

In  
good  
company

IBM



As we look at the world of business today—including our clients and their industries—we like what we see.

Even better, we like what they see.

We are certainly encouraged by IBM's recent performance in a tough economy and by our future growth prospects. But what gives us even more hope for the future is the way companies, leaders and institutions of all kinds are coming to share in a highly promising consensus about the direction—and the very nature—of business.

About the potential of technology for integration, not just automation.  
About the power of innovation that combines invention and insight.  
About the links among openness, standards and trust.

Sometimes, consensus is driven by reaction and fear. But at other times, it's fueled by hope. This is one of those times. Which is very good news, both for IBM and for a new era of global business growth.

So, while it's certainly nice to be a company that's doing well...  
it's even nicer to be doing so in such *good company*.



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

Dear IBM Investor,

Last year, I told you that we were repositioning IBM for leadership, in all the ways that a business can lead. I described how IBM defines leadership, along with our plans to achieve it. And I said that I believed the results of this repositioning would roll out in meaningful ways in the years and decades to come.

TWELVE MONTHS LATER, it's clear that the future we envisioned is arriving, and more rapidly than we expected. This is in part because of the hopeful signs we're seeing of economic recovery, with the promise of renewed business investment in information technology. It's partly because of the rapid adoption of our on demand strategy by clients, partners and the overall IT industry. But it's also something more—something specific to this company and its people, and something longer lasting than a particular economic cycle.

IBM today is a very different enterprise than it was just a few years ago. Our business model has been quietly but substantially reshaped to capitalize on the most promising growth and profit opportunities in the market. Even more important for the long term, our operations and culture are being transformed as well. We are now focused with an intensity and unity I haven't seen since the heyday of the mainframe. As a result, we are poised to take IBM to the next level, and to redraw and extend the boundaries of the IT industry.

*A very good year, for a very different company*

IBM's 2003 is the kind of year on which it's gratifying to look back—both for our overall achievements and for the strong momentum with which we ended the year.

Our revenue from continuing operations, at \$89.1 billion (a company record), increased by 10 percent. Earnings from continuing operations were \$7.6 billion compared to \$5.3 billion in 2002, which included \$1.6 billion of after-tax charges for second and fourth quarter 2002 actions. We continued to gain market share across all our core businesses. IBM today is the market leader in servers, middleware, business transformation services and strategic outsourcing.

Highlights for the year included revenue growth in every server segment, a WebSphere middleware platform that grew 12 percent and gained market share, and 14 percent growth in strategic outsourcing. Our success with clients was evident in faster-than-market growth for five of IBM's six industry sectors. For example, in the public sector, which includes our relationships with governments and health care providers, we grew by 15 percent; in communications by 8 percent; in industrial by 14 percent; and in financial services by 13 percent.

We again generated excellent cash flows. After investing \$5.1 billion in R&D, we had \$12.7 billion in cash available for investment and distribution to shareholders. We invested \$3.9 billion of that in net capital expenditures and \$1.8 billion in acquisitions to

strengthen our portfolio. And we were able to return \$5.4 billion to investors—\$4.3 billion through share repurchase and \$1.1 billion through dividends—ending the year in a strong cash position, with \$7.6 billion, including marketable securities.

Overall, despite facing serious challenges, the IBM team executed with discipline. And indications for the year ahead are encouraging, including a strong demand pipeline (enlarged by more than \$17 billion of services signings in the fourth quarter) and a growing number of alliances with business partners and software companies committed to leading with IBM's open, standards-based platforms.

All in all, a very good performance. But is it sustainable? Can we, in fact, improve upon it and keep growing for the foreseeable future? I believe so, and let me tell you why.

### *Recommitting to high value*

For the past couple of decades, if you were to look at IBM's performance in any given year or over several years, what would you see? You'd see a very large global company in which some businesses are growing rapidly, some are flat and some are declining. Add it up, and it would average out to steady profitability—but perhaps uninspiring growth. For people with comparatively short memories, this might be the only IBM they'd ever known. And it would be legitimate to ask if the company is capable of more.

The answer is: We certainly are. In fact, over most of our nearly 100-year history, IBM was consistently a company that outperformed others in our markets and generated superior returns. And that was because we were singularly focused on leading, and most often creating and defining, the high-value spaces in our industry.

Of course, with a company of IBM's breadth and global presence, there are always ups and downs that result from economic cycles, product and technology transitions, and sometimes issues of execution. But it's also apparent that, somewhere along the line, we became more focused on defending our existing leadership position than on creating the next one. We weren't particularly bold or imaginative in getting into new markets or developing new businesses, products and services, even when our strategic analyses indicated that something new was coming. And, just as important, we hesitated to reinvent or get out of businesses that no longer represented high value for either

clients or shareholders. In a word, we lost sight of IBM's mission, of what had always set us apart.

Well, we've regained our focus now. IBM is an innovator—in every dimension of that word. We know that IBM and IBMers are at their best when they create value that our clients cannot get from anyone else. That means we will provide leading-edge technology, services, expertise and intellectual capital, and will integrate these capabilities for each client to provide them with competitive advantage.

We commit to that. We commit to innovating to deliver client success. And that is something for which clients are willing to pay a premium.

This may seem like a truism, but it actually commits us to a very focused strategy, based on a choice between the two primary sources of growth and profit in IT today: the high-volume, undifferentiated product play; and the high-value, innovation and integration play, focused on the enterprise. It is this high-value space we have chosen to lead.

We believe this is the right choice for IBM and our investors. By focusing on this space, we believe we can, on a sustainable, long-term basis, generate superior returns compared to the overall IT industry, command leading share position in our selected businesses, outperform the average of the S&P 500 on return on invested capital, and produce strong cash flows.

In recent years, we've taken many steps to seize this position. Before I talk about those steps, I want to spend a minute on what constitutes "high value" for clients today, and what will do so for the foreseeable future. It's embodied in what we call the on demand enterprise. And that, in turn, is all about a new kind of integration.

### *The next wave of integration*

After two decades of disaggregation, the IT industry is re-integrating. This is being driven simultaneously by a major shift in client demand, and a major shift in technology.

Companies have come to realize that if they're going to respond rapidly and effectively to today's volatile marketplace, they need to do more than Web-enable discrete systems, processes or business units. They need to pull together all of the systems they've already got and integrate them securely with their core business activities—horizontally, across not just their whole company but their entire value chain, from customers to suppliers. This is an on demand enterprise.



## Focus on High Value

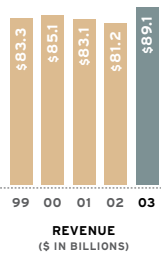
IBM Global Services generated \$55 billion in services signings in 2003, including seven contracts over \$1 billion and an additional 56 contracts in excess of \$100 million each.

IBM Systems Group revenue increased 11 percent to \$14 billion in 2003. It outpaced competitors with double-digit growth in strategic UNIX, blade and Intel-based servers, and storage systems products.

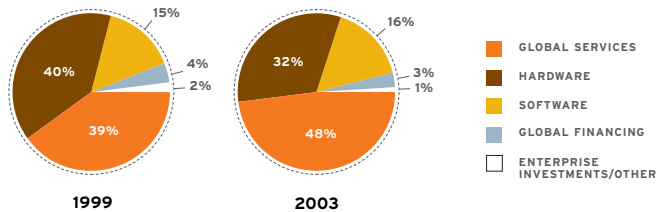
In 2003, IBM earned 3,415 U.S. patents, breaking the record for patents received in a single year and eclipsing the nearest company by more than 1,400 patents. During the past eleven years, the U.S. Patent Office has issued IBM more than 25,000 patents—nearly triple the total of any U.S. IT competitor during this time.

IBM Global Financing pre-tax income was \$1.2 billion for 2003, representing a 24 percent year-to-year increase.

In 2003, revenue from IBM middleware increased 11 percent to \$11 billion, primarily driven by continued strength in demand for WebSphere (12 percent growth), DB2 database (13 percent growth) and Tivoli (12 percent growth) middleware products.

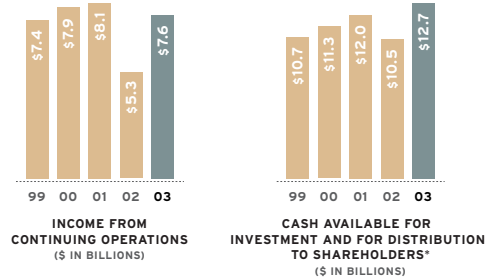
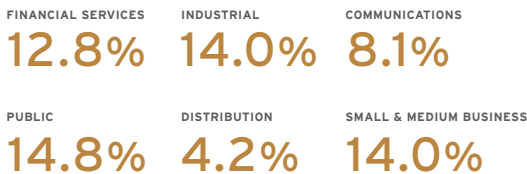


TOTAL REVENUE BY BUSINESS SEGMENT



### INDUSTRY SECTOR GROWTH YEAR TO YEAR (2002-2003)

REVENUES IN ALL SIX OF IBM'S INDUSTRY SECTORS GREW FOR THE FULL YEAR, WITH THE FINANCIAL SERVICES SECTOR, INDUSTRIAL SECTOR AND PUBLIC SECTOR AMONG THE STRONGEST, AND WITH CONTINUED GOOD RESULTS IN THE SMALL AND MEDIUM BUSINESS SECTOR.



\* This represents management's view of cash available for investment and for distribution to shareholders. See the company's Management Discussion section on pages 64 and 65 for a reconciliation of these amounts to GAAP net cash from operating activities and basis for its presentation.

### INCUBATED NEW BUSINESSES

- In just three years, Life Sciences has become a \$1 billion business, more than doubling its revenue each year. It has grown from two employees in 2001 to more than 1,000 employees in 2003.
- IBM's Digital Media business grew 60 percent to \$1.7 billion in revenue in 2003.
- Application Management Services grew 30 percent and contributed more than \$1 billion in new revenue since the line of business was created two years ago.
- In 2003, Linux revenue grew over 50 percent to more than \$2 billion, as the rate of related software and services combined nearly doubled year to year.
- IBM's Pervasive Computing business generated more than \$2.4 billion in revenue in 2003, 36 percent growth mainly from services and software installations.

### EMERGING GROWTH AREAS

- In China, India, Russia and Brazil, IBM generated revenue of \$3 billion in 2003 and saw double-digit growth.
- IBM Business Consulting Services' Business Transformation Outsourcing (BTO) unit generated fourth-quarter 2003 signings of nearly \$3 billion. Major contracts are in place with clients including BP, Procter & Gamble, Sprint, Raytheon Aircraft, Dresdner Bank of Germany, and United Technologies Corporation.
- With more than 2,000 clients, e-business Hosting Services revenue increased by more than 20 percent each of the past three years, topping \$1 billion in revenue in 2003.
- IBM clients have more than \$10 billion in dormant computing capacity installed, which can be turned on and paid for on demand. More than \$500 million in capacity was turned on in 2003.

- In its first year, IBM's Engineering & Technology Services business designed products for Medtronic, New York Stock Exchange, Raytheon, Mayo Clinic and others, generating more than \$160 million in revenue in 2003.

### SUPPLY CHAIN IMPROVEMENTS

- By the end of 2003, the work of transforming and integrating the supply chain resulted in the lowest inventory levels for IBM in more than 20 years.
- IBM's supply chain transformation efforts have reduced the amount of time the sales force spends on activities like checking on order status, proposal generation and contracts by 20 percent.
- By speeding inventory turns and improving client collections and supplier payment terms, IBM's supply chain efforts generated more than \$700 million in cash in 2003.

## Financial Highlights

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

*(\$ in millions except per share amounts)*

FOR THE YEAR	2003	2002
Revenue	\$89,131	\$81,186
Income from continuing operations	7,613	5,334
Loss from discontinued operations	(30)	(1,755)
Net income	7,583	3,579
Earnings/(loss) per share of common stock:		
Assuming dilution:		
Continuing operations	4.34	3.07
Discontinued operations	(0.02)	(1.01)
Total	4.32	2.06
Basic:		
Continuing operations	4.42	3.13
Discontinued operations	(0.02)	(1.03)
Total	4.40	2.10
Net cash provided by operating activities from continuing operations	14,569	13,788
Investment in plant, rental machines and other property	4,393	4,753
Cash dividends paid on common stock	1,085	1,005
Per share of common stock	0.63	0.59

AT YEAR END

Cash, cash equivalents and marketable securities	7,647	5,975
Total assets	104,457	96,484
Working capital	7,098	7,502*
Total debt	23,632	26,017
Stockholders' equity	27,864	22,782
Common shares outstanding (in millions)	1,695	1,722
Market capitalization	157,047	133,483
Stock price per common share	92.68	77.50
Number of employees in IBM/wholly owned subsidiaries	319,273	315,889

\* Reclassified to conform with 2003 presentation.



Becoming one is dauntingly hard to pull off. It requires both the end-to-end integration of the technology—which niche product vendors simply cannot do—and the integration of technology with business processes. This in turn requires deep business knowledge and industry expertise that few traditional technology companies have, and significant technical knowledge and research strengths that few consulting firms possess.

Integration is also an emerging force in core technology and computing architectures. To cite one example, advances in semiconductor devices have been largely propelled by increasing the clock speed of the microprocessor chip; this is like revving up the RPM of a car engine. But while advances in raw speed are continuing apace, they are no longer enough to increase chip and overall system performance. For one thing, chips have become so densely packed with transistors that they produce more heat than can be cost-effectively dissipated.

The solution is integration—putting multiple, often less-than-top-speed processors on the same chip, along with additional functions like fast memory and high-performance input/output. This is the approach IBM engineers have taken in developing our Blue Gene supercomputer. Integration of this sophistication is beyond the reach of most chip and systems companies. It requires expertise not just in semiconductors but in advanced systems architecture, custom logic design, operating systems and software tools. This is the kind of expertise that IBM has built up over decades, and it is not easily replicated. And that's why technology leaders like Sony, Cisco, Apple and QUALCOMM have partnered with IBM for advanced technology—and why last year Microsoft licensed IBM's microprocessor technology for use in its next-generation Xbox game console.

### *Bulking up in on demand*

Many IT companies will struggle with this world that is dawning—with the need to choose between open and proprietary, between serving consumers and enterprises, between redistributing other people's intellectual capital and innovating. This is not about making pronouncements or promises. A company cannot be all things to every client, every partner and every investor.

For our part, we've decided. The two parallel trajectories of integration—in client demand and in what the technology requires—play directly to IBM's historic strengths. However, even with everything IBM brought to this table, we needed more. That's why we've made acquisitions such as PricewaterhouseCoopers Consulting (PwCC), Rational software and 19 other companies in the past two years. And it's why we reset our priorities in R&D to develop more technologies and services specifically for client needs in the on demand era.

On demand integration is also why we've placed a huge bet on standards, from the Internet protocols and Linux to grid computing and Web services. Without open technical interfaces and agreed-upon standards, even integration within a single enterprise would remain a gargantuan task. And forget about integration with the other companies, business processes, applications, pervasive computing devices, laws, regulations, customs and cultures that make up the ever-more-global marketplace of the 21st century. An IT company's position on open standards—not just its rhetoric, but its actions—is a clear indicator of whether it faces forward or backward, is serving the needs of clients or protecting its market position.

In addition to the opportunities I've described, our move into on demand has opened up some very large businesses beyond the frontiers of the traditional IT industry—opportunities that remain out of reach for most of our competitors.

One promising example is Business Transformation Outsourcing (BTO), which was not even part of the industry lexicon 18 months ago. In BTO engagements, IBM becomes responsible for transforming—and actually providing—a client's business process in areas such as human resources, procurement, customer care, and finance and administration. Thanks to the acquisition of PwCC and the formation of IBM Business Consulting Services, we generated nearly \$3 billion in BTO signings during the fourth quarter of 2003 alone. To give a rough idea of the potential here, the current size of businesses' outsourced spending on sales, marketing, logistics, finance, HR and all other administrative processes is about \$1 trillion a year. Of that, there is an opportunity in excess of \$100 billion in the BTO areas we are pursuing. We are committed to extend our leadership position in BTO in 2004.

### *Remaking IBM*

To some people, it may seem bold to have made all these moves during the worst market ever seen in the IT industry. But I don't believe it was particularly risky, because it was driven by client demand and the realities of the technology. What's really important for you to understand is that our commitment to leadership in the high-value spaces and in innovation isn't a mission statement. It's a business model. And it commits us to continual reinvention of IBM itself.

