

A Significant Accounting Policies**Principles of Consolidation**

The consolidated financial statements include the accounts of International Business Machines Corporation and its controlled subsidiary companies, which are majority owned. Investments in business entities in which IBM does not have control, but has the ability to exercise significant influence over operating and financial policies (generally 20–50 percent ownership), are accounted for by the equity method. Other investments are accounted for by the cost method.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying disclosures. Although these estimates are based on management's best knowledge of current events and actions the company may undertake in the future, actual results ultimately may differ from the estimates.

Revenue**HARDWARE**

Revenue from hardware sales or sales-type leases is recognized when the product is shipped. Revenue from rentals and operating leases is recognized monthly as the fees accrue.

SERVICES

Revenue from time and material service contracts is recognized as the services are provided. Revenue from fixed price long-term service contracts is recognized over the contract term based on the percentage of services provided during the period compared to the total estimated services provided over the entire contract. Losses on fixed price contracts are recognized during the period in which the loss first becomes apparent. Revenue from maintenance is recognized over the contractual period or as the services are performed. Revenue in excess of billings on service contracts are recorded as unbilled receivables and included in trade accounts receivable. Billings in excess of revenue recognized on service contracts are recorded as deferred income until the above revenue recognition criteria are met.

SOFTWARE

Revenue from one-time charge licensed software is recognized when the program is shipped, provided the company has vendor-specific objective evidence of the fair value of each element of the software offering. A deferral is recorded for post-contract customer support and any other future deliverables included within the contract arrangement. This deferral is earned over the support period or as contract elements are delivered. Revenue from monthly software licenses is recognized as license fees accrue.

FINANCING

Revenue from financing is recognized at level rates of return over the term of the lease or receivable.

Revenue for all categories is reduced for estimated customer returns, allowances and anticipated price actions.

Income Taxes

Income tax expense is based on reported income before income taxes. Deferred income taxes reflect the impact of temporary differences between assets and liabilities recognized for financial reporting purposes and such amounts recognized for income tax purposes. In accordance with Statement of Financial Accounting Standards (SFAS) 109, "Accounting for Income Taxes," these deferred taxes are measured by applying currently enacted tax laws.

Translation of Non-U.S. Currency Amounts

Assets and liabilities of non-U.S. subsidiaries that operate in a local currency environment are translated to U.S. dollars at year-end exchange rates. Income and expense items are translated at average rates of exchange prevailing during the year. Translation adjustments are recorded in Accumulated gains and losses not affecting retained earnings within stockholders' equity.

Inventories and plant, rental machines and other non-monetary assets and liabilities of non-U.S. subsidiaries and branches that operate in U.S. dollars, or whose economic environment is highly inflationary, are translated at approximate exchange rates prevailing when acquired. All other assets and liabilities are translated at year-end exchange rates. Inventories charged to cost of sales and depreciation are translated at historical exchange rates. All other income and expense items are translated at average rates of exchange prevailing during the year. Gains and losses that result from translation are included in net income.

Financial Instruments

In the normal course of business, the company uses a variety of derivative financial instruments for the purpose of currency exchange rate and interest rate risk management. In order to qualify for hedge accounting, the company requires that the derivative instruments used for risk management purposes effectively reduce the risk exposure that they are designed to hedge. For instruments associated with the hedge of anticipated transactions, hedge effectiveness criteria also require that the occurrence of the underlying transactions be probable. Instruments meeting these hedging criteria are formally designated as hedges at the inception of the contract. Those risk management instruments not meeting these criteria and considered ineffective as hedges are accounted for at fair

value with changes in fair value recognized immediately in net income. Refer to note M, "Financial Instruments," on pages 74 and 75 for descriptions of the major classes of derivative financial instruments used by the company, including the specific methods used to account for them.

In assessing the fair value of its financial instruments, both derivative and non-derivative, the company uses a variety of methods and assumptions that are based on market conditions and risks existing at each balance sheet date. Quoted market prices or dealer quotes for the same or similar instruments are used for the majority of marketable securities, long-term investments and long-term debt. Other techniques, such as option pricing models, estimated discounted value of future cash flows, replacement cost and termination cost, are used to determine fair value for the remaining financial instruments. These values represent a general approximation of possible value and may never actually be realized.

Cash Equivalents

All highly liquid investments with a maturity of three months or less at date of purchase are carried at fair value and considered to be cash equivalents.

Marketable Securities

Marketable securities included within current assets represent highly liquid securities with a maturity less than one year. The company's marketable securities are considered available for sale and are reported at fair value with changes in unrealized gains and losses, net of applicable taxes, recorded in Accumulated gains and losses not affecting retained earnings within stockholders' equity. Realized gains and losses are calculated based on the specific identification method.

Inventories

Raw materials, work in process and finished goods are stated at the lower of average cost or net realizable value.

Depreciation

Plant, rental machines (computer equipment used internally or as part of managed operations contracts) and other property are carried at cost and depreciated over their estimated useful lives using the straight-line method.

The estimated useful lives of depreciable properties are generally as follows: buildings, 50 years; building equipment, 20 years; land improvements, 20 years; plant, laboratory and office equipment, 2 to 15 years; and computer equipment, 1.5 to 5 years.

Software

Costs related to the conceptual formulation and design of licensed programs are expensed as research and development. Costs incurred subsequent to establishment of technological feasibility to produce the finished product are capitalized. The annual amortization of the capitalized amounts is the greater of the amount computed based on the estimated revenue distribution over the products' revenue-producing lives, or the straight-line method, and is applied over periods ranging up to four years. Periodic reviews are performed to ensure that unamortized program costs remain recoverable from future revenue. Costs to support or service licensed programs are charged against income as incurred, or when related revenue is recognized, whichever occurs first.

Retirement Plans and Nonpension Postretirement Benefits

Current service costs of retirement plans and postretirement healthcare and life insurance benefits are accrued in the period. Prior service costs resulting from amendments to the plans are amortized over the average remaining service period of employees expected to receive benefits. Assuming thresholds established in SFAS 87, "Employers' Accounting for Pensions," are met, unrecognized net gains and losses are amortized to service cost over the average remaining service life of employees expected to receive benefits. See note W, "Retirement Plans," on page 81 through 83 and note X, "Nonpension Postretirement Benefits," on pages 83 and 84 for further discussion.

Goodwill

Goodwill is charged to net income on a straight-line basis over the periods estimated to be benefited, generally not exceeding five years. Reviews to evaluate recoverability of this goodwill are conducted periodically.

Common Stock

Common stock refers to the \$.50 par value capital stock as designated in the company's Certificate of Incorporation.

Earnings Per Share of Common Stock

Earnings per share of common stock is computed by dividing net income after deduction of preferred stock dividends by the weighted-average number of common shares outstanding for the period. Earnings per common share of stock—assuming dilution reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock which would then share in the net income of the company. See note T, "Earnings Per Share of Common Stock," on page 79 for further discussion.

B Accounting Changes

Standards Implemented

The company implemented new accounting standards in 1998, 1997 and 1996. None of these standards had a material effect on the financial position or results of operations of the company.

Beginning with the first quarter of 1998, the company adopted SFAS 130, "Reporting Comprehensive Income," which established standards for reporting and displaying comprehensive income and its components. The disclosures required by SFAS 130 are presented in the Accumulated gains and losses not affecting retained earnings section in the Consolidated Statement of Stockholders' Equity on pages 66 and 67 and in note O, "Stockholders' Equity Activity," on pages 76 and 77.

Effective December 31, 1998, the company adopted SFAS 131, "Disclosures About Segments of an Enterprise and Related Information," which establishes standards for reporting operating segments and disclosures about products and services, geographic areas and major customers. See note Y, "Segment Information," on pages 84 through 89 for further information.

Effective December 31, 1998, the company adopted SFAS 132, "Employers' Disclosures about Pensions and Other Postretirement Benefits," which established expanded disclosures for defined benefit pension and postretirement benefit plans. See note W, "Retirement Plans," on pages 81 through 83 and note X, "Nonpension Postretirement Benefits" on pages 83 and 84 for the required disclosures.

On January 1, 1998, the company adopted the American Institute of Certified Public Accountants Statement of Position (SOP) 97-2, "Software Revenue Recognition." This SOP provides guidance on revenue recognition for software transactions. It requires deferral of some or all of the revenue related to a specific contract depending on the existence of vendor-specific objective evidence and the ability to allocate the total fee to all elements within the contract. The portion of the fee allocated to an element is recognized as revenue when all of the revenue recognition criteria have been met for that element.

In December 1997, the company implemented SFAS 128, "Earnings Per Share" (EPS). This standard prescribes the methods for calculating basic and diluted EPS and requires dual presentation of these amounts on the face of the earnings statement. No restatement of EPS, for either basic or diluted, was required for amounts reported previously in the company's filings with the U.S. Securities and Exchange Commission.

Effective January 1, 1997, the company implemented SFAS 125, "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities." This standard provides accounting and reporting standards for transfers and servicing of financial assets and extinguishments of liabilities. The company was generally in compliance with this standard prior to adoption.

In 1996, the company adopted SOP 96-1, "Environmental Remediation Liabilities." This SOP provides guidance on the recognition, measurement, display and disclosure of environmental remediation liabilities. See note N, "Other Liabilities and Environmental," on page 76 for further information. The company was generally in compliance with this standard prior to adoption.

