15, 2001.

(2)

Incorporated by reference to Form 8-A12B of SAP AG, filed on May 3, 2001.

(3)

Incorporated by reference to Form 8-A12B of SAP AG, filed on May 3, 2001.

(4)

Incorporated by reference to Form 8-A12B of SAP AG, filed on May 3, 2001.

(5)

Incorporated by reference to the Current Report on Form 8-K of Commerce One, Inc., filed on July 10, 2001.

(6)

Incorporated by reference to the Current Report on Form 8-K of Commerce One, Inc., filed on July 10, 2001.

(7)

Incorporated by reference to the Current Report on Form 8-K of Commerce One, Inc., filed on July 10, 2001.

(8)

Incorporated by reference to the Quarterly Report on Form 10-Q of Commerce One, Inc., filed on November 14, 2000.

(9)

Incorporated by reference to the Quarterly Report on Form 10-Q of Commerce One, Inc., filed on August 14, 2001.

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Registrant certifies that it meets all of the requirements for filing this Annual Report on Form 20-F and has duly caused this Annual Report to be signed on our behalf by the undersigned, thereunto duly authorized.

SAP AKTIENGESELLSCHAFT SYSTEME,
ANWENDUNGEN, PRODUKTE IN DER
DATENVERARBEITUNG
(Registrant)

By: /s/ PROF. DR. HENNING KAGERMANN
Name: Prof. Dr. Henning Kagermann
Title: Co-Chairman and CEO

Dated: March 28, 2001

By: /s/ DR. WERNER BRANDT
Name: Dr. Werner Brandt
Title: CFO

SAP AKTIENGESELLSCHAFT AND SUBSIDIARIES
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	<u>Page</u>
Report of Independent Public Accountants	F-1
Consolidated Financial Statements:	
Consolidated Statements of Income for the years ended December 31, 2001, 2000, and 1999.....	F-2
Consolidated Balance Sheets as of December 31, 2001 and 2000.	F-3
Consolidated Statements of Changes in Shareholders' Equity for the years ended December 31, 2001, 2000 and 1999.....	F-4
Consolidated Statements of Cash Flows for the years ended December 31, 2001, 2000 and 1999.	F-5
Notes to Consolidated Financial Statements	F-6
Schedule for the years ended December 31, 2001, 2000 and 1999:	
Schedule II — Valuation and Qualifying Accounts and Reserves.....	S-1



JB: W58561 PN: 100.00.00.00 SN: 11 <SQ>

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

We have audited the accompanying consolidated balance sheets of SAP Aktiengesellschaft Systeme, Anwendungen, Produkte in der Datenverarbeitung and subsidiaries as of December 31, 2001 and 2000, and the related consolidated statements of income, changes in shareholders' equity and cash flows for each of the years in the three-year period ended December 31, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. 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 financial statements referred to above present fairly, in all material respects, the financial position of SAP Aktiengesellschaft Systeme, Anwendungen, Produkte in der Datenverarbeitung and subsidiaries as of December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States.

As explained in Note 2 to the financial statements, the Company has given retroactive effect to the year ended December 31, 2000, for the change in accounting related to an investment that qualifies for the equity method of accounting during the year ended December 31, 2001.

Our audit was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The schedule listed in the index of financial statements is presented for the purpose of complying with the Securities and Exchange Commission's rules and is not part of the basic financial statements. This schedule has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, fairly states in all material respects the financial data required to be set forth therein in relation to the basic financial statements taken as a whole.

Eschborn/Frankfurt am Main
January 21, 2002

ARTHUR ANDERSEN
Wirtschaftsprüfungsgesellschaft
Steuerberatungsgesellschaft mbH

Gross
Wirtschaftsprüfer

Turowski
Wirtschaftsprüfer

SAP AKTIENGESELLSCHAFT

CONSOLIDATED STATEMENTS OF INCOME

for the years ended December 31,

(in thousands except for per share and exchange rate data)

	Note	2001 ⁽¹⁾	2001	2000 ⁽²⁾	1999
		US\$	€	€	€
Software revenue		2,296,919	2,580,518	2,458,725	1,932,391
Maintenance revenue		1,888,125	2,121,250	1,670,364	1,162,062
Product revenue		4,185,044	4,701,768	4,129,089	3,094,453
Consulting revenue		1,853,949	2,082,855	1,645,198	1,546,933
Training revenue		414,986	466,224	400,566	394,478
Service revenue		2,268,935	2,549,079	2,045,764	1,941,411
Other revenue	(5)	80,071	89,957	89,742	74,349
Total revenue		6,534,050	7,340,804	6,264,595	5,110,213
Cost of product		(789,901)	(887,429)	(721,556)	(526,653)
Cost of service		(1,749,046)	(1,965,000)	(1,750,487)	(1,625,096)
Research and development		(799,533)	(898,251)	(969,377)	(744,666)
Sales and marketing		(1,599,996)	(1,797,546)	(1,577,330)	(1,131,917)
General and administration		(343,570)	(385,990)	(417,570)	(260,130)
Other operating income/expense, net ..	(6)	(83,860)	(94,214)	(25,617)	(25,571)
Total operating expenses	(7)	(5,365,906)	(6,028,430)	(5,461,937)	(4,314,033)
Operating income		1,168,144	1,312,374	802,658	796,180
Other non-operating income/expense, net	(8)	(9,473)	(10,643)	(55,340)	(51,008)
Finance income, net	(9)	(207,370)	(232,974)	265,551	235,175
Income before income taxes		951,301	1,068,757	1,012,869	980,347
Income taxes	(10)	(423,949)	(476,293)	(391,807)	(376,416)
Minority interest		(10,083)	(11,328)	(5,330)	(2,930)
Net income		517,269	581,136	615,732	601,001
Earnings per share — basic	(11)	1.65	1.85	1.96	1.92
Earnings per share — diluted	(11)	1.65	1.85	1.95	1.90

(1) The 2001 figures have been translated solely for the convenience of the reader at an exchange rate of €1.00 to US\$ 0.8901, the Noon Buying Rate certified by the Federal Reserve Bank of New York on December 31, 2001.

(2) The 2000 figures have been adjusted for the effect of the change in the investment in Commerce One, Inc. to the equity method of accounting.

See Notes to Consolidated Financial Statements.

SAP AKTIENGESELLSCHAFT
CONSOLIDATED BALANCE SHEETS
as of December 31,
(in thousands except for exchange rate data)

Assets	Note	2001 ⁽²⁾	2001	2000 ⁽³⁾
		US\$	€	€
Intangible assets	(12)	444,473	499,352	116,093
Property, plant and equipment	(13)	887,476	997,052	870,676
Financial assets	(14)	<u>629,375</u>	<u>707,083</u>	<u>636,924</u>
Fixed assets		<u>1,961,324</u>	<u>2,203,487</u>	<u>1,623,693</u>
Inventories	(15)	4,088	4,593	5,801
Accounts receivable net	(16)	1,967,934	2,210,913	2,194,505
Accounts due from related parties		644	723	3,777
Other assets	(17)	<u>158,103</u>	<u>177,624</u>	<u>188,615</u>
Accounts receivable and other assets		<u>2,126,681</u>	<u>2,389,260</u>	<u>2,386,897</u>
Marketable securities	(18)	87,357	98,143	95,643
Liquid assets	(19)	<u>770,871</u>	<u>866,050</u>	<u>1,086,721</u>
Short-term assets		<u>2,988,997</u>	<u>3,358,046</u>	<u>3,575,062</u>
Deferred taxes		427,022	479,747	305,460
Prepaid expenses and deferred charges	(20)	<u>137,364</u>	<u>154,324</u>	<u>114,756</u>
Total assets		<u>5,514,707</u>	<u>6,195,604</u>	<u>5,618,971</u>
(thereof current assets)		3,245,942	3,646,716	4,011,526
Shareholders' Equity and Liabilities				
Subscribed capital ⁽¹⁾		280,227	314,826	314,715
Treasury stock		(83,858)	(94,212)	—
Additional paid-in capital		144,836	162,719	35,203
Retained earnings		2,267,458	2,547,419	1,976,588
Accumulated other comprehensive income		<u>159,115</u>	<u>178,761</u>	<u>190,575</u>
Shareholders' equity	(21)	<u>2,767,778</u>	<u>3,109,513</u>	<u>2,517,081</u>
Temporary equity	(22)	<u>—</u>	<u>—</u>	<u>409,500</u>
Minority interests		55,903	62,805	61,151
Pension liabilities and similar obligations	(24)	46,128	51,823	24,832
Other reserves and accrued liabilities	(25)	<u>1,225,264</u>	<u>1,376,547</u>	<u>1,409,956</u>
Reserves and accrued liabilities		<u>1,271,392</u>	<u>1,428,370</u>	<u>1,434,788</u>
Bonds	(26)	6,494	7,296	4,412
Other liabilities	(27)	<u>1,077,211</u>	<u>1,210,214</u>	<u>826,969</u>
Other liabilities		<u>1,083,705</u>	<u>1,217,510</u>	<u>831,381</u>
Deferred income	(28)	<u>335,929</u>	<u>377,406</u>	<u>365,070</u>
Total shareholders' equity and liabilities		<u>5,514,707</u>	<u>6,195,604</u>	<u>5,618,971</u>
(thereof current liabilities)		2,493,107	2,800,929	2,510,891

(1) Contingent capital € 43,276 thousand (2000: € 44,785 thousand)
(2) The 2001 figures have been translated solely for the convenience of the reader at an exchange rate of € 1.00 to US\$ 0.8901 the Noon Buying Rate certified by the Federal Reserve Bank of New York on December 31, 2001.
(3) The 2000 figures have been adjusted for the effect of the change in the investment in Commerce One, Inc, to the equity method of accounting.

See Notes to Consolidated Financial Statements.



SAP AKTIENGESELLSCHAFT

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

for the years ended December 31,

	Number of shares issued and outstanding (000)	(in thousands of €)						
		Comprehensive income	Accumulated other comprehensive income	Retained earnings	Additional paid-in capital	Treasury stock	Subscribed capital	Total
December 31, 1998 ⁽¹⁾	104,564		44,357	1,263,560	243,035	—	267,315	1,818,267
Net income		601,001		601,001				601,001
Other comprehensive income, net of tax								
Unrealized gains on marketable securities		224,127						
Currency translation adjustment		90,628						
Additional minimum pension liability		(1,625)						
Unrealized losses on cash flow hedges		(13,530)						
Other comprehensive income		299,600	299,600					299,600
Comprehensive Income		900,601						
Convertible bonds exercised	192				9,307		490	9,797
Dividends				(165,473)				(165,473)
Other				(859)	(2,978)			(3,837)
December 31, 1999	104,756		343,957	1,698,229	249,364	—	267,805	2,559,355
Effect of 3-for-1 stock split	209,512				(46,463)		46,463	
Net income		615,732		615,732				615,732
Other comprehensive income, net of tax								
Unrealized losses on marketable securities		(233,868)						
Currency translation adjustment		45,207						
Additional minimum pension liability		(3,780)						
Unrealized gains on cash flow hedges		39,059						
Other comprehensive income		(153,382)	(153,382)					(153,382)
Comprehensive income		462,350						
Convertible bonds exercised	447				7,160		447	7,607
Dividends				(165,780)				(165,780)
Effect of put option				(170,232)	(209,699)			(379,931)
Other				(1,361)	34,841			33,480
December 31, 2000 ⁽²⁾	314,715		190,575	1,976,588	35,203	—	314,715	2,517,081
Net income		581,136		581,136				581,136
Other comprehensive income, net of tax								
Unrealized losses on marketable securities		(24,241)						
Currency translation adjustment		41,098						
Additional minimum pension liability		(3,142)						
Unrealized losses on cash flow hedges		(25,529)						
Other comprehensive income		(11,814)	(11,814)					(11,814)
Comprehensive income		569,322						
Convertible bonds exercised	111				1,781		111	1,892
Dividends				(180,414)				(180,414)
Share repurchase						(94,212)		(94,212)
Effect of put option				170,232	152,177			322,409
Other				(123)	(26,442)			(26,565)
December 31, 2001	314,826		178,761	2,547,419	162,719	(94,212)	314,826	3,109,513

(1) The 1998 amounts have been restated from Deutsche Marks into Euros at an exchange rate of DM 1.95583 to € 1.00, the fixed exchange rate as of January 1, 1999.

(2) The 2000 figures have been adjusted for the effect of the change in the investment in Commerce One, Inc. to the equity method of accounting.

See Notes to Consolidated Financial Statements.

SAP AKTIENGESELLSCHAFT

CONSOLIDATED STATEMENTS OF CASH FLOWS

for the years ended December 31,

(in thousands except exchange rate data)

	Note	2001 ⁽¹⁾	2001	2000 ⁽²⁾	1999
		US\$	€	€	€
Net income before minority interest		517,269	581,136	615,732	601,001
Minority interest		10,083	11,328	5,330	2,930
Net income		527,352	592,464	621,062	603,931
Calculated gain from initial public offering of a subsidiary		—	—	(44,234)	—
Depreciation and amortization		249,043	279,792	223,308	172,680
Losses from equity investments, net		147,311	165,499	96,943	19,631
In Process R&D		4,981	5,596	—	—
Losses on disposal of property, plant and equipment and marketable equity securities, net		(20,186)	(22,678)	(348,692)	(223,847)
Write-downs of financial assets, net		63,493	71,332	19,137	1,626
Impacts of hedging		73,237	82,279	29,436	—
Change in accounts receivable and other assets		(16,816)	(18,892)	(202,275)	(369,043)
Change in deferred stock compensation		(10,362)	(11,641)	—	—
Change in reserves and liabilities		13,687	15,377	553,776	382,327
Change in deferred taxes		(128,746)	(144,642)	(132,001)	14,714
Change in other current assets		(33,459)	(37,590)	(65,744)	(31,403)
Change in deferred income		10,637	11,950	(10,743)	(41,543)
Net cash provided by operating activities	(29)	880,172	988,846	739,973	529,073
Purchase of intangible assets and property, plant and equipment		(336,319)	(377,844)	(285,435)	(354,228)
Purchase of financial assets		(68,285)	(76,716)	(216,975)	(92,156)
Change in the scope of consolidation		(4,086)	(4,591)	(4,129)	(2,012)
Proceeds from disposal of fixed assets		58,365	65,572	370,367	154,834
Investment in Commerce One		(270,623)	(304,037)	(270,442)	—
Purchase of TopTier, net of cash acquired		(337,342)	(378,993)	—	—
Change in liquid assets (maturities greater than 90 days) and marketable securities		32,561	36,581	(38,639)	(51,455)
Net cash used in investing activities	(30)	(925,729)	(1,040,028)	(445,253)	(345,017)
Dividends paid		(160,587)	(180,414)	(165,780)	(165,473)
Effect of 2000 STAR-hedge, net		(106,751)	(119,931)	29,569	—
Purchase of treasury stock		(83,858)	(94,212)	—	—
Impact of convertible bonds, net		4,251	4,776	10,756	9,308
Other changes to additional paid-in-capital		(4,167)	(4,682)	8,537	(2,978)
Proceeds from line of credit and long-term debt		301,444	338,663	100,000	—
Principal payments made on long-term debt		(1,826)	(2,052)	(29,519)	(287)
Effect of 2001 STAR-hedge		(60,918)	(68,440)	—	—
Proceeds from initial public offering of a subsidiary		—	—	87,324	—
Net cash used in/provided by financing activities	(31)	(112,412)	(126,292)	40,887	(159,430)
Effect of foreign exchange rates on cash		(3,665)	(4,117)	(2,159)	63,979
Net decrease/increase in cash and cash equivalents		(161,634)	(181,591)	333,448	88,605
Cash and cash equivalents at the beginning of the year		928,293	1,042,909	709,461	620,856
Cash and cash equivalents at the end of the year	(19)	766,659	861,318	1,042,909	709,461

(1) The 2001 figures have been translated solely for the convenience of the reader at an exchange rate of € 1.00 to US\$ 0.8901, the Noon Buying Rate certified by the Federal Reserve Bank of New York on December 31, 2001.

(2) The 2000 figures have been adjusted for the effect of the change in the investment in Commerce One, Inc. to the equity method of accounting.

See Notes to Consolidated Financial Statements.

SAP AKTIENGESELLSCHAFT

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

A. SIGNIFICANT ACCOUNTING PRINCIPLES

(1) Basis of Presentation

The consolidated financial statements of the SAP Aktiengesellschaft Systeme, Anwendungen, Produkte in der Datenverarbeitung (“SAP AG”), together with its subsidiaries (collectively, “SAP,” “Group” or “Company”), have been prepared in accordance with accounting principles generally accepted in the United States (“U.S. GAAP”).

SAP is using the relief outlined in section 292a of the German Commercial Code (“HGB”), which exempts companies from preparing consolidated financial statements in accordance with German GAAP if the consolidated financial statements are prepared in accordance with an internationally accepted accounting principle (i.e., U.S. GAAP or International Accounting Standards). The required description of the significant differences between U.S. GAAP and German GAAP is set forth in note 38.

Amounts included in the consolidated financial statements are reported in thousands of euros (“€”) unless otherwise stated. All euro financial data that has been presented in U.S. Dollars (“\$” or “USD”) has been converted, for the convenience of the reader, at the Noon Buying Rate certified by the Federal Reserve Bank of New York on December 31, 2001, which was € 1.00 per \$ 0.8901.

(2) Scope of Consolidation

The consolidated financial statements include SAP AG and subsidiaries in which SAP AG holds, directly or indirectly, a majority of the voting rights.

The following table summarizes the number of companies included in the consolidated financial statements:

<u>Number of companies consolidated in the financial statements</u>	<u>German</u>	<u>Foreign</u>	<u>Total</u>
December 31, 2000	16	60	76
Additions	5	14	19
Disposals	<u>1</u>	<u>3</u>	<u>4</u>
December 31, 2001	<u>20</u>	<u>71</u>	<u>91</u>

Eight companies in which SAP directly holds between 20% and 50% of the voting rights and has the ability to exercise significant influence over the financial and operating policies (“associated companies”), are reported using the equity method of accounting. U.S. GAAP requires retroactive restatement in cases where an investment in common stock previously accounted for under the cost method of accounting qualifies for use of the equity method. The Company retroactively applied the equity method as a result of surpassing the 20% ownership threshold in Commerce One, Inc. (“Commerce One”) in August 2001. The investment in Commerce One was previously accounted for in accordance with Statement of Financial Accounting Standard No. 115, “Accounting for Certain Investments in Debt and Equity Securities.” This retroactive restatement resulted in a € 18,593 thousand and € 0.06 reduction of 2000 net income and basic earnings per share, respectively. Financial assets and certain amounts within the consolidated statements of changes in shareholders’ equity previously reported in 2000 were also impacted.

