Goodwill

Goodwill is charged to net income on a straight-line basis over the periods estimated to benefit, generally not to exceed five years. The company performs reviews to evaluate the recoverability of goodwill and takes into account events or circumstances that warrant revised estimates of useful lives or that indicate that an impairment exists.

Common Stock

Common stock refers to the $.20 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—basic is computed by dividing Net income applicable to common stockholders by the weighted-average number of common shares outstanding for the period. Earnings per share of common stock—assuming dilution reflects the maximum potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock and would then share in the net income of the company. See note T, "Earnings Per Share of Common Stock," on page 83 for further discussion.

B Accounting Changes

Standards Implemented

The company implemented new accounting standards in 1999, 1998 and 1997. None of these standards had a material effect on the financial position or results of operations of the company.

Effective January 1, 1999, the company adopted American Institute of Certified Public Accountants (AICPA) Statement of Position (SOP) 98-1, "Accounting for the Costs of Computer Software Developed or Obtained for Internal Use." The SOP requires a company to capitalize certain costs that are incurred to purchase or to create and implement internal use computer software. See note A, "Significant Accounting Policies" on pages 69 through 71 for a description of the company's policies for internal use software.

Effective December 31, 1998, the company adopted SFAS No. 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 89 through 93 for the company's segment information.

Effective December 31, 1998, the company adopted SFAS No. 132, "Employers' Disclosures about Pensions and Other Postretirement Benefits," which establishes standardized disclosures for defined benefit pension and postretirement benefit plans. See note W, "Retirement Plans," on pages 86 through 88 and note X, "Nonpension Postretirement Benefits," on pages 88 and 89 for the disclosures.

Effective January 1, 1998, the company adopted SFAS No. 130, "Reporting Comprehensive Income," which establishes standards for reporting and displaying in a full set of general-purpose financial statements the gains and losses not affecting retained earnings. The disclosures required by SFAS No. 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 N, "Stockholders' Equity Activity," on pages 78 and 79.

Effective January 1, 1998, the company adopted the AICPA SOP 97-2, "Software Revenue Recognition." This SOP provides guidance on revenue recognition for software transactions. See note A, "Significant Accounting Policies" on pages 69 through 71 for a description of the company's policy for software revenue recognition.

Effective December 31, 1997, the company implemented SFAS No. 128, "Earnings Per Share" (EPS). This statement prescribes the methods for calculating basic and diluted EPS and requires dual presentation of these amounts on the face of the Consolidated Statement of Earnings.

Effective January 1, 1997, the company implemented SFAS No. 125, "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities." This statement provides accounting and reporting standards for transfers and servicing of financial assets and extinguishments of liabilities.

New Standards to be Implemented

In June 1999, the Financial Accounting Standards Board issued SFAS No. 137, "Accounting for Derivative Instruments and Hedging Activities—Deferral of the Effective Date of FASB Statement No. 133." This statement defers the effective date of SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," to fiscal years beginning after June 15, 2000, although early adoption is encouraged. SFAS No. 133 establishes accounting and reporting standards for derivative instruments. It requires a company to recognize all derivatives as either assets or liabilities in the statement of financial position and to measure those instruments at fair value. Additionally, the fair value adjustments will affect either stockholders' equity or net income depending on whether the derivative instrument qualifies as a hedge for accounting purposes and, if so, the nature of the hedging activity. The company will adopt this standard as of January 1, 2001. Management does not expect the adoption to have a material effect on the company's results of operations; however, the effect on the company's financial position depends on the fair values of the company's derivatives and related financial instruments at the date of adoption.

C Common Stock Split

On January 26, 1999, the company's Board of Directors approved a two-for-one stock split effective May 10, 1999. On April 27, 1999, the stockholders of the company approved amendments to the Certificate of Incorporation to increase the number of authorized shares of common stock from 1,875 million to 4,687.5 million, which was required to effect that stock split. In addition, the amendment reduced the par value of the common shares from $.50 to $.20 per share. Common stockholders of record at the close of business on May 10, 1999, received one additional share for each share held. All share and per share data presented in the Consolidated Financial Statements and notes of this Annual Report reflect the two-for-one stock split.