In 1996, the company implemented the disclosure-only provisions of SFAS 123, "Accounting for Stock-Based Compensation." See note V, "Stock-Based Compensation Plans," on pages 79 through 81 for further information.

New Standards to be Implemented

In June 1998, the Financial Accounting Standards Board issued SFAS 133, "Accounting for Derivative Instruments and Hedging Activities." This statement establishes accounting and reporting standards for derivative instruments. It requires an entity to recognize all derivatives as either assets or liabilities in the Statement of Financial Position and measure those instruments at fair value. Additionally, the fair value adjustments will impact either stockholders' equity or net income depending on whether the derivative instrument qualifies as a hedge and, if so, the nature of the hedging activity. The company will adopt this new standard as of January 1, 2000. Management does not expect the adoption to have a material impact on the company's results of operations, however, the impact on the company's financial position is dependent upon the fair values of the company's derivatives and related financial instruments at the date of adoption.

During 1998, the American Institute of Certified Public Accountants issued SOP 98-1, "Accounting for the Costs of Computer Software Developed or Obtained for Internal Use." The statement requires the capitalization of internal use computer software costs if certain criteria are met. The capitalized software costs will be amortized on a straight-line basis over the useful life of the software. The company will adopt the statement as of January 1, 1999. The adoption of the statement is not expected to have a material impact on the company's financial statements.

C Subsequent Events

Stock Split

On January 26, 1999, the IBM Board of Directors declared a two-for-one common stock split, subject to the approval of stockholders of an increase in the number of common shares authorized from 1,875 million to 4,687.5 million. The record date for the split will be on May 10, 1999, with distribution of the split shares expected to follow on May 26, 1999. Earnings per share calculations included in this report have not been restated to reflect this proposed stock split.

Debt Offering

On February 1, 1999, the company issued \$600 million of 5 3/8% notes due February 1, 2009. The net proceeds from the issuance of this debt will be used for general corporate purposes.

D Divestitures

In December 1998, IBM and AT&T announced that AT&T will acquire IBM's Global Network business for \$5 billion in cash. In addition, the two companies have agreed to enter into outsourcing contracts with each other. This subject is discussed further on pages 61 and 62 under the section entitled "Divestitures/Acquisitions" in the Management Discussion.

E Common Stock Split

On April 29, 1997, the stockholders of the company approved amendments to the Certificate of Incorporation to increase the number of authorized shares of common stock from 750 million to 1,875 million, which was required to effect a two-for-one stock split approved by the company's Board of Directors on January 28, 1997. In addition, the amendments served to reduce the par value of the common stock from \$1.25 to \$.50 per share. Stockholders of record at the close of business on May 9, 1997, received one additional share for each share held. All share and per share data prior to the second quarter of 1997 presented in the Consolidated Financial Statements and footnotes of this Annual Report reflect the two-for-one stock split.

F Inventories

(Dollars in millions)

At December 31:	1998	1997
Finished goods	\$ 1,088	\$ 1,090
Work in process and raw materials	4,112	4,049
Total	\$ 5,200	\$ 5,139

G Plant, Rental Machines and Other Property

(Dollars in millions)

At December 31:	1998	1997
Land and land improvements	\$ 1,091	\$ 1,117
Buildings	11,088	11,208
Plant, laboratory and office equipment	27,025	25,015
	39,204	37,340
Less: Accumulated depreciation	22,463	21,680
	16,741	15,660
Rental machines	5,666	4,793
Less: Accumulated depreciation	2,776	2,106
	2,890	2,687
Total	\$ 19,631	\$ 18,347

H Investments and Sundry Assets

(Dollars in millions)

At December 31:	1998	1997
Net investment in sales-type leases*	\$ 14,384	\$ 13,733
Less: Current portion—net	6,510	5,720
	7,874	8,013
Deferred taxes	2,921	3,163
Prepaid pension assets	4,836	3,828
Customer loan receivables— not yet due	3,499	2,741
Installment payment receivables	1,087	977
Alliance investments:		
Equity method	420	484
Other	138	236
Goodwill, less accumulated amortization (1998, \$2,111; 1997, \$1,717)	945	950
Marketable securities—non-current	281	295
Other investments and sundry assets	1,509	1,228
Total	\$ 23,510	\$ 21,915

* These leases relate principally to IBM equipment and are generally for terms ranging from three to five years. Net investment in sales-type leases includes unguaranteed residual values of approximately \$685 million and \$563 million at December 31, 1998 and 1997, respectively, and is reflected net of unearned income at those dates of approximately \$1,600 million for both years. Scheduled maturities of minimum lease payments outstanding at December 31, 1998, expressed as a percentage of the total, are approximately as follows: 1999, 48 percent; 2000, 31 percent; 2001, 15 percent; 2002, 5 percent; and 2003 and beyond, 1 percent.

I Lines of Credit

The company maintains a \$10.0 billion committed global credit facility. Unused committed lines of credit from this global facility amounted to \$8.8 billion and \$9.2 billion at December 31, 1998 and 1997, respectively. The company's other committed and uncommitted lines of credit amounted to \$5.2 billion at December 31, 1998 and 1997. The unused portion of those lines amounted to \$4.3 billion and \$3.9 billion at December 31, 1998 and 1997, respectively. Total unused lines of credit at December 31, 1998 and 1997, amounted to \$13.1 billion. Interest rates on borrowings vary from country to country depending on local market conditions.

J Sale and Securitization of Receivables

At year-end 1998 and 1997, the company had a net balance of \$0.9 billion in assets under management from the securitization of loans, leases and trade receivables. The company received total cash proceeds of approximately \$2.4 billion and \$3.0 billion in 1998 and 1997, respectively, from the sale and securitization of these receivables and assets. No material gain or loss resulted from these transactions. Recourse amounts associated with the aforementioned sale and securitization activities are expected to be minimal, and adequate reserves are in place to cover potential losses.

K Debt

Short-term debt

(Dollars in millions)

At December 31:	1998	1997
Commercial paper	\$ 4,885	\$ 4,583
Short-term loans	6,370	5,699
Long-term debt: Current maturities	2,650	2,948
Total	\$ 13,905	\$ 13,230

The weighted-average interest rates for commercial paper at December 31, 1998 and 1997, were approximately 5.7 percent and 5.8 percent, respectively. The weighted-average interest rates for short-term loans at December 31, 1998 and 1997, were approximately 5.3 percent and 5.5 percent, respectively.

Long-term debt

(Dollars in millions)

At December 31:	Maturities	1998	1997*
U.S. Dollars:			
Debentures:			
6.22%	2027	\$ 500	\$ 500
6.5%	2028	700	—
7.0%	2025	600	600
7.0%	2045	150	150
7.125%	2096	850	850
7.5%	2013	550	550
8.375%	2019	750	750
Notes: 6.7% average	2000-2013	2,695	2,674
Medium-term note			
program: 5.8% average	1999-2013	4,885	4,472
Other: 6.5% average	1999-2012	1,514	1,319
		13,194	11,865
Other currencies			
(average interest rate at December 31, 1998, in parentheses):			
Japanese yen (3.1%)	1999-2014	3,866	3,944
Canadian dollars (5.7%)	1999-2003	672	407
German marks (4.9%)	1999-2002	120	111
Swiss francs (2.5%)	2001	91	85
U.K. pounds (7.9%)	1999-2004	25	28
Other (11.9%)	1999-2026	221	235
		18,189	16,675
Less: Net unamortized discount			
		31	31
		18,158	16,644
Less: Current maturities			
		2,650	2,948
Total		\$ 15,508	\$ 13,696

Annual maturities in millions of dollars on long-term debt outstanding at December 31, 1998, are as follows: 1999, \$2,650; 2000, \$5,120; 2001, \$1,491; 2002, \$1,676; 2003, \$1,116; 2004 and beyond, \$6,136.

* Reclassified to conform to 1998 presentation.

L Interest on Debt

Interest paid and accrued on borrowings of the company and its subsidiaries amounted to \$1,585 million in 1998, \$1,596 million in 1997 and \$1,565 million in 1996. Of these amounts, \$28 million in 1998, \$32 million in 1997 and \$31 million in 1996 were capitalized. The remainder was charged to the cost of rentals and financing in the amounts of \$844 million in 1998, \$836 million in 1997 and \$818 million in 1996, or interest expense in the amounts of \$713 million in 1998, \$728 million in 1997 and \$716 million in 1996. The decrease in total interest expense in 1998 versus 1997 was due primarily to lower average interest rates, partially offset by higher levels of debt. The increase in total interest expense in 1997 versus 1996 was primarily due to higher levels of debt, partially offset by lower interest rates. The average interest rate for total debt was 5.7 percent, 6.4 percent and 7.0 percent in 1998, 1997 and 1996, respectively. These rates include the results of currency and interest rate swaps applied to the debt described in note K, "Debt," on page 73.

M Financial Instruments

The company maintains portfolios of financial instruments both on- and off-balance sheet.

Financial Instruments On-Balance Sheet (excluding derivatives)

Financial assets with carrying values approximating fair value include cash and cash equivalents, marketable securities, notes and other accounts receivable and other investments. Financial liabilities with carrying values approximating fair value include accounts payable and other accrued expenses and liabilities, and short-term and long-term debt.

The following table summarizes the company's marketable securities and other investments, all of which were considered available for sale.