The impact of including new companies in the consolidated financial statements during 2001 and 2000 does not limit comparability of the annual financial statements with those of the previous years.

All affiliated companies and associated companies are listed on page F-54 to F-58 with ownership percentages, revenues, net income, equity, and numbers of employees.

Separate individual financial statements were not prepared for the following subsidiaries as allowed under § 264b of HGB:

SAP CRM Consulting GmbH & Co. KG, Mannheim
SAP Deutschland AG & Co. KG, Walldorf
SAP Hosting AG & Co. KG, St. Leon-Rot
SAP Portals Holding GmbH & Co. KG, Walldorf
SAP Retail Solutions GmbH & Co. KG, St. Ingbert

(3) Significant Accounting Policies

Consolidation Policies

The Company accounts for its business combinations using the purchase accounting method. As of the date of acquisition, differences between acquisition costs and attributable shareholders’ equity are first allocated to identifiable tangible and intangible assets acquired or liabilities assumed to the extent of their fair market values. The fair value of any identifiable in-process research and development (“in-process R&D”), which represents functionality that has not reached technological feasibility and research and development having no alternative future uses, is expensed immediately. Any remaining goodwill is capitalized as an intangible asset. Accounting for associated companies under the equity method is calculated based upon the same principles as described above. However, amounts capitalized under the equity method are recorded in financial assets and related income statement impacts are reflected in finance income.

Intercompany receivables, payables, revenues, expenses and profits among the consolidated companies are eliminated. Deferred taxes are calculated for consolidation entries affecting income. Minority interest is identified for subsidiaries not wholly owned by the parent company.

Use of Estimates

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent amounts at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. In making estimates, the Company uses historical and forecast information. Changes in regional and industry economic conditions in which the Company and/or its customers participate, may negatively impact the estimates made by management in assessing the valuation and recoverability of investments and other assets in particular. Actual results could differ from those estimates.

Currency Translation

The financial statements of the fully consolidated foreign subsidiaries are translated according to the functional currency method. Since all subsidiaries are economically independent, and thus their functional currency is the local currency, their balance sheets are translated into the Group’s reporting currency at period-end closing exchange rates and their income statements are translated at annual average rates. Differences from the prior year’s translation of assets and liabilities and translation differences between the balance sheet and the income statement do not affect income. The effects of foreign currency translation are included in other comprehensive income in the consolidated statements of changes in shareholders’ equity.

Assets and liabilities denominated in foreign currencies are translated at the period-end closing rate with resulting gains and losses reflected in income.

The exchange rates of key currencies affecting the Group changed as follows:

Exchange Rates		Closing rate at December 31, to € 1.00		Annual average exchange rate to € 1.00		
		2001	2000	2001	2000	1999
U.S. Dollar	USD	0.8823	0.9302	0.8929	0.9162	1.0595
Japanese Yen	JPY	115.69	106.83	108.85	99.071	119.28
British Pound	GBP	0.6091	0.6233	0.6207	0.6087	0.6525
Canadian Dollar	CAD	1.4101	1.3929	1.3871	1.3716	1.5582
Australian Dollar	AUD	1.7310	1.6770	1.7297	1.5932	1.6349

Revenue Recognition

The Company recognizes software revenue in accordance with the American Institute of Certified Public Accountants (“AICPA”) Statement of Position 97-2, “Software Revenue Recognition”, as amended by SOP 98-4 and SOP 98-9 (collectively, “SOP 97-2”).

In accordance with SOP 97-2, software license fee revenues are recognized when persuasive evidence of an arrangement exists, delivery has occurred, the license fee is fixed and determinable and the collection of the fee is probable. The Company allocates a portion of its software revenues to maintenance activities or other services or products provided to the customer free of charge or at non-standard discounts when provided in conjunction with the licensing arrangement. Amounts are allocated using the residual method whereby revenue is deferred for undelivered elements based upon standard prices charged for those undelivered services or products and the residual amounts are recognized as revenue for the delivered elements. Software license fees for resellers or other members of the indirect sales channel are based on a fixed percentage of the Company’s standard prices. The Company recognizes software license revenue for such contracts based upon the terms and conditions provided by the reseller to their customer.

Maintenance revenues are recognized ratably over the term of the contract on a straight-line basis. Consulting and training services are generally recognized at the time the service is performed. Fees from licenses sold together with consulting services are generally recognized upon shipment provided that the SOP 97-2 criteria described above are fulfilled. In instances where the aforementioned criteria have not been met, both the license and the consulting fees are recognized under the percentage of completion method of contract accounting. The Company provides for sales returns and allowances.

In limited instances, the Company will enter into fixed fee consulting arrangements. Revenues under such arrangements are generally recognized using the percentage of completion method. Provisions for estimated losses on uncompleted contracts are made in the period such losses are determined.

Research and Development

Statement of Financial Accounting Standards No. 86, “Accounting for the Costs of Computer Software to be Sold, Leased, or Otherwise Marketed”, requires the capitalization of research and development costs incurred upon achieving technological feasibility until such product is available for sale. Historically, such costs have not been material. Development costs incurred prior to achieving technological feasibility are expensed as incurred.

Advertising Costs

The Company generally expenses advertising costs as incurred.

Earnings per Share

Earnings per share (“EPS”) are calculated in accordance with Statement of Financial Accounting Standards No. 128, “Earnings per Share”. Basic EPS are computed by dividing consolidated net income by weighted average number of ordinary shares outstanding. Diluted EPS is computed by dividing consolidated net income by the sum of the weighted average number of ordinary shares outstanding and the weighted

average number of potential ordinary shares outstanding to the extent they are dilutive. Prior year amounts are adjusted for the Company’s 1-for-1 conversion of preference shares to ordinary shares in 2001 and the Company’s 3-for-1 stock split in 2000 as described in note 21.

Intangible Assets and Property, Plant and Equipment

Purchased intangible assets are recorded at cost and amortized on a straight-line basis over their estimated life, generally three to five years. Goodwill arising from business combinations consummated prior to July 1, 2001 is amortized using the straight-line method over its estimated useful life, which does not exceed five years. Goodwill resulting from business combinations on or subsequent to such date is not amortized, but rather is subject to at least an annual assessment for impairment in accordance with Statement of Financial Accounting Standards No. 142, “Goodwill and Other Intangible Assets” (“SFAS No. 142”) as described below.

Property, plant and equipment are shown at cost less accumulated depreciation, where appropriate, based on their expected useful lives. Interest incurred during the construction of qualifying assets are capitalized and amortized over the related assets’ estimated useful lives.

	<u>Useful lives of property, plant and equipment</u>
Buildings	25 to 50 years
Leasehold improvements	Based upon the lease contract
Information technology equipment	3 to 5 years
Office furniture	4 to 20 years
Automobiles	5 years

Generally, property, plant and equipment are depreciated using the straight-line method. Certain assets with expected useful lives in excess of three years are depreciated using the declining balance method. Low-value assets are expensed in the year of acquisition. If assets are deemed to be impaired based upon an estimate of future undiscounted operating cash flows, carrying amounts are reduced to fair value. For the years ended December 31, 2001, 2000 and 1999, no such impairments have been recorded.

Financial Assets

Other loans represent amounts due to the Company. Interest-free loans to employees and to third parties are discounted to their present value. In accordance with Statement of Financial Accounting Standards No. 115, “Accounting for Certain Investments in Debt and Equity Securities,” marketable debt and equity securities, other than investments accounted for by the equity method, are categorized as either trading, available for sale or held to maturity, depending on management’s intent with respect to holding such investments. The Company’s marketable securities within financial assets are considered to be available-for-sale and, therefore, are valued at fair market value at the balance sheet date. Unrealized gains and losses are excluded from earnings and reported net of tax in comprehensive income within shareholders’ equity. Investments in privately held companies for which the Company does not have the ability to exercise significant influence are accounted for under the cost method of accounting. A write-down in the value through a charge to finance expense occurs if a decline in market value is deemed to be other than temporary, that is, if the fair market value remains below carrying value for an extended period. Gains or losses recognized on sales of securities are based on the average cost method.

Investments in associated companies are accounted for under the equity method. Such investments are initially recorded at cost, are adjusted for the Company’s share of the investments’ net income or loss and are reduced for amortization of any step-up in the value of acquired assets over the investee’s book value, excluding goodwill for acquisitions consummated on or after July 1, 2001.

The Company reviews its investments in associated companies on a quarterly basis for impairment. Factors considered in determining other than temporary impairment are significant or prolonged declines in share price, if publicly traded, based upon available market prices. Additional consideration is given to the

ability to recover the carrying amount of the investment or ability of the investee to sustain an earnings capacity which would justify the carrying amount of the investment.

Short-Term Assets

Inventories are shown at the lower of purchase/production cost or market value. Production costs consist of direct salaries, materials, and production overhead. No write-downs of inventory were necessary for the periods presented.

Accounts receivable are stated at their nominal value, which approximates fair value. Included in accounts receivable are unbilled receivables related to fixed fee consulting arrangements. Allowances are provided when deemed necessary to reduce accounts receivables to their estimated net realizable value after giving consideration to specific customer and regional economic risks. Non-interest bearing receivables with a term exceeding one year are discounted to their present value using local interest rates. Other assets are shown at their nominal value, which approximates fair value.

Marketable securities within short-term assets are considered trading. Accordingly, these securities are valued at fair market value at the balance sheet date with realized and unrealized gains/losses included in earnings. Recognized gains or losses are based on the average cost method.

Liquid assets are comprised of cash and cash equivalents and time deposits with original maturities exceeding 90 days. Cash and cash equivalents consist of cash at banks and highly liquid investments with original maturities of 90 days or less. Liquid assets are reconciled to cash and cash equivalents in note 19.

Deferred Taxes

Deferred taxes are established for temporary differences arising between the tax and financial reporting basis of assets, liabilities and net income. Deferred taxes are also recorded for temporary differences resulting from consolidation.

Deferred taxes are computed by the “liability method,” under which the enacted tax rate applicable to the local subsidiaries is applied.

In accordance with Statement of Financial Accounting Standards No. 109, “Accounting for Income Taxes”, deferred tax amounts are shown gross on the consolidated balance sheets. Deferred tax assets are recognized for net operating loss carryforwards that are available to reduce future taxes. Such amounts are reduced by a valuation allowance to the extent that it is more likely than not that some portion or all of the deferred tax assets will not be realized.

Prepaid Expenses and Deferred Charges

Prepaid expenses and deferred charges are determined by allocating expenses to the periods to which they are attributable.

Liabilities

Pension provisions are based on actuarial computations according to the “Projected Unit Credit Method.” In accordance with the Projected Unit Credit Method, current pensions and remuneration existing on the balance sheet date, as well as expected future increases in these obligations, are included in the valuation. The assumptions used to calculate the provision for pensions are shown in note 24. The Company accrues amounts due under the provisions of its various defined contribution plans.

Other reserves and accrued liabilities are recorded when an obligation to a third party has been incurred and payment is probable and reasonably estimable. All applicable direct and indirect costs are considered in determining other accrued liabilities.

Liabilities are shown at the amounts payable, which approximate fair market value.

Accounting for Stock-Based Compensation

As permitted under Statement of Financial Accounting Standards No. 123, “Accounting for Stock-Based Compensation” (“SFAS No. 123”), the Company applies the intrinsic value-based method in accordance with Accounting Principles Board Opinion 25 (“APB No. 25”) for its employee stock-based compensation plans. Under APB No. 25, the Company records no expenses relating to the convertible bonds issued under its 2000 Long Term Incentive Program (“LTI 2000 Plan”) since the conversion price is equal to the market price of a SAP ordinary share on the date of grant. Because the exercise price for stock options issued under the LTI 2000 Plan is variable, an expense is recorded over the vesting period based upon the stock options’ intrinsic value on the reporting date. See note 23 for a description of the Company’s LTI 2000 Plan and for a summary of the pro forma effects on reported net income and earnings per share based on the fair value of convertible bonds and stock options as required by SFAS No. 123.

Derivatives

The Group primarily uses forward exchange derivatives to reduce the currency risk of anticipated cash flows from engaging in transactions with subsidiaries denominated in currencies other than the euro. These anticipated cash flows reflect forecast assumptions, which historically have reflected actual results.

Effective January 1, 1999, the Company adopted Statement of Financial Accounting Standards No. 133, “Accounting for Derivative Instruments and Hedging Activities” as amended by Statement of Financial Accounting Standards 137 and 138 (collectively “FAS 133”). SFAS No. 133 requires derivative financial instruments to be recorded on the balance sheet at their fair value. The effective portion of the realized and unrealized gain or loss on a derivative designated as a cash flow hedge is reported net of tax in other comprehensive income at the time related changes in the fair value of such instruments occur. The portion of gains or losses on derivatives is reclassified from other comprehensive income into earnings in the same period or periods during which the hedged forecasted transaction affects earnings. The ineffective portion of gain or loss on a derivative designated as a cash flow hedge is reported in earnings when the ineffectiveness occurs. In measuring the effectiveness of foreign currency related cash flow hedges, the Company excludes differences resulting from the time value (i.e., spot rates versus forward rates for forward contracts). Changes in value resulting from the excluded component are recognized in earnings immediately.

Credit Arrangements

Certain of the Company’s foreign subsidiaries have lines of credit available which allow them to borrow in the local currency to the extent SAP AG has guaranteed such amounts. At December 31, 2001, SAP and its subsidiaries had approximately € 1,216,386 thousand available through its lines of credit under which they may borrow on an overdraft or short-term basis. As of December 31, 2001, SAP AG had € 430,000 thousand borrowed against these lines of credit. Interest under all lines is determined at the time of borrowing based on current market rates.

Comprehensive Income

Statement of Financial Accounting Standards No. 130, “Reporting Comprehensive Income”, requires companies to separately report the components of comprehensive income, which is comprised of net income and other comprehensive income. Other comprehensive income is comprised of the change in equity from transactions and other events not affecting net income except changes resulting from investments by shareholders and distributions to shareholders.

Other comprehensive income includes currency translation differences, additional minimum pension liabilities, unrecognized gains and losses from derivatives designated as cash flow hedges and unrealized gains and losses from marketable debt and equity securities considered available for sale. Both other comprehensive income and comprehensive income are disclosed in the consolidated statements of changes in shareholders’ equity.

Cash Flows

The consolidated statements of cash flows illustrate the effect of inflows and outflows during the course of the fiscal year on the Group’s cash and cash equivalents, and have been prepared in accordance with Statement of Financial Accounting Standards No. 95, “Statement of Cash Flows”. The consolidated statements of cash flows distinguish between cash flows from operating activities, investing activities, and financing activities. The statement of cash flows is reconciled to cash and cash equivalents, which are reconciled to liquid assets in note 19.

Recent Accounting Pronouncements

In June 2001, the Financial Accounting Standards Board approved the issuance of Statements of Financial Accounting Standards No. 141, “Business Combinations” (“SFAS No. 141”) and No. 142.

SFAS No. 141 requires the use of the purchase method of accounting for all business combinations initiated after June 30, 2001. For acquisitions accounted for under the purchase method which are consummated on or after July 1, 2001, SFAS No. 141 requires acquired intangible assets obtained through contractual or legal right, or are capable of being separately sold, transferred, licensed, rented or exchanged be recognized as an asset apart from goodwill.

Under SFAS No. 142, goodwill and intangibles with indefinite lives will no longer be subject to amortization, but will be subject to at least an annual assessment for impairment. Impairment testing specific to goodwill is determined by applying a fair value based test on a reporting unit level, which is defined as an operating segment or one level lower. Additionally, goodwill on equity method investments will no longer be amortized; however, it will continue to be tested for impairment in accordance with APB No. 18, “The Equity Method of Accounting for Investments in Common Stock”. All other intangible assets will continue to be amortized over their estimated useful lives. SFAS No. 142 is effective for fiscal years beginning after December 15, 2001 although goodwill and intangible assets with an indefinite life acquired in business combinations consummated on or after July 1, 2001 will not be amortized.

The Company is currently quantifying the impact of implementing SFAS No. 141 and No. 142 and has not yet determined whether or the extent to which they will effect the financial statements. As of December 31, 2001 the company has goodwill and intangible assets with a carrying amount of € 342,301 thousand and € 157,051 thousand respectively, which are subject to the provisions of SFAS No. 142. Amortization of goodwill was € 62,884 thousand, € 33,485 thousand and € 16,725 thousand for the years ended December 31, 2001, 2000 and 1999, respectively.

In June 2001, the FASB issued Statement of Financial Accounting Standards No. 143, “Accounting for Asset Retirement Obligations”. SFAS No. 143 addresses financial accounting and reporting for obligations associated with the retirement of tangible long-lived assets and the associated asset retirement costs. SFAS No. 143 is effective for financial statements issued for fiscal years beginning after June 15, 2002. The Company does not anticipate that the adoption of SFAS No. 143 will have a material impact on its consolidated financial statements.

In August 2001, the FASB issued SFAS No. 144, “Accounting for the Impairment or Disposal of Long-Lived Assets”. The statement supersedes SFAS No. 121, “Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of”, and the accounting and reporting provisions of APB Opinion No. 30, “Reporting the Results of Operations — Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions”, for the disposal of a segment of a business. SFAS No. 144 retains the fundamental provisions of SFAS No. 121 for recognition and measurement of the impairment of long-lived assets to be held and used and for measurement of long-lived assets to be disposed of by sale. It requires recognition of an impairment loss for long-lived assets to be held and used only if the carrying amount of the asset is not recoverable from its undiscounted cash flows. The impairment loss continues to be measured as the difference between the carrying amount and fair value of the asset. SFAS No. 144 is effective in its entirety for financial statements issued for fiscal years beginning after

December 15, 2001. Adoption of SFAS No. 144 is not expected to have a significant effect on the Company’s consolidated financial statements.

In November 2001, the Emerging Issues Task Force (“EITF”) reached a consensus on EITF No. 01-9, “Accounting for Consideration Given by a Vendor to a Customer or a Reseller of the Vendor’s Products”. EITF No. 01-9 applies to vendors that derive their revenue from sales of services, as well as those that derive their revenue from sales of products. Consideration includes sales incentive offers labeled as discounts, coupons, rebates, and free products or services. EITF No. 01-9 is effective for financial statements issued for fiscal years beginning after December 15, 2001, but earlier adoption is encouraged. The Company’s accounting policies are consistent with the practices outlined in EITF No. 01-9, and accordingly, EITF No. 01-9 is not expected to have a significant effect on the Company’s consolidated financial statements.

