decreased 34.4 percent (33 percent at constant currency) to S1.6 billion compared with the fourth quarter of 2000.

Revenue from Global Services, including maintenance, declined 1.4 percent (up 1 percent at constant currency) in the fourth quarter to $9.1 billion. Global Services revenue, excluding maintenance, declined 1.6 percent (up 1 percent at constant currency). The company's annuity-like outsourcing and maintenance businesses continued to perform well, but the company felt the economic pressure in Consulting Services and BIS during the quarter. In addition, a slowdown in contract signings in the middle of the year, particularly in short-term engagements, affected the company's fourth quarter revenue. New contract signings for Global Services in the fourth quarter were approximately SI5 billion.

Hardware revenue decreased 24.0 percent (21 percent at constant currency) to $8.7 billion from the 2000 fourth quarter. Mainframe computing capacity, however, grew 12 percent in the fourth quarter, as measured in MIPS. Revenue from the company's UNIX-based pScries declined, in large part because of transition to the company's new "Regatta" family of UNIX servers, which began shipping on December 14, 2001. Personal computer and microelectronics revenue decreased substantially over the prior year's quarter, principally due to price pressures in personal computers and an ongoing downturn affecting the worldwide semiconductor and OEM markets. Revenue from the company's high-end storage product "**Shark**" grew in a declining market.

Software revenue increased 6.0 percent (8 percent at constant currency) to S3.8 billion compared to the prior year's fourth quarter. Overall, the company's middlcwarc software revenue grew 9 percent (10 percent at constant currency). The company's data management and WchSpherc products had strong growth versus the fourth quarter of 2000. Although fourth-quarter revenue declined year to year in the company's Tivoli and Lotus businesses, both units had strong revenue growth sequentially. Tivoli and Lotus are benefiting from operational efficiencies gained as a result of integrating their business processes into the company's Software business, which has improved profitability in both units. Operating system revenue declined 4 percent (2 percent at constant currency).

Global Financing revenue decreased 4.6 percent (4 percent at constant currency) in the fourth quarter to S927 million primarily due to a lower earnings-generating asset base and lower sales of used equipment. As expected, revenue from the Enterprise Investments/Other area, which includes custom-made products to third-party companies, declined 20.0 percent (18 percent at constant currency) compared to the fourth quarter of 2000 to S340 million. The company has been consistently shifting development and distribution of products in this segment to third-party companies.

The company's total gross profit margin improved to 38.3 percent in the 2001 fourth quarter from 37.3 percent in the 2000 fourth quarter. Gross margins improved in each revenue segment except for Hardware, which declined by 4.1 points, due to low volumes in the Technology segment and pricing pressures in personal computers and IIDDs.

Despite absorbing workforce-balancing actions and write-downs of certain equity investments, the company's Total Expense and Other Income improved 5.6 percent to $5.4 billion. The improvement came from each of the company's two main expense categories: SG&A expense as well as research and development expense. The company continued to reduce its expense and improve operating efficiencies **through** the use of electronic procurement, sales, education and customer support systems. These systems, known as c-procurement, ihm.com, c-learning and c-Cart, have resulted in substantial productivity improvements. The company's fourth quarter 2001 Intellectual property and custom development income, which includes the transfer of the company's optical transceiver intellectual property, was essentially flat compared to such income in 2000.

The company's tax rate in the fourth quarter was 29.3 percent compared with 29.5 percent in the fourth quarter of 2000.

The company spent approximately $1.0 billion on common share repurchases in the fourth quarter. The average number of common shares outstanding assuming dilution was lower by 32.6 million shares in fourth quarter of 2001 versus the fourth quarter of 2000, primarily as a result of the ongoing common share repurchase program. The **average** number of shares assuming dilution *was* 1,758.0 million in fourth quarter 2001 versus 1,790.6 million in fourth quarter 2000.

During 2001, the company continued to demonstrate strong financial performance, enabling it to make appropriate investments to support future growth and increase shareholder value. The company spent S5,844 million for research, development and engineering, including software development that was capitalized on the Consolidated Statement of Financial Position, $4,483 million for plant and other property, including machines used in strategic outsourcing contracts; S1,177 million for machines on operating leases with customers; and S5,293 million for the repurchase of the company's common shares. In addition, the company paid cash totaling approximately S916 million of the aggregate $1,082 million purchase price of the company's two acquisitions in 2001. The **company had** $6,393 million in Cash and cash equivalents and current Marketable securities at December 31, 2001. The company's debt levels declined $1,425 million in 2001 primarily due to a decline in Global

Financing debt, offset by an increase in non-global financing debt. The decline in Global Financing debt was the result of the decrease in Global Financing assets.