D Acquisitions/Divestitures

Acquisitions

In 1999, the company completed 17 acquisitions at a cost of approximately $1.5 billion. Three of the major acquisitions for the year are detailed in the following discussion.

On September 24, 1999, the company acquired all of the outstanding capital stock of Sequent Computer Systems, Inc. (Sequent) for approximately $828 million. Sequent was an acknowledged leader in systems based on NUMA (non-uniform memory access) architecture.

On September 29, 1999, the company acquired all of the outstanding stock of Mylex Corporation (Mylex) for approximately $259 million. Mylex was a leading developer of technology for moving, storing, protecting and managing data in desktop and networked environments.

On September 27, 1999, the company acquired DASCOM, Inc. (DASCOM), an industry leader in Web-based and enterprise-security technology, for approximately $115 million.

The company accounted for each acquisition as a purchase transaction. The effects of these acquisitions on the company's Consolidated Financial Statements were not material. Hence, the company has not provided pro forma financial statements as if the companies had combined at the beginning of the current period or the immediately preceding period.

The company engaged a nationally recognized independent appraisal firm to express an opinion on the fair value of the net assets that the company acquired to serve as a basis for the following allocation of the purchase price.

(Dollars in millions)	Sequent	Mylex	DASCOM
Purchase price	**$ 828**	**$ 259**	**$ 115**
Tangible net assets (liabilities)	**382**	**67**	**(17)**
Identifiable intangible assets	**187**	**35**	**13**
Current technology	87	26	19
Goodwill	183	145	92
In-process research and development	**85**	**7**	**19**
Deferred tax liabilities related to identifiable intangible assets	**(96)**	**(21)**	**(11)**

The tangible net assets comprise primarily cash, accounts receivable, land, buildings and leasehold improvements. The identifiable intangible assets comprise primarily patents, trademarks, customer lists, assembled workforce, employee agreements and leasehold interests. The identifiable intangible assets and goodwill will be amortized on a straight-line basis over a five-year period.

In connection with the acquisitions of Sequent, Mylex and DASCOM, the company recorded a pre-tax charge for research, development and engineering of $111 million ($111 million after tax, or $.06 per diluted common share) for acquired in-process research and development (IPR&D). At the date of each acquisition, the IPR&D projects had not yet reached technological feasibility and had no alternative future uses. The value of the IPR&D reflects the relative value and contribution of the acquired research and development to the company's existing research or product lines.

In January 1998, the company acquired Software Artistry, Inc., a leading provider of both consolidated service desk and customer relationship management solutions for distributed enterprise environments. In March 1998, the company acquired CommQuest Technologies, Inc., a company that designs and markets advanced semiconductors for wireless communications applications such as cellular phones and satellite communications. In connection with these acquisitions, the company recorded a pre-tax charge for IPR&D of $111 million ($111 million after tax, or $.06 per diluted common share).

On April 16, 1997, the company purchased a majority interest in NetObjects, a leading provider of Web site development tools for designers and intranet developers. In 1999, as a result of NetObject's initial public offering, the company's interest declined to less than 50 percent. In September 1997, the company acquired the 30 percent equity interest held by Sears in Advantis, the U.S. network services arm of the company's Global Network. Advantis was then owned 100 percent by the company. Advantis became part of the company's Global Network, which the company sold to AT&T in 1999. In December 1997, the company acquired Eastman Kodak's share of Technology Service Solutions, which was formed in 1994 by the company and Eastman Kodak. In December 1997, the company acquired Unison Software, Inc., a leading developer of workload management software. In connection with these acquisitions the company recorded a pre-tax charge for IPR&D of $111 million ($111 million after tax, or $.05 per diluted common share).

Divestitures

In December 1998, the company announced that it would sell its Global Network business to AT&T. During 1999, the company completed the sale to AT&T for $4,991 million. More than 5,300 IBM employees joined AT&T as a result of these sales of operations in 71 countries.