Over the past several years, we've taken aggressive steps to remix our business so that we are positioned for long-term leadership and new opportunities in the high-value enterprise space, however that changes.

We have, since 1997:

- exited or reduced our presence in such areas as application software, hard-disk drives, networking hardware, low-end printers and retail PCs—which we estimate have declined from 31 percent to 25 percent of IT industry revenue;
- entered or increased our presence in distributed middleware, non-hardware maintenance services, Intel-based servers and mobile PCs—which have grown from 40 percent of industry revenue to 46 percent, and are expected to continue outperforming the overall IT market;
- increased our revenue in business and technology consulting services, infrastructure services and infrastructure software—which generate superior long-term revenue growth, profit, cash and return on invested capital—from 48 percent to 64 percent of our total, with expectations of increasing that going forward;
- grown aggressively in emerging markets; in China, India, Russia and Brazil we generated revenue of \$3 billion last year and saw double-digit growth;
- upped our rate of new account growth, giving us a total of 730,000 large, medium and small enterprise clients—with IBM's small-and-medium business segment alone growing 14 percent to outperform the market in 2003, adding \$2.4 billion in revenue; and
- incubated successful new high-growth businesses such as life sciences, digital media, application management services, e-business hosting services, Linux and pervasive computing—each of which has already

become a \$1 billion-plus revenue stream. In the areas we're targeting within life sciences and digital media alone, third-party analysts see more than \$60 billion of market opportunity by 2006.

While we do all this, we're continuing relentlessly to improve execution. By becoming an on demand business ourselves, we've made big strides in product cycle time, new product introduction, sales productivity and simplification of our processes. Our inventories are at their lowest level in more than 20 years, and our continuing progress in integrating our supply chain took \$7 billion of cost out of the business in 2003, surpassing what we achieved in 2002.

### *Business value, and a company's values*

As I mentioned last year, we've been spending a great deal of time thinking, debating and determining the fundamentals of this company. It has been important to do so. When IBMers have been crystal clear and united about our strategies and purpose, it's amazing what we've been able to create and accomplish. When we've been uncertain, conflicted or hesitant, we've squandered opportunities and even made blunders that would have sunk smaller companies.

It may not surprise you, then, that last year we examined IBM's core values for the first time since the company's founding. In this time of great change, we needed to affirm IBM's reason for being, what sets the company apart and what should drive our actions as individual IBMers.

Importantly, we needed to find a way to engage everyone in the company and get them to speak up on these important issues. Given the realities of a smart, global, independent-minded, 21st-century workforce like ours, I don't believe something as vital and personal as values could be dictated from the top.

So, for 72 hours last summer, we invited all 319,000 IBMers around the world to engage in an open "values jam" on our global intranet. IBMers by the tens of thousands weighed in. They were thoughtful and passionate about the company they want to be a part of. They were also brutally honest. Some of what they wrote was painful to read, because they pointed out all the bureaucratic and dysfunctional things that get in the way of serving clients, working as a team or implementing new ideas. But we were resolute in keeping the dialog free-flowing and candid. And I don't

think what resulted—broad, enthusiastic, grass-roots consensus—could have been obtained in any other way.

In the end, IBMers determined that our actions will be driven by these values:

- Dedication to every client's success
- Innovation that matters, for our company and for the world
- Trust and personal responsibility in all relationships

I must tell you, this process has been very meaningful to me. We are getting back in touch with what IBM has always been about—and always will be about—in a very concrete way. And I feel that I've been handed something every CEO craves: a mandate, for exactly the right kinds of transformation, from an entire workforce.

Where will this lead? It is a work in progress, and many of the implications remain to be discovered. What I can tell you is that we are rolling up our sleeves to bring IBM's values to life in our policies, procedures and daily operations.

I've already touched on a number of things relating to clients and innovation, but our values of trust and personal responsibility are being managed just as seriously—from changes in how we measure and reward performance, to how we equip and support IBMers' community volunteerism.

Our values underpin our relationships with investors, as well. In late February, the board of directors approved sweeping changes in executive compensation. They include innovative programs that ensure investors first receive meaningful returns—a 10 percent increase in the stock price—before IBM's top 300 executives can realize a penny of profit from their stock option grants. Putting that into perspective, IBM's market value would have to increase by \$17 billion before executives saw any benefit from this year's option awards. In addition, these executives will be able to acquire market-priced stock options only if they first invest their own money in IBM stock. We believe these programs are unprecedented, certainly in our industry and perhaps in business.

Clearly, leading by values is very different from some kinds of leadership demonstrated in the past by business. It is empowering, and I think that's much healthier. Rather than burden our people with excessive controls, we are trusting them to make decisions and to act based on values—values they themselves shaped.

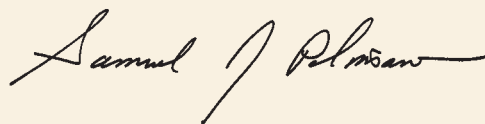
To me, it's also just common sense. In today's world, where everyone is so interconnected and interdependent, it is simply essential that we work for each other's success. If we're going to solve the biggest, thorniest and most widespread problems in business and society, we have to innovate in ways that truly matter. And we have to do all this by taking personal responsibility for all of our relationships—with clients, colleagues, partners, investors and the public at large. This is IBM's mission as an enterprise, and a goal toward which we hope to work with many others, in our industry and beyond.

### *Playing offense*

Put it all together—a more focused business model, an industry shift that plays to our strengths, bets that are paying off in the near term, and a workforce that is united and impatient to become the great company we all aspire to be—and I feel good about IBM and our prospects.

Without the prod of fear or of a “burning platform,” we've begun a substantial transformation of our company. For the first time in a very long time—probably since my early days with IBM 30 years ago—I'm seeing a company ready to focus more on opportunities than on threats, more intent on setting the agenda than on reacting to the moves of others. Our deep-seated optimism—a fundamental belief that IBMers have always possessed in progress, science and the improvability of the human condition—is reasserting itself. IBMers are ready to reclaim a position of leadership—in our industry and in the larger world of business.

Which is a very exciting place to be. For me and my colleagues, it's just terrific to be part of an energized IBM company that is once again ready to play some offense.



**SAMUEL J. PALMISANO**

*Chairman, President and  
Chief Executive Officer*

# In the company *of* leaders

IF YOU WANT TO UNDERSTAND the changes shaping global business in the 21ST century, take a look into the corner office.

We're seeing the rise of a new generation of CEOs, who share a common point of view about how value is created today, how to exploit technology for tangible benefit, how to build different kinds of business relationships—and why those relationships, spanning all their company's constituencies, are vital to its success.

You'll also, more and more, find a leader who is actively driving the integration of business and technology and changing the way the organization operates—becoming what we at IBM call an on demand business.

For IBM, this shared point of view shapes everything we do—from our work with clients to the way we innovate. We have a new understanding of the potential for business in the world today. And we didn't just think it up on our own.

“If you can’t differentiate yourself in this world, you get commoditized instantaneously. So we are constantly driving for more innovation, more differentiation and more technology.


When I rally people inside GE, I say, ‘Growth is out there to be had, but it’s going to be uneven. Unless you are willing to make investments in the future, to take steps and stands, this is not a tide that’s going to raise every boat. There are going to be clear winners and losers.’”

Jeffrey R. Immelt

CHAIRMAN AND CEO, GE

Tracing its origin to Thomas Edison’s 1878 electric light company, GE has grown to become the world’s most valuable company, with a market capitalization of more than \$132 billion and 315,000 employees.



A portrait of Jorma Ollila, Chairman and CEO of Nokia. He is a middle-aged man with short brown hair, wearing glasses, a dark suit jacket, a light blue dress shirt, and a patterned tie. He is sitting and looking directly at the camera with a slight smile. The background is a blurred glass and steel building.

## Jorma Ollila

CHAIRMAN AND CEO, NOKIA

“Nokia sees a future where the mobile phone industry can help companies mobilize their business processes, so they can be more competitive, innovative and flexible, and where users will enjoy the true benefits of enterprise mobility—connection to the people who matter, and to the data and processes that matter. Building this future requires strong industry cooperation and relies on an open business ecosystem to implement it successfully.”

Nokia is the world leader in mobile communications, driving the growth and sustainability of the broader mobility industry. Nokia is dedicated to enhancing people's lives and productivity by providing easy-to-use and secure products like mobile phones, and solutions for imaging, games, media, mobile network operators and businesses.

# Meg Whitman

PRESIDENT AND CEO, EBAY

“eBay is an on demand business. Our industry is incredibly dynamic, and we have to be the fastest moving, most flexible, most single-focused: a very simple company, actually. We have 89 million customers who expect us to be up 24 by 7, and their needs are constantly changing.”

AT IBM'S BUSINESS LEADERSHIP FORUM, NOV. 12, 2003

With 971 million listings in 2003, representing \$24 billion in gross merchandise sales, eBay defines the category of online marketplace. Along with nearly 95 million confirmed registered users, eBay hosts more than 150,000 stores online and provides services such as its payment solution, PayPal.





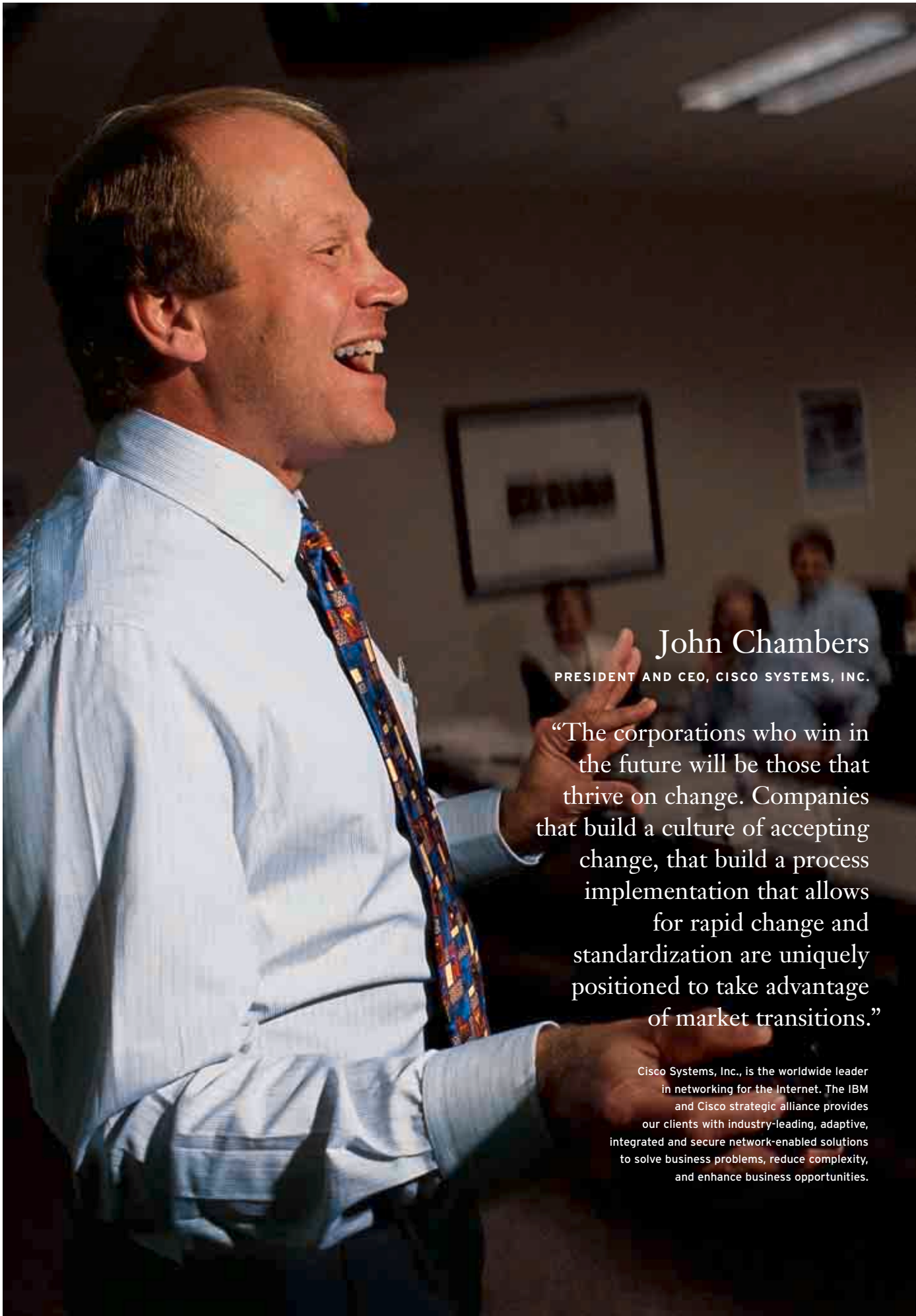
A portrait of Michael L. Eskew, Chairman and CEO of UPS. He is wearing a dark leather jacket with the UPS shield logo on the left chest, over a light blue shirt and a yellow patterned tie. He is smiling slightly and looking towards the camera. The background is dark and out of focus.

## Michael L. Eskew

CHAIRMAN AND CEO, UPS

“On demand and synchronized commerce are about treating every customer—and for us, every package—as if it were the only one we have. With 13 million packages a day going to and from 9 million customers, that’s a tall order. Bringing synchronized solutions to our customers will allow the small to act big, the big to act small, and everyone to act global.”

Founded in 1907, UPS has grown into a \$30 billion corporation, and is a leading global provider of specialized transportation and logistics services. UPS operates in more than 200 countries and territories worldwide. Its innovative digital content management solution has streamlined and automated its workflow and approval routing processes.



## John Chambers

PRESIDENT AND CEO, CISCO SYSTEMS, INC.

“The corporations who win in the future will be those that thrive on change. Companies that build a culture of accepting change, that build a process implementation that allows for rapid change and standardization are uniquely positioned to take advantage of market transitions.”

Cisco Systems, Inc., is the worldwide leader in networking for the Internet. The IBM and Cisco strategic alliance provides our clients with industry-leading, adaptive, integrated and secure network-enabled solutions to solve business problems, reduce complexity, and enhance business opportunities.

A portrait of W. James McNerney, Jr., Chairman and CEO of 3M Company. He is a middle-aged man with short, graying hair, wearing a dark blue suit jacket, a white dress shirt, and a red and blue patterned tie. He is looking slightly to the left of the camera with a slight smile. The background is a blurred blue and white pattern, possibly a wall or a backdrop. A large, stylized red letter 'M' is visible on the left side of the image.

## W. James McNerney, Jr.

CHAIRMAN AND CEO, 3M COMPANY

“The best and most sustainable innovation occurs where creativity and customer needs intersect. Good ideas don’t just leap out of laboratories—they are called out by the clear voice of the customer and need to be reinforced with the right resources.”

With operations in 60 countries and clients in more than 200, 3M is one of the United States’ largest global manufacturers and a diversified technology company that has become an icon of innovation. Its creativity spans many markets—from display and graphics to electronics and communications, health care, safety, security and protection services, transportation and beyond.