Effective May 31, 2001, the company arranged global credit facilities totaling $12.0 billion in committed credit lines, including an S8.0 billion five-year facility and a $4.0 billion 364-day facility, replacing the company's S10 billion credit facility which was due to expire in February 2002. Amounts unused and available under these facilities were $11,383 million and S9,103 million at December 31, 2001 and 2000, respectively. In addition, at December 31, 2001 and 2000, the company had in place other lines of credit, most of which were uncommitted, of S6,860 million and $7,646 million, respectively. The amounts unused and available under these primarily uncommitted facilities at December 31, 2001 and 2000, were $4,738 million and $5,111 million, respectively.

At December 31, 2001 and 2000, the company had a total balance of state and local government loans receivable securitized of S213 million and $136 million, respectively. For additional information, sec note i, "Sale and Securitization of Receivables," on page 84.

The changes in the company's U.S. pension plan during 2001, including the increased benefits for retirees and the 1999 amendment to the plan, arc not expected to have a material effect on the company's financial condition.

The major rating agencies' ratings of the company's debt securities at December 31, 2001, appear in the table below:

	Standard and Poor's	Moody's Investors Ser.ice	Fitch, Inc.
Senior long-term debt	A+	Al	AA-
Commercial paper	A-1	Prime-1	F-1+

The company's cash flows from operating, investing and financing activities, as reflected in the Consolidated Statement of Cash Flows on page 74, are summarized in the following table:

(dollars in millions)	2001	m00	1999
Net cash provided from/ (used in):			
Operating activities	**S 14,265**	$ 9,274	$ 10,111
Investing activities	**(6,106)**	(4,248)	(1,669)
Financing activities	**(5,309)**	(6,359)	(8,625)
Effect of exchange rate changes on cash and cash equivalents	(83)	(147)	(149)
Net change in cash and cash equivalents	S 2,767	S (1,480)	$ (332)

(dollars in millions) AT DFCFMRFR 111:	2001	2000
Current assets	$ **42,461**	S 43,880
Current liabilities	**35,119**	36,406
Working capital	$ **7,342**	S 7,474
Current ratio	1.21:1	1.21:1

Current assets decreased S1,419 million due primarily to decreases in accounts receivable of $3,708 million, Inventories of $461 million and Deferred taxes of S299 million, offset by net increases of S2,671 million in Cash and cash equivalents and current Marketable securities, and $378 million in Prepaid expenses and other current assets. The decline in accounts receivable was primarily attributable to lower fourth quarter 2001 revenue volumes as compared to the fourth quarter of 2000. The net increase in Cash and cash equivalents and current Marketable securities was due primarily to an increase in cash from operations and a reduction in common stock transactions, mainly from lower stock repurchases, partially offset by an increase in investment and acquisition activities.

The company ended 2001 with Inventories of $4,304 million, the lowest level since 1983, primarily as a result of lower inventory levels within the Personal and Printing Systems segment. The company's inventory turnover ratio declined to 5.8 in 2001 from 6.3 in 2000.

Current liabilities declined S1,287 million from year-end 2000, primarily due to decreases of $1,145 million in Accounts payable, $644 million in Other accrued expenses and liabilities and S293 million in Deferred income, offset by an increase of S983 million in Short-term debt.

The company's investments for Plant, rental machines and other property were $5,660 million for 2001, remaining essentially flat.

In addition to software development expenses included in RD&E expense, the company capitalized $655 million of software costs during 2001, an increase of $90 million from the 2000 period. The increase resulted from increases in capitalized costs for both internal-use software and licensed programs.

Investments and sundry assets were $17,102 million at the end of 2001, an increase of S2,655 million from 2000, primarily the result of increases in Prepaid pension assets and Informix goodwill, offset by declines in Alliance investments and Deferred taxes. Sec note h, "Investments and Sundry Assets," on page 84 for additional information.

The company continues to invest in its Global Services, Software, Global Financing and selected hardware businesses. The company continues its plans to invest approximately S5 billion in its microelectronics business. These investments include building an advanced 300mm chip-making facility in East Fishkill, New York and expanding its chip-making and chip-packaging operations worldwide. In 2001, approximately S1.2 billion has been spent on these investments. The remaining amount is to he invested over the next three years.

