

**DEAR FELLOW INVESTOR,**

This is my last annual letter to you.

By the time you read this, Sam Palmisano will be our new Chief Executive Officer, the eighth in IBM's history. He will be responsible for shaping our strategic direction, as well as leading our operations. For a discussion of IBM's performance in 2001, I invite you to read Sam's first letter to shareholders, starting on page 45.

I want to use this occasion to offer a perspective on what lies ahead for our industry. To many observers today, its future is unclear, following perhaps the worst year in its history. A lot of people chalk that up to the recession and the "dot-com bubble." They seem to believe that when the economies of the world recover, life in the information technology industry will get back to normal.

*In my view, nothing could be further from the truth.*

A handwritten signature in blue ink, appearing to read "Louis V. Gerstner, Jr.". The signature is fluid and cursive, with "Louis" and "V." being more distinct, while "Gerstner" and "Jr." are more stylized.

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A massive shift is under way in our industry. You may think I mean the transition to a networked world. After all, IBM was one of the first to recognize this change and the impact it would have. And make no mistake, we are experiencing an explosion of technological innovation that will lead to permanent changes in business, government, education, health care and every other area of human endeavor—as every significant institution, every product and service, as well as billions of people, become permanently “connected.”

But that's not the shift I'm talking about. The revolution I'm describing is that customers are finally driving the direction of the information technology industry.

### Technologists Talking to Technologists

The first 30 years of this industry's history consisted of the technology inventors inside I/T companies talking to the technology implementers inside businesses and institutions. For most of that era, the applications of the technology were fairly limited—focused on the automation of back-office processes like accounting and payroll, or desktop applications such as word processing and e-mail.

Then, starting in the early 1990s, businesspeople began to understand the importance of information technology to everything they wanted to do. It's gotten to the point where it's almost impossible to distinguish between the business strategy and the I/T strategy of any successful enterprise. Approximately half of the investments that customers make in I/T are now driven by line-of-business managers, not chief information officers. This is a remarkable shift in just five or six years. Not that CIOs

have become unimportant. They now sit at the table where technology is translated into business value. And their traditional bailiwick of infrastructure, too, has been transformed by the networked world. But there's no question that business strategy now sets the technology agenda, not the other way around.

Prior to joining IBM, my career as a management consultant and executive took me inside the inner workings of many industries. So I was surprised, on entering this one, to learn that the computer industry had been able to get away with inventing new things and just “throwing them over the wall,” leaving customers to figure out how to integrate and apply them. That wasn't easy for those customers, for a lot of reasons. One was the absence of common standards. The industry model was designed around a variety of proprietary architectures (which, to be candid, technology providers were using to control customers).

This came as quite a shock to me, since all my prior experience had taught me that you either give the customer what he or she wants, or the customer walks. Well, guess what? Customers have finally put on their walking shoes. They've made it emphatically clear to this industry that they will no longer cede control to the makers of the technology.

That means customers are demanding integration, and refusing to accept piece parts that aren't designed and delivered to work together. It means they are demanding solutions, not “speeds and feeds.” And it means they insist that the technology adapt itself to the needs of their business and help them gain some tangible competitive advantage—to squeeze cost from

their supply chains, to create lasting relationships with customers, to empower their key constituencies (internal and external) with tools and knowledge.

### A Tale of Two Revolutions

So the past decade hasn't seen just one major shift, it's seen two. For IBM, this was good news. Even in the depths of our decline, in 1993, it was obvious that no other company had both the technical expertise to win product battles against competitors *and* the business knowledge to become a trusted partner for its customers. Contrary to the conventional wisdom of pundits, analysts, the media (and, of course, our rivals), IBM still had a *raison d'être*.

Of course, we had to unlock both capabilities, and, in fact, make them feed each other. That goal—creating a business model that uniquely combines technical and business innovation, a company with one foot in the lab and one in the boardroom—underpins the new IBM we set out to build.

Thus, the big decision we made early on—to reverse the then-current plan to break up the company and commit instead to making all of IBM's parts work together—was a fairly easy one. It didn't involve a lot of research or market analysis. The real question in my mind was not "Should IBM exist?" but rather, "Can we become what this new era demands?" Put another way: Could we aspire to lead again? I can't think of many companies, in any industry, that have led two eras. But I can tell you now that, even in the dark days, we began believing that we could defy history.

Of course, that's like deciding to climb Mount Everest. You still have to climb the mountain! And we weren't

starting our trek from an elevated base camp, or even from sea level. This annual report captures a sense of the sheer range of what was involved to pull it off.

Through it all, our guiding light came down to two words: customer focus. It has proved both galvanizing and clarifying, serving as the criterion for reexamining a whole lot of dogma, and for resolving many of our seemingly intractable internal debates.

Was it okay for IBM Global Services to recommend competitors' hardware or software? Should the IBM software business develop solutions for Sun or HP servers? How about letting our hardware units support Oracle or Microsoft products? In every case, the answer was: We'll do what customers want.

Once we started really listening to customers, it's striking how many aspects of our business improved—and not just on the market-facing side, but also in procurement, with our suppliers and even in technology, where the quality and quantity of our output have benefited enormously from exposure to the marketplace.

This is important. The relationship between business and technology isn't one-way. Technology itself isn't some force of nature that we simply direct or use. It, too, is the product of human intentionality and choice. So yes, we apply technology to solve customer problems. And we also apply marketplace knowledge to help shape our research agenda—whether it's the direction of the economy, or growth opportunities, or emerging forms of governance and education, or demographic and social trends, or discoveries in other fields such as life sciences.

A decade ago, the two were disconnected—and one of them was running amok. Technology was being pursued for

its own sake, and was either buried in labs (in the case of IBM), or generating premature visions of business triumph (in the “build it and they will come” fantasies of the dot-com paper billionaires and “new economy” moguls).

We needed to reassert a proper balance. And that led, in IBM, to a handful of strategic bets on the future drivers of our industry. I would highlight four.

#### **1. THE NEW INDUSTRY MODEL: *Innovate or Integrate***

To survive, you have to do one or the other really well. To lead, you have to do both.

The vertical integration of the technology industry in the '60s and '70s had given way by the early 1990s to a dizzying array of “pure play” companies (specialists in PCs, databases, application software and the like). This explosion of entrepreneurial and technical creativity was, on the one hand, a testament to our industry’s enduring power. It’s a well that will never run dry.

Businesses, however, desperately needed someone to help them make sense of this chaos. Hence, the emergence over the past several years of technology integrators—and the rush of traditional professional services companies into e-business consulting.

As I/T moves out of the back office and into the executive suite, value and growth in our industry are driven less than they used to be by technical innovation or product excellence, as necessary as those remain. What matters most today is the ability to integrate technology into the lifeblood of business. The people who help customers apply technology to transform their businesses have increasing influence over everything from architecture and standards to hardware and software choices and partners.

#### **2. THE NEW BUSINESS MODEL: *Services-Led***

A lot of people now understand the lead role played by I/T services. However, building up the requisite skill base, not to mention an appropriately sophisticated management system, is nontrivial. You can’t buy your way into it, or just go out and hire a lot of smart people. You need a certain scale and range of disciplines. Also, you can’t just layer one kind of expertise on top of another. This isn’t just filling up two beakers, one labeled “customer” and the other labeled “technology.” It takes years and a lot of knowledge to be able to mix those elements properly.

Plus, services is rapidly expanding and evolving in some surprising ways. It now encompasses not just labor-intensive consulting, but also the utility-like delivery of computing—from applications, to processing, to storage. We see the beginnings of this trend in Web hosting and our own “e-business on demand” offerings, where customers don’t buy computers, but acquire computing services over the Net, on a pay-for-use basis. To play here, as well as in the globally booming strategic outsourcing arena, you have to be willing and able to use your balance sheet to support growth.

IBM, of course, had deep experience in I/T services. But in our old business model, it was buried inside a revenue stream dependent on selling hardware. We had to extract our service operations and turn them into a profit center in their own right. That involved a lot of trial and error. But today, IBM Global Services has evolved into the world’s largest and most innovative consultancy, systems integrator and strategic outsourcing leader.

**3. THE NEW COMPUTING MODEL: *Infrastructure Plus Ubiquity***

It became clear to some of us in the mid-'90s that the PC-driven, client/server computing model had run its course, and was being replaced by network-based, distributed computing. This meant that, on one end of the scale, the workload was moving back to the infrastructure—to industrial-strength servers, storage, databases and transaction-management systems. On the client end, it has spawned a proliferation of network-connected devices of all kinds: PDAs, cell phones, videogame systems, set-top boxes and beyond—to the whole pervasive-computing world of embedded components in everything from household appliances, to medical devices, to cars. And tying it all together was an emerging category of software with a wonderfully descriptive name, which hardly anybody had heard of five years ago—middleware.

It stood to reason that, in a distributed model, profitability would be distributed, too. So we zeroed in on three sweet spots of the new computing “stack”: enterprise systems, integrating middleware, and the specialized, high-value components (such as custom chips) that turn every sort of device into a computer.

This is anything but a “portfolio” approach. We’re not just hedging our bets, and we’re certainly not trying to be all things to all people. Our choices have been about both what businesses to pursue aggressively, and what ones to exit (such as enterprise application software and networking hardware).

- In enterprise systems, we retooled our storage family and entirely revamped and consolidated our server lines. And, let the record note, we didn’t accept another piece of conventional wisdom—we didn’t give up on the

mainframe. Like IBM, it’s back—transformed, more powerful, and doing quite nicely.

- In software, through acquisition and internal development, we built the biggest middleware business in the world. That’s fortunate, because middleware—which helps customers integrate their applications and processes—has emerged as the fastest-growing sector of the software industry. As a development platform, it’s becoming more important than operating systems. And that, in turn, has helped IBM Software to become more deeply integrated into the wider software industry than ever before, much better positioned to share in its future growth.

- In component technology, what began as a search for a new revenue stream to support our R&D expenses turned into a significant growth engine in its own right—our OEM, or original equipment manufacturer, business. Yes, that part of IBM has been hit by the general downturn in technology purchasing. But we remain confident in the long-term future of the business, which is based on exactly the kinds of specialized components for which demand will be greatest in a post-PC world.

Of course, we are no longer alone in drawing this new computing model. But while pretty much everyone now agrees on the outlines, there is much disagreement about the approach. Basically, it comes down to whether you believe in interoperability and common standards or not. We have certainly placed our bet.

**4. THE NEW MARKETPLACE MODEL: *An Open Playing Field***

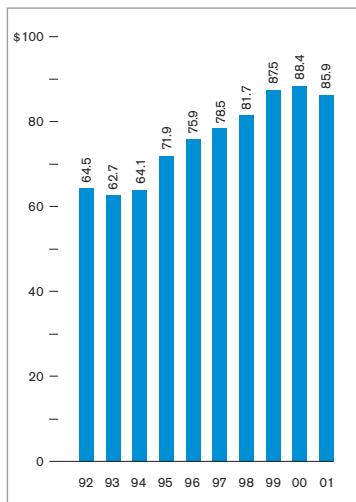
A lot of companies—including many of our leading competitors—still don’t acknowledge or fully understand that common standards are essential in a networked



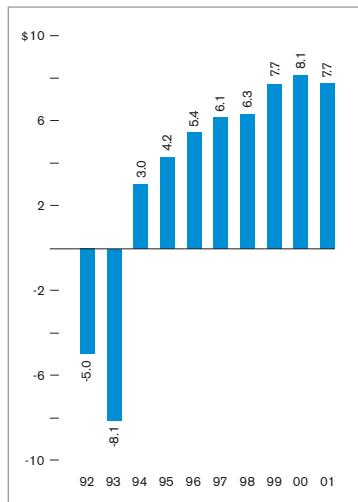
**SAMUEL J. PALMISANO**  
President and Chief Executive Officer

**JOHN M. THOMPSON**  
Vice Chairman of the Board

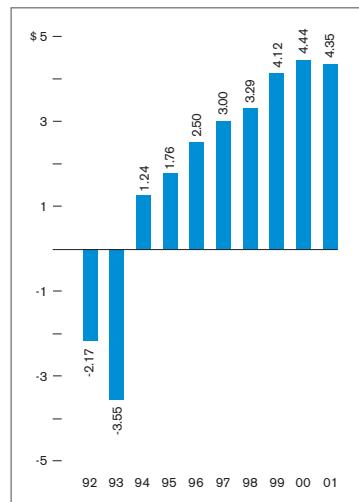
**LOUIS V. GERSTNER, JR.**  
Chairman of the Board



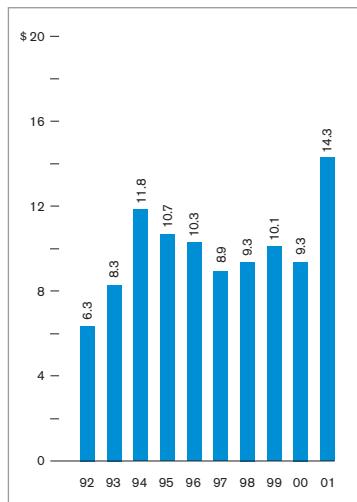
**REVENUE**  
(\$ in billions)



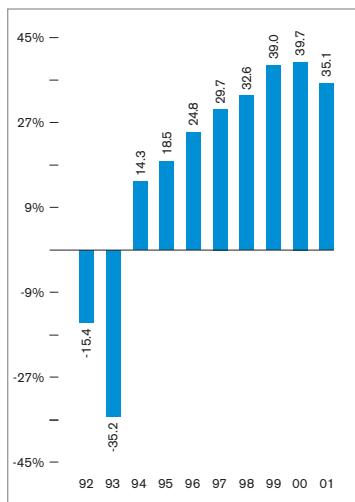
**NET INCOME**  
(\$ in billions)



**EARNINGS PER SHARE—DILUTED**



**CASH FLOW FROM OPERATIONS**  
(\$ in billions)



**RETURN ON STOCKHOLDERS' EQUITY**

world, and that no one will ever again control customers through proprietary technology.

We can certainly appreciate their struggle. We've had to turn a company that long ago made its fortune from proprietary technologies into one that saw the benefits of openness. Maybe it's precisely because we were so acutely aware of the siren call of proprietary control that we have learned to resist it. But one thing is apparent: In a customer-driven world, open architectures and common standards are inevitable.

Today, we are focusing all our technical expertise and marketing energy—previously devoted to creating and marketing self-sufficient systems—toward reimagining and rebuilding them for open platforms. We now share our emerging software products with the developer community; license our technology and patents; and champion common standards at all levels, from Linux, to Java, to Web services. Most important of all was the work we undertook to open up our technical architectures. Absolutely every piece of IBM hardware and software today is a fundamentally different beast (and a more socialized one) than it was ten years ago.

We know what it's like to be on the wrong side of history. The future won't be kind to those who ignore this lesson.

\* \* \*

Put these models together, and you see a changed competitive landscape with very new dynamics. There will be a different lineup of winners and losers. And at the head of the pack, we will see the emergence of a new type of enterprise with a whole new type of corporate culture. We've been building such a company for nearly a decade: big but fast; entrepreneurial and disciplined; at once

scientific and market-driven; able to create intellectual capital on a worldwide scale, and to deliver it to a customer of one. This new breed continually learns, changes and renews itself. It is tough and focused—but open to new ideas. It abhors bureaucracy, dissembling and politicking. It rewards results. Above all, it covets talent and passion for everything it does.

It's hard work—the hardest any business can undertake, in my view—but we're making good progress. From a changed approach to hiring and performance-based compensation; to groundbreaking work on distance learning; to providing the tools, opportunities and flexibility for employees to control their own work/life balance; we are creating not just the theory, but also the practice—and the mindset—of a true e-business.

This is a very different place from the one I joined nine years ago, in many ways that are obvious, even to the casual observer—and in some that aren't, even to the observant insider. It is smarter, more unified and much, much faster. Instead of consistently resisting change, more IBMers now lead it. Our employee population is as skilled and comfortable collaborating online—across geographies, functions, roles—as any I've seen. And we are even learning to make a virtue of our size and complexity, becoming more adept at working the matrix to get things done.

## Farewell

Nine years! As must be obvious by now, I am not exactly ready for retirement. And I would love nothing better than to help drive, and learn from, all that I see happening in the laboratories of IBM and the work we're doing with

CHAIRMAN'S LETTER

customers—everything from “smart dust” to e-sourcing, from global e-learning to e-government, from life sciences to grid computing. What a world is hurtling toward us!

However, a decade or so is long enough to be the leader of a large, complex company like IBM. To win in this industry, you've got to get out in front of the big shifts that come along about every ten years. You need fresh thinking and the courage to lead wrenching change. With e-business, we caught the wave early. We bet the company on the networked world, and that will serve IBM well for years. But I'm sure that Sam will face, during his long and illustrious career, another major shift. When it comes, I hope he throws out everything Gerstner ever did. Adjusting to the market's evolution is why IBM is now succeeding—just as an inability to do so was once IBM's fundamental failure.

We see fascinating hints already of the company IBM will become. I am confident that, with Sam Palmisano's leadership, the best is yet to come. As Chairman of the Board for the remainder of this year, I will continue to be involved in any way that Sam desires. But my time as IBM's leader is over. It has been an enormously exhilarating run, and I have learned more, much more, than I ever expected.

I don't comfortably express my deepest feelings in public. So let me just say, to all my colleagues, all our loyal customers, all our invaluable partners, and to my friend and worthy successor—thank you.

Thanks to the IBM customers who rooted for us to come back from the brink.

Thanks to our shareholders, who took the time to understand what was happening in IBM against the backdrop of industry change.

Thanks to a smart, committed board of directors, who provided wisdom, guidance and support for an agenda full of risk-taking change.

Thanks to the many IBM executives who gave me a chance, who helped me learn and supported me in the early days—when they could very easily have been antibodies resisting this invader from outside.

And, thanks—320,000 thanks—to all my colleagues in this magnificent company. No matter what the challenge—from IBM's own near-death experience, to Y2K, to dot-com mania, to recession, to 9/11—IBM employees blessed all of us with their grit, their passion, their compassion and their class.

I'm proud to have served and worked with all of you. I'm grateful for all that you've taught me, and for sharing with me the business opportunity of a lifetime.

And now—go get 'em.



*Louis V. Gerstner, Jr.  
Chairman of the Board*

Sixteen decisions that *transformed* IBM

# WALL STREET JOURNAL

TUESDAY, NOVEMBER 10, 1992 C1

## Post Gain; Fades Clinton Economy; Divided

## SELL & INVESTING

### 'Break Up IBM,' Cry Some Investors Who See Value in Those Baby Blues

#### HEARD ON THE STREET

By MICHAEL W. MILLER

Staff Reporter of THE WALL STREET JOURNAL  
NEW YORK — Investors in International Business Machines are starting to ask a question once unthinkable: Is IBM worth more dead than alive?

With Big Blue's stock mired near a 16-year low, Wall Street is starting to take a hungry look at the dozen increasingly autonomous units into which IBM carved itself last year. Traded separately, the fantasy goes, these "Baby Blues" could slash overhead costs, break all their bad habits and enjoy the juicy market multiples that software and other high-tech specialists command.

Yesterday, news of a product delay at a competitor helped IBM's stock perk up 1 1/4 to 67 1/2, even though many analysts believe the issue still hasn't hit bottom in its steep autumn dive.

"IBM might have a lot more value broken up," says Charles Bidderman, publisher of the Market Trim Tabs investment newsletter. "The train called IBM is headed towards the junkyard, unless the parts of it get off and go their own way."

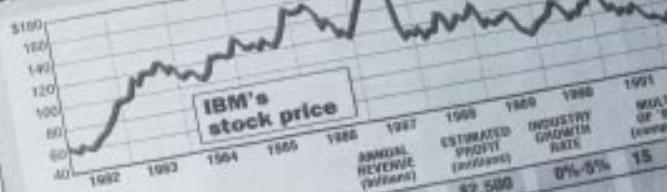
Don't hold your breath for an out-and-out bust-up takeover of IBM, still pricey at \$5 billion. But the company itself is quietly working on ways to give shareholders more value from the Baby Blues.

The current scenario of choice inside IBM, industry officials say: special inside shares, similar to the General Motors H and E shares, which are pegged to results of the no maker's Hughes Aircraft and Elec-

Mutual Funds	C29	Oil Prices	C6
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NYSE/Amex Bonds	C18	Stock Market Data Bank	C37
NYSE Highs & Lows	C19	Treasury/Agency Issues	C19
NYSE Stocks	C5	U.S. Regional Markets	C10
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#### The Story of IBM



BIG BLUE	ANNUAL REVENUE (\$BILLION)	ESTIMATED PROFIT (\$BILLION)	INDUSTRY GROWTH RATE	MARKET VALUE (\$BILLION)
Application Business Systems (midrange computers)	11.4	950	5%-6%	15
Programming Systems (application software)	2.7	290	10%-15%	14
Integrated Systems Solutions Corp. (data processing for outside customers)	0.5	30	15%-20%	17
Pennant Systems (high-end printers)	2.1	30	15%-20%	17
Aststar (disk drives, other computer storage)	11.9	870	20%-40%	17

Note: Stock-price multiples are based on estimated 1992 earnings. Profits X each w

Sources: Antex Research, Wall Street analysts

If there's a stock you like a long-term play, acquire a subsidiary to IBM and IBM won't be blues. Audited results before 1993. So an IBM

electronic Data Systems businesses, respectively. Compared with an outright spinoff, the GM route would preserve a time-worn strategy to which IBM executives cling with religious zeal: offering its customers one-stop shopping for all sizes of computers.

Please Turn to B

NO. I

## We *decided* not to die

KEEPING IBM TOGETHER

Did the world need a company like IBM anymore? In the early 1990s, our way of computing and our way of working with customers had fallen out of vogue, and we were on a fast track to being dismantled, from within.

Then, in the spring of 1993, new leadership brought a new vision—and a surprising decision. IBM would stay together. We believed niche players weren't the future. In fact, breaking up the company would have been the end of everything IBM stood for.

We made a big bet that customers needed a partner who could both create technologies and integrate them—with each other, and with the customer's business processes.

At the time, it was a gutsy call. They always are when you're alone. But we decided that we should be true to ourselves. It all started with that.



Chess Grandmaster Garry Kasparov versus IBM supercomputer Deep Blue, May 11, 1997

## We reaffirmed our *technical heritage*

REVITALIZING IBM RESEARCH AND DEVELOPMENT

For us, IBM's heritage isn't captured in the volume of patents we earn, as impressive as that is. (In 2001, we became the first company to receive more than 3,000 U.S. patent awards in one year. It was also the ninth straight year we were awarded more patents than any enterprise in any industry.)

Nor is it mostly a function of the discoveries in new fields that are pouring out of our labs, as exciting as those are. (On the horizon, we look to the promise of our pioneering work in areas such as autonomic systems, nanotechnologies and quantum computing.)

For IBM, the true heart of our technical and scientific heritage is in doing research and development that *matter*. IBM's heritage is technology that changes how business is done, how states can govern, how students can learn. IBM's R&D finds its ultimate scorecard not in scientific journals, but in the impact it has on the fundamental problems and opportunities that exist in the world.

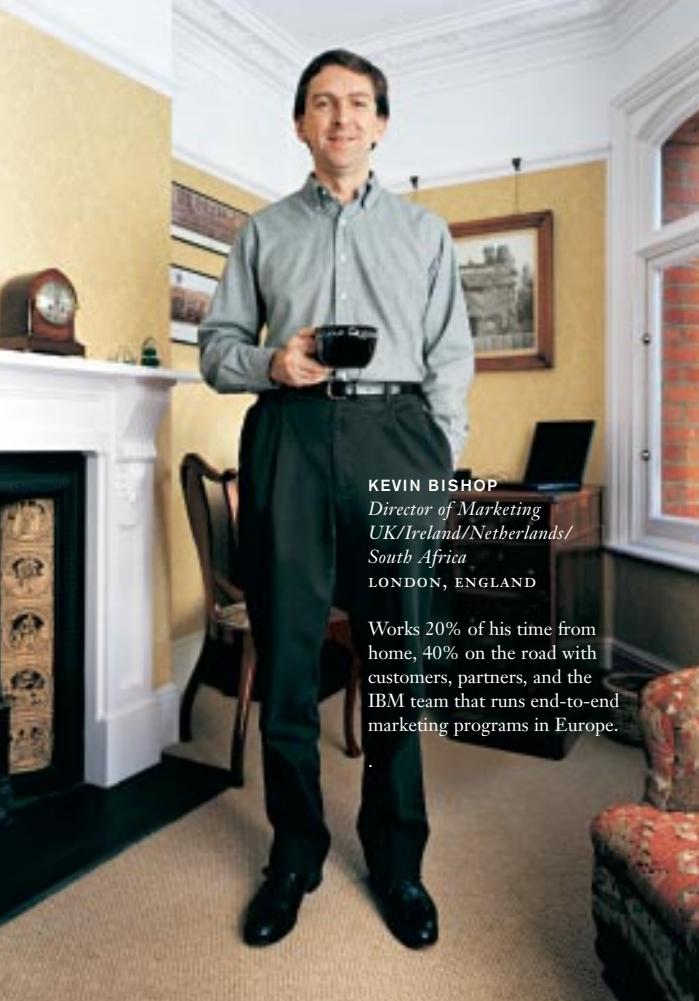
Maybe that's why one Sunday evening in 1997 was such a signal moment. A supercomputer named Deep Blue defeated the reigning chess grandmaster—and announced that IBM was, once again, the place where grand challenges are taken on, and where paradigms get shifted.

*In 2001*

OUR STRAINED SILICON TECHNOLOGY STRETCHES SILICON TO SPEED  
THE FLOW OF ELECTRONS THROUGH A CHIP—POTENTIALLY  
*boosting chip performance or cutting power consumption by 35 percent*

OUR CARBON NANOTUBE TECHNOLOGY USES TINY CYLINDERS  
OF CARBON ATOMS—AS SMALL AS 10 ATOMS ACROSS—to build transistors,  
which could lead to *smaller, faster, lower-power* computer chips

OUR RESEARCHERS EXECUTE THE MOST COMPLICATED COMPUTATION  
EVER PERFORMED ON A QUANTUM COMPUTER,  
A TYPE OF *experimental system* THAT HARNESSES CERTAIN PROPERTIES IN BILLIONS  
OF ATOMS TO PERFORM CALCULATIONS EXPONENTIALLY FASTER  
THAN CONVENTIONAL COMPUTERS



**KEVIN BISHOP**

*Director of Marketing  
UK/Ireland/Netherlands/  
South Africa  
LONDON, ENGLAND*

Works 20% of his time from home, 40% on the road with customers, partners, and the IBM team that runs end-to-end marketing programs in Europe.



**ENA D. CANTU**

*Supercomputer Storage  
and Systems Administrator  
CAMP SPRINGS, MARYLAND*

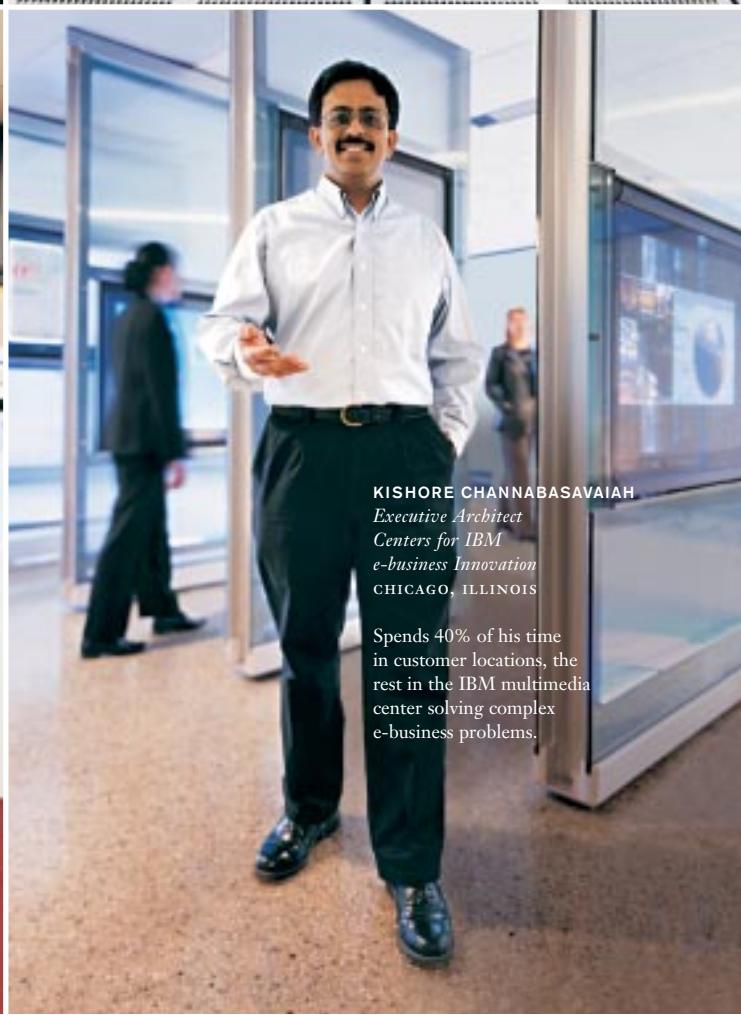
Spends 100% of her time at The National Center for Environmental Predictions, maintaining the NCEP's operational weather and climate forecasting system.



**PRISCILLA E. HAY**

*Senior Problem Manager  
IBM Baulkham Hills  
Command Centre Operations  
SYDNEY, AUSTRALIA*

Monitors the I/T systems for more than 80 customers simultaneously from the IBM Global Services command center.



**KISHORE CHANNABASAVAIAH**

*Executive Architect  
Centers for IBM  
e-business Innovation  
CHICAGO, ILLINOIS*

Spends 40% of his time in customer locations, the rest in the IBM multimedia center solving complex e-business problems.

## We rewired the enterprise

TRANSFORMING OUR CRITICAL PROCESSES AND  
BECOMING AN E-BUSINESS

We had met the enemy, and it was us. Too slow, too costly, too insular.

So in 1994, we rolled up our sleeves and started to transform the way IBM works, from end to end. Most companies attempt one major reengineering project at a time. We launched 11—from the way we manage internal information systems, to the way we develop products and serve customers. It was ambitious—but it wasn't enough.

We came to realize that important organizational change also has to happen in a company's social structures—in how people understand what is expected of them, in how they are rewarded and managed, in the ways that ideas are shared. In order to deliver on our value proposition, we had to change the very nature of work.