(4) Acquisitions

In April 2001, SAP AG acquired 100% of the outstanding shares of TopTier Inc. (“TopTier”), for approximately € 379 million in cash excluding cash acquired. TopTier, renamed SAP Portals Inc., specializes in technologies and know-how for creating enterprise portals. The acquisition was accounted for under the purchase method of accounting, and accordingly, the operating results have been included in the Company’s consolidated results of operations from the date of acquisition.

Acquired intangibles totalling approximately € 138 million included the fair value of software, workforce and tradenames. In addition, approximately € 6 million of in-process R&D was identified and immediately expensed. Goodwill resulting from the purchase price allocation was approximately € 278 million. Amounts paid to settle the portion of TopTier’s outstanding, vested stock options are included in the purchase price. SAP AG agreed to compensate former TopTier employees for the unvested portion of such outstanding options based upon the original vesting schedule provided such employees remain continuously employed by the Company. These amounts are included as deferred compensation within shareholders’ equity and are recorded as compensation expense over the remaining vesting period.

In the second and third quarters of 2000, SAP acquired 2.4% and 0.6% of Commerce One’s outstanding voting shares, respectively, for approximately € 270 million. The investment was accounted for as an available for sale security to the extent the underlying shares were not restricted. Restricted shares were recorded at cost until considered available for sale, twelve months prior to the date they were no longer restricted. SAP AG made additional investments in Commerce One, during the second quarter of 2001, resulting in a cumulative ownership interest of slightly less than 5%. In August 2001, SAP AG acquired approximately 17% of the outstanding voting stock of Commerce One, resulting in SAP AG having significant influence. Amounts invested in 2001 approximated € 304 million. See note 2 for a description of the retroactive application of the equity method of accounting relating to acquisitions of Commerce One. SAP allocated the purchase price for each step in the acquisition based on the ownership percentage of the Commerce One’s recorded net equity at such time. The purchase price allocation resulted in acquired intangibles totaling approximately € 44 million including primarily software and technology, € 11 million for in-process R&D and € 300 million of goodwill.

The following table presents summarized consolidated financial information for Commerce One for the years ended December 31.

	2001 € (000) ⁽¹⁾	2001 US\$ (000)	2000 US\$ (000)
Net revenues	459,015	408,569	401,796
Loss from operations	(2,901,549)	(2,582,669)	(345,564)
Net loss	(2,903,156)	(2,584,099)	(344,947)
Current assets	383,679	341,513	512,768
Non-current assets	545,050	485,149	2,557,787
Total assets	928,729	826,662	3,070,555
Current liabilities	206,546	183,847	266,805
Notes payable and capital lease obligations	21,346	19,000	4,339
Shareholder's equity	700,837	623,815	2,799,411
Total liabilities and equity	928,729	826,662	3,070,555

(1) The 2001 figures have been translated for the convenience of the reader at an exchange rate of € 1.00 to U.S.\$0.8901, the Noon Buying Rate certified by the Federal Reserve Bank of New York on December 31, 2001.

B. NOTES TO THE CONSOLIDATED INCOME STATEMENTS

(5) Revenue

Revenue information by segment is disclosed in note 36. Other revenue is derived mainly from marketing events.

(6) Other Operating Income/Expense, Net

Other operating income/expenses for the years ended December 31, are as follows:

	2001 € (000)	2000 € (000)	1999 € (000)
Amortization of goodwill	(62,884)	(33,485)	(16,725)
General bad debt expense	(14,706)	—	(9,582)
Restructuring costs	(13,636)	—	—
Expenses to obtain rental income	(7,737)	(5,308)	—
Other operating expense	(6,667)	(5,477)	(3,083)
Other operating expense	(105,630)	(44,270)	(29,390)
Rental income	9,774	6,988	1,510
Reductions of general bad debt allowance	—	5,792	—
Receipt of insurance proceeds	1,137	1,389	1,535
Other operating income	505	4,484	774
Other operating income	11,416	18,653	3,819
	(94,214)	(25,617)	(25,571)

Restructuring costs primarily relate to severance packages for personnel located in the United States. Severance arrangements were communicated to the affected personnel as of December 31, 2001 and all such payments are expected to be made in the first quarter of 2002.

(7) Functional Costs and Other Expenses

The information provided below is classified based upon the type of expense. The consolidated income statements include these amounts in various expenses based upon the applicable line of business.

Cost of Services and Materials

Cost of services and materials, which is included in various operating expense line items in the consolidated income statements for the years ended December 31, is as follows:

	<u>2001</u> <u>€ (000)</u>	<u>2000</u> <u>€ (000)</u>	<u>1999</u> <u>€ (000)</u>
Raw materials and supplies, purchased goods	22,033	18,444	15,176
Purchased services	<u>806,550</u>	<u>725,097</u>	<u>758,238</u>
	<u>828,583</u>	<u>743,541</u>	<u>773,414</u>

The changes in purchased services in 2001 resulted from additional purchases of external consulting services.

Personnel Expenses/Number of Employees

Personnel expenses, which are included in various operating expenses in the consolidated income statements for the years ended December 31, are as follows:

	<u>2001</u> <u>€ (000)</u>	<u>2000</u> <u>€ (000)</u>	<u>1999</u> <u>€ (000)</u>
Salaries	2,497,261	2,450,329	1,750,770
Social costs	313,813	275,839	226,736
Pension expense	<u>97,030</u>	<u>86,599</u>	<u>54,233</u>
	<u>2,908,104</u>	<u>2,812,767</u>	<u>2,031,739</u>

Included in personnel expenses for the years ended December 31, 2001, 2000 and 1999, are expenses associated with stock based compensation as described in note 23.

The average number of employees was as follows:

	<u>2001</u>	<u>2000</u>	<u>1999</u>
Employees	27,452	23,335	20,975

(8) Other Non-Operating Income/Expense, Net

Other non-operating income/expenses for the years ended December 31, are as follows:

	2001 € (000)	2000 € (000)	1999 € (000)
Foreign currency losses	(145,318)	(176,785)	(89,707)
Losses on disposal of fixed assets	(4,419)	(9,192)	(3,131)
Other	(10,041)	(5,333)	(2,916)
Other non-operating expenses	(159,778)	(191,310)	(95,754)
Foreign currency gains	139,589	82,729	34,828
Gains on disposal of fixed assets	3,465	2,745	2,066
Gain from IPO of subsidiary	—	44,234	—
Other	6,081	6,262	7,852
Other non-operating income	149,135	135,970	44,746
	(10,643)	(55,340)	(51,008)

In July 2000, two of the Company’s subsidiaries, SAP Solutions GmbH and SRS AG, merged into SAP Systems Integration GmbH to form SAP Systems Integration AG (“SAP SI”). SAP SI completed an initial public offering in September 2000, which resulted in the dilution of the Company’s beneficial ownership of SAP SI voting shares from 62% to 54%. Net proceeds received by SAP SI from the offering, based on the offering price of € 19 per share totaled € 87,324 thousand, resulting in an unrealized gain of € 44,234 thousand.

(9) Finance Income, Net

Finance income, net for the years ended December 31, are as follows:

	2001 € (000)	2000 € (000)	1999 € (000)
Interest and similar income	55,910	69,658	34,472
Interest and similar expenses	(22,244)	(10,464)	(3,265)
Interest income, net	33,666	59,194	31,207
Loss from associated companies	(165,499)	(96,943)	(19,631)
Income from marketable securities and loans of financial assets	1,771	1,071	910
Write-down of financial assets	(75,586)	(19,845)	(2,239)
Gains on sales of marketable equity securities	23,632	355,139	224,912
Unrealized loss on STAR hedge	(50,901)	(29,436)	—
Other net	(57)	(3,629)	16
Other finance income/loss, net	(101,141)	303,300	223,599
	(232,974)	265,551	235,175

Interest income is derived primarily from cash and cash equivalents, long-term investments and other assets. The negative results from associated companies include losses of € 161,592 thousand and € 18,593 thousand in 2001 and 2000 as restated, respectively, from the Company’s investment in Commerce One, Inc. and € 69,829 thousand and € 23,354 thousand in 2000 and 1999, respectively, resulting from Pandesic LLC, a joint venture founded in 1997 with Intel Corp. The 2001 figures include the Company’s share of Commerce One’s impairment and restructuring charges of approximately € 81,900 thousand. The 2000 figure also includes the Company’s share of a non-recurring charge of approximately € 23,400 thousand for exit costs recorded in conjunction with the decision and plan design for Pandesic LLC to cease operations. Amounts accrued for Pandesic LLC exit costs were fully utilized and Pandesic LLC has essentially ceased operations in 2001. See notes 14 and 23 regarding write-down of financial assets and unrealized loss on STAR hedge, respectively.

(10) Income Taxes

Income tax expense for the years ended December 31, is as follows:

	2001 € (000)	2000 € (000)	1999 € (000)
Current taxes — Germany	461,890	235,679	110,071
Current taxes — Foreign	<u>170,878</u>	<u>279,342</u>	<u>226,442</u>
	632,768	515,021	336,513
Deferred taxes — Germany	(124,552)	(106,752)	88,183
Deferred taxes — Foreign	<u>(31,923)</u>	<u>(16,462)</u>	<u>(48,280)</u>
	(156,475)	(123,214)	39,903
	<u>476,293</u>	<u>391,807</u>	<u>376,416</u>

Changes to German tax laws (“Steuersenkungsgesetz — StSenkG”), effective in 2001, were enacted in October 2000. The new tax laws reduce the existing German corporate tax rates from 30% for distributed earnings and 40% for undistributed earnings to 25% for both, effective 2001. Additionally, capital gains and losses are or will no longer be taxable depending upon the location of the investee. The change in the corporate tax rates and non-deductibility of capital gains and losses reduced the Company’s 2001 tax expense by approximately € 86 million. In 2000, the changes in tax law did not materially impact earnings and resulted in a net deferred tax asset increase of approximately € 13.4 million at December 31, 2000. This included reductions of deferred tax liabilities associated with unrealized capital gains for which the Company does not expect to incur a tax liability under the new laws.

Income before income taxes is attributable to the following geographic locations:

	2001 € (000)	2000 € (000)	1999 € (000)
Germany	802,375	288,827	454,745
Foreign	<u>266,382</u>	<u>724,042</u>	<u>525,602</u>
	<u>1,068,757</u>	<u>1,012,869</u>	<u>980,347</u>

The effective tax rate of the Group for the years ended December 31, 2001, 2000 and 1999, is 44.6%, 38.7% and 38.4%, respectively. The table below shows the reconciliation of the current German statutory corporate income tax rate of 25% in 2001 (40% in 2000 and 1999) and the Company’s effective tax rate. A solidarity surcharge of 5.5% is imposed with respect to German corporation tax liability. The effective German trade tax rate, before income taxes for the years ended December 31, 2001, 2000 and 1999 was 14.9%, 15.0% and 13.8%, respectively.

	2001 € (000)	2000 € (000)	1999 € (000)
Income before income taxes	1,068,757	1,012,869	980,347
German trade tax on income	<u>(119,169)</u>	<u>(43,431)</u>	<u>(62,742)</u>
Income after German trade tax on income	<u>949,588</u>	<u>969,438</u>	<u>917,605</u>
Corporation tax on income (40% in 2000 and 1999)	237,397	387,775	367,042
German trade tax on income	119,169	43,431	62,742
Solidarity charge	13,277	6,127	1,611
Tax reduction for dividend payments	—	(28,014)	(28,331)
Foreign tax rate differential, net	51,353	(44,954)	(28,006)
Utilization of loss carryforwards	(8,334)	(3,697)	(19,938)
Tax on non-deductible expenses	60,471	24,495	11,383
Tax effect on current year losses	3,611	588	395
Consolidation effects	4,849	(7,598)	(3,130)
Other	<u>(5,500)</u>	<u>13,654</u>	<u>12,648</u>
Income taxes	<u>476,293</u>	<u>391,807</u>	<u>376,416</u>

The impact of non-deductible expenses increased significantly in 2001 and 2000 as a result of the tax treatment for SAP AG’s portion of Commerce One’s losses recorded under the equity method of accounting.

In accordance with the liability method, the differences between assets, liabilities and net income calculated for tax purposes and for financial reporting purposes that are expected to reverse in the future are shown below. Based upon past results of subsidiaries and expectations of similar performance in the future, the taxable income of these subsidiaries will more likely than not be sufficient to fully recognize the net deferred tax assets related to these subsidiaries.

	2001 € (000)	2000 € (000)
Deferred tax assets		
Property plant & equipment and intangibles	122,112	20,455
Financial assets	24,828	3,510
Accounts receivable	41,752	36,699
Net operating loss carryforwards	123,615	40,440
Pension provisions	14,283	4,368
STAR provisions	—	40,832
Other provisions	100,936	99,348
Deferred income	46,990	55,560
Other	8,842	4,836
	483,358	306,048
Less: Valuation allowance	(3,611)	(588)
Deferred tax assets	<u>479,747</u>	<u>305,460</u>
Deferred tax liabilities		
Property plant & equipment and intangibles	55,045	8,825
Financial assets	21	24,835
Accounts receivable	1,583	688
Pension provisions	2,695	3,482
STAR provisions	—	10,555
Other provisions	14,123	12,183
Deferred income	7,201	3,007
Other	282	69
Deferred tax liabilities	<u>80,950</u>	<u>63,644</u>
Net deferred tax (liabilities)/assets	<u>398,797</u>	<u>241,816</u>

With regard to their duration, deferred tax assets and deferred tax liabilities are classified as follows:

	2001 € (000)	2000 € (000)
Deferred tax assets		
Short-term	188,432	232,131
Long-term	291,315	73,329
	<u>479,747</u>	<u>305,460</u>
Deferred tax liabilities		
Short-term	21,643	26,223
Long-term	59,307	37,421
	<u>80,950</u>	<u>63,644</u>

Certain foreign subsidiaries of the Company have net operating loss carryforwards at December 31, 2001 and 2000, totalling € 343,623 thousand and € 112,785 thousand, respectively, which may be used to offset future taxable income. The majority of net operating loss carryforwards will expire at different dates over the

next three to twenty years. The deferred tax assets, which have been established for these net operating loss carryforwards, have been reduced by a valuation allowance to the extent that it is more likely than not that some portion or all of the deferred tax assets will not be realized.

In 2001, SAP Japan utilized their remaining net operating loss of € 22,322 thousand. The 1998 valuation allowance of € 17,850 thousand relating to Japan was eliminated in 1999 as a result of net operating loss utilization and changes in facts and circumstances.

Deferred tax liabilities are provided for the unremitted earnings of non-German subsidiaries unless management considers such amounts to be permanently reinvested. As of December 31, 2001, the cumulative amount of earnings considered permanently reinvested is approximately € 1,499,320 thousand.

(11) Earnings Per Share

The Company’s convertible bonds and stock options are considered for the diluted earnings per share calculations to the extent they have a dilutive effect. The dilutive impact is calculated using the treasury stock method. Additionally, the dilutive effect of the Company’s written put option described in note 23 is considered in 2000 diluted earnings per share using the reverse treasury stock method.

	2001 ⁽¹⁾ € (000)	2000 ⁽¹⁾ € (000)	1999 ⁽¹⁾ € (000)
Net income	581,136	615,732	601,001
Weighted average shares — basic	314,309	314,423	313,815
Convertible bonds and stock options	103	1,216	1,935
Put options	—	98	—
Weighted average shares — diluted	314,412	315,737	315,750
Earnings per share — basic	1.85	1.96	1.92
Earnings per share — diluted	1.85	1.95	1.90

(1) Amounts are in thousands except per share data.

C. NOTES TO THE CONSOLIDATED BALANCE SHEET

(12) Intangible Assets

	Trademarks, similar rights and other intangibles € (000)	Goodwill € (000)	Total € (000)
Purchase cost			
1/1/01	115,680	130,928	246,608
Exchange rate differences	124	490	614
Changes in the scope of consolidation	758	—	758
Additions	166,222	338,255	504,477
Retirements/disposals	(24,860)	0	(24,860)
Reclassifications	83	(17,089)	(17,006)
12/31/01	<u>258,007</u>	<u>452,584</u>	<u>710,591</u>
Accumulated amortization			
1/1/01	71,332	59,183	130,515
Exchange rate differences	238	315	553
Changes in the scope of consolidation	165	—	165
Amortization expense	47,847	62,884	110,731
Retirements/disposals	(18,631)	—	(18,631)
Reclassifications	5	(12,099)	(12,094)
12/31/01	<u>100,956</u>	<u>110,283</u>	<u>211,239</u>
Book value 12/31/01	<u>157,051</u>	<u>342,301</u>	<u>499,352</u>
Book value 12/31/00	<u>44,348</u>	<u>71,745</u>	<u>116,093</u>

The majority of additions relates to the acquisition of TopTier as described in note 4.

(13) Property, Plant and Equipment

	Land, leasehold improvements and buildings, including buildings on third-party land € (000)	Other property, plant and equipment € (000)	Payments and construction in progress € (000)	Total € (000)
Purchase cost				
1/1/01	729,757	674,018	38,448	1,442,223
Exchange rate differences	11,665	5,187	716	17,568
Changes in the scope of consolidation	792	3,545	—	4,337
Additions	43,564	176,496	75,236	295,296
Retirements/disposals	(19,297)	(59,839)	(6)	(79,142)
Reclassifications	19,458	3,964	(23,509)	(87)
12/31/01	<u>785,939</u>	<u>803,371</u>	<u>90,885</u>	<u>1,680,195</u>
Accumulated depreciation				
1/1/01	140,378	431,169	—	571,547
Exchange rate differences	1,597	3,225	—	4,822
Changes in the scope of consolidation	34	373	—	407
Depreciation expense	41,985	127,076	—	169,061
Retirements/disposals	(9,912)	(52,773)	—	(62,685)
Reclassifications	(55)	46	—	(9)
12/31/01	<u>174,027</u>	<u>509,116</u>	<u>—</u>	<u>683,143</u>
Book value 12/31/01	<u>611,912</u>	<u>294,255</u>	<u>90,885</u>	<u>997,052</u>
Book value 12/31/00	<u>589,379</u>	<u>242,849</u>	<u>38,448</u>	<u>870,676</u>

The additions in other property, plant and equipment relate primarily to the purchase of computer hardware acquired in the normal course of business. Additions to payments and construction in progress mainly relate to costs incurred by SAP AG for the construction of additional office space in Walldorf, Germany.