The company recognized a pre-tax gain of $4,057 million ($2,495 million after tax, or $1.33 per diluted common share). The net gain reflects dispositions of Plant, rental machines and other property of $410 million, other assets of $182 million and contractual obligations of $342 million.

E Inventories

(Dollars in millions)

At December 31:	1999	1998
Finished goods	$ 1,162	$ 1,088
Work in process and raw materials	3,706	4,112
Total	$ 4,868	$ 5,200

F Plant, Rental Machines and Other Property

(Dollars in millions)

At December 31:	1999	1998
Land and land improvements	$ 1,026	$ 1,091
Buildings	10,395	11,088
Plant, laboratory and office equipment	22,503	27,025
	33,924	39,204
Less: Accumulated depreciation	19,268	22,463
	14,656	16,741
Rental machines	5,692	5,666
Less: Accumulated depreciation	2,758	2,776
	2,934	2,890
Total	$ 17,590	$ 19,631

G Investments and Sundry Assets

(Dollars in millions)

At December 31:	1999	1998
Net investment in sales-type leases*	$ 14,201	$ 14,384
Less: Current portion—net	6,220	6,510
	7,981	7,874
Deferred taxes	2,654	2,921
Prepaid pension assets	5,636	4,836
Customer loan receivables— not yet due	4,219	3,499
Installment payment receivables	848	1,087
Alliance investments:		
Equity method	595	420
Other—available for sale	1,439	138
Goodwill, less accumulated amortization (1999, $2,646; 1998, $2,111)	1,045	945
Marketable securities—non-current	113	281
Other investments and sundry assets	1,557	1,509
Total	$ 26,087	$ 23,510

* 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 $737 million and $685 million at December 31, 1999 and 1998, 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, 1999, expressed as a percentage of the total, are approximately as follows: 2000, 49 percent; 2001, 32 percent; 2002, 14 percent; 2003, 4 percent; and 2004 and beyond, 1 percent.

H Lines of Credit

The company maintains a $10.0 billion global credit facility. The company's other committed and uncommitted lines of credit were $5.5 billion and $5.2 billion at December 31, 1999 and 1998, respectively. Interest rates and other terms of borrowing under these lines of credit vary from country to country depending on local market conditions at the time of the borrowing.

(Dollars in billions)

At December 31:	1999	1998
Unused Lines		
From the global credit facility	$ 8.6	$ 8.8
From other committed and uncommitted lines	4.5	4.3
Total unused lines of credit	$ 13.1	$ 13.1

I Sale and Securitization of Receivables

The company manages assets of $273 million and $864 million from the securitization of loans, leases and trade receivables, at year-end 1999 and 1998, respectively. The company received cash proceeds of $1,311 million and $2,425 million in 1999 and 1998, respectively, from the sale and securitization of these receivables and assets. No significant gain or loss resulted from these transactions. The company expects recourse amounts associated with the aforementioned sale and securitization activities to be minimal, and has adequate reserves to cover potential losses.

J Debt

Short-term debt

(Dollars in millions)

At December 31:	1999	1998
Commercial paper	$ 5,074	$ 4,885
Short-term loans	3,351	6,370
Long-term debt: Current maturities	5,805	2,650
Total	$ 14,230	$ 13,905

The weighted-average interest rates for commercial paper at December 31, 1999 and 1998, were 5.9 percent and 5.7 percent, respectively. The weighted-average interest rates for short-term loans at December 31, 1999 and 1998, were 4.0 percent and 5.3 percent, respectively.