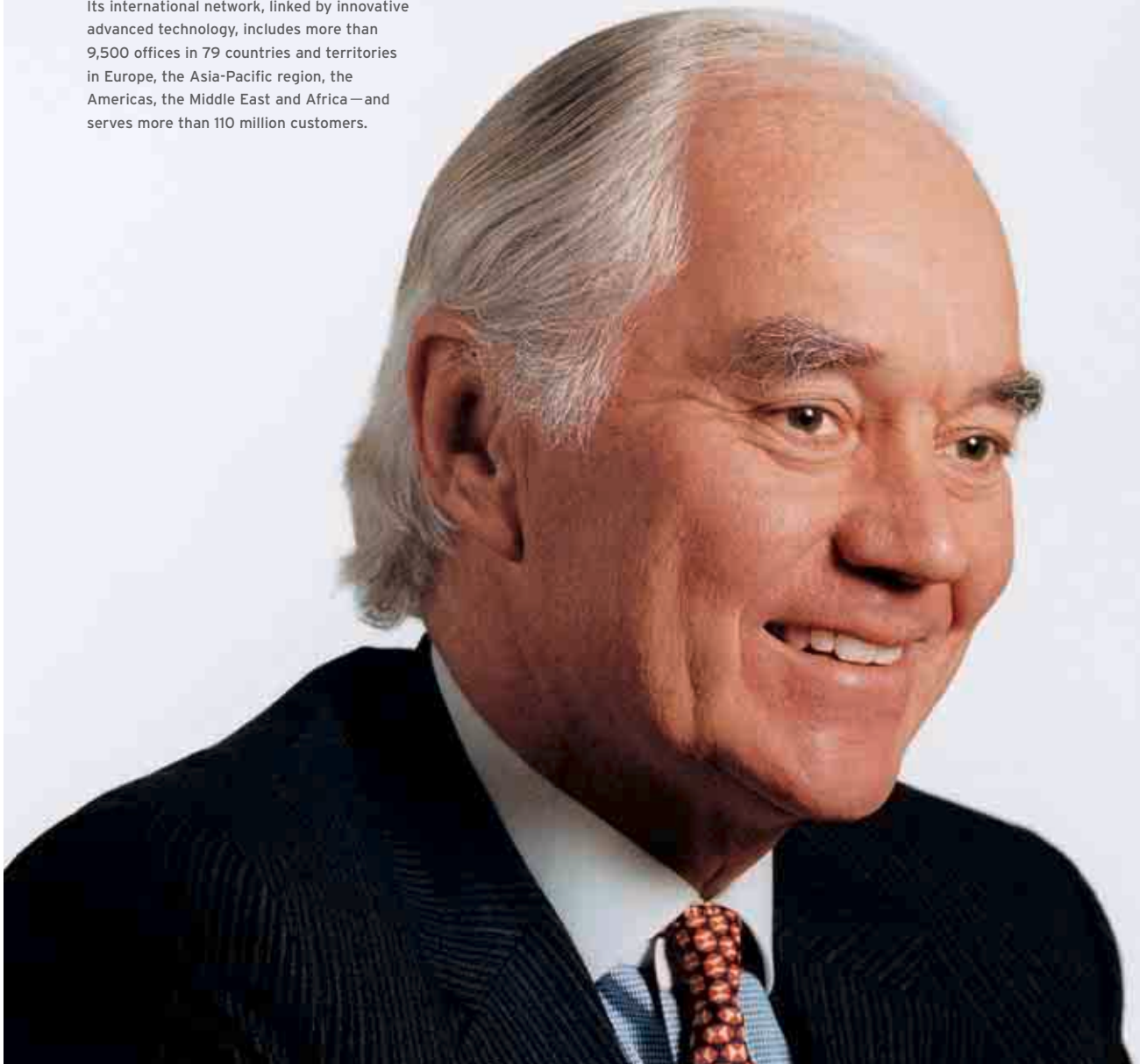


# Sir John Bond

HSBC GROUP CHAIRMAN

“HSBC has to be flexible to succeed. Companies today have to reinvent themselves constantly. You have to preserve the best of what’s gone before, jettison what’s no longer relevant and build the new. And you have to maintain your essential character while doing it.”

HSBC is the world's second largest banking and financial services organization. Its international network, linked by innovative advanced technology, includes more than 9,500 offices in 79 countries and territories in Europe, the Asia-Pacific region, the Americas, the Middle East and Africa—and serves more than 110 million customers.



# In the company of innovators

INNOVATION IS NOT JUST “INVENTION.” It’s what results when technical invention meets business insight. And it crosses fields of study, as well as industries.

What results? New business models. New ways to envision and build the physical environment. New ways of integrating knowledge and technology to enhance health and extend life. New ways to serve clients. New forms of creative expression.

This is how IBM pursues innovation—and this is the kind of innovation we pursue—every day, in our clients’ workplaces, and in our own. Together, we apply intelligence, reason and science to make not just a product or a profit, but a difference. Because, while invention can be a solitary activity, innovation is always a collaboration.

IBM HAS BEEN WORKING WITH THE AIRLINE INDUSTRY SINCE THE 1960S. Today, 18 of the world's TOP 20 AIRLINES ARE IBM CLIENTS, INCLUDING DELTA AIR LINES, AIR CANADA, JAPAN AIRLINES AND AMERICAN AIRLINES.

## Finnair HIGHER MATH



WHAT ARE AN AIRLINE'S ASSETS, and how do they generate revenue? There are the fleet and routes, of course—but there is also a vast and continually growing store of data about travel and purchase histories. The problem is, this asset has been essentially unused. But what if that data could be analyzed and integrated with marketing programs and processes to predict buying patterns and sales appeal? Customer relationship management would then become customer equity management. And that would be a whole new way to run an airline.

That's how Finnair's long-term relationship with IBM took a new turn this past year, with the deployment of mathematical modeling and optimization algorithms designed by researchers from IBM's Zurich Research Lab. Processing frequent-flier data has a potential impact of reducing marketing costs by 20 percent while improving marketing response rates by as much as 10 percent. And that means big money—in increased revenues and in savings.

Still only a prototype, IBM's Customer Equity Management solution already has an 80 percent accuracy rate for predicting the eventual value a customer represents. By forecasting a frequent flier's future travel decisions, it's also helped improve the airline's customer satisfaction rate by 10 percent. And all from pulling numbers out of Finnair.

“With the many ills the airline industry faces today, and in a highly logistical business, managing processes by applying technology more widely and more innovatively is a necessity.”

EERO AHOLA, SENIOR VICE PRESIDENT, CORPORATE BUSINESS DEVELOPMENT AND STRATEGY, FINNAIR

### 01.

#### OTHER DESTINATIONS

Finnair now uses IBM's Customer Equity Management system to understand its best customers much more deeply, and to tailor marketing programs to them—even aligning company strategy around their needs. And future applications could be broader still—helping make decisions about fleet deployment, the allocation of new routes, and contingency plans for some of the most serious challenges facing airlines today.

### 02.

#### GETTING UPGRADED

Finnair's relationship with IBM began decades ago, in the mainframe era. Since 2002, IBM has run the airline's data center operations, as well. But with Customer Equity Management, IBM and Finnair are taking a whole new trip together. “They've gone from being a supplier to being our data center to being a partner,” says Eero Ahola. “It's a totally different relationship.”



# Frank Gehry

## THINKING OUTSIDE THE BOX



“This technology provides a way for me to get closer to the craft. It felt like I’d been speaking a foreign language, and now, all of a sudden, the craftsman understands me.

In this case, the computer is not dehumanizing;  
it’s an interpreter.”

FRANK GEHRY, ARCHITECT



REPLACING BOXY BUILDINGS with bold, reflective, curvilinear designs takes courage and vision—especially when dealing with large-scale public works.

Master architect Frank Gehry is so excited about the potential of software to free architects from the constraints of paper, pencil and two-dimensional design programs that he recently created Gehry Technologies. This IBM-certified business partner sells the concept and the software itself to other architects and designers to help them unleash their own creativity.

Gehry was inspired by his experience designing Los Angeles' Walt Disney Concert Hall. Collaborative virtual product design software originally developed by IBM and Dassault Systèmes for the aerospace and automotive industries allowed craftspeople to understand Gehry's novel, three-dimensional designs precisely. With the technology, IBM Product Lifecycle Management Solutions, they knew how much material the design required and how the complex components would come together.

That helped in both creative and pragmatic ways. Removing uncertainties reduced costs as much as one-third, which proved critical in overcoming a raft of obstacles—from an economic downturn to a major earthquake—standing in the high-profile project's way.

The result: One of the most acoustically sophisticated concert halls in the world, an instant global architectural landmark and the centerpiece of a \$1.2 billion redevelopment project in L.A.'s downtown Bunker Hill district.

## 01.

### FIRST COMES CREATIVITY...

A crumpled napkin. The movement of water around the bow of a boat. Who knows what will spark the creative mind? But the more unusual the design, the greater the risks. Can it be built? What will it cost? Will it perform as intended? Innovators like Frank Gehry have embraced new tools to tame this uncertainty principle—and to let their creativity take flight.

## 02.

### ...FOLLOWED BY SAVINGS...

Complex, free-form surfaces excite designers and delight the eye. CATIA (computer-aided three-dimensional interactive application) software makes even the most complex and unconventional designs readily understandable and gives craftspeople the tools they need to fabricate and assemble components efficiently.

## 03.

### ...AND THEN THE APPLAUSE

The Los Angeles Philharmonic Orchestra performed the first concert in its new home on October 23, 2003. Music critics marveled at the concert hall's acoustics. Architecture critics praised the "exquisite craftsmanship" of the "stunning organic sculpture." One critic pronounced it a "rhapsody in steel." Yet another was confident that, "over time, it will be to Los Angeles what the Eiffel Tower is to Paris."

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IN 2003, INDEPENDENT SOFTWARE VENDORS WITH WHOM IBM HAS A STRATEGIC ALLIANCE INFLUENCED MORE THAN **\$10 BILLION** OF IBM SERVICES, HARDWARE AND SOFTWARE REVENUE, *more than double the amount* INFLUENCED IN 2001.

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MORE THAN **90,000 BUSINESS PARTNERS** WORLDWIDE (CONSULTANTS, INTEGRATORS, SOFTWARE VENDORS, VALUE-ADDED RESELLERS AND DISTRIBUTORS) GENERATED *more than 1/3* OF IBM'S REVENUE IN 2003.

FLIP A SWITCH, and thousands of people and buildings instantly appear. Flip it off, and they go away. On. Off. On. Off. Sounds like a cartoon, doesn't it?

For Threshold Digital Research Lab, a digital production company that's really in the business of intellectual property management, it is a cartoon... or a full-length film, a television show, or a Web site. It's whatever high-end graphic, animation and special effects power they need right at that moment. On. Off.

They have all the IT muscle they need to challenge far larger competitors without breaking the bank, because this groundbreaking studio pays only for the computing capacity as it's needed—an especially attractive pricing model for an entertainment company, which faces surges in demand (“opening next week, everywhere”) and periods of lower-intensity use (“coming next fall to a theater near you”). Think of it as supercomputing on demand: IBM hosts the computing in New York, and Threshold animators and artists in California apply their super-creative talents to make the most of it.

Threshold's upcoming full-length animated feature, *Foodfight!*, will include 138 speaking characters, more than 6,000 “extras” and 174 sets with nearly 5,000 buildings—all digital, and all ready for an early call at the flip of a switch, anytime they're needed. So despite the complexity of the project, Threshold has been able to use IBM's Deep Computing Capacity On Demand Center to shorten its production cycle to 18 months—less than a third of the time it takes to produce most animated films.

## O1.

### THE VIRTUAL STUDIO

Major film studios used to need up to 500 acres of sets, props, costumes and characters. Today, Threshold's “virtual backlot” is making a feature with more of all of these than the largest epics of the past—in a studio of less than 10,000 square feet. And when filming “wraps,” Threshold doesn't have to destroy the sets and send its character actors packing. They remain intact and accessible for modification and future use by other Threshold artists.

## O2.

### ON TIME AND ON BUDGET

Even popular films often lose money simply because they cost too much to make. Threshold's on demand e-studio avoids the large permanent overhead some of its competitors must support. And it uses human capital just as efficiently. Threshold's core group of animators can tap the talents of remotely based colleagues using industry-standard IBM workstations. Chairman and CEO Larry Kananoff believes his on demand business model can cut costs as much as 40 percent.

SOME CUSTOMERS TAP INTO IBM'S DEEP COMPUTING CAPACITY ON DEMAND CENTER, WHILE OTHERS HAVE CAPACITY ON DEMAND SITTING IN THEIR IBM MACHINES, WAITING TO BE TURNED ON. IN FACT, MORE THAN \$500 MILLION of that capacity on demand was turned on in 2003, with another \$10 BILLION STILL IN THE MARKETPLACE.





# Threshold Digital Research Lab

READY FOR ITS CLOSE-UP



LARRY KASANOFF (ABOVE, FAR RIGHT) MEETS WITH MEMBERS OF THE CREATIVE TEAM OF *FOODFIGHT!*  
(OPPOSITE PAGE) A SCENE FROM *FOODFIGHT!*

“IBM on demand technology is allowing us to compete against people who may have more resources than we do, in the following very simple way:

It allows us to make our entertainment better, faster and cheaper.

The On Demand Center takes away the words, ‘I can’t,’ and makes you say, ‘Hey, I can do anything I can think up.’”

LARRY KASANOFF, CHAIRMAN AND CEO, THRESHOLD ENTERTAINMENT



# GILFAM

REAL-TIME REAL ESTATE



“We have to set a legal framework in order to provide a land register available to everybody, yet we have to satisfy specific conditions, such as insuring privacy and safeguarding against misuse.”


JEAN-LUC VALLENS, JUDGE, PRESIDENT OF THE PUBLIC  
GROUP FOR THE COMPUTERIZATION OF THE LAND REGISTER OF  
ALSACE AND MOSELLE (GILFAM)

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OVER THE LAST FIVE YEARS, IBM'S BUSINESS WITH GOVERNMENTS WORLDWIDE HAS MORE THAN DOUBLED — GROWING AT A RATE IN 2003 *more than FIVE TIMES* THE INDUSTRY AVERAGE IN EUROPE, THE MIDDLE EAST AND AFRICA COMBINED, *and more than seven times the industry average* IN THE AMERICAS.

IN THE UNITED STATES, IBM HARDWARE, SOFTWARE AND SERVICES CAN BE FOUND IN *more than 90 PERCENT* of federal agencies.





IN THE ALSACE AND MOSELLE jurisdictions of eastern France, what worked to ensure the rights of property owners has worked against the needs of modern business development.

Local law in the region keeps things very local. Only original documents can be used for all land title transactions. Also, the documents may not leave their regions. And their authenticity has to be guaranteed—signed—by the local judge. The rules are in some ways unique, due in part to the inheritance of regulations and customs from periods of French and German sovereignty.

The problem was, owners and mortgage bankers could barely conduct business away from the local courthouse. So GILFAM, the government bureau that oversees the computerization of the land registry for this part of France, worked with IBM to create a novel system for on demand security and the authenticity of digitized titles and deeds. The result is useful not just for land registries, but for many other regulatory agencies requiring official approvals and notarizations.

Using smartcards, biometric identification tools and time stamps, judges will be able to sign registry documents in digital fashion, making them available online for buyers, builders and lenders as well. The GILFAM registry and process have thus been virtualized—one of the keys to making the business of government on demand.

## O1.

### THE MORE THINGS NEED TO STAY THE SAME...

Land title archives for the three government jurisdictions that make up GILFAM—Moselle and the Upper and Lower Rhine divisions of Alsace—go back 300 years and have at different times been written in French, German and Gothic German. An elementary but necessary step was turning all these deeds—2.5 million sheets of paper in 40,000 registers held in 46 registry offices—into digital documents.

As a result of the system created by IBM, the transfer of real estate titles will now combine the assurance of a secure system with robust user authentication, to maintain the registry's integrity, as required by law. Something a judge has (such as a hardware token), plus something the judge knows (a personal password), and something the judge "is" (a biometric pattern like a fingerprint) will produce something everyone can use and trust.

## O2.

### ...THE MORE THINGS NEED TO CHANGE

The project for a computerized land registry (*livre foncier informatisé*) is a good example of the integration of technology and law in effective e-government. New processes and supporting technology were created by the IBM team to support the GILFAM mission, but new laws had to be passed by the French government to support the validity of digital signatures and the authenticity of an e-business registry office.

This model can apply to governments everywhere as they transform themselves to become on demand. In the United States, for example, the Food and Drug Administration has issued regulations that permit the use of electronic records and digital signatures in place of paper and handwriting once the outlined requirements are met. The end result for these agencies is greater flexibility and efficiency, as well as easier access for citizens and corporations.

IN ACADEMIC CIRCLES, it's widely known as the "traveling salesman problem": Take a finite number of points and the cost of travel between each pair of them. Then find the most cost-effective way to visit all the points and return the traveling salesman to where he started. But for a leading limousine company serving thousands of traveling salespeople and other professionals every day, it was a complex business problem, as well.

When BostonCoach initially asked IBM to install a global-positioning system, so that its dispatchers could find optimal routes, it inspired us to see the fleet itself as an organic system. In the process, we rethought how a limo company (with thousands of customers, rides and routes on any given day) could become an on demand business, with continual response and analysis of data in the search for maximum efficiency.

With the solution developed by IBM, the drivers' assignments are still made by fleet controllers—real people with years of experience. But the system now uses an algorithm developed by IBM researchers to solve the problem of scheduling. By considering positioning data, business "rules" and even driver pay rates and FAA schedules, the Fleet Optimization System maps the location of drivers and customers and suggests to dispatchers the best matchups.