MARKETABLE SECURITIES AND OTHER INVESTMENTS

(Dollars in millions)	Carrying Value	
	1998	1997
At December 31:		
Current marketable securities:		
U.S. government securities	\$ 15	\$ 93
Time deposits and other bank obligations	335	181
Non-U.S. government securities and other fixed-term obligations	43	173
Total	\$ 393	\$ 447
Marketable securities—non-current:*		
U.S. government securities	\$ —	\$ 54
Time deposits and other bank obligations	271	183
Non-U.S. government securities and other fixed-term obligations	10	58
Total	\$ 281	\$ 295
Other investments:*		
Alliance investments—Other	\$ 138	\$ 236

* Included within Investments and sundry assets on the Consolidated Statement of Financial Position (See note H on page 72).

Financial Instruments Off-Balance Sheet (excluding derivatives)

IBM has guaranteed certain loans and financial commitments of affiliates. The approximate amount of these financial guarantees were \$1,158 million and \$861 million at December 31, 1998 and 1997, respectively. Additionally, the company is responsible for fulfilling financial commitments associated with certain contracts to which it is a party. These commitments, which in the aggregate were approximately \$1,600 million and \$600 million at December 31, 1998 and 1997, respectively, are not expected to have a material adverse effect on the company's financial position or results of operations.

The company's dealers had unused lines of credit available from IBM for working capital financing of approximately \$3.6 billion and \$2.1 billion at December 31, 1998 and 1997, respectively.

Derivative Financial Instruments

The company has used derivative instruments as an element of its risk management strategy for many years. Although derivatives entail a risk of nonperformance by counterparties, the company manages this risk by establishing explicit dollar and term limitations that correspond to the credit rating of each carefully selected counterparty. The company has not sustained a material loss from these instruments nor does it anticipate any material adverse effect on its results of operations or financial position in the future.

The following table summarizes the notional value, carrying value and fair value of the company's derivative financial instruments on- and off-balance sheet. The notional value at

December 31 provides an indication of the extent of the company's involvement in such instruments at that time, but does not represent exposure to market risk.

(Dollars in millions)	At December 31, 1998			At December 31, 1997		
	Notional Value	Carrying Value	Fair Value	Notional Value	Carrying Value	Fair Value
Interest rate and currency contracts	\$ 31,484	\$ (485)	\$ (427)	\$ 24,774	\$ 29	\$ 84
Option contracts	9,021	67	45	14,211	41	193
Total	\$ 40,505	\$ (418)	\$ (382)*	\$ 38,985	\$ 70	\$ 277*

Bracketed amounts are liabilities.

* The estimated fair value of derivatives both on- and off-balance sheet at December 31, 1998 and 1997, consists of assets of \$486 million and \$581 million and liabilities of \$868 million and \$304 million, respectively.

A significant portion of the company's derivative transactions relates to the matching of liabilities to assets associated with both its global financing business and its non-global financing business. The company issues debt, using the most efficient capital markets and products, which may result in a currency or interest rate mismatch with the underlying assets. Interest rate swaps or currency swaps are then used to match the interest rates and currencies of its debt to the related assets. These swap contracts principally mature within five years. Interest and currency rate differentials accruing under these interest rate and currency swap contracts are recognized over the life of the contracts in interest expense.

The company uses internal regional centers to manage the cash of its subsidiaries. These regional centers principally use currency swaps to convert cash flows in a cost-effective manner, predominantly for the company's European subsidiaries. The terms of the swaps are generally less than one year. The effects of these contracts are recognized over the life of the contract in interest expense.

The company also utilizes currency swaps and other foreign currency contracts in order to hedge the foreign currency exposures of certain of the company's net investments in foreign subsidiaries. The currency effects of these hedges are reflected in the Accumulated gains and losses not affecting retained earnings section of Stockholders' equity, offsetting a portion of the translation of net assets.

When the terms of an underlying instrument are modified, or if it ceases to exist, all changes in fair value of the swap contract are recognized in income each period until it matures.

Additionally, the company uses derivatives to limit its exposure to loss resulting from fluctuations in foreign currency exchange rates on anticipated cash transactions among foreign subsidiaries and the parent company. The company receives significant intracompany royalties and net payments for goods and services from its non-U.S. subsidiaries. In anticipation of these foreign currency flows, and given the volatility of the currency markets, the company selectively employs foreign currency options to manage the currency risk. The terms of these instruments are generally less than one year.

For purchased options that hedge qualifying anticipated transactions, gains and losses are deferred and recognized in net income in the same period that the underlying transaction occurs, expires or is otherwise terminated. At December 31, 1998 and 1997, there were no material deferred gains or losses. The premiums associated with entering into these option contracts are generally amortized over the life of the options and are not material to the company's results. Unamortized premiums are included in prepaid assets. For purchased options that hedge anticipated transactions which do not qualify for hedge accounting, gains and losses are recorded in net income as they occur on a mark-to-market basis. All written options are marked to market monthly and are not material to the company's results.

The company also enters into transactions to moderate the impact that an appreciation of the dollar relative to other currencies would have on the translation of foreign earnings. These transactions do not qualify as hedges for accounting purposes, and their foreign exchange gains and losses are recorded in net income as they occur.

N Other Liabilities and Environmental

Other liabilities consists principally of accruals for nonpension postretirement benefits for U.S. employees (\$6.6 billion) and nonpension postretirement benefits, indemnity and retirement plan reserves for non-U.S. employees (\$1.4 billion). More detailed discussion of these liabilities appears in note X, "Nonpension Postretirement Benefits," on pages 83 and 84, and note W, "Retirement Plans," on pages 81 through 83.

Also included are non-current liabilities associated with infrastructure reduction and restructuring actions taken in 1993 and prior. As a result, amounts representing postemployment preretirement accruals in the amount of \$793 million and \$681 million (net of sublease receipts) for accruals for leased space that the company has vacated are included.

The company employs extensive internal environmental protection programs that are primarily preventative in nature. The cost of these ongoing programs is recorded as incurred.

The company continues to participate in environmental assessments and cleanups at a number of locations, including operating facilities, previously owned facilities and Superfund sites. The company accrues for all known environmental liabilities for remediation costs when a cleanup program becomes probable and costs can be reasonably estimated. In addition, estimated environmental costs associated with post-closure activities, such as the removal and restoration of chemical storage facilities and monitoring, are accrued when the decision is made to close a facility. The total amounts accrued, which do not reflect any insurance recoveries, were \$238 million and \$243 million at December 31, 1998 and 1997, respectively.

The amounts accrued do not cover sites that are in the preliminary stages of investigation where neither the company's percentage of responsibility nor the extent of cleanup required has been identified. Estimated environmental costs are not expected to materially impact the financial position or results of the company's operations in future periods. However, environmental cleanup periods are protracted in length, and environmental costs in future periods are subject to changes in environmental remediation regulations.

O Stockholders' Equity Activity**Stock Repurchases**

The Board of Directors from time to time has authorized the company to repurchase IBM common stock. The company repurchased 57,384,100 common shares at a cost of \$6.9 billion and 81,505,200 common shares at a cost of \$7.1 billion in 1998 and 1997, respectively. The repurchases resulted in a reduction of \$28,498,409 and \$34,388,668 in the stated capital (par value) associated with common stock in 1998 and 1997, respectively. In 1997, 10 million repurchased shares were used to establish the Employee Benefits Trust (see below). In 1998 and 1997, 387,282 and 2,727,864 shares, respectively, were issued as a result of acquisitions. The rest of the repurchased shares were retired and restored to the status of authorized but unissued shares. At December 31, 1998, approximately \$2.8 billion of Board authorization for repurchases remained. The company plans to purchase shares on the open market from time to time, depending on market conditions.

In 1995, the IBM Board of Directors authorized the company to purchase all of its outstanding Series A 7 1/2 percent preferred stock. During 1998 and 1997, the company repurchased 51,250 shares at a cost of \$5.5 million and 13,450 shares at a cost of \$1.4 million, respectively. This resulted in a \$512.50 and \$134.50 (\$.01 par value per share) reduction in the stated capital associated with preferred stock as of December 31, 1998 and 1997, respectively. The repurchased shares were retired and restored to the status of authorized but unissued shares. The company plans to purchase remaining shares on the open market and in private transactions from time to time, depending on market conditions.

Employee Benefits Trust

Effective November 1, 1997, the company created an employee benefits trust to which the company contributed 10 million shares of treasury stock. The company is authorized to instruct the trustee to sell shares from time to time and to use proceeds from such sales, and any dividends paid on such contributed stock, toward the partial satisfaction of the company's future obligations under certain of its compensation and benefits plans, including its retiree medical plans. The shares held in trust are not considered outstanding for earnings per share purposes until they are committed to be released. The shares will be voted by the trustee in accordance with its fiduciary duties. As of December 31, 1998 and 1997, no shares have been committed to be released.

At December 31, 1998, the company adjusted its valuation of the employee benefits trust to fair value. This adjustment solely impacted line items within stockholders' equity and did not affect total stockholders' equity or net income.