### *Speed*

SINCE 1993, *cycle time* FOR LARGE SYSTEMS DEVELOPMENT  
HAS BEEN SLASHED 56 MONTHS TO 16 MONTHS TODAY. FOR LOW-END SYSTEMS,  
IT'S SEVEN MONTHS—DOWN FROM TWO YEARS

### *Superior Quality*

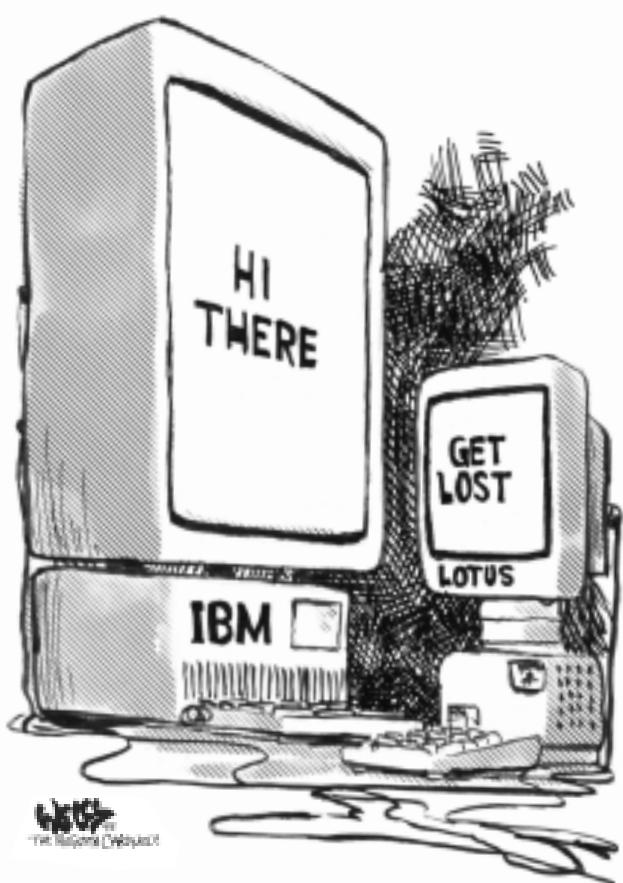
BETWEEN 1997 AND 2001, THE HARDWARE RELIABILITY OF OUR  
HIGH-END SERVERS *improved by more than 200 percent* WHILE COMPUTING  
POWER INCREASED BY A FACTOR OF FOUR

### *Simplicity*

SINCE 1993, WE HAVE *reduced I/T spending by 31 percent*  
(E.G., BY CONSOLIDATING DATA CENTERS)—FOR A TOTAL SAVINGS  
OF MORE THAN \$2 BILLION

### *Trust*

EMPLOYEES REGARD IBM'S INTRANET AS THEIR *most trusted source*  
OF COMPANY INFORMATION—SURPASSING EXTERNAL MEDIA, COWORKERS  
AND THEIR IMMEDIATE MANAGERS



NO. 4

## We didn't take “no” for an answer

WHAT THE LOTUS ACQUISITION TAUGHT US

History records that on June 5, 1995, we launched the hostile takeover of Lotus Development Corp. At the time, it was billed as the largest software acquisition ever. It was actually much bigger than that.

It was the moment that signaled we were out of survival and turnaround mode; when we asserted the will to lead again.

In acquiring Lotus and its elegant collaborative software program, Notes, we simultaneously filled a hole in our portfolio, made a bold move into the world of networked computing, and announced that IBM was back.

A circular perspective view of a vintage IBM System/360 computer room. The room is filled with large, black and red mainframe computers arranged in a circular pattern. Several people in white lab coats are working on the equipment. The floor is white-tiled, and the overall atmosphere is one of a high-end computing facility from the mid-20th century.

With its debut in 1964, the IBM System/360 defined an era in high-end computing.

And the name was no accident. The 360, as in the perfect circle, was the paradigm of proprietary systems architecture—its own self-contained world of hardware, software and peripheral equipment.

## We fought for an *open world*

THE END OF PROPRIETARY COMPUTING AT IBM

IBM used to be the poster child for closed, proprietary computing. In the early days of the information technology industry, computer makers built systems that were compatible with their own product lines (mostly), but not with anyone else's.

Even today, that's the way a few I/T companies still build their products—locking in customers and locking out flexibility and choice based on architectural “choke” points.

But not IBM. By the 1980s, it was clear that any high-tech company that tried to impose closed technology on customers would be standing on the wrong side of history. Getting to the right side wasn't easy.

It involved opening up our software to run on all the industry-leading platforms, and supporting non-IBM software on our hardware. Even our services business had to change—recommending, installing and supporting non-IBM products.

We did all that, and along the way built a reputation for backing any effort, with any vendor or any customer, to give our products an even more open identity.

IBM PRODUCES MORE SERVER-BASED MIDDLEWARE ON THE  
WINDOWS NT OPERATING SYSTEM THAN MICROSOFT

IBM ACTIVELY BACKS THE GLOBAL GRID FORUM  
COMMUNITY'S VISION OF OPEN STANDARDS FOR THE "GRID" NETWORKS THAT WILL  
UNITE COMPUTER SYSTEMS AROUND THE WORLD,  
REGARDLESS OF THEIR LOCATION, OPERATING SYSTEM OR MAKER

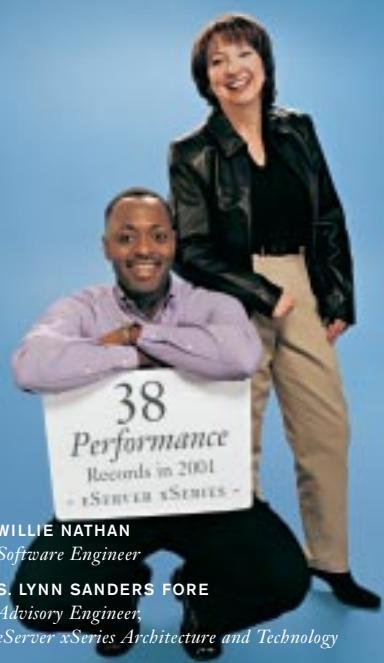
IBM IS A LEADING SERVICES PROVIDER FOR  
ORACLE AND COMPUTER ASSOCIATES PRODUCTS

I,000 IBM DEVELOPERS—MORE THAN AT ANY OTHER COMPANY—  
ARE WORKING ON LINUX

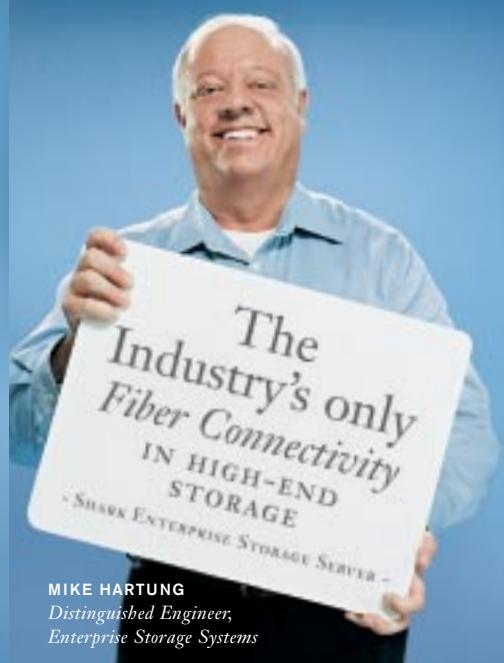
WE DONATED MORE THAN \$40 MILLION IN  
APPLICATION DEVELOPMENT TOOLS TO A NEW, INDEPENDENT, OPEN-SOURCE  
SOFTWARE COMMUNITY CALLED ECLIPSE



**GOUPI ADVANI**  
Product Development Team Leader,  
Wireless RF Products



**WILLIE NATHAN**  
Software Engineer  
**S. LYNN SANDERS FORE**  
Advisory Engineer,  
eServer xSeries Architecture and Technology



**MIKE HARTUNG**  
Distinguished Engineer,  
Enterprise Storage Systems



**MARCIA SPRINGFIELD**  
Manager,  
Mobile Hardware and Software Solutions



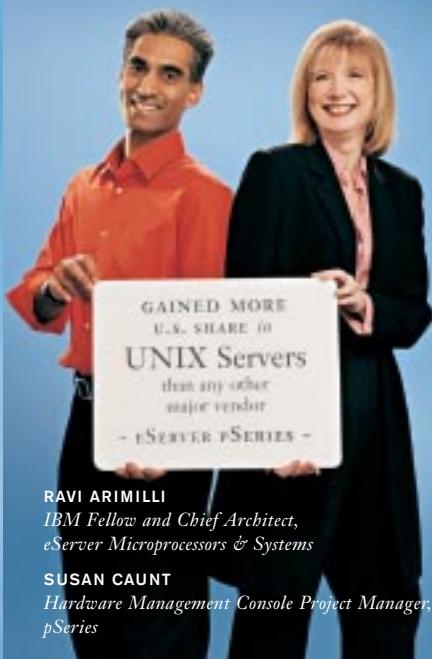
**BOAS BETZLER**  
Senior Software Engineer



**DONALD FERGUSON**  
IBM Fellow



**NELSON M. MATTO'S**  
Distinguished Engineer and Director,  
Information Integration — Data Management



**RAVI ARIMILLI**  
IBM Fellow and Chief Architect,  
eServer Microprocessors & Systems  
**SUSAN CAUNT**  
Hardware Management Console Project Manager,  
pSeries



**DAVE BOUTCHER**  
Senior Technical Staff Member,  
iSeries Linux Development

NO. 6

## We decided *our products* would set the standard

NOT ON PLANET IBM, BUT ON PLANET EARTH

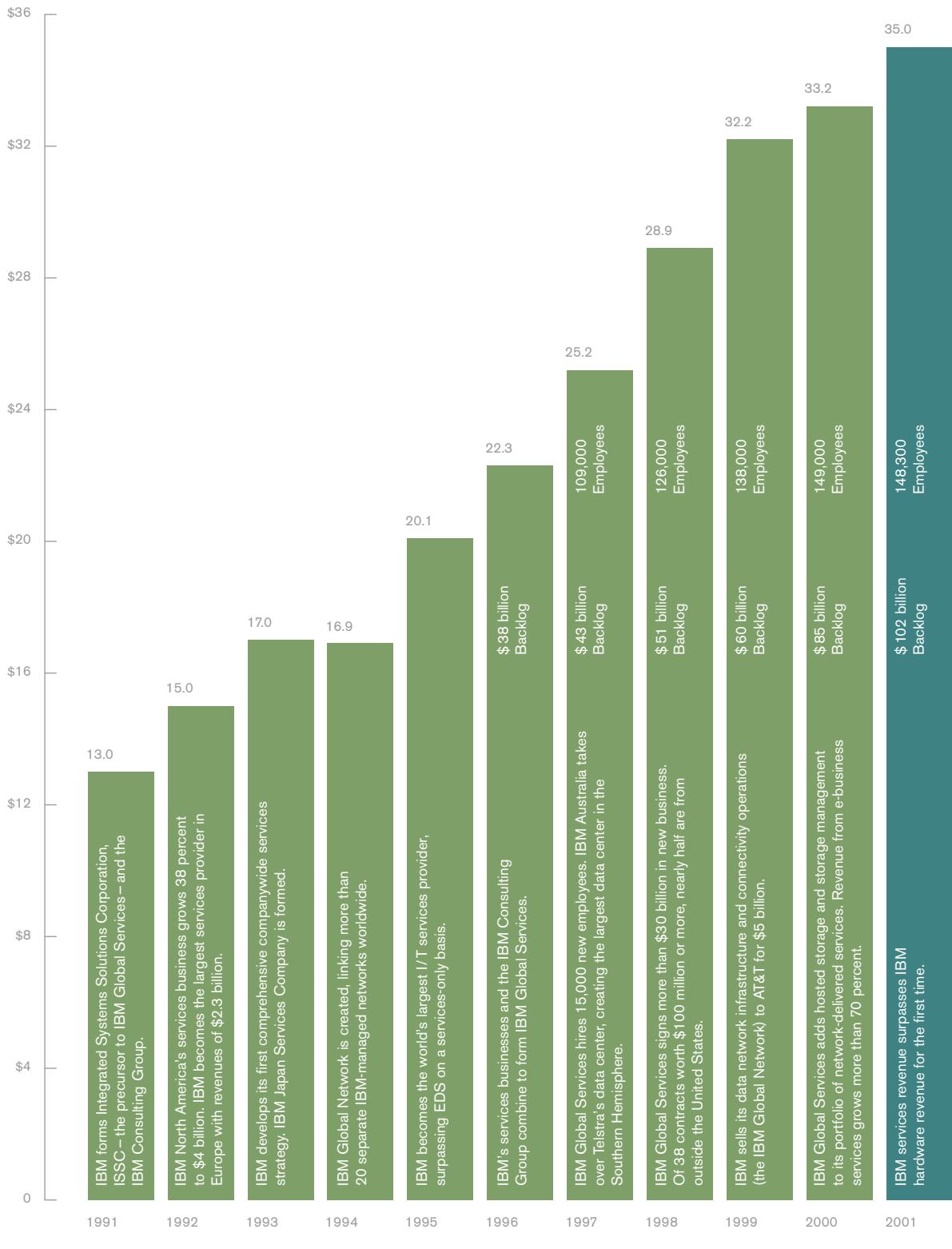
For a long time, we won with such consistency that we started to look for another challenge. We began to compare the performance of our products against *our own* prior generation, regardless of what our competitors were doing. By the early '90s, it was clear we were playing the wrong game.

So we stopped the internal benchmarks, and got serious about winning against the best the marketplace had to offer.

That decision forced us to speed up, to bring new technologies to market on shorter and shorter cycles. And it also triggered a chain reaction across the company—changing our investment and acquisition strategies, our approach to market analysis and the way we prioritize research efforts.

Today, we are the number 1 or number 2 company in servers; collaborative software; custom logic; middleware; I/T services; maintenance; Web software; high-end disk storage; distributed application software; and total software.

It's remarkable how much more you win when you're in the right game.



Total IBM Services Revenue (\$ in billions)

NO. 7

## We grew a business from the ground up

THE BIRTH OF IBM GLOBAL SERVICES

Put another way, we realized that the future of the computer industry wasn't in computers.

In 1991, we were a \$64.8 billion company that got less than \$6 billion from non-maintenance services. Ten short years later, the business of information technology *services* generated more than 40 percent of our \$86 billion in sales and became the single largest source of revenue in our portfolio.

How did that happen? It was partly the result of old-fashioned hard work and serious commitment—growing customer by customer; building disciplined management and financial systems; and investing to hire and train experts in everything from I/T consulting, to systems architecture, to Web services. We used our financial strength to fund the expensive push into outsourcing. And we placed informed bets on the future—in areas such as I/T utility services (“e-business on demand”) and hosted storage.

But most important, the success of IBM Global Services comes from something very simple—a clear understanding of customers' needs. We saw that technology and business were converging to create something new—and challenging—for every kind of enterprise. We had the deep experience in both areas to help our customers combine them most effectively.



IBM and Computer & Technologies Software Ltd. form a strategic alliance to provide e-business solutions in China.



Sharp and IBM jointly form a new solutions company and enter into a strategic outsourcing partnership.



IBM and Shanghai Telecom form a strategic alliance to provide e-business hosting services.



IBM and The Bank of China's Jiangsu Branch celebrate the installation of the 100th Shark Enterprise Storage Server.



IBM and the Korea Institute of Science and Technology Information sign Asia's largest supercomputer deal.



Malaysia's CyberVillage Sdn Bhd joins IBM's Accelerated Growth Program.

NO. 8

## We put down roots in Asia

CAPTURING NEW MARKETS

For IBM, Asia isn't an "emerging market." We started our first operations there in 1925, and have built a \$17 billion franchise—which alone would make our Asian operations one of the largest information technology companies in the world.

Identifying the world's emerging growth markets isn't that hard. The trick is operating inside those markets as a local enterprise, one that understands business practices and cultural traditions that can form barriers-to-entry more formidable than tariffs or entrenched competitors.

Until the mid-'90s for example, Asian companies staunchly resisted strategic outsourcing, long after other parts of the world had embraced it. When we signed our first outsourcing contracts in Japan, it was because our customers understood that their employees were not moving to a foreign company with a local presence, but to a Japanese company with very familiar values and principles.

STRATEGIC OUTSOURCING REVENUE IN ASIA WENT FROM  
NOTHING IN 1995 TO \$2.6 BILLION IN 2001,  
WITH 47 PERCENT GROWTH AT CONSTANT CURRENCY LAST YEAR

IN JAPAN, SERVICES REVENUE IN 2001  
INCREASED 25 PERCENT IN A VERY DIFFICULT ECONOMY

OUR STAFF IN THE PEOPLE'S REPUBLIC OF CHINA STOOD AT 120 IN 1991.  
THAT'S GROWN TO A WORKFORCE OF MORE THAN 11,000 TODAY, INCLUDING  
WHOLLY OWNED SUBSIDIARIES AND JOINT VENTURES.  
REVENUE INCREASED 30 PERCENT TO \$1.5 BILLION IN 2001

**PAUL CHOU***Emerging Interactive Spaces*

IBM and Steelcase Inc.: innovative work environments that integrate architecture, furniture design and advanced I/T to increase creativity, improve comfort and provide more personalization.

**PAUL BORREL***Product Lifecycle Management*

IBM and Dassault Systèmes: advanced solutions that enable product innovation, design collaboration and the sharing of product data with pervasive computing technology.

**DAVID E. JOHNSON***Text Mining and Computational Linguistics*

IBM and Wachovia: a system that learns and performs fast, accurate and high-volume text documentation categorization.

**KATHERINE BETZ***Secure Electronic Payments*

IBM, The Bank of Tokyo-Mitsubishi and The Industrial Bank of Japan: a framework for global financial institutions and their corporate customers to use the Internet for payments.

**DAVID NAHAMOO***Human Language Technologies*

IBM and T. Rowe Price: the first natural language understanding system that allows 401(k) participants to manage their accounts simply by speaking into the phone.



NO. 9

## We brought the marketplace into *our labs*

BRINGING CUSTOMER FOCUS TO OUR TECHNICAL COMMUNITY

“IBM products aren’t launched. They escape.”

During the early 1990s, we heard that frequently, both from customers and from our own scientists, engineers and developers.

So we set to work reinventing the way we create, develop and deploy new technologies. We got innovations to market much faster, but we also found we had to do the reverse—bring real-world customer wants and needs into our laboratories.

Today, the linkage between our research and development labs and the marketplace has never been tighter. At the same time our researchers are chasing computational grand challenges or pioneering the frontiers of material science, we’re just as apt to be building prototype solutions with a customer. In fact, one quarter of our researchers are involved in this kind of joint project. Ideas flow in. Technologies flow out. The result is a new type of creative chemical reaction—between the discoveries of the lab and the immediate needs of business—that opens up new possibilities in both.



NINTENDO  
GameCube

CANON  
PowerShot S30  
Digital Camera

e.DIGITAL  
Treo 10 Digital  
Music Jukebox

DELL  
Inspiron 8200 Notebook Computer

## We *shared* the crown jewels

BUILDING THE OEM BUSINESS

There was a time when all our component technologies, such as semiconductors and hard disk drives, went inside our own products. And only there.

That was then, this is now. In order to support our massive investments in R&D, we needed additional revenue streams, so we began doing something previously unthinkable—selling our technology products to other high-tech companies. Fortunately, our technology was so good that we sold a lot of it—multibillion dollars' worth, creating a large OEM (original equipment manufacturer) business.

But that was just for openers. Now is when it gets interesting.

We're entering a period of explosive demand for semiconductors—from processors for the largest servers to chips in everything from your car to your microwave oven, plus billions of Net access devices like intelligent cell phones or PDAs.

Every one of those devices needs memory, storage and communications capability, in addition to the processor. And for every kind of device, there's a slightly different kind of chip design.

This is a good time to have the largest custom chip business in the world. We do. In 2001, IBM was one of only two top-30 chip makers that grew revenue.



COMPAQ  
iPAQ Pocket PC

NIKON  
Coolpix 5000 Digital Camera

FRONTIER LABS  
Nex II Digital  
Audio Player

e.DIGITAL  
MXP 100 Digital  
Audio Player/Voice  
Recorder

KYOCERA MITA  
ECOSYS Printer  
FS-1800



January 2002

## We *didn't give up* on the mainframe

A RETURN TO ENTERPRISE COMPUTING

"I PREDICT THAT THE LAST MAINFRAME WILL BE UNPLUGGED  
ON MARCH 15, 1996."

*Stewart Alsop, InfoWorld, March 1991*

In 1991, Stewart Alsop was far from alone. Most respected industry pundits were declaring the end of the "mainframe era." So we don't hold it against him. We're just glad he has the grace and good humor to see things differently today.

To be fair, the "mainframe," circa 1991, *was* a dead end. But we believed (along with a lot of our customers) that this *way* of computing—serious, secure, industrial-strength—would always be in demand.

So we stuck with "big iron," but reinvented it from the inside—infusing it with an entirely new technology core, reducing its price, and building support for open standards and operating environments like Linux.

Since 1992, shipments of mainframe computing capacity have increased more than 30 percent annually. And in the years since the last one was to have been unplugged, our mainframe business has generated revenues in excess of \$19 billion.

"IT'S CLEAR THAT CORPORATE CUSTOMERS STILL  
LIKE TO HAVE CENTRALLY CONTROLLED, VERY PREDICTABLE,  
RELIABLE COMPUTING SYSTEMS—EXACTLY THE KIND  
OF SYSTEMS THAT IBM SPECIALIZES IN."

*Stewart Alsop, February 2002*

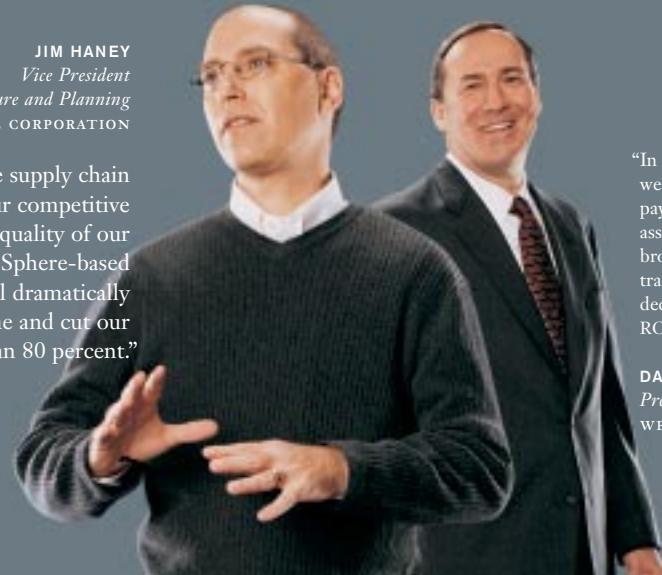
**JIM HANEY**

*Vice President*

*Architecture and Planning*

WHIRLPOOL CORPORATION

"In our business, the supply chain is as important to our competitive advantage as the quality of our products. Our WebSphere-based partner trade portal dramatically improved ordering time and cut our costs by more than 80 percent."



"In today's economy the investments we make in technology have to pay back. Our Tradetopia extranet assists sales managers and food brokers in planning and tracking trade promotions and in handling deductions. It produced 100 percent ROI in under a year."

**DANIEL P. DILLON**

*President and Chief Executive Officer*  
WELCH FOODS, INC.

**PHILIP F. MOONEY**

*Director, Corporate Archives*  
THE COCA-COLA COMPANY

"In order to understand our brands and their positioning, our employees have to be steeped in the traditions, history and imagery of our company. We've been able to bring to life thousands of video clips, photos and documents and make them instantly available to our associates all over the world."

**GORDON CASTLE**

*Senior Vice President, CNN Technology*  
CNN

**MAYNARD WEBB**

*President, eBay Technologies*  
EBAY

"Our business is our website. We've got 42 million registered users who are listing millions of items and transacting over \$30 million in gross merchandise sales on the eBay site each day. You don't run that kind of Web enterprise on anything but industrial-strength platforms."



"We're transforming our business with a new e-business infrastructure—powered by IBM database, communications, application and system management software. For customers, this means new and better services. For employees, it means our intranet, e-Spacio, can simplify and speed up how we work."

**JOSE MANUEL AGUIRRE LARIZGOITIA**

*Senior Vice President and CIO*  
BBVA GROUP

NO. 12

## We majored on *middleware*

BUILDING OUR SOFTWARE BUSINESS

In 1993, nobody would have recognized the term “middleware.” Today, it is nearly 40 percent of the \$230 billion software marketplace.

It’s also what we bet our software business on in 1995, when we were looking for IBM’s next growth opportunities.

Middleware is the collection of products—databases, transaction management systems, messaging, systems management—that lets customers do things they care about. Things like allowing your online bookstore to make recommendations based on prior purchases, or keeping your credit card information confidential when you go to the Net to buy an airline ticket.

Middleware represents 80 percent of our \$13 billion software business. We’re the world’s leading provider, and we’re growing faster than our main competitors.



*(music under)*

*Web Guy:* I've got some great ideas for our website. We could have a spinning logo like this one... or a flaming logo. This is cool!

*Boss:* You know what would be a great idea? If people with PCs anywhere could order our products...and that was all tied together with inventory, billing, vendors. You know, the works. Then, that would change everything.

*Web Guy (perplexed):* I don't know how to do that.

*Closing title shot:* IBM helps thousands of companies do real business on the Web.

*e-business logo... (music out)*

NO. 13

## We found *our voice*

REINVIGORATING THE IBM BRAND AND EVANGELIZING E-BUSINESS

We recaptured something we'd lost—our ability to engage our customers and our industry in a meaningful conversation about what matters to us, and to them.

This wasn't about cranking up the volume, issuing more press releases, or producing memorable TV commercials. It was about rediscovering our confidence and articulating what we believe. Things like:

- WE ARE ENTERING A POST-PC ERA.
- THE DOT-COMS ARE FIREFLIES BEFORE THE STORM.
- THE WINNERS IN THIS INDUSTRY WILL DO ONE OF TWO THINGS: INNOVATE OR INTEGRATE.

When we rediscovered our voice, we discovered something else: our sense of direction, the courage to stand apart from the crowd and, ultimately, what it means to speak out like a leader again.

**BOB QUINN**  
*Finance Program Manager*



**KIM SHEDLIN**  
*Administrative Assistant*



**DANIEL DREYER**  
*Human Resources*



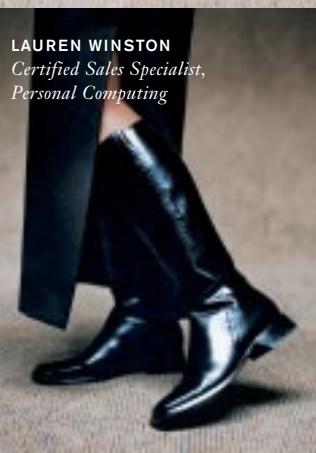
**ETHAN R.R. McCARTY**  
*Web Editor*



**JIAN M. WU**  
*I/T Specialist*



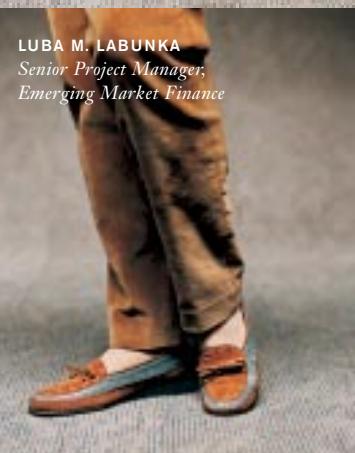
**LAUREN WINSTON**  
*Certified Sales Specialist,  
Personal Computing*



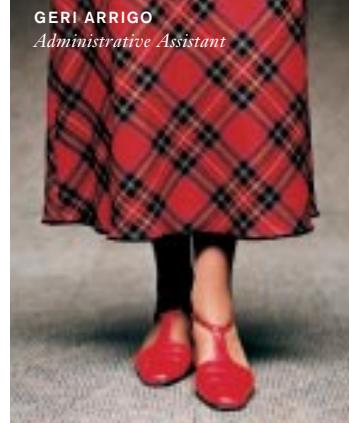
**BRADFORD HOBBS**  
*Director, Corporate  
Brand Strategy*



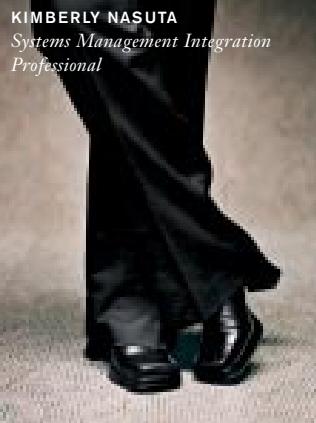
**LUBA M. LABUNKA**  
*Senior Project Manager,  
Emerging Market Finance*



**GERI ARRIGO**  
*Administrative Assistant*



**KIMBERLY NASUTA**  
*Systems Management Integration  
Professional*



**LARRY RICCIARDI**  
*Senior Vice President*



**GRACE SUH**  
*Program Manager  
Corporate Community Relations*



**JOHN T. O'LEARY**  
*Software Account Manager*



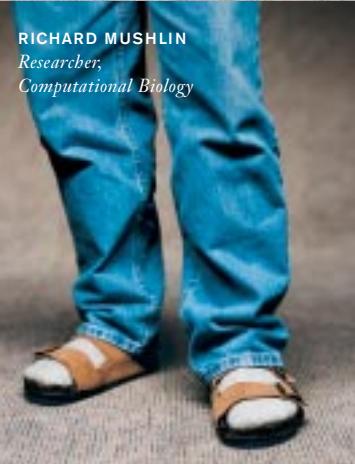
**MARY JO D'ALESSANDRO**  
*Legal Assistant*



**MAUREEN POWER**  
*Client Services Principal,  
J.P. Morgan Chase & Co.*



**RICHARD MUSHLIN**  
*Researcher;  
Computational Biology*



Some of the IBM employees who walked into IBM headquarters in Armonk, New York, on January 15, 2002

NO. 14

## We loosened our tie

CHANGING CORPORATE CULTURE

In the early days of the 1990s, we knew that a lot of things about IBM had to change: financial, strategic, operational. We tackled those, and by the middle of the decade, the company was no longer on life-support.

But there was one more hill to climb. In order to deliver on IBM's value proposition—uniting business knowledge and technology to provide integrated solutions for our customers—we had to change something even tougher.

Ourselves.

We've reinvented how we compensate people and who we hire. We provided people with the tools, opportunities and flexibility to control their own work/life balance, and their own learning. We've rethought all kinds of assumptions about management, including the role of the manager.

Changing a company's culture—turning it once again into an unbeatable competitive asset, rather than a near-fatal malady—that's about a lot more than allowing people to bring their dogs into the office or dropping a dress code.

And, for the record, "dropping the IBM dress code" was the biggest culture-change move we *never* made. We simply said IBMers should dress appropriately for the task at hand. We trusted their judgment—on a lot more than clothing.



NO. 15

## We remembered our *middle name*

BUILDING A REPUTATION IN BUSINESS INNOVATION

At our core, we've always been a technology company—including back in the '60s and '70s, when we were taking a consultative approach to transforming customers' back-office processes like accounting and payroll.

In the late 1980s, however, we lapsed. We forgot that the commitment to business solutions—not technology for technology's sake—is what separates IBM from the field.

That's the reason we're no longer organized by geographic regions or product sets, but align our expertise and resources around customers and industries. It's why we created a services business and committed ourselves to integrated solutions.

And it's what led us to define the Internet phenomenon not as "the network" or "the Information Superhighway" or "the wired world," but as "e-business."

It's why we're quite comfortable with our middle name.



INTERNATIONAL BUSINESS MACHINES CORPORATION  
500 MADISON AVENUE  
NEW YORK 22, N.Y.

OFFICE OF  
THE PRESIDENT  
Confidential

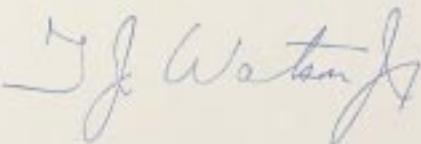
September 21, 1953

Policy Letter #4

The purpose of this letter is to restate for all of the supervisory personnel of the IBM Company the policy of this corporation regarding the hiring of personnel with specific reference to race, color, or creed.

Under the American system, each of the citizens of this country has an equal right to live and work in America. It is the policy of this organization to hire people who have the personality, talent and background necessary to fill a given job, regardless of race, color or creed.