As a result, while other travel companies have experienced declines in revenue and customer loyalty, BostonCoach is on target to achieve a 20 percent increase in productivity and a 10 percent increase in sales.

## O I.

### NOW SERVING ATLANTA

Despite the name, BostonCoach has operations in nine major cities, with affiliates in more than 450 other cities globally and with as many as 1,000 to 1,400 rides per day in its largest markets. Normally, establishing service in a new city would require BostonCoach to create a new dispatch center operating 24 hours a day, 7 days a week, right at startup. With the efficiencies of the Fleet Optimization System, in 2003 the company entered an entirely new market—in Atlanta—by relying completely on its existing dispatch centers.

## O 2.

### BETTER SERVICE WITH BETTER SCHEDULES

BostonCoach leads in the van, limousine and sedan service industry for on-time pickup, but leadership used to come at a cost. Before the system created by IBM's On Demand Innovation Services, dispatchers would often turn down last-minute reservations—or send two cars to meet a single customer—rather than risk brand-damaging disappointment. Now, fleet controllers can accept more business and use cars more efficiently, with a system that optimizes schedules for three different time scales: daily, every 15 minutes and even several times per minute.



ON DEMAND INNOVATION SERVICES is IBM's first formal client-focused arm within IBM Research. CLIENTS CAN ACCESS ANY OF IBM'S 3,000 RESEARCHERS WORLDWIDE WHO SPECIALIZE IN BUSINESS TRANSFORMATION AND TECHNOLOGY CONSULTING.

## BostonCoach

YOUR RIDE IS HERE



“The real differentiation is in the quality of service that you deliver. More likely than not, technology initiatives will become a commodity down the road, so you really want to be first to market—to get in first and hook customers.”

**RUSS COOKE, PRESIDENT, BOSTONCOACH**



# Mayo Clinic

REFINING THE ART OF HEALING




(LEFT) HUGH C. SMITH, M.D., VICE PRESIDENT, AND CHAIR, BOARD OF GOVERNORS, MAYO CLINIC IN ROCHESTER, MINN.  
(RIGHT) DENIS A. CORTESE, M.D., PRESIDENT AND CEO, MAYO CLINIC

“Wouldn’t it be marvelous if I knew not just the exact location of the patient’s cancer but its gene characteristics, and the outcomes with the last 500 patients at Mayo with cancer in that identical location and with those identical genetic characteristics?” DR. HUGH SMITH, MAYO CLINIC

IN THREE YEARS, *Life Sciences* has become a **\$1 BILLION** business for IBM, *more than doubling revenue* each year since its formation in 2000. NEW CLIENTS INCLUDE 25 OF THE TOP PHARMACEUTICAL AND BIOTECHNOLOGY COMPANIES.

IN THE AREA OF MEDICAL DEVICES AND DIAGNOSTICS, *more than 60 leading analytical instrument and tools companies* NOW BASE THEIR OFFERINGS ON IBM TECHNOLOGY, INCLUDING IBM MIDDLEWARE, SERVER PLATFORMS AND SERVICES.



FOR A MEDICAL CENTER, loss means something far more serious than it does for almost any other business.

And the prospect of loss becomes maddening if there's any possibility information for treatment and cure might already exist—but be hidden inside archived case files, or in trends across millions of records, requiring lengthy, expensive studies to uncover. If only doctors could tap data from consenting patients with similar epidemiological or genetic makeup, much faster, more effective, individualized therapy would be possible.

Now, with IBM's help, the world-famous Mayo Clinic is increasing exponentially the ability to sift through their warehouse of patient data—and helping doctors make sense of it. As a result, medicine can become less about the science of trial-and-error and more about the art of healing.

It was Mayo Clinic that originally pioneered the idea of collaborative medicine—the joint application of the greatest medical minds to treat an illness and cure a disease. And now they've expanded that collaborative approach into the realm of patient histories. Through IBM's on demand solution, trends and correlatives become identifiable—speeding the course of discovery and enhancing patient care.

## 01.

### 2,400 HEADS ARE BETTER THAN ONE

The new system will provide Mayo Clinic's 2,400 physicians with differing levels of on demand access to medical data to support diagnoses and treatment decisions based on information collected from millions of informed, consenting patients. To ensure patient privacy and confidentiality are maintained, physicians conducting research will access only general information ("a 38-year-old female with a family history of heart disease"), while the treating doctor accesses the records of her specific patient—no matter where those records originated or physically reside.

## 02.

### FROM MONTHS TO MINUTES

The Mayo Clinic Life Sciences System can perform complex, cross-patient correlations across patient demographics, diagnostics and laboratory results—for all of the 4.4 million patient histories in their vast data warehouse. Medical searches by symptom, patient age, laboratory result, drugs prescribed and other factors—searches that once took months—are completed in a matter of minutes, giving physician investigators the information they need, where and how they need it, facilitating discovery and patient care improvement.

## 03.

### CHANGING HOW MEDICINE IS PRACTICED

As the understanding of genetics increases, the system will aggregate patient genomic information, as well as proteomic data and research information, from a variety of sources. This will help quicken the pace of clinical research, identify likely participants in clinical trials, help researchers understand illness on a molecular level, and allow physicians to treat patients and practice preventive medicine based on an individual's own physical makeup.

# In the company of visionaries

THERE IS A GROWING—WE THINK UNSTOPPABLE—realization that neither technology nor business will for long be controlled by a small number of people or companies. Aside from the obvious economic advantages of an “open” approach, there is simply no other way to bring about the world we envision—the world we need.

The implications are far-reaching and broadly empowering. Opening access to other people and their information creates relationships that didn’t exist before, which then become engines of creation themselves. Crossing barriers—between languages or even areas of expertise—opens up opportunities for the creation of new economic, business and societal value.

Connections arise between people and ideas, technologies and processes—and what started as a commitment or passion just a few years ago may end up as the leading position. And once you’re there, it’s good to find out that you’re not alone.



## MOVING IMAGES CAN ERASE BOUNDARIES

by **Martin Scorsese**

FILMMAKER/CHAIR, THE FILM FOUNDATION

Film has undeniably changed the way people view themselves. The ability to see the world in motion, mechanically reproduced, first in image and then married to sound, is a monumental development in human history.

It's allowed us to see ourselves in ways we never would have previously imagined.

Of course, a change of this magnitude affects culture and society in complex, dramatic ways, some better than others. But ultimately, cinema is about people—all cinema is about who we are as human beings. And film has allowed us a glimpse into other cultures like no other medium.

In the working-class Italian-American neighborhood where I grew up, cinema was my introduction to other cultures. Through film, I identified with people who looked and lived differently from myself. Through this identification, superficial differences disappeared, and I saw myself and the people I knew in these films.

In today's world, it's important we recognize our interdependency: we are not alone, and certainly not isolated. Technologies as complex as the Internet, and as comparatively simple as motion pictures, serve to unite the world and to erase boundaries. Exposure to other cultures only enriches our own. Film is a powerful tool for knowledge and for understanding.

IBM, THE FILM FOUNDATION AND THE UCLA FILM AND TELEVISION ARCHIVE WILL PRESERVE AND ARCHIVE *more than 27 MILLION* FEET OF HEARST METRONOME NEWS COLLECTION NEWSREEL FOOTAGE DATING FROM 1913 TO THE 1960S, WHICH HISTORIANS, SCHOLARS AND THE GENERAL PUBLIC *can access online*.

IBM ALSO SUPPORTS THE FILM FOUNDATION'S EDUCATIONAL INITIATIVE, "THE STORY OF MOVIES"—AN INTERACTIVE, INTERDISCIPLINARY CURRICULUM ENABLING EDUCATORS TO *teach students critical thinking* ABOUT THE HISTORICAL AND CULTURAL SIGNIFICANCE OF FILM.



TO ADVANCE LEARNING'S FRONTIER, WE NEED  
TO CROSS DISCIPLINES

by Shirley Ann Jackson, Ph.D.

PRESIDENT, RENSSELAER POLYTECHNIC INSTITUTE

For decades, in both business and science, the trend was specialization—knowing more and more about increasingly focused and narrower areas.

Today, the boundaries of specialization are blurring.

Many of the most exciting frontiers of scientific research today—such as biotechnology, genomics, and nanotechnology—represent a convergence of disciplinary forces, creating new discoveries and often new science.

As these emerging scientific areas grow and expand, they increasingly overlap. And as they do so, they begin to inform each other, yielding even greater discoveries. Their function requires multidisciplinary and interdisciplinary approaches and the use of sophisticated computing tools.

That is what information technology represents—

a requisite support system for human thought and human creativity.

At this point, there are still more questions than answers about the full impact of information technology in transforming the university. Many of the questions will be answered, in time. What we know now is that we must be prepared for disruption, and that universities must devote sufficient resources and investment to getting ahead of the curve in this new era. Information technology cannot just be grafted onto existing plans. It must be an integral part of a new planning process.

IBM AND RENSSELAER POLYTECHNIC INSTITUTE,  
*America's oldest technological research university,*  
CREATED THE RENSSELAER CENTER FOR BROADBAND DATA TRANSPORT,  
SCIENCE AND TECHNOLOGY. THE **\$33 MILLION** RESEARCH CENTER  
PROVIDES AN IT INFRASTRUCTURE  
TO HANDLE ANY LEVEL OF INTERNET TRAFFIC,  
DATA STORAGE, AND NEW SCIENTIFIC CHALLENGES THAT REQUIRE  
IMMENSE COMPUTING POWER.







THE WORLD WIDE WEB MUST LIVE UP  
TO ITS NAME

by **Harry P. Pachon, Ph.D.**

PRESIDENT, TOMÁS RIVERA POLICY INSTITUTE, AND PROFESSOR OF  
PUBLIC POLICY, UNIVERSITY OF SOUTHERN CALIFORNIA

and **Elsa E. Macias, Ph.D.**

SENIOR RESEARCH ASSOCIATE, TOMÁS RIVERA POLICY INSTITUTE,  
UNIVERSITY OF SOUTHERN CALIFORNIA

Despite the increase of  
multilanguage material online, most  
Web content is still in English.

This leaves Spanish-dominant Web users—especially vulnerable low-income and underserved Latinos—with minimal access to vital material on the Web that can help them address health, education or life-skills issues. Given the large and growing number of first-generation Latinos in the United States, this need will continue to be important for years to come, affecting millions. The ¡TradúceloAhora! (TranslateNow!) grant program, pioneered by IBM in response to a report it commissioned on the Latino digital divide, provides a creative solution to the problem. IBM created, and is now donating, English-to-Spanish translation software and technology for nonprofit organizations across the United States, opening a world of information for Spanish-speakers and bilingual online users.

THE TOMÁS RIVERA POLICY INSTITUTE (TRPI) IS THE  
*premier Latino think tank*. IN 2003, IBM LAUNCHED A  
MULTIMILLION-DOLLAR ¡TRADÚCELOAHORA! **AUTOMATIC  
TRANSLATION** GRANT PROGRAM, WHICH HAS HELPED  
TRPI AND 30 OTHER NONPROFIT ORGANIZATIONS  
*address the digital divide* FOR LATINOS WITH IBM'S  
WEBSPHERE TRANSLATION SERVER.



## DON'T THINK "COMPUTERS," THINK COMPUTING

by Xie Huanzhong

DIRECTOR-GENERAL, DEPARTMENT OF SCIENCE AND TECHNOLOGY,  
MINISTRY OF EDUCATION, PEOPLE'S REPUBLIC OF CHINA

The China Grid will provide a wide range of advantages over standard computer networks for university students and researchers—and its uses will go far beyond the academic world.

Innovation is the spirit and soul of China's economic development. And it is also key to our students' aspirations for personal development and for making a difference—for their country and for human civilization.

China is one of the first countries to implement a computing grid of this scale. It is a computing network, much more efficient than a network of computers. You simply can't compare traditional clustering and data storage capacity with those of a grid. For example, the China Grid will fully utilize the information and computing resources of our CERNET (China Education and Research Network), and will enable resource sharing, eliminate information islands and provide an effective and high-standard platform for computing at our universities.

This implementation of grid computing will help bring down costs and raise the bar for quality control. It will transform teaching and education in general by better utilizing online information and by providing a robust environment for scientific research. Students and researchers will use the China Grid for image processing, biological information science, hydrodynamics, e-campus activities and other computing-intensive projects.

But grid computing is also the future environment for applications ranging from e-business, telemedicine and a variety of industries to even the home and entertainment markets. Working together, progressive policy and IT infrastructure can enable economies and markets to grow rapidly—but in an orderly fashion.

UPON COMPLETION, THE CHINA EDUCATION AND RESEARCH GRID WILL BE CAPABLE OF LINKING *more than 200,000* students and faculty members FROM NEARLY 100 UNIVERSITIES ACROSS THE PEOPLE'S REPUBLIC OF CHINA TO A VIRTUAL SUPERCOMPUTER—BASED ON NEW WEB SERVICES TECHNOLOGY IN WebSPHERE—CAPABLE OF CONDUCTING **15 TRILLION** CALCULATIONS PER SECOND.





## SOMETHING VENTURED, SOMETHING GAINED

by Robert Grady, James W. Breyer, and Lip-Bu Tan

JAMES BREYER IS CHAIRMAN, AND ROBERT GRADY AND LIP-BU TAN ARE BOARD MEMBERS, OF THE NATIONAL VENTURE CAPITAL ASSOCIATION, AN ORGANIZATION REPRESENTING MORE THAN 400 MEMBER FIRMS WORLDWIDE.

THE VENTURE CAPITAL INDUSTRY during the bubble perhaps made one mistake—investing only in cutting-edge technologies being sold only to other, larger IT companies. When the big cap companies caught a cold, the little companies got pneumonia. We believe that the more powerful trend is the deployment of technology throughout the industrial economy—in automotive manufacturing, defense and aerospace, health care, logistics, transportation, you name it. Technology continues to penetrate and offer productivity improvements in each of these sectors. The reengineering of businesses in America and around the world is far from complete, and its daily story is very exciting to us. — ROBERT GRADY

SOME PEOPLE SAY OPEN SOURCE software has commoditized segments of the IT industry, but I would argue that it re-energized technologies that had stagnated and lacked innovation for some time. Customers have long felt exploited by the proprietary vendors who base their pricing on lock-in and market power, rather than innovation or value delivered. The open source movement is as much a customer rebellion against that exploitation as it is a developer movement. And it's not only about cost. On the flipside, traditional software companies had better be prepared to justify their value continually, or they risk falling prey to the next open source project. — JAMES BREYER

THE WILD EXUBERANCE surrounding the Internet resulted in a get-rich-quick euphoria that afflicted entrepreneurs, large corporations, venture capitalists and small investors. Huge amounts of money went into business models that never really made sense. Vast sums were spent on marketing and advertising to propel growth in an effort to IPO the company as soon as possible. Hopefully, the VC industry learned some good lessons. We are still very excited about the continuing innovations that we see in the IT sector. But, we have to build companies the old-fashioned way: with lots of entrepreneurial hard work and sweat equity, smaller rounds of financing, slower growth and self-financing revenue plans, and with more responsible involvement from venture capitalists in building the businesses. — LIP-BU TAN

IBM BELIEVES THAT VENTURE CAPITALISTS ARE A **POWERFUL FORCE** FOR INNOVATION. *We actively build relationships* WITH THE VENTURE CAPITAL COMMUNITY TO SHARE OUR VISIONS, STRATEGIES, STANDARDS AND ARCHITECTURES, AND TO IDENTIFY EMERGING BUSINESS OPPORTUNITIES.

*From left to right:*

ROBERT GRADY IS MANAGING DIRECTOR OF THE CARLYLE GROUP.  
JAMES BREYER IS MANAGING PARTNER OF ACCEL PARTNERS.  
LIP-BU TAN IS CHAIRMAN OF WALDEN INTERNATIONAL.



## RELATIONSHIPS BECOME THE BUSINESS MODEL

by Sanjay K. Jha

EXECUTIVE VICE PRESIDENT & PRESIDENT,  
QUALCOMM CDMA TECHNOLOGIES (QCT), QUALCOMM

Wireless communications is one of the most exciting growth opportunities in technology. And its greatest impact may not be in the new multimedia devices that support CD-quality audio, integrated cameras, high-quality graphics for gaming, and video for news and teleconferencing that are generating most of the attention in the industrialized countries.