(14) Financial Assets

	Investments in associated companies € (000)	Available for sale securities		Other loans € (000)	Total € (000)
		Equity securities € (000)	Debt securities € (000)		
Purchase cost					
1/1/01.....	304,354	218,652	55,862	35,285	614,153
Exchange rate differences.....	16,127	3,570	201	(601)	19,297
Change in the scope of consolidation ..	—	—	—	68	68
Additions	326,801	38,069	8,511	31,098	404,479
Retirements	(192,232)	(18,208)	(3,334)	(7,570)	(221,344)
Reclassifications	17,089	—	—	—	17,089
12/31/01.....	472,139	242,083	61,240	58,280	833,742
Changes in fair value of marketable securities					
1/1/01.....	—	55,310	511	—	55,821
Exchange rate differences.....	—	1,875	—	—	1,875
Changes in unrealized gains/losses	—	(59,912)	1,457	—	(58,455)
12/31/01.....	—	(2,727)	1,968	—	(759)
Accumulated write off					
1/1/01.....	12,835	13,193	6	7,016	33,050
Exchange rate differences.....	—	1,030	—	19	1,049
Additions	13,508	65,294	—	4,267	83,069
Retirements	—	(700)	—	(1,997)	(2,697)
Reclassifications	12,099	—	—	—	12,099
Write-ups	—	—	—	(670)	(670)
12/31/01.....	38,442	78,817	6	8,635	125,900
Book value 12/31/01	<u>433,697</u>	<u>160,539</u>	<u>63,202</u>	<u>49,645</u>	<u>707,083</u>
Book value 12/31/00	<u>291,519</u>	<u>260,769</u>	<u>56,367</u>	<u>28,269</u>	<u>636,924</u>

Investments in associated companies primarily relate to the Company’s investment in Commerce One. Amounts pertaining to 2000 have been restated to reflect the retroactive application of the equity method of accounting for investments. Additions primarily relate to purchases of Commerce One ordinary shares. The Company’s share of Commerce One’s net loss included in retirements is based upon ownership percentages at the time of such loss. The carrying value of the Company’s investment in Commerce One is € 425.2 million and € 276.8 million as of December 31, 2001 and 2000, respectively. Other loans include interest bearing and non-interest bearing loans to employees and third parties.

Amounts pertaining to marketable equity and debt securities available for sale at December 31 are as follows:

2001				
	Cost € (000)	Gross unrealized gains € (000)	Gross unrealized losses € (000)	Carrying value € (000)
Equity securities	242,083	5,090	86,634	160,539
Securities with fixed maturities	51,129	1,968	—	53,097
Other securities	10,111	—	6	10,105
Debt securities	61,240	1,968	6	63,202
	<u>303,323</u>	<u>7,058</u>	<u>86,640</u>	<u>223,741</u>
2000				
	Cost € (000)	Gross unrealized gains € (000)	Gross unrealized losses € (000)	Carrying value € (000)
Equity securities	218,652	67,743	25,626	260,769
Securities with fixed maturities	51,129	511	—	51,640
Other securities	4,733	—	6	4,727
Debt securities	55,862	511	6	56,367
	<u>274,514</u>	<u>68,254</u>	<u>25,632</u>	<u>317,136</u>

The Company recorded a charge of € 65,294 thousand and € 15,764 thousand in 2001 and 2000, respectively, to reduce the value of certain available for sale marketable securities for declines in value considered other than temporary. Unrealized losses which are unrecognized are considered temporary.

Securities with fixed maturities mature in 2004.

(15) Inventories

Inventories consist of cost of services for which revenues have been deferred, office supplies and documentation.

(16) Accounts Receivable

Amounts shown on the consolidated balance sheets are net of allowance for bad debts of € 110,269 thousand and € 76,223 thousand at December 31, 2001 and 2000, respectively.

Accounts receivable based on due dates at December 31, are as follows:

	2001 € (000)	2000 € (000)
Due within one year	2,202,055	2,184,716
Due between one and five years	8,858	9,789
Due in greater than five years	—	—
	<u>2,210,913</u>	<u>2,194,505</u>

License fees having extended payment terms are deferred if such payments are not considered fixed and determinable under SOP 97-2. Included in accounts receivable are unbilled receivables related to fixed fee consulting arrangements.

Concentrations of operating risks are limited due to the Company’s large customer base and its dispersion across many different industries and countries worldwide. No single customer accounted for 5% or more of revenues for fiscal year 2001, 2000 or 1999.

(17) Other Assets

	2001 € (000)	2000 € (000)
Tax receivables	38,444	40,664
Assets for employee financed pension plans	29,679	6,263
Rent deposits	26,116	25,240
Fair value of derivatives	20,162	42,330
Proceeds due from sale of marketable securities	—	20,289
Others	63,223	53,829
Total other assets	177,624	188,615
— thereof with a remaining term greater than 1 year	67,407	34,560

Amounts within “Others” include interest receivable and short-term loans.

(18) Marketable Securities

Marketable securities primarily consist of investments the Company has made with three creditworthy financial institutions. These financial institutions have created individual funds in which they independently trade securities, subject to guidelines prescribed by the Company. Such guidelines limit investments in equity securities to 20% of the total value with the remaining amounts invested in interest bearing securities. Securities held by the funds are limited to investments in companies within the European market. The Company considers these short-term marketable securities as trading. Fair values are based on available market prices as of December 31, 2001 and 2000 as reported by the financial institutions.

Amounts pertaining to marketable securities at December 31 are as follows:

	Amortized cost € (000)	Unrealized gains € (000)	Carrying value € (000)
2001	95,193	2,950	98,143
2000	91,516	4,127	95,643

(19) Liquid Assets

Liquid assets at December 31, consist of the following:

	2001 € (000)	2000 € (000)
Cash at banks	296,285	209,269
Restricted cash	106,367	80,464
Time deposits with original maturities of 3 months or less	458,666	753,176
Cash and cash equivalents	861,318	1,042,909
Time deposits which mature in less than 1 year	4,278	38,911
Time deposits with maturities exceeding 1 year	454	4,901
	866,050	1,086,721

Restricted cash is used to collateralize the Company’s obligation under its operating lease arrangement with a financial institution in conjunction with capital expenditures made for SAP America’s headquarters. Amounts collateralized increase as the Company incurs additional obligations under its lease arrangement. Interest earned on restricted funds is substantially equal to amounts accrued as rent expense under the terms of the lease. See note 33.

(20) Prepaid Expenses and Deferred Charges

Prepaid expenses and deferred charges are mainly composed of prepayments for software royalties, operating leases and maintenance contracts. Increases in 2001 and 2000 primarily relate to prepaid royalties to software vendors.

(21) Shareholders’ Equity

By resolution of the Annual General Shareholders’ Meeting held May 3, 2001, the Company’s outstanding preference shares were converted on a one-to-one basis into fully voting ordinary shares. The conversion was completed in June 2001. Following the share conversion, special rights and provisions previously held by preference share holders cease to exist. SAP’s American Depositary Receipts (“ADRs”), which trade on the New York Stock Exchange and previously were based on the preference share, are now based on the ordinary share.

Accordingly, the resolutions discussed below were modified through resolutions affected by the Annual General Shareholders’ Meeting held May 3, 2001. References to preference shares have been replaced by ordinary shares as appropriate due to the conversion of preference shares to ordinary shares.

Subscribed Capital

At December 31, 2001, SAP AG had 314,825,685 no-par ordinary shares issued and outstanding with a calculated nominal value of € 1 per share.

By resolution of the Annual General Shareholders’ Meeting held May 5, 2000, the shareholders approved a 3-for-1 stock split of the Company’s ordinary shares. In connection with the stock split, the Company reclassified € 46,463 thousand from additional paid-in capital to subscribed capital in 2000 to adjust the calculated nominal value per share to € 1. After giving effect to the 3-for-1 stock split, four ADRs are equivalent to one ordinary share.

In 2001, the number of shares increased by 111,030 (corresponding to € 111,030) resulting from the conversion of the 1994/2004 convertible bonds.

The shareholdings in SAP AG at December 31, 2001 were as follows:

	2001		2000
	Number of shares (000)	% of subscribed capital	% of subscribed capital
Dietmar Hopp (including immediate family)	8,721	2.8%	5.1%
Dietmar Hopp Stiftung GmbH	28,017	8.9%	8.9%
Golfplatz St. Leon-Rot GmbH & Co. Beteiligungs-KG	5,161	1.6%	0.0%
Hasso Plattner GmbH & Co. Beteiligungs-KG	31,241	9.9%	9.9%
Hasso Plattner Förderstiftung GmbH	6,000	1.9%	1.9%
Dr. h.c. Klaus Tschira (including immediate family)	4,134	1.3%	6.3%
Dr. h. c. Tschira Beteiligungs GmbH & Co. KG	15,833	5.0%	0.0%
Klaus Tschira Stiftung GmbH	21,155	6.7%	6.7%
Free float	194,564	61.9%	61.2%
	314,826	100.0%	100.0%

In 2001, all shares directly owned by Dietmar Hopp were transferred to Golfplatz St. Leon-Rot GmbH & Co. Beteiligungs-KG, which he wholly owns. Accordingly, 2001 shares reported as “Dietmar Hopp (including immediate family members)”, belong only to immediate family members.

Authorized and Contingent Capital

Authorized Capital

By resolution of the Annual General Shareholders’ Meeting held May 7, 1998, the Executive Board was authorized to issue up to € 5,113 thousand additional preference shares (“Authorized Capital I”). No additional shares were issued under Authorized Capital I. As a result of the preference share conversion to ordinary shares, Authorized Capital I was replaced by resolution of the Annual General Shareholder’s Meeting held May 3, 2001. New Authorized Capital allows the Executive Board, subject to consent of the Supervisory Board, to increase its subscribed capital up to a maximum of € 60 million through the period ending May 1, 2006 by issuing of additional ordinary shares in return for contributions in cash or in kind. The issuance of the additional ordinary shares is subject to the preemptive rights of existing shareholders. No such additional ordinary shares were issued during the fiscal year.

By resolution of the Annual General Shareholders’ Meeting held May 3, 2001, the Executive Board was authorized, subject to the consent of the Supervisory Board, to increase subscribed capital up to € 60 million through May 1, 2006 through the issuance of additional ordinary shares in return for contributions in cash or in kind (“New Authorized Capital II”). Subject to certain preconditions and the consent of the Supervisory Board, the Executive Board is authorized to exclude the shareholders’ preemptive rights. By the same resolution, originally Authorized Capital II of € 25 million, previously authorized by resolution of the Annual General Shareholders’ Meeting held May 5, 2000 and based on preference shares, was replaced by New Authorized Capital II. No additional ordinary shares were issued under the originally Authorized Capital II or New Authorized Capital II.

Contingent Capital

Contingent capital represents shares that have been authorized in conjunction with a convertible bond or stock option program, which are not yet issued or outstanding. By resolution of the Annual General Shareholders’ Meeting held May 3, 2001, Contingent Capital IIa, IIIa and V were authorized and Contingent Capital II, III and IV were amended, effective June 2001.



By resolution of the Annual General Shareholders' Meeting held on June 22, 1994, Contingent Capital II was authorized to satisfy shares needed in conjunction with the 1994/2004 Convertible Bond Program. As of December 31, 2000, Contingent Capital II was € 1,035 thousand, which was reduced by € 3 thousand as a result of expirations prior to the Annual Shareholders' Meeting in May 2001. To satisfy the remaining conversion rights under the 1994/2004 Convertible Bond Program, a new Contingent Capital IIa, which authorizes the Board to issue a maximum of 1,032,495 ordinary shares, was established. Contingent Capital IIa at December 31, 2001 was reduced to € 921 thousand as a result of 1994/2004 bond conversions. Contingent Capital II is maintained at the same levels as Contingent Capital IIa in case any participants require preference shares upon conversion.

In 2000, the Company received authorization at the Extraordinary General Shareholders' Meeting to issue a maximum of 6,250 thousand (18,750 thousand after 3-for-1 stock split) preference shares ("Contingent Capital III") to satisfy shares required in conjunction with the SAP AG Long Term Incentive Plan ("LTI 2000 Plan"). As of March 16, 2001, 7,376,311 awards were granted under the LTI 2000 Plan which were convertible into preference shares. Contingent Capital IIIa was authorized to satisfy ordinary share requirements for these previously issued awards under the LTI 2000 Plan. Contingent Capital III of € 7,376 thousand is maintained at the same levels as Contingent Capital IIIa in case any participants require preference shares upon exercise of awards. To satisfy the future share requirements for LTI 2000 Plan awards granted subsequent to March 16, 2001, Contingent Capital V was authorized, permitting the Board to issue a maximum of 9,978,199 ordinary shares. The Company may also acquire shares from the market to satisfy obligations under the LTI 2000 Plan.

On May 5, 2000, the Annual General Shareholders Meeting authorized the Executive Board to issue bonds with detachable warrants and/or convertible bonds carrying warrant rights or convertible rights, as appropriate, with respect to non-voting preference shares through May 4, 2005. Contingent Capital IV authorizes the issuance of up to a maximum of 25 million preference shares to satisfy the related share requirements. Shareholders' preemptive rights were excluded. The Annual General Shareholders' Meeting held on May 3, 2001 replaced the authorisation concerning the issue of bonds with detachable warrants and/or convertible bonds and the Contingent Capital IV with New Contingent Capital IV, permitting the issuance of bonds with detachable warrants and/or convertible bonds carrying warrant rights or convertible rights, as appropriate, with respect to ordinary voting shares up to a maximum of € 25 million through May 1, 2006. Shareholders' preemptive rights may be excluded.

Refer to the consolidated statements of changes in shareholders' equity.

Treasury Stock

As authorized by resolution of the January 18, 2000 Extraordinary Shareholders' Meeting, SAP AG acquired 500 thousand of its own shares in 2001. Such shares were acquired at an average price of approximately € 188.42 per share, and remain held in treasury at December 31, 2001. Although such shares are legally considered outstanding, SAP AG has no dividend or voting rights associated with treasury stock. Subsequent to the share repurchase, the resolution was replaced by a resolution of the Annual General Shareholders' Meeting held May 3, 2001, authorizing the Executive Board to acquire up to 30 million of SAP AG ordinary shares through October 31, 2002. The Company may either redeem or resell shares held in treasury. The Company held no ADRs at December 31, 2001 or 2000.

Additional Paid-In Capital

The change of additional paid-in capital of € 127,516 thousand is primarily related to a € 152,177 thousand impact resulting from the settlement of a put option described in note 23.

Refer to the consolidated statements of changes in shareholders' equity.

Accumulated Other Comprehensive Income

Accumulated other comprehensive income consists of the following at December 31:

	Unrealized gains/losses on securities € (000)	Currency translation adjustment € (000)	Additional minimum pension liability € (000)	Cash flow hedges € (000)	Total € (000)
December 31, 2001					
Before tax	759	(186,501)	14,002	—	(171,740)
Tax impact	(1,566)	—	(5,455)	—	(7,021)
Net amount	<u>(807)</u>	<u>(186,501)</u>	<u>8,547</u>	<u>—</u>	<u>(178,761)</u>
December 31, 2000					
Before tax	(42,628)	(145,403)	8,783	(37,271)	(216,519)
Tax impact	17,580	—	(3,378)	11,742	25,944
Net amount	<u>(25,048)</u>	<u>(145,403)</u>	<u>5,405</u>	<u>(25,529)</u>	<u>(190,575)</u>
December 31, 1999					
Before tax	(419,636)	(100,196)	2,936	30,377	(486,519)
Tax impact	160,720	—	(1,311)	(16,847)	142,562
Net amount	<u>(258,916)</u>	<u>(100,196)</u>	<u>1,625</u>	<u>13,530</u>	<u>(343,957)</u>

Upon sale of marketable equity securities, the Company reclassified € 9,901 thousand in 2001, € 174,827 thousand in 2000 and € 125,046 thousand in 1999 of gains, net of tax, from accumulated other comprehensive income to finance income/loss. The Company reclassified € 12,483 thousand, € (53,161) thousand and € (47,323) thousand of net foreign exchange gains/ (losses), net of tax, relating to the Company’s anticipated cash flow hedges in 2001, 2000 and 1999, respectively, from accumulated other comprehensive income to other non-operating income/expenses.

Miscellaneous

Under the German corporation law (Aktiengesetz), the amount of dividends available for distribution to shareholders is based upon the earnings of SAP AG as reported in its statutory financial statements determined in accordance with the German commercial code (Handelsgesetzbuch). For the year ended December 31, 2001, SAP management has proposed a distribution in 2002 of € 0.58 per share relating to the 2001 earnings of SAP AG as a dividend to the shareholders. Dividends paid for 2000 and 1999 were as follows:

	2000 €	1999 €
Dividend per ordinary share	0.57	0.52
Dividend per preference share	0.58	0.53

(22) Temporary Equity

Due to a put option, as explained in note 23, the Company reclassified amounts from additional paid in capital and retained earnings to temporary equity in 2000. Amounts represented the cash redemption amount the Company would have paid if physical settlement had been elected under the terms of the put option. Instead, the Company elected a net cash settlement of the put option, and remaining amounts were reclassified to retained earnings and additional paid in capital as discussed in note 23 below.

(23) Stock Based Compensation Plans

The Company maintains several stock based compensation plans. Amounts expensed in conjunction with these programs were € 98,377 thousand, € 440,818 thousand and € 140,324 thousand in 2001, 2000 and 1999, respectively, primarily related to the 1999 STARS.

Employee Discounted Stock Purchase Programs

The Company acquires SAP AG ordinary shares and ADRs under various employee stock purchase plans and transfers the shares to employees. Discounts provided to employees through such plans do not exceed 15% and are treated as a direct reduction of equity. During the fiscal year, SAP AG acquired 175,764 of its own ordinary shares, representing 0.06% of the total shares outstanding at December 31, 2001 at an average market price of € 144.94 per share. Such shares were transferred to employees during the year at an average price of € 129.23 per share. Certain of SAP AG’s foreign subsidiaries purchased 495,895 ADRs, at an average price of \$ 34.77 per ADR and were distributed to employees during the year at an average price of \$ 29.68 per ADR by an administrator.