If everyone in IBM who hires new employees will observe this rule, the corporation will obtain the type of people it requires, and at the same time we will be affording an equal opportunity to all in accordance with American tradition.



T. J. Watson, Jr.

## We never abandoned *our values*

OUR RESPONSIBILITY TO  
THE COMMUNITIES IN WHICH WE WORK AND LIVE

Everything else in this report has been about what changed over the past nine years. This is about what didn't.

Long before there was an Internet, before computers, or semiconductors, or even vacuum tubes, there were ethics, corporate citizenship, social and environmental responsibility and fairness.

We make our business in the high-tech revolution of the networked world. But we *built* our business on a system of beliefs. These values transcend the progression of one generation of technology to the next—or, for that matter, of one generation of people to another.

Of course, as the needs within communities changed, so did the nature of our philanthropic efforts, or the way we applied our expertise and technologies. We adapted the approach, but never the underlying principles.

So perhaps this last decision is really more of a pledge, or a promise that a company and its people make to the institution, and to one another: To remain faithful to values that never change. And to remember—at every step of the journey—who we are, and what we stand for.

*In 2001*

IBM CONTRIBUTED MORE THAN \$127 million TO PROGRAMS AROUND  
THE WORLD THAT HELP PEOPLE IN NEED

INDIVIDUAL employees contributed another \$51.2 million through matching grants and donations to nonprofit organizations and institutions

IBMERS volunteered more than 4 million hours of time and expertise  
to a broad range of local causes

IBM CONTINUED ITS COMMITMENT TO *improve the quality*  
OF K-12 EDUCATION THROUGHOUT THE WORLD WITH ITS \$70 MILLION  
REINVENTING EDUCATION GRANT PROGRAM

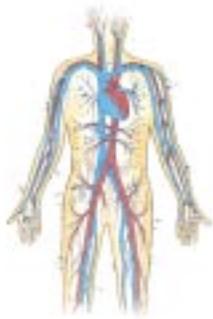
U.S. ENVIRONMENTAL PROTECTION AGENCY PRESENTED IBM  
THE 2001 ENERGY STAR® “*excellence in corporate commitment*” AWARD

DURING THE PAST SIX YEARS, IBM HAS *increased its number* OF WOMEN  
EXECUTIVES WORLDWIDE BY 246 PERCENT

# Seven shifts that *will transform* the future (yours, and ours)

## 1. Computers *will care* for themselves.

Mere humans don't stand a chance of keeping pace with the coming onslaught of data volumes and transaction flows, not to mention the complexity of information systems themselves. Fortunately, mere humans can infuse the systems with the ability to manage the complexity themselves. Called *autonomic computing* (after the human autonomic nervous system that governs activities like heart rate, digestion and breathing), this will make our systems more reliable, self-managing, self-protecting and even self-healing—freeing up enterprises to focus on more creative things, like new uses for those very systems.



## 2. Advanced computing devices will take a lesson from a mollusk.

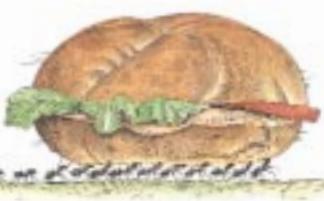
 Scientists today can etch microscopic lines in computing components that are astoundingly fine, but the processes are themselves astoundingly intricate, complex and increasingly expensive. Now, scientists are taking a cue from the lowly abalone, which organically combines materials to form a shell 3,000 times stronger than its component elements. That principle of natural self-assembly is behind using chemical reactions to form materials with built-in nano-scale features. IBM scientists have already moved individual atoms. Tomorrow, they just might be able to make those individual atoms do some amazing work.

Scientists today can etch microscopic lines in computing components that are astoundingly fine, but the processes are themselves astoundingly intricate, complex

## 3. Enterprises will dismantle *industrial age* workplaces.

Once, we shoehorned people into office complexes so they could be near the filing cabinets and each other. No longer. “The office” will be discarded in response to a changing workforce with radically different expectations, a marketplace that has no time for bureaucracy (or time zones), and technologies that make the traditional workplace an e-workplace. At IBM, we’re not only studying this in our labs—we’re also learning about it, and living it, in our e-business-enabled work lives.





#### 4. The *small (and energy-efficient)* will pack quite a wallop.

For many of tomorrow's most massive computing challenges, IBM scientists expect to see 10 times the energy efficiency at the same cost by assembling "cellular architectures" of thousands, even millions

of simpler microprocessors that will work in parallel on discrete "chunks" of a problem. When aggregations of these power-efficient chips combine their resources over virtualized computing networks, we may see supercomputer performance within reach, not just of enterprises of all sizes, but individuals.



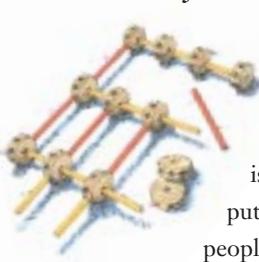
#### 5. Converging technologies may *decode* (and extend) the book of life.

The mapping of the human genome was as much a triumph of advanced computation as of advanced biology. Now that we've created this autobiography of our species—a book 3 billion chemical letters long—what we read there may drive astounding quality-of-life improvements: dramatic reductions in the cycle time for development of new pharmaceuticals; personalized medications that interact with an individual's unique genetic make-up; and the potential to defeat scourges like heart disease or AIDS. Some researchers believe we're on the verge of the first significant increase in life spans—on the order of 20 years—since the introduction of antibiotics.



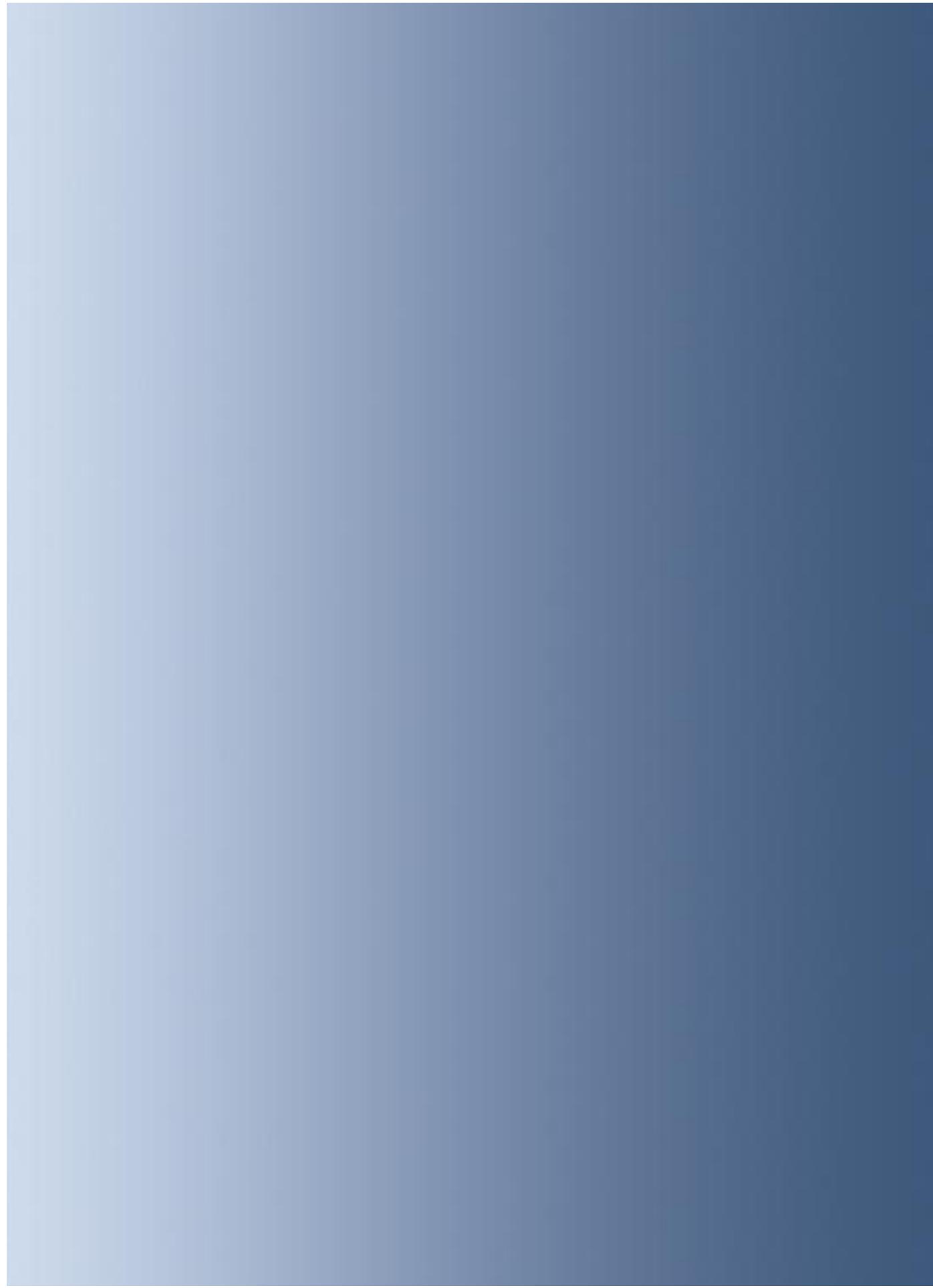
#### 6. You'll be able to manage *an army of "you."*

People used to worry that cyberspace would mean the loss of individual identity. If only. We collect too many identities—passwords, user names and customer profiles that multiply every time we surf a new website—and as a result, fragment the image we present any time we enter a physical store, classroom, website, bank, or government office. The solution? Technologies being developed today by IBM and others can make possible one "virtual identity"—single, encompassing and under our total control through all our daily interactions and transactions. If we've earned preferred-customer status, we'll get it. If we're a first-timer in need of some extra hand-holding, that, too, will be obvious.



#### 7. All computers (and computer users) will join "*the grid.*"

Just as electricity has become part of the global infrastructure on which modern life depends, the same thing is about to happen with computing. What's coming is an interconnected, shared computing infrastructure through which people will access the computational resources of...the world. In essence, millions of computers will be interwoven into a gigantic grid which people will use like a utility. This emerging global infrastructure will be, essentially, like one big computer.



**DEAR FELLOW INVESTOR,**

Last year at this time, Lou Gerstner said 2001 would be a “show me” year for IBM. We knew heading into 2001 that global economies were decelerating, and that IBM wouldn’t be immune from the slowdown. We also knew that a tight economy would provide an acid test of our competitive position, and that of our major competitors. No hiding. No getting swept along by a booming economy. *Show me.*

A handwritten signature in blue ink that reads "Sam Palmisano". The signature is fluid and cursive, with "Sam" on top and "Palmisano" below it, though the two words are somewhat interconnected.

In 2001, I believe IBM showed the world three things:

- The strategies we've been following for the past several years are correct.
- We've produced results through disciplined market-place execution.
- If we can gain share in a declining economy—which IBM did in 2001—then we can keep winning when a rebound occurs.

We delivered strong results in an environment that took a heavy toll on the high-tech sector. For the first time in nearly a decade, the information technology industry shrank. Yet, measured in constant currency, IBM's revenue was up 1 percent. That's a modest increase, to be sure—but it was the first time since the early 1990s that IBM outperformed the industry. Our gross profit margins improved, and we reduced our indirect expense by more than \$1 billion, reinvesting these savings in direct expense that can drive future revenues and share gains. Earnings declined from 2000 levels, yet we delivered very strong profitability—net income of \$7.7 billion for the year and more than \$14 billion of cash from operations.

Our continued strong cash flow gave us the flexibility to make investments in our future—\$5.8 billion in research and development, \$5.7 billion in capital expenditures, and \$1.1 billion for strategic acquisitions to strengthen our portfolio. The bulk of our acquisition investment was used to acquire the database assets of Informix Corp., which improved our share position and

growth potential in the battle for database software leadership. After making all those investments, we used our strong cash position further to increase shareholder value by raising our common stock dividend 8 percent and by repurchasing \$5.3 billion in IBM common shares. We ended the year with a cash balance of \$6.4 billion.

The strength of our performance relative to our mainstream competitors was reflected in a 42 percent increase in our stock price—this during a year when the S&P 500 index declined 13 percent and the NASDAQ was down 21 percent. While market valuations were being decimated across the high-tech sector, our market capitalization at year end was \$208 billion, up 41 percent.

Most encouraging of all, we consistently outperformed our major rivals and gained share in every strategic business segment. This is the overriding message of 2001. We won a lot more than we lost, and based on that record alone, IBM enters 2002 far stronger and better positioned than when last year began.

In an environment in which revenue growth was hard to come by, our two principal growth businesses—software and services—delivered the strongest results.

### **Software**

Our software growth was fueled by strong momentum across our middleware products—the integrating software layer of e-business infrastructure.

- In database and transaction management, we grew and took significant share from the market leaders in both categories.

- WebSphere—our suite of products that allow businesses to build, deploy and manage all manner of e-business operations, grew 50 percent and significantly outpaced its competition.
- Lotus remains the market leader in collaborative middleware, and Tivoli, which develops security and software management products, got stronger throughout 2001 after working through management and product transitions.

## Services

In the early 1990s, I was one of the starry-eyed optimists who were flying around closing the initial services contracts. Well, today, IBM is a services-led business in a services-led industry.

Our services story in 2001 mirrors what happened across our entire portfolio: some businesses up, some down, but on balance a solid performance—with underlying dynamics that point to continued strength this year.

The positives start with a dramatically improved services profit performance, contributing nearly half of all IBM pre-tax profit for the year. We increased revenues from services associated with e-business and strategic outsourcing; and revenues from Web hosting jumped 35 percent. Contract signings remained strong, and we closed the year with contracts for \$102 billion in future services revenue.

Even in difficult economic times, customers invest in services to manage technical complexities and financial risks—and especially in the world of e-business, to transform their businesses. However, while some areas of services are countercyclical, others tend to correlate very closely with economic conditions. That's especially true of high-value I/T consulting services—a business that had to work through a significant transition in 2001. As the market shifted and customers deferred spending on consulting engagements, we were initially slow to respond. Throughout 2001, we took steps to rebalance skills in our consulting and systems integration businesses. Based on that work, and a strong pipeline of signings headed into 2002, we expect a markedly improved performance across our services business this year.

## Enterprise Systems

Across enterprise systems—eServers and storage subsystems—we had a strong year and gained 3 points of share.

- Revenue from our zSeries mainframes increased—our first full year of revenue growth in the mainframe business since 1989—and we saw a double-digit increase in shipments of computing capacity.
- Our UNIX servers gained significant share. Literally five years to the day after we promised leadership in microprocessor technology on a UNIX platform, our technical team delivered Regatta, the world's fastest UNIX server. Customer demand has been strong.

**FINANCIAL HIGHLIGHTS** *International Business Machines Corporation and Subsidiary Companies*

(dollars in millions except per share amounts)	2001	2000
<b>FOR THE YEAR</b>		
Revenue	<b>\$ 85,866</b>	\$ 88,396
Net income	<b>\$ 7,723</b>	\$ 8,093
Per share of common stock:		
Assuming dilution	<b>\$ 4.35</b>	\$ 4.44
Basic	<b>\$ 4.45</b>	\$ 4.58
Net cash provided from operating activities	<b>\$ 14,265</b>	\$ 9,274
Investment in plant, rental machines and other property	<b>\$ 5,660</b>	\$ 5,616
Cash dividends paid on common stock	<b>\$ 956</b>	\$ 909
Per share of common stock	<b>\$ 0.55</b>	\$ 0.51
<b>AT YEAR END</b>		
Cash, cash equivalents and marketable securities	<b>\$ 6,393</b>	\$ 3,722
Total assets	<b>\$ 88,313</b>	\$ 88,349
Working capital	<b>\$ 7,342</b>	\$ 7,474
Total debt	<b>\$ 27,151</b>	\$ 28,576
Stockholders' equity	<b>\$ 23,614</b>	\$ 20,624
Common shares outstanding (in millions)	<b>1,723</b>	1,743
Market capitalization	<b>\$ 208,438</b>	\$ 148,146
Stock price per common share	<b>\$ 120.96</b>	\$ 85.00
Number of employees in IBM/wholly owned subsidiaries	<b>319,876</b>	316,303

- In high-end data storage, the product we call "Shark" continued its strong comeback. We grew Shark revenue 32 percent and gained share.

Our major challenges in 2001 came in the two businesses that were most affected by the industry downturn. Our Technology Group—which sells component technologies to high-tech companies and telecommunications firms—was hit hard by the industrywide slump. We also felt the effects of a declining market for personal computers. Throughout 2001 and continuing into this year, we've taken steps to improve our long-term competitiveness—rebalancing resources and cost structures in both units. We expect these businesses to show better results in 2002, regardless of economic conditions.

Looking ahead to 2002, we are, like everyone else, watching the economy and anticipating a slow recovery. However, we have not built our 2002 plans around an economic rebound that's not within our power to control. We're executing plans to help our customers thrive in this environment; to continue to gain share against our competitors; to drive turnarounds in our underperforming businesses; and to keep advancing productivity gains.

Beyond that, we're building on what we learned in 2001. Because in addition to being a "show me" year, it was also a "shake out" year. I'm not only talking about all the dot-coms that were flushed out of the system. More important than that, 2001 was a year when the reality of e-business—the serious, pragmatic reality IBM has been talking about for years—finally took hold. As that has happened, more and more people have come to see the

strategic vulnerabilities of many of our one-product, or "pure play," competitors.

This is important to understand, because the setbacks our competitors have experienced—and the share gains IBM has achieved—are not primarily driven by short-term economic conditions. As Lou Gerstner explains in his letter to you, the I/T industry is undergoing fundamental change. We see the new competitive and customer landscape taking shape around three domains.

#### **INFRASTRUCTURE**

The demands of real e-business computing have launched a full-blown movement toward open, secure, reliable, enterprise-scale systems built on integrated, industrial-strength technologies—in other words, the kinds of computing systems that have defined IBM's franchise. We gained share in every key segment of hardware and software infrastructure last year.

#### **BUSINESS INSIGHT**

Customer investment decisions increasingly are being made in favor of partners who can provide industry-specific insight (e.g., on financial services, or life sciences, or retail), in addition to technical expertise. One implication of this shift is obvious: Companies that deliver this kind of industry-based know-how will be able to influence customers' technology investment decisions.

#### **TECHNICAL INNOVATION**

We know—and more important, our customers know—that the computing infrastructure for e-business will be orders of magnitude more complex and sophisticated

than anything that preceded it. That's the kind of challenge that gets the juices flowing across IBM's technical communities. Not only are our scientists and engineers energized by what's ahead, but we've spent decades hiring, investing in and building our technical prowess to prepare for just such a moment.

One indication: In 2001, we became the first enterprise to earn more than 3,000 new U.S. patent awards—our ninth straight year of global patent leadership. Our total (3,411) exceeded the combined total of 12 of the largest I/T companies in the United States.

Every time this industry has moved through a major evolutionary shift, the value of technical leadership has come to the fore. The companies that set the technical agenda also earn the mind share and market share that come with leadership.

In this next phase, those advantages will accrue to the companies that do more than deliver standalone hardware and software. The leader will create the technologies for a new computing infrastructure for e-business. For instance:

- The global I/T infrastructure will have to be able to handle a coming flood of transactions, operations and complexity. And because there aren't enough technologists in the world to manage it all, the systems themselves must become much more spontaneous and "autonomic"—able to regulate, protect, configure and even heal themselves. In 2001, we delivered an autonomic blueprint for the industry and the academic community, and launched our own comprehensive autonomic initiative, beginning with our Project eLiza.

- At the client end of this spectrum, there will be explosive demand for custom-designed, highly energy-efficient chips. They'll be the brains inside everything from tiny medical devices to billions of Net-enabled consumer electronics products. (And, by the way, they'll also be found inside the world's largest servers and storage systems.) Fulfilling that demand is a proposition far different from stamping out millions of look-alike microprocessors for personal computers. Every kind of device will require a slightly different chip design. Our custom logic business is the largest in the world.

- Finally, at the 40,000-foot level, "grid computing" architectures will turn the Internet itself into a gigantic virtual computer that can tap and interconnect all the I/T resources—not just information, but also tools—across multiple enterprises. We're already building one such grid with the University of Pennsylvania, to bring the most advanced techniques in breast cancer screening and diagnosis to patients across the United States.

\* \* \*

I can't close my first letter to IBM's shareholders without a word about the person I succeed in this job, and the legacy that he leaves to all of his IBM colleagues and to anyone with a stake in the success of this company. So I'll just say this: When all's said and done, Lou Gerstner is the man who recreated IBM.

When Lou arrived, IBM's very viability was in question. Even those who thought we'd survive weren't sure it mattered. After all, many technology companies have

risen from their deathbeds—but they came back smaller, diminished and, frankly, irrelevant. On top of that, many people, even inside IBM, didn't believe an outsider could do the job.

About the only person who didn't have doubts (about almost anything, it seemed!) was Lou. From his first day, he said IBM was going to get back on top. Then he set to work making it so. Nine years later, it's hard to imagine an IBM without a world-class services capability, without a self-renewing capacity for technical innovation and without the strongest product line in its history. Even more astonishing, it's becoming hard to remember an IBM whose culture wasn't grounded in simple-but-vital principles like marketplace obsession, speed, shareholder return and the make-or-break importance of talented, energized people.

That's all part of the IBM Lou envisioned in 1993, and the IBM we've built under his leadership. Along the way, Lou did one more thing. He made all of us in IBM winners again. And because he did, I'm able to tell you, our investors, that your company and its people are strong.

I'm humbled not only to be here at one of the most exciting moments in our industry's history, but to be given the privilege of leading this truly meaningful company, with the finest workforce in business. We've got the right strategic vision—one that is being emulated by many. And if there is one thing this team has proved again and again—whether it was betting on services, creating e-business, embracing Linux, or in the ongoing

work to restructure our PC business—it is that we have the smarts, the agility and the guts to seize a new direction and to lead change.

Together, we're going to build on everything we've done to this point, and make IBM the most successful company in the information technology industry—and a leader among businesses in any industry. The work has already started. In fact, it never stops.



*Samuel J. Palmisano*  
President and Chief Executive Officer

### *Company Mission*

AT IBM, WE STRIVE TO LEAD IN THE CREATION,  
DEVELOPMENT AND MANUFACTURE OF THE INDUSTRY'S  
MOST ADVANCED INFORMATION TECHNOLOGIES, INCLUDING  
COMPUTER SYSTEMS, SOFTWARE, NETWORKING SYSTEMS,  
STORAGE DEVICES AND MICROELECTRONICS.

WE TRANSLATE THESE ADVANCED TECHNOLOGIES INTO  
VALUE FOR OUR CUSTOMERS THROUGH OUR PROFESSIONAL  
SOLUTIONS AND SERVICES BUSINESSES WORLDWIDE.

# Financial Report

INTERNATIONAL BUSINESS MACHINES CORPORATION  
*and Subsidiary Companies*

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## Report of Management

INTERNATIONAL BUSINESS MACHINES CORPORATION  
*and Subsidiary Companies*

Responsibility for the integrity and objectivity of the financial information presented in this Annual Report rests with IBM management. The accompanying financial statements have been prepared in conformity with generally accepted accounting principles, applying certain estimates and judgments as required.

IBM maintains an effective internal control structure. It consists, in part, of organizational arrangements with clearly defined lines of responsibility and delegation of authority, and comprehensive systems and control procedures. We believe this structure provides reasonable assurance that transactions are executed in accordance with management authorization, and that they are appropriately recorded in order to permit preparation of financial statements in conformity with generally accepted accounting principles and to adequately safeguard, verify and maintain accountability of assets. An important element of the control environment is an ongoing internal audit program.

To assure the effective administration of internal control, we carefully select and train our employees, develop and disseminate written policies and procedures, provide appropriate communication channels, and foster an environment conducive to the effective functioning of controls. We believe that it is essential for the company to conduct its business affairs in accordance with the highest ethical standards, as set forth in the IBM Business Conduct Guidelines. These

guidelines, translated into numerous languages, are distributed to employees throughout the world, and reemphasized through internal programs to assure that they are understood and followed.

PricewaterhouseCoopers LLP, independent accountants, is retained to examine IBM's financial statements. Its accompanying report is based on an examination conducted in accordance with generally accepted auditing standards, including a review of the internal control structure and tests of accounting procedures and records.

The Audit Committee of the Board of Directors is composed solely of outside directors, and is responsible for recommending to the Board the independent accounting firm to be retained for the coming year, subject to stockholder approval. The Audit Committee meets periodically and privately with the independent accountants, with the company's internal auditors, as well as with IBM management, to review accounting, auditing, internal control structure and financial reporting matters.



Samuel J. Palmisano  
President and  
Chief Executive Officer

John R. Joyce  
Senior Vice President and  
Chief Financial Officer

## Report of Independent Accountants

### TO THE STOCKHOLDERS AND BOARD OF DIRECTORS OF INTERNATIONAL BUSINESS MACHINES CORPORATION:

In our opinion, the accompanying consolidated financial statements, appearing on pages 70 through 105, present fairly, in all material respects, the financial position of International Business Machines Corporation and subsidiary companies at December 31, 2001 and 2000, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally

accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.



PricewaterhouseCoopers LLP  
New York, New York  
January 17, 2002

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION  
and Subsidiary Companies

## Road Map

The financial section of the IBM 2001 Annual Report consisting of this Management Discussion, the Consolidated Financial Statements that follow and the related notes thereto comprises 52 pages of information. The length and detail required by the various applicable reporting and disclosure rules can leave a reader somewhat overwhelmed. Therefore, this Road Map is designed to provide you with some perspective regarding the information contained in the financial section and a few helpful hints for reading the next 51 pages.

### IBM'S BUSINESS MODEL

The company's business model is relatively straightforward. IBM sells services, hardware and software. These offerings are bolstered by IBM's research and development capabilities. If a customer requires financing, IBM can provide that too. The fundamental strength of this business model is IBM's ability to assemble the optimal mix of these offerings to design tailored solutions for customers and to continue to win in the marketplace.

### FINANCIAL REPORTING

IBM follows generally accepted accounting principles. It is important for investors to understand the quality of a company's earnings, and as you read this financial section, you will learn about both recurring and nonrecurring events and trends that result in items that contribute to or reduce earnings. Some of these items and trends occur in an unpredictable fashion. Among these, the following are examples of items disclosed in this financial section:

	Page
Write-downs of certain equity investments	62
Higher bad debt expense	61 and 91
Lower income from transfer of intellectual property	62 and 91
Lower goodwill amortization	61
Lower interest income	62 and 91
Higher workforce accruals	61 and 91
Increase in income from retirement-related benefits	62 and 96
Lower gains from certain real estate activity	62 and 91
Higher foreign currency transaction gains	62 and 91

It is, however, just as or more important to maintain a longer-term perspective and to consider net income in the context of revenues and cash flows. A fundamentally sound and strong company should have strength in all three of these measures. Since 1994, IBM's business model has produced \$633 billion of revenue, \$85 billion of cash flows from operations, and \$49 billion of net income.

IBM does not use so-called "pro forma" earnings for its quarterly earnings press releases or analysts conference calls. One of the reasons that the company does not use pro forma earnings is that many items adding to or reducing earnings are part of the company's operating business model. An example of such items is transfers of intellectual property. Although individual transactions may be large or small, the company realizes income from such transactions every quarter. See pages 62, 76 and 91 for additional information.

### HELPFUL HINTS

#### *Organization of Information*

- This Management Discussion section is designed to provide the reader of the financial statements with a narrative on the company's financial results. It discusses the results of operations for each segment of the business and is followed by a description of the company's financial position generally divided between the Global Financing business and the rest. Certain employee data is located at the end of this section. It is useful to read the Management Discussion in conjunction with note v, "Segment Information," on pages 100 through 105.
- Pages 70 through 74 include the Consolidated Financial Statements. These statements include an overview of the company's income and cash flow performance and its financial position.

- The notes follow the financial statements. Among other things, the notes contain the company's accounting policies (pages 75 through 79), detailed information on balances within the financial statements, certain contingencies and commitments (page 89), and the results of each IBM segment (pages 100 through 105).

#### *Retirement Benefits Including Pensions*

Pages 62 and 63 include a discussion of the impact that retirement benefits have on the company's Consolidated Financial Statements. On pages 76 and 77, you will find the required accounting policies for these benefits. The detailed information about each plan including financial analysis of the larger plans is provided on pages 96 through 100.

#### *Capital Structure*

The use of debt by the company's Global Financing business and the importance of cash flows from operations to the rest of the company are discussed on page 66. Page 67 continues the discussion with an overview of the company's total interest expense and its relation to the Global Financing unit's financial results. Pages 84 and 85 include detailed information regarding the company's debt.

## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION  
*and Subsidiary Companies*

### *Financing Obligations*

All of the company's financing obligations are disclosed within this financial section.

### *Derivatives*

The company does not use derivatives for speculative purposes. Instead, derivatives are used to mitigate certain currency and interest rate risks. The company's accounting policy for derivatives is located on pages 77 and 78. A discussion of the company's implementation of the new derivatives accounting rules is located on page 80. Details regarding the company's risk management programs and the derivatives used in these programs are located on pages 85 through 87.

We hope that this information facilitates your review of this document as you continue to evaluate IBM.

### **Financial Overview of 2001**

IBM achieved strong profitability in spite of a volatile and uncertain global business environment in 2001. In addition, the company gained market share in the key business segments of services, software, storage and servers. Notably, the Global Services segment finished the year with a record backlog of services contracts, despite a tough business climate. The zSeries mainframe servers, led by the z900, recorded its first full year of growth in more than a decade, and the company's new "Regatta" UNIX servers, which began shipping in December, were sold out in the fourth quarter. The company's personal computer and original equipment manufacturer (OEM) businesses slowed dramatically, principally due to pricing pressures and an ongoing economic downturn affecting the worldwide semiconductor and OEM markets.

The company's financial results for 2001 declined in comparison to 2000 in a number of key areas, but were strong relative to its competitors in the technology sector. The company's strong performance in services, software, zSeries servers and high-end storage helped its gross profit margin to move higher. Some of IBM's businesses were impacted by industry weakness; the microelectronics unit grew at a slower pace. Declines in personal computers and hard disk drives (HDD) contributed significantly to a decline in IBM revenue, however, since the personal computer and HDD markets have lower margins than other markets where IBM competes, the company's net income was affected to a lesser extent.

During the year, the company continued to make progress in its ongoing drive to reduce cost and expense. These savings helped to fund increased investment in key areas in which the company can leverage its leadership, such as research and development and sales initiatives relative to the company's high priority segments within the services, software, servers and storage businesses.

The company's cash flow continued to be very strong in 2001. IBM's strong cash flow, even in a difficult economic environment, gave the company the flexibility to make necessary and appropriate investments for the future of the business and for share repurchases.

Cash and cash equivalents and Marketable securities on the balance sheet stand at \$6.4 billion, \$2.7 billion above last year's level. Total debt decreased \$1.4 billion. Both inventories and accounts receivable were lower versus the prior year. The company's balance sheet remains strong.

### **Focus Items in 2002**

Business conditions remain challenging as the company enters the new year. The company will continue to benefit from its business model with a mix of annuity-like businesses and transaction-based businesses as well as its healthy balance sheet. There are three areas in which the company is placing particular emphasis in 2002:

- Continue to grow market share in key market segments, including services offerings, software, servers, and storage subsystems.
- Improve performance in the personal computer, HDD and microelectronics businesses.
- Continue to execute on the company's productivity initiatives.