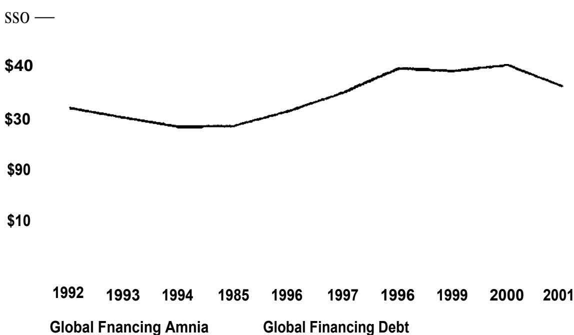
The company has remaining authorization at December 31, 2001, to purchase S4.6 billion of IBM common shares in the open market from time to time, based on market conditions.

The company expects to fund all of these investments primarily with cash from ongoing operations.

The company's debt level of $27 billion is almost entirely (more than 94 percent) the result of the company's Global Financing business. The Global Financing business provides financing primarily to the company's customers and business partners. Using the typical financing business model, Global Financing funds its operations primarily through borrowings. It uses a debt to equity ratio of approximately 7 to 1. Global Financing generates income by charging its customers a higher interest rate than the interest expense on Global Financing borrowings.

Global Financing** Assets **and Debt

(dollars in hillionc)



The company's operations are essentially self-funding except for the company's Global Financing business which leverages debt.

As a result, the S5.3 billion of share repurchases, S5.7 billion of capital additions, and $5.8 billion of RD&E. spending, including software development that was capitalized on the Consolidated Statement of Financial Position, were made possible from cash generated by operations, not external company borrowings.

The company's funding requirements arc continually monitored and strategics arc executed to manage the company's overall asset and liability profile. Additionally, the company maintains sufficient flexibility to access global funding sources as needed. During 2001, the company issued debt denominated in U.S. dollars, Japanese yen, British pounds and Canadian dollars to meet existing financing needs.

The company's total debt decreased S1,425 million to $27,151 million. Based upon the company's two different capital structures as previously discussed in this section, the analysis of this change and certain ratios are discussed below on both a Global Financing and a non-global financing basis.

Global Financing

(dollars in nnllions)

AT DFCFMRFR 31:	**2001**	1000
Assets*	**S 36,670**	$ 40,822
Debt**	**25,545**	27,514
Equity	**3,756**	4,142
Debt/Equity	**6.8x**	6.6x

' *Global* Financing *assets include cash, financing reatvables (see* note f: *"Financing Receivables," on page 83), intercompany amounts. rental machine fixed assets and other assets.*

• *The total interest* expense *related to Global Financing debt above is presented in the Global Financing* column on page 67.

As discussed above, the Global Financing segment is a financial services business and is, therefore, more debt dependent than the company's other businesses. At December 31, 2001, more than 94 percent of the company's total debt was used to fund this business, and supported almost 42 percent of the company's total assets. In 2001, Global Financing debt to equity ratio increased to 6.8x, which is within management's acceptable target range.

The company's Global Financing business provides funding predominantly for the company's external customers but also provides financing for the company including the funding to support the Global Services business' long-term customer services contracts. All of these financing arrangements are at arm's-length rates based upon market conditions. The company manages and measures the Global Financing business as if it approximates a standalone business that includes both the external financing and related company financing described above. Accordingly, the Global Financing debt discussed above and Cost of Global Financing discussed below support both of these Global Financing activities.

All intercompany transactions are eliminated in the Consolidated Statement of Earnings and therefore, the financing revenue associated with the financing provided by Global Financing to the company is eliminated in consolidation. Accordingly, the interest expense from the company's external

borrowings that supports such financing revenue is classified in the Interest expense caption of the Consolidated Statement of Earnings as opposed to the Cost of Global Financing caption.

The reconciliation of the segment amounts to the Consolidated Statement of Earnings amounts for the years 2001, 2000 and 1999 is as follows:

(dollars in millions)	Global Financing	Non-Global Financing	Consolidated Eliminations	Consolidated Results
2001				
Cost of (Global Financing	***$ 1,140***	***$ —***	***$(176)***	***$ 964***
Interest expense		*62*	*176*	***238***
2000'				
Cost of Global Financing	$ 1,319	$ —	$ (237)	S 1,082
Interest expense		110	237	347
1999'				
Cost of Global Financing	$ 1,232	$	$ (132)	S 1,100
Interest expense		220	132	352

• *Rrclurified to confer. with 7001 presentation.*

Non-Global Financing

(dollars in millions) AT DCCCMBCR 31:	2001	2000
Debt`	**$ 1,606**	$ 1,062
Debt/Capitalization	7.5%	6.1%

Non-global finaNcinq debt is the ro..pasty's total rxterNal *debt less the Global Financing debt desmbed in for Global Financing table on page 66.*

The company's non-global financing businesses generate significant cash from ongoing operations and therefore generally do not require a significant amount of debt. Cash flows from operations are these businesses' primary source of funds for future investments.