Long-term debt

(Dollars in millions)

At December 31:	Maturities	1999	1998
U.S. Dollars:			
Debentures:			
6.22%	2027	$ 500	$ 500
6.5%	2028	700	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: 6.3% average	2000-2014	4,191	2,695
Medium-term note program: 5.8% average	2000-2014	6,230	4,885
Other: 6.5% average	2000-2012	1,227	1,514
		15,748	13,194
Other currencies (average interest rate at December 31, 1999, in parentheses):			
Japanese yen (3.0%)	2000-2014	3,141	3,866
Canadian dollars (5.7%)	2000-2005	707	672
German marks (4.9%)	2002	103	120
Swiss francs (2.5%)	2001	78	91
U.K. pounds (7.0%)	2000-2003	33	25
Other (13.6%)	2000-2014	159	221
		19,969	18,189
Less: Net unamortized discount		40	31
		19,929	18,158
Less: Current maturities		5,805	2,650
Total		$ 14,124	$ 15,508

Annual maturities in millions of dollars on long-term debt outstanding at December 31, 1999, are as follows: 2000, $5,805; 2001, $2,915; 2002, $2,659; 2003, $1,234; 2004, $489; 2005 and beyond, $6,867.

K Interest on Debt

Interest paid and accrued on borrowings of the company and its subsidiaries was $1,475 million in 1999, $1,585 million in 1998 and $1,596 million in 1997. Of these amounts, the company capitalized $23 million in 1999, $28 million in 1998 and $32 million in 1997. Of the remainder, the company charged to the cost of financing $725 million in 1999, $844 million in 1998 and $836 million in 1997, and to interest expense $727 million in 1999, $713 million in 1998 and $728 million in 1997. The decrease in total interest in 1999 versus 1998 was due primarily to lower average interest rates, partially offset by an increase in average debt outstanding during 1999. The decrease in 1998 versus 1997 was due primarily to lower average interest rates, partially offset by higher outstanding average debt. The average effective interest rate for total debt was 5.1 percent, 5.7 percent and 6.4 percent in 1999, 1998 and 1997, respectively. These rates include the results of currency and interest rate swaps applied to the debt described in note J, "Debt," on page 74.

L Financial Instruments

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

Financial Instruments On-Balance Sheet (excluding derivatives)

Financial assets with carrying values that approximate fair value include cash and cash equivalents, marketable securities, notes and other accounts receivable and other investments. Financial liabilities with carrying values that approximate 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, all of which are considered available for sale.

MARKETABLE SECURITIES*

(Dollars in millions)	Fair Value	
At December 31:	1999	1998
Current marketable securities:		
U.S. government securities	$ 15	$ 15
Time deposits and other bank obligations	746	335
Non-U.S. government securities and other fixed-term obligations	27	43
Total	$ 788	$ 393
Marketable securities—non-current:**		
Time deposits and other bank obligations	$ 105	$ 271
Non-U.S. government securities and other fixed-term obligations	8	10
Total	$ 113	$ 281
Alliance investments**	$ 1,439	$ 138

* Gross unrealized gains (before taxes) on marketable securities were $1,310 million and $87 million at December 31, 1999 and 1998, respectively. Gross unrealized losses (before taxes) on marketable securities were $7 million and $8 million at December 31, 1999 and 1998, respectively.

** Included within Investments and sundry assets on the Consolidated Statement of Financial Position. (See note G on page 73.)

Financial Instruments Off-Balance Sheet (excluding derivatives)

IBM has guaranteed certain loans and financial commitments of its affiliates. The approximate amount of these financial guarantees was $1.2 billion at December 31, 1999 and 1998.

The company's dealers had unused lines of credit available from IBM for working capital financing of approximately $4.5 billion and $3.6 billion at December 31, 1999 and 1998, respectively.

The company enters into contracts that effectively provide the company with committed future borrowings in select foreign currencies. The aggregate notional value of these contracts was $6.4 billion and $3.0 billion as of December 31, 1999 and 1998, respectively. The terms of these contracts generally are less than eighteen months. Foreign exchange gains and losses associated with these contracts are recorded in net income as they are realized. These amounts have not been and are not expected to be material to the company's financial results.

Derivative Financial Instruments

The company uses derivative financial instruments as an element of its risk management strategy. The company manages the risk of nonperformance by counterparties 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 these instruments at that time, but does not represent exposure to credit, interest rate or foreign exchange rate market risks.