### **Forward-Looking and Cautionary Statements**

Certain statements contained in this Annual Report may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements involve a number of risks, uncertainties and other factors that could cause actual results to be materially different, as discussed more fully elsewhere in this Annual Report and in the company's filings with the Securities and Exchange Commission, including the company's 2001 Form 10-K to be filed on or about March 11, 2002.

## Management Discussion

**INTERNATIONAL BUSINESS MACHINES CORPORATION**  
*and Subsidiary Companies*

### Results of Operations

(dollars in millions except per share amounts)			
FOR THE YEAR ENDED DECEMBER 31:	2001	2000*	1999*
Revenue	\$ 85,866	\$ 88,396	\$ 87,548
Cost	54,084	56,342	55,994
Gross profit	31,782	32,054	31,554
Gross profit margin	37.0%	36.3%	36.0%
Total expense and other income	20,829	20,520	19,797
Income before income taxes	10,953	11,534	11,757
Net income	\$ 7,723	\$ 8,093	\$ 7,712
Earnings per share of common stock:			
Assuming dilution	\$ 4.35	\$ 4.44	\$ 4.12
Basic	\$ 4.45	\$ 4.58	\$ 4.25

\* Reclassified to conform with 2001 presentation.

The average number of common shares outstanding assuming dilution was lower by 40.9 million shares in 2001 versus 2000 and 59.0 million shares in 2000 versus 1999, primarily as a result of the company's common share repurchase program. The average number of common shares outstanding assuming dilution was 1,771.2 million, 1,812.1 million and 1,871.1 million, respectively, at December 31, 2001, 2000 and 1999.

Revenue in 2001 totaled \$85.9 billion, a decline of 2.9 percent (up 1 percent at constant currency) compared with revenue of \$88.4 billion in the year-earlier period. Global Services and Software revenue grew year over year, but was more than offset by lower Hardware, Global Financing and Enterprise Investments/Other revenue.

The Global Services segment became the largest segment in terms of revenue in 2001. The following table identifies the company's percentage of revenue:

	2001	2000	1999
Global Services	40.7%	37.5%	36.7%
Hardware	38.9	42.7	43.3
Software	15.1	14.3	14.5
Global Financing	4.0	3.9	3.6
Enterprise Investments/Other	1.3	1.6	1.9
Total	100.0%	100.0%	100.0%

The overall gross profit margin of 37.0 percent increased 0.7 points from 2000, following a 0.3 point increase in 2000 versus 1999. The increase in 2001 gross profit margin was primarily driven by improvement in Global Services, Software and Global Financing margins, partially offset by a lower Hardware gross profit margin. The increase in the 2000 gross profit margin was primarily driven by improvement

in the Hardware margin, partially offset by a lower Global Services margin. The reference to constant currency, the best measure of comparative business growth, is made so that a segment can be viewed without the impacts of changing foreign currency exchange rates. The U.S. dollar generally strengthened against other currencies, so growth at constant currency exchange rates is higher than growth at actual currency exchange rates.

In the Americas, full-year 2001 revenue was \$37.4 billion, down 3.4 percent (2 percent at constant currency) from the 2000 period. Revenue from Europe/Middle East/Africa was \$24.0 billion, a decrease of 0.9 percent (up 3 percent at constant currency). Asia Pacific revenue declined 2.5 percent (up 8 percent at constant currency) to \$17.2 billion. OEM revenue decreased 7.2 percent (6 percent at constant currency) to \$7.2 billion.

Information about the company's operating segments can be found in note v, "Segment Information," on pages 100 through 105. Note v provides additional information, including a description of the products and services of each segment, as well as financial data pertaining to each segment.

The following discussion is based on the Consolidated Financial Statements on pages 70 through 74, which reflect, in all material respects, the company's segment results on an external basis.

#### GLOBAL SERVICES

(dollars in millions)	2001	2000	1999
Revenue	\$ 34,956	\$ 33,152	\$ 32,172
Cost	25,355	24,309	23,304
Gross profit	\$ 9,601	\$ 8,843	\$ 8,868
Gross profit margin	27.5%	26.7%	27.6%

Global Services revenue increased 5.4 percent (10 percent at constant currency) in 2001 over 2000 and 3.0 percent (6 percent at constant currency) in 2000 over 1999. Global Services revenue, excluding maintenance, increased 6.8 percent (11 percent at constant currency) in 2001 versus 2000 and 3.7 percent (7 percent at constant currency) in 2000 versus 1999. Maintenance revenue declined 2.2 percent (up 2 percent at constant currency) in 2001 versus 2000 and was essentially flat (up 4 percent at constant currency) in 2000 when compared to 1999.

Global Services experienced a slowdown in contract signings in the middle of the year, particularly in short-term engagements, which affected the growth of Global Services revenue in 2001. Strategic Outsourcing Services and Integrated Technology Services contributed significantly to the revenue growth in 2001 and 2000. Strategic Outsourcing Services continued to demonstrate solid revenue growth,

## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION  
*and Subsidiary Companies*

particularly in Asia Pacific, and in its Web hosting offerings. Web hosting is an e-sourcing service that became a \$1 billion business in 2001. Integrated Technology Services grew its revenue in support of server consolidations, business continuity services, and its OEM alliances. Global Services revenue growth in support of non-IBM hardware deployment continues to moderate due to the slowdown in personal computer, telecommunications and networking equipment providers. Business Innovation Services (BIS) revenue grew but it was affected the most by the current economic environment. This business includes consulting and systems integration. Despite a slowdown in the BIS market, especially in the U.S., customers continued to deploy e-business applications such as customer relationship management and supply chain management and to perform e-business integration of their business processes and multiple applications.

Revenue comparisons in 2000 were adversely affected by two events: the sale of the Global Network to AT&T in 1999 and the decline in Y2K services activity year over year. After adjusting for those two factors, Global Services revenue (excluding maintenance) increased 9 percent in 2000 versus 1999. (See "Divestitures," on page 82 for additional information about the Global Network sale.) In 2000, Integrated Technology Services revenue was affected by the loss of revenue due to the sale of the Global Network and BIS was affected primarily by the decline in Y2K activity. BIS recovered in the second half of 2000 as customers shifted from mature offerings such as custom systems integration and Y2K remediation to the company's e-business offerings. BIS revenue, exclusive of Y2K and custom systems integration, experienced strong growth in 2000.

In 2001, the company signed contracts totaling \$51 billion, including 39 contracts in excess of \$100 million, six of which exceeded \$1 billion. These transactions contributed to a services backlog at December 31, 2001, of \$102 billion compared with \$85 billion at December 31, 2000. The company experienced an acceleration in contract signings in the fourth quarter of 2001 and a strong pipeline of contracts at December 31, 2001, that should have a positive effect on Global Services revenue growth in 2002. Also, in 2002, the annuity-like portions of Global Services, particularly outsourcing and maintenance, should mitigate the downturn in other businesses until the economy recovers. To extend the benefits of outsourcing, the company is in the forefront of e-sourcing—the delivery of infrastructure, applications and business processes over the Internet as a service. The company intends to provide the infrastructure technologies that all of these service providers will require, as well as to provide many of the services themselves.

Global Services gross profit dollars increased 8.6 percent in 2001 compared to 2000 and were essentially flat in 2000 versus 1999. The gross profit margin increased 0.8 points in 2001 versus 2000 and declined 0.9 points in 2000 versus 1999. The increases in both gross profit dollars and gross profit margin in 2001 were a result of reduced labor and parts costs across all geographies for maintenance offerings and cost reductions across all services offerings. The decline in gross profit margin in 2000 was primarily driven by lower utilization rates in BIS and Integrated Technology Services due to rapid hiring and retraining associated with rebalancing skills toward e-business services. Also contributing to the decline was a revenue shift to OEM alliances, which have a lower gross profit margin. These declines were partially offset by an improvement in the maintenance gross profit margin.

### HARDWARE

(dollars in millions)	2001	2000	1999
Revenue	\$ 33,392	\$ 37,777	\$ 37,888
Cost	24,137	27,038	27,591
Gross profit	\$ 9,255	\$ 10,739	\$ 10,297
Gross profit margin	27.7%	28.4%	27.2%

Hardware revenue declined 11.6 percent (8 percent at constant currency) in 2001 versus 2000 and was essentially flat (up 2 percent at constant currency) in 2000 compared with 1999.

Effective in the first quarter 2001, the company made changes in the organization of its Hardware segment. These changes include the transfer of the xSeries (Intel-based) servers from the Personal Systems segment to the Enterprise Systems segment, and the transfer of the Printing Systems Division from the Technology segment to the newly formed Personal and Printing Systems segment, consisting of the realigned Personal Computer Division, Retail Store Solutions Division and the Printing Systems Division. All amounts disclosed herein for all years presented have been reclassified to conform with these changes.

In 2001, Enterprise Systems revenue declined 3.2 percent from 2000, following an increase of 2.6 percent in 2000 versus 1999. zSeries revenue grew in 2001, the first full year of revenue growth since 1989, a clear recognition of the unique advantages mainframes offer to the company's customers. Total deliveries of zSeries computing power increased more than 30 percent as measured in MIPS (millions of instructions per second) versus 2000. In addition, revenue growth in storage products was driven by high-end products ("Shark"). pSeries revenue decreased in 2001 as the market for UNIX-based servers declined substantially, but the new high-end

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"Regatta" servers began shipping in December 2001, and were sold out in the fourth quarter. Entry and mid-range pSeries revenue declined in 2001, but the company will strengthen these products by bringing Regatta's Power-4 technology to the products later in 2002. Revenue from iSeries declined in 2001; however, it benefited from server consolidations and Linux late in the year. Although the pSeries and iSeries servers had declining revenue, these products gained market share in 2001 against their competitors. xSeries revenue also declined, reflecting the extremely competitive environment in the Intel-based server market.

The company is investing in an initiative (project eLiza) that will deliver self-managing systems technology across the company's entire e-server product portfolio within the next five years. Project eLiza involves developing systems that can configure, optimize, fix and protect themselves. This project will give businesses the ability to manage systems and technology that are significantly more complex than those in existence today.

In 2000, revenue increased for both xSeries servers and pSeries UNIX servers, with particular strength in the mid-range and high-end pSeries Web servers. In addition, revenue from the company's storage products, which include "Shark," increased in 2000. These increases were partially offset by revenue declines for the mid-range iSeries servers and the zSeries servers in 2000 as compared to 1999.

Personal and Printing Systems revenue declined 20.6 percent in 2001 from 2000, following a decrease of 3.2 percent in 2000 versus 1999 with personal computers, retail store solutions and printing systems all showing declines. The personal computer revenue decline reflects demand weakness and price erosion across all product lines. The company continues to focus on reducing cost and expense in the personal computer business as well as achieving maximum utilization through the company's direct fulfillment channel via the Internet. In the fourth quarter of 2001, 44 percent of the personal computer division revenue was through the direct fulfillment channel via the Internet versus 34 percent in 2000. In February 2002, the company completed the sale of its U.S. and European desktop personal computer manufacturing to Sanmina-SCI. Pursuant to the transaction agreement, the company will outsource its NetVista desktop manufacturing operations to Sanmina-SCI. This transaction will allow the company to eventually further lower its cost, while it continues to develop and sell a full line of personal computer products and services as part of its end-to-end solutions to help customers build their computer infrastructure.

The change in 2000 revenue was driven by decreased revenue in desktop personal computer and retail store solutions revenue, partially offset by increased mobile products revenue. The decline in desktop revenue was driven by consumer products, as the company decided in 1999 to exit retail channels in the U.S. and Europe.

Technology revenue in 2001 decreased 6.4 percent when compared with 2000, following an increase of 6.1 percent in 2000 versus 1999. The decline in the Technology segment revenue was driven by the semiconductor industry's severe downturn which began affecting the company in the second quarter of 2001. In addition, HDD revenue declined as the company's ability to sell HDDs is highly dependent on the personal computer industry. The uncertainty in this industry is affecting both the company's HDD and personal computer results. The company continues to evaluate various alternatives to mitigate the impact of HDDs on the results of the company. These alternatives include, among other actions, rebalancing sources of supply and re-examining manufacturing efficiencies. The increase in 2000 revenue was driven by strong growth in custom logic, networking and pervasive computing products, partially offset by lower HDD revenue.

The company took actions in 1999 in the microelectronics and HDD areas that were aimed at strengthening the Technology segment over the long-term. Those actions were intended to shift the focus of the Technology segment to higher margin businesses and more efficient operations.

Hardware gross profit dollars decreased 13.8 percent in 2001 from 2000, following a 4.3 percent increase in 2000 versus 1999. The Hardware gross profit margin declined 0.7 points in 2001 following an increase of 1.2 points in 2000 versus 1999. The decline in gross profit dollars and gross profit margin was primarily due to lower volumes in the company's Technology segment and pricing pressures in personal computers and HDDs.

The increase in 2000 gross profit margin was primarily driven by improved margins in microelectronics and personal computers.

### SOFTWARE

(dollars in millions)	2001	2000	1999
Revenue	\$ 12,939	\$ 12,598	\$ 12,662
Cost	2,265	2,283	2,240
Gross profit	\$ 10,674	\$ 10,315	\$ 10,422
Gross profit margin	82.5%	81.9%	82.3%

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Software revenue increased 2.7 percent (7 percent at constant currency) in 2001, following a decline of 0.5 percent (up 4 percent at constant currency) in 2000 from 1999. The company's middleware products grew revenue 5 percent (9 percent at constant currency) in 2001 and 3 percent (8 percent at constant currency) in 2000. Middleware comprises data management, transaction processing, Tivoli systems management and Lotus Notes messaging and collaboration for both IBM and non-IBM platforms. Middleware revenue increases in 2001 and 2000 were driven by strong growth in WebSphere (Web application server software), DB2 (data management) and MQSeries (business integration software) offerings. Revenue from the acquisition of the Informix database business in July 2001 contributed about 62 percent of the middleware software growth in 2001. These increases were partially offset by revenue declines in Tivoli and Lotus products. Although revenue was down in both 2001 and 2000 in Tivoli and Lotus businesses, both units grew revenue sequentially from quarter to quarter within 2001. The company continues to focus on helping customers use IBM's software to transform businesses to e-businesses across all platforms. To achieve this, the company uses its services offerings, 74 strategic alliances, 56,000 business partners and a 10,000-person dedicated software sales force. These provide the company with strong momentum in its Software business as it enters 2002.

Operating systems software revenue declined 3 percent (up 1 percent at constant currency) in 2001 and 9 percent (5 percent at constant currency) in 2000 compared with the prior year. The decline in 2001 resulted from lower revenue associated with iSeries and pSeries server products. The decline in 2000 was driven by lower revenue associated with e-server products and legacy (S/390, AS/400 and RS/6000) products.

Software gross profit dollars increased 3.5 percent in 2001 from 2000, following a decrease of 1.0 percent in 2000 from 1999. The Software gross profit margin improved 0.6 points in 2001 following a decline of 0.4 points in 2000 compared to 1999. The increase in gross profit dollars and gross profit margin was primarily due to higher Software revenue, lower service costs and purchased vendor software, partially offset by higher amortization costs and vendor royalty payments in 2001 versus 2000. The decline in gross profit dollars and gross profit margin in 2000 was primarily due to lower revenue, higher costs for purchased vendor software and higher vendor royalty payments, partially offset by lower amortization and services costs.

### GLOBAL FINANCING

(dollars in millions)	2001	2000*	1999*
Revenue	\$ 3,426	\$ 3,465	\$ 3,137
Cost	1,693	1,965	1,821
Gross profit	<b>\$ 1,733</b>	\$ 1,500	\$ 1,316
Gross profit margin	50.6%	43.3%	41.9%

\* Reclassified to conform with 2001 presentation.

Global Financing revenue declined 1.1 percent (up 1 percent at constant currency) in 2001 from 2000, following an increase of 10.4 percent (13 percent at constant currency) in 2000 versus 1999. The decline in 2001 was primarily a result of a lower earnings-generating asset base and lower used equipment sales. The revenue increase in 2000 over 1999 was due to higher used equipment sales and commercial financing activity.

Global Financing gross profit dollars increased 15.5 percent in 2001 versus 2000, following an increase of 14.0 percent in 2000 versus 1999. The Global Financing gross profit margin improved 7.3 points in 2001 following an increase of 1.4 points in 2000 as compared to 1999. The increases in 2001 gross profit dollars and gross profit margin were primarily driven by lower borrowing costs related to the current interest rate environment and increased margin in used equipment sales. The increase in 2000 was primarily driven by higher sales of used equipment and an improving gross profit margin on these sales. See Management Discussion on page 62 for additional information regarding Cost of Global Financing reclassification effective in 2001. All amounts displayed herein for all years presented have been reclassified to conform with these changes. (Also see the "Debt and Equity" section of Management Discussion on pages 66 and 67 for additional discussion of Global Financing debt.)

### ENTERPRISE INVESTMENTS/OTHER

(dollars in millions)	2001	2000	1999
Revenue	\$ 1,153	\$ 1,404	\$ 1,689
Cost	634	747	1,038
Gross profit	<b>\$ 519</b>	\$ 657	\$ 651
Gross profit margin	45.0%	46.8%	38.5%

As expected, Enterprise Investments/Other revenue decreased 17.9 percent (14 percent at constant currency) from 2000, following a decrease of 16.9 percent (13 percent at constant currency) in 2000 from 1999. The decreases in revenue were a result of the company's strategy to shift development and distribution of custom-made products to third-party

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companies. In addition, computer-aided three-dimensional interactive application (CATIA) related products revenue decreased in 2001 versus 2000, and their revenue grew slightly in 2000 versus 1999.

The gross profit dollars from Enterprise Investments/Other declined 21.0 percent in 2001 versus 2000 and increased 0.9 percent in 2000 versus 1999. The Enterprise Investments/Other gross profit margin declined 1.8 points in 2001 following an increase of 8.3 points in 2000 versus 1999. The decline in 2001 gross profit dollars and margin was primarily a result of lower revenue in 2001 as compared to 2000. The increase in 2000 gross profit dollars and margin was primarily due to a shift in the mix of revenue to products that have a higher gross profit margin than the product lines the company discontinued in 1999.

### EXPENSE AND OTHER INCOME

Amounts within the Expense and Other Income section of the Consolidated Statement of Earnings have been reclassified to provide additional details. See "Reclassifications," on page 79.

(dollars in millions)	2001	2000*	1999*
Selling, general and administrative	\$ 17,197	\$ 17,535	\$ 16,294
Percentage of revenue	20.0%	19.8%	18.6%
Research, development and engineering	5,290	5,374	5,505
Percentage of revenue	6.2%	6.1%	6.3%
Intellectual property and custom development income	(1,535)	(1,728)	(1,506)
Other (income) and expense	(361)	(1,008)	(848)
Interest expense	238	347	352
Total expense and other income	\$ 20,829	\$ 20,520	\$ 19,797

\* Reclassified to conform with 2001 presentation.

Selling, general and administrative (SG&A) expense declined 1.9 percent in 2001 versus 2000, following an increase of 7.6 percent in 2000 compared with 1999.

See "Expense and Other Income," on page 76 for a description of the expenses.

The company continued to reduce its SG&A expense by using technology to improve its efficiency. The increased use of e-procurement, ibm.com, e-Care for customer support and other actions related to the company's ongoing e-business transformation resulted in substantial productivity improvements in 2001. In addition, the company continued to reduce discretionary spending such as travel and consulting in 2001 and benefited from lower goodwill amortization

expense during the year as goodwill relating to several older acquisitions became fully amortized. The decreases were partially offset by higher charges taken for workforce rebalancing actions and bad debt expense in 2001 versus 2000. Future levels of SG&A expense arising from bad debt expense will depend upon the prevailing economic conditions, estimated value of collateral, and the overall health of and any concentrations in the company's receivables portfolio.

The increase in 2000 SG&A expense was primarily driven by the 1999 net pre-tax benefit of \$2,107 million associated with the sale of the Global Network, actions taken by the company in 1999 to improve its competitiveness and to strengthen the company's overall business portfolio, and implementation of a change in personal computers' depreciation lives. (See "Divestitures," on page 82, and note q, "1999 Actions," on pages 91 through 93 for further information.) Excluding the 1999 actions and sale of the Global Network, 2000 SG&A expense would have declined 4.7 percent versus 1999. In addition, the percentage of revenue would have been 21.0 percent for 1999.

As described in "New Standards to be Implemented," on pages 80 and 81, the company adopted new accounting rules that eliminate the amortization of goodwill on January 1, 2002. The new rules also provide for no goodwill amortization on any acquisitions that occurred after June 30, 2001. The amount of goodwill amortization, net of tax, that was recorded in 2001, 2000 and 1999 was \$262 million, \$436 million, and \$420 million, respectively. The amount of goodwill amortization, net of tax, that would have been recorded in 2002 if the new rules were not adopted on January 1, 2002, (excluding the Informix acquisition that occurred after June 30, 2001, and any other post-2001 acquisition) would have been \$244 million.

Research, development and engineering (RD&E) expense declined 1.6 percent in 2001 from 2000, following a decrease of 2.4 percent in 2000 from 1999. The decline in 2001 was a result of actions taken to reduce overhead. In addition, the company reprioritized its spending to increase its investment in high-growth opportunities such as e-business, initiatives to support Linux and middleware software products. In addition, as discussed on page 59, the company is also investing in project eLiza that will deliver self managing systems technology across its entire e-server product portfolio, within the next five years. The decline in 2000 is primarily due to a \$111 million pre-tax charge taken in 1999 for acquired in-process research and development (IPR&D) associated with the acquisition of Sequent Computer Systems, Inc., Mylex Corporation and DASCOM, Inc. See note c, "Acquisitions/Divestitures," on page 82 for further detail about the IPR&D charge.

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As a result of its ongoing research and development efforts, the company was awarded the most U.S. patents in 2001 for the ninth consecutive year, with a record 3,411 issued by the U.S. Patent and Trademark Office. This represents nearly a 20 percent increase over its previous record of 2,886 set in 2000, and the company becomes the first patent holder in history to be granted more than 3,000 U.S. patents in a single year.

More than one-third of the technologies the company patented last year are already being applied to its product and service offerings. For example, magnetic recording media with antiferromagnetically coupled (AFC) ferromagnetic films as the recording layer is the company's "pixie dust" patent. Pixie dust is a new type of magnetic coating that is eventually expected to quadruple the data density of current hard disk drive products. In 2001, the company shipped more than 5.3 million disk drives manufactured with AFC.

Intellectual property and custom development income include both sales and other transfers as well as license/royalty bearing fee transfers. The sales and other transfers in 2001, which included \$280 million of pre-tax income from the transfer of the company's optical transceiver intellectual property, declined from 2000 due to lower activity. These amounts can vary from year to year. The amount of income from intellectual property licensing/royalty-based fee transactions has declined in recent years and may continue this trend in 2002. See "Intellectual Property and Custom Development Income," on page 91 for additional information.

Other income and expense declined 64.2 percent in 2001 versus 2000 and increased 18.9 percent in 2000 versus 1999. The decline in 2001 was primarily due to write-downs (\$405 million) of certain equity investments for other-than-temporary market declines. In addition, the company realized lower gains from sales of securities and other investments, lower interest income (other than from the company's Global Financing business transactions) and lower net realized gains from certain real estate activities in 2001 versus 2000. The increase in 2000 versus 1999 was primarily a result of higher net realized gains from certain real estate activity and an increase in foreign currency transaction gains, partially offset by lower interest income and lower gains from sales of securities and other investments.

Effective January 1, 2001, interest expense is presented in Cost of Global Financing in the Consolidated Statement of Earnings if the related external borrowings to support the Global Financing business were issued by either the company or its Global Financing unit (see pages 66 and 67 for a discussion of Global Financing debt and interest expense). In prior periods, the caption only included interest related to direct external borrowings of Global Financing. Prior period results have been reclassified to conform with the current period presentation.

Interest expense, excluding amounts recorded in Cost of Global Financing, declined 31.4 percent in 2001 from 2000 and 1.4 percent in 2000 versus 1999. The declines were primarily due to lower average interest rates and a decline in average debt outstanding in the periods.

The following table provides the total pre-tax (income)/cost for retirement-related plans for 2001, 2000 and 1999. (Income)/cost amounts are included as a reduction from/addition to, respectively, the company's cost and expense amounts on the Consolidated Statement of Earnings.

### Retirement-Related Benefits

(dollars in millions)	2001	2000	1999
Total retirement-related plans	\$ (437)	\$ (327)	\$ 83
Comprise:			
Defined benefit and contribution pension plans	(841)	(728)	(288)
Nonpension post-retirement benefits	404	401	371

The additional income contributed by the defined benefit plans of the company in 2001 was principally due to the long-term investment returns generated by the pension trust assets. As discussed in "Retirement-Related Benefits," on pages 76 and 77, there will almost always be a difference in any given year between the company's expected return on plan assets and the actual return. These differences are spread over time in accordance with Statement of Financial Accounting Standards (SFAS) No. 87, "Employers' Accounting for Pensions." Although actual returns in 2001 were less than expected returns in the U.S. pension plan, the cumulative excess of actual returns over expected returns was \$5.3 billion since 1986 (the year in which the company was required to adopt SFAS No. 87). Each year's difference is recognized over a number of years following the year that each difference arises. Therefore, the 2001 shortfall between actual and expected returns in the U.S. will be recognized in the net periodic pension calculation over the next five years along with the excess actual versus expected returns in recent years and any other differences arising in future years.

Although the income from defined benefit pension plans represents a contribution to the company's reported Income before income taxes, these amounts are partially offset by the costs of the company's nonpension postretirement medical benefits. Moreover, these amounts have positive implications for the company's employees, retirees and shareholders. The returns that the fund has experienced over time resulted in these benefits. As a result, despite the recent downturn in the equity and financial markets, the trust funds have continued

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to provide the capacity to meet their obligations to current and future retirees.

The largest retirement-related benefit plan is the U.S. Personal Pension Plan (PPP). See page 96 for the impact that the PPP had on the company's Income before income taxes. The following is a discussion of the impacts of recent changes relating to the PPP on the company's financial results. Refer to page 98 for a table containing the actuarial assumption changes.

The following is the historical actual average rates of return on plan assets in the PPP:

	2001	2000	1999	1998	1997
Actual annualized rates of return:					
15-year average	10.3%	11.9%	13.5%	12.8%	13.0%
10-year average	10.0%	12.5%	12.3%	12.7%	12.4%
Expected rate of return assumptions					
	10.0%	10.0%	9.5%	9.5%	9.5%

The company uses long-term historical actual return experience, the expected investment mix of the plans' assets, and future estimates of long-term investment returns to develop its expected rate of return assumption used in the net periodic pension calculation. This assumption is reviewed and set annually at the beginning of each year. Accordingly, the change for 2000 and the decision to leave the rate unchanged in 2001 was made at the beginning of each respective year. At the beginning of 2002, using the process described above, the company reduced its expected long-term return on the U.S. plan asset assumption from 10.0 percent to 9.5 percent. This change and the impact of 2002 changes in the expected long-term rate of return on plan assets for certain non-U.S. plans is expected to reduce 2002 net retirement plan income by approximately \$350 million. The change in expected long-term return on U.S. plan assets in 2000 resulted in an additional \$195 million of net retirement plan income for the year ended December 31, 2000.

The company annually sets its discount rate assumption for retirement-related benefits accounting to reflect the rates available on high-quality, fixed-income debt instruments. Using this process, the company changed its discount rate assumption for the PPP from 7.25 percent to 7.0 percent, effective December 31, 2001. This change is not expected to have a material effect on the company's 2002 results of operations. The change in the discount rate from 7.75 percent to 7.25 percent, effective December 31, 2000, did not have a significant impact on the company's results of operations for the year ended December 31, 2001. Effective January 1, 2001, the company increased pension benefits to certain recipients who retired before January 1, 1997. The increases

ranged from 2.5 percent to 25 percent, and are based on the year of retirement and the pension benefit currently being received. This improvement resulted in an additional cost to the company of approximately \$100 million in 2001.

The change in discount rate assumption for the 2000 U.S. plan year did not have a significant impact on the company's results of operations for the year ended December 31, 2000.

Future effects of pension plans, including the changes noted above, on the operating results of the company depend on economic conditions, employee demographics, mortality rates and investment performance.

See note v, "Segment Information," on pages 100 through 105 for additional information about the pre-tax income of each segment, as well as the methodologies employed by the company to allocate shared expenses to the segments.

### PROVISION FOR INCOME TAXES

The provision for income taxes resulted in an effective tax rate of 29.5 percent for 2001, compared with the 2000 effective tax rate of 29.8 percent and a 1999 effective tax rate of 34.4 percent. The 4.6 point decrease in the 2000 rate from the 1999 rate was primarily the result of the company's 1999 sale of its Global Network business and various other actions implemented during 1999. Had it not been for these 1999 actions, the company's 1999 effective tax rate would have been 30 percent (essentially flat from 1998 through 2001).

As reflected in the reconciliation of the company's effective tax rate in note o, "Taxes," on pages 90 and 91, the increased benefit on the company's tax rate of the foreign tax differential in 2000 was principally due to the U.S. tax benefit from the repatriation of profits previously subject to foreign taxes, partially offset by a less favorable mix of profits arising in markets with lower effective tax rates.

### Fourth Quarter

In the quarter ended December 31, 2001, the company had diluted earnings per common share of \$1.33, a 10.1 percent decrease compared with diluted earnings per common share of \$1.48 in the fourth quarter of 2000. Fourth-quarter 2001 net income was \$2.3 billion, a 12.7 percent decrease from \$2.7 billion in the year-earlier period. The company's fourth quarter 2001 revenue totaled \$22.8 billion, down 10.9 percent (8 percent at constant currency) compared with fourth quarter of 2000.

In the Americas, fourth-quarter revenue was \$9.8 billion, a decrease of 9.1 percent (8 percent at constant currency) from the 2000 period. Revenue from Europe/Middle East/Africa was \$6.9 billion, down 6.3 percent (6 percent at constant currency). Asia Pacific revenue declined 9.8 percent (1 percent at constant currency) to \$4.5 billion. OEM revenue

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decreased 34.4 percent (33 percent at constant currency) to \$1.6 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 \$15 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 pSeries 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 \$3.8 billion compared to the prior year's fourth quarter. Overall, the company's middleware software revenue grew 9 percent (10 percent at constant currency). The company's data management and WebSphere 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 \$927 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 \$340 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 HDDs.

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 e-procurement, ibm.com, e-learning and e-Care, 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.

### Financial Condition

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 \$5,844 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; \$1,177 million for machines on operating leases with customers; and \$5,293 million for the repurchase of the company's common shares. In addition, the company paid cash totaling approximately \$916 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

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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 \$8.0 billion five-year facility and a \$4.0 billion 364-day facility, replacing the company's \$10 billion credit facility which was due to expire in February 2002. Amounts unused and available under these facilities were \$11,383 million and \$9,103 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 \$6,860 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 \$213 million and \$136 million, respectively. For additional information, see 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, are 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 Service	Fitch, Inc.
Senior long-term debt	A+	A1	AA-
Commercial paper	A-1	Prime-1	F-1+

### CASH FLOWS

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	2000	1999
<b>Net cash provided from/ (used in):</b>			
Operating activities	\$ 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	<b>\$ 2,767</b>	<b>\$ (1,480)</b>	<b>\$ (332)</b>

### WORKING CAPITAL

(dollars in millions)

AT DECEMBER 31:	2001	2000
Current assets	\$ 42,461	\$ 43,880
Current liabilities	35,119	36,406
Working capital	\$ 7,342	\$ 7,474
Current ratio	<b>1.21:1</b>	<b>1.21:1</b>

Current assets decreased \$1,419 million due primarily to decreases in accounts receivable of \$3,708 million, Inventories of \$461 million and Deferred taxes of \$299 million, offset by net increases of \$2,671 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 \$1,287 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 \$293 million in Deferred income, offset by an increase of \$983 million in Short-term debt.