Perhaps less appreciated, though more consequential, is the role the wireless industry is playing in bringing simple voice communication and Internet connectivity to newer, emerging markets, such as India, Southeast Asia, Latin America, and of course China, which now has more wireless users than users of traditional landlines.

QUALCOMM develops the chipsets and integrated applications to make wireless devices smaller, more versatile and less costly. To do that, we have to manage our global supply chain and understand the needs and preferences of consumers in each regional marketplace. We also have to be acutely sensitive to governmental practices in each of the dozens of countries in which we do business, because the scarcity of wireless spectrum invites a high degree of regulation.

With so much to know and so little time to act on that knowledge, we knew we'd have to stay extraordinarily focused if we were to succeed. From the beginning, we were convinced the most successful companies would be those that concentrated on their core areas of expertise while depending on the proficiencies of their partners. The transition from an innovative idea to a commercially successful product requires an enormous amount of collaboration among consumer electronics device manufacturers, applications developers, wireless carriers, and partners like IBM, whose technology development expertise we rely on to deliver leading-edge semiconductors.

WORKING TOGETHER FOR *more than 10 years*, QUALCOMM AND IBM  
HAVE MANUFACTURED AND SHIPPED MORE THAN  
**300 MILLION** CHIPS FOR THEIR CELLULAR PRODUCTS,  
HELPING QUALCOMM TO BECOME THE WORLD'S LARGEST  
"FABLESS" SEMICONDUCTOR COMPANY.





## WHY WE NEED TO BE OPEN

by **Stuart Cohen**

CHIEF EXECUTIVE OFFICER, OPEN SOURCE DEVELOPMENT LABS

OPEN SOURCE SOFTWARE is very much like science. You have an idea, you make something, you test it, and if it works, then you and others in the world go do something useful with it.

It's all open so people can understand how the software works, how to improve it and where the bugs and security problems might be. It's a much more efficient way to get things done. This is very valuable to business.

The openness can also speed time to market with new services and software. And it's much easier and less expensive to adapt open source software to meet your business requirements than it is with proprietary software.

We believe that Linux, in particular, offers a very compelling value proposition. Customers like things that are faster, better, cheaper and more reliable and flexible. That's Linux in many markets already.

by **Ian Foster**

ASSOCIATE DIVISION DIRECTOR, ARGONNE NATIONAL LABORATORY AND ARTHUR HOLLY COMPTON PROFESSOR OF COMPUTER SCIENCE, UNIVERSITY OF CHICAGO

GRID TECHNOLOGIES are very much an evolutionary step forward, made possible by the sharing and integration of resources and services within distributed, dynamic, multiorganizational settings. And although early grid deployments are comparatively modest in scope, even these are already doing far more than today's office networks or the Web. Their benefits fall into three main areas: increased productivity, reduced costs and the enablement of entirely new applications.

The ultimate goal of grid computing, however, is revolutionary: to virtualize computing, so that individuals or companies can call upon the computing, storage, data and software that they need to do their work, regardless of location and from the lowest bidder.

Open standards are vital to the success of grids because grids are about integration, and without standards our ability to integrate is limited. Decisions you make now will make it far easier (or harder) to provide grid capabilities as you move forward.

IBM IS A LEADER, SIGNIFICANT CONTRIBUTOR OR IMPORTANT PARTICIPANT IN NUMEROUS OPEN SOURCE PROJECTS.  
*Key areas include:* LINUX, INTERNET STANDARDS, HTTP SERVER, XML, SOAP, WEB SERVICES, APACHE, ECLIPSE AND THE GLOBUS ALLIANCE.

# In the company of IBMers

A publicly held corporation is a legal entity, but it is also a set of relationships—between the company’s people and its shareholders, and among clients, suppliers, distributors, organizations and the communities where its people live and work. For 319,000 IBMers around the world, relationships are the context for our work, where collaboration fosters innovation and leads to client success.

In July 2003, tens of thousands of IBMers reexamined their relationship with this company and with each other in a 72-hour online discussion that took place via IBM’s global intranet. They discussed, debated and explored what it means to be an IBMer today and what needs to change to keep them motivated for tomorrow. In the end, they shaped and committed to three values that will guide everything we do.

## *IBMers value:*

- Dedication to every client’s success
- Innovation that matters—for our company and for the world
- Trust and personal responsibility in all relationships

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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.

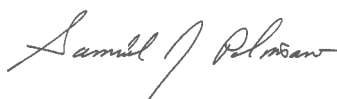
IBM maintains an effective internal control structure. It consists, in part, of organizational arrangements with clearly defined lines of responsibility and delegation of authority, and comprehensive systems and control procedures. We believe this structure provides reasonable assurance that transactions 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 controls, 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 auditors, 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 independent, non-management directors, and is responsible for recommending to the Board the independent auditing firm to be retained for the coming year, subject to stockholder ratification. The Audit Committee meets periodically and privately with the independent auditors, 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**

*Chairman of the Board,  
President and Chief Executive Officer*



**JOHN R. JOYCE**

*Senior Vice President and  
Chief Financial Officer*

## Report of Independent Auditors

*To the Stockholders and Board of Directors of  
International Business Machines Corporation:*

In our opinion, based on our audits and the report of other auditors, the accompanying consolidated financial statements appearing on pages 74 through 121 present fairly, in all material respects, the financial position of International Business Machines Corporation and subsidiary companies at December 31, 2003 and 2002, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2003, 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 did not audit the financial statements of the company's Business Consulting Services Reporting Unit (which includes the consulting practice acquired from us as discussed in note C) for the year ended December 31, 2003 and the three months ended December 31, 2002, which statements reflect total revenues of 14.5 percent and 4.3 percent of the related consolidated totals in the periods ended December 31, 2003 and 2002, respectively.

Those statements were audited by other auditors whose report thereon has been furnished to us, and our opinion expressed herein, insofar as it relates to the amounts included for the company's Business Consulting Services Reporting Unit, is based solely on the report of the other auditors. 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 and the report of other auditors provide a reasonable basis for our opinion.



**PRICEWATERHOUSECOOPERS LLP**

*New York, New York  
January 15, 2004*

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## ROAD MAP

The financial section of the International Business Machines Corporation (IBM) 2003 Annual Report, consisting of this Management Discussion, the Consolidated Financial Statements that follow and the related notes thereto, comprises 81 pages of information. 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 these 81 pages.

## IBM'S BUSINESS MODEL

IBM's business model is built to support two principal goals: helping clients become more efficient and competitive through the use of business insight and information technology (IT) solutions; and providing long-term value to shareholders. In support of these objectives, the business model has been developed over time through strategic investments in services and technologies that have the best long-term growth and profitability prospects based on the value they deliver to clients. In addition, IBM is committed to its employees and the communities in which it operates.

The model is designed to allow for flexibility and periodic rebalancing, as demonstrated with the 2002 acquisition of PricewaterhouseCoopers' (PwC) consulting business (PwCC), the acquisition of Rational Software Corp. (Rational) in 2003, and the 2002 divestiture of the company's hard disk drive (HDD) business.

The company's portfolio of capabilities ranges from services that include business transformation consulting to software, hardware, fundamental research, financing and the component technologies used to build larger systems. These capabilities are combined to provide business insight and solutions in the enterprise computing space.

In terms of financial performance, over the last two years, IBM increased its participation in the high-growth areas of its industry, while at the same time maintaining a breadth of capabilities that has allowed it to gain market share during weak economic environments. In general, this strategy results in less volatile returns overall, because each individual capability has unique financial attributes. Some involve contractual long-term cash and income streams while others involve cyclical transaction-based sales.

In terms of marketplace performance — i.e., the ability to deliver client value — it is important to understand that the fundamental strength of this business model is not found in the breadth of the portfolio alone, but in the way the company creates business solutions from among its capabilities and relationships.

## TRANSPARENCY

Transparency is a primary goal of successful financial reporting. The following are additional improvements you will find in this year's Annual Report:

- The Management Discussion is designed to provide readers with a view of the company's results and certain factors that may affect future prospects from the perspective of the company's management. A new snapshot of the key messages in the Management Discussion has been added on page 44 immediately following the Road Map. While the details of the Management Discussion remain, readers will be able to assess quickly the most important and key drivers within this brief overview.
- The Management Discussion was redesigned to reflect the company's continued and improving strength in providing broad client solutions, as opposed to a "piece parts" conglomeration of many hardware, software and services businesses. The Description of Business beginning on page 45 (introduced in the 2002 Annual Report), Results of Continuing Operations on page 51, Financial Position on page 57, and Looking Forward on page 63 sections, all are now written from the perspective of the consolidated entity. Detailed analysis for each of the company's segments follows the consolidated perspective and appears on pages 55 to 57.
- A separate Global Financing section beginning on page 69 (introduced in the 2002 Annual Report) is retained and not included in the consolidated perspective that is referred to above. This section was separately retained given its unique impact on the company's financial condition and leverage.
- The Liquidity and Capital Resources section beginning on page 64 was expanded to provide greater insight on the strength and factors affecting the company's liquidity.

## HELPFUL HINTS

### *Organization of Information*

- This Management Discussion section provides the reader of the financial statements with a narrative on the company's financial results. It contains the results of operations for each segment of the business, followed by a description of the company's financial position, as well as certain employee data. It is useful to read the Management Discussion in conjunction with note X, "Segment Information," on pages 117 through 121.
- Pages 74 through 79 include the Consolidated Financial Statements. These statements provide an overview of the company's income and cash flow performance and its financial position.
- The notes follow the Consolidated Financial Statements. Among other things, the notes contain the company's accounting policies (pages 80 to 86), detailed information on specific items within the financial statements, certain contingencies and commitments (pages 101 to 103), and the results of each IBM segment (pages 117 to 121).

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

- The selected reference to constant currency in the Management Discussion is made so that the financial results can be viewed without the impacts of changing foreign currency exchange rates and therefore facilitates a comparative view of business growth.

## Discontinued Operations

On December 31, 2002, the company sold its HDD business to Hitachi, Ltd. (Hitachi). The HDD business was accounted for as a discontinued operation under generally accepted accounting principles (GAAP). This means that 2002 and 2001 income statement and cash flow information were reformatted to separate the divested business from the company's continuing operations. This presentation is required by GAAP and facilitates historical and future trend analysis of IBM's continuing operations. On page 92, the company discusses this transaction and the accounting for the divestiture.

## MANAGEMENT DISCUSSION SNAPSHOT

(dollars and shares in millions except per share amounts)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. PERCENT/ MARGIN CHANGE
Revenue	\$ 89,131	\$ 81,186	9.8%*
Gross profit margin	37.0%	37.3%	(0.3)pts.
Total expense and other income	\$ 22,144	\$ 22,760	(2.7)%
Total expense and other income to revenue ratio	24.8%	28.0%	(3.2)pts.
Provision for income taxes	\$ 3,261	\$ 2,190	48.9%
Income from continuing operations	\$ 7,613	\$ 5,334	42.7%
Earnings per share from continuing operations:			
Assuming dilution	\$ 4.34	\$ 3.07	41.4%
Basic	\$ 4.42	\$ 3.13	41.2%
Weighted-average shares outstanding:			
Assuming dilution	1,756.1	1,730.9	1.5%
Basic	1,721.6	1,703.2	1.1%
Assets**	\$ 104,457	\$ 96,484	8.3%
Liabilities**	\$ 76,593	\$ 73,702	3.9%
Equity**	\$ 27,864	\$ 22,782	22.3%

\* 2.8 percent at constant currency

\*\* at December 31

## CONTINUING OPERATIONS

The increase in IBM's 2003 Income from continuing operations and diluted earnings per share from continuing operations as compared to 2002 was due to:

- The results of the company's productivity and efficiency initiatives, including the benefits from the 2002 Microelectronics and productivity actions
- Stronger demand associated with the improving economy (especially during the fourth quarter) and continued market share gains
- The charges recorded in 2002 for the 2002 actions
- Favorable impact of currency translation, partly offset by related hedging activities

The increase in revenue in 2003 as compared to 2002 was due to:

- Stronger demand associated with the improving economy (especially during the fourth quarter) and continued market share gains
- The impact of the fourth quarter 2002 acquisition of PwCC and the first quarter 2003 acquisition of Rational, partially offset by decreases in revenue due to Technology Group divestitures
- The favorable impact from currency translation

With regard to the way that management reviews the business, as-reported and constant currency revenue trends were all positive for most of the company's segments, geographies and industry sectors. See page 51 for the summary trend rates on an as-reported and constant currency basis, as well as such information for each segment on pages 55 to 57.

Gross profit margins remained relatively flat. Increases in Hardware and Software margins resulting from the ongoing benefits from the company's integrated supply chain initiatives and favorable currency translation were offset by decreases in Global Services margins driven primarily by investment costs on the early stages of a Strategic Outsourcing (SO) contract and the company's changing mix of revenue toward Business Consulting Services (BCS).

As discussed above, there were several charges in 2002 that impacted the year-to-year expense comparison. These items contributed 2.8 points of the improvement in the Total expense and other income-to-revenue ratio. The remaining improvement was primarily due to the results of productivity and efficiency initiatives partially offset by an increase in retirement-related plans cost.



## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

The company's effective tax rate increased by almost 1 point primarily due to a less favorable mix of geographic income and the absence of the tax benefit associated with the Microelectronics actions taken in the second quarter of 2002.

With regard to Total Assets, approximately \$7 billion of the increase relates to the impact of currency translation. The remaining increase primarily consists of an increase in Goodwill associated with recent acquisitions and increased pension assets, as well as strong cash performance. The increase in cash during 2003 was due to the combination of stronger operating results and lower pension funding in 2003. The company reduced non-Global Financing debt in 2003 as a result of strong 2003 cash flows from operations. Global Financing debt decreased, but the company's Global Financing debt-to-equity ratio remained flat at 6.9 to 1 and within the company's target range.

Looking forward, the company's business model targets revenue to grow in the mid to high single digits and earnings per share to grow at low double digits over the long term. The company's ability to meet these objectives depends on a number of factors, including those outlined on page 50 and on pages 101 and 102.

Global Services signings were \$55 billion in 2003 as compared to \$53 billion in 2002. The Global Services backlog is \$120 billion at December 31, 2003.

### DESCRIPTION OF BUSINESS

*Please refer to IBM's Annual Report on Form 10-K filed on or about March 8, 2004, with the Securities and Exchange Commission (SEC) for a more detailed version of this Description of Business, especially the detailed "Significant Factors Affecting IBM's Business" section.*

IBM focuses on the intersection of business insight and technological innovation for enterprise clients.

Over the past decade, IBM has been a leader in the IT market's shift of focus from selling hardware, software and services, to the creation of solutions to clients' business problems. During the early years of the Internet's entry into mainstream commerce, communications and business operations in the mid- to late- 1990s, value was created first through providing widespread access and then through the integration of business processes, such as supply chain, client relationships and human resources. Today, IBM is once again leading the industry toward the more fundamental, industry-specific transformations of on demand business.

In its relationships with its clients, IBM has found that a majority of enterprises are concerned with four main issues:

- Demand for faster innovation
- Reducing expenses
- Integration across the organization's "value chain" (representing every transaction or interaction within an enterprise, with other enterprises and with individuals)
- Demand for predictable return on investment

By redesigning their business processes and organizational structure, supported by and enabled by new systems operating environments, these clients are seeking to become on demand businesses.

IBM defines an on demand business as an enterprise whose business processes are:

- Responsive to any client demand, market opportunity or external threat;
- Integrated end-to-end across the company; and
- Integrated across industry value nets, interconnected chains of partners, suppliers and clients.

An essential aspect of an on demand operating environment is that its infrastructure is based on industry-wide standards (commonly referred to as "open standards"). In IBM's view, an investment in such an infrastructure provides the greatest returns rather than relying on proprietary control by a single company or affiliation of companies. One positive development in this regard is the emergence of "open source" operating systems and programming languages that benefit from further development by the business and IT communities, as in the case of the Linux operating system or the Java programming language.

However, to realize the full benefits of an on demand environment, solutions with the highest returns also require the transformation and integration of business processes within and among institutions.