The increase in the non-global financing debt is consistent with the company's cash and debt arrangement strategies and should be considered in conjunction with the increase in cash in the same period.

A review of the company's debt and equity should also consider other contractual obligations and commitments, which are disclosed elsewhere in the financial section. These amounts are summarized in one table below to facilitate a reader's review.

Contractual Obligations

(dollars in millions)	Balance as of Dec. 31, 2001	Payments Due In 2(102	71103-04	7005-06	After 71106
Long-term debt	***$ 20,429***	$ 5,186	$ 4,607	$ 4,165	$ 6,471
Lease commitments	**5,734**	1,378	1,927	1,062	1,367

Commitments

(dollars in millions)	Balance as of Dec. 31, 2001	Amounts Expiring In 2002	2003-04	2005-06	After 2006
Unused lines of credit	***$ 4,088***	$ 3,127	$ 395	$ 259	$ 307
Other commitments	***269***	140	129		
Financial guarantees	***218***	87	37	8	86

Unused lines of credit represent amounts available to the company's dealers to support their working capital needs and available lines of credit relating to the company's syndicated loan activities. Other commitments primarily include the company's commitments to provide financing to customers for their future purchases of the company'-s products. Financial guarantees represent guarantees for certain loans and financial commitments the company had made as of December 31, 2001.

Stockholders' Equity

The company's total consolidated Stockholders' equity increased S2,990 million to 823,614 million at December 31, 2001, primarily due to the increase in Retained earnings, partially offset by the company's ongoing stock repurchase program and Accumulated gains and losses not affecting retained earnings. (Sec note m, "Stockholders' Equity Activity," on pages 88 and 89).

Changes in the relative values of non-U.S. currencies to the U.S. dollar affect the company's results. At December 31, 2001, currency changes resulted in assets and liabilities denominated in local currencies being translated into fewer dollars than at year-end 2000. The currency rate changes had an unfavorable effect on revenue growth of approximately 4 percentage points in 2001, approximately 3 percentage points in 2000 and minimal effect in 1999.

For non-U.S. subsidiaries and branches that operate in U.S. dollars or whose economic environment is highly inflationary, translation adjustments arc reflected in results of operations, as required by SFAS No. 52, "Foreign Currency Translation?' Generally, the company manages currency risk in these entities by linking prices and contracts to U.S. dollars and entering into foreign currency hedge contracts.

The company uses a variety of financial hedging instruments to limit specific currency risks related to financing transactions and other foreign currency-based transactions. Further discussion of currency and hedging appears in note k, "Derivatives and Hedging Transactions," on pages 85 through 87.

On January 1, 2001, the company adopted SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities." Sec "Standards Implemented," on pages 79 and 80 for additional information regarding SFAS No. 133.

In the normal curse of business, the financial position of the company routinely is subjected to a variety of risks. In addition to the market risk associated with interest rate and currency movements on outstanding debt and non-U.S. dollar denominated assets and liabilities, other examples of risk include collectibility of accounts receivable and recoverability of residual values on leased assets.

The company regularly assesses these risks and has established policies and business practices to protect against the adverse effects of these and other potential exposures. As a result, the company does not anticipate any material losses from these risks.

The company's debt in support of the Global Financing business and the geographic breadth of the companys operations contain an element of market risk from changes in interest and currency rates. The company manages this risk, in part, through the use of a variety of financial instruments including derivatives, as explained in note k, "Derivatives and I ledging Transactions," on pages 85 through 87.

Io meet disclosure requirements, the company performs sensitivity analysis to determine the effects that market risk exposures may have on the fair values of the company's debt and other financial instruments.

The financial instruments that are included in the sensitivity analysis comprise all of the company's cash and cash equivalents, marketable securities, long-term non-lease receivables, investments, long-term and short-term debt and all derivative financial instruments. The company's portfolio of derivative financial instruments includes interest rate swaps, interest rate options, foreign exchange swaps, forward contracts and option contracts.

To perform the sensitivity analysis, the company assesses the risk of loss in fair values from the effect of hypothetical changes in interest rates and foreign currency exchange rates on market-sensitive instruments. The market values for interest and foreign currency exchange risk are computed based on the present value of future cash flows as affected by the changes in rates that are attributable to the market risk being measured. The discount rates used for the present value computations were selected based on market interest and foreign currency exchange rates in effect at December 31, 2001 and 2000, respectively. The differences in this comparison are the hypothetical gains or losses associated with each type of risk.