	At December 31, 1999			At December 31, 1998		
(Dollars in millions)	Notional Value	Carrying Value	Fair Value	Notional Value	Carrying Value	Fair Value
Interest rate and currency contracts	**$ 29,830**	**$ (257)**	**$ (491)**	$ 31,484	$ (485)	$ (427)
Option contracts	**1,705**	**59**	**54**	9,021	67	45
Total	**$ 31,535**	**$ (198)**	**$ (437)***	$ 40,505	$ (418)	$ (382)*

Amounts in parentheses are liabilities.

* The estimated fair value of derivatives both on- and off-balance sheet at December 31, 1999 and 1998, comprises assets of $616 million and $486 million and liabilities of $1,053 million and $868 million, respectively.

A significant portion of the company's derivative transactions relates to matching the interest and foreign currency rate profiles of funding liabilities with the interest and foreign currency rate profiles of global financing and other market risk sensitive assets. 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. The company uses interest rate swaps or currency swaps to match the interest rate and currency profiles of its debt to the related assets. The terms of these swap contracts generally are less than five years. Net interest settlements and currency rate differentials that accrue under interest rate and currency swap contracts, respectively, are recognized in interest expense over the life of the contracts.

The company uses its Global Treasury Centers to manage the cash of its subsidiaries. These treasury 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 generally are less than one year. The interest rate differential in these contracts is recognized in interest expense over the life of the contracts.

The company also uses currency swaps and other foreign currency contracts 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 thereby offsetting a portion of the translation of the net foreign assets.

The company also uses derivatives to limit its exposure to loss resulting primarily from fluctuations in foreign currency exchange rates on anticipated cash transactions among foreign subsidiaries and with 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 in view of the volatility of the currency markets, the company selectively employs foreign currency derivatives to manage its currency risk. The terms of these instruments generally are less than eighteen months.

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 otherwise is terminated. At December 31, 1999 and 1998, there were no material deferred gains or losses. The premiums associated with entering into these option contracts generally are amortized over the life of the options and are not material to the company's results. Unamortized premiums are recorded in prepaid assets. Gains and losses on purchased options that hedge anticipated transactions that do not qualify for hedge accounting, and on written options, are recorded in earnings as they occur and are not material to the company's results.

M Other Liabilities and Environmental Remediation

Other liabilities principally comprises accruals for nonpension postretirement benefits for U.S. employees ($6,392 million) and nonpension postretirement benefits, indemnity and retirement plan reserves for non-U.S. employees ($1,028 million). More detailed discussion of these liabilities appears in note X, "Nonpension Postretirement Benefits," on pages 88 and 89, and note W, "Retirement Plans," on pages 86 through 88.

Also included in other liabilities are non-current liabilities associated with infrastructure reduction and restructuring actions taken through 1993. Other liabilities includes $659 million for postemployment preretirement accruals and $503 million (net of sublease receipts) for accruals for leased space that the company vacated.

The company employs extensive internal environmental protection programs that primarily are preventive 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 when it becomes probable that the company will incur clean-up costs and those costs can reasonably be estimated. In addition, estimated environmental costs that are associated with postclosure activities (for example, 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 actual or anticipated insurance recoveries, were $240 million and $238 million at December 31, 1999 and 1998, respectively.

The amounts accrued do not cover sites that are in the preliminary stages of investigation; that is, for which neither the company's percentage of responsibility nor the extent of cleanup required has been identified. Estimated environmental costs are not expected to materially affect the financial position or results of the company's operations in future periods. However, estimates of future costs are subject to change due to protracted cleanup periods and changing environmental remediation regulations.