### INVESTMENTS

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 \$2,655 million from 2000, primarily the result of increases in Prepaid pension assets and Informix goodwill, offset by declines in Alliance investments and Deferred taxes. See note h, "Investments and Sundry Assets," on page 84 for additional information.

## Management Discussion

**INTERNATIONAL BUSINESS MACHINES CORPORATION**  
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The company continues to invest in its Global Services, Software, Global Financing and selected hardware businesses. The company continues its plans to invest approximately \$5 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 \$1.2 billion has been spent on these investments. The remaining amount is to be invested over the next three years.

The company has remaining authorization at December 31, 2001, to purchase \$4.6 billion of IBM common shares in the open market from time to time, based on market conditions.

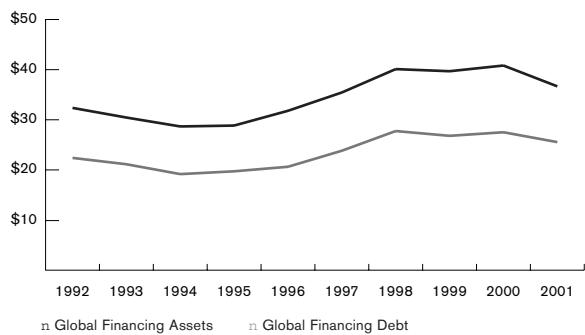
The company expects to fund all of these investments primarily with cash from ongoing operations.

### DEBT AND EQUITY

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 billions)



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

As a result, the \$5.3 billion of share repurchases, \$5.7 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 are continually monitored and strategies are 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 \$1,425 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 millions)

AT DECEMBER 31:	2001	2000
Assets*	\$ 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 receivables (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 stand-alone 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

## Management Discussion

**INTERNATIONAL BUSINESS MACHINES CORPORATION**  
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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
<b>2001</b>				
Cost of Global Financing	\$ 1,140	\$ —	\$ (176)	\$ 964
Interest expense	—	62	176	238
<b>2000*</b>				
Cost of Global Financing	\$ 1,319	\$ —	\$ (237)	\$ 1,082
Interest expense	—	110	237	347
<b>1999*</b>				
Cost of Global Financing	\$ 1,232	\$ —	\$ (132)	\$ 1,100
Interest expense	—	220	132	352

\* Reclassified to conform with 2001 presentation.

### *Contractual Obligations*

(dollars in millions)	Balance as of Dec. 31, 2001	Payments Due In			
		2002	2003-04	2005-06	After 2006
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.

### *Non-Global Financing*

(dollars in millions)

AT DECEMBER 31:	2001	2000
Debt*	\$ 1,606	\$ 1,062
Debt/Capitalization	7.5%	6.1%

\* Non-global financing debt is the company's total external debt less the Global Financing debt described in the 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.

### *Stockholders' Equity*

The company's total consolidated Stockholders' equity increased \$2,990 million to \$23,614 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. (See note m, "Stockholders' Equity Activity," on pages 88 and 89).

## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION  
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### CURRENCY RATE FLUCTUATIONS

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 are 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." See "Standards Implemented," on pages 79 and 80 for additional information regarding SFAS No. 133.

### MARKET RISK

In the normal course 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 company's 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 Hedging Transactions," on pages 85 through 87.

To 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 are constrained by the fact that certain items are 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

## Management Discussion

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instrument portfolio for these theoretical changes in the level of interest rates are 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 Currency 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 \$1,352 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 RISKS**

Financing is an integral part of the company's total worldwide offerings. Inherent in financing are 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 unguaranteed 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.

(dollars in millions)	Total			Run-Out of 2001 Balance			2005 and beyond
	1999*	2000*	2001	2002	2003	2004	
Sales-type leases	\$ 771	\$ 785	\$ 791	\$ 236	\$ 273	\$ 220	\$ 62
Operating leases	609	396	334	172	95	44	23
Total residual value	<b>\$ 1,380</b>	<b>\$ 1,181</b>	<b>\$ 1,125</b>	<b>\$ 408</b>	<b>\$ 368</b>	<b>\$ 264</b>	<b>\$ 85</b>

\* Restated to include residual value associated with non-information technology (I/T) equipment. (Amounts were included in the narrative in prior years.)

### **Accounting Estimates**

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.

### **Employees and Related Workforce**

	2001	2000	1999	Percentage Changes	
				2001-00	2000-99
IBM/wholly owned subsidiaries	<b>319,876</b>	316,303	307,401	1.1	2.9
Less-than-wholly owned subsidiaries	<b>25,403</b>	21,886	17,176	16.1	27.4
Complementary	<b>21,300</b>	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.

# Consolidated Statement of Earnings

**INTERNATIONAL BUSINESS MACHINES CORPORATION**  
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(dollars in millions except per share amounts)

FOR THE YEAR ENDED DECEMBER 31:

	Notes	2001	2000*	1999*
<b>REVENUE:</b>				
Global Services		\$ 34,956	\$ 33,152	\$ 32,172
Hardware		33,392	37,777	37,888
Software		12,939	12,598	12,662
Global Financing		3,426	3,465	3,137
Enterprise Investments/Other		1,153	1,404	1,689
<b>TOTAL REVENUE</b>		<b>85,866</b>	88,396	87,548
<b>COST:</b>				
Global Services		25,355	24,309	23,304
Hardware		24,137	27,038	27,591
Software		2,265	2,283	2,240
Global Financing	j	1,693	1,965	1,821
Enterprise Investments/Other		634	747	1,038
<b>TOTAL COST</b>		<b>54,084</b>	56,342	55,994
<b>GROSS PROFIT</b>		<b>31,782</b>	32,054	31,554
<b>EXPENSE AND OTHER INCOME:</b>				
Selling, general and administrative	p	17,197	17,535	16,294
Research, development and engineering	p	5,290	5,374	5,505
Intellectual property and custom development income	p	(1,535)	(1,728)	(1,506)
Other (income) and expense	p	(361)	(1,008)	(848)
Interest expense	j & k	238	347	352
<b>TOTAL EXPENSE AND OTHER INCOME</b>		<b>20,829</b>	20,520	19,797
<b>INCOME BEFORE INCOME TAXES</b>		<b>10,953</b>	11,534	11,757
Provision for income taxes	o	3,230	3,441	4,045
<b>NET INCOME</b>		<b>7,723</b>	8,093	7,712
Preferred stock dividends		10	20	20
<b>NET INCOME APPLICABLE TO COMMON STOCKHOLDERS</b>		<b>\$ 7,713</b>	\$ 8,073	\$ 7,692
<b>EARNINGS PER SHARE OF COMMON STOCK:</b>				
ASSUMING DILUTION	r	\$ 4.35	\$ 4.44	\$ 4.12
BASIC	r	\$ 4.45	\$ 4.58	\$ 4.25

#### AVERAGE NUMBER OF COMMON SHARES OUTSTANDING:

ASSUMING DILUTION: 2001—1,771,230,599; 2000—1,812,118,422; 1999—1,871,073,912

BASIC: 2001—1,733,348,422; 2000—1,763,037,049; 1999—1,808,538,346

\* Reclassified to conform with 2001 presentation.

The accompanying notes on pages 75 through 105 are an integral part of the financial statements.

# Consolidated Statement of Financial Position

**INTERNATIONAL BUSINESS MACHINES CORPORATION**  
*and Subsidiary Companies*

(dollars in millions except per share amounts)

AT DECEMBER 31:

	Notes	2001	2000
<b>ASSETS</b>			
Current assets:			
Cash and cash equivalents		\$ 6,330	\$ 3,563
Marketable securities	d	63	159
Notes and accounts receivable—trade, net of allowances		9,101	10,447
Short-term financing receivables	f	16,656	18,705
Other accounts receivable		1,261	1,574
Inventories	e	4,304	4,765
Deferred taxes	o	2,402	2,701
Prepaid expenses and other current assets		2,344	1,966
Total current assets		<b>42,461</b>	43,880
Plant, rental machines and other property	g	38,375	38,455
Less: Accumulated depreciation		21,871	21,741
Plant, rental machines and other property—net		<b>16,504</b>	16,714
Long-term financing receivables	f	12,246	13,308
Investments and sundry assets	h	17,102	14,447
<b>TOTAL ASSETS</b>		<b>\$ 88,313</b>	\$ 88,349
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>			
Current liabilities:			
Taxes	o	\$ 4,644	\$ 4,827
Short-term debt	j & k	11,188	10,205
Accounts payable		7,047	8,192
Compensation and benefits		3,796	3,801
Deferred income		4,223	4,516
Other accrued expenses and liabilities		4,221	4,865
Total current liabilities		<b>35,119</b>	36,406
Long-term debt	j & k	15,963	18,371
Other liabilities	l	13,617	12,948
<b>TOTAL LIABILITIES</b>		<b>64,699</b>	67,725
Contingencies	n		
Stockholders' equity:	m		
Preferred stock, par value \$.01 per share		—	247
Shares authorized: 150,000,000			
Shares issued and outstanding (2000—2,546,011)			
Common stock, par value \$.20 per share		14,248	12,400
Shares authorized: 4,687,500,000			
Shares issued (2001—1,913,513,218; 2000—1,893,940,595)			
Retained earnings		30,142	23,784
Treasury stock, at cost (shares: 2001—190,319,489; 2000—131,041,411)		(20,114)	(13,800)
Employee benefits trust (shares: 2000—20,000,000)		—	(1,712)
Accumulated gains and losses not affecting retained earnings		(662)	(295)
<b>TOTAL STOCKHOLDERS' EQUITY</b>		<b>23,614</b>	20,624
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>		<b>\$ 88,313</b>	\$ 88,349

*The accompanying notes on pages 75 through 105 are an integral part of the financial statements.*

# Consolidated Statement of Stockholders' Equity

**INTERNATIONAL BUSINESS MACHINES CORPORATION**  
*and Subsidiary Companies*

(dollars in millions)	Preferred Stock	Common Stock	Retained Earnings	Treasury Stock	Employee Benefits Trust	Accumulated Gains and (Losses) Not Affecting Retained Earnings	Total
<b>1999*</b>							
Stockholders' equity, January 1, 1999	\$ 247	\$ 10,121	\$ 10,141	\$ (133)	\$ (1,854)	\$ 911	\$ 19,433
Net income plus gains and losses not affecting retained earnings:							
Net income			7,712				<u>\$ 7,712</u>
Gains and losses not affecting retained earnings (net of tax):							
Foreign currency translation adjustments (net of tax expense of \$180)					(549)	(549)	
Minimum pension liability adjustment					3	3	
Net unrealized gains on marketable securities (net of tax expense of \$456)					796	<u>796</u>	
Total gains and losses not affecting retained earnings					250		
Subtotal: Net income plus gains and losses not affecting retained earnings						<u>\$ 7,962</u>	
Cash dividends declared—common stock				(859)			(859)
Cash dividends declared—preferred stock				(20)			(20)
Common stock issued under employee plans (22,927,141 shares)	741		(1)				740
Purchases (6,418,975 shares) and sales (6,606,223 shares) of treasury stock under employee plans—net				(95)	(50)		(145)
Other treasury shares purchased, not retired (70,711,971 shares)					(7,192)		(7,192)
Fair value adjustment of employee benefits trust	318				(308)		10
Increase due to shares issued by subsidiary	37						37
Tax effect—stock transactions	545						545
Stockholders' equity, December 31, 1999	\$ 247	\$ 11,762	\$ 16,878	\$ (7,375)	\$ (2,162)	\$ 1,161	\$ 20,511
<b>2000*</b>							
Net income plus gains and losses not affecting retained earnings:							
Net income			8,093				<u>\$ 8,093</u>
Gains and losses not affecting retained earnings (net of tax):							
Foreign currency translation adjustments (net of tax expense of \$289)					(538)	(538)	
Minimum pension liability adjustment					7	7	
Net unrealized losses on marketable securities (net of tax benefit of \$506)					(925)	<u>(925)</u>	
Total gains and losses not affecting retained earnings							<u>(1,456)</u>
Subtotal: Net income plus gains and losses not affecting retained earnings						<u>\$ 6,637</u>	
Cash dividends declared—common stock				(909)			(909)
Cash dividends declared—preferred stock				(20)			(20)
Common stock issued under employee plans (17,275,350 shares)	615		1				616
Purchases (8,799,382 shares) and sales (9,074,212 shares) of treasury stock under employee plans—net				(259)	6		(253)
Other treasury shares purchased, not retired (58,867,226 shares)					(6,431)		(6,431)
Fair value adjustment of employee benefits trust	(439)				450		11
Increase due to shares remaining to be issued in acquisition		40					40
Tax effect—stock transactions		422					422
Stockholders' equity, December 31, 2000	\$ 247	\$ 12,400	\$ 23,784	\$ (13,800)	\$ (1,712)	\$ (295)	\$ 20,624

# Consolidated Statement of Stockholders' Equity

**INTERNATIONAL BUSINESS MACHINES CORPORATION**  
*and Subsidiary Companies*

(dollars in millions)	Preferred Stock	Common Stock	Retained Earnings	Treasury Stock	Employee Benefits Trust	Accumulated Gains and (Losses) Not Affecting Retained Earnings	Total
<b>2001</b>							
Stockholders' equity, December 31, 2000	\$ 247	\$ 12,400	\$ 23,784	\$ (13,800)	\$ (1,712)	\$ (295)	\$ 20,624
Net income plus gains and losses not affecting retained earnings:							
Net income			7,723				<u>\$ 7,723</u>
Gains and losses not affecting retained earnings (net of tax):							
Cumulative effect of adoption of SFAS No. 133 on Jan. 1 (net of tax expense of \$120)					219	219	
Net unrealized gains on SFAS No. 133 cash flow hedge derivatives during 2001 (net of tax expense of \$44)					77	77	
Foreign currency translation adjustments (net of tax expense of \$323)					(539)	(539)	
Minimum pension liability adjustment					(216)	(216)	
Net unrealized gains on marketable securities (net of tax expense of \$58)					92	92	
Total gains and losses not affecting retained earnings							<u>(367)</u>
Subtotal: Net income plus gains and losses not affecting retained earnings							<u>\$ 7,356</u>
Cash dividends declared—common stock			(956)				(956)
Cash dividends declared—preferred stock			(10)				(10)
Preferred stock purchased and retired (10,184,043 shares)	(247)		(7)				(254)
Common stock issued under employee plans (19,572,623 shares)		774	(1)				773
Purchases (2,237,935 shares) and sales (11,801,053 shares) of treasury stock under employee plans—net		32	(391)	1,032			673
Other treasury shares purchased, not retired (48,841,196 shares)					(5,091)		(5,091)
Dissolution of employee benefits trust (20,000,000 shares)		546			(2,255)	1,712	3
Decrease in shares remaining to be issued in acquisition			(6)				(6)
Tax effect—stock transactions		502					502
<b>Stockholders' equity, December 31, 2001</b>	<b>\$ —</b>	<b>\$ 14,248</b>	<b>\$ 30,142</b>	<b>\$ (20,114)</b>	<b>\$ —</b>	<b>\$ (662)</b>	<b>\$ 23,614</b>

\* Reclassified to conform with 2001 presentation.

The accompanying notes on pages 75 through 105 are an integral part of the financial statements.

# Consolidated Statement of Cash Flows

**INTERNATIONAL BUSINESS MACHINES CORPORATION**  
*and Subsidiary Companies*

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:

	2001	2000*	1999*
<b>CASH FLOW FROM OPERATING ACTIVITIES:</b>			
Net income	\$ 7,723	\$ 8,093	\$ 7,712
Adjustments to reconcile net income to net cash provided from operating activities:			
Depreciation	4,195	4,513	6,159
Amortization of software	625	482	426
Deferred income taxes	658	29	(713)
Gain on asset sales	(317)	(792)	(4,791)
Write-down of impaired investment assets	405	—	—
Other changes that provided/(used) cash:			
Receivables	3,284	(4,720)	(1,677)
Inventories	337	(55)	301
Other assets	(545)	(643)	(130)
Accounts payable	(969)	2,245	(3)
Other liabilities	(1,131)	122	2,827
<b>NET CASH PROVIDED FROM OPERATING ACTIVITIES</b>	<b>14,265</b>	<b>9,274</b>	<b>10,111</b>
<b>CASH FLOW FROM INVESTING ACTIVITIES:</b>			
Payments for plant, rental machines and other property	(5,660)	(5,616)	(5,959)
Proceeds from disposition of plant, rental machines and other property	1,165	1,619	1,207
Investment in software	(655)	(565)	(464)
Purchases of marketable securities and other investments	(778)	(750)	(2,628)
Proceeds from marketable securities and other investments	738	1,393	2,616
Proceeds from sale of the Global Network	—	—	4,880
Acquisitions	(916)	(329)	(1,321)
<b>NET CASH USED IN INVESTING ACTIVITIES</b>	<b>(6,106)</b>	<b>(4,248)</b>	<b>(1,669)</b>
<b>CASH FLOW FROM FINANCING ACTIVITIES:</b>			
Proceeds from new debt	4,535	9,604	6,133
Short-term borrowings/(repayments) less than 90 days—net	2,926	(1,400)	276
Payments to settle debt	(7,898)	(7,561)	(7,510)
Preferred stock transactions—net	(254)	—	—
Common stock transactions—net	(3,652)	(6,073)	(6,645)
Cash dividends paid	(966)	(929)	(879)
<b>NET CASH USED IN FINANCING ACTIVITIES</b>	<b>(5,309)</b>	<b>(6,359)</b>	<b>(8,625)</b>
Effect of exchange rate changes on cash and cash equivalents	(83)	(147)	(149)
Net change in cash and cash equivalents	2,767	(1,480)	(332)
Cash and cash equivalents at January 1	3,563	5,043	5,375
<b>CASH AND CASH EQUIVALENTS AT DECEMBER 31</b>	<b>\$ 6,330</b>	<b>\$ 3,563</b>	<b>\$ 5,043</b>
<b>SUPPLEMENTAL DATA:</b>			
Cash paid during the year for:			
Income taxes	\$ 2,279	\$ 2,697	\$ 1,904
Interest	\$ 1,247	\$ 1,447	\$ 1,574

\* Reclassified to conform with 2001 presentation.

The accompanying notes on pages 75 through 105 are an integral part of the financial statements.

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION  
and Subsidiary Companies

## 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 in general are majority owned. Investments in business entities in which the company 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. The accounting policy for other investments in securities is described on page 78 within "Marketable Securities."

### 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 that are reported in the consolidated financial statements and accompanying disclosures. Although these estimates are based on management's best knowledge of current events and actions that the company may undertake in the future, actual results may be different from the estimates.

### REVENUE

The company recognizes revenue when it is realized or realizable and earned. The company considers revenue realized or realizable and earned when it has persuasive evidence of an arrangement, the product has been shipped or the services have been provided to the customer, the sales price is fixed or determinable and collectibility is reasonably assured. The company reduces revenue for estimated customer returns and other allowances. In addition to the aforementioned general policy, the following are the specific revenue recognition policies for each major category of revenue and for multiple element arrangements.

#### Services

The terms of service contracts generally range from less than one year up to ten years. Revenue from time and material service contracts is recognized as the services are provided. Revenue from Strategic Outsourcing Service contracts reflects the extent of actual services delivered in the period in accordance with the terms of the contract. Revenue from Business Innovation Services (BIS) contracts requiring the delivery of unique products and/or services is recognized using the percentage-of-completion (POC) method of accounting. In using the POC method, the company records revenue by reference to the costs incurred to

date and the estimated costs remaining to fulfill the contracts. Provisions for losses 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.

In some of the company's services contracts, the company bills the customer prior to performing the service. This situation gives rise to deferred income of \$2.4 billion and \$2.5 billion at December 31, 2001 and 2000, respectively, included in Deferred income on the Consolidated Statement of Financial Position. In other services contracts, the company performs the service prior to billing the customer. This situation gives rise to unbilled accounts receivable of \$1.3 billion and \$1.2 billion at December 31, 2001 and 2000, respectively, included in Notes and accounts receivable—trade on the Consolidated Statement of Financial Position. In these circumstances, billings usually occur shortly after the company performs the services and can range up to six months later. Unbilled receivables are expected to be billed and collected within nine months.

#### Hardware

Revenue from hardware sales or sales-type leases is recognized when the product is shipped to the customer and there are no unfulfilled company obligations that affect the customer's final acceptance of the arrangement. Any cost of these obligations is accrued when the corresponding revenue is recognized. Revenue from rentals and operating leases is recognized monthly as the fees accrue.

#### Software

Revenue from one-time charge licensed software is recognized at the inception of the license term. Revenue from monthly software licenses is recognized ratably over the license term. Revenue from maintenance, unspecified upgrades and technical support is recognized over the period such items are delivered. See "Multiple Element Arrangements" below for further information.

#### Financing

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

#### Multiple Element Arrangements

The company enters into transactions that include multiple element arrangements, which may include any combination of hardware, services or software. These arrangements and stand-alone software arrangements may also involve any combination of software maintenance, software technical support or unspecified software upgrades. When some elements are

## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION  
*and Subsidiary Companies*

delivered prior to others in an arrangement, revenue is deferred until the delivery of the last element unless there is all of the following:

- Vendor-specific objective evidence of fair value (VSOE) of the undelivered elements.
- The functionality of the delivered elements is not dependent on the undelivered elements.
- Delivery of the delivered element represents the culmination of the earnings process.

VSOE is the price charged by the company to an external customer for the same element when such element is sold separately.

### EXPENSE AND OTHER INCOME

#### *Selling, General and Administrative*

Selling, general and administrative (SG&A) expense is charged to income as incurred. Expenses of promoting and selling products are classified as selling expense and include such items as advertising, sales commissions and travel. General and administrative expense includes such items as officers' salaries, office supplies, non income taxes, insurance and office rental. In addition, general and administrative expense includes other operating items such as provision for doubtful accounts, workforce accruals for contractually obligated payments to employees terminated in the ongoing course of business, amortization of intangible assets and environmental remediation costs. The cost of internal environmental protection programs that are preventive in nature are expensed as incurred. The company accrues for all known environmental liabilities when it becomes probable that the company will incur cleanup costs and those costs can be reasonably estimated. In addition, estimated environmental costs that are associated with post-closure activities (for example, the removal and restoration of chemical storage facilities and monitoring) are accrued when the decision is made to close a facility.

#### *Research, Development and Engineering*

Research, development and engineering costs are expensed as incurred.

#### *Intellectual Property and Custom Development Income*

As part of the company's ongoing business model, the company licenses and sells the rights to certain of its intellectual property including internally developed patents, trade secrets and technological know-how. Certain transfers of intellectual property to third parties are licensing/royalty fee based and other transfers are transaction-based sales and other transfers. Licensing/royalty-based fees involve transfers in which the company earns the income over time or the amount of income is not fixed and determinable until the

licensee sells future related products (e.g., variable royalty based upon licensee's revenue). Sales and other transfers typically include transfers of intellectual property whereby the company has fulfilled its obligations and the fee received is fixed and determinable. The company also earns income from certain custom development projects for specific customers. The company records the income from these projects when the fee is earned, is not refundable, and is not dependent upon the success of the project.

#### *Other Income and Expense*

Other income and expense includes interest income (other than from the company's Global Financing business transactions), gains and losses from securities and other investments, realized gains and losses from real estate activity, and foreign currency transaction gains and losses.

#### *Depreciation and Amortization*

Plant, rental machines 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 generally are 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.

Capitalized software costs incurred or acquired after technological feasibility are amortized over periods up to 3 years. See "Software Costs" section on page 79 for additional information. Other intangible assets are amortized for periods up to 5 years. See "New Standards to Be Implemented" on pages 80 and 81 for additional information on goodwill.

#### *Retirement-Related Benefits*

The company accounts for its defined benefit pension plans and its nonpension postretirement benefit plans using actuarial models required by Statement of Financial Accounting Standards (SFAS) No. 87, "Employers' Accounting for Pensions," and SFAS No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions," respectively. These models use an attribution approach that generally spreads individual events over the service lives of the employees in the plan. Examples of "events" are plan amendments and changes in actuarial assumptions such as discount rate, rate of compensation increases and mortality. See the next paragraph for information on the expected long-term rate of return on plan assets. The principle underlying the required attribution approach is that employees render service over their service lives on a relatively smooth basis and therefore, the income statement effects of pensions or nonpension postretirement benefit plans are earned in, and should follow, the same pattern.

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION  
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One of the principal components of the net periodic pension calculation is the expected long-term rate of return on plan assets. The required use of expected long-term rate of return on plan assets may result in recognized pension income that is greater or less than the actual returns of those plan assets in any given year. Over time, however, the expected long-term returns are designed to approximate the actual long-term returns and therefore result in a pattern of income and expense recognition that more closely matches the pattern of the services provided by the employees. Differences between actual and expected returns are recognized in the net periodic pension calculation over five years.

The company uses long-term historical actual return information, the mix of investments that comprise plan assets, and future estimates of long-term investment returns by reference to external sources to develop its expected return on plan assets.

The discount rate assumptions used for pension and non-pension postretirement benefit plan accounting reflects the rates available on high-quality fixed-income debt instruments on December 31 of each year. The rate of compensation increase is another significant assumption used in the actuarial model for pension accounting and is determined by the company based upon its long-term plans for such increases. For retiree medical plan accounting, the company reviews external data and its own historical trends for health care costs to determine the health care cost trend rates.

## INCOME TAXES

Income tax expense is based on reported income before income taxes. Deferred income taxes reflect the effect of temporary differences between asset and liability amounts that are recognized for financial reporting purposes and the amounts that are recognized for income tax purposes. These deferred taxes are measured by applying currently enacted tax laws. Valuation allowances are recognized to reduce the deferred tax assets to an amount that is more likely than not to be realized. In assessing the likelihood of realization, management considers estimates of future taxable income.

## 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 weighted-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, Plant, rental machines and other property—net, 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 the company acquired the assets or liabilities. All other assets and liabilities are translated at year-end exchange rates. Cost of sales and depreciation are translated at historical exchange rates. All other income and expense items are translated at the weighted-average rates of exchange prevailing during the year. Gains and losses that result from translation are included in net income.

## DERIVATIVES

In the normal course of business, the company uses a variety of derivative financial instruments to manage currency exchange rate and interest rate risk. The company does not use derivatives for trading or speculative purposes, nor is it a party to leveraged derivatives.

All derivatives are recognized on the balance sheet at fair value and are reported in Prepaid expenses and other current assets, Investments and sundry assets, Other accrued expenses and liabilities or Other liabilities in the Consolidated Statement of Financial Position. Classification of each derivative as current or non current is based upon whether the maturity of each instrument is less than or greater than 12 months. To qualify for hedge accounting in accordance with SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," the company requires that the instruments are effective in reducing the risk exposure that they are designated to hedge. For instruments that are associated with the hedge of an anticipated transaction, hedge effectiveness criteria also require that it be probable that the underlying transaction will occur. Instruments that meet established accounting criteria are formally designated as hedges at the inception of the contract. These criteria demonstrate that the derivative is expected to be highly effective at offsetting changes in fair value of the underlying exposure both at inception of the hedging relationship and on an ongoing basis. The assessment for effectiveness is formally documented at hedge inception and reviewed at least quarterly throughout the designated hedge period.

The company applies hedge accounting in accordance with SFAS No. 133, whereby the company designates each derivative as a hedge of (1) the fair value of a recognized asset or liability or of an unrecognized firm commitment ("fair value" hedge); (2) the variability of anticipated cash flows of a forecasted transaction or the cash flows to be received or paid related to a recognized asset or liability ("cash flow" hedge); or (3) a hedge of a long-term investment ("net investment" hedge) in a foreign operation. From time to time, however, the company may enter into derivatives that economically hedge certain of its risks, even though hedge

## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION  
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accounting does not apply under SFAS No. 133 or is not applied by the company. In these cases, there generally exists a natural hedging relationship in which changes in fair value of the derivative, which are recognized currently in net income, act as an economic offset to changes in the fair value of the underlying hedged item(s).

Changes in the value of a derivative that is designated as a fair value hedge, along with offsetting changes in fair value of the underlying hedged exposure, are recorded in earnings each period. For hedges of interest rate risk, the fair value adjustments are recorded as adjustments to Interest expense and Cost of Financing in the Consolidated Statement of Earnings. For hedges of currency risk associated with recorded assets or liabilities, derivative fair value adjustments generally are recognized in Other income and expense in the Consolidated Statement of Earnings. Changes in the value of a derivative that is designated as a cash flow hedge are recorded in the Accumulated gains and losses not affecting retained earnings, a component of Stockholders' equity. When net income is affected by the variability of the underlying cash flow, the applicable amount of the gain or loss from the derivative that is deferred in Stockholders' equity is released to net income and reported in Interest expense, Cost, SG&A expense or Other income and expense in the Consolidated Statement of Earnings based on the nature of the underlying cash flow hedged. Effectiveness for net investment hedging derivatives is measured on a spot to spot basis. The effective portion of changes in the fair value of derivatives and other non derivative risk management instruments designated as net investment hedges are recorded as foreign currency translation adjustments in the Accumulated gains and losses not affecting retained earnings section of Stockholders' equity. Changes in the fair value of the portion of a net investment hedging derivative excluded from the effectiveness assessment are recorded in Interest expense.

When the underlying hedged item ceases to exist, all changes in the fair value of the instrument are included in net income each period until the instrument matures. When the underlying transaction ceases to exist, a hedged asset or liability is no longer adjusted for changes in its fair value. Derivatives that are not designated as hedges, as well as changes in the value of derivatives that do not offset the underlying hedged item throughout the designated hedge period (collectively, "ineffectiveness"), are recorded in net income each period and generally are reported in Other income and expense. Refer to note k, "Derivatives and Hedging Transactions," on pages 85 through 87 for a description of the major risk management programs and classes of financial instruments used by the company.

### FINANCIAL INSTRUMENTS

In determining fair value of its financial instruments, the company uses a variety of methods and assumptions that are based on market conditions and risks existing at each balance sheet date. For the majority of financial instruments including most derivatives, long-term investments and long-term debt, standard market conventions and techniques such as discounted cash flow analysis, option pricing models, replacement cost and termination cost are used to determine fair value. Dealer quotes are used for the remaining financial instruments. All methods of assessing fair value result in a general approximation of value, and such value 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 in Current assets represent securities with a maturity of less than one year. The company also has Marketable securities, including non equity method alliance investments, with a maturity of more than one year. These non current investments are included in Investments and sundry assets. The company's Marketable securities, including certain non equity method alliance investments, 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. Other than temporary declines in market value from original cost are charged to Other income and expense in the period in which the loss occurs. In determining whether an other than temporary decline in the market value has occurred, the company considers the duration that and extent to which market value is below original cost. Realized gains and losses and other than temporary declines in market value from original cost are included in Other income and expense in the Consolidated Statement of Earnings. All other investment securities not described above or in the "Principles of Consolidation" on page 75, primarily non-publicly traded equity securities, are accounted for using the cost method.