Stock Appreciation Rights Plan

In February 2001, the Company granted approximately 3.4 million stock appreciation rights (“2001 STARS”) to selected employees who are not participants in the LTI 2000 Plan. The 2001 STAR grant value of € 193.51 is based upon the average fair market value of one ordinary share over the 20 business days commencing the day after the January 23, 2001 announcement of the Company’s 2000 preliminary results. The valuation of the 2001 STARS is calculated quarterly over a period of two years. Each quarterly valuation is weighted as follows in determining the final valuation of the 2001 STARS:

<u>Quarter ended factor</u>	<u>Weighting</u>	<u>Quarter ended factor</u>	<u>Weighting</u>
March 31, 2001.....	5%	March 31, 2002.....	10%
June 30, 2001	5%	June 30, 2002	10%
Sept 30, 2001	10%	Sept 30, 2002	10%
Dec 31, 2001	20%	Dec 31, 2002	30%

The valuations for the quarterly periods ending December 31, 2001 and 2002 are based on the amount by which the grant price of € 193.51 is exceeded by the average fair market value of one ordinary share as quoted on the XETRA trading system over the 20 consecutive business days commencing on the day after the announcement of the Company’s preliminary annual results for 2001 (January 23, 2002) and 2002, respectively. The other quarterly valuations are based on the amount by which the grant price of € 193.51 is exceeded by the average fair market value of one ordinary share quoted on the XETRA trading system over the five consecutive business days commencing on the day after the announcement of the Company’s quarterly results. Because each quarterly valuation is measured independently, it will be unaffected by any other quarterly valuation.

The cash payout value of each 2001 STAR will be calculated quarterly as follows: (i) 100% of the first € 50 value appreciation for such quarter; (ii) 50% of the next € 50 value appreciation; and (iii) 25% of any additional value appreciation. Participants will receive payments with respect to the 2001 STARS as follows: an initial payment on June 30, 2002, equal to 50% of the first-year measurement value; and two installments one on March 31, 2003 and the last on January 31, 2004, each equal to 50% of the total payout amount minus the initial payment. Participants will receive 2001 STAR payments provided that, subject to certain



exceptions, they continue to be actively employed by the Company on the payment dates. Compensation expenses related to 2001 STARs are recorded based upon the appreciation of the 2001 STAR's market price over the vesting period (February 2001 — January 2004) after consideration of estimated forfeitures. No 2001 STAR expenses were accrued as of December 31, 2001 since the grant price exceeded the average fair market value for all quarters in 2001.

In February 2000, the Company granted stock appreciation rights ("2000 STARs") to eligible employees. As of December 31, 2000 and the final measurement date, the 2000 STARs grant price of € 274 exceeded the preliminary end price based on SAP AG's preference share price on such date and, accordingly, no payments were made.

In May 1999, the Company granted stock appreciation rights ("1999 STARs") to eligible employees. Amounts paid are based upon the € 161.67 appreciation in SAP AG preference shares during the measurement period of approximately nine months after consideration of the 3-for-1 stock split. Payments under the 1999 STARs were made in three equal installments (July 2000, January 2001 and July 2001) provided that, subject to certain exceptions, the participants continued to be actively employed on the payment dates. Compensation expenses related to 1999 STARs are recorded based upon the appreciation of the 1999 STAR's market price over the vesting period (May 1999 — July 2001) after consideration of forfeitures.

In February 2001, SAP AG purchased various call options from a sophisticated financial institution to hedge the anticipated cash flow exposure resulting from the non vested expense relating to the 2001 STARs. Upon exercise of the call options, SAP AG would receive cash equal to a portion of the market price appreciation for 3.2 million ordinary shares in excess of € 193.51. These call options have been structured to replicate the payouts required, if any, under the terms of the 2001 STARs. As a result of the Company's hedging strategy, expenses incurred in connection with the 2001 STARs, if any, will be reduced by a corresponding gain on the hedging instruments. The premiums paid by the Company to purchase the derivative instruments will be recognized as finance expense over the lives of the derivatives.

In September 2000, the Company purchased a call option from a sophisticated financial institution to hedge the cash flow exposure resulting from the non vested expense relating to the 2000 STARs. The call option expired in February 2001 and was recorded in other assets at its fair market value as of December 31, 2000. Changes in value were recorded in earnings and shareholders' equity, depending upon the effectiveness of the hedging relationship.

As of December 31, 2001 and 2000, approximately € 51 million and € 29 million has been recorded as an expense in financial income. These amounts represent fair market value changes attributable to time value, which on a cumulative basis through expiration are equal to the original cost of the option.

Long Term Incentive Plan

On January 18, 2000, the Company's shareholders approved the LTI 2000 Plan. The LTI 2000 Plan is a stock based compensation program providing members of the SAP AG Executive Board, members of subsidiaries' executive boards and selected employees a choice between convertible bonds, stock options, or a 50% mixture of each. If stock options are chosen, the participant receives 25% more stock options than convertible bonds. Under the LTI 2000 Plan, each convertible bond having a € 1 nominal value may be converted into one ordinary share over a maximum of 10 years subject to vesting requirements. The conversion price is equal to the market price of an ordinary share as quoted on the XETRA trading system the day immediately preceding the granting. Each stock option may be exercised in exchange for one ordinary share over a maximum of 10 years subject to the same vesting requirements. The exercise price varies based upon the outperformance of the ordinary share price appreciation versus the appreciation of the Goldman Sachs Technology Software Index from the day immediately preceding granting to the day which the exercise price is being determined. Both the convertible bonds and stock options vest as follows: 33% after 2 years from date of grant, 33% after 3 years and 34% after 4 years. Forfeited convertible bonds or stock options are disqualified and may not be reissued.

A summary of the LTI 2000 Plan activity for both convertible bonds and stock options is as follows:

	Shares available for grant (000)	Stock Options		Convertible Bonds	
		Number of options outstanding (000)	Weighted average exercise price per option €	Number of bonds outstanding (000)	Weighted average exercise price per bond €
January 1, 2000.....	—	—	—	—	—
Additional shares authorized	18,750	—	—	—	—
Granted	3,145	767	167.08	2,378	289.78
Reduction due to option/bond ratio (25% of bonds issued)	595	—	—	—	—
Exercised	—	—	—	—	—
Forfeited	—	111	168.07	216	293.25
December 31, 2000	<u>15,010</u>	<u>656</u>	<u>166.91</u>	<u>2,162</u>	<u>289.43</u>
Additional shares authorized	—	—	—	—	—
Granted	4,352	1,075	142.37	3,277	190.43
Reduction due to option/bond ratio (25% of bonds issued)	819	—	—	—	—
Exercised	—	—	—	—	—
Forfeited	—	153	128.78	248	237.83
December 31, 2001	<u>9,839</u>	<u>1,578</u>	<u>132.73</u>	<u>5,191</u>	<u>229.40</u>

The following tables summarize information about convertible bonds and stock options outstanding as of December 31, 2001:

Outstanding Stock Options			
Range of exercise prices €	Number of options (000)	Weighted average remaining contractual life (in years)	Weighted average exercise price €
86.85 - 97.45	12	8.40	91.09
109.67 - 116.81	571	8.08	116.74
<u>138.53 - 158.44</u>	<u>995</u>	<u>9.11</u>	<u>142.40</u>
<u>86.85 - 158.44</u>	<u>1,578</u>	<u>8.73</u>	<u>132.73</u>

Outstanding Convertible Bonds			
Range of exercise prices €	Number of bonds (000)	Weighted average remaining contractual life (in years)	Weighted average exercise price €
131.81 - 183.67	82	9.43	157.67
191.25 - 247.00	3,135	9.07	192.12
<u>290.32 - 334.67</u>	<u>1,974</u>	<u>8.09</u>	<u>291.58</u>
<u>131.81 - 334.67</u>	<u>5,191</u>	<u>8.70</u>	<u>229.40</u>

See note 37 for stock options and convertible bonds awarded to members of the board.

As of December 31, 2001, none of the outstanding stock options or convertible bonds were exercisable.

In September 2000, SAP AG sold a put option to a sophisticated financial institution. The put option, which was exercised in February 2001, required SAP AG at its sole discretion to either a) acquire 1.5 million

of its preference shares for € 273 per share (represents € 409 million of temporary equity) or b) not to acquire shares but rather to pay cash equal to any decline in the preference share market price upon exercise below € 273 per share for 1.5 million preference shares. SAP AG opted to settle the option in cash.

The put option is considered an equity instrument as a result of its settlement terms. Accordingly, the original fair market value of € 29,569 thousand received is recorded as an increase in shareholders' equity as of December 31, 2000 with no recognition for changes in such value. In 2000, additional paid in capital and retained earnings have been reduced for amounts shown in temporary equity. Upon settlement of the put option in 2001, SAP AG made a cash payment of approximately € 120 million, thus resulting in a net reduction of approximately € 90 million. Amounts considered temporary equity in 2000 were reclassified in 2001 to retained earnings and additional paid in capital. See the consolidated statements of changes in shareholders' equity and note 22 for additional details.

Accounting for Stock Based Compensation

SFAS No. 123 requires disclosure of pro forma information regarding net income and earnings per share as if the Company had accounted for its stock-based awards granted to employees using the fair value method. The fair value of the Company's stock based awards was estimated as of the date of grant using the Black-Scholes option-pricing model. The fair value of the Company's stock-based awards described above was calculated using the following weighted average assumptions:

	2001	2000
Expected life (in years)	4.5	4.5
Risk free interest rate	4.96%	5.36%
Expected volatility	50%	50%
Expected dividends	0.30%	0.25%

For pro forma purposes, the estimated fair value of the Company's stock-based awards is amortized over the vesting period. The Company's pro forma information for the year ended December 31, is as follows:

	2001	2000
Net income (in thousands of €):		
As reported	581,136	615,732
Pro forma	490,221	541,908
Earnings per share (in €):		
Basic — as reported	1.85	1.96
Diluted — as reported	1.85	1.95
Basic — pro forma	1.56	1.72
Diluted — pro forma	1.56	1.72

The weighted-average fair value of all stock options and convertible bonds granted during 2001 was € 69.77 and € 87.71, respectively (2000: € 96.33 and € 120.95). In 1999, the fair value method did not materially impact net income or earnings per share. The effects of applying SFAS No. 123 on pro forma disclosures of net income and earnings per share for fiscal 2001 and 2000 are not likely to be representative of the pro forma effects on net income and earnings per share in the future since the assumptions used to determine fair value can vary significantly.

(24) Pension Liabilities and Similar Obligations

The Company maintains several defined benefit and defined contribution plans for its employees both in Germany and within foreign subsidiaries which provide for old age, disability and survivors' benefits. Individual, performance-oriented benefit plans have been established for members of the Executive Board. The accrued pension and other similar obligations at December 31, consists of the following:

	2001 € (000)	2000 € (000)
Domestic benefit plans	6,149	7,218
Foreign benefit plans	14,358	10,485
Employee financed plans	29,679	6,263
Other pension and similar obligations	1,637	866
	<u>51,823</u>	<u>24,832</u>

Domestic Benefit Plans

The defined benefit plans are based on the length of service and compensation of employees.

The change of the pension obligation and the change in plan assets for the domestic plans are as follows:

	2001 € (000)	2000 € (000)
Change in benefit obligation:		
Benefit obligation at beginning of year	25,616	22,694
Service costs	590	1,002
Interest costs	1,657	1,438
Liability decreased due to settlement	(503)	(267)
Actuarial loss	125	1,477
Settlement	—	(494)
Benefits paid	(192)	(186)
Payments for settlement of deferred vested employees	(4)	(48)
Benefit obligation at end of year	<u>27,289</u>	<u>25,616</u>
Change in plan assets:		
Fair value of plan assets at beginning of year	17,391	14,991
Actual return on plan assets	1,474	766
Employer contributions	2,346	2,610
Life/disability insurance premiums and expenses	(372)	(631)
Benefits paid	(192)	(186)
Payments for settlement of deferred vested employees	(4)	(48)
Assets transferred to defined contribution plan	(194)	(111)
Fair value of plan assets at end of year	<u>20,449</u>	<u>17,391</u>
Funded status	6,840	8,225
Unrecognized net actuarial loss	(4,657)	(4,766)
Unrecognized prior service cost	(1)	(2)
Unrecognized transition assets	(616)	(658)
Net amount recognized	<u>1,566</u>	<u>2,799</u>

	2001 € (000)	2000 € (000)
Amounts recognized in the consolidated balance sheets:		
Accrued benefit liability	6,149	7,218
Intangible asset.....	(37)	(41)
Accumulated other comprehensive income.....	(4,546)	(4,378)
Net amount recognized	1,566	2,799

The following assumptions were used to develop the changes in pension obligation and the changes in plan assets of the German plans:

	2001 %	2000 %	1999 %
Discount rate	6.0	6.5	6.5
Expected return on plan assets	6.5	6.5	6.5
Rate of compensation increase	4.0	4.0	4.0

Components of Net Periodic Benefit Cost:

	2001 € (000)	2000 € (000)	1999 € (000)
Service cost	590	1,002	4,582
Interest cost	1,657	1,438	2,440
Expected return on plan assets	(1,303)	(1,096)	(2,013)
Net amortization	456	246	741
	1,400	1,590	5,750

Foreign Benefit Plans

Defined benefit plans are based upon compensation levels, age and years of service.

The change of the pension obligation and the change in plan assets for the foreign plans are as follows:

	2001 € (000)	2000 € (000)
Change in benefit obligation:		
Benefit obligation at beginning of year	68,229	38,637
Service costs	24,466	20,944
Interest costs.....	5,446	3,246
Plan amendments.....	(4,065)	505
Actuarial loss	1,952	6,568
Benefits paid	(2,404)	(3,741)
Foreign currency exchange rate changes	2,746	2,070
Benefit obligation at end of year	96,370	68,229
Change in plan assets:		
Fair value of plan assets at beginning of year.....	50,106	35,341
Actual return on plan assets	(3,444)	(164)
Employer contributions	30,043	15,178
Benefits paid	(1,855)	(3,140)
Foreign currency exchange rate changes	2,953	2,891
Fair value of plan assets at end of year	77,803	50,106

	2001 € (000)	2000 € (000)
Funded status	18,567	18,123
Unrecognized transition (asset)/obligation	(526)	(610)
Unrecognized prior service cost	3,766	(462)
Unrecognized net actuarial gain/(loss)	(16,905)	(12,043)
Net amount recognized	<u>4,902</u>	<u>5,008</u>
Amounts recognized in the consolidated balance sheets:		
Prepaid benefit cost	—	—
Accrued benefit liability	14,358	10,485
Intangible assets	—	(1,072)
Accumulated other comprehensive income	(9,456)	(4,405)
Net amount recognized	<u>4,902</u>	<u>5,008</u>

The following weighted-average assumptions were used to develop the change in pension obligation and the change in plan assets of the foreign plans:

	2001 %	2000 %	1999 %
Discount rate	6.6	7.5	7.8
Expected return on plan assets	8.0	8.0	8.0
Rate of compensation increase	6.0	6.0	6.0

Components of Net Periodic Benefit Cost:

	2001 € (000)	2000 € (000)	1999 € (000)
Service cost	24,466	20,944	12,283
Interest cost	5,446	3,246	1,544
Expected return on plan assets	(4,975)	(3,358)	(1,766)
Net amortization	596	517	175
	<u>25,533</u>	<u>21,349</u>	<u>12,236</u>

Contribution Plans

The Company also maintains domestic and foreign defined contribution plans. Amounts contributed by the Company under such plans are based upon a percentage of the employees’ salary or the amount of contributions made by employees. The costs associated with defined contribution plans were € 70,097 thousand, € 63,660 thousand and € 36,248 thousand in 2001, 2000 and 1999, respectively.

Germany maintains an unqualified employee financed plan whereby employees may contribute a limited portion of their salary. SAP AG purchases and holds guaranteed fixed rate insurance contracts which are recorded in Other Assets and are equal to its obligations under the plan.

(25) Other Reserves and Accrued Liabilities

	2001 € (000)	2000 € (000)
Current and deferred taxes	476,700	241,292
Other reserves and accrued liabilities	899,847	1,168,664
	<u>1,376,547</u>	<u>1,409,956</u>

Accrued taxes include current and prior year tax obligations.

Other reserves and accrued liabilities at December 31, are as follows:

	2001 € (000)	2000 € (000)
Other obligations to employees	540,174	457,356
Obligations to suppliers	184,174	189,516
Vacation entitlement	120,560	99,238
Customer claims	29,873	38,014
Auditing and reporting costs	4,803	3,521
Warranty and service costs	4,600	5,184
Contribution to employees' accident insurance account	3,150	2,506
Fair value of foreign exchange contracts	2,973	—
STAR program obligations	93	366,530
Other	9,447	6,800
	<u>899,847</u>	<u>1,168,664</u>

Other reserves and accrued liabilities of € 2,461 thousand (€ 1,960 thousand in 2000) are due in more than one year.

Obligations to employees relate primarily to variable bonus payments tied to earnings performance, paid out after the balance sheet date. Obligations to suppliers represent services received or goods purchased for which SAP has not yet been invoiced. Warranty and service costs accruals represent estimated future warranty obligations and other minor routine items provided under maintenance.

(26) Bonds

This item consists primarily of outstanding convertible bonds related to the Company's LTI 2000 Plan as described in note 23. Additional amounts pertain to outstanding bonds issued in conjunction with the Company's 1994/2000 convertible bond program and other subsidiaries' convertible bond programs.

(27) Other Liabilities

Other liabilities based on due dates at December 31, are as follows:

	Term less than 1 year € (000)	Term between 1 and 5 years € (000)	Term more than 5 years € (000)	2001 € (000)	2000 € (000)
Bank loans and overdrafts	458,266	79	—	458,345	149,008
Advanced payments received	34,213	—	—	34,213	21,085
Accounts payable	391,208	—	—	391,208	355,547
Taxes	160,288	—	—	160,288	173,686
Social security	38,439	—	—	38,439	39,068
Other liabilities	<u>107,360</u>	<u>784</u>	<u>19,577</u>	<u>127,721</u>	<u>88,574</u>
	<u>1,189,774</u>	<u>863</u>	<u>19,577</u>	<u>1,210,214</u>	<u>826,969</u>

The liabilities are unsecured, excluding retention of title and similar rights customary in the industry. The bank loans and overdrafts relate primarily to outstanding lines of credit in Germany with an effective interest rate of 3.86% and 4.91% in 2001 and 2000, respectively.

In 2000, liabilities with a remaining term not exceeding one year amounted to € 809,040 thousand and those with a remaining term exceeding five years amounted to € 15,176 thousand.