Accumulated Gains and Losses Not Affecting Retained Earnings

(Dollars in millions)	Foreign Currency Items (Net of Tax)	Net Unrealized Gains (Losses) on Marketable Securities (Net of Tax)	Total Gains and Losses Not Affecting Retained Earnings (Net of Tax)
Beginning balance, January 1, 1996	\$ 3,036	\$ 57	\$ 3,093
Change for period	(635)	111	(524)
Ending balance, December 31, 1996	2,401	168	2,569
Change for period	(1,610)	(60)	(1,670)
Ending balance, December 31, 1997	791	108	899
Change for period	69	(57)	12
Ending balance, December 31, 1998	\$ 860	\$ 51	\$ 911

**NET CHANGE IN UNREALIZED GAINS (LOSSES) ON
MARKETABLE SECURITIES (NET OF TAX)**

(Dollars in millions)	1998
For the year ended December 31:	
Unrealized gains	
arising during the period, net of tax	\$ 99
Less gains included in net income	
for the period, net of tax	156
Net decrease in unrealized gains	
on marketable securities, net of tax	\$ (57)

P Contingencies

The company is subject to a variety of claims and suits that arise from time to time out of the ordinary course of its business, including actions with respect to contracts, intellectual property, product liability and environmental matters. The company does not believe that any such current action will have a material impact on the company's business, financial condition or results of operations.

On February 25, 1993, a class action complaint was filed against the company in the United States District Court for the Southern District of New York alleging, among other matters, that the company disseminated false and misleading statements concerning its financial condition and dividends during certain periods of 1992. On February 3, 1997, Judge Rakoff issued an order granting the company's motion for summary judgment in this case in its entirety. Plaintiffs filed an appeal and on November 17, 1998, the Second Circuit Court of Appeals upheld Judge Rakoff's decision for the company.

Q Taxes

(Dollars in millions)	1998	1997	1996
For the year ended December 31:			
Income before income taxes:			
U.S. operations	\$ 2,960	\$ 3,193	\$ 3,025
Non-U.S. operations	6,080	5,834	5,562
	\$ 9,040	\$ 9,027	\$ 8,587

The provision for income taxes by geographic operations is as follows:

U.S. operations	\$ 991	\$ 974	\$ 1,137
Non-U.S. operations	1,721	1,960	2,021
Total provision for income taxes	\$ 2,712	\$ 2,934	\$ 3,158

The components of the provision for income taxes by taxing jurisdiction are as follows:

U.S. federal:			
Current	\$ 1,117	\$ 163	\$ 727
Deferred	(475)	349	83
	642	512	810
U.S. state and local:			
Current	139	83	158
Deferred	(260)	(87)	(353)
	(121)	(4)	(195)
Non-U.S.:			
Current	2,062	2,330	2,262
Deferred	129	96	281
	2,191	2,426	2,543
Total provision for income taxes	2,712	2,934	3,158
Provision for social security, real estate, personal property and other taxes	2,859	2,774	2,584
Total provision for taxes	\$ 5,571	\$ 5,708	\$ 5,742

The effect of tax law changes on deferred tax assets and liabilities did not have a significant impact on the company's effective tax rate.

The significant components of activities that gave rise to deferred tax assets and liabilities included on the balance sheet were as follows:

DEFERRED TAX ASSETS

(Dollars in millions)

At December 31:	1998	1997
Employee benefits	\$ 3,909	\$ 3,707
Bad debt, inventory and warranty reserves	1,249	1,027
Alternative minimum tax credits	1,169	1,092
Capitalized research and development	913	1,196
Restructuring charges	863	1,163
Deferred income	686	893
General business credits	555	492
Equity alliances	387	378
Foreign tax loss carryforwards	304	202
State and local tax loss carryforwards	212	203
Depreciation	201	132
Intracompany sales and services	182	235
Other	2,614	2,507
Gross deferred tax assets	13,244	13,227
Less: Valuation allowance	488	2,163
Net deferred tax assets	\$ 12,756	\$ 11,064

DEFERRED TAX LIABILITIES

(Dollars in millions)

At December 31:	1998	1997
Sales-type leases	\$ 3,433	\$ 3,147
Retirement benefits	2,775	2,147
Depreciation	1,505	1,556
Software costs deferred	287	420
Other	1,841	1,413
Gross deferred tax liabilities	\$ 9,841	\$ 8,683

As part of implementing its global strategies involving the relocation of certain of its manufacturing operations, the company transferred certain intellectual property rights to several non-U.S. subsidiaries in December 1998. Since these strategies, including this transfer, result in the anticipated utilization of U.S. federal tax credit carryforwards, the company reduced the valuation allowance from that previously required. The valuation allowance at December 31, 1998, principally applies to certain state and local and foreign tax loss carryforwards that, in the opinion of management, are more likely than not to expire before the company can utilize them.

A reconciliation of the company's effective tax rate to the statutory U.S. federal tax rate is as follows:

For the year ended December 31:	1998	1997	1996
Statutory rate	35%	35%	35%
Foreign tax differential	(6)	(3)	2
State and local	1	1	1
U.S. valuation allowance related items	(1)	—	(6)
Other	1	—	5
Effective rate	30%	33%	37%

For tax return purposes, the company has available tax credit carryforwards of approximately \$2,067 million, of which \$1,169 million have an indefinite carryforward period, \$184 million expire in 1999 and the remainder thereafter. The company also has state and local and foreign tax loss carryforwards, the tax effect of which is \$516 million. Most of these carryforwards are available for 10 years or have an indefinite carryforward period.

Undistributed earnings of non-U.S. subsidiaries included in consolidated retained earnings amounted to \$13,165 million at December 31, 1998, \$12,511 million at December 31, 1997, and \$12,111 million at December 31, 1996. These earnings, which reflect full provision for non-U.S. income taxes, are indefinitely reinvested in non-U.S. operations or will be remitted substantially free of additional tax.

R Selling and Advertising

Selling and advertising expense is charged against income as incurred. Advertising expense, which includes media, agency and promotional expenses, amounted to \$1,681 million, \$1,708 million and \$1,569 million in 1998, 1997 and 1996, respectively.

S Research, Development and Engineering

Research, development and engineering expense amounted to \$5,046 million in 1998, \$4,877 million in 1997 and \$5,089 million in 1996. Expenditures for product-related engineering included in these amounts were \$580 million, \$570 million and \$720 million in 1998, 1997 and 1996, respectively.

Expenditures of \$4,466 million in 1998, \$4,307 million in 1997 and \$4,369 million in 1996 were made for research and development activities covering basic scientific research and the application of scientific advances to the development of new and improved products and their uses. Of these amounts, software-related activities were \$2,086 million, \$2,016 million and \$2,161 million in 1998, 1997 and 1996, respectively. Included in the 1996 expenditures is \$435 million of purchased in-process research and development expense relating to the Tivoli and Object Technology International, Inc. acquisitions.

T Earnings Per Share of Common Stock

The following table sets forth the computation of basic and diluted earnings per share.

For the year ended December 31:	1998	1997	1996
Number of shares on which basic earnings per share is calculated:			
Average outstanding during year	934,502,785	983,286,361	1,056,704,188
Add—Incremental shares under stock compensation plans	25,562,450	27,648,581	23,004,716
Number of shares on which diluted earnings per share is calculated	960,065,235	1,010,934,942	1,079,708,904
Net income (millions)	\$ 6,328	\$ 6,093	\$ 5,429
Less—Preferred stock dividends (millions)	20	20	20
Net income on which basic and diluted earnings per share are calculated (millions)	\$ 6,308	\$ 6,073	\$ 5,409
Basic earnings per share	\$ 6.75	\$ 6.18	\$ 5.12
Diluted earnings per share	\$ 6.57	\$ 6.01	\$ 5.01

Stock options to purchase 2,062,365 shares in 1998, 165,833 shares in 1997 and 784,141 shares in 1996 were outstanding, but were not included in the computation of diluted earnings per share because the options' exercise price was greater than the average market price of the common shares, and therefore, the

effect would be antidilutive. In addition, 2,565,519 restricted stock units in 1998 relating to the company's Long-Term Performance Plan were not included in the computation of diluted earnings as their effect would be antidilutive.

U Rental Expense and Lease Commitments

Rental expense, including amounts charged to inventories and fixed assets and excluding amounts previously reserved, was \$1,431 million in 1998, \$1,280 million in 1997 and \$1,210 million in 1996. The table below depicts gross minimum rental commitments under noncancelable leases, amounts related to vacant space that the company has reserved and sublease income commitments. These amounts generally reflect activities related to office space and manufacturing equipment.

(Dollars in millions)	1999	2000	2001	2002	2003	Beyond 2003
Gross rental commitments	\$ 1,398	\$ 1,242	\$ 1,085	\$ 877	\$ 623	\$ 1,417
Vacant space	205	188	150	98	59	222
Sublease income commitments	165	140	122	64	35	66

V Stock-Based Compensation Plans

The company applies Accounting Principles Board (APB) Opinion No. 25 and related Interpretations in accounting for its stock-based compensation plans. A description of the terms of the company's stock-based compensation plans follows:

Long-Term Performance Plan

Incentive awards are provided to officers and other key employees under the terms of the IBM 1997 Long-Term Performance Plan, which was approved by stockholders in April 1997, and its predecessor plan, the 1994 Long-Term Performance Plan ("the Plans"). The Plans are administered by the Executive Compensation and Management Resources Committee of the Board of Directors. The committee determines the type and terms of the awards to be granted, including vesting provisions.