IBM's clients include many different kinds of enterprises, from sole proprietorships to the world's largest organizations, governments and companies representing every major industry and endeavor. Over the last decade, IBM has exited or greatly de-emphasized its involvement in consumer markets and divested itself of other non-core businesses to concentrate on the enterprise market. In IBM's view, the enterprise market represents approximately two-thirds of the IT industry's revenue, as well as twice the growth and three times the

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

profits compared to consumer areas of the industry. As a result, IBM has made acquisitions and invested in emerging business opportunities important to its enterprise clients. Many of these investments have since grown to a point where their revenue and opportunity now can be considered part of IBM's mainline businesses. The majority of the company's enterprise business, which excludes the company's original equipment manufacturer (OEM) technology business, occurs in industries that are broadly grouped into six sectors around which the company's sales and distribution activities, as well as an increasing number of its services and products businesses are organized:

SECTOR	INDUSTRIES
<i>Financial Services</i>	Banking Financial Markets Insurance
<i>Public</i>	Education Government Health Care Life Sciences
<i>Industrial</i>	Aerospace Automotive Defense Chemical and Petroleum Electronics
<i>Distribution</i>	Consumer Products Retail Travel Transportation
<i>Communications</i>	Energy and Utilities Media and Entertainment Telecommunications
<i>Small &amp; Medium Business</i>	The majority of businesses in this sector have fewer than 1,000 employees

## THE IT INDUSTRY AND IBM'S STRATEGY

IBM operates in both the business services and IT industries, which comprise the following three categories:

- Business Value
- Infrastructure Value
- Component Value

The primary rationale for IBM's investments in the Component Value category is to provide a competitive advantage in the Infrastructure Value category, which in turn is considered a competitive advantage in the Business Value category.

IBM sees a shift in revenue and profit growth up from Component Value to Infrastructure Value and into the Business Value category, where revenue and profit potential are thought to be greatest in the decade ahead.

## Business Value

### OVERVIEW

Services and software to improve business performance for Enterprise Computing clients. IBM helps its Enterprise Computing clients transform their business processes and gain competitive advantage by applying its skills and experience to processes specific to the client's industry or to business challenges across industries and processes. The company enters into long-term relationships and creates solutions for clients, on its own or in partnership with other companies, drawing upon its broad product and service offerings, and relying on its BCS organization, the capabilities of IBM Research, its experience in chip design and application, and the company's own viewpoint of developing trends in business and technology.

### STRATEGY

Drive on demand business innovation.

### CAPABILITIES

*Business Consulting Services* – Delivery of value to clients through consulting services for application innovation and systems integration, client relationship management, financial management, human capital, business strategy and change, supply chain management and the transformation of business processes and operations. (Global Services)

*Customer financing* – Lease and loan financing to clients and internal clients for terms generally between two and five years. (Global Financing)

*Engineering & Technology Services (E&TS)* – System and component design services, strategic outsourcing of clients' design teams, and technology and manufacturing consulting services. (Technology Group)

*On Demand Innovation Services (ODIS)* – IBM Research scientists and experts work with BCS consultants to analyze clients' business challenges and provide solutions that address these challenges. ODIS offers a number of cross-industry micropractices with deep expertise in business optimization, security, mobile enablement, information mining and more. (Global Services)

*Software and services to meet industry-specific needs* – Solutions and applications built on an on demand, standards-based infrastructure to transform a process that is unique to specific industries. (All IBM Groups)

## Infrastructure Value

### OVERVIEW

Hardware, software and services integrated into a computing environment. Infrastructure Value concerns systems, such as high-volume server computers; middleware software that can interconnect disparate operating systems and applications with data; storage networks; and devices. It also refers to such services as infrastructure management—whether on

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

the client's premises or managed remotely at IBM's own facilities—and consulting about how to improve and strengthen the infrastructure and realize greater return on investment in it. Central to IBM's approach for building value in the infrastructure category is its support of open standards and its active promotion of Linux, the open source operating system, which helps IBM's clients control costs and allows them to benefit from the latest developments created by the Linux development community around the world. To support Linux development and deployment, IBM has enabled its servers and storage products to operate with Linux, IBM's leading middleware products are designed to work in a Linux environment, and Linux is a preferred choice for many of the company's services and consulting engagements.

## STRATEGY

Deliver open and integrated offerings; expand partnerships; continue to exit select markets, such as application software.

## CAPABILITIES

*Application Management Services* – Application development, management, maintenance and support services for packaged software, as well as custom and legacy applications. (Global Services)

*Commercial financing* – Short-term inventory and accounts receivable financing to dealers and remarketers of IT products. (Global Financing)

*DB2 information management software* – Advanced database and content management software solutions that enable clients to leverage information on demand. (Software)

*e-business Hosting Services* – Solutions for the management of clients' Web-based infrastructure and business applications, as well as a growing portfolio of industry-specific independent software vendor (ISV) solutions that are delivered as a service. (Global Services)

*Integrated Technology Services (ITS)* – Design, implementation and maintenance of clients' technology infrastructures. (Global Services)

*Lotus software* – Collaboration and messaging software that allows a company's employees, clients, vendors and partners to engage in real-time and asynchronous communication and knowledge management. (Software)

*Personal computers* – Desktop and notebook computers featuring ThinkVantage technologies that provide enterprises and end users with increased productivity and cost-effectiveness. (Personal Systems Group)

*Printing Systems* – Production print solutions, on demand print-related solutions, enterprise workgroup print technologies, and print management software and services. (Personal Systems Group)

*Rational software* – Integrated tools designed to improve an organization's software development processes and capabilities. (Software)

*Remarketing* – The sale and lease of used equipment (primarily sourced from the conclusion of lease transactions) to new or existing clients. (Global Financing)

*Retail Store Solutions* – Point-of-sale retail checkout equipment, software and solutions. (Personal Systems Group)

*Servers* – IBM eServer systems using IBM operating systems (zSeries and iSeries), as well as AIX, the IBM UNIX operating system (pSeries) and the Microsoft Windows operating system (xSeries). All servers can also run Linux, a key open-source operating system. (Systems Group and Software).

*Storage* – Data storage products, including disk, tape and storage area networks. IBM continues to be a leading vendor in storage services. (System Group)

*Strategic Outsourcing Services* – Competitive cost advantages through the outsourcing of processes and operations. (Global Services)

*Tivoli software* – Software for infrastructure management, including security, change, configuration, job scheduling, storage capability, performance and availability. (Software)

*WebSphere software* – Management of a wide variety of business processes using open standards to interconnect applications, data and operating systems. (Software)

## Component Value

### OVERVIEW

Component Value describes advanced semiconductor development and manufacturing for IBM's server and storage offerings, and services, technology and licenses provided to OEMs that create and market products requiring advanced chips and other core technology elements.

### STRATEGY

Leverage components for Infrastructure Value; and continue to participate in select markets and to pursue outsourcing for manufacturing of select products.

### CAPABILITIES

*Application Specific Integrated Circuit (ASICs)* – Manufacturing of customized semiconductor products for clients. (Technology Group)

*Advanced Foundry* – Full suite of semiconductor manufacturing and integrated supply chain services using either a client's or IBM's design. (Technology Group)

*Standard products and custom microprocessors* – Semiconductors designed and manufactured primarily based upon IBM's PowerPC architecture. (Technology Group)



# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## BUSINESS SEGMENTS

Organizationally, the company's major operations comprise a Global Services segment; three hardware product segments — Systems Group, Personal Systems Group and Technology Group; a Software segment; and a Global Financing segment. See the IT Industry and IBM's Strategy section on pages 46 and 47 for the specific capabilities relating to these business segments.

*Global Services* is an important part of the company's strategy of providing insight and solutions to clients. While solutions often include industry-leading IBM software and hardware, other suppliers' products are also used if a specific client solution requires it. Global Services outsourcing contracts as well as BCS contracts with the U.S. federal government and its agencies are typically seven to ten years in duration. Other contracts range in periods generally up to one year, including consulting contracts and ITS.

The company's new Business Transformation Outsourcing (BTO) capabilities combine the insight of BCS with the company's process outsourcing capabilities to assume responsibility for the operations and management of a client's business processes in areas including human resources, procurement, customer relationship management, finance and administration, among others. The company will only enter into BTO agreements with clients when it believes that IBM can leverage its business knowledge and technology to drive client productivity and cost improvements. These generally are large-scale, multiyear contracts ranging up to ten years in length that include the operation, strategic change and transformation of the client's business processes. BTO engagements may include support and involvement of various business units that have capabilities such as BCS, Application Management Services, e-business Hosting Services, middleware and hardware.

*Systems Group* provides business solutions to clients. Approximately half of the Systems Group's sales transactions are through business partners and approximately 46 percent are direct to clients, slightly more than half of which are through the Web at [ibm.com](http://ibm.com). While appropriately not reported as external revenue, hardware is also deployed to support Global Services solutions.

*Technology Group* provides leading semiconductor technology and products, packaging solutions and engineering technology services to OEM clients (approximately 78 percent) and, although appropriately not reported as external revenue, to the Systems Group (approximately 21 percent).

Using a "one-team" approach, Systems Group works hand-in-hand with the Technology Group on product planning and strategy, given the high content level of Technology Group components inside Systems Group products. In recognition of the increasing degree of collaboration between the two segments and as discussed on page 118, the company combined the Systems Group and the Technology Group in the first quarter of 2004.

*Personal Systems Group* includes the company's lines of personal computers, printers and point-of-sale terminals. These offerings are designed to assist clients to improve productivity and to reduce clients' total cost of ownership.

*Software* consists primarily of middleware and operating systems software. Middleware software enables clients to integrate systems, processes and applications across the clients' enterprises through the use of open standards. Middleware is designed to be the underlying support for applications provided by ISVs who build industry- or process-specific applications according to open industry standards. Operating systems are the engines that run computers. Approximately 70 percent of Software volumes are directly with the end-user clients and about 20 percent are through Business Partners. While appropriately not reported as external revenue, the remainder is deployed internally to support Global Services solutions.

Approximately 40 percent of external Software revenue relates to one-time charge (OTC) arrangements whereby the client pays one up-front payment for a lifetime license. Typically, arrangements for the sale of OTC software include one year of maintenance. The client can also purchase ongoing maintenance after the first year, which includes product upgrades and technical support. The remaining software is sold on a monthly license charge arrangement.

*Global Financing* is described on pages 69 to 73.

*Enterprise Investments* develops and provides industry-specific IT solutions supporting the Hardware, Software and Global Services segments of the company. Primary product lines include product life cycle management software and document processing technologies. Product life cycle management software primarily serves the Industrial sector and helps clients manage the development and manufacturing of their products. Document processor products service the Financial Services sector and include products that enable electronic banking.

## IBM WORLDWIDE ORGANIZATIONS

The following three company-wide organizations play key roles in IBM's delivery of value to its clients:

- Sales & Distribution Organization and related sales channels
- Research, Development and Intellectual Property
- Supply Chain

### *Sales & Distribution Organization*

IBM offers its products through its Global Sales & Distribution organizations. Consistent with IBM's focus on Business Value, the company's global corps of account representatives combine a deep understanding of each client's organizational and industry-specific needs with comprehensive knowledge of the products, technologies and services offered by IBM and its network of business partners.

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IBM also offers its products through a variety of other internal and external channels. Four of these channels comprise IBM's Business Partner relationships, through which the company receives approximately one-third of its revenue.

#### INTERNAL ROUTES-TO-MARKET

*Global Services consultants* – Particularly in selling end-to-end solutions for large, complex business challenges, IBM very often relies on the practitioners and consultants within its Global Services unit, as these challenges generally require integrating services and on demand solutions from IBM and other suppliers.

*Hardware and software brand specialists* – IBM's own hardware and software brand product specialists work face-to-face with clients, selling IBM platforms as part of a discrete technology platform decision, typically to "self-integrating" IT departments.

*ibm.com* – Online and telephone sales and assistance operations handle basic commodity transactions for large enterprises and small-to-medium businesses.

#### BUSINESS PARTNERS ROUTES-TO-MARKET

*Global/major independent software vendors* – ISVs deliver business process or industry-specific applications and, in doing so, often influence the sale of IBM hardware, middleware and services.

*Global/major systems integrators (SIs)* – SIs identify business problems and design solutions when Global Services is not the preferred systems integrator; they also sell computing infrastructures from IBM and its competitors.

*Regional ISVs and SIs* – SIs identify the business problems, and ISVs deliver business process or industry-specific applications to medium-sized and large businesses requiring IBM computing infrastructure offerings.

*Solutions providers, resellers and distributors* – Resellers sell IBM platforms and value-added services as part of a discrete technology platform decision to clients wanting third-party assistance.

#### *Research, Development and Intellectual Property*

IBM's research and development (R&D) operations differentiate IBM from its competitors. IBM annually spends approximately \$5 billion for R&D, including capitalized software costs, focusing its investments in high-growth opportunities. Recent such efforts include e-business, initiatives to support Linux, middleware software products, autonomic computing, advanced semiconductor technology and other technologies supporting on demand. As a result of innovations in these and other areas, IBM was once again awarded more U.S. patents in 2003 than any other company. This marks the 11th year in a row that IBM achieved this distinction.

A key transformation that has been taking place over the past decade and continues today is the change in the focus

and the culture of IBM's R&D organization to be more closely linked to and be primarily driven by industry-specific and client-specific needs. Significant successes have been achieved by this changing focus, such as autonomic computing and Linux developments, as previously mentioned.

In addition to producing world-class products and solutions for the company's clients, the company's investments in R&D also result in intellectual property (IP) income. Some of IBM's technological breakthroughs are used exclusively in IBM products, while others are used by the company's licensees for their products when that new technology is not strategic to IBM's business goals. A third group is both used internally and licensed externally.

In addition to these IP income sources, the company also generates value from its patent portfolio through cross-licensing arrangements and IP licensed in divestiture transactions. Cross-licensing arrangements involve licensing of the company's IP to a third party in exchange for the right to use the third party's IP. The value of these other two sources is not readily apparent in the financial results on pages 54 and 74 due to the fact that income on cross-licensing arrangements is recorded only to the extent cash is received. The value received by IBM for IP transferred in divestiture transactions is included in the overall gain or loss from the divestiture, not in the separately displayed IP income amounts on pages 54 and 74.

#### *Supply Chain*

Just as IBM works to transform its clients' supply chains for greater efficiencies and responsiveness to market conditions, IBM has undertaken a large-scale initiative to recast IBM's own supply chain as an on demand business operation, thereby turning what had previously been a cost/expense to be managed, into a strategic advantage for the company and, ultimately, for its clients.

IBM spends nearly \$39 billion annually in its supply chain, procuring materials and services around the world. Prior to 2002, the company's supply, manufacturing and distribution operations were spread across its product brands and service offerings. These are now integrated in one operating unit that can:

- Understand and respond to marketplace opportunities and external risks, as well as the needs of clients, employees and partners
- Convert fixed costs to variable costs
- Simplify and streamline internal operations to improve sales force productivity and processes and thereby, continuing to improve the experiences of the company's clients when working with IBM
- Reduce inventories

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

The cost savings this unit generates provide two opportunities for the company: directly improve financial results, mostly through improved gross profit margins, or improve competitiveness and market share by passing some or all of the cost savings to clients. Accordingly, the cost savings generated by this unit will not always result in a dollar-for-dollar apparent gross margin improvement in the company's Consolidated Statement of Earnings.

While these efforts are largely concerned with product manufacturing and delivery, IBM is also applying supply chain principles to service delivery across its solutions and services lines of business.

By the end of 2003, the work of transforming and integrating its supply chain resulted in the lowest inventory levels for IBM in more than 20 years.

In addition to its own manufacturing operations, the company uses a number of contract manufacturing (CM) companies around the world to manufacture IBM-designed products. The use of CM companies is intended to generate cost efficiencies and reduce time-to-market for certain IBM products. Some of the company's relationships with CM companies are exclusive. The company has key relationships with Sanmina-SCI for the manufacture of many Intel-based products and with Solectron for a significant portion of the manufacturing operations of Global Asset Recovery Services—an operation of Global Financing that restores end-of-lease personal computers and other IT equipment for resale. Further, some IBM-branded products are manufactured by third-party OEMs and then purchased by IBM and resold under the IBM brand.

## KEY BUSINESS DRIVERS

### *Economic Environment and Corporate IT Spending Budgets*

If overall demand for hardware, software and services changes, whether due to general economic conditions or a shift in corporate buying patterns, sales performance could be impacted. IBM's diverse portfolio of products and offerings is designed to gain market share in strong and weak economic climates. The company accomplishes this by not only having a mix of offerings with long-term cash and income streams as well as cyclical transaction-based sales, but also by developing competitive products and solutions, and by effectively managing a skilled resource base.