N Stockholders' Equity Activity

Stock Repurchases

From time to time, the Board of Directors authorizes the company to repurchase IBM common stock. The company repurchased 71,618,800 common shares at a cost of $7.3 billion and 114,768,200 common shares at a cost of $6.9 billion in 1999 and 1998, respectively. In 1999, the company did not retire the shares it repurchased. The 1998 repurchases resulted in a reduction of $28,498,409 in the stated capital (par value) associated with common stock. In 1998, the company retired the repurchased shares and restored them to the status of authorized but unissued shares. In 1999 and 1998, the company issued 906,829 and 774,564 shares, respectively, as a result of exercises of employee stock options. At December 31, 1999, approximately $2.5 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 Board of Directors authorized the company to purchase all of its outstanding Series A 7-1/2 percent preferred stock. The company did not repurchase any shares in 1999. During 1998, the company repurchased 51,250 shares at a cost of $5.5 million. This resulted in a $512.50 ($.01 par value per share) reduction in the stated capital associated with preferred stock as of December 31, 1998. The company retired the repurchased shares and restored them to the status of authorized but unissued shares. The company plans to purchase the remaining outstanding shares on the open market and in private transactions from time to time, depending on market conditions. There were 2,546,011 shares outstanding at December 31, 1999 and 1998.

Employee Benefits Trust

Effective November 1, 1997, the company created an employee benefits trust to which it contributed 20 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 those sales, and any dividends paid on the contributed stock, toward the partial satisfaction of the company's future obligations under certain of its compensation and benefits plans. The shares held in trust are not considered outstanding for purposes of calculating earnings per share until they are committed to be released. The trustee will vote the shares in accordance with its fiduciary duties. As of December 31, 1999 and 1998, the company had not committed any shares to be released.

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

Accumulated Gains and Losses Not Affecting Retained Earnings

(Dollars in millions)	Foreign Currency Items*	Net Unrealized Gains (Losses) on Marketable Securities*	Total Gains and Losses Not Affecting Retained Earnings*
Beginning balance, January 1, 1997	**$ 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**
Change for period	**(546)**	**796**	**250**
Ending balance, December 31, 1999	**$ 314**	**$ 847**	**$ 1,161**

* Net of tax.

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

(Dollars in millions)

For the year ended December 31:	1999	1998*
Net unrealized gains arising during the period	$ 943	$ 44
Less net gains included in net income for the period	147	101
Net increase in net unrealized gains on marketable securities	$ 796	$ (57)

* Restated to present amounts net of tax.

O Contingencies

The company is subject to a variety of claims and suits that arise from time to time in 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 current action will have a material effect on the company's business, financial condition or results of operations.

P Taxes

(Dollars in millions)

For the year ended December 31:	1999	1998	1997
Income before income taxes:			
U.S. operations	$ 5,892	$ 2,960	$ 3,193
Non-U.S. operations	5,865	6,080	5,834
	$ 11,757	$ 9,040	$ 9,027
The provision for income taxes by geographic operations is as follows:			
U.S. operations	$ 2,005	$ 991	$ 974
Non-U.S. operations	2,040	1,721	1,960
Total provision for income taxes	$ 4,045	$ 2,712	$ 2,934

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

(Dollars in millions)

For the year ended December 31:	1999	1998	1997
U.S. federal:			
Current	$ 1,759	$ 1,117	$ 163
Deferred	(427)	(475)	349
	1,332	642	512
U.S. state and local:			
Current	272	139	83
Deferred	7	(260)	(87)
	279	(121)	(4)
Non-U.S.:			
Current	2,727	2,062	2,330
Deferred	(293)	129	96
	2,434	2,191	2,426
Total provision for income taxes	4,045	2,712	2,934
Provision for social security, real estate, personal property and other taxes	2,831	2,859	2,774
Total provision for taxes	$ 6,876	$ 5,571	$ 5,708

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

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

DEFERRED TAX ASSETS

(Dollars in millions)

At December 31:	1999	1998
Employee benefits	$ 3,737	$ 3,909
Alternative minimum tax credits	1,244	1,169
Bad debt, inventory and warranty reserves	1,093	1,249
Infrastructure reduction charges	918	863
Capitalized research and development	880	913
Deferred income	870	686
General business credits	605	555
Foreign tax loss carryforwards	406	304
Equity alliances	377	387
Depreciation	326	201
State and local tax loss carryforwards	227	212
Intracompany sales and services	153	182
Other	2,763	2,614
Gross deferred tax assets	13,599	13,244
Less: Valuation allowance	647	488
Net deferred tax assets	$ 12,952	$ 12,756