### INVENTORIES

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

## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION  
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### CUSTOMER LOANS RECEIVABLE

Global Financing is one of many sources of funding from which customers can choose. Customer loans receivable, net of allowances, comprise almost entirely loans made by the company's Global Financing segment, primarily to finance the purchase of the company's services and software. Separate contractual relationships on these financing agreements are generally for terms ranging from one to three years requiring straight-line payments over the term. These agreements do not represent extended payment terms. Each financing contract is priced independently at competitive market rates. An allowance for loan losses is established with a corresponding charge to SG&A expense based upon management's historical collection experience, prevailing economic conditions, the present value of estimated future cash flows, the estimated value of underlying collateral, and specific situations that may affect a customer's ability to repay.

### ESTIMATED RESIDUAL VALUES OF LEASE ASSETS

The recorded residual values of the company's lease assets are estimated at the inception of the lease to be the expected fair market value of the assets at the end of the lease term. On a quarterly basis, the company reassesses the realizable value of its lease residual values. In accordance with generally accepted accounting principles, anticipated increases in specific future residual values are not recognized before realization. Anticipated decreases in specific future residual values that are considered to be other than temporary are recognized immediately.

### SOFTWARE COSTS

Costs that are related to the conceptual formulation and design of licensed programs are expensed as research and development. Also, for licensed programs, the company capitalizes costs that are incurred to produce the finished product after technological feasibility is established. The annual amortization of the capitalized amounts is performed using the straight-line method, and is applied over periods ranging up to three years. The company performs periodic reviews to ensure that unamortized program costs remain recoverable from future revenue. Costs to support or service licensed programs are expensed as the costs are incurred.

The company capitalizes certain costs that are incurred to purchase or to create and implement internal-use computer software, which include software coding, installation, testing and data conversion. Capitalized costs are amortized on a straight-line basis over two years.

### COMMON STOCK

Common stock refers to the \$.20 par value capital stock as designated in the company's Certificate of Incorporation. Treasury stock is accounted for using the cost method. When treasury stock is reissued, the value is computed and recorded using a weighted-average basis.

### 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 r, "Earnings Per Share of Common Stock," on page 93 for additional information.

### RECLASSIFICATIONS

Effective January 1, 2001, interest expense is presented in Cost of Global Financing in the Consolidated Statement of Earnings if the related external borrowings to support the Global Financing business were issued by either the company or its Global Financing units. In prior years, the Cost of Global Financing caption only included interest related to direct external borrowings of the Global Financing units. Prior periods were reclassified to conform with the current year presentation. This change was described and disclosed in the company's 2001 first quarter report on Form 10-Q.

The company also removed the impact of intellectual property income, gains and losses on sales and other than temporary declines in market value of certain investments, realized gains and losses on certain real estate activity and foreign currency transaction gains and losses from the SG&A caption on the Consolidated Statement of Earnings. Custom development income was also removed from the Research, development and engineering caption on the Consolidated Statement of Earnings. Intellectual property and custom development income are now recorded in a separate caption in the Consolidated Statement of Earnings. The other items listed above are now recorded as part of Other income and expense. Prior periods were reclassified to conform with the current year presentation.

### **b Accounting Changes**

#### STANDARDS IMPLEMENTED

The company implemented new accounting standards in 2001, 2000 and 1999. These standards did not have a material effect on the financial position or results of operations of the company.

## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION  
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On January 1, 2001, the company adopted SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities," as amended by SFAS No. 138, "Accounting for Certain Derivative Instruments and Certain Hedging Activities." SFAS No. 133, as amended, establishes accounting and reporting standards for derivative instruments. Specifically, SFAS No. 133 requires an entity 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. As of January 1, 2001, the adoption of the new standard resulted in a cumulative effect net-of-tax increase of \$219 million to Accumulated gains and losses not affecting retained earnings in the Stockholders' equity section of the Consolidated Statement of Financial Position and a cumulative effect net-of-tax charge of \$6 million included in Other income and expense in the Consolidated Statement of Earnings.

Effective January 1, 2001, the company adopted SFAS No. 140, "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities—a replacement of SFAS No. 125." This statement provides accounting and reporting standards for transfers and servicing of financial assets and extinguishments of liabilities and revises the accounting standards for securitizations and transfers of financial assets and collateral. The adoption did not have a material effect on the company's results of operations and financial position. The standard also requires new disclosures which were not applicable to the company.

Pursuant to the Securities and Exchange Commission's Staff Accounting Bulletin (SAB) No. 102, "Selected Loan Loss Allowance Methodology and Documentation Issues," the company has reviewed its policies related to methodologies for the determination of, and documentation in support of its allowance for loan losses and the provision for loan losses in its Global Financing segment. The company's methodology and documentation policies are consistent with the views expressed within SAB 102. See "Customer Loans Receivable," on page 79 for a description of the company's policies for customer loans receivable.

In 2000, the Financial Accounting Standards Board (FASB) issued Interpretation (FIN) No. 44, "Accounting for Certain Transactions Involving Stock Compensation, an interpretation of Accounting Principles Board Opinion No. 25." The requirements of FIN No. 44 are either not applicable to the company or are already consistent with the company's existing accounting policies.

Effective July 1, 2000, the company adopted Emerging Issues Task Force (EITF) Issue No. 00-2, "Accounting for

Web Site Development Costs." As a result, the company changed its accounting policies to capitalize certain phases of Web site development costs that were previously expensed as incurred. The company amortizes these amounts on a straight-line basis over two years.

Pursuant to the Securities and Exchange Commission's SAB No. 101, "Revenue Recognition in Financial Statements," the company has reviewed its accounting policies for the recognition of revenue. SAB No. 101 was required to be implemented in fourth quarter 2000. SAB No. 101 provides guidance on applying generally accepted accounting principles to revenue recognition in financial statements. The company's policies for revenue recognition are consistent with the views expressed within SAB No. 101. See "Revenue," on page 75 for a description of the company's policies for revenue recognition.

Effective January 1, 1999, the company adopted American Institute of Certified Public Accountants (AICPA) Statement of Position (SOP) No. 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 "Software Costs," on page 79 for a description of the company's policies for internal-use software.

### NEW STANDARDS TO BE IMPLEMENTED

In July 2001, the FASB issued SFAS No. 141, "Business Combinations," and SFAS No. 142, "Goodwill and Intangible Assets." SFAS No. 141 requires the use of the purchase method of accounting for business combinations and prohibits the use of the pooling of interests method. Under the previous rules, the company used the purchase method of accounting. SFAS No. 141 also refines the definition of intangible assets acquired in a purchase business combination. As a result, the purchase price allocation of future business combinations may be different than the allocation that would have resulted under the old rules. Business combinations must be accounted for using SFAS No. 141 beginning on July 1, 2001.

SFAS No. 142 eliminates the amortization of goodwill, requires annual impairment testing of goodwill and introduces the concept of indefinite life intangible assets. It was adopted on January 1, 2002. The new rules also prohibit the amortization of goodwill associated with business combinations that close after June 30, 2001.

These new requirements will impact future period net income by an amount equal to the discontinued goodwill amortization offset by goodwill impairment charges, if any, and adjusted for any differences between the old and new rules for defining intangible assets on future business combinations.

## Notes to Consolidated Financial Statements

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An initial impairment test must be performed in 2002 as of January 1, 2002. The company completed this initial transition impairment test and determined that its goodwill is not impaired.

In August 2001, the FASB issued SFAS No. 143, "Accounting for Asset Retirement Obligations." SFAS No. 143 provides accounting and reporting guidance for legal obligations associated with the retirement of long-lived assets that result from the acquisition, construction or normal operation of a long-lived asset. The standard is effective January 1, 2003. The company is reviewing the provisions of this standard. Its adoption is not expected to have a material effect on the financial statements.

In October 2001, the FASB issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS No. 144 addresses significant issues relating to the implementation of SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of," and develops a single accounting model, based on the framework established in SFAS No. 121 for long-lived assets to be disposed of by sale, whether such assets are or are not deemed to be a business. SFAS No. 144 also modifies the accounting and disclosure rules for discontinued operations. The standard was adopted on January 1, 2002, and is not expected to have a material effect on the financial statements except that any future discontinued operations may be presented in the financial statements differently under the new rules as compared to the old rules.

In November 2001, the FASB issued EITF Issue No. 01-14, "Income Statement Characterization of Reimbursements Received for 'Out of Pocket' Expenses Incurred." This guidance requires companies to recognize the recovery of reimbursable expenses such as travel costs on services contracts as revenue. These costs are not to be netted as a reduction of cost. This guidance was effective January 1, 2002. The company does not expect this guidance to have a material effect on the financial statements due to the company's billing practices. For instance, outside the U.S., almost all of the company's contracts involve fixed billings that are designed to recover all costs, including out-of-pocket costs. Therefore, the "reimbursement" of these costs are already recorded in revenue.

### **c Acquisitions/Divestitures**

#### **ACQUISITIONS**

##### **2001**

In 2001, the company completed two acquisitions at a cost of approximately \$1,082 million.

The larger was the acquisition of Informix Corporation's database software business. In July, the company agreed to

pay \$1 billion in cash for the net assets of the business. Under the terms of the purchase, the company has paid \$889 million of the purchase price and will pay the remaining amount in 2002. The Informix acquisition provides the company with a database software system for data warehousing, business intelligence and transaction-handling systems that are used by more than 100,000 customers. In addition, the acquisition significantly increased the size of the company's UNIX database business. The transaction was completed in the third quarter of 2001 from which time the results of this acquisition were included in the company's consolidated financial statements.

The allocation of the purchase price for the 2001 acquisitions is presented in the following table in the required SFAS No. 141 format.

(dollars in millions)	Amortization Life (in years)	Informix*	Other
Current assets		\$ 156	\$ 57
Fixed/long-term assets		41	21
Intangible assets:			
Customer lists	5	220	—
Completed technology	3	140	—
Trademarks	2	10	—
Goodwill		591	25
Total assets acquired		\$ 1,158	\$ 103
Deferred revenue		(101)	(2)
Payables/accrued expenses		(55)	(21)
Total liabilities assumed		\$ (156)	\$ (23)
Net assets acquired		\$ 1,002	\$ 80

\* During the fourth quarter, the company revised the estimates originally disclosed in the third quarter. These adjustments resulted in an additional \$40 million of goodwill and a corresponding decrease in tangible net assets acquired. There was no adjustment in the purchase price or in the company's earnings.

The overall weighted-average life of intangible assets purchased from Informix is 4.2 years. Goodwill of \$591 million has been assigned to the Software segment. Almost all of the goodwill is deductible for tax purposes. The primary items that generated this goodwill are the value of the acquired assembled workforce and the synergies between the acquired business and IBM. This transaction occurred after June 30, 2001, and therefore, the acquired goodwill is not subject to amortization.

##### **2000**

In 2000, the company completed nine acquisitions at a cost of approximately \$511 million.

The largest acquisition was LGS Group Inc. (LGS). The company acquired all the outstanding stock of LGS in April for \$190 million. LGS offers services ranging from application development to information technology (I/T) consulting.

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The following table presents the allocation of the purchase price of the 2000 acquisitions.

(dollars in millions)	LGS	Other
Purchase price	\$ 190	\$ 321
Tangible net assets	31	68
Identifiable intangible assets	—	36
Goodwill	159	220
In-process research and development	—	9
Deferred tax liabilities related to identifiable intangible assets	—	(12)

### 1999

In 1999, the company completed 17 acquisitions at a cost of approximately \$1,551 million. 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., an acknowledged leader in systems based on NUMA (non-uniform memory access) architecture, for approximately \$837 million.

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

On September 27, 1999, the company acquired all of the outstanding stock of DASCOM, Inc., an industry leader in Web-based and enterprise-security technology, for approximately \$115 million.

The following table presents the allocation of the purchase price of the 1999 acquisitions.

(dollars in millions)	Sequent	Mylex	DASCOM	Other
Purchase price	\$ 837*	\$ 259	\$ 115	\$ 340
Tangible net assets/(liabilities)	382	67	(17)	45
Identifiable intangible assets	187	35	13	—
Current technology	87	26	19	9
Goodwill	192*	145	92	286
In-process research and development	85	7	19	—
Deferred tax liabilities related to identifiable intangible assets	(96)	(21)	(11)	—

\*In 2000, the total purchase price and goodwill numbers were adjusted primarily for increased stock options being exercised versus being converted to IBM options and at a higher gain per option than originally assumed.

The company's acquisitions were accounted for as purchase transactions, and accordingly, the assets and liabilities of the acquired entities were recorded at their estimated fair value at the date of acquisition. The effects of these acquisitions on the company's consolidated financial statements were not material. Hence, the company has not provided pro forma financial information as if the companies had combined at the beginning of the current period or at the immediately preceding period.

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 have been amortized on a straight-line basis, generally not to exceed five years. Except for Informix, goodwill has been amortized over five years. Effective January 1, 2002, any unamortized assembled workforce intangible asset will be reclassified to goodwill and all goodwill will no longer be amortized. See "New Standards to Be Implemented" on pages 80 and 81 for a description of the new accounting rules that eliminate the amortization of goodwill.

In connection with these acquisitions, the company recorded pre-tax charges of \$9 million and \$111 million for acquired in-process research and development (IPR&D) for 2000 and 1999, respectively. At the date of the acquisitions, 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.

### DIVESTITURES

During 1999, the company completed the sale of its Global Network business 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.

During 1999, 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. The gain was recorded as a reduction of SG&A expense in the Consolidated Statement of Earnings.

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## **d Financial Instruments (excluding derivatives)**

### **FAIR VALUE OF FINANCIAL INSTRUMENTS**

Cash and cash equivalents, marketable securities, notes and other accounts receivable and other investments are financial assets with carrying values that approximate fair value. Accounts payable, other accrued expenses and liabilities, and short-term and long-term debt are financial liabilities with carrying values that approximate fair value.

### **MARKETABLE SECURITIES\***

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

(dollars in millions)	Fair Value	
AT DECEMBER 31:	2001	2000
<b>Current marketable securities:</b>		
Time deposits and other obligations	\$ 55	\$ 153
Non-U.S. government securities and other fixed-term obligations	8	6
<b>Total</b>	<b>\$ 63</b>	<b>\$ 159</b>
 Marketable securities—non current:**		
Time deposits and other obligations	\$ 124	\$ 163
Non-U.S. government securities and other fixed-term obligations	—	8
<b>Total</b>	<b>\$ 124</b>	<b>\$ 171</b>
 Non equity method alliance investments**		
	\$ 574	\$ 909

\* Gross unrealized gains (before taxes) on marketable securities and alliance investments were \$27 million and \$47 million at December 31, 2001 and 2000, respectively. Gross unrealized losses (before taxes) on marketable securities and alliance investments were \$4 million and \$175 million at December 31, 2001 and 2000, respectively. See note m, "Stockholders' Equity Activity," on pages 88 and 89 for accumulated and net change in unrealized gains and losses on marketable securities.

\*\* Included within Investments and sundry assets in the Consolidated Statement of Financial Position. (See note b, "Investments and Sundry Assets," on page 84.)

## **e Inventories**

(dollars in millions)	2001	2000
AT DECEMBER 31:		
Finished goods	\$ 1,259	\$ 1,446
Work in process and raw materials	3,045	3,319
<b>Total</b>	<b>\$ 4,304</b>	<b>\$ 4,765</b>

## **f Financing Receivables**

The following table includes receivables resulting from leasing activities, installment loans to customers, and commercial financing activities (primarily dealers and syndicated loan activities), arising from the Global Financing business. See

note v, "Segment Information," on page 104 for information on the total assets of the Global Financing segment, which include cash, rental machine fixed assets, intercompany amounts and other assets.

	2001	2000
<b>Short-term:</b>		
Commercial financing receivables	\$ 5,452	\$ 6,851
Customer loans receivable	4,297	4,065
Installment payment receivables	871	1,221
Net investment in sales-type leases	6,036	6,568
<b>Total short-term financing receivables</b>	<b>\$ 16,656</b>	<b>\$ 18,705</b>
 <b>Long-term:</b>		
Commercial financing receivables	\$ 1,009	\$ 779
Customer loans receivable	4,041	4,359
Installment payment receivables	353	574
Net investment in sales-type leases	6,843	7,596
<b>Total long-term financing receivables</b>	<b>\$ 12,246</b>	<b>\$ 13,308</b>

Net investment in sales-type leases is for leases that relate principally to IBM equipment and is generally for terms ranging from two to five years. Net investment in sales-type leases includes unguaranteed residual values of approximately \$791 million and \$785 million at December 31, 2001 and 2000, respectively, and is reflected net of unearned income at those dates of approximately \$1,428 million and \$1,481 million, respectively. Scheduled maturities of minimum lease payments outstanding at December 31, 2001, expressed as a percentage of the total, are approximately as follows: 2002, 50 percent; 2003, 31 percent; 2004, 14 percent; 2005, 4 percent; and 2006 and beyond, 1 percent.

## **g Plant, Rental Machines and Other Property**

	2001	2000
 <b>AT DECEMBER 31:</b>		
Land and land improvements	\$ 859	\$ 896
Buildings and building improvements	10,073	9,904
Plant, laboratory and office equipment	22,369	22,354
	33,301	33,154
<b>Less: Accumulated depreciation</b>	<b>18,982</b>	<b>18,857</b>
	14,319	14,297
Rental machines	5,074	5,301
<b>Less: Accumulated depreciation</b>	<b>2,889</b>	<b>2,884</b>
	2,185	2,417
<b>Total</b>	<b>\$ 16,504</b>	<b>\$ 16,714</b>

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### **h Investments and Sundry Assets**

(dollars in millions)	2001	2000
AT DECEMBER 31:		
Deferred taxes	\$ 2,395	\$ 2,968
Prepaid pension assets	9,407	6,806
Alliance investments:		
Equity method	544	629
Other	574	909
Goodwill (less accum. amortization)	1,278	848
Marketable securities—non current	124	171
Software	963	782
Other assets	1,817	1,334
Total	<b>\$ 17,102</b>	<b>\$ 14,447</b>

### **i Sale and Securitization of Receivables**

The company periodically sells receivables through the securitization of loans, leases and trade receivables. The company retains servicing rights in the securitized receivables for which it receives a servicing fee. Any gain or loss incurred as a result of such sales is recognized in the period in which the sale occurs.

During 2001, the company entered into an uncommitted trade receivables securitization facility that allows for the ongoing sale of up to \$500 million of trade receivables. This facility was put in place primarily to provide backup liquidity and can be accessed on three days' notice. The company sold \$179 million in trade receivables through this facility in 2001. In addition, the company sold \$278 million of loans receivable due from state and local government customers through a securitization program established in 1990. No receivables were sold in 2000 under this program. Net gains and losses on these sales were insignificant.

Total cash proceeds of \$460 million were received in 2001 from the sale and securitization of receivables.

At December 31, 2001, the total balance of assets securitized and under the company's management was \$213 million, all of which related to loans receivable. Servicing assets net of servicing liabilities were insignificant.

The investors in the loans receivable securitizations have recourse to the company via a limited guarantee. At year-end 2001, delinquent amounts from the receivables sold and net credit losses were insignificant.

### **j Borrowings**

#### **SHORT-TERM DEBT**

(dollars in millions)	2001	2000
AT DECEMBER 31:		
Commercial paper	\$ 4,809	\$ 3,521
Short-term loans	1,564	3,975
Long-term debt: Current maturities	4,815	2,709
Total	<b>\$ 11,188</b>	<b>\$ 10,205</b>

The weighted-average interest rates for commercial paper at December 31, 2001 and 2000, were 1.9 percent and 6.7 percent, respectively. The weighted-average interest rates for short-term loans at December 31, 2001 and 2000, were 4.0 percent and 2.9 percent, respectively.

#### **LONG-TERM DEBT**

(dollars in millions)	Maturities	2001	2000
AT DECEMBER 31:			
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	2002-2014	2,772	2,933
Medium-term note			
program: 5.4% average	2002-2014	3,620	4,305
Other: 4.5% average	2002-2009	828	1,092
		<b>11,320</b>	12,430
Other currencies			
(average interest rate at December 31, 2001, in parentheses):			
Euros (4.4%)	2002-2009	3,042	3,042
Japanese yen (1.1%)	2002-2014	4,749	4,845
Canadian dollars (5.8%)	2002-2011	441	302
Swiss francs (4.0%)	2002-2003	151	231
Other (6.1%)	2002-2014	726	275
		<b>20,429</b>	21,125
Less: Net unamortized discount		47	45
Add: SFAS No. 133 fair value adjustment*		396	—
		<b>20,778</b>	21,080
Less: Current maturities		4,815	2,709
Total		<b>\$ 15,963</b>	\$ 18,371

\* In accordance with the requirements of SFAS No. 133, the portion of the company's fixed-rate debt obligations that is hedged is reflected in the Consolidated Statement of Financial Position as an amount equal to the sum of the debt's carrying value plus a SFAS No. 133 fair value adjustment representing changes recorded in the fair value of the hedged debt obligations attributable to movements in market interest rates.

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Annual maturities on long-term debt outstanding at December 31, 2001, are as follows:

(dollars in millions)	2002	2003	2004	2005	2006	2007 and beyond
	\$ 5,186					
2002	\$ 5,186					
2003		3,106				
2004		1,501				
2005		1,904				
2006		2,261				
2007 and beyond		6,471				
<b>INTEREST ON DEBT</b>						
(dollars in millions)	2001	2000*	1999*			
Cost of Global Financing	\$ 964	\$ 1,082	\$ 1,100			
Interest expense	238	347	352			
Interest capitalized	33	20	23			
Total interest paid and accrued	<b>\$ 1,235</b>	<b>\$ 1,449</b>	<b>\$ 1,475</b>			

\* Reclassified to conform with 2001 presentation.

Refer to the table and related discussion on page 104 in note v, "Segment Information," for the total interest expense of the Global Financing segment. See note k, "Derivatives and Hedging Transactions," on pages 85 through 87 for a discussion of the use of currency and interest rate swaps in the company's debt risk management program.

### LINES OF CREDIT

Effective May 31, 2001, the company replaced its \$10 billion committed global credit facility, which was due to expire in February 2002, with two global credit facilities totaling \$12.0 billion in committed credit lines, including an \$8.0 billion five-year facility and a \$4.0 billion 364-day facility. The company's other lines of credit, most of which were uncommitted, totaled \$6,860 million and \$7,646 million, respectively, at December 31, 2001 and 2000. Interest rates and other terms of borrowing under these lines of credit vary from country to country, depending on local market conditions.

(dollars in millions)	2001	2000
AT DECEMBER 31:		
Unused lines		
From the committed global credit facility	\$ 11,383	\$ 9,103
From other committed and uncommitted lines	4,738	5,111
Total unused lines of credit	<b>\$ 16,121</b>	<b>\$ 14,214</b>

### k Derivatives and Hedging Transactions

#### DERIVATIVES AND HEDGING

The company operates in approximately 35 functional currencies and is a significant lender and a borrower in the global markets. In the normal course of business, the company is exposed to the impact of interest rate changes and foreign currency fluctuations. The company limits these risks by following established risk management policies and procedures including use of derivatives and, where cost-effective, financing with debt in the currencies in which assets are denominated. For interest rate exposures, derivatives are used to align rate movements between the interest rates associated with the company's lease and other financial assets and the interest rates associated with its financing debt. Derivatives are also used to manage the related cost of debt. For currency exposures, derivatives are used to limit the effects of foreign exchange rate fluctuations on financial results.

The company does not use derivatives for trading or speculative purposes, nor is it a party to leveraged derivatives. Further, the company has a policy of only entering into contracts with carefully selected major financial institutions based upon their credit ratings and other factors and maintains strict dollar and term limits that correspond to the institution's credit rating. When viewed in conjunction with the underlying and offsetting exposure that the derivatives are designed to hedge, the company has not sustained a material loss from these instruments.

In its hedging programs, the company employs the use of forward contracts, interest rate and currency swaps, options, caps, floors or a combination thereof depending upon the underlying exposure.

A brief description of the major hedging programs follows:

#### *Debt Risk Management*

The company issues debt on the global capital markets, principally to fund its financing lease and loan portfolio. Access to cost-effective financing can result in interest rate and/or currency mismatches with the underlying assets. To manage these mismatches and to reduce overall interest cost, the company primarily uses interest-rate and currency instruments, principally swaps, to convert specific fixed-rate debt issuances into variable-rate debt (i.e., fair value hedges) and to convert specific variable-rate debt and anticipated

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commercial paper issuances to fixed rates (i.e., cash flow hedges). The resulting cost of funds is lower than that which would have been available if debt with matching characteristics was issued directly. The weighted-average remaining maturity of all swaps in the debt risk management program is approximately four years.

### *Long-Term Investments in Foreign Subsidiaries ("net investments")*

A significant portion of the company's foreign currency denominated debt portfolio is designated as a hedge to reduce the volatility in stockholders' equity caused by changes in foreign currency exchange rates in the functional currency of major foreign subsidiaries with respect to the U.S. dollar. The company also uses currency swaps and foreign exchange forward contracts for this risk management purpose. The currency effects of these hedges (approximately \$506 million for the current period, net of tax) are reflected as a credit in the Accumulated gains and losses not affecting retained earnings section of the Consolidated Statement of Stockholders' Equity, thereby offsetting a portion of the translation of the applicable foreign subsidiaries' net assets.

### *Anticipated Royalties and Cost Transactions*

The company's operations generate significant non functional currency third party vendor payments and intercompany payments for royalties and goods and services among the company's non-U.S. subsidiaries and with the parent company. In anticipation of these foreign currency cash flows and in view of the volatility of the currency markets, the company selectively employs foreign exchange forward and option contracts to manage its currency risk. At December 31, 2001, the maximum remaining maturity of these derivative instruments was less than 24 months, commensurate with the underlying hedged anticipated cash flows. The effective portion of the gain or loss of these contracts is reported in net income when the underlying transactions occur. Classification of derivative gains and losses in the Consolidated Statement of Earnings is consistent with the recognition of the specific underlying transactions hedged.

### *Subsidiary Cash and Foreign Currency Asset/Liability Management*

The company uses its Global Treasury Centers to manage the cash of its subsidiaries. These centers principally use currency swaps to convert cash flows in a cost-effective manner. In addition, the company uses foreign exchange forward contracts to hedge, on a net basis, the foreign currency exposure of a portion of the company's non functional currency assets and liabilities. The terms of these forward and swap contracts are generally less than one year. The changes in fair value from these contracts and from the underlying hedged exposures are generally offsetting and are recorded in Other income and expense in the Consolidated Statement of Earnings.

### *Equity Risk Management*

The company is exposed to certain equity price changes related to certain obligations to employees. These equity exposures are primarily related to market value movements in certain broad equity market indices and in the company's own stock. Changes in the overall value of this employee compensation obligation are recorded in SG&A expense in the Consolidated Statement of Earnings. Although not designated as accounting hedges, the company utilizes equity derivatives, including equity swaps and futures to economically hedge the equity exposures relating to this employee compensation obligation. To match the exposures relating to this employee compensation obligation, these derivatives are linked to the total return of certain broad equity market indices and/or the total return of the company's common stock. These derivatives are recorded at fair value with gains or losses also reported in SG&A expense in the Consolidated Statement of Earnings.

### *Other Derivatives*

The company holds warrants in connection with certain investments that, although not designated as hedging instruments, are deemed derivatives since they contain net share settlement clauses. During the year, the company recorded the change in the fair value of these warrants in net income.

The following table summarizes the net fair value of the company's derivative and other risk management instruments at December 31, 2001, included in the Consolidated Statement of Financial Position.

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## *Risk Management Program*

(dollars in millions)	Hedge Designation			
	Fair Value	Cash Flow	Net Investment	Non-Hedge/Other
<b>Derivatives:</b>				
Debt risk management	\$ 301	\$ (26)	\$ —	\$ (13)
Long-term investments in foreign subsidiaries ("net investments")			92	
Anticipated royalties and cost transactions			375	
Subsidiary cash and foreign currency asset/liability management				16
Equity risk management				22
All other				3
Total derivatives	<u>\$ 301<sup>(1)</sup></u>	<u>\$ 349<sup>(2)</sup></u>	<u>\$ 92<sup>(3)</sup></u>	<u>\$ 28<sup>(4)</sup></u>
<b>Debt:</b>				
Long-term investments in foreign subsidiaries ("net investments")	—	—	(5,519)*	—
Total	<u>\$ 301</u>	<u>\$ 349</u>	<u>\$ (5,427)</u>	<u>\$ 28</u>

\* Represents fair value of foreign denominated debt issuances formally designated as a hedge of net investments.

<sup>(1)</sup> Comprises assets of \$301 million.

<sup>(2)</sup> Comprises assets of \$383 million and liabilities of \$34 million.

<sup>(3)</sup> Comprises assets of \$92 million.

<sup>(4)</sup> Comprises assets of \$60 million and liabilities of \$32 million.

## *Accumulated Derivative Gains or Losses*

As illustrated, the company makes extensive use of cash flow hedges, principally in the anticipated royalties and cost transactions risk management program. In connection with the company's cash flow hedges, it has recorded approximately \$296 million of net gains in Accumulated gains and losses not affecting retained earnings as of December 31, 2001, net of tax, of which approximately \$276 million is expected to be reclassified to net income within the next year to provide an economic offset to the impact of the underlying anticipated cash flows hedged.

The following table summarizes activity in the Accumulated gains and losses not affecting retained earnings section of the Consolidated Statement of Stockholders' Equity related to all derivatives classified as cash flow hedges held by the company during the period January 1, 2001 (the date of the company's adoption of SFAS No. 133) through December 31, 2001:

(dollars in millions, net of tax)	Debit/ (Credit)
Cumulative effect of adoption of SFAS No. 133 as of January 1, 2001	\$ (219)
Net gains reclassified into earnings from equity	379
Changes in fair value of derivatives	(456)
Accumulated derivative gain included in Accumulated gains and losses not affecting retained earnings as of December 31, 2001	<u>\$ (296)</u>

As of December 31, 2001, there were no significant gains or losses on derivative transactions or portions thereof that were either ineffective as hedges, excluded from the assessment of hedge effectiveness, or associated with an underlying exposure that did not occur; nor are there any anticipated in the normal course of business.

## *I Other Liabilities*

(dollars in millions)	AT DECEMBER 31:	2001	2000
Retirement and nonpension postretirement benefits—			
U.S. and non-U.S. employees	\$ 8,044	\$ 7,128	
Deferred income taxes	1,593	1,623	
Deferred income	1,145	1,266	
Executive compensation accruals	868	769	
Restructuring actions	589	854	
Postemployment/ preretirement liability	493	585	
Environmental accruals	215	226	
Other	670	497	
Total	<u>\$ 13,617</u>	<u>\$ 12,948</u>	

The company has taken actions, including workforce rebalancing actions, each year to improve productivity and competitive position. Contractually obligated future payments associated with these ongoing activities are recorded in postemployment/preretirement liabilities. Prior to 1994 and in 1999, the company took significant actions including

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significant workforce reductions. The non current liabilities relating to these actions are included in restructuring actions in the table on page 87. See note q, "1999 Actions," on pages 91 through 93 for more information regarding the 1999 actions. The reconciliation of the December 31, 2000 to 2001, balances of the current and non current liabilities for restructuring actions are presented below. The current liabilities presented in the table are included in Other accrued expenses and liabilities in the Consolidated Statement of Financial Position.