Awards may include stock options, stock appreciation rights, restricted stock, cash or stock awards, or any combination thereof. The number of shares that may be issued under the IBM 1997 Long-Term Performance Plan for awards is 50.3 million, which was 5 percent of the outstanding common stock on February 10, 1997. There were 34.3 million and 46.4 million unused shares available for granting under the IBM 1997 Long-Term Performance Plan as of December 31, 1998 and 1997, respectively, and approximately 2.0 and 9.0 million shares available for granting under the 1994 Long-Term Performance Plan at December 31, 1998 and 1997, respectively.

These awards, which are expressed in terms of shares, are adjusted to fair value at the end of each period and the change in value is included in net income. Awards under the Plans resulted in compensation expense of \$322.4 million, \$214.1 million and \$203.9 million in 1998, 1997 and 1996, respectively.

Stock Option Grants

Stock options granted under the Plans allow the purchase of the company's common stock at 100 percent of the market price on the date of grant and generally expire 10 years from the date of grant. The following tables summarize option activity of the Plans during 1998, 1997 and 1996:

	1998		1997		1996	
	Wtd. Avg. Exercise Price	No. of Shares under Option	Wtd. Avg. Exercise Price	No. of Shares under Option	Wtd. Avg. Exercise Price	No. of Shares under Option
Balance at January 1	\$ 54	61,728,361	\$ 44	61,435,322	\$ 39	68,565,806
Options granted	107	20,587,675	71	21,471,228	63	15,359,058
Options exercised	44	(14,816,738)	42	(19,630,005)	36	(19,302,622)
Options terminated	71	(1,777,373)	56	(1,548,184)	61	(3,186,920)
Balance at December 31	\$ 72	65,721,925	\$ 54	61,728,361	\$ 44	61,435,322
Exercisable at December 31	\$ 44	23,095,818	\$ 38	26,619,548	\$ 41	30,603,845

The shares under option at December 31, 1998, were in the following exercise price ranges:

Exercise Price Range	Options Outstanding			Options Currently Exercisable	
	No. of Options	Wtd. Avg. Exercise Price	Wtd. Avg. Contractual Life (in years)	No. of Options	Wtd. Avg. Exercise Price
\$21 – 50	16,708,124	\$ 32	5	15,137,952	\$ 32
\$51 – 80	26,369,118	68	7	7,463,820	66
\$81 – 110	20,024,496	103	9	491,047	103
\$111 and over	2,620,187	138	10	2,999	112
	65,721,925	\$ 72		23,095,818	\$ 44

IBM Employees Stock Purchase Plan

The IBM Employees Stock Purchase Plan (ESPP) enables substantially all regular employees to purchase full or fractional shares of IBM common stock through payroll deductions of up to 10 percent of eligible compensation. The price an employee pays is 85 percent of the average market price on the last day of an applicable pay period.

During 1998, 1997 and 1996, employees purchased 3,993,372, 4,676,980 and 6,461,856 shares, all of which were treasury shares, for which \$415 million, \$354 million and \$324 million were paid to the company, respectively.

There were approximately 31.5 million, 35.5 million and 40.2 million reserved unissued shares available for purchase under the ESPP, as previously approved by stockholders, at December 31, 1998, 1997 and 1996, respectively.

Pro Forma Disclosure

In applying APB Opinion No. 25, no expense was recognized for stock options granted under the Plan or for employee stock purchases under the ESPP. SFAS 123 requires that a fair market value of all awards of stock-based compensation be determined using standard techniques and that pro forma net income and earnings per share be disclosed as if the resulting stock-based compensation amounts were recorded in the Consolidated Statement of Earnings. The table below depicts the effects of SFAS 123.

(Dollars in millions except per share amounts)	1998		1997		1996	
	As reported	Pro forma	As reported	Pro forma	As reported	Pro forma
Net income applicable to common shareholders	\$ 6,308	\$ 5,985	\$ 6,073	\$ 5,866	\$ 5,409	\$ 5,267
Earnings per share of common stock—basic	\$ 6.75	\$ 6.40	\$ 6.18	\$ 5.97	\$ 5.12	\$ 4.98
Earnings per share of common stock—assuming dilution	\$ 6.57	\$ 6.24	\$ 6.01	\$ 5.82	\$ 5.01	\$ 4.89

The pro forma amounts, for purposes of SFAS 123, reflect the portion of the estimated fair value of awards earned in 1998, 1997 and 1996. The aggregate fair value of awards granted is earned ratably over the vesting or service period and is greater than that included in the pro forma amounts.

The company used the Black-Scholes model to value the stock options granted in 1998, 1997 and 1996. The weighted-average assumptions used to estimate the value of the options included in the pro forma amounts, and the weighted-average estimated fair value of an option granted are as follows:

	1998	1997	1996
Term (years)*	5/6	5/6	5/6
Volatility**	26.4%	23.0%	22.0%
Risk-free interest rate (zero coupon U.S. treasury note)	5.1%	6.2%	6.0%
Dividend yield	0.8%	1.0%	1.2%
Weighted-average fair value of options	\$ 36	\$ 25	\$ 20

* Option term is based on tax incentive options (5 years) and non-tax incentive options (6 years).
 **To determine volatility, the company measured the daily price changes of the stock over the most recent 5 and 6 year periods.

W Retirement Plans

The company and its subsidiaries have defined benefit and defined contribution retirement plans covering substantially all regular employees, and a supplemental retirement plan that covers certain executives.

The changes in the benefit obligations and plan assets of the U.S. and material non-U.S. defined benefit plans for 1998 and 1997 were as follows:

(Dollars in millions)	U.S. Plan		Non-U.S. Plans	
	1998	1997*	1998	1997*
Change in benefit obligation:				
Benefit obligation at beginning of year	\$ 33,161	\$ 29,729	\$ 18,846	\$ 19,883
Service cost	532	397	399	366
Interest cost	2,261	2,215	1,213	1,182
Plan participants' contributions	—	—	29	33
Acquisitions/divestitures, net	22	(2)	—	129
Amendments	—	14	2	—
Actuarial losses	2,729	2,805	1,331	431
Benefits paid from trust	(2,144)	(1,997)	(683)	(623)
Direct benefit payments	—	—	(254)	(281)
Foreign exchange impact	—	—	1,155	(2,186)
Plan curtailments/settlements/termination benefits	—	—	10	(88)
Benefit obligation at end of year	36,561	33,161	22,048	18,846
Change in plan assets:				
Fair value of plan assets at beginning of year	38,475	34,281	21,841	21,039
Actual return on plan assets	5,240	6,193	2,400	3,454
Employer contribution	—	—	452	192
Acquisitions/divestitures, net	22	(2)	—	129
Plan participants' contributions	—	—	29	33
Benefits paid from trust	(2,144)	(1,997)	(683)	(623)
Foreign exchange impact	—	—	1,283	(2,263)
Settlements	—	—	(28)	(120)
Fair value of plan assets at end of year	41,593	38,475	25,294	21,841
Fair value of plan assets in excess				
of benefit obligation	5,032	5,314	3,246	2,995
Unrecognized net actuarial gains	(1,289)	(1,901)	(2,342)	(2,897)
Unrecognized prior service costs	174	190	181	194
Unrecognized net transition asset	(771)	(911)	(78)	(83)
Adjustment to recognize minimum liability	—	—	(87)	(3)
Prepaid pension asset recognized				
in the Consolidated Statement of Financial Position	\$ 3,146	\$ 2,692	\$ 920	\$ 206

* Reclassified to conform to 1998 presentation.

U.S. Plan: U.S. regular, full-time and part-time employees are covered by a noncontributory plan that is funded by company contributions to an irrevocable trust fund, which is held for the sole benefit of employees. Under a new formula, which is being phased in over five years, retirement benefits will be determined based on points accumulated for each year worked and final average compensation period. To preserve benefits of employees close to retirement, service and earnings credit will continue to accrue under the prior formula through the year 2000, and upon retirement, these employees will receive the benefit from either the new or prior formulas, whichever is higher. Benefits become vested upon the completion of five years of service. The number of individuals receiving benefits at December 31, 1998 and 1997, was 116,685 and 108,415, respectively.

Non-U.S. Plans: Most subsidiaries and branches outside the U.S. have retirement plans covering substantially all regular employees, under which funds are deposited under various

fiduciary-type arrangements, annuities are purchased under group contracts or reserves are provided. Retirement benefits are based on years of service and the employee's compensation, generally during a fixed number of years immediately prior to retirement. The ranges of assumptions used for the non-U.S. plans reflect the different economic environments within various countries.

U.S. Supplemental Executive Retirement Plan: The company also has a non-qualified U.S. Supplemental Executive Retirement Plan (SERP). The SERP, which is unfunded, provides eligible executives defined pension benefits outside the IBM Retirement Plan, based on average earnings, years of service and age at retirement. At December 31, 1998 and 1997, the projected benefit obligation was \$178 million and \$128 million, respectively, and the amounts included in the Consolidated Statement of Financial Position were pension liabilities of \$81 million and \$56 million, respectively.