### *Internal Business Transformation and Efficiency Initiatives*

Key to the success of IBM's strategy are its ongoing efforts to drive greater productivity and cost savings as IBM continues to transform itself into an on demand enterprise. Integral to these efforts will be the internal supply chain initiatives discussed above as well as the company's efforts to manage the cost of its resources worldwide. These efforts will continue to include the rebalancing of skills, developing the most

cost-effective workforce structure, and continuing to make the company's compensation programs competitive and aligned with organizational units. The degree of continued success in this area will impact the amount of company expense and cost structure improvements, as well as the amount of competitive leverage it can apply by passing such savings along to clients.

### *Technology Innovations*

IBM invests for new and innovative products and services. IBM has been moving away from commoditized categories of the IT industry and into areas in which it can differentiate itself through innovation, and by leveraging its investments in R&D. Examples include IBM's leadership position in the design and fabrication of ASICs; the design of smaller, faster and energy-efficient semiconductor devices (using industry-leading innovations such as copper technology, silicon on insulator, silicon germanium, low-K dielectric and nano-technology); the design of "autonomic" or self-managing computing systems and "grid" computing networks that allow computers to share processing power; and the company's efforts to advance open technology standards such as Linux. In the highly competitive IT industry with large diversified competitors as well as smaller and nimble single-technology competitors, IBM's ability to continue its cutting-edge innovation is critical to maintaining and increasing market share. IBM is managing this risk by more closely linking its R&D organization to industry-specific and client-specific needs, as discussed on page 49.

### *Open Standards*

The broad adoption of open standards is essential to the computing model for e-business on demand. Without the open standards that enable all manner of computing platforms to communicate and work with one another, the integration of any client's internal systems, applications and processes remains a monumental and expensive task. The broad-based acceptance of open standards—rather than closed, proprietary architectures—also allows the computing infrastructure to more easily absorb new technical innovations. IBM is committed to fostering open standards because they benefit clients, because they are vital to the on demand computing model, and because their acceptance will expand growth opportunities across the entire business services and IT industry. IBM's support is evidenced by the enabling of its products to support open standards such as Linux, as well as its recent acquisition of Rational. Rational's software development tools can be used to develop and upgrade any other company's software products. Accordingly, this acquisition is a critical part of IBM's open standards strategy.

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## YEAR IN REVIEW

### RESULTS OF CONTINUING OPERATIONS

#### Revenue

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. PERCENT CHANGE	YR. TO YR. PERCENT CHANGE CONSTANT CURRENCY
Statement of Earnings Revenue Presentation:				
Global Services	\$ 42,635	\$ 36,360	17.3%	9.3%
Hardware	28,239	27,456	2.9	(2.9)
Software	14,311	13,074	9.4	1.9
Global Financing	2,826	3,232	(12.6)	(17.6)
Enterprise Investments/Other	1,120	1,064	5.2	(2.9)
<b>Total</b>	<b>\$ 89,131</b>	<b>\$ 81,186</b>	<b>9.8%</b>	<b>2.8%</b>

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002*	YR. TO YR. PERCENT CHANGE	YR. TO YR. PERCENT CHANGE CONSTANT CURRENCY
Industry Sector:				
Financial Services	\$ 22,323	\$ 19,799	12.8%	4.8%
Public	13,977	12,171	14.8	8.5
Industrial	11,763	10,320	14.0	6.3
Distribution	8,079	7,751	4.2	(1.9)
Communications	8,009	7,406	8.1	1.5
Small & Medium	19,809	17,371	14.0	6.0
OEM	2,634	3,350	(21.4)	(21.8)
Other	2,537	3,018	(15.9)	(17.3)
<b>Total</b>	<b>\$ 89,131</b>	<b>\$ 81,186</b>	<b>9.8%</b>	<b>2.8%</b>

\* Reclassified to conform with 2003 presentation.

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. PERCENT CHANGE	YR. TO YR. PERCENT CHANGE CONSTANT CURRENCY
Geographies:				
Americas	\$ 38,078	\$ 36,423	4.5%	3.7%
Europe/Middle East/Africa	29,102	24,260	20.0	3.1
Asia Pacific	19,317	17,153	12.6	5.1
OEM	2,634	3,350	(21.4)	(21.8)
<b>Total</b>	<b>\$ 89,131</b>	<b>\$ 81,186</b>	<b>9.8%</b>	<b>2.8%</b>

Revenue for all industry sectors increased in 2003 on an as-reported basis. The Financial Services sector, Public sector and Industrial sector were among the strongest, with continued growth in the Small & Medium Business sector. These results reflect the company's go-to-market strategy of designing industry-specific solutions. See the discussion on page 52 for the decrease in OEM. The decline in Other sector revenue was due to a decrease in customer revenue not allocated to an industry sector and other adjustments.

Full-year geographic revenue increased across all geographies. In the Americas, U.S. and Canada, revenue grew as did Latin America, notably in Brazil. In Europe/Middle East/Africa, revenue performance was highest in the U.K., Central Europe and Middle East and Africa. In Asia Pacific, 2003 revenue for Japan, which is 60 percent of the region's revenue, increased compared with 2002, while the Australia/New Zealand and ASEAN regions achieved the strongest performance.



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While OEM revenue, representing three percent of the company's revenue, declined, such decline was smaller than the prior year decline. The year-to-year percent change in revenue reflects, in large part, the company's exit from its interconnect products business in 2002, as well as sluggish demand from certain OEM clients.

The increase in Global Services revenue was driven by SO, as a result of new signings, as well as BCS, as a result of the acquisition of PwCC in the fourth quarter of 2002. For Hardware, Systems Group revenue increased as pSeries servers, xSeries servers, zSeries servers and Storage System revenue increased in 2003 versus 2002. pSeries server revenue increased due to increased demand for both low-end servers and high-end servers. xSeries server revenue increased due to continued success in the company's new blade server offerings. Storage revenue increased due to increased demand for external disk and tape products. zSeries server revenue increased as total deliveries of computing power as measured in MIPS (millions of instructions per second) increased more than 28 percent in 2003 versus 2002. This increase was offset by lower average price per MIPS in 2003 versus 2002. Personal Systems Group revenue increased. Increases in mobile personal computer revenue were offset by lower revenue for desktop personal computers reflecting industry-wide price pressures. The decline in Technology Group revenue in 2003 was primarily due to divestitures in the Technology Group in 2002 as well as sluggish demand from certain OEM clients. With respect to Software, improved demand helped to drive middleware revenue increases. The WebSphere family of products, Data Management DB2 database software, and Tivoli security and storage software were middleware software categories with revenue growth. Operating system software increased due to the favorable impact of currencies. Offsetting these increases were lower demand for DB2 tools, Lotus advanced collaboration software and other middleware. Overall, the increase in total Software revenue was mainly due to the acquisition of Rational in the first quarter of 2003. The decline in Global Financing revenue in 2003 versus 2002 was primarily a result of lower interest rates and the decline in the average asset balance primarily driven by lower originations in prior years. See pages 69 to 73 for additional information regarding Global Financing results.

The following table presents each segment's revenue as a percentage of the company's total.

FOR THE YEAR ENDED DECEMBER 31:	2003	2002
Global Services	47.8%	44.8%
Hardware	31.7	33.8
Software	16.1	16.1
Global Financing	3.2	4.0
Enterprise Investments/Other	1.2	1.3
Total	100.0%	100.0%

### Gross Profit

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. CHANGE
Gross Profit Margin:			
Global Services	25.2%	26.3%	(1.1) pts.
Hardware	27.8	27.1	0.7
Software	86.5	84.4	2.1
Global Financing	55.8	56.2	(0.4)
Enterprise Investments/ Other	43.4	42.6	0.8
Total	37.0%	37.3%	(0.3) pts.

The decline in Global Services margin was due to investment costs during the early stages of an SO contract and the company's changing mix of revenue toward BCS. These decreases were partially offset by an increase in gross margin for Maintenance due to lower labor and parts costs and benefits from the 2002 productivity actions.

The increase in Hardware margin was achieved by cost improvements in zSeries and pSeries primarily due to the new product announcement of the z990 server and increased demand associated with the pSeries high-end servers. xSeries servers also increased as a result of cost improvements and the success of the company's blade strategy. In addition, Technology Group margin increased primarily due to the productivity and cost savings resulting from the 2002 Microelectronics actions taken in the second quarter of 2002.

The Software margin increased due to growth in Software revenue principally as a result of currency translation.

The decrease in the Global Financing margin was driven by a mix change toward lower margin remarketing sales and away from financing income, partially offset by lower borrowing costs related to the current interest rate environment.

The cost savings generated by IBM's supply chain initiatives also contributed to the company's overall margin improvement, but as discussed on pages 49 and 50, the company will and has passed a portion of the savings to clients to improve competitive leadership and gain market share in key industry sectors.

### Expense

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. CHANGE
Total expense and other income	\$ 22,144	\$ 22,760	(2.7)%
E/R	24.8%	28.0%	(3.2) pts.

The Total expense and other income expense-to-revenue ratio declined 3.2 percentage points to 24.8 percent in 2003 versus 2002. This decline was a result of revenue increasing by 9.8 percent in 2003 versus 2002, while Total expense and other income declined 2.7 percent in 2003 versus 2002 due primarily to productivity and efficiency initiatives, and the 2002 actions partially offset by an increase in retirement-related plan costs. For additional information regarding the decline in Total expense and other income, see the following analyses by category.

## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

### SG&A

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. CHANGE	
Selling, general and administrative expense:				
Selling, general and administrative — base	\$ 15,826	\$ 14,557	8.7%	
Advertising	1,406	1,427	(1.5)	
Workforce reductions — ongoing	454	300	51.3	
Bad debt	205	673	(69.5)	
2002 actions	(39)	1,489	NM	NM
Acquisition-related charges — PwCC	—	292	NM	NM
<b>Total</b>	<b>\$ 17,852</b>	<b>\$ 18,738</b>	<b>(4.7)%</b>	

NM—*not meaningful*

Total SG&A expense decreased 4.7 percent (9 percent at constant currency) in 2003 primarily due to ongoing productivity and efficiency initiatives, including the related benefit associated with the 2002 actions. In addition, the decrease was due to the absence in 2003 of charges for the 2002 actions recorded in 2002. The 2002 actions, principally workforce reductions, comprise the Microelectronics and productivity actions taken in the second quarter of 2002 as well as the fourth quarter 2002 actions related to the acquisition of PwCC. See pages 105 through 107 for additional information on the 2002 actions. In addition, Bad debt expense declined in 2003 versus 2002 reflective of the increased provision the company recorded in 2002 to reflect the general economic environment as well as exposure in specific sectors, particularly the Communications sector. These issues have stabilized and contributed to the lower year-to-year bad debt charges.

These decreases were partially offset by higher expenses resulting from 2003 having a full year of expenses for PwCC (acquired in the fourth quarter of 2002) and the expense associated with Rational, which was acquired during the first quarter of 2003. Included in these expenses is the amortization of intangible assets relating to PwCC and Rational. Despite these higher expenses associated with acquisitions, the expense-to-revenue ratio for the SG&A-base category declined from 2002 to 2003 (17.9 percent to 17.8 percent, respectively) due, in part, to the benefits associated with the 2002 productivity actions. The amount of Workforce reductions — ongoing will vary from year to year depending upon needed skills, the competitive landscape and economic conditions. The 2002 amount excludes workforce reductions that took place in the second quarter of 2002. These 2002 second-quarter workforce reductions were recorded in the 2002 actions amount above. See note S, “2002 Actions,” on pages 105 to 107.

### OTHER (INCOME) AND EXPENSE

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. CHANGE	
Other (income) and expense:				
Foreign currency transaction losses/(gains)	\$ 411	\$ (39)	NM	NM
Interest income	(152)	(127)	19.7%	
Net realized gains on sales of securities and other investments	(54)	(63)	(14.3)	
Writedowns of impaired investment assets	50	58	(13.8)	
Net realized losses/(gains) from certain real estate activities	16	(66)	(124.2)	
2002 actions	2	513	NM	NM
Other	(35)	(49)	(28.6)	
<b>Total</b>	<b>\$ 238</b>	<b>\$ 227</b>	<b>5.0%</b>	

NM—*not meaningful*

Other (income) and expense in 2003 versus 2002 was generally flat. Foreign currency transaction losses/(gains) increased as the dollar weakened against other currencies. This increase was more than offset by the absence of 2002 actions, principally losses associated with the exiting of a business and the vacant space accruals in 2002. The foreign currency

transaction losses/ (gains) relate primarily to losses on certain hedge contracts offset by gains on the settlement of foreign currency receivables and payables. See pages 67 and 68 for additional discussion of currency impacts on the company's financial results.

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## RESEARCH, DEVELOPMENT AND ENGINEERING

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. CHANGE
Research, development and engineering:			
Total	\$ 5,077	\$ 4,750	6.9%

The increase in Research, development and engineering (RD&E) expense in 2003 versus 2002 was primarily the result of Software acquisitions.

## INTELLECTUAL PROPERTY AND CUSTOM DEVELOPMENT INCOME

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. CHANGE
Intellectual property and custom development income:			
Sales and other transfers of intellectual property	\$ 562	\$ 511	10.0%
Licensing/royalty-based fees	338	351	(3.7)
Custom development income	268	238	12.6
Total	\$ 1,168	\$ 1,100	6.1%

IP and custom development income increased in 2003 versus 2002. The timing and amount of Sales and other transfers of IP may vary significantly from period to period depending upon timing of new patents and know-how development, timing of divestitures, economic conditions and industry consolidation. There were no 2003 agreements that individually had income of more than \$100 million.

## INTEREST EXPENSE

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. CHANGE
Interest expense:			
Total	\$ 145	\$ 145	0.0%

Interest expense is presented in Cost of Global Financing in the Consolidated Statement of Earnings only if the related external borrowings are to support the Global Financing external business. See pages 72 and 73 for additional information regarding Global Financing debt and interest expense.

## Retirement-Related Benefits

The following table provides the total pre-tax cost/(income) for all retirement-related plans. Cost/(income) amounts are included as an addition to/reduction of, respectively, the company's cost and expense amounts in the Consolidated Statement of Earnings within the caption (e.g., Cost, SG&A, RD&E) relating to the job function of the individuals participating in the plans.

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. CHANGE
Retirement-related plans — cost/(income):			
Defined benefit and contribution pension plans — cost/(income)	\$ 27	\$ (619)	NM
Nonpension postretirement benefits costs	335	371	(9.7)%
Total	\$ 362	\$ (248)	NM

NM — not meaningful

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INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

On January 1, 2003, the company reduced its expected long-term return assumption on the U.S. IBM Personal Pension Plan's (PPP) assets from 9.5 percent to 8 percent. On December 31, 2002, the company lowered its discount rate assumption from 7 percent to 6.75 percent, and lowered its rate of compensation increase from 6 percent to 4 percent. Reductions in these rates also occurred in certain non-U.S. countries. The company voluntarily fully funded the tax-qualified portion of the PPP, as measured by its accumulated benefit obligation, through a contribution of cash and IBM stock totaling \$3,963 million in the fourth quarter of 2002. These assumption changes and funding action had the collective net effect of causing the reduction in the Retirement-related plans—cost/(income) amount displayed on page 54. See the Looking Forward section on page 64 for the impact of assumption changes on the 2004 Retirement-related plans—cost/(income). Also see pages 110 to 117 for additional information relating to the company's retirement-related plans including assumptions and method used to determine assumptions.

## Provision for Income Taxes

The provision for income taxes resulted in an effective tax rate of 30.0 percent for 2003, compared with the 2002 effective tax rate of 29.1 percent. The increase in the effective tax rate in 2003 versus 2002 was primarily due to a less favorable mix of geographic income and the absence of the tax benefit associated with the Microelectronics actions taken in the second quarter of 2002.