	Dec. 31, 2000 (dollars in millions)	Payments	Other Adjustments	Dec. 31, 2001 Balance
<b>Current:</b>				
Workforce	\$ 148	\$ 128	\$ 67	\$ 87
Space	91	86	60	65
<b>Total</b>	<b>\$ 239</b>	<b>\$ 214</b>	<b>\$ 127</b>	<b>\$ 152</b>
<b>Non current:</b>				
Workforce	\$ 470	\$ —	\$ (85)	\$ 385
Space	384	—	(180)	204
<b>Total</b>	<b>\$ 854</b>	<b>\$ —</b>	<b>\$ (265)</b>	<b>\$ 589</b>

The workforce accruals relate to terminated employees who are no longer working for the company, but who were granted annual payments to supplement their state pensions in certain countries. These contractually required payments will continue until the former employee dies.

The space accrals are for ongoing obligations to pay rent for vacant space that could not be sublet or space that was sublet at rates lower than the committed lease arrangement. The length of these obligations varies by lease with the longest extending through 2012.

The Other Adjustments column in the table above includes the reclassification of non current to current and translation adjustments. In addition, the company adjusted its vacant space accrual by \$110 million. This adjustment is recorded as part of the real estate activity included in Other income and expense and is offset by a decline in real estate gains in 2001. Refer to "Other Income and Expense," on page 91 for additional information on the company's net gains from real estate activity. The adjustment was made as a result of the company's periodic reassessment of the remaining accrual.

The company employs extensive internal environmental protection programs that primarily are preventive in nature. The company also participates in environmental assessments and cleanups at a number of locations, including operating facilities, previously owned facilities and Superfund sites.

The total amounts accrued for environmental liabilities, including amounts classified as current in the Consolidated Statement of Financial Position, that do not reflect actual or

anticipated insurance recoveries, were \$238 million and \$248 million at December 31, 2001 and 2000, respectively.

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.

### m Stockholders' Equity Activity

#### STOCK REPURCHASES

From time to time, the Board of Directors authorizes the company to repurchase IBM common stock. The company repurchased 50,764,698 common shares at a cost of \$5.3 billion and 61,041,820 common shares at a cost of \$6.7 billion in 2001 and 2000, respectively. In 2001 and 2000, the company issued 1,923,502 and 2,174,594 treasury shares, respectively, as a result of exercises of stock options by employees of certain recently acquired businesses and by non-U.S. employees. At December 31, 2001, approximately \$4.6 billion of Board authorized repurchases remained. The company plans to purchase shares on the open market from time to time, depending on market conditions. The company also repurchased 314,433 common shares at a cost of \$31 million and 249,288 common shares at a cost of \$27 million in 2001 and 2000, respectively, as part of other stock compensation plans.

In 1995, the Board of Directors authorized the company to repurchase all of its outstanding Series A 7-1/2 percent callable preferred stock. On May 18, 2001, the company announced it would redeem all outstanding shares of its Series A 7-1/2 percent callable preferred stock, represented by the outstanding depositary shares (10,184,043 shares). The depositary shares represent ownership of one-fourth of a share of preferred stock. Depositary shares were redeemed as of July 3, 2001, the redemption date, for cash at a redemption price of \$25 plus accrued and unpaid dividends to the redemption date for each depositary share. Dividends on preferred stock, represented by the depositary shares, ceased to accrue on the redemption date. The company did not repurchase any shares in 2000.

#### EMPLOYEE BENEFITS TRUST

In 1997, the company created an employee benefits trust to which the company contributed 10 million shares of treasury stock. The company was authorized to instruct the trustee to sell such shares from time to time and to use the proceeds from such sales, and any dividends paid or earnings received on such stock, toward the partial payment of the company's obligations under certain of its compensation and benefit plans. The shares held in trust were not considered outstanding for earnings per share purposes until they were committed to be released. The company did not commit any

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shares for release from the trust during its existence nor were any shares sold from the trust. The trust would have expired in 2007. Due to the fact that the company has not used the trust, nor is it expected to need the trust prior to its expiration, the company dissolved the trust, effective May 31, 2001, and all of the shares (20 million on a split-adjusted basis) were returned to the company as treasury shares.

Dissolution of the trust will not affect the company's obligations related to any of its compensation and employee benefit plans or its ability to settle the obligations. In addition, the dissolution is not expected to have any impact on net income. At this time, the company plans to fully meet its obligations for the compensation and benefit plans in the same manner as it does today, using cash from operations.

### ACCUMULATED GAINS AND LOSSES NOT AFFECTING RETAINED EARNINGS\*\*

(dollars in millions)	Net Unrealized Gains on Cash Flow Hedge Derivatives	Foreign Currency Translation Adjustments	Minimum Pension Liability Adjustments	Net Unrealized Gains/(Losses) on Marketable Securities	Accumulated Gains/(Losses) Not Affecting Retained Earnings
January 1, 1999	\$ —	\$ 1,014	\$ (154)	\$ 51	\$ 911
Change for period	—	(549)	3	796	250
December 31, 1999	—	465	(151)	847	1,161
Change for period	—	(538)	7	(925)	(1,456)
December 31, 2000	—	(73)	(144)	(78)	(295)
Cumulative effect on January 1, 2001	219	—	—	—	219
Change for period	77	(539)	(216)	92	(586)
December 31, 2001	\$ 296	\$ (612)	\$ (360)	\$ 14	\$ (662)

\* Net of tax.

+ Reclassified to conform with 2001 presentation.

### Net Change in Unrealized Gains/(Losses) on Marketable Securities (net of tax)

(dollars in millions)	2001	2000
AT DECEMBER 31:		
Net unrealized losses arising during the period	\$ (154)	\$ (810)
Less net (losses)/gains included in net income for the period	(246)*	115
Net change in unrealized gains/(losses) on marketable securities	\$ 92	\$ (925)

\* Includes write-downs of \$287 million.

Unrealized losses arising in 2000 relate primarily to previous unrealized gains from original cost occurring in prior years.

## n Contingencies and Commitments

### 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, employment and environmental matters. The company is a defendant and/or third-party defendant in a number of cases in which claims have been filed by current and former employees, independent contractors, estate representatives, offspring and relatives of

employees seeking damages for wrongful death and personal injuries allegedly caused by exposure to chemicals in various of the company's facilities from 1964 to the present. The company believes that plaintiffs' claims are without merit and will defend itself vigorously.

While it is not possible to predict the ultimate outcome of the matters discussed above, the company believes that any losses associated with any of such matters will not have a material effect on the company's business, financial condition or results of operations.

### COMMITMENTS

The company has guaranteed certain loans and financial commitments. The approximate amount of these financial guarantees was \$218 million and \$388 million at December 31, 2001 and 2000, respectively.

The company extended lines of credit, of which the unused amounts were \$4,088 million and \$4,235 million at December 31, 2001 and 2000, respectively. A portion of these amounts was available to the company's dealers to support their working capital needs. In addition, the company committed to provide future financing to its customers in connection with customer purchase agreements for approximately \$269 million and \$129 million at December 31, 2001 and 2000, respectively.

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### o Taxes

(dollars in millions)	2001	2000	1999
<b>FOR THE YEAR ENDED DECEMBER 31:</b>			
Income before income taxes:			
U.S. operations	\$ 5,386	\$ 5,871	\$ 5,892
Non-U.S. operations	5,567	5,663	5,865
	<b>\$ 10,953</b>	<b>\$ 11,534</b>	<b>\$ 11,757</b>

The provision for income taxes by geographic operations is as follows:			
U.S. operations	\$ 1,455	\$ 1,692	\$ 2,005
Non-U.S. operations	1,775	1,749	2,040
Total provision for income taxes	<b>\$ 3,230</b>	<b>\$ 3,441</b>	<b>\$ 4,045</b>

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

(dollars in millions)	2001	2000	1999
<b>FOR THE YEAR ENDED DECEMBER 31:</b>			
U.S. federal:			
Current	\$ 348	\$ 613	\$ 1,759
Deferred	341	286	(427)
	<b>689</b>	<b>899</b>	<b>1,332</b>
U.S. state and local:			
Current	62	192	272
Deferred	155	47	7
	<b>217</b>	<b>239</b>	<b>279</b>
Non-U.S.:			
Current	2,162	2,607	2,727
Deferred	162	(304)	(293)
	<b>2,324</b>	<b>2,303</b>	<b>2,434</b>
Total provision for income taxes	<b>3,230</b>	<b>3,441</b>	<b>4,045</b>
Provision for social security, real estate, personal property and other taxes	<b>2,761</b>	<b>2,766</b>	<b>2,831</b>
Total provision for taxes	<b>\$ 5,991</b>	<b>\$ 6,207</b>	<b>\$ 6,876</b>

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 Consolidated Statement of Financial Position were as follows:

### Deferred Tax Assets

(dollars in millions)	AT DECEMBER 31:	2001	2000
Employee benefits		\$ 3,612	\$ 3,673
Alternative minimum tax credits		1,282	1,424
Bad debt, inventory and warranty reserves		907	953
Capitalized research and development		747	848
General business credits		700	655
Deferred income		656	837
Infrastructure reduction charges		466	617
Depreciation		386	376
Foreign tax loss carryforwards		325	489
Equity alliances		290	437
State and local tax loss carryforwards		238	246
Intracompany sales and services		127	149
Other		2,974	2,809
Gross deferred tax assets		<b>12,710</b>	13,513
Less: Valuation allowance		<b>581</b>	<b>572</b>
Net deferred tax assets		<b>\$ 12,129</b>	<b>\$ 12,941</b>

### Deferred Tax Liabilities

(dollars in millions)	AT DECEMBER 31:	2001	2000
Retirement benefits		\$ 3,977	\$ 3,447
Sales-type leases		2,159	2,450
Depreciation		971	1,179
Software costs deferred		318	306
Other		1,744	1,836
Gross deferred tax liabilities		<b>\$ 9,169</b>	<b>\$ 9,218</b>

The valuation allowance at December 31, 2001, 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:	2001	2000	1999
Statutory rate	35%	35%	35%
Foreign tax differential	(5)	(6)	(2)
State and local	1	1	1
Valuation allowance related items	—	(1)	—
Other	(1)	1	—
Effective rate	<b>30%</b>	<b>30%</b>	<b>34%</b>

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The company's effective rate will change year to year based on nonrecurring events (such as the sale of the Global Network business and various other actions in 1999) as well as recurring factors including the geographical mix of income before taxes, the timing and amount of foreign dividends, state and local taxes, and the interaction of various global tax strategies. In the normal course of business, the company expects that its effective rate will approximate 30 percent.

For tax return purposes, the company has available tax credit carryforwards of approximately \$2,092 million, of which \$1,282 million have an indefinite carryforward period and the remainder begin to expire in 2004. The company also has state and local, and foreign tax loss carryforwards, the tax effect of which is \$563 million. Most of these carryforwards are available for 5 years or have an indefinite carryforward period.

Undistributed earnings of non-U.S. subsidiaries included in consolidated retained earnings were \$16,851 million at December 31, 2001, \$15,472 million at December 31, 2000, and \$14,900 million at December 31, 1999. 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.

### **p Expense and Other Income**

#### SELLING, GENERAL AND ADMINISTRATIVE

Included in SG&A expense is advertising expense, which includes media, agency and promotional expenses, of \$1,615 million, \$1,746 million and \$1,758 million in 2001, 2000 and 1999, respectively. Workforce accruals for contractually obligated payments to employees terminated in the ongoing course of business were \$293 million, \$169 million and \$486 million in 2001, 2000 and 1999, respectively. The provision for bad debt expense in 2001, 2000 and 1999 was \$491 million, \$271 million and \$319 million, respectively.

In 1999, the \$4,057 million gain from the sale of the Global Network (see "Divestitures," on page 82 for additional information) was recorded as a reduction of SG&A expense and the cost of \$1,546 million for the 1999 actions described in note q, "1999 Actions," was included in SG&A expense.

#### RESEARCH, DEVELOPMENT AND ENGINEERING

Research, development and engineering expense was \$5,290 million in 2001, \$5,374 million in 2000 and \$5,505 million in 1999.

The company had expenses of \$4,620 million in 2001, \$4,568 million in 2000 and \$4,806 million in 1999 for 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 expenses were \$1,926 million, \$1,956 million and \$2,051 million in 2001,

2000 and 1999, respectively. Included in the expense for 2000 and 1999 are charges for acquired in-process research and development of \$9 million and \$111 million, respectively. See note c, "Acquisitions/Divestitures," on page 82 for further information about that expense.

Expenses for product-related engineering were \$670 million, \$806 million and \$699 million in 2001, 2000 and 1999, respectively.

#### INTELLECTUAL PROPERTY AND CUSTOM DEVELOPMENT INCOME

The company earned the following intellectual property-related income:

(dollars in millions)	2001	2000	1999
Sales and other transfers of intellectual property	\$ 736	\$ 915	\$ 628
Licensing/royalty-based fees	515	590	646
Custom development income	284	223	232
Total	<b>\$ 1,535</b>	<b>\$ 1,728</b>	<b>\$ 1,506</b>

#### OTHER INCOME AND EXPENSE

The company recorded interest income (other than from the company's Global Financing business) of \$178 million, \$310 million and \$416 million in 2001, 2000 and 1999, respectively. Net realized gains/(losses) from sales and other than temporary declines in market value of securities and other investments were \$(169) million, \$265 million and \$366 million in 2001, 2000 and 1999, respectively. Net realized gains from certain real estate activity were \$133 million, \$222 million and \$100 million in 2001, 2000 and 1999, respectively. Foreign currency transaction gains/(losses) amounted to \$198 million, \$140 million and \$(125) million in 2001, 2000 and 1999, respectively.

### **q 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 affected the Microelectronics Division (MD), the Storage Technology Division (STD)—previously known as the Storage Systems Division—and the Networking Hardware Division (NHD) of the company's Technology Group. The company completed these actions during 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 92.

The actions within MD addressed a prolonged, industry-wide downturn in memory chip prices that affected the

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results of the company's semiconductor business. They were 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 reduced its internal dynamic random access memory (DRAM) capacity by converting its manufacturing facility in Essonnes, France, from DRAM to custom logic. The company effected that conversion through a joint venture with Infineon Technologies, which at the time was 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 participated 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 assumed the company's interest in Dominion effective December 1, 2000. The company participated 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 was 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 and to cut back production. In the second quarter of 1999, the company accrued related costs associated with the MiCRUS operations. The liability created was primarily for lease termination charges for equipment under the MiCRUS operation. Since June 1999, related activities were under way and were completed in June 2000. The liabilities accrued in the second quarter of 1999 were utilized during the second quarter of 2000. In June 2000, the company sold its MiCRUS semiconductor operations to Philips Semiconductors, an affiliate of Royal Philips Electronics.

The company also announced aggressive steps intended to improve its competitive position in the markets that STD serves by merging server hard disk drive (HDD) product lines and realigning operations. The company integrated all server HDDs into a single low-cost design platform that uses common development and manufacturing processes. The company transferred manufacturing assembly and test operations to Hungary and Mexico and completed 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 by both existing and new customers deteriorated.

The following table identifies the significant components of the pre-tax charge related to the 1999 actions and the liability as of December 31, 2001 and 2000:

(dollars in millions)	Total Pre-Tax Charges*	Investments and Other Asset Write-Downs	Liability Created in 1999	Liability as of Dec. 31, 1999		Liability as of Dec. 31, 2000	
	Payments	Other Adjustments**	Payments	Other Adjustments**			
<b>Technology Group</b>							
<b>MD Actions:</b>							
DRAM							
Equipment <sup>(1)</sup>	\$ 662	\$ 662	\$ —	\$ —	\$ —	\$ —	\$ —
Employee terminations: <sup>(2)(8)</sup>							
Current	30	—	30	15	18	33	44
Non current	137	—	137	—	(21)	116	—
Dominion investment <sup>(3)</sup>	171	171	—	—	—	—	—
MiCRUS investment <sup>(4)</sup>	152	—	152	—	—	152	152
STD Actions:							
Equipment <sup>(5)</sup>	337	337	—	—	—	—	—
Employee terminations <sup>(6)</sup>	23	—	23	16	—	7	7
NHD Action:							
Inventory write-downs and contract cancellations <sup>(7)</sup>	178	178	—	—	—	—	—
<b>Total 1999 actions</b>	<b>\$ 1,690</b>	<b>\$ 1,348</b>	<b>\$ 342</b>	<b>\$ 31</b>	<b>\$ (3)</b>	<b>\$ 308</b>	<b>\$ 203</b>
							<b>\$ (4)</b>
							<b>\$ 101</b>

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(dollars in millions)	Liability as of Dec. 31, 2000	Payments	Other Adjustments**	Liability as of Dec. 31, 2001
<b>DRAM</b>				
Employee terminations: <sup>(2)(8)</sup>				
Current	\$ 15	\$ 14	\$ 12	\$ 13
Non current	86	—	(12)	74
Total 1999 actions	\$ 101	\$ 14	\$ —	\$ 87

\* With the exception of NHD inventory write-downs, all charges were recorded in SG&A expense. NHD inventory write-downs were recorded in Hardware cost.

\*\* Principally represents reclassification of non current to current and translation adjustments.

(1) Represents (a) the difference between net book value and fair value of assets that were contributed to a joint venture, (b) the book value of assets that were removed from service as a result of the MD actions and were scrapped during the second quarter of 1999 and (c) the difference between the net book value and the appraised fair value of test equipment that is subject to sale-leaseback agreements and that is being used and appropriately expensed.

(2) Workforce reductions that affected approximately 790 employees (455 direct manufacturing and 335 indirect manufacturing) in France. The workforce reductions were completed by the end of the first quarter of 2000.

(3) Write-off of investment in joint venture at the signing of the agreement with Toshiba Corporation.

(4) Acquisition of minority interest in MiCRUS and charges for equipment leasehold cancellation liabilities and lease rental payments for idle equipment. The MiCRUS semiconductor operation was sold to Philips Semiconductors during June 2000.

(5) Represents (a) the book value of assets that were removed from service as a result of the STD actions and were scrapped during the second and third quarters of 1999, (b) write-downs to fair value of equipment under contract for sale and delivery by December 1, 1999 (\$29 million), and March 31, 2000 (\$3 million), and (c) the difference between the net book value and the appraised fair value of equipment that is subject to sale-leaseback agreements and that is being used and appropriately expensed.

(6) Workforce reductions that affected approximately 900 employees (780 direct manufacturing and 120 indirect manufacturing) in the U.S. The workforce reductions were completed by the end of the first quarter of 2000.

(7) Write-down to net realizable value of inventory of router and switch products (\$144 million) and contract cancellation fees (\$34 million) related to deterioration in demand for router and switch products.

(8) The 2001 year-end and 2000 amounts are also disclosed in note I, "Other Liabilities," on pages 87 and 88.

## CHANGE IN ESTIMATE

As a result of a change in the estimated useful life of personal computers from five years to three years, the company recognized a charge in the second quarter of 1999 of \$404 million (\$241 million after tax, \$.13 per diluted common share). In the second quarter of 1999, the company wrote off the net book value of personal computers that were three

years old or older and, therefore, had no remaining useful life. The remaining book value of the assets will be depreciated over the remaining new useful life. The net effect on future operations is expected to be minimal as the increased depreciation due to the shorter life will be offset by the lower depreciable base attributable to the write-off of personal computers older than three years.

## r Earnings Per Share of Common Stock

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

FOR THE YEAR ENDED DECEMBER 31:	2001	2000	1999
Weighted-average number of shares on which earnings per share calculations are based:			
Basic	1,733,348,422	1,763,037,049	1,808,538,346
Add—incremental shares under stock compensation plans	36,595,476	46,750,030	59,344,849
Add—incremental shares associated with contingently issuable shares	1,277,222	2,331,343	3,190,717
Add—incremental shares associated with put options*	9,479	—	—
Assuming dilution	1,771,230,599	1,812,118,422	1,871,073,912

(dollars in millions except per share amounts)

Net income applicable to common stockholders (millions)	\$ 7,713	\$ 8,073	\$ 7,692
Less—net income applicable to contingently issuable shares (millions)	4	21	(11)
Net income on which diluted earnings per share is calculated (millions)	\$ 7,709	\$ 8,052	\$ 7,703

Earnings per share of common stock:

Assuming dilution	\$ 4.35	\$ 4.44	\$ 4.12
Basic	\$ 4.45	\$ 4.58	\$ 4.25

\* Represents short-term put option contracts sold by the company on a limited basis through private placements with independent third parties to reduce the cost of the share buy-back program. The put option contracts that were executed permitted net share settlement at the company's option and did not result in a put option liability on the Consolidated Statement of Financial Position. At December 31, 2001, the company did not have any put option obligations outstanding.

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Stock options to purchase 67,596,737 common shares in 2001, 34,633,343 common shares in 2000 and 27,355,056 common shares in 1999 were outstanding, but were not included in the computation of diluted earnings per share because the exercise price of the options was greater than the average market price of the common shares and, therefore, the effect would have been antidilutive. Net income applicable to common stockholders excludes preferred stock dividends of \$10 million in 2001 and \$20 million in both 2000 and 1999.

These amounts reflect activities primarily related to office space as well as to manufacturing equipment.

(dollars in millions)	2002	2003	2004	2005	2006	Beyond 2006
Gross rental commitments	\$ 1,378	\$ 1,129	\$ 798	\$ 625	\$ 437	\$ 1,367
Vacant space	\$ 121	\$ 75	\$ 47	\$ 42	\$ 25	\$ 90
Sublease income commitments	\$ 58	\$ 32	\$ 25	\$ 19	\$ 13	\$ 36

### **t Stock-Based Compensation Plans**

The company applies Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees," 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 PLANS

Incentive awards are provided to employees under the terms of the company's Long-Term Performance Plans ("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.

### **s Rental Expense and Lease Commitments**

Rental expense, including amounts charged to inventories and fixed assets and excluding amounts previously reserved, was \$1,349 million in 2001, \$1,366 million in 2000 and \$1,397 million in 1999. The table below depicts gross minimum rental commitments under noncancelable leases, amounts related to vacant space associated with infrastructure reduction and restructuring actions taken through 1993 (previously reserved), and sublease income commitments.

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 Plans is 231.6 million. There were 193.4 million and 121.9 million unused shares available to be granted under the Plans at December 31, 2001 and 2000, respectively. Awards under the Plans resulted in compensation expense of \$169.8 million, \$134.0 million and \$267.3 million in 2001, 2000 and 1999, respectively.

#### *Stock Option Grants*

Stock options are granted to employees at an exercise price equal to the fair market value of the company's stock at the date of grant. Generally, options vest 25 percent per year, are fully vested four years from the grant date and have a term of ten years.

The following tables summarize option activity under the Plans during 2001, 2000 and 1999:

	2001		2000		1999	
	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	\$ 73	<b>160,557,003</b>	\$ 60	146,136,523	\$ 36	131,443,850
Options granted	<b>110</b>	<b>43,410,364</b>	102	42,601,014	115	42,786,845
Options exercised	37	<b>(20,354,701)</b>	35	(18,243,347)	28	(23,160,228)
Options canceled/expired	<b>100</b>	<b>(5,656,176)</b>	87	(9,937,187)	61	(4,933,944)
Balance at December 31	<b>\$ 85</b>	<b>177,956,490</b>	\$ 73	160,557,003	\$ 60	146,136,523
Exercisable at December 31	<b>\$ 62</b>	<b>80,773,980</b>	\$ 45	66,599,878	\$ 29	51,599,735

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The shares under option at December 31, 2001, were in the following exercise price ranges:

Exercise Price Range	Options Outstanding			Options Currently Exercisable	
	Wtd. Avg. Exercise Price	No. of Options	Wtd. Avg. Remaining Contractual Life (in years)	Wtd. Avg. Exercise Price	No. of Options
\$ 12—50	\$ 28	35,220,555	4	\$ 28	34,918,554
\$ 51—90	63	38,048,214	6	60	24,215,708
\$ 91—110	104	53,168,401	9	105	9,934,212
\$ 111 and over	122	51,519,320	9	131	11,705,506
	\$ 85	177,956,490	7	\$ 62	80,773,980

### 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. Effective July 1, 2000, ESPP was amended whereby the share price paid by an employee changed from 85 percent of the average market price on the last business day of each pay period, to the lesser of 85 percent of the average market price on the first business day of each offering period or 85 percent of the average market price on the last business day of each pay period. The current plan provides semi-annual offerings over the five-year period commencing July 1, 2000. ESPP participants are restricted from purchasing more than \$25,000 of common stock in one calendar year or 1,000 shares in an offering period. This change is not

expected to have a significant effect on the company's financial condition. Approximately 16.5 million, 26.3 million and 57.3 million reserved unissued shares were available for purchase under ESPP at December 31, 2001, 2000 and 1999, respectively.

### PRO FORMA DISCLOSURE

In accordance with APB Opinion No. 25, the company does not recognize expense for stock options granted under the Plans or for employee stock purchases under the ESPP. SFAS No. 123, "Accounting for Stock-Based Compensation," requires a company to determine the fair market value of all awards of stock-based compensation at the grant date and to disclose pro forma net income and earnings per share as if the resulting stock-based compensation amounts were recorded in the Consolidated Statement of Earnings.

The table below presents these pro forma disclosures:

(dollars in millions except per share amounts)	2001		2000		1999	
	As Reported	Pro Forma	As Reported	Pro Forma	As Reported	Pro Forma
Net income applicable to common stockholders	\$ 7,713	\$ 6,474	\$ 8,073	\$ 7,183	\$ 7,692	\$ 7,044
Earnings per share of common stock:						
Assuming dilution	\$ 4.35	\$ 3.69	\$ 4.44	\$ 3.99	\$ 4.12	\$ 3.78
Basic	\$ 4.45	\$ 3.74	\$ 4.58	\$ 4.07	\$ 4.25	\$ 3.89

The pro forma amounts that are disclosed in accordance with SFAS No. 123 reflect the portion of the estimated fair value of awards that was earned for the years ended December 31, 2001, 2000 and 1999.

The fair market value of stock option grants is estimated using the Black-Scholes option-pricing model with the following assumptions:

	2001	2000	1999
Term (years)*	4/5	4/5	5/6
Volatility**	37.7%	32.0%	27.3%
Risk-free interest rate (zero coupon U.S. treasury note)	4.4%	5.1%	6.6%
Dividend yield	0.5%	0.5%	0.4%
Weighted-average fair value per option	\$ 42	\$ 36	\$ 46

\* Option term is 4 years for tax incentive options and 5 years for non-tax incentive options for the years ended December 31, 2001 and 2000. Option term is 5 years for tax incentive options and 6 years for non-tax incentive options for the year ended December 31, 1999.

\*\* To determine volatility, the company measured the daily price changes of the stock over the respective term for tax incentive options and non-tax incentive options.

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### u Retirement-Related Benefits

IBM offers defined benefit pension plans, defined contribution pension plans and nonpension postretirement plans, primarily consisting of retiree medical benefits. These benefits form an important part of the company's total compensation and benefits program that is designed to attract and retain highly skilled and talented employees. The following table provides the total retirement-related benefit plans impact on income before income taxes.

(dollars in millions)	U.S.			Non-U.S.			Total		
	2001	2000	1999	2001	2000	1999	2001	2000	1999
Total retirement-related plans—(income)/cost	\$(256)	\$(156)	\$ 47	\$(181)	\$(171)	\$ 36	\$(437)	\$(327)	\$ 83
<b>Comprises:</b>									
Defined benefit and contribution pension plans	\$(632)	\$(530)	\$(295)	\$(209)	\$(198)	\$ 7	\$(841)	\$(728)	\$(288)
Nonpension postretirement benefits	376	374	342	28	27	29	404	401	371

See Management Discussion on pages 62 and 63 for additional discussion regarding the company's retirement-related benefits. Also see note a, "Significant Accounting Policies," pages 76 and 77 for the company's accounting policy regarding retirement-related benefits.

#### DEFINED BENEFIT AND DEFINED CONTRIBUTION PLANS

The company and its subsidiaries have defined benefit and defined contribution pension plans that cover substantially all regular employees, and supplemental retirement plans that cover certain executives.

##### U.S. Plans

IBM provides U.S. regular, full-time and part-time employees with a noncontributory plan that is funded by company contributions to an irrevocable trust fund, which is held for the sole benefit of participants.

Effective January 1, 2001, the company increased pension benefits to certain recipients who retired before January 1, 1997. The increases range from 2.5 percent to 25 percent, and are based on the year of retirement and the pension benefit currently being received. This improvement resulted in an additional cost to the company of approximately \$100 million in 2001.

Effective July 1, 1999, the company amended the IBM Retirement Plan to establish the IBM Personal Pension Plan (PPP). The new plan establishes a new formula for determining pension benefits for many of the company's employees. Under the amended PPP, a new formula was created whereby retirement benefits are credited to each employee's cash balance account monthly based on a percentage of the employee's pensionable compensation. Employees who were retirement eligible or within five years

of retirement eligibility with at least one year of service, or who were at least forty years of age with at least ten years of service as of June 30, 1999, could elect to participate under the new formula or to have their service and earnings credit accrue under the preexisting benefit formula. Benefits become vested on the completion of five years of service under either formula.

The number of individuals receiving benefits from the PPP at December 31, 2001 and 2000, was 131,071 and 129,290, respectively. Net periodic pension income for this plan for the years ended December 31, 2001, 2000 and 1999, was \$1,025 million, \$896 million and \$638 million, respectively. Although these pension income amounts represent a contribution to the company's income before income taxes, these amounts are partially offset by the costs of the company's other retirement-related plans (see table above). Moreover, these amounts have positive implications for the company's employees, retirees and shareholders. The returns that the fund has experienced over time have resulted in these benefits. Therefore, despite the recent downturn in the equity and financial markets, the trust funds continued to provide the capacity to meet their obligations to current and future retirees.

U.S. regular, full-time and part-time employees are eligible to participate in the Tax Deferred Savings Plan 401(k) (TDSP), which is a qualified voluntary defined contribution plan. The company matches 50 percent of the employee's contribution up to the first 6 percent of the employee's compensation. All contributions, including the company match, are made in cash in accordance with the participants' investment elections. There are no minimum amounts that must be invested in

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company stock. The total cost of all of the company's U.S. defined contribution plans was \$313 million, \$294 million and \$275 million for the years ended December 31, 2001, 2000 and 1999, respectively.

### *Non-U.S. Plans*

Most subsidiaries and branches outside the U.S. have defined benefit and/or defined contribution retirement plans that cover substantially all regular employees, under which the company deposits funds under various fiduciary-type arrangements, purchases annuities under group contracts or provides reserves. Benefits under the defined benefit plans are typically based on years of service and the employee's compensation, generally during a fixed number of years immediately before retirement. The ranges of assumptions that are used for the non-U.S. defined benefit plans reflect the different economic environments within various countries. The total non-U.S. retirement plan (income)/cost of these plans for the years ended December 31, 2001, 2000 and 1999, was \$(209) million, \$(198) million and \$7 million, respectively.