WEIGHTED-AVERAGE ASSUMPTIONS AS OF DECEMBER 31:

	U.S. Plan			Non-U.S. Plan		
	1998	1997	1996	1998	1997	1996
Discount rate	6.5%	7.0%	7.75%	4.5 – 7.5%	4.5 – 7.5%	4.5 – 8.5%
Expected return on plan assets	9.5%	9.5%	9.25%	6.5 – 10.0%	6.0 – 9.5%	6.5 – 10.0%
Rate of compensation increase	5.0%	5.0%	5.0%	2.7 – 6.1%	2.6 – 6.1%	2.3 – 6.5%

The cost of the defined benefit plans for 1998, 1997 and 1996 was as follows:

(Dollars in millions)	U.S. Plan			Non-U.S. Plan		
	1998	1997*	1996*	1998	1997*	1996*
Service cost	\$ 532	\$ 397	\$ 412	\$ 399	\$ 366	\$ 384
Interest cost	2,261	2,215	2,125	1,213	1,182	1,302
Expected return on plan assets	(3,123)	(2,907)	(2,701)	(1,739)	(1,457)	(1,485)
Net amortization	(124)	(125)	(121)	21	15	27
Settlement losses/(gains)	—	—	—	10	(63)	(102)
Net periodic pension cost (benefit)—U.S. Plan and material non-U.S. Plans	\$ (454)	\$ (420)	\$ (285)	\$ (96)	\$ 43	\$ 126
Total net periodic pension cost (benefit) for all non-U.S. plans				\$ (42)	\$ 50	\$ 148

* Reclassified to conform to 1998 presentation.

Cost of defined contribution plans	\$ 258	\$ 236	\$ 209	\$ 90	\$ 64	\$ 29
Cost of complementary defined benefits	\$ 34	\$ 33	\$ 27			
Cost of U.S. supplemental executive retirement plan	\$ 25	\$ 20	\$ 19			

Net periodic pension cost is determined using the Projected Unit Credit actuarial method.

The effects on the company's results of operations and financial position from changes in the estimates and assumptions used in computing pension and prepaid pension assets or pension liability is mitigated by the delayed recognition provisions of SFAS 87, with the exception of the effects of settlement gains, curtailment losses and early terminations, which are recognized immediately. The 0.5% decrease in the discount rate in 1998 resulted in an actuarial loss of \$2,144 million for the U.S. plan. The 0.75% decrease in the discount rate in 1997 resulted in an actuarial loss of \$2,723 million for the U.S. plan.

It is the company's practice to fund amounts for pensions sufficient to meet the minimum requirements set forth in applicable employee benefits laws and with regard to local tax laws. Additional amounts are contributed from time to time when deemed appropriate by the company. Liabilities for amounts in excess of these funding levels are accrued and reported in the company's Consolidated Statement of Financial Position. The assets of the various plans include corporate equities, government securities, corporate debt securities and real estate.

At December 31, 1998, the material non-U.S. defined benefit plans in which the plan assets exceeded the benefit obligation had obligations of \$18,217 million and assets of \$21,736 million. The material non-U.S. defined benefit plans in which the benefit obligation exceeded the fair value of plan assets had obligations of \$3,831 million and assets of \$3,558 million.

At December 31, 1997, the material non-U.S. defined benefit plans in which the plan assets exceeded the benefit obligation had obligations of \$18,322 million and assets of \$21,391 million. The material non-U.S. defined benefit plans in which the benefit obligation exceeded the fair value of plan assets had obligations of \$524 million and assets of \$450 million.

X Nonpension Postretirement Benefits

The company and its U.S. subsidiaries have defined benefit postretirement plans that provide medical, dental and life insurance for retirees and eligible dependents. Plan cost maximums for those who retired prior to January 1, 1992, will take effect beginning with the year 2001. Plan cost maximums for all other employees take effect upon retirement.

The changes in the benefit obligation and plan assets of the U.S. plans for 1998 and 1997 are as follows:

(Dollars in millions)	1998	1997*
Change in benefit obligation:		
Benefit obligation at beginning of year	\$ 6,384	\$ 6,453
Service cost	42	32
Interest cost	427	455
Amendments	(26)	(290)
Actuarial gains	(146)	(234)
Actuarial losses	272	435
Benefits paid from trust	(486)	(455)
Direct benefit payments	(10)	(12)
Benefit obligation at end of year	6,457	6,384
Change in plan assets:		
Fair value of plan assets at beginning of year	120	559
Actual return on plan assets	10	16
Employer contributions	479	—
Benefits paid, net of employee contributions	(486)	(455)
Fair value of plan assets at end of year	123	120
Benefit obligation in excess of plan assets	(6,334)	(6,264)
Unrecognized net actuarial losses	700	578
Unrecognized prior service cost	(965)	(1,073)
Accrued postretirement benefit liability recognized in the Consolidated Statement of Financial Position	\$ (6,599)	\$ (6,759)

* Reclassified to conform to 1998 presentation.

The benefit obligation was determined by application of the terms of medical, dental and life insurance plans, including the effects of established maximums on covered costs, together with relevant actuarial assumptions. These actuarial assumptions included a projected healthcare cost trend rate of 6 percent.

The net periodic postretirement benefit cost for the U.S. plan for the years ended December 31 included the following components:

(Dollars in millions)	1998	1997	1996
Service cost	\$ 42	\$ 32	\$ 43
Interest cost	427	455	478
Expected return on plan assets	(5)	(15)	(68)
Net amortization and deferral	(133)	(119)	(87)
Net periodic postretirement benefit cost	\$ 331	\$ 353	\$ 366

WEIGHTED-AVERAGE ASSUMPTIONS AS OF DECEMBER 31:

	1998	1997	1996
Discount rate	6.5%	7.0%	7.75%
Expected return on plan assets	5.0%	5.0%	9.25%

The assets of the plan are comprised of short-term fixed income investments. Certain of the company's non-U.S. subsidiaries have similar plans for retirees. However, most of the retirees outside the United States are covered by government-sponsored and administered programs. The obligations and cost of these programs are not significant to the company.

A one percentage-point change in the assumed healthcare cost trend rate would have the following effects as of December 31, 1998:

(Dollars in millions)	One Percentage Point Increase	One Percentage Point Decrease
Effect on total service and interest cost	\$ 4	\$ (6)
Effect on postretirement benefit obligation	\$ 87	\$ (122)

Y Segment Information

IBM is in the business of providing customer solutions through the use of advanced information technology. The company operates primarily in a single industry utilizing several segments that create value by offering a variety of solutions that include, either singularly or in some combination, technologies, systems, products, services, software and financing.

Organizationally, the company's major operations consist of three hardware product segments—Technology, Personal Systems and Server; a Global Services segment; a Software segment; a Global Financing segment and a series of Enterprise Investments. The product segments are determined based on several factors including customer base, homogeneity of products, technology, delivery channels and other factors.

The Technology segment produces peripheral equipment for use in general purpose computer systems including storage and networking devices, advanced function printers and display devices. In addition, the segment provides components such as semiconductors and hard disk drives for use in the company's products and for sale to original equipment manufacturers (OEM). Major business units include Storage Systems, Microelectronics, Printer Systems and Networking Hardware.

The Personal Systems segment produces general purpose computer systems, including some system and consumer software, that operate applications for use by one user at a time (personal computer clients), or as servers, and display devices. Major brands include the Aptiva home PC's, IntelliStation workstations, Netfinity servers, PC 300 commercial desktop and ThinkPad mobile systems. Consumer software brands include Crayola, Edmark and World Book Multimedia Encyclopedia. These products are sold primarily through reseller and retail channels.

The Server segment produces powerful multi-purpose computer systems that operate many open-network based applications and are used primarily by multiple users at the same time. They perform high-volume transaction processing and serve data to personal systems and other end-user devices. The servers are the engines behind the bulk of electronic business transactions, including e-commerce. Major brands include S/390, AS/400 and RS/6000. The segment's products are sold directly by the company and through business partner relationships.

The Global Services segment is the world's largest and most versatile information technology services provider, supporting computer hardware and software products, and providing professional services to help customers of all sizes realize the full value of information technology (IT). The segment provides its customers with services that include business and IT consulting, business transformational services like an ERP solution, e-business services and full scope services like strategic outsourcing or Total Systems Management services. The Global Services segment is uniquely suited to integrate the full range of the company's capabilities, including hardware, software and research.

The Software segment delivers operating systems for the company's servers and middleware for IBM and non-IBM platforms. Middleware includes application development, data management, networking, systems management, transaction processing, and messaging and collaboration. In addition to its own development, product and marketing effort, the segment supports more than 29,000 independent software vendors to ensure that the company's software and hardware offerings are included in those partners' solutions.

The Global Financing segment provides and facilitates a broad array of financing services for the company, its customers and its business partners. The primary focus is to leverage its financial structuring, portfolio management and partnering skills to expand the company's customer and partner base.

Enterprise Investments segment provides a spectrum of initiatives in information technology solutions, supporting the hardware, software and services segments of the company. The segment develops unique products designed to meet specific marketplace requirements and to complement the company's overall portfolio of products.

Segment revenue and pre-tax income include transactions between the segments which are intended to reflect an arm's-length transfer at the best price available for comparable external customers. Specifically, semiconductors and disk drives are sourced internally from the Technology segment for use in the manufacture of the Server segment and Personal Systems segment products. Technology, hardware and software used by the Global Services segment in outsourcing

engagements are sourced internally from the Technology, Server, Personal Systems and Software segments. For the internal use of information technology services, the Global Services segment recovers cost as well as a reasonable fee reflecting the arm's-length value of providing the services. The Global Services segment enters into arm's-length leases at prices equivalent to market rates with the Global Financing segment to facilitate the acquisition of equipment used in outsourcing engagements. All internal transaction prices are reviewed and reset annually if appropriate.