(28) Deferred Income

Deferred income consists mainly of deferred software license revenues. Such amounts will reverse as software, maintenance or service revenue depending upon the reasons for the deferral.

D. INFORMATION ON THE CONSOLIDATED STATEMENTS OF CASH FLOWS

See the reconciliation from cash and cash equivalents to liquid assets in note 19.

(29) Net Cash Provided by Operating Activities

Net cash provided by operating activities was negatively impacted in 2001 by an increase of deferred tax assets. The Company expects these tax assets to result in positive cash flows in the periods they become reductions of the Company’s current tax obligations. Additionally, a reduction of other reserves and accrued liabilities resulting primarily from the Company’s 2001 final payment of the 1999 STAR obligation further reduced the net cash provided by operating activities. In 2000, the increase in 1999 STAR accruals increased the Company’s operating cash flow.

Interest payments in 2001, 2000 and 1999 were € 20,834 thousand, € 6,847 thousand and € 3,511 thousand, respectively. Income taxes paid in fiscal 2001, 2000 and 1999, net of refunds were € 500,098 thousand, € 459,629 thousand and € 419,471 thousand, respectively.

(30) Net Cash Used by Investing Activities

In 2001, the Company used cash to invest in Commerce One and acquire TopTier. The Company also invested in property, plant and equipment during 2001, 2000, and 1999 to keep pace with the overall growth in business activities and related headcount increases. In 2001, the Company utilized cash provided by financing activities to fund a portion of the significant investments made during the year.

In 2000 and 1999, the Company received significant proceeds upon the sale of its marketable equity securities within financial assets. The Company’s continued venture capital and strategic investment activities offset these cash receipts, particularly in 2000. This includes the investment in Commerce One during 2000. In 2000 and 1999, cash provided by operating activities was sufficient to fund the Company’s investing activities.

(31) Net Cash Provided By/Used in Financing Activities

In 2001, the Company obtained proceeds from financing activities in order to fund a portion of the investing activities described above. The payments of dividends for the prior year continued to be the primary use of cash for financing activities. Additionally, financing activities were impacted by the Company’s cash settlement of the put option as described in note 23.

In 2000, the Group received cash from lines of credit and the initial public offering of a subsidiary.

E. ADDITIONAL INFORMATION

(32) Contingent Liabilities

	2001 € (000)	2000 € (000)
Notes receivable sold	11	10
Guarantees and endorsements	1,304	4,530
Guarantees for unused lines of credit and other commitments	210,742	206,305
Liabilities from the extension of collateral securities for others	642	13,467
	<u>212,699</u>	<u>224,312</u>

Contingent liabilities listed above have not been accrued because the associated risk of loss is not probable.

(33) Other Financial Commitments

Other financial commitments amounted to € 771,641 thousand and € 673,028 thousand as of December 31, 2001 and 2000, respectively, and are mainly comprised of commitments under rental and operating leases of € 660,936 thousand and € 553,917 thousand as of December 31, 2001 and 2000, respectively, and purchase commitments of € 102,191 thousand and € 119,111 thousand as of December 31, 2001 and 2000, respectively.

In October 2000, SAP Properties, Inc. (“Properties”), a wholly owned subsidiary of SAP America, Inc. entered into a seven year lease arrangement with a sophisticated financial institution for office space and also agreed to serve as an agent to oversee the renovations of the office space. Under the terms of the lease, Properties is required to restrict cash equal to the amount spent by the financial institution on such renovations. See note 19. This lease is accounted for as an operating lease in accordance with SFAS No. 13 “Accounting for Leases”.

Commitments under rental and operating lease contracts as of December 31, 2001:

	€ (000)
Due 2002	157,914
Due 2003	117,203
Due 2004	90,488
Due 2005	69,144
Due 2006	55,698
Due thereafter	170,489

Rent expense was € 208,908 thousand, € 209,172 thousand and € 182,064 thousand for the years ended December 31, 2001, 2000 and 1999, respectively.

(34) Litigation and Claims

The bankruptcy trustee of the U.S. company FoxMeyer Corp. (“FoxMeyer”) instituted legal proceedings against SAP America, Inc., the U.S. subsidiary of SAP AG, and SAP AG, in 1998. FoxMeyer was a pharmaceutical wholesaler that filed for bankruptcy protection in 1996. The discovery phase of the litigation is now proceeding. While the ultimate outcome of this matter cannot be presently determined with certainty, the Company believes that FoxMeyer’s claims in this action are without merit. The Company is vigorously defending against the claims and believes that this action is not likely to have a material effect on its results of operations, financial condition or cash flows.

SAP is also subject to other legal proceedings and claims, either asserted or unasserted, that arise in the ordinary course of business. Although the outcome of these proceedings and claims cannot be predicted with certainty, management does not believe that the outcome of any of these matters will have a material adverse effect on the Company’s results of operations, financial condition or cash flows.

(35) Financial Instruments

Fair Value of Financial Instruments

	2001		2000	
	Carrying value € (000)	Fair value € (000)	Carrying value € (000)	Fair value € (000)
Investments in associated companies	433,697	238,291	291,519	151,149
Debt/equity securities	223,741	223,741	317,136	317,136
Marketable securities	98,143	98,143	95,643	95,643
Other loans	49,645	49,645	28,269	28,269
Bank loans and overdrafts	(458,345)	(458,345)	(149,008)	(149,008)
Derivative financial instruments:				
Forward exchange contracts	(467)	(467)	37,890	37,890
Currency options	—	—	4,440	4,440
Equity swaps	—	—	(2,312)	(2,312)
	<u>346,414</u>	<u>151,008</u>	<u>623,577</u>	<u>483,207</u>

The Company utilizes various types of financial instruments in the ordinary course of business. The market values of these financial instruments are determined as follows:

- Marketable debt and equity securities: The fair values of marketable debt and equity securities are based upon available quoted market prices on December 31.
- Other loans, bank loans and overdrafts: The fair values of other loans, bank loans and overdrafts approximate their carrying values.
- Derivative financial instruments: The fair value of derivatives generally reflects the estimated amounts the Company would pay or receive to terminate the contracts at the reporting date.

Investments in associated companies include investments accounted for under the equity method of accounting, primarily the Company’s investment in Commerce One. On December 31, 2001 and January 18, 2002, the aggregate fair market value of the Company’s investment in Commerce One was € 229,825 thousand and € 176,234 thousand respectively, based upon available market prices and the Noon Buying Rate as certified by the Federal Bank of New York on such dates. The Company does not believe that the share price of Commerce One is indicative of a loss in value that is other than temporary.

Detailed information about the fair value of the Company’s financial instruments is included in notes 14 and 18.

Derivative Financial Instruments

As an internationally active enterprise, the Company is subject to risks from interest-rate and currency fluctuations in its ordinary operations. The Company utilizes derivative financial instruments to reduce such risks as described below. The derivative financial instruments employed by the Company are exclusively marketable instruments with sufficient liquidity. The Company has established internal guidelines that govern the use of derivative financial instruments.

The Company is exposed to credit-related losses in the event of non-performance by counterparties to derivative financial instruments. To avoid these counterparty risks, the Company conducts business exclusively with major financial institutions.

Foreign Exchange Risk Management

Most of SAP AG’s subsidiaries have entered into license agreements with SAP AG pursuant to which each subsidiary has acquired the right to sublicense SAP AG software products to customers within a specific territory. Under these license agreements, the subsidiaries generally are required to pay SAP AG a royalty

equivalent to a percentage of the product fees charged by them to their customers within 30 days in 2001 and 90 days in prior years following the end of the month in which the subsidiary recognizes the revenue. These intercompany royalties payable to SAP AG are generally denominated in the respective subsidiary's local currency in order to centralize foreign currency risk with SAP AG in Germany. Because these royalties are denominated in the various subsidiaries local currencies, whereas the functional currency of SAP AG is Euro, SAP AG's anticipated cash flows are subjected to foreign exchange risks. In addition, the delay between the date when the subsidiary records product revenue and the date when the subsidiary remits payment to SAP AG exposes SAP AG to foreign exchange risk.

SAP AG enters into derivative instruments, primarily foreign exchange forward contracts and currency options, to protect all or a portion of anticipated cash flows from foreign subsidiaries. Specifically, these foreign exchange forward contracts offset anticipated cash flows and existing intercompany receivables relating to the countries with significant operations, including the United States, Japan, the United Kingdom, Switzerland, Canada and Australia. SAP AG uses foreign exchange derivatives that generally have maturities of twelve months or less, which may be rolled over to provide continuing coverage until the applicable royalties are received.

Generally, anticipated cash flows represent expected intercompany amounts resulting from revenues generated within the twelve months following the purchase date of the derivative instrument. However, management infrequently extends the future periods being hedged for a period of up to two years from the purchase date of the derivative instrument based on the Company's forecasts and anticipated exchange rate fluctuations in various currencies. Management believes the use of foreign currency derivative financial instruments reduces the aforementioned risks that arise from doing business in international markets and holds such instruments for purposes other than trading.

Foreign exchange derivatives are recorded at fair value in the consolidated balance sheets. Gains or losses on derivatives hedging anticipated cash flows are included in accumulated other comprehensive income, net of tax. When intercompany accounts receivables resulting from product revenue royalties are recorded, the applicable gain or loss is reclassified to other non-operating income/expense. Going forward, any additional gains or losses relating to that derivative are posted to other non-operating income/expense until the position is closed or the derivative expires.

Equity Derivatives

SAP AG enters into call options with sophisticated financial institutions to hedge the anticipated cash flow exposure resulting from the non-vested expense relating to its various stock appreciation rights programs. The fair values recorded as of December 31 represent the amount the Company would be required to pay in order to purchase a call option with those similar terms. See note 23 for additional information.

SAP AG infrequently enters into equity swap arrangements with creditworthy financial institutions. Under the terms of such equity swaps, SAP AG either receives or pays money to the extent the value of the underlying marketable security changes compared to the value of such securities at the inception of the swap. Gains or losses are immediately recognized in non-operating income and are based on changes in the fair value. The fair values recorded as of December 31 represent the amount the Company would receive or pay if the equity swaps were terminated on such date.

The notional values and fair values of the derivative financial instruments as of December 31, are as follows:

	2001		2000	
	Notional value € (000)	Fair value € (000)	Notional value € (000)	Fair value € (000)
Forward exchange contracts:				
Gains	403,164	2,506	757,232	37,985
Losses	194,503	(2,973)	18,249	(95)
	597,667	(467)	775,481	37,890
Currency options	—	—	77,869	4,440
Call options	468,160	17,656	228,000	133
Equity swaps:				
Gains	—	—	—	—
Losses	—	—	20,289	(2,312)
	—	—	20,289	(2,312)

(36) Segment Information

SAP discloses segment information in accordance with Statement of Financial Accounting Standards No. 131, “Disclosures about Segments of an Enterprise and Related Disclosures” (“SFAS No. 131”). SFAS 131 presents standards for reporting information about operating segments, as well as for related disclosures about products and services and geographic areas.

SFAS No. 131 generally requires financial information about operating segments to be reported on the basis that is used internally for evaluating segment performance and deciding how to allocate resources to segments. The Company prepares financial data for its internal use, based upon its major line of business operating segments.

SAP is organized by line of business and geographically. Furthermore, certain subsets of the Company are organized by industry segments. Additionally, beginning in 2001, the Company has provided information on revenues from certain specific software solutions. The Company’s internal reporting system produces reports in which business activities are presented in a variety of ways. Based on these reports, the Executive Board, which has been identified as the chief operating decision-maker according to the criteria of SFAS 131, evaluates business activities in a number of different ways. Neither the line of business nor the geographic structure can be identified as primary. Therefore, in accordance with SFAS No. 131, the line of business structure is regarded as constituting the operating segments.

SAP has three operating segments: “Product,” “Consulting” and “Training”. The product segment is primarily engaged in the marketing and licensing of the Company’s software products and performing of maintenance services that include technical support for the Company’s products, assistance in resolving problems, the provision of user documentation, updates for software products, and new releases, versions and correction levels. The consulting segment assists customers in the implementation of SAP software products. Consulting services also include customer support in project planning, feasibility studies, analyses, organiza-tional consulting, system adaptation, system optimization, release change and interface setup. The training segment provides educational services on the use of SAP software products and related topics.

Accounting policies for each segment are the same as those described in the summary of significant accounting policies as disclosed in note 3 except for differences in the currency translation that results in minor deviations between the figures reported internally and the figures reported in the financial statements. Depending on the type of service provided, SAP accounts for internal sales and transfers either on a cost basis or at current market prices.

2001				
	Product € (000)	Consulting € (000)	Training € (000)	Total € (000)
External revenue	4,819,436	2,012,749	479,817	7,312,002
Internal revenue	480,457	445,589	118,451	1,044,497
Total revenue	5,299,893	2,458,338	598,268	8,356,499
Segment expenses	(2,875,836)	(2,034,119)	(419,008)	(5,328,963)
Segment contribution	2,424,057	424,219	179,260	3,027,536
Segment profitability	45.7%	17.3%	30.0%	

2000				
	Product € (000)	Consulting € (000)	Training € (000)	Total € (000)
External revenue	4,208,863	1,575,490	401,260	6,185,613
Internal revenue	118,024	379,587	67,322	564,933
Total revenue	4,326,887	1,955,077	468,582	6,750,546
Segment expenses	(2,070,409)	(1,663,082)	(338,910)	(4,072,401)
Segment contribution	2,256,478	291,995	129,672	2,678,145
Segment profitability	52.2%	14.9%	27.7%	

1999				
	Product € (000)	Consulting € (000)	Training € (000)	Total € (000)
External revenue	3,091,511	1,514,030	453,758	5,059,299
Internal revenue	68,253	276,905	60,007	405,165
Total revenue	3,159,764	1,790,935	513,765	5,464,464
Segment expenses	(1,477,462)	(1,527,995)	(334,871)	(3,340,328)
Segment contribution	1,682,302	262,940	178,894	2,124,136
Segment profitability	53.2%	14.7%	34.8%	

Revenues

The external revenue figures for the operating segments differ from the revenue figures disclosed in the consolidated income statements because internally revenue is generally allocated to the segment that is responsible for the related project whereas in the consolidated income statements, revenue is allocated based on the nature of the transaction regardless of the segment it was provided by. Internal revenues comprise revenues from transactions with other parts of the Company. In 2001, internal revenues increased mainly due to a change in the intercompany allocation of support and marketing expenses.

The following table represents a reconciliation from the total of the segments' revenues to the total consolidated revenues as reported in the consolidated income statements:

	2001 € (000)	2000 € (000)	1999 € (000)
Total revenue for reportable segments	8,356,499	6,750,546	5,464,464
Elimination of internal revenues	(1,044,497)	(564,934)	(405,165)
Other external revenues	28,503	78,808	62,298
Other differences	299	175	(11,384)
	<u>7,340,804</u>	<u>6,264,595</u>	<u>5,110,213</u>



Other external revenues result from services provided from outside the reportable segments. Other differences primarily comprise currency translation differences.

Segment Contribution

The segment contributions reflect only expenses that are allocated to the segments. They do not represent the actual margins for the operating segments since general and administrative, stock based compensation, research and development and other corporate expenses are not allocated to the operating segments. Interest revenues and expenses are not included in segment contributions. Because depreciation and amortization expenses are mainly charged to the segments indirectly as part of cost allocations, they are not identified separately on the segment level in the internal reporting system. It would therefore be impractical to provide such disclosure.

The following table represents a reconciliation from the total contribution for reportable segments to income before income taxes as reported in the consolidated income statements:

	2001 € (000)	2000 € (000)	1999 € (000)
Total contribution for reportable segments	3,027,537	2,678,145	2,124,136
Contribution from activities outside the reportable segments . .	(1,616,697)	(1,440,777)	(1,181,840)
Stock based compensation expenses	(98,377)	(440,818)	(140,324)
Other differences	(89)	6,108	(5,792)
Operating income	1,312,374	802,658	796,180
Other non-operating income/expenses, net	(10,643)	(55,340)	(51,008)
Finance income, net	(232,974)	265,551	235,175
	<u>1,068,757</u>	<u>1,012,869</u>	<u>980,347</u>

The contribution from activities outside the reportable segments mainly comprises research and development, general and administrative and other corporate expenses that are not allocated to the operating segments. Other differences primarily comprise currency translation differences.

Segment Profitability

A segment’s profitability is calculated as the ratio of segment contribution to segment total revenues.

Segment Assets

The Company does not currently track assets or capital expenditures by operating segments in its internal reporting system. It would therefore be impractical to show assets, capital expenditures or related data by operating segments. As part of implementing SFAS No. 142, the Company is in the process of allocating assets and liabilities to various segments.

Geographic Information

The following table presents a summary of operations by geographic region. The following amounts are based on consolidated data. Therefore, the total of each of the following categories reconciles to the consolidated financial statements.

Sales by destination are based upon the location of the customer whereas sales by operation reflect the location of the SAP subsidiary responsible for the sale.

Germany incurs the majority of research and development costs as SAP AG has title to the majority of internally developed software. As of December 31, 2001, approximately 70% of the research and development personnel are located in Germany, 7% in the rest of EMEA, 14% in the United States and 9% in the Asia-Pacific region.