### *(Income)/Cost of Pension Plans:*

(dollars in millions)	U.S. Plans			Non-U.S. Plans		
	2001	2000	1999	2001	2000	1999
Service cost	\$ 613	\$ 563	\$ 566	\$ 429	\$ 445	\$ 475
Interest cost	2,624	2,553	2,404	1,214	1,234	1,282
Expected return on plan assets	(4,202)	(3,902)	(3,463)	(2,062)	(2,042)	(1,937)
Amortization of transition assets	(140)	(141)	(140)	(10)	(10)	(11)
Amortization of prior service cost	80	31	(21)	28	24	25
Recognized actuarial losses/(gains)	—	—	16	(12)	4	28
Settlement gains	—	—	—	(12)	(25)	(23)
Net periodic pension income—U.S. Plan and material non-U.S. Plans	\$ (1,025)	\$ (896)	\$ (638)	\$ (425)	\$ (370)	\$ (161)
Cost of other defined benefit plans	80	72	68	54	23	37
Total net periodic pension income for all defined benefit plans	\$ (945)	\$ (824)	\$ (570)	\$ (371)	\$ (347)	\$ (124)
Cost of defined contribution plans	\$ 313	\$ 294	\$ 275	\$ 162	\$ 149	\$ 131
Total retirement plan (income)/cost recognized in the Consolidated Statement of Earnings	\$ (632)	\$ (530)	\$ (295)	\$ (209)	\$ (198)	\$ 7

See beginning of note u, "Retirement-Related Benefits," on page 96 for the company's total retirement-related benefits (income)/cost.

### *U.S. Supplemental Executive Retention Plan*

The company also has a non qualified U.S. Supplemental Executive Retention Plan (SERP). The SERP, which is unfunded, provides defined pension benefits outside the IBM Retirement Plan to eligible executives, based on average earnings, years of service and age at retirement. Effective July 1, 1999, the company adopted the Supplemental Executive Retention Plan (which replaced the previous Supplemental Executive Retirement Plan). Some participants of the pre-existing SERP will still be eligible for benefits under that plan, but will not be eligible for the new plan. The total cost of this plan for the years ended December 31, 2001, 2000 and 1999, was \$23 million, \$24 million and \$30 million, respectively. These amounts are reflected in Cost of other defined benefit plans below. At December 31, 2001 and 2000, the projected benefit obligation was \$166 million and \$163 million, respectively, and the amounts included in Other liabilities in the Consolidated Statement of Financial Position were pension liabilities of \$151 million and \$131 million, respectively.

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The changes in the benefit obligations and plan assets of the U.S. and significant non-U.S. defined benefit plans for 2001 and 2000 were as follows:

(dollars in millions)	U.S. Plan		Non-U.S. Plans	
	2001	2000	2001	2000
<b>Change in benefit obligation:</b>				
Benefit obligation at beginning of year	\$ 37,539	\$ 34,434	\$ 21,150	\$ 21,770
Service cost	613	563	429	445
Interest cost	2,624	2,553	1,214	1,234
Plan participants' contributions	—	—	27	28
Acquisitions/divestitures, net	(29)	36	22	(65)
Amendments	—	645	8	63
Actuarial losses	457	1,729	1,101	243
Benefits paid from trust	(2,595)	(2,421)	(748)	(728)
Direct benefit payments	—	—	(198)	(218)
Foreign exchange impact	—	—	(1,184)	(1,626)
Plan curtailments/settlements/termination benefits	—	—	(20)	4
<b>Benefit obligation at end of year</b>	<b>38,609</b>	<b>37,539</b>	<b>21,801</b>	<b>21,150</b>
<b>Change in plan assets:</b>				
Fair value of plan assets at beginning of year	44,594	45,584	24,833	27,843
Actual return on plan assets	(2,405)	1,395	(1,559)	(196)
Employer contribution	—	—	417	66
Acquisitions/divestitures, net	(29)	36	—	(50)
Plan participants' contributions	—	—	27	28
Benefits paid from trust	(2,595)	(2,421)	(748)	(728)
Foreign exchange impact	—	—	(1,376)	(2,015)
Settlements	—	—	(63)	(115)
<b>Fair value of plan assets at end of year</b>	<b>39,565</b>	<b>44,594</b>	<b>21,531</b>	<b>24,833</b>
Fair value of plan assets in excess of benefit obligation	956	7,055	(270)	3,683
Unrecognized net actuarial losses/(gains)	4,297	(2,768)	2,871	(1,860)
Unrecognized prior service costs	803	883	140	168
Unrecognized net transition asset	(351)	(491)	(42)	(56)
Adjustment to recognize non-U.S. minimum liability	—	—	(462)	(90)
<b>Net prepaid pension asset recognized in the Consolidated Statement of Financial Position</b>	<b>\$ 5,705</b>	<b>\$ 4,679</b>	<b>\$ 2,237</b>	<b>\$ 1,845</b>

Actuarial assumptions used to determine costs and benefit obligations for principal pension plans follow:

WEIGHTED-AVERAGE ACTUARIAL ASSUMPTIONS AS OF DECEMBER 31:	U.S. Plan			Non-U.S. Plans		
	2001	2000	1999	2001	2000	1999
Discount rate	7.0%	7.25%	7.75%	4.5-7.1%	4.5-7.1%	4.5-7.3%
Expected return on plan assets	10.0%	10.0%	9.5%	5.0-10.0%	5.0-11.0%	6.0-10.5%
Rate of compensation increase	6.0%	6.0%	6.0%	2.0-6.1%	2.6-6.1%	2.6-6.1%

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The company evaluates its actuarial assumptions on an annual basis and considers changes in these long-term factors based upon market conditions and the requirements of SFAS No. 87, "Employers' Accounting for Pensions."

The change in the discount rate for the 2001 U.S. plan year had an effect of an additional \$9 million of net retirement plan cost for the year ended December 31, 2001. The change in expected return on plan assets and the discount rate for the 2000 U.S. plan year had an effect of an additional \$195 million and \$26 million of net retirement plan income, respectively, for the year ended December 31, 2000. This compares with an additional \$46 million and \$65 million of net retirement plan cost for the year ended December 31, 1999, as a result of plan year 1999 changes in the rate of compensation increase and the discount rate, respectively.

### *Funding Policy*

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 local tax laws. From time to time, the company contributes additional amounts as it deems appropriate. 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.

### *Other*

As described earlier in this note, the company provides defined benefit pension plans in a number of countries. Page 98 includes an aggregation of the significant non-U.S. plans. SFAS No. 132, "Employers' Disclosures about Pensions and Other Postretirement Benefits," requires that companies disclose the aggregate benefit obligation (BO) and plan assets of all plans in which the BO exceeds plan assets. Similar disclosure is required for all plans in which the accumulated benefit obligation (ABO) exceeds plan assets. BO reflects the present value of the pension obligation assuming salary increases and is included in the table on the top of page 98. The ABO reflects this obligation based upon current salary levels (i.e., no salary increases). Accordingly, the ABO is a subset of the BO and the plans listed under the Plans with an ABO in excess of plan assets are also included in the amounts for Plans with a BO in excess of plan assets. The aggregate

BO and plan assets are also disclosed for plans in which the plan assets exceed the BO.

(dollars in millions)	2001		2000	
	Benefit Obligation	Plan Assets	Benefit Obligation	Plan Assets
Plans with BO in excess of plan assets	\$ 12,358	\$ 10,929	\$ 4,209	\$ 3,919
Plans with ABO in excess of plan assets	\$ 3,041	\$ 2,636	\$ 530	\$ 400
Plans with assets in excess of BO	\$ 9,443	\$ 10,602	\$ 16,941	\$ 20,915

### **NONPENSION POSTRETIREMENT BENEFITS**

The total cost of the company's nonpension postretirement benefits for the years ended December 31, 2001, 2000 and 1999, were \$404 million, \$401 million and \$371 million, respectively. The company has a defined benefit postretirement plan that provides medical, dental and life insurance for U.S. retirees and eligible dependents. The total cost of this plan for the years ended December 31, 2001, 2000 and 1999, was \$376 million, \$374 million and \$342 million, respectively. Effective July 1, 1999, the company established a "Future Health Account (FHA) Plan" for employees who were more than five years away from retirement eligibility. Employees who were within five years of retirement eligibility are covered under the company's prior retiree health benefits plan. Under either the FHA or the preexisting plan, there is a maximum cost to the company for retiree health care. For employees who retired before January 1, 1992, that maximum became effective in 2001. For all other employees, the maximum is effective upon retirement.

Certain of the company's non-U.S. subsidiaries have similar plans for retirees. However, most of the retirees outside the U.S. are covered by government-sponsored and administered programs. The total cost of these plans for the years ended December 31, 2001, 2000 and 1999, was \$28 million, \$27 million and \$29 million, respectively. At December 31, 2001 and 2000, Other liabilities in the Consolidated Statement of Financial Position include non-U.S. postretirement benefit liabilities of \$200 million and \$208 million, respectively.

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

(dollars in millions)	2001	2000	1999
Service cost	\$ 65	\$ 50	\$ 48
Interest cost	437	449	424
Expected return on plan assets	—	(2)	(6)
Amortization of prior service costs	(148)	(147)	(143)
Recognized actuarial losses	22	24	19
<b>Net periodic post-retirement benefit cost</b>	<b>\$ 376</b>	<b>\$ 374</b>	<b>\$ 342</b>

The changes in the benefit obligation and plan assets of the U.S. plan for 2001 and 2000 are as follows:

(dollars in millions)	2001	2000*
<b>Change in benefit obligation:</b>		
Benefit obligation at beginning of year	\$ 6,443	\$ 6,178
Service cost	65	50
Interest cost	437	449
Actuarial (gains)/losses	(183)	363
Participant contributions	71	23
Benefits paid from trust	(68)	(110)
Direct benefit payments	(617)	(510)
<b>Benefit obligation at end of year</b>	<b>6,148</b>	<b>6,443</b>
<b>Change in plan assets:</b>		
Fair value of plan assets at beginning of year	4	105
Actual return on plan assets	1	(14)
Participant contributions	71	23
Benefits paid	(68)	(110)
<b>Fair value of plan assets at end of year</b>	<b>8</b>	<b>4</b>
<b>Benefit obligation in excess of plan assets</b>		
Unrecognized net actuarial losses	781	986
Unrecognized prior service costs	(653)	(801)
<b>Accrued postretirement benefit liability recognized in the Consolidated Statement of Financial Position</b>	<b>\$ (6,012)</b>	<b>\$ (6,254)</b>

\* Reclassified to conform with 2001 presentation.

The plan assets primarily comprise short-term fixed-income investments.

The benefit obligation was determined by applying 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 include a projected health care cost trend rate of 6 percent. The projected health care cost trend rate assumption is projected to increase to 10 percent in 2002, and is assumed to decrease gradually to 5 percent by 2007 and remain constant thereafter.

### WEIGHTED-AVERAGE ACTUARIAL ASSUMPTIONS

#### FOR NON-PENSION POSTRETIREMENT BENEFIT PLANS AS OF DECEMBER 31:

	2001	2000	1999
Discount rate	7.00%	7.25%	7.75%
Expected return on plan assets	5.0%	5.0%	5.0%

The company evaluates its actuarial assumptions on an annual basis and considers changes in these long-term factors based upon market conditions and the requirements of SFAS No. 106, "Employers' Accounting for Postretirement Benefits Other Than Pensions." The discount rate changes did not have a material effect on net postretirement benefit cost for the years ended December 31, 2001, 2000 and 1999.

The health care cost trend rate has an insignificant effect on plan costs and obligations. A one-percentage-point change in the assumed health care cost trend rate would have the following effects at December 31, 2001:

(dollars in millions)	One-Percentage-Point Increase	One-Percentage-Point Decrease
Effect on total service and interest cost	\$ 6	\$ (6)
Effect on postretirement benefit obligation	\$ 24	\$ (29)

### v Segment Information

IBM uses advanced I/T to provide customer solutions. The company operates primarily in a single industry using several segments that create value by offering a variety of solutions that include, either singularly or in some combination, technologies, systems, products, services and financing.

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

The Global Services segment is the world's largest I/T services provider, supporting computer hardware and software products and providing professional services to help customers of all sizes realize the full value of I/T. The segment provides value through three primary lines of business: Strategic Outsourcing Services, BIS and Integrated Technology Services. Strategic Outsourcing Services creates business value through long-term strategic partnerships with

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customers by taking on responsibility for their processes and systems. BIS provides business/industry consulting and end-to-end e-business implementation of such offerings as Supply Chain Management, Customer Relationship Management, Enterprise Resource Planning and Business Intelligence. Integrated Technology Services offers customers a single I/T partner to manage multivendor I/T systems' complexity in today's e-business environment including such traditional offerings as Product Support, Business Recovery Services, Site and Connectivity Services, and Systems Management and Networking Services. Learning Services supports the three primary lines of business and helps customers design, develop and deploy curricula to educate their employees. The Global Services segment is uniquely suited to integrate the full range of the company's and key industry participants' capabilities, including hardware, software, services and research.

The Enterprise Systems segment produces powerful multipurpose computer servers that operate many open-network-based applications simultaneously for multiple users. 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. Brands include the zSeries mainframe servers, the heart of the e-business infrastructure for mission-critical data and transaction processing, the pSeries servers, the most powerful technologically advanced UNIX servers, the iSeries mid-range servers, integrated mid-range business servers that run sophisticated business applications and the Intel-based xSeries servers. The segment also includes system-level product businesses such as the company's disk storage products, including the Enterprise Storage Server known as "Shark," tape subsystems and the company's storage area networking products.

In the first quarter of 2001, the company reorganized the Personal Systems segment and renamed it the Personal and Printing Systems segment. In accordance with the organizational change, the company transferred the Printing Systems Division from the Technology segment to the Personal and Printing Systems segment. In addition, the xSeries (Intel-based) servers were transferred to the Enterprise Systems segment from the Personal Systems segment. The Personal and Printing Systems segment produces general-purpose computer systems, advanced function printers, and point-of-sale solutions. Major business units include Personal Computers, Retail Store Solutions, and Printing Systems. Major brands include ThinkPad mobile systems and NetVista.

The Technology segment provides components such as semiconductors and HDDs for use in the company's products and for sale to original equipment manufacturers

(OEM). Major business units include Microelectronics and Storage Technology.

The Software segment delivers operating systems for the company's servers and e-business enabling software (middleware) for IBM and non-IBM platforms. The segment's business offerings align with key customer opportunity areas—transformation and integration, leveraging information, organizational effectiveness and managing technology. In addition to its own development, product and marketing effort, the segment supports 56,000 business partners to ensure that the company's software and hardware offerings are included in their solutions.

The Global Financing segment is the world's largest provider of financing services for I/T. The segment provides lease and loan financing that enables the company's customers to acquire complete I/T and e-business solutions—hardware, software and services—provided by the company and its business partners. Global Financing, as a reliable source of capital for the distribution channel, also provides the company's business partners with customized commercial financing for inventory, accounts receivable and term loans, helping them manage their cash flow, invest in infrastructure and grow their business. Global Financing also selectively participates in syndicated loan activities.

The Enterprise Investments segment provides industry-specific I/T solutions, supporting the Hardware, Software and Global 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. Enterprise Investments revenue is primarily derived from the sale of software products.

Segment revenue and pre-tax income include transactions between the segments that are intended to reflect an arm's-length transfer price. Specifically, semiconductors and HDDs are sourced internally from the Technology segment for use in the manufacture of the Enterprise Systems segment and Personal and Printing Systems segment products. In addition, technology, hardware and software that are used by the Global Services segment in outsourcing engagements are mostly sourced internally from the Enterprise Systems, Personal and Printing Systems and Software segments. For the internal use of I/T 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. Generally, all internal transaction prices are reviewed and reset annually if appropriate.

The company uses shared-resources concepts to realize economies of scale and efficient use of resources. Thus, a

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considerable 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., headcount. When a clear and measurable driver cannot be identified, shared expenses are allocated on a financial basis that is consistent with the company's management system; e.g., image advertising is allocated based on the gross profit of the segments. The unallocated corporate amounts arising from certain acquisitions, indirect infrastructure reductions and certain intellectual property income are recorded in net income but 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. Different amounts could result if actuarial assumptions that are unique to the 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. The results for 2000 and 1999 have been reclassified to reflect the organizational changes and product transfers made in 2001.

### *Management System Segment View*

(dollars in millions)	Hardware								Total Segments	
	Global Services	Enterprise Systems	Personal and Printing Systems		Technology	Software	Global Financing	Enterprise Investments		
			Technology	Software						
<b>2001:</b>										
External revenue	\$ 34,956	\$ 13,743	\$ 11,982	\$ 7,970	\$ 12,939	\$ 3,407	\$ 1,118	\$ 86,115		
Internal revenue	2,647	710	73	2,325	981	836	4	7,576		
<b>Total revenue</b>	<b>\$ 37,603</b>	<b>\$ 14,453</b>	<b>\$ 12,055</b>	<b>\$ 10,295</b>	<b>\$ 13,920</b>	<b>\$ 4,243</b>	<b>\$ 1,122</b>	<b>\$ 93,691</b>		
<b>Pre-tax income/(loss)</b>	<b>\$ 5,161</b>	<b>\$ 1,830</b>	<b>\$ (153)</b>	<b>\$ (374)</b>	<b>\$ 3,168</b>	<b>\$ 1,143</b>	<b>\$ (317)</b>	<b>\$ 10,458</b>		
Revenue year-to-year change	5.7%	(2.6)%	(20.5)%	(10.7)%	3.7%	(4.5)%	(18.2)%	(2.8)%		
Pre-tax income year-to-year change	14.3%	(4.8)%	(251.5)%	(155.1)%	13.4%	(2.8)%	(6.7)%	(4.0)%		
Pre-tax income margin	13.7%	12.7%	(1.3)%	(3.6)%	22.8%	26.9%	(28.3)%	11.2%		
<b>2000*:</b>										
External revenue	\$ 33,152	\$ 14,194	\$ 15,098	\$ 8,519	\$ 12,598	\$ 3,500	\$ 1,369	\$ 88,430		
Internal revenue	2,439	649	70	3,007	828	944	3	7,940		
<b>Total revenue</b>	<b>\$ 35,591</b>	<b>\$ 14,843</b>	<b>\$ 15,168</b>	<b>\$ 11,526</b>	<b>\$ 13,426</b>	<b>\$ 4,444</b>	<b>\$ 1,372</b>	<b>\$ 96,370</b>		
<b>Pre-tax income/(loss)</b>	<b>\$ 4,517</b>	<b>\$ 1,922</b>	<b>\$ 101</b>	<b>\$ 679</b>	<b>\$ 2,793</b>	<b>\$ 1,176</b>	<b>\$ (297)</b>	<b>\$ 10,891</b>		
Revenue year-to-year change	2.2%	3.1%	(3.0)%	(2.3)%	0.0%	9.6%	(17.8)%	0.6%		
Pre-tax income year-to-year change	1.2%	21.3%	304.0%	51.2%	(9.9)%	12.3%	57.4%	9.2%		
Pre-tax income margin	12.7%	12.9%	0.7%	5.9%	20.8%	26.5%	(21.6)%	11.3%		
<b>1999*:</b>										
External revenue	\$ 32,172	\$ 13,834	\$ 15,593	\$ 8,026	\$ 12,662	\$ 3,219	\$ 1,651	\$ 87,157		
Internal revenue	2,636	568	45	3,774	767	835	19	8,644		
<b>Total revenue</b>	<b>\$ 34,808</b>	<b>\$ 14,402</b>	<b>\$ 15,638</b>	<b>\$ 11,800</b>	<b>\$ 13,429</b>	<b>\$ 4,054</b>	<b>\$ 1,670</b>	<b>\$ 95,801</b>		
<b>Pre-tax income/(loss)</b>	<b>\$ 4,464</b>	<b>\$ 1,584</b>	<b>\$ 25</b>	<b>\$ 449</b>	<b>\$ 3,099</b>	<b>\$ 1,047</b>	<b>\$ (697)</b>	<b>\$ 9,971</b>		
Pre-tax income margin	12.8%	11.0%	0.2%	3.8%	23.1%	25.8%	(41.7)%	10.4%		

\* Reclassified to conform with 2001 presentation.

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### RECONCILIATIONS TO IBM AS REPORTED

(dollars in millions)	2001	2000	1999
<b>REVENUE:</b>			
Total reportable segments	<b>\$ 93,691</b>	\$ 96,370	\$ 95,801
Other revenue and adjustments	(249)	(34)	391
Elimination of internal revenue	(7,576)	(7,940)	(8,644)
Total IBM consolidated	<b>\$ 85,866</b>	\$ 88,396	\$ 87,548
(dollars in millions)	2001	2000	1999
<b>PRE-TAX INCOME:</b>			
Total reportable segments	<b>\$ 10,458</b>	\$ 10,891	\$ 9,971
Elimination of internal transactions	108	62	(47)
Sale of Global Network	—	—	4,057
1999 actions	—	—	(2,205)
Unallocated corporate amounts	387	581	(19)
Total IBM consolidated	<b>\$ 10,953</b>	\$ 11,534	\$ 11,757

### 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 that are attributable to the segments do not have a significant effect on the financial position or the financial results of the segments.

### SEGMENT ASSETS AND OTHER ITEMS

The Global Services assets primarily are accounts receivable, maintenance inventory, and plant, property and equipment including those associated with the segment's outsourcing business. The assets of the Hardware segments primarily are inventory and plant, property and equipment. The Software segment assets mainly are plant, property and equipment, and investment in capitalized software.

To accomplish the efficient use of the company's space and equipment, it usually is necessary 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 is not allocated to each user segment. This is consistent with the company's management system and is reflected accordingly in the schedule on page 104. In those cases, there will not be a precise correlation between segment pre-tax income and segment assets.

Similarly, the depreciation amounts reported by each segment are based on the assigned landlord ownership and may not be consistent with the amounts that are included in the segments' pre-tax income. The amounts that are included in pre-tax income reflect occupancy charges from the landlord segment and are not specifically identified by the management reporting system.

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

The Global Financing segment amounts on page 104 for Interest income and Cost of Global Financing interest expense reflect the interest income and interest expense associated with the Global Financing business, as well as the income from the investment in cash and marketable securities. The reconciliation and explanation of the difference between Cost of Global Financing and Interest expense for segment presentation versus presentation on the Statement of Consolidated Earnings are included on pages 66 and 67 of the Management Discussion.

The segment information for 2000 and 1999 has been reclassified to reflect the organizational changes and product transfers between the segments in 2001.

## Notes to Consolidated Financial Statements

**INTERNATIONAL BUSINESS MACHINES CORPORATION**  
*and Subsidiary Companies*

### *Management System Segment View*

(dollars in millions)	Hardware								Total Segments
	Global Services	Enterprise Systems	Personal and Printing Systems	Technology	Software	Global Financing	Enterprise Investments		
<b>2001:</b>									
Assets	\$ 10,340	\$ 3,208	\$ 1,904	\$ 9,136	\$ 3,356	\$ 36,670	\$ 106	\$ 64,720	
Depreciation/amortization	1,219	308	131	1,105	782	2,476	8	6,029	
Capital expenditures/ investment in software	1,519	390	128	1,855	839	3,143	7	7,881	
Interest income	—	—	—	—	—	2,941	—	2,941	
Cost of Global Financing interest expense	—	—	—	—	—	1,140	—	1,140	
<b>2000*:</b>									
Assets	\$ 10,492	\$ 3,451	\$ 2,448	\$ 9,316	\$ 2,488	\$ 40,822	\$ 246	\$ 69,263	
Depreciation/amortization	1,243	425	154	1,060	665	2,696	12	6,255	
Capital expenditures/ investment in software	1,311	325	180	1,744	770	2,898	9	7,237	
Interest income	—	—	—	—	—	3,051	—	3,051	
Cost of Global Financing interest expense	—	—	—	—	—	1,319	—	1,319	
<b>1999*:</b>									
Assets	\$ 9,312	\$ 3,788	\$ 1,691	\$ 9,187	\$ 2,527	\$ 39,686	\$ 369	\$ 66,560	
Depreciation/amortization	1,259	234	149	2,077	576	2,976	15	7,286	
Capital expenditures/ investment in software	1,292	363	163	1,792	656	3,217	12	7,495	
Interest income	—	—	—	—	—	2,961	—	2,961	
Cost of Global Financing interest expense	—	—	—	—	—	1,232	—	1,232	

\* Reclassified to conform with 2001 presentation.

### **RECONCILIATIONS TO IBM AS REPORTED**

(dollars in millions)	2001	2000	1999
<b>Assets:</b>			
Total reportable segments	\$ 64,720	\$ 69,263	\$ 66,560
Elimination of internal transactions	(4,884)	(5,300)	(5,776)
<b>Unallocated amounts:</b>			
Cash and marketable securities	5,313	2,268	4,563
Notes and accounts receivable	2,810	3,145	2,658
Deferred tax assets	4,624	5,498	5,428
Plant, other property and equipment	3,260	3,798	4,161
Pension assets	9,408	6,809	5,636
Other	3,062	2,868	4,265
<b>Total IBM consolidated</b>	<b>\$ 88,313</b>	<b>\$ 88,349</b>	<b>\$ 87,495</b>

## Notes to Consolidated Financial Statements

**INTERNATIONAL BUSINESS MACHINES CORPORATION**  
*and Subsidiary Companies*

### REVENUE BY CLASSES OF SIMILAR PRODUCTS OR SERVICES

For the Personal and Printing Systems, Software and Global Financing segments, the segment data on page 102 represents the revenue contributions from the products that are contained in the segments and that are basically similar in nature. The following table provides external revenue for similar classes of products within the Technology, Enterprise

Systems and Global Services segments. The Technology segment's OEM hardware comprises revenue primarily from the sale of HDD storage files, semiconductors and display devices. Other technology is primarily design services for OEM customers. The Enterprise Systems segment's storage comprises revenue from the Enterprise Storage Server ("Shark"), other disk storage products and tape subsystems.

	Consolidated		
	2001	2000*	1999*
<i>(dollars in millions)</i>			
Technology:			
OEM	\$ 7,624	\$ 8,229	\$ 7,740
Other technology	346	290	286
Enterprise Systems:			
Servers	\$ 10,947	\$ 11,497	\$ 11,024
Storage	2,755	2,539	2,381
Networking products	41	158	429
Global Services:			
Services	\$ 29,953	\$ 28,036	\$ 27,035
Maintenance	5,003	5,116	5,137

\* Reclassified to conform with 2001 presentation.

### MAJOR CUSTOMERS

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

### GEOGRAPHIC INFORMATION

(dollars in millions)	Revenue*			Long-lived Assets**		
	2001	2000	1999	2001	2000	1999
United States	\$ 35,215	\$ 37,216	\$ 37,171	\$ 23,028	\$ 21,449	\$ 19,309
Japan	11,514	12,128	10,411	4,034	4,319	4,710
Other countries	39,137	39,052	39,966	9,572	10,029	10,259
Total	\$ 85,866	\$ 88,396	\$ 87,548	\$ 36,634	\$ 35,797	\$ 34,278

\* Revenue is attributed to countries based on location of customer.

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

**INTERNATIONAL BUSINESS MACHINES CORPORATION**  
*and Subsidiary Companies*

## Five-Year Comparison of Selected Financial Data

(dollars in millions except per share amounts)

FOR THE YEAR:	2001	2000	1999	1998	1997
Revenue	\$ 85,866	\$ 88,396	\$ 87,548	\$ 81,667	\$ 78,508
Net income	7,723	8,093	7,712	6,328	6,093
Per share of common stock:					
Assuming dilution	4.35	4.44	4.12	3.29	3.00
Basic	4.45	4.58	4.25	3.38	3.09
Cash dividends paid on common stock	956	909	859	814	763
Per share of common stock	.55	.51	.47	.43	.3875
Investment in plant, rental machines and other property	5,660	5,616	5,959	6,520	6,793
Return on stockholders' equity	35.1%	39.7%	39.0%	32.6%	29.7%
AT END OF YEAR:					
Total assets	\$ 88,313	\$ 88,349	\$ 87,495	\$ 86,100	\$ 81,499
Net investment in plant, rental machines and other property	16,504	16,714	17,590	19,631	18,347
Working capital	7,342	7,474	3,577	5,533	6,911
Total debt	27,151	28,576	28,354	29,413	26,926
Stockholders' equity	23,614	20,624	20,511	19,433	19,816

## Selected Quarterly Data

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

	Revenue	Gross Profit	Net Income	Per Share of Common Stock			Stock Prices†	
				Earnings			Stock Prices†	
				Assuming Dilution	Basic	Dividends	High	Low
<b>2001</b>								
First quarter	\$ 21,044	\$ 7,608	\$ 1,750	\$ .98	\$ 1.00	\$ .13	\$ 118.64	\$ 83.75
Second quarter	21,568	8,038	2,045	1.15	1.17	.14	119.90	90.05
Third quarter	20,428	7,391	1,595	0.90	0.92	.14	115.40	87.49
Fourth quarter	22,826	8,745	2,333	1.33	1.35	.14	124.70	91.34
<b>Total</b>	<b>\$ 85,866</b>	<b>\$ 31,782</b>	<b>\$ 7,723</b>	<b>\$ 4.35**</b>	<b>\$ 4.45**</b>	<b>\$ .55</b>		
<b>2000*</b>								
First quarter	\$ 19,348	\$ 6,934	\$ 1,519	\$ .83	\$ .85	\$ .12	\$ 128.25	\$ 99.50
Second quarter	21,651	7,863	1,941	1.06	1.10	.13	126.94	101.25
Third quarter	21,781	7,704	1,963	1.08	1.11	.13	134.94	100.00
Fourth quarter	25,616	9,553	2,670	1.48	1.52	.13	119.63	80.06
<b>Total</b>	<b>\$ 88,396</b>	<b>\$ 32,054</b>	<b>\$ 8,093</b>	<b>\$ 4.44*</b>	<b>\$ 4.58</b>	<b>\$ .51</b>		

\* Reclassified to conform with 2001 presentation.

\*\* Earnings Per Share (EPS) in each quarter is computed using the weighted-average number of shares outstanding during that quarter while EPS for the full year is computed using the weighted-average number of shares outstanding during the year. Thus, the sum of the four quarters' EPS does not equal the full-year EPS.

† 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

INTERNATIONAL BUSINESS MACHINES CORPORATION  
and Subsidiary Companies

### IBM STOCKHOLDER SERVICES

*Stockholders with questions about their accounts should contact:*

EquiServe Trust Company, N.A.

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) 324-0218.

Stockholders can also reach EquiServe Trust Company, N.A. via e-mail at: [ibm@equiserve.com](mailto:ibm@equiserve.com)

Hearing-impaired stockholders with access to a telecommunications device (TDD) can communicate directly with EquiServe Trust Company, N.A., by calling (800) 490-1493. Stockholders residing outside the United States, Canada and Puerto Rico should call (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>).

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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 safe-keeping. Call (888) 421-8860 for a copy of the brochure. Investors residing outside the United States, Canada and Puerto Rico should call (201) 324-0218.

*Investors with other requests may write to:*

IBM Corporation

Stockholder Relations

New Orchard Road

Armonk, New York 10504

### IBM STOCK

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

### ANNUAL MEETING

The IBM Annual Meeting of Stockholders will be held on Tuesday, April 30, 2002, at 10 a.m. at the Kentucky International Convention Center, 221 Fourth Street, Louisville, Kentucky.

### STOCKHOLDER COMMUNICATIONS

Stockholders in the United States and Canada can get quarterly financial results, listen to a summary of the 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.

### LITERATURE FOR IBM STOCKHOLDERS

*The following literature on IBM is available without charge from:*

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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) 324-0218.

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 report is released in March; 10-Q reports are released in May, August and November.

An audio cassette recording of the 2001 Annual Report will be available for sight-impaired stockholders in June.

"IBM Environment and Well-Being: Progress Report" reports on IBM's health and safety, environmental 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 (404) 238-1234.

### CORPORATE OFFICES

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**INTERNATIONAL BUSINESS MACHINES CORPORATION**  
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