The company extensively utilizes shared-staff concepts in order to realize economies of scale and efficient use of resources. As such, a significant amount of expense is shared by all of the company's segments. This expense represents sales coverage, marketing and support functions such as Accounting, Treasury, Procurement, Legal, Human Resources and Billing and Collections. Where practical, shared expenses are allocated based on measurable drivers of expense, e.g., Human Resources costs are allocated on headcount while account coverage expenses are allocated on a revenue mix that reflects the company's sales commission plan. When a clear and measurable driver cannot be identified, shared expenses are allocated based on a financial basis consistent with the company's management system, e.g., image advertising is allocated based on the gross profit of the segments. The unallocated corporate expenses primarily relate to expense arising from certain acquisitions, indirect infrastructure reductions and currency exchange gains and losses recorded in net income which are not allocated to the segments.

The following tables reflect the results of the segments consistent with the company's management system. These results are not necessarily a depiction that is in conformity with generally accepted accounting principles, e.g., employee retirement plan costs are developed using actuarial assumptions on a country-by-country basis and allocated to the segments on headcount. A different result could be arrived at for any segment if actuarial assumptions unique to each segment were used. Performance measurement is based on income before income taxes (pre-tax income). These results are used, in part, by management, both in evaluating the performance of, and in allocating resources to, each of the segments.

MANAGEMENT SYSTEM SEGMENT VIEW

(Dollars in millions)	Hardware Segments			Global Services	Software	Global Financing	Enterprise Investments	Total Segments
	Technology	Personal Systems	Server					
1998:								
External revenue	\$ 11,890	\$ 12,776	\$ 10,624	\$ 28,916	\$ 11,863	\$ 2,979	\$ 2,468	\$ 81,516
Internal revenue	4,578	29	445	2,747	749	792	56	9,396
Total revenue	\$ 16,468	\$ 12,805	\$ 11,069	\$ 31,663	\$ 12,612	\$ 3,771	\$ 2,524	\$ 90,912
Pre-tax income	\$ 955	\$ (992)	\$ 2,842	\$ 3,757	\$ 2,588	\$ 1,165	\$ (616)	\$ 9,699
Revenue year-to-year change	(4.4)%	(10.8)%	(6.0)%	13.5%	6.6%	5.8%	0.6%	2.0%
Pre-tax income year-to-year change	(47.1)%	(516.1)%	(1.9)%	30.0%	27.2%	3.0%	32.3%	0.1%
Pre-tax income margin	5.8%	(7.7)%	25.7%	11.9%	20.5%	30.9%	(24.4)%	10.7%
1997:								
External revenue	\$ 11,083	\$ 14,337	\$ 11,286	\$ 25,166	\$ 11,164	\$ 2,935	\$ 2,438	\$ 78,409
Internal revenue	6,147	20	491	2,737	671	628	70	10,764
Total revenue	\$ 17,230	\$ 14,357	\$ 11,777	\$ 27,903	\$ 11,835	\$ 3,563	\$ 2,508	\$ 89,173
Pre-tax income	\$ 1,806	\$ (161)	\$ 2,896	\$ 2,890	\$ 2,034	\$ 1,131	\$ (910)	\$ 9,686
Revenue year-to-year change	0.3%	3.3%	(6.9)%	12.6%	(1.5)%	(3.3)%	5.0%	3.0%
Pre-tax income year-to-year change	17.7%	(312.8)%	(12.1)%	14.3%	(17.5)%	(10.2)%	(17.4)%	(5.7)%
Pre-tax income margin	10.5%	(1.1)%	24.6%	10.4%	17.2%	31.7%	(36.3)%	10.9%
1996:								
External revenue	\$ 10,244	\$ 13,876	\$ 12,230	\$ 22,310	\$ 11,426	\$ 3,224	\$ 2,294	\$ 75,604
Internal revenue	6,942	23	423	2,460	593	462	95	10,998
Total revenue	\$ 17,186	\$ 13,899	\$ 12,653	\$ 24,770	\$ 12,019	\$ 3,686	\$ 2,389	\$ 86,602
Pre-tax income	\$ 1,535	\$ (39)	\$ 3,293	\$ 2,529	\$ 2,466	\$ 1,260	\$ (775)	\$ 10,269
Pre-tax income margin	8.9%	(0.3)%	26.0%	10.2%	20.5%	34.2%	(32.4)%	11.9%

Reconciliations to IBM as Reported

(Dollars in millions)	1998	1997	1996
REVENUE:			
Total reportable segments	\$ 90,912	\$ 89,173	\$ 86,602
Other revenues	151	99	343
Elimination of internal revenue	(9,396)	(10,764)	(10,998)
Total IBM Consolidated	\$ 81,667	\$ 78,508	\$ 75,947
PRE-TAX INCOME:			
Total reportable segments	\$ 9,699	\$ 9,686	\$ 10,269
Elimination of internal transactions	(162)	(377)	(251)
Unallocated corporate expenses	(497)	(282)	(996)
Purchased research and development	—	—	(435)
Total IBM Consolidated	\$ 9,040	\$ 9,027	\$ 8,587

Major Customers

No single customer represents 10% or more of the company's total revenue.

Immaterial Items
INVESTMENT IN EQUITY ALLIANCES AND EQUITY ALLIANCES GAINS/LOSSES

The investments in equity alliances and the resulting gains and losses from these investments attributable to the segments are minimal and do not have a material impact on the financial results of the segments.

Segment Assets and Other Items

The assets of the hardware segments primarily include inventory and plant, property and equipment. The software segment assets mainly include inventory, plant, property and equipment, and investment in deferred software development. The Global Services segment assets primarily include maintenance inventory and plant, property and equipment associated with its strategic outsourcing business. Details regarding the Global Financing segment assets can be found on page 89.

To accomplish the efficient use of space and equipment, it becomes necessary, in most instances, for several segments to share plant, property and equipment assets. Where assets are shared, landlord ownership of the assets is assigned to one segment and not allocated to each user segment. This is consistent with the company's management system and is reflected as such in the schedule on page 88. In such cases, there will not be a precise compatibility between segment pre-tax income and segment assets.

Similarly, the depreciation amounts reported by segment are deployed on a landlord ownership basis and may not be consistent with the actual amounts included in the segments' pre-tax income. Such amounts included in pre-tax income reflect occupancy charges from the landlord segment and are not specifically identified by the management reporting system.

Capital expenditures reported by segment are also in line with the landlord ownership basis of asset assignment.

The Global Financing segment amounts on page 88 for interest income and interest expense reflect the interest income and expense associated with the financing business as well as the investment in cash and marketable securities. The remaining amounts of interest income and interest expense are not allocated discretely to the other segments, but are included as part of an indirect expense allocation.

MANAGEMENT SYSTEM SEGMENT VIEW

(Dollars in millions)	Hardware Segments			Global Services	Software	Global Financing	Enterprise Investments	Total Segments
	Technology	Personal Systems	Server					
1998:								
Assets	\$ 11,251	\$ 1,464	\$ 2,106	\$ 2,236	\$ 2,577	\$ 40,109	\$ 363	\$ 60,106
Depreciation/amortization	1,207	121	178	322	681	2,768	15	5,292
Capital expenditures/ investment-software	2,044	156	288	358	424	3,438	19	6,727
Interest income	—	—	—	—	—	2,725	—	2,725
Interest expense	—	—	—	—	—	1,252	—	1,252
1997:								
Assets	\$ 10,060	\$ 1,629	\$ 2,191	\$ 1,914	\$ 2,642	\$ 35,444	\$ 362	\$ 54,242
Depreciation/amortization	1,092	112	167	315	1,132	2,170	10	4,998
Capital expenditures/ investment-software	2,028	195	235	361	515	3,615	16	6,965
Interest income	—	—	—	—	—	2,639	—	2,639
Interest expense	—	—	—	—	—	1,175	—	1,175
1996:								
Assets	\$ 9,435	\$ 2,666	\$ 2,322	\$ 2,067	\$ 2,813	\$ 31,793	\$ 295	\$ 51,391
Depreciation/amortization	1,030	141	201	283	1,496	1,761	11	4,923
Capital expenditures/ investment-software	1,805	162	171	359	453	3,086	11	6,047
Interest income	—	—	—	—	—	2,752	—	2,752
Interest expense	—	—	—	—	—	1,166	—	1,166

Reconciliations to IBM as Reported

(Dollars in millions)	1998	1997	1996
ASSETS:			
Total reportable segments	\$ 60,106	\$ 54,242	\$ 51,391
Elimination of internal transactions	(7,519)	(6,287)	(5,192)
Unallocated amounts:			
Cash and marketable securities	4,295	6,062	6,601
Notes and accounts receivable	7,715	7,441	7,962
Deferred tax assets	5,376	4,746	4,683
Plant, other property and equipment	7,706	7,564	7,505
Pension assets	4,836	3,828	3,323
Other	3,585	3,903	4,859
Total IBM Consolidated	\$ 86,100	\$ 81,499	\$ 81,132

In addition to the previous information for the company's business segments, the following information is provided to enhance the understanding of the Global Financing segment. This data summarizes the Global Financing segment's financial statements for 1998, 1997 and 1996, respectively.