## Weighted-Average Common Shares

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. CHANGE
Earnings per share from continuing operations:			
Assuming dilution	\$ 4.34	\$ 3.07	41.4%
Basic	4.42	3.13	41.2
Weighted-average shares outstanding: (in millions)			
Assuming dilution	1,756.1	1,730.9	1.5%
Basic	1,721.6	1,703.2	1.1

The average number of common shares outstanding assuming dilution was higher by 25.2 million shares in 2003 versus 2002. The increase was primarily the result of the company's use of common shares to fund a portion of its fourth quarter 2002 contribution to the PPP and common shares associated with the acquisition of PwCC, partially offset by the company's common share repurchase program. See note N, "Stockholders' Equity Activity," on pages 100 and 101 for additional information regarding the common share activities. Also see note T, "Earnings Per Share of Common Stock," on page 108.

## SEGMENT DETAILS

The following is an analysis of the 2003 versus 2002 external segment results. The analysis of 2002 versus 2001 external segment results is on pages 61 and 62.

### Global Services

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002*	YR. TO YR. CHANGE
Global Services Revenue:	\$ 42,635	\$ 36,360	17.3%
Strategic Outsourcing	\$ 17,124	\$ 14,995	14.2%
Business Consulting	12,955	9,424	37.5
Integrated Technology	7,099	6,871	3.3
Maintenance	5,457	5,070	7.6

\* Reclassified to conform with 2003 presentation.

Global Services revenue increased 17.3 percent (9.3 percent at constant currency) in 2003 versus 2002. SO revenue increased in 2003 primarily driven by new signings. SO continued to demonstrate its competitive advantage in delivering on demand solutions by leveraging its business transformation skills and its scale during 2003. e-business Hosting Services, an offering that provides Web infrastructure and application management as an Internet-based service, continued its strong pattern of revenue growth. BCS revenue increased in 2003 due to the acquisition of PwCC in the fourth quarter of 2002. ITS revenue increased due to the favorable impact of currency movements. During 2003, the company changed its reporting for certain OEM hardware sales to IBM clients from gross to net revenue treatment based upon a review of the terms of these sales. The company determined that the agent-like characteristics of these transactions were more appropriately recorded on a net revenue basis. Due to the amounts involved, the prior year amounts were not adjusted. As a result of this change in 2003, revenue and costs for ITS were lower by \$279 million in 2003 as compared to 2002, partially offsetting the currency impact discussed above. This change had no impact on the company's gross profit dollars, net income or cash flows.

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. CHANGE
Global Services:			
Gross profit	\$ 10,732	\$ 9,548	12.4%
Gross profit margin	25.2%	26.3%	(1.1)pts.



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INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

The Global Services gross profit dollars increased primarily due to the corresponding increase in revenue. The gross profit margin declined due to investment costs on the early stages of an SO contract and the company's changing mix toward BCS. These decreases in the gross profit margin were partially offset by the benefit from the 2002 productivity actions, as well as an increase in the gross margin for Maintenance, due to lower labor costs, as a result of improved product serviceability and increased automation, as well as lower parts costs.

### Hardware

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. PERCENT CHANGE
Hardware Revenue:	\$ 28,260	\$ 27,630	2.3%
Systems Group	\$ 14,002	\$ 12,646	10.7%
zSeries			7.4
iSeries			7.1
pSeries			12.5
xSeries			16.8
Storage Systems			9.8
Personal Systems Group	11,387	11,049	3.1
Personal Computers			3.5
Retail Store Solutions			9.3
Printer Systems			(2.7)
Technology Group	2,871	3,935	(27.0)
Microelectronics			(28.6)
Engineering & Technology Services			65.6
Other			(41.2)

Systems Group revenue increased 10.7 percent (3.3 percent at constant currency) in 2003 versus 2002 driven by xSeries server products due to growth in sales of high-volume servers supported by strong growth in blades. The company is now the industry leader in blade servers and just recently announced the industry's most powerful 4-way blade solution at close to one-fourth the size of the competitors' offerings. A blade is an independent server with its own processors, memory, storage, network controllers, operating system and applications. Blade servers slide into the bays in a single chassis, sharing power, fans, floppy drives, switches and ports with other blade servers, thereby reducing the cost of ownership by making it easier for clients to maintain the machines. The pSeries server revenues increased due to strong demand for the 64-bit POWER systems across both the low-end and high-end server offerings. The company expects to gain market share in both the xSeries and pSeries server businesses.

Revenue from the zSeries servers increased. The total delivery of zSeries computing power as measured in MIPS increased more than 28 percent in 2003 as compared to

2002. This increase was offset by lower average price per MIPS in 2003 versus 2002. The zSeries servers are often an integral part of clients' restructuring into an on demand environment. Revenue from the iSeries servers increased in all four quarters of 2003 when compared to 2002. An important competitive differentiator for this platform is its ability to consolidate and integrate heterogeneous workloads. Storage Systems revenue increased due to growth in external disk and tape products.

Personal Systems Group revenue increased 3.1 percent (down 2.5 percent at constant currency) in 2003 versus 2002. Revenue from mobile personal computers increased due to strong demand and was offset by lower desktop personal computer revenue. The decreased desktop revenue primarily reflects the fact that increased volume gains were not enough to offset a reduction in price due to decreasing commodity costs.

Technology Group revenue declined 27.0 percent (27.5 percent at constant currency) in 2003 versus 2002 driven by actions taken in 2002 to refocus and redirect its Microelectronics business to the high-end foundry, ASICs and standard products, while creating a new technology services business. These actions included the divestiture of multiple non-core businesses. See pages 105 and 106 for additional information. There was also sluggish demand from certain OEM clients that contributed to this decline. The Technology Group's advanced technologies provide the Systems Group with a competitive advantage in performance and cost, drivers for the Systems Group's strong performance.

See page 118 for a discussion of the first quarter 2004 combination of the Systems Group and the Technology Group.

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. CHANGE
Hardware:			
Gross profit	\$ 8,136	\$ 7,399	10.0%
Gross profit margin	28.8%	26.8%	2.0pts.

Hardware gross profit dollars and gross profit margin increased in 2003 versus 2002. The increases were primarily driven by increases in Technology Group and Systems Group, and a more favorable mix of revenue toward the Systems Group, which has a higher gross profit margin than the other Hardware groups. The increase in Technology Group was primarily due to the productivity and cost savings resulting from the 2002 Microelectronics actions taken in the second quarter of 2002. The Systems Group gross margin increases were due to improvements across most products, as a result of improved component costs partly attributable to the company's supply chain initiatives and reduced inventory losses.

## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

### Software

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002*	YR. TO YR. CHANGE
Software Revenue:	\$ 14,311	\$ 13,074	9.4%
Middleware	\$ 11,242	\$ 10,117	11.1%
WebSphere family			11.8
Data Management			4.7
Lotus			0.9
Tivoli			12.0
Rational			NA
Other middleware			5.5
Operating systems	2,450	2,307	6.2
Other	619	650	(4.7)

\* Reclassified to conform with 2003 presentation.

Software revenue increased 9.4 percent (1.9 percent at constant currency) in 2003 versus 2002, especially for Middleware software products. The WebSphere family of software offerings revenue increased as clients continue to focus on the higher function products that integrate Web-based applications, including advanced collaboration technology, on a user's desktop. The lower-function WebSphere application server continued to commoditize. Improved demand was also noted for Data Management DB2 database software. Revenue from Tivoli products increased as clients continue to realize the on demand attributes of Tivoli products, enabling businesses to securely automate many of their processes and gain operational efficiencies. Operating system software revenue increased due to the favorable impacts of currency movements. Offsetting these increases were lower demand for DB2 tools, Lotus advanced collaboration software and Other middleware software. A new Lotus messaging platform became generally available during the 2003 fourth quarter and helped to drive momentum in the Lotus Notes family of products toward the end of 2003. Overall, the increase in total Software revenue was mainly due to the acquisition of Rational in the first quarter of 2003. When compared to the separately reported 2002 external revenue amounts for Rational, its revenue increased approximately 6 percent in 2003.

The company's momentum with ISVs has continued to build as 155 partnership agreements were signed in 2003. These ISVs have committed to open standards and to lead with platforms such as DB2, WebSphere, Linux and eServer.

The company is rapidly evolving its Middleware business, including sales, marketing, development and ISV programs, to a greater focus on industry solutions and business transformations.

The increase in Operating system software revenue correlates to the increases in the related eServer increases.

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	YR. TO YR. CHANGE
Software:			
Gross profit	\$ 12,384	\$ 11,031	12.3%
Gross profit margin	86.5%	84.4%	2.1 pts.

The increase in the Software gross profit dollars and gross profit margin was primarily driven by the growth in Software revenue and the positive impact from currency.

### Global Financing

See page 70 for a discussion of Global Financing's revenue and gross profit.

### Enterprise Investments

Revenue from Enterprise Investments increased 4.2 percent (down 5.1 percent at constant currency) in 2003 versus 2002. The decline was attributable to demand for product life-cycle management software in the European market, especially in the automotive and aerospace industries.

Gross profit dollars increased 12.9 percent and gross profit margin increased 3.4 percentage points to 43.6 percent in 2003 versus 2002 primarily driven by the growth in product life-cycle management software attributable to the positive effects from currency.

## FINANCIAL POSITION

### Dynamics

The assets and debt associated with the company's Global Financing business are a significant part of IBM's financial condition. Accordingly, although the financial position amounts appearing below and on pages 58 and 59 are the company's consolidated amounts including Global Financing, to the extent the Global Financing business is a major driver of the consolidated financial position, reference in the narrative section will be made to the separate Global Financing section in this Management Discussion on pages 69 to 73. The amounts appearing in the separate Global Financing section are supplementary data presented to facilitate an understanding of the company's Global Financing business.

### Working Capital

(dollars in millions)

AT DECEMBER 31:	2003	2002*
Current assets	\$ 44,998	\$ 41,722
Current liabilities	37,900	34,220
Working capital	\$ 7,098	\$ 7,502
Current ratio	1.19:1	1.22:1

\* Reclassified to conform with 2003 presentation.

## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

Current assets increased \$3,276 million due primarily to an increase of \$1,672 million in Cash and cash equivalents and Marketable securities. See the Cash Flow analysis below. In addition, short-term receivables increased \$1,565 million due to currency impacts.

Current liabilities increased \$3,680 million due primarily to a \$1,546 million increase in Deferred income primarily from the impact of foreign currencies, an \$830 million increase in Accounts payable driven primarily by the impact of foreign currencies and the company's outsourcing of some of its manufacturing, which changed the timing and amount of related accounts payable, a \$615 million increase in Short-term debt (primarily associated with the Global Financing business, see pages 72 and 73), as well as a \$743 million increase in Other accrued expenses and liabilities driven by increases in short-term derivatives that are in a liability position.

### Cash Flow

The company's cash flow from operating, investing and financing activities, as reflected in the Consolidated Statement of Cash Flows on page 79, are summarized in the table below. These amounts include the cash flows associated with the company's Global Financing business. See pages 69 to 73.

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002
Net cash provided by/(used in) continuing operations:		
Operating activities	\$ 14,569	\$ 13,788
Investing activities	(5,122)	(6,897)
Financing activities	(7,798)	(7,265)
Effect of exchange rate changes on cash and cash equivalents	421	148
Net cash used in discontinued operations*	(162)	(722)
Net change in cash and cash equivalents	\$ 1,908	\$ (948)

\* Does not include approximately \$97 million in 2003 and \$1,170 million in 2002 of net proceeds from the sale of the HDD business. Such proceeds are included in Net cash provided by investing activities in the table above.

Net cash provided by operating activities for the year ended December 31, 2003 increased as compared to 2002. This increase was driven primarily by lower pension contributions of approximately \$1.6 billion and improved cash results from operations represented by the combined effect of improved profitability and accounts payable management. These increases were partially offset by lower cash generated by the Global Financing business (see discussion on pages 69 to 73) in 2003 and lower cash received from the monetization of interest rate swaps in 2003 as compared to 2002. The monetization of interest rate swaps did not affect net income.

The decrease in cash flows in investing activities during 2003 was primarily attributable to fewer acquisitions in 2003 (primarily a \$1,042 million net cash payment for Rational

and a \$397 million true-up for the 2002 acquisition of PwCC) than in 2002 (primarily a \$2,852 million net cash payment for PwCC) and a decrease in capital expenditures as the company completes its 300 millimeter semiconductor facility. These increases were offset by the reduction in cash received from divestitures (\$97 million in 2003 versus \$1,233 million primarily for the HDD divestiture in 2002). The increase in cash used in financing activities in 2003 compared to 2002 was primarily the result of a reduction of debt, increased stock repurchases and dividends during 2003.

### Non-Current Assets and Liabilities

(dollars in millions)

AT DECEMBER 31:	2003	2002*	YR. TO YR. CHANGE
Non-current assets	\$ 59,459	\$ 54,762	8.6%
Long-term debt	16,986	19,986	(15.0)
Non-current liabilities (excluding debt)	21,707	19,496	11.3

\* Reclassified to conform with 2003 presentation.

The increase in Non-current assets during 2003 was primarily due to the \$2,423 million increase in Prepaid pension assets associated with net periodic pension income (see pages 110 to 117) as well as a \$1,015 million impact due to foreign currencies and a \$2,806 million increase in Goodwill, which was primarily driven by the acquisition of Rational, as discussed on pages 89 and 90. These increases were partially offset by the decrease of \$699 million in Long-term financing receivables (see pages 69 through 73) due to lower originations in sales type leases and lower amounts outstanding of syndicated loans.

Long-term debt decreased \$3,000 million primarily driven by the decrease in non-Global Financing debt (see below).

Other non-current liabilities increased \$2,211 million primarily due to a \$1,036 million increase in Retirement and nonpension postretirement benefit obligations, a \$384 million increase in non-current deferred taxes and a \$433 million increase in non-current Deferred income. The increase in Retirement and nonpension postretirement benefit obligations was primarily attributable to the required accounting for the unfunded status of the non-U.S. pension plans as discussed on pages 110 through 115, as well as accrued pension costs and foreign exchange impact. The increase in both non-current deferred taxes and non-current Deferred income was primarily attributable to the impact of foreign currencies.

### Debt

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.

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

(dollars in millions)

AT DECEMBER 31:	2003	2002
Total company debt	\$ 23,632	\$ 26,017
Non-Global Financing debt*	368	2,189
Non-Global Financing debt/ capitalization	1.5%	10.2%

\* Non-Global Financing debt is the company's total external debt less the Global Financing debt described in the Global Financing balance sheet on pages 70, 72 and 73.

During the fourth quarter of 2002, the company increased its non-Global Financing debt to position itself for potential year-end pension funding levels and the possible acquisition of Rational, especially given the cash paid for PwCC during the 2002 fourth quarter. Based upon the strong cash flows from operations in 2003, the company reduced non-Global Financing debt.

## Equity

(dollars in millions)

AT DECEMBER 31:	2003	2002	YR. TO YR. CHANGE
Stockholders' equity:			
Total	\$ 27,864	\$ 22,782	22.3%

The company's total consolidated Stockholders' equity increased \$5,082 million during 2003 primarily due to an increase in the company's retained earnings partially offset by the company's ongoing stock repurchase program and higher dividend payments.

## Off-Balance Sheet Arrangements

The company, in the ordinary course of business, entered into off-balance sheet arrangements as defined by the SEC Final Rule 67 (FR-67), "Disclosure in Management's Discussion and Analysis about Off-Balance Sheet Arrangements and Aggregate Contractual Obligations," including: certain guarantees, indemnifications and retained interests in assets transferred to an unconsolidated entity for securitization purposes.

None of these off-balance sheet arrangements either has, or is reasonably likely to have, a material current or future effect on financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources. See pages 65 and 66 for the company's contractual obligations.

See note O, "Contingencies and Commitments," on pages 102 and 103, for detailed information about the company's guarantees on certain loans and financial commitments, indemnification arrangements and loans receivable securitization program.

## CONSOLIDATED FOURTH QUARTER RESULTS

(dollars and shares in millions except per share amounts)

FOR FOURTH QUARTER:	2003	2002	YR. TO YR. CHANGE
Revenue	\$ 25,913	\$ 23,684	9.4%*
Gross profit margin	38.4%	38.8%	(0.4)pts.
Total expense and other income	\$ 6,097	\$ 6,479	(5.9)%
Total expense and other income-to-revenue ratio	23.5%	27.4%	(3.9)pts.
Provision for income taxes	\$ 1,162	\$ 801	45.0%
Income from continuing operations	\$ 2,716	\$ 1,911	42.2%
Earnings per share from continuing operations:			