DEFERRED TAX LIABILITIES

(Dollars in millions)

At December 31:	1999	1998
Retirement benefits	$ 3,092	$ 2,775
Sales-type leases	2,914	3,433
Depreciation	1,237	1,505
Software costs deferred	250	287
Other	2,058	1,841
Gross deferred tax liabilities	$ 9,551	$ 9,841

The valuation allowance at December 31, 1999, 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 use 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:	1999	1998	1997
Statutory rate	35%	35%	35%
Foreign tax differential	(2)	(6)	(3)
State and local	1	1	1
Valuation allowance related items	—	(1)	—
Other	—	1	—
Effective rate	34%	30%	33%

For tax return purposes, the company has available tax credit carryforwards of approximately $1,919 million, of which $1,244 million have an indefinite carryforward period, $199 million expire in 2004 and the remainder thereafter. The company also has state and local and foreign tax loss carryforwards, the tax effect of which is $633 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 were $14,900 million at December 31, 1999, $13,165 million at December 31, 1998, and $12,511 million at December 31, 1997. 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.

Q Selling and Advertising

Selling and advertising expense is charged against income as incurred. Advertising expense, which includes media, agency and promotional expenses, was $1,758 million, $1,681 million and $1,708 million in 1999, 1998 and 1997, respectively.

R 1999 Actions

Technology Group Actions

During 1999, the company implemented actions that were designed to better align the operations and cost structure of IBM's Technology Group with that group's strategic direction in view of the competitive environment, overcapacity in the industry and resulting pricing pressures. The actions affect the Microelectronics Division (MD), the Storage Systems Division (SSD) and the Networking Hardware Division (NHD) of the company's Technology Group. The company expects these actions to be substantially completed by the first half of 2000.

In total, the Technology Group actions resulted in a charge of $1,690 million ($1,366 million after tax, or $.73 per diluted common share) as described below and in the table on page 82.

The actions within MD addressed a prolonged, industry-wide downturn in memory chip prices that affected the results of the company's semiconductor business. They are intended to enable the company to (1) reconfigure the assets and capabilities of the division to allow more focus on the faster-growth, higher-margin custom logic portion of the MD business and (2) enhance its ability to more cost effectively manage a partnership agreement that was formed to produce complementary metal oxide semiconductor (CMOS) based logic components.

The company will reduce its internal dynamic random access memory (DRAM) capacity by converting its manufacturing facility in Essonnes, France, from DRAM to custom logic over an 18-month period. The company is effecting that conversion through a joint venture with Infineon Technologies, a subsidiary of Siemens AG. Also related to DRAM, the company executed contracts with various banks and other financing institutions to sell and lease back test equipment.

The company also participates in a 50/50 joint venture (Dominion Semiconductor Company) with Toshiba Corporation to produce DRAM memory components. The company entered into an agreement whereby Toshiba will assume the company's interest in Dominion effective December 31, 2000. The company will participate in the capacity output of Dominion at a significantly reduced rate in the interim period.

The company held a majority interest in a joint venture (MiCRUS) with Cirrus Logic Inc. (the partner) to produce CMOS-based logic components for IBM and its partner based on contractual capacity agreements. The partner indicated that it would not require the output capacity that is provided for in the partnership agreement. The company determined that the most cost-effective manner in which to address the partner's desire to exit the partnership agreement was to acquire the minority interest held by that partner.

The company also announced aggressive steps intended to improve its competitive position in the markets that SSD serves by merging server hard disk drive (HDD) product lines and realigning operations. The company is integrating all server HDDs into a single low-cost design platform that uses common development and manufacturing processes. The company continues to transfer manufacturing assembly and test operations to Hungary and Mexico and expects to complete these actions by mid 2000.

The actions within NHD relate to a global alliance with Cisco Systems, Inc. As a result of the announcement of the alliance, demand for the router and switch products from both existing and new customers deteriorated.