STATEMENT OF FINANCIAL POSITION

(Dollars in millions)

At December 31:	1998	1997	1996
Assets:			
Cash and cash equivalents	\$ 1,032	\$ 998	\$ 1,433
Net investment in capital leases	14,456	13,831	13,430
Working capital financing receivables	5,798	4,928	4,030
Loans receivable	8,682	6,951	6,428
Inventories	119	111	98
Equipment on operating leases and other property, net of accumulated depreciation	5,663	5,168	3,988
Other assets	4,359	3,457	2,386
Total assets	\$ 40,109	\$ 35,444	\$ 31,793
Liabilities and stockholders' equity:			
Taxes, accrued expenses and other liabilities	\$ 8,077	\$ 7,969	\$ 7,915
Debt	27,754	23,824	20,627
Total liabilities	35,831	31,793	28,542
Stockholders' equity/ invested capital	4,278	3,651	3,251
Total liabilities and stockholders' equity	\$ 40,109	\$ 35,444	\$ 31,793

NET INCOME

(Dollars in millions)

For the year ended December 31:	1998	1997	1996
Net income before income taxes	\$ 1,165	\$ 1,131	\$ 1,260
Provision for income taxes	432	429	531
Net income	\$ 733	\$ 702	\$ 729
Return on equity	19.1%	20.3%	22.7%

Geographic Information

(Dollars in millions)

	Revenue*			Long-lived Assets**		
	1998	1997	1996	1998	1997	1996
United States	\$ 35,303	\$ 32,663	\$ 29,395	\$ 18,450	\$ 17,802	\$ 16,910
Japan	8,567	9,765	10,181	4,310	3,635	3,765
Other non-U.S. countries	37,797	36,080	36,371	12,343	11,621	11,648
Total	\$ 81,667	\$ 78,508	\$ 75,947	\$ 35,103	\$ 33,058	\$ 32,323

* Revenues are attributed to countries based on location of customer.

**Includes all non-current assets except non-current financial instruments and deferred tax assets.

CASH FLOWS

(Dollars in millions)

For the year ended December 31:	1998	1997	1996
Net cash provided from operating activities	\$ 4,441	\$ 3,919	\$ 5,314
Net cash used in investing activities	(7,296)	(8,435)	(5,544)
Net cash provided from financing activities	2,856	4,102	872
Effect of exchange rate changes on cash and cash equivalents	33	(21)	(17)
Net change in cash and cash equivalents	34	(435)	625
Cash and cash equivalents at January 1	998	1,433	808
Cash and cash equivalents at December 31	\$ 1,032	\$ 998	\$ 1,433

Revenue by Classes of Similar Products or Services

For the Personal Systems, Server, Software and Global Financing segments, the segment data on page 86 represents the revenue contributions from the products contained in the segments which are basically similar in nature. In the Technology and Global Services segments the table below provides external revenue for similar classes of products within those segments. OEM hardware consists primarily of revenue from the sale of HDD storage files and semiconductors. Storage consists of externally attached direct access storage devices and tape storage devices. Other technology consists primarily of advanced function printers and networking devices.

(Dollars in millions)	Consolidated		
	1998	1997	1996
Technology:			
OEM	\$ 6,756	\$ 5,560	\$ 4,123
Storage	2,439	2,644	2,716
Other technology	2,695	2,879	3,405
Global Services:			
Services	23,730	19,534	16,218
Maintenance	5,186	5,632	6,092

Five-Year Comparison of Selected Financial Data

(Dollars in millions except per share amounts)

For the year:	1998	1997	1996	1995	1994
Revenue	\$ 81,667	\$ 78,508	\$ 75,947	\$ 71,940	\$ 64,052
Net income	6,328	6,093	5,429	4,178	3,021
Per share of common stock—basic	6.75	6.18	5.12	3.61	2.51
Per share of common stock—assuming dilution	6.57	6.01	5.01	3.53	2.48
Cash dividends paid on common stock	814	763	686	572	585
Per share of common stock	.86	.775	.65	.50	.50
Investment in plant, rental machines and other property	6,520	6,793	5,883	4,744	3,078
Return on stockholders' equity	32.6%	29.7%	24.8%	18.5%	14.3%
At end of year:					
Total assets	\$ 86,100	\$ 81,499	\$ 81,132	\$ 80,292	\$ 81,091
Net investment in plant, rental machines and other property	19,631	18,347	17,407	16,579	16,664
Working capital	5,533	6,911	6,695	9,043	12,112
Total debt	29,413	26,926	22,829	21,629	22,118
Stockholders' equity	19,433	19,816	21,628	22,423	23,413

Selected Quarterly Data

(Dollars in millions except per share amounts and stock prices)

	Revenue	Gross Profit	Net Income	Per Share Common Stock			Stock Prices**	
				Earnings-Basic	Earnings-Assuming Dilution	Dividends	High	Low
1998								
First quarter	\$ 17,618	\$ 6,450	\$ 1,036	\$ 1.08	\$ 1.06	\$.20	\$ 108.38	\$ 95.63
Second quarter	18,823	7,146	1,452	1.54	1.50	.22	129.31	103.31
Third quarter	20,095	7,467	1,494	1.60	1.56	.22	138.13	110.75
Fourth quarter	25,131	9,809	2,346	2.55	2.47	.22	189.94	116.81
Total	\$ 81,667	\$ 30,872	\$ 6,328	\$ 6.75*	\$ 6.57*	\$.86		
1997								
First quarter	\$ 17,308	\$ 6,592	\$ 1,195	\$ 1.19	\$ 1.16	\$.175	\$ 85.06	\$ 65.00
Second quarter	18,872	7,401	1,446	1.46	1.43	.200	93.75	63.56
Third quarter	18,605	7,098	1,359	1.38	1.35	.200	109.44	90.13
Fourth quarter	23,723	9,518	2,093	2.16	2.11	.200	113.50	88.63
Total	\$ 78,508	\$ 30,609	\$ 6,093	\$ 6.18*	\$ 6.01*	\$.775		

* The sum of the quarters' earnings per share does not equal the year-to-date earnings per share due to changes in average share calculations. This is in accordance with prescribed reporting requirements.

** The stock prices reflect the high and low prices for IBM's common stock on the New York Stock Exchange composite tape for the last two years.

STOCKHOLDER INFORMATION

IBM Stockholder Services

Stockholders with questions about their accounts should contact:
First Chicago Trust Company, a division of EquiServe
Mail Suite 4688
P.O. Box 2530
Jersey City, New Jersey 07303-2530
(888) IBM-6700

Investors residing outside the United States, Canada and Puerto Rico should call (201) 324-0405.

Stockholders can also reach First Chicago Trust Company via the Internet at: ibmfct@em.fcncbd.com

Hearing-impaired stockholders with access to a telecommunications device (TDD) can communicate directly with First Chicago Trust Company by calling (201) 222-4489.

IBM on the Internet

Topics featured in this Annual Report can be found via the IBM home page on the Internet (<http://www.ibm.com>). Financial results, news on IBM products, services and other activities can also be found via that address. Stockholders of record can receive online account information and answers to frequently asked questions regarding stockholder accounts via the Internet (<http://www.ibm.com/investor>).

Stockholders of record can also consent to receive future IBM Annual Reports and Proxy Statements online through the Internet at this site.

IBM Investor Services

The Investor Services Program brochure outlines a number of services provided for IBM stockholders and potential IBM investors, including the reinvestment of dividends, direct purchase and the deposit of IBM stock certificates for safekeeping. Call (888) 421-8860 for a copy of the brochure. Investors residing outside the United States, Canada and Puerto Rico should call (201) 324-0405.

Annual Meeting

The IBM Annual Meeting of Stockholders will be held on Tuesday, April 27, 1999, at 10 a.m. (EST) at the James L. Knight Center at the Miami Convention Center in Miami, Florida.

IBM Stock

IBM common stock is listed on the New York Stock Exchange, on other exchanges in the United States and around the world.

Stockholder Communications

Stockholders in the United States and Canada can get quarterly financial results, listen to a summary of Mr. Gerstner's Annual Meeting remarks and hear voting results from the meeting by calling (800) IBM-7800. Callers can also request printed copies of the information via mail or fax. Stockholders residing outside the United States, Canada and Puerto Rico should call (402) 573-9861.

Investors with other requests may write to:

IBM Stockholder Relations
IBM Corporation
New Orchard Road
Armonk, New York 10504

Literature for IBM Stockholders

The following literature on IBM is available without charge from First Chicago Trust Company, a division of EquiServe
Mail Suite 4688
P.O. Box 2530
Jersey City, New Jersey 07303-2530
(201) 324-0405

The Form 10-K Annual Report and Form 10-Q Quarterly Reports to the SEC provide additional information on IBM's business. The 10-K is issued in April; 10-Q reports are released in May, August and November.

An audio cassette recording of the 1998 Annual Report is available for sight-impaired stockholders.

IBM Credit Corporation's Annual Report is available in April.

"Progress Report: Environment and Well-Being" reports on IBM's environmental, safety and energy programs.

"Valuing Diversity: An Ongoing Commitment" communicates to the company's entire community of employees, customers, stockholders, vendors, suppliers, business partners and employment applicants the importance IBM places on the diversity of the company's workplace and marketplace.

General Information

For answers to general questions about IBM from within the continental United States, call (800) IBM-4YOU. From outside the United States, call (770) 863-1234.

Corporate Offices

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G507-0501-04

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