	Sales by destination			Sales by operation		
	2001 € (000)	2000 € (000)	1999 € (000)	2001 € (000)	2000 € (000)	1999 € (000)
Germany	1,468,726	1,237,383	1,067,266	1,615,777	1,380,439	1,154,288
Rest of EMEA ⁽¹⁾	2,317,456	1,836,550	1,407,437	2,211,982	1,710,632	1,347,150
Total EMEA	<u>3,786,182</u>	<u>3,073,933</u>	<u>2,474,703</u>	<u>3,827,759</u>	<u>3,091,071</u>	<u>2,501,438</u>
United States	2,084,140	1,848,281	1,638,277	2,102,136	1,877,879	1,630,094
Rest of Americas	639,980	587,287	507,528	613,503	561,973	506,255
Total Americas	<u>2,724,120</u>	<u>2,435,568</u>	<u>2,145,805</u>	<u>2,715,639</u>	<u>2,439,852</u>	<u>2,136,349</u>
Asia-Pacific	830,502	755,094	489,705	797,406	733,672	472,426
	<u>7,340,804</u>	<u>6,264,595</u>	<u>5,110,213</u>	<u>7,340,804</u>	<u>6,264,595</u>	<u>5,110,213</u>

(1) Europe/Middle East/Africa

	Income before income tax			Total assets		
	2001 € (000)	2000 € (000)	1999 € (000)	2001 € (000)	2000 € (000)	1999 € (000)
Germany	802,375	288,827	454,746	2,276,865	1,965,450	1,525,095
Rest of EMEA ⁽¹⁾	250,458	239,773	199,968	1,247,286	1,235,233	997,172
Total EMEA	<u>1,052,833</u>	<u>528,600</u>	<u>654,714</u>	<u>3,524,151</u>	<u>3,200,683</u>	<u>2,522,267</u>
United States	(128,792)	336,299	234,974	1,905,382	1,647,102	1,634,374
Rest of Americas	53,846	70,041	75,657	355,646	356,925	333,556
Total Americas	<u>(74,946)</u>	<u>406,340</u>	<u>310,631</u>	<u>2,261,028</u>	<u>2,004,027</u>	<u>1,967,930</u>
Asia-Pacific	90,870	77,929	15,002	410,425	414,261	336,692
	<u>1,068,757</u>	<u>1,012,869</u>	<u>980,347</u>	<u>6,195,604</u>	<u>5,618,971</u>	<u>4,826,889</u>

(1) Europe/Middle East/Africa



	Property, plant and equipment			Capital expenditures		
	2001 € (000)	2000 € (000)	1999 € (000)	2001 € (000)	2000 € (000)	1999 € (000)
Germany	543,954	472,900	433,059	168,964	117,758	156,160
Rest of EMEA ⁽¹⁾	158,284	136,353	137,337	54,593	30,143	35,075
Total EMEA	702,238	609,253	570,396	223,557	147,901	191,235
United States	257,757	215,916	177,433	58,396	46,874	43,690
Rest of Americas	9,791	13,608	16,586	2,592	3,960	8,286
Total Americas	267,548	229,524	194,019	60,988	50,834	51,976
Asia-Pacific	27,266	31,899	29,861	10,751	23,215	16,099
	997,052	870,676	794,276	295,296	221,950	259,310

(1) Europe/Middle East/Africa

	Depreciation			Employees as of December 31,		
	2001 € (000)	2000 € (000)	1999 € (000)	2001	2000	1999
Germany	86,419	75,350	67,226	12,356	10,432	8,912
Rest of EMEA ⁽¹⁾	32,638	33,914	29,695	6,504	5,196	4,162
Total EMEA	119,057	109,264	96,921	18,860	15,628	13,074
United States	29,674	21,784	16,994	5,228	4,498	4,408
Rest of Americas	5,934	7,592	7,598	1,522	1,579	1,597
Total Americas	35,608	29,376	24,592	6,750	6,077	6,005
Asia-Pacific	14,396	16,278	13,311	3,268	2,775	2,620
	169,061	154,918	134,824	28,878	24,480	21,699

(1) Europe/Middle East/Africa

In 2000, the original sectors were modified. Accordingly, prior year amounts have been reclassified for comparative purposes. Six groups of industry sectors generated the following total sales revenues for the year ended:

	2001 € (000)	2000 € (000)	1999 € (000)
Process industries	1,524,330	1,342,149	1,027,156
Discrete industries	1,807,468	1,582,676	1,441,820
Consumer industries	1,186,839	999,299	776,166
Service industries	1,849,741	1,578,801	1,266,563
Financial services	448,229	336,028	247,484
Public services	524,197	425,642	351,024
	7,340,804	6,264,595	5,110,213

In 2001, the Company allocated software revenues to specific software solutions for the first time. These allocations include revenues from designated solution contracts, as well as figures from integrated solution contracts, which are allocated based on usage surveys:

	<u>2001</u> <u>€ (000)</u>
mySAP SCM	582,892
mySAP CRM.....	444,918
mySAP PLM	195,963
mySAP BI/Portals — mySAP E-Procurement/Marketplaces	415,922
mySAP Financials — mySAP Human Resources	940,823
	<u>2,580,518</u>

(37) Board of Directors

Subject to the adoption of the dividend resolution by the shareholders at the Annual General Shareholders’ Meeting on May 3, 2002, the total annual remuneration of the Supervisory Board for the year ended December 31, 2001 will amount to €560 thousand. The total annual remuneration of the Executive Board for the year ended December 31, 2001 was €8,043 thousand. This amount includes €2,419 thousand fixed and €5,624 thousand variable remuneration including stock based compensation amounts of €1,120 thousand in 2001 for the 1999 STAR program. As of December 31, 2001, 2000 and 1999, the Company did not provide any loans, warranties or guaranties to the Executive Board. The pension accrual as of December 31, 2001 for former Executive Board members was €1,396 thousand.

The ordinary shares owned by Dietmar Hopp (Chairman of the Supervisory Board), Hasso Plattner (Co-Chairman of the Executive Board) and Klaus Tschira (Member of the Supervisory Board), their family members and related entities are disclosed in note 21. All other members of the Supervisory Board and the Executive Board own less than 1% of SAP AG shares.

Information relating to awards granted under the LTI 2000 Plan to Members of the Executive Board as of December 31, 2001 is as follows:

	Stock Options		
	Number of stock options	First year of vesting	Year of expiration
Prof. Dr. h.c. Hasso Plattner	—	—	—
Prof. Dr. Henning Kagermann	9,251	2002	2010
	9,251	2003	2010
	9,530	2004	2010
	12,993	2003	2011
	12,994	2004	2011
	13,388	2005	2011
	67,407		
Dr. Werner Brandt	2,062	2003	2011
	2,063	2004	2011
	2,125	2005	2011
	6,250		
Prof. Dr. Claus Heinrich	6,776	2002	2010
	6,776	2003	2010
	6,980	2004	2010
	9,075	2003	2011
	9,075	2004	2011
	9,350	2005	2011
	48,032		
Gerhard Oswald	6,776	2002	2010
	6,776	2003	2010
	6,980	2004	2010
	9,075	2003	2011
	9,075	2004	2011
	9,350	2005	2011
	48,032		
Dr. Peter Zencke	6,776	2002	2010
	6,776	2003	2010
	6,980	2004	2010
	9,075	2003	2011
	9,075	2004	2011
	9,350	2005	2011
	48,032		
	217,753		

	Convertible Bonds				
	Number of convertible bonds	Par value per bond	Conversion Price per bond	First year of vesting	Year of expiration
Prof. Dr. h.c. Hasso Plattner.....	—	—	—	—	—
Prof. Dr. Henning Kagermann	7,400	1	290	2002	2010
	7,400	1	290	2003	2010
	7,625	1	290	2004	2010
	10,395	1	191	2003	2011
	10,395	1	191	2004	2011
	10,710	1	191	2005	2011
	53,925				
Dr. Werner Brandt	1,650	1	191	2003	2011
	1,650	1	191	2004	2011
	1,700	1	191	2005	2011
	5,000				
Prof. Dr. Claus Heinrich	5,420	1	290	2002	2010
	5,420	1	290	2003	2010
	5,585	1	290	2004	2010
	7,260	1	191	2003	2011
	7,260	1	191	2004	2011
	7,480	1	191	2005	2011
	38,425				
Gerhard Oswald	5,420	1	290	2002	2010
	5,420	1	290	2003	2010
	5,585	1	290	2004	2010
	7,260	1	191	2003	2011
	7,260	1	191	2004	2011
	7,480	1	191	2005	2011
	38,425				
Dr. Peter Zencke	5,420	1	290	2002	2010
	5,420	1	290	2003	2010
	5,585	1	290	2004	2010
	7,260	1	191	2003	2011
	7,260	1	191	2004	2011
	7,480	1	191	2005	2011
	38,425				
	174,200				

EXECUTIVE BOARD	Membership of supervisory boards and other comparable governing bodies of enterprises, other than the subsidiaries of the Company, in Germany and other countries, on December 31, 2001.*
Prof. Dr. h.c. Hasso Plattner Co-Chairman and CEO mySAP.com Internet Strategy, Industry Solution Development, Basis Technology, Marketing, Corporate Communications	Board of Directors, Industry To Industry Inc., Boston/USA Board of Directors, Pandesic LLC, Santa Clara/USA
Prof. Dr. Henning Kagermann Co-Chairman and CEO Sales, Distribution, Consulting and Global Customer Relations, Industry Solutions, Strategic Development Projects	Supervisory Board, Deutsche Bank AG, Frankfurt/M. Supervisory Board, DaimlerChrysler Services AG, Berlin Supervisory Board, IDS Scheer AG, Saarbruecken Supervisory Board, Muenchener Rueckversicherungs-Gesellschaft AG, Munich
Dr. Werner Brandt Chief Financial Officer (as of February 1, 2001) Finance and Administration	
Prof. Dr. Claus E. Heinrich Human Resources Development of Industry Solutions, Development mySAP.com Solutions	Supervisory Board, SVC AG Schmidt Vogel Consulting, Bielefeld (up to August 9, 2001)
Gerhard Oswald Global Support, IT Infrastructure	
Dr. Peter Zencke Development of Industry Solutions, Development mySAP.com Solutions, e-business, Coordination of Global Research	Supervisory Board, Pixelpark AG, Berlin Supervisory Board, SupplyOn AG, Hallbergmoos (as of January 1, 2001)

* Memberships of supervisory boards and comparable governing bodies of subsidiaries are displayed in the financial statements of SAP AG which can be obtained from the company on request.

EXTENDED MANAGEMENT BOARD

Leo Apotheker EMEA	Karl-Heinz Hess Technology Development
Erwin Gunst Germany and Switzerland (up to December 31, 2001)	Wolfgang Kemna Americas
Les Hayman Asia-Pacific	Dieter Matheis Chief Financial Officer (up to February 1, 2001) Purchasing and Facilities Management (up to December 31, 2001)



SUPERVISORY BOARD

Membership of other supervisory boards and comparable governing bodies of enterprises, other than the Company, in Germany and other countries on December 31, 2001

Dietmar Hopp^{(2) (4) (6) (7) (8)}
Chairperson

Supervisory Board, MLP AG, Heidelberg
Supervisory Board, Actris AG, Frankfurt/M.

Helga Classen^{(1) (4) (5) (6) (7)}
Deputy Chairperson
Development Architect

Willi Burbach^{(1) (4) (5)}
Developer

Prof. Dr. Wilhelm Haarmann^{(2) (3) (4) (7) (8)}
Attorney at Law, Certified Public Auditor, Certified Tax Advisor, Kronberg Managing Partner of Haarmann, Hemmelrath & Partner, Frankfurt/M

Supervisory Board, iXOS AG, Grasbrunn
Supervisory Board, Häussler AG, Stuttgart
Supervisory Board, Depfa IT Services AG, Mainz
Supervisory Board, Vodafone AG, Düsseldorf
Supervisory Board, IBAG Immobilien und Beteiligungen AG, Berlin

Bernhard Koller^{(1) (3) (4) (7)}
Manager Idea Management

Supervisory Board, LION CONSULT AG, Heddeshheim

Klaus-Dieter Laidig^{(5) (6)}
Business Consultant
Laidig Business Consulting GmbH, Boeblingen

Supervisory Board, Heiler Software AG, Stuttgart
Supervisory Board, Varetis AG, Munich
Supervisory Board, Grau Data Storage AG, Schwäbisch Gmünd
Supervisory Board Knorr Capital Partner AG, Munich
Board of Directors, Agile Software Corporation, San José, USA
Board of Directors, Latitude Communications, Santa Clara, USA
Management Board, Mach HiTECH AG, Zug, Schweiz

Dr. Gerhard Maier^{(1) (2) (6) (8)}
Development Manager

Hartmut Mehdorn
Chairman of the Executive Board
Deutsche Bahn AG, Berlin

Supervisory Board, Lufthansa Technik AG, Hamburg
Supervisory Board, DB Station & Service AG, Berlin
Supervisory Board, DB Reise & Touristik AG, Berlin
Supervisory Board, DB Regio AG, Berlin
Supervisory Board, DB Cargo AG, Berlin
Supervisory Board, DB Netz AG, Berlin
Supervisory Board, DEVK Deutsche Eisenbahn Versicherung Lebensversicherungsverein a.G., Köln

Dr. Barbara Schennerlein⁽¹⁾
Consultant

Alfred Simon⁽¹⁾
Documentation Shipping Associate

Advisory Council, Contraf Nicotex Tobacco GmbH, Heilbronn

Dr. Dieter Spoeri
Head of Corporate Representation
Federal Affairs, DaimlerChrysler AG, Berlin

Dr. h.c. Klaus Tschira⁽³⁾
Managing Director, Klaus Tschira Foundation, Heidelberg

Supervisory Board, Lion bioscience AG, Heidelberg
Supervisory Board, SRH Learnlife AG, Heidelberg

- (1) Elected by the employees
- (2) Member of the Company’s Compensation Committee
- (3) Member of the Company’s Audit Committee
- (4) Member of the Company’s Mediation Committee
- (5) Member of the Company’s Technology Committee
- (6) Member of the Company’s Venture Capital Committee
- (7) Member of Finance Committee
- (8) Member of Corporate Governance Committee

(38) Significant Differences Between German and U.S. Accounting Principles

Introduction

Because SAP AG is a holding corporation that owns the majority of voting rights in other enterprises, it is generally obliged to prepare consolidated financial statements in accordance with the accounting regulations set out in the German Commercial Code (“Handelsgesetzbuch — HGB”). Section 292a HGB offers an exemption from this obligation if consolidated financial statements are prepared and published in accordance with an internationally accepted accounting principle (U.S. GAAP or IAS). To make use of this exemption, the Company is required to describe the significant differences between the accounting methods applied and German accounting methods.

Fundamental Differences

German HGB accounting rules and U.S. GAAP are based on fundamentally different perspectives. While accounting under the German HGB emphasizes the principle of caution and creditor protection, the availability of relevant information for shareholder decision-making is the primary objective of U.S. GAAP.

Revenue Recognition

Under German HGB, payment terms generally have no impact on revenue recognition. Under SOP 97-2, extended payment terms may indicate that license fees are not fixed and determinable and should therefore be recognized as payments become due.

Generally, software maintenance agreements are concluded in conjunction with the software license agreement. Maintenance fees are mostly based upon a standard percentage of the related software license fee. Under German HGB, the expected costs of the maintenance service are accrued if a free-of-charge service period is provided. SOP 97-2 regards both maintenance fees below the standard percentage and the provision of free maintenance service as discounts to be considered in recognizing software revenue. Therefore, the fair market value of nonstandard maintenance arrangements, including free service periods, reduce the related software license revenue and is recognized as maintenance revenue when such services are provided in subsequent periods.

Deferred Taxes

Under German GAAP, deferred tax assets are not recorded for net operating losses. Under U.S. GAAP, deferred tax assets are recorded for net operating losses and a valuation allowance is established when it is more likely than not that deferred tax assets will not be realized.

STAR Plan

The STAR plan rewards selected employees based on the appreciation of SAP AG’s share price over a predetermined period of time. The compensation arising from this measurement period is paid to participants in several installments. Under German GAAP, the total expense is recognized in the year the STARs were granted. In addition, the accrual is based on the share appreciation through the last date available before the completion of SAP AG’s financial statements. Under U.S. GAAP, the expense is recognized over a period beginning with the granting of the STARs and ending with the payment of the last installment. In addition, the accrual is based on the SAP share appreciation through December 31.

Put Option

During 2000, SAP AG sold a put option, as described in note 23, which entitles the option holder to sell 1.5 million SAP AG preference shares to the SAP AG for € 273 per share, or receive cash equal to any decline in the preference share market price upon exercise below € 273. Under German GAAP, any amounts due by the Company are recorded as an expense. Under U.S. GAAP, the put option is considered an equity instrument with no charge to earnings.

LTI Plan

Participants of the LTI 2000 Plan may choose convertible bonds, stock options, or a 50% mixture of each. Under German GAAP, the Company records expense over the vesting period only to the extent the Company provides shares it acquired from the market to the participant upon conversion or exercise. The expense amount is based upon the intrinsic value on the reporting date. No expense is recorded if the Company issues shares from contingent capital to the participant. Under U.S. GAAP, no expense is recorded for convertible bonds issued since the grant price is equal to the fair market value of a SAP AG ordinary share on the date of grant. Because the exercise price for stock options is variable, U.S. GAAP requires recognition of an expense over the vesting period based upon the stock options’ intrinsic value on the reporting date.

Goodwill and Intangible Assets

According to German GAAP, goodwill and intangible assets acquired in business combinations are either capitalized or recorded as a direct reduction to shareholders’ equity. If capitalized, amounts are subject to amortization and impairment testing. As described in note 3, SFAS No. 142 prohibits amortization of goodwill and intangible assets with an indefinite life acquired in business combinations after June 30, 2001.

Marketable Securities

Under German GAAP, marketable debt and equity securities are valued at the lower of acquisition cost or market value at the balance sheet date. Unrealized losses are included in earnings. Under U.S. GAAP, marketable debt and equity securities are categorized as either trading, available for sale or held to maturity. The Company’s securities are considered to be either trading or available for sale and, therefore, are valued under U.S. GAAP at fair market value as of the balance sheet date. Unrealized gains and losses for available for sale securities are reported net of tax, in accumulated other comprehensive income. A write-down in the value through a charge to finance expense occurs if a decline in market value is deemed to be other than temporary, that is, if the fair market value remains below cost for an extended period. Unrealized gains and losses from trading securities are included in earnings.

Derivatives

Under German GAAP, most derivatives are not recorded on the balance sheet. Unrealized gains are not recognized, unrealized losses are accrued. Under SFAS No. 133, derivatives are recorded on the balance sheet at their fair value. Gains or losses on derivatives qualifying as cash flow hedges are reported in accumulated other comprehensive income net of tax and are realized in earnings in conjunction with the gain or loss on the hedged item or transaction.

Employee Discounted Stock Purchase Program

Under certain employee discounted stock purchase programs, SAP employees are provided a discount on the purchase of SAP shares. Under German GAAP, discounts provided under these programs are expensed, whereas under U.S. GAAP, discounts provided are recorded as a direct reduction in additional paid-in capital.

Treasury Stock

According to HGB, treasury stock is considered a marketable security and is valued at the lower of cost or market at the balance sheet date. Unrealized and realized losses and realized gains are included in earnings. Under U.S. GAAP, as applied by the Company, treasury stock is recorded at cost within shareholders’ equity. Changes in value, whether realized or unrealized, are not recognized.