Information provided by the sensitivity analysis does not necessarily represent the actual changes in fair value that the company would incur under normal market conditions because, due to practical limitations, all variables other than the specific market risk factor are held constant. In addition, the results of the model arc constrained by the fact that certain items arc specifically excluded from the analysis, while the financial instruments relating to the financing or hedging of those items are included by definition. Excluded items include leased assets, forecasted foreign currency cash flows, and the company's net investment in foreign operations. As a consequence, reported changes in the values of some of the financial instruments affecting the results of the sensitivity analysis are not matched with the offsetting changes in the values of the items that those instruments are designed to finance or hedge.

The results of the sensitivity analysis at December 31, 2001, and December 31, 2000, are as follows:

Interest Rate Risk

At December 31, 2001, a 10 percent decrease in the levels of interest rates with all other variables held constant would result in a decrease in the fair market value of the company's financial instruments of $177 million as compared with a decrease of $99 million at December 31, 2000. A 10 percent increase in the levels of interest rates with all other variables held constant would result in an increase in the fair value of the company's financial instruments of $151 million as compared to $83 million at December 31, 2000. Changes in the relative sensitivity of the fair value of the company's financial

instrument portfolio for these theoretical changes in the level of interest rates arc primarily driven by changes in the company's debt maturity, interest rate profile and amount. In 2001 versus 2000, the reported increase in interest rate sensitivity is primarily due to reductions in the company's "receive fixed/pay floating" interest rate swap portfolio that had been utilized in 2000 to more closely match the maturity profile of the company's fixed-rate debt.

Foreign Currenty Exchange Rate Risk

At December 31, 2001, a 10 percent weaker U.S. dollar against foreign currencies with all other variables held constant would result in a decrease in the fair value of the company's financial instruments of $1,401 million as compared with a decrease of S1,352 million at December 31, 2000. Conversely, a 10 percent stronger U.S. dollar against foreign currencies with all other variables held constant would result in an increase in the fair value of the company's financial instruments of $1,440 million compared to $1,435 million at December 31, 2000.

Financing is an integral part of the company's total worldwide offerings. Inherent in financing arc certain risks, including credit, interest rate, currency and residual value. The company manages credit risk through comprehensive credit evaluations and pricing practices. To manage the risks associated with an uncertain interest rate environment, the company pursues a funding strategy of substantially matching the interest rate profile of its debt with the interest rate profile of its assets. Currency risks are managed by denominating liabilities in the same currency as the assets.

Residual value risk is managed by developing projections of future equipment values at lease inception, reevaluating these projections quarterly, and effectively deploying remarketing capabilities to recover residual values and potentially earn a profit. The following table presents the recorded amount of unguarantecd residual values for sales-type and operating leases at December 31, 1999, 2000 and 2001. In addition, the table below presents the run-out of the unguaranteed residual value over the remaining lives of these leases at December 31, 2001.

	local			Run-Out of 7001 Balance			
(dollars in millions)	1999`	2000*	2001	2002	2003	2004	7005 and beyond
Sales-type leases	$ 771	$ 785	$ 791	$ 236	$ 273	$ 220	$ 62
Operating leases	609	396	334	172	95	44	23
Total residual value	$ 1,380	$ 1,181	$ 1,125	$ 408	$ 368	$ 264	$ 85

' *Restated to include residual value associated with nonanfirntataon technology (UT) equipment. (Amounts were included to the narrative in prior years.)*

Accounting under generally accepted accounting principles requires the use of estimates. The company's note a, "Significant Accounting Policies," starting on page 75 describes the important estimates used by the company.

				Percentage Changes	
	2001	2000	1999	2001-00	2000-99
IBM/wholly owned subsidiaries	***319,876***	316,303	307,401	1.1	*2.9*
Less-than-wholly owned subsidiaries	***25,403***	*21,886*	17,176	16.1	*27.4*
Complementary	**21,300**	25,500	29,800	(16.5)	(14.4)

Employees at IBM and its wholly owned subsidiaries in 2001 increased 3,573 from last year. Although the rate of growth of the company's workforce slowed in 2001, primarily due to workforce rebalancing initiatives, the company continued to hire at a strong pace. Global Services, for example, hired nearly 14,000 people in 2001. Acquisitions, particularly the Informix database business, added to the 2001 workforce as well.

In less than wholly owned subsidiaries, the number of employees increased from last year, particularly in Europe and China. This growth reflects a new subsidiary in Europe related to a major services venture with Fiat SpA, and growth in China to support a rapidly expanding I/T infrastructure.

The company's complementary workforce is an approximation of equivalent full-time employees hired under temporary, part-time and limited-term employment arrangements to meet specific business needs in a flexible and cost-effective manner.