Walldorf, January 21, 2002
SAP Aktiengesellschaft

Systeme, Anwendungen, Produkte in der Datenverarbeitung
Walldorf/Baden

Executive Board
Plattner Kagermann Brandt Heinrich Oswald Zencke

FINANCIAL STATEMENTS OF SAP AG
(SHORT VERSION)
(Prepared in accordance with German GAAP)
as of December 31,

	2001 € (000)	2000 € (000)
Income Statement		
Total revenue	2,603,803	2,499,160
Increase in inventory of unfinished services	—	(11,697)
Other operating income	138,466	162,816
Cost of services and materials	(815,356)	(704,746)
Personnel expenses	(508,592)	(653,248)
Depreciation and amortization	(95,651)	(102,742)
Other operating expenses	(661,827)	(771,487)
Finance income	340,713	105,441
Income from ordinary activities	1,001,556	523,497
Extraordinary income	487,400	—
Income taxes	(419,114)	(244,997)
Net income	1,069,842	278,500
	2001 € (000)	2000 € (000)
Balance Sheet		
Intangible assets	24,647	33,288
Property, plant and equipment	463,498	412,586
Financial assets	2,316,830	959,394
Fixed assets	2,804,975	1,405,268
Inventories	24,045	8,527
Accounts receivable	999,587	759,732
Marketable securities	166,195	94,127
Liquid assets	36,156	77,329
Short-term assets	1,225,983	939,715
Deferred taxes	18,685	37,308
Prepaid expenses and deferred charges	19,554	11,515
Total assets	4,069,197	2,393,806
Shareholders' equity	2,178,338	1,286,685
Reserves and accrued liabilities	470,913	644,605
Other liabilities	1,416,966	459,918
Deferred income	2,980	2,598
Total shareholders' equity and liabilities	4,069,197	2,393,806

The complete Financial Statements and unqualified auditors' report for SAP AG are published in the Bundesanzeiger (German Federal Gazette) and deposited with the Commercial Registry of the Heidelberg Municipal Court. They can be obtained from SAP AG on request.

SUBSIDIARIES, ASSOCIATED COMPANIES AND OTHER INVESTMENTS

as of December 31, 2001

Name and location of company	Ownership %	amounts in thousands of €			Number of employees as of 12/31/2001 ⁽²⁾
		Sales revenues in 2001 ⁽¹⁾	Net income/loss (-) for 2001 ⁽¹⁾	Equity as of 12/31/2001 ⁽¹⁾	
I. AFFILIATED COMPANIES					
GERMANY					
SAP Deutschland AG & Co. KG, Walldorf ⁽³⁾	100	1,291,353	280,989	342,016	2,346
SAP Systems Integration AG, Dresden ⁽⁶⁾	60	242,053	(16,522)	229,928	1,532
SAP Markets Europe GmbH, Walldorf ⁽⁴⁾	100	113,388	(3,937)	15,798	460
SAP Retail Solutions GmbH & Co. KG, St. Ingbert ⁽⁴⁾	100	83,635	12,519	30,087	599
SAP Portals Europe GmbH, Walldorf ^{(3) (4), (5)}	100	81,400	5,689	84,748	496
Steeb Anwendungssysteme GmbH, Abstatt	100	46,404	4,839	5,715	198
SAP CRM Consulting GmbH & Co. KG, Mannheim ⁽⁴⁾	100	34,507	7,537	8,744	241
SAP Hosting AG & Co. KG, St. Leon- Rot ⁽⁴⁾	100	12,702	1,192	1,743	71
SAP Learning Solutions GmbH, Immenstaad	100	3,417	415	703	23
In-Q-My Technologies GmbH, Walldorf ..	100	4	(6,704)	(4,065)	14
SAP Beteiligungs GmbH, Walldorf	100	3	3	29	—
DACOS Software Holding GmbH, St. Ingbert	100	—	6,531	7,609	—
SAPHosting Beteiligungs GmbH, St. Leon-Rot	100	—	5	25	—
SAP Retail Solutions Beteiligungsgesellschaft mbH, Walldorf	100	—	3	33	—
SAP CRM Consulting Beteiligungsgesellschaft mbH, Mannheim	100	—	3	28	—
eSAP Beteiligungs GmbH, Walldorf	100	—	2	27	—
SAP Portals Holding GmbH & Co. KG, Walldorf ^{(3), (4)}	100	—	—	566,553	—
SAP Portals Holding Beteiligungs GmbH, Walldorf ^{(3), (4)}	100	—	—	27	—
sky7home GmbH, Walldorf	100	—	—	25	—
SAP Beteiligungsverwaltungs GmbH, Walldorf ⁽³⁾	100	—	—	—	—
Prescient Consulting GmbH, Walldorf ^{(3), (4)}	100	—	(3)	15	—

Name and location of company	Ownership %	amounts in thousands of €			Number of employees as of 12/31/2001 ⁽²⁾
		Sales revenues in 2001 ⁽¹⁾	Net income/loss (–) for 2001 ⁽¹⁾	Equity as of 12/31/2001 ⁽¹⁾	
REST OF EUROPE/MIDDLE EAST/AFRICA					
SAP (UK) Limited, Feltham/Great Britain	100	443,492	32,527	89,488	753
SAP FRANCE SYSTEMES APPLICATIONS ET PROGICIELS					
S.A., Paris/France	100	304,090	22,190	39,065	636
SAP (Schweiz) AG Systeme, Anwendungen und Produkte der					
Datenverarbeitung, Biel/Switzerland	100	280,131	33,684	100,681	512
SAP Nederland B.V., ‘s Hertogenbosch/					
The Netherlands	100	185,856	21,223	48,248	413
S.A.P. Italia Sistemi Applicazioni Prodotti					
in Data Processing S.p.A., Milan/Italy . .	100	182,535	15,423	60,121	365
SAP Österreich GmbH, Vienna/Austria . .	100	114,778	4,717	24,642	385
SAP España Sistemas Aplicaciones y					
Productos en la Informática, S.A.,					
Madrid/Spain	100	102,818	3,506	30,377	280
NV SAP BELGIUM SA,					
Brussels/Belgium	100	102,474	6,101	28,596	239
SAP Svenska Aktiebolag,					
Stockholm/Sweden	100	83,471	4,855	14,285	199
Systems Applications Products (Africa)					
(Proprietary) Limited,					
Woodmead/South Africa	100	62,584	2,587	10,465	278
SAP Finland Oy, Espoo/Finland	100	62,476	3,558	15,068	172
SAP Danmark A/S, Brøndby/Danmark . . .	100	61,231	2,225	11,949	191
SAP Portugal — Sistemas, Aplicações e					
Produtos Informáticos, Sociedade					
Unipessoal, Lda., Paco d’Arços/Portugal	100	57,004	6,312	17,873	122
SAP CR, spol. s.r.o., Prague/Czech					
Republic	100	51,949	1,412	15,818	202
SAP Polska Sp. z.o.o., Warsaw/Poland . . .	100	34,312	(214)	9,127	155
SAP Hellas S.A. Societe Anonyme of					
Systems, Applications & Information					
Technology Products, Athens/Greece . . .	100	29,786	1,433	3,410	207
SAP Hungary Rendszerek, Alkalmazások					
és Termékek az Adatfeldolgozásban					
Informatikai Kft., Budapest/Hungary . . .	100	27,958	1,057	9,675	141
SAP Norge AS, Lysaker/Norway	100	26,973	(1,934)	8,307	89
SAP Public Services (Pty) Ltd.,					
Woodmead/South Africa ⁽⁴⁾	70	24,780	2,170	1,734	38
SAP Service and Support Centre (Ireland)					
Limited, Dublin/Ireland	100	23,443	5,783	11,309	261
SAP Portals UK, Guildford/Great					
Britain ^{(3),(4)}	100	23,209	8,987	449	64
OOO SAP Consult C.I.S., Moscow/Russia	100	19,994	4,791	8,017	190
SAP Portals Israel, Ra’anana/Israel ^{(3),(4)} . .	100	17,456	(596)	(2,978)	149
SAP Slovensko s.r.o., Bratislava/Slovakia	100	14,273	627	3,768	42

Name and location of company	Ownership %	amounts in thousands of €			Number of employees as of 12/31/2001 ⁽²⁾
		Sales revenues in 2001 ⁽¹⁾	Net income/loss (-) for 2001 ⁽¹⁾	Equity as of 12/31/2001 ⁽¹⁾	
SAP Labs France S.A., Sophia Antipolis/France	100	8,210	544	2,741	118
SAP Systems Integration (Schweiz) AG, Frauenfeld/Switzerland ⁽⁴⁾	60	7,988	636	822	10
SAP Labs Israel Ltd. formerly SAP-OFEK Ltd., Industrial Area Herzliya/Israel....	100	6,101	299	2,773	63
CADRA S.A., Chazay D’Azergues/France ⁽⁴⁾	100	5,021	(766)	780	53
IN-Q-MY Labs EOOD, Sofia/Bulgaria ⁽⁴⁾	100	2,140	48	62	120
SAP Cyprus Ltd., Nicosia/Cyprus ⁽⁴⁾	100	2,039	(315)	368	24
SAP Systems Yazilim Uretim A.S., Istanbul/Turkey ⁽³⁾	100	1,607	(246)	332	21
SAP d.o.o., Zagreb/Croatia ⁽³⁾	100	1,403	360	386	7
LLC SAP Consult Ukraine, Kiev/Ukraine	100	1,121	237	292	13
SAP Bulgaria Ltd., Sofia/Bulgaria ⁽⁴⁾	100	832	(617)	(1,976)	27
Systems Application Products Limited, Lagos/Nigeria ⁽⁴⁾	100	312	(30)	(253)	—
IthinQ.com (Pty) Ltd., Woodmead/South Africa ⁽⁴⁾	60	5	419	(126)	—
SAP sistemi, aplikacije in produkti za obdelavo podatkov d.o.o., Ljubljana/Slovenia ⁽³⁾	100	—	—	25	—
SAP Portals Nederland B.V., ‘s-Hertogenbosch/The Netherlands ^{(3),(4)}	100	—	—	18	—
Ambin Properties (Pty) Ltd., Woodmead/South Africa ^{(3),(4)}	100	—	(1)	(1)	—
SAP Ireland Limited, Dublin/Ireland	100	—	—	—	—
KGM 46 Investments (Pty) Limited, Woodmead/South Africa ^{(3),(4)}	100	—	—	—	—
AMERICAS					
SAP America, Inc., Newtown Square/USA.....	100	1,915,913	76,573	735,258	3,552
SAP Canada Inc., North York/Canada ...	100	254,773	21,227	82,775	593
SAP Public Services, Inc., Washington D.C./USA ⁽⁴⁾	100	205,913	(10,509)	(54,785)	259
SAP Labs, Inc., Palo Alto/USA ⁽⁴⁾	100	176,089	2,550	22,782	713
SAP Brasil Ltda., Sao Paulo/Brazil	100	139,769	1,689	19,521	396
SAP Markets, Inc., Palo Alto/USA	100	116,702	(137,900)	(77,822)	329
SAP Global Marketing, Inc., New York/USA ⁽³⁾	100	105,410	1,082	607	50
SAP México, S.A. de C.V., Mexico City/Mexico	100	99,297	4,422	30,060	193
SAP ANDINA Y DEL CARIBE C.A., Caracas/Venezuela	100	83,521	5,446	19,877	159
SAP ARGENTINA S.A., Buenos Aires/Argentina	100	64,375	(3,360)	17,972	181
SAP Systems Integration America LLC, Atlanta/USA ^{(3),(4)}	100	23,910	(1,531)	9,766	117
SAP Portals Inc. USA, San Jose/USA ⁽³⁾	100	18,456	(94,077)	856,046	189

Name and location of company	Ownership %	amounts in thousands of €			Number of employees as of 12/31/2001 ⁽²⁾
		Sales revenues in 2001 ⁽¹⁾	Net income/loss (-) for 2001 ⁽¹⁾	Equity as of 12/31/2001 ⁽¹⁾	
SAP International, Inc., Miami/USA ⁽⁴⁾ ...	100	13,968	473	456	19
SAP Properties, Inc., Newtown Square/USA ⁽⁴⁾	100	3,153	83	119	—
SAP Systems Integration America Holding, Inc., Newtown Square/USA ^{(3),(4)}	100	—	(209)	4,548	—
SAP Investments, Inc., Wilmington/USA ⁽⁴⁾	100	—	(1,907)	725,643	—
ASIA/PACIFIC					
SAP JAPAN CO., LTD., Tokio/Japan ...	100	462,740	38,320	65,335	1,149
SAP AUSTRALIA PTY LTD, Sydney/Australia	100	112,142	(583)	5,524	337
SAP Asia Pte. Ltd., Singapore	100	71,533	3,303	17,207	298
SAP Korea Limited, Seoul/Korea	100	63,765	(2,165)	10,236	273
SAP MALAYSIA SDN. BHD., Kuala Lumpur/Malaysia	100	33,744	3,775	9,744	92
SAP INDIA SYSTEMS, APPLICATIONS AND PRODUCTS IN DATA PROCESSING PRIVATE LIMITED, Bangalore/India ⁽⁴⁾					
SAP HONG KONG CO. LIMITED, Taikoo Shing/Hong Kong	100	23,276	1,240	5,496	51
SAP (Beijing) Software System Co., Ltd., Beijing/China	100	21,795	254	749	174
SAP Labs India Private Limited, Bangalore/India	100	19,178	1,004	5,695	521
SAP Taiwan Co. Ltd., Taipei/Taiwan	100	13,711	(2,284)	10,255	64
PT SAP Indonesia formerly PT SAP ASIA, Jakarta/Indonesia	100	13,579	2,048	2,592	32
SAP SYSTEMS, APPLICATIONS AND PRODUCTS IN DATA PROCESSING (THAILAND) LTD., Bangkok/Thailand					
SAP NEW ZEALAND LIMITED, Auckland/New Zealand	100	8,037	(858)	2,685	30
SAP Philippines, Inc., Makati City/Philippines	100	6,035	(1,593)	(432)	37
SAPMARKETS ASIA PACIFIC SOLUTIONS PTE LTD, Singapore ⁽⁴⁾ ..					
SAP India (Holding) Pte. Ltd., Singapore	100	—	(15)	389	—
II. ASSOCIATED COMPANIES					
Commerce One, Inc., Pleasanton/USA ...	20	459,015	(2,903,156)	700,837	1,896
Global Virtual Marketplace GmbH, Munich/Germany	50	480	(2,765)	3,418	—
Emaro Verwaltungs AG, Walldorf/Germany	40	1,485	(6,779)	1,492	39
ec4ec.GmbH, Duesseldorf/Germany	20	144	(10,000)	13,800	31
Industry To Industry Inc., Boston/USA ...	31	1,043	(8,845)	2,563	20



Name and location of company	Ownership %	amounts in thousands of €			Number of employees as of 12/31/2001 ⁽²⁾
		Sales revenues in 2001 ⁽¹⁾	Net income/loss (-) for 2001 ⁽¹⁾	Equity as of 12/31/2001 ⁽¹⁾	
COPA GmbH, Wesel/Germany ⁽⁴⁾	25	28,300	854	2,595	230
SAP LEARNING SOLUTIONS PTE LTD, Singapore ⁽³⁾	40	1,020	(1,041)	(960)	19
Pandesic LLC i.L., Santa Clara/USA	50	—	—	—	—

III. OTHER INVESTMENTS (ownership of five or more percent)

ABACO P.R., Inc., Roswell/USA	MarketFirst Software, Inc., Mountain View/USA
ABC Technologies Inc., Beaverton/USA	Marketline HU, Budapest/Ungarn
Achilles Group Ltd., Oxon/Great Britain	mysaar.com Betreibergesellschaft mbH & Co. KG, Saarbruecken/Germany
Catalyst International Inc., Milwaukee/USA ⁽⁶⁾	mysaar.com Betreibergesellschaft Verwaltungs GmbH, Saarbruecken/Germany
cc-chemplorer Ltd., Dublin/Ireland	Onventis GmbH, Stuttgart/Germany
CENTRADE, a.s., Prague/Czech Republic	opsXchange.com, Inc., San Francisco/USA
CPGmarket.com SA, Geneva/Switzerland	Orbian Corp., New York/USA
DFKI GmbH, Kaiserslautern/Germany	Orbian Management Ltd., London/Great Britain
e-millennium 1 GmbH & Co. KG, Munich/Germany	PowerSim Corporation, Reston/USA
Grau Datastorage AG, Schwaebisch Gmuend/Germany	ProSyst Software AG, Cologne/Germany
Heiler Software AG, Stuttgart/Germany ⁽⁶⁾	Realize Corp., Tokio/Japan
humanIT Human Information Technologies GmbH, Sankt Augustin/Germany	SALT Logistics AG, Wuerzburg/Germany
IDS Scheer AG, Saarbruecken/Germany ⁽⁶⁾	Sequencia Corporation, Phoenix/USA
imc information multimedia communication GmbH, Saarbruecken/Germany	SupplyAccess, Inc., El Segundo/USA
Intellicorp Inc., Mountain View/USA ⁽⁶⁾	SupplyOn AG, Munich/Germany
InterWise Ltd., Tel Aviv/Israel	TeaLeaf, Inc., San Francisco/USA
Isochron Data Corp., Austin/USA	UTILITePlace AG, Hamburg/Germany
Iwaytrade.com (formerly OCIXEM) — Serviços de Informação, S.A., Lisbon/Portugal	VCB Virtueller Campus Bayern GmbH, Hof (Saale)/Germany
Jet2Web Bizmarket e-Business Services GmbH, Vienna/Austria	Venture Capital Beteiligungs GbR, Stuttgart/Germany
	YellowMap AG, Munich/Germany

(1) These figures do not include eliminations resulting from consolidation and therefore do not reflect the contribution of these companies included in the consolidated financial statements.

(2) As of December 31, 2001, including managing directors.

(3) Consolidated for the first time in 2001.

(4) Represents a wholly or majority owned entity of a subsidiary.

(5) Includes eSAP GmbH & Co. KG, Walldorf which was merged into this new company.

(6) Publicly held company.

SCHEDULE II

Valuation and Qualifying Accounts and Reserves
Years Ended December 31, 2001, 2000 and 1999
€(000)

Description	Beginning Balance	Charged to Costs and Expenses	Write-offs	Other Deductions	Ending Balance
Allowances for doubtful accounts:					
Year ended December 31, 1999	80,364	41,673	(25,303)	—	96,734
Year ended December 31, 2000	96,734	25,135	(20,417)	(25,229)	76,223
Year ended December 31, 2001	76,223	63,192	(19,184)	(9,962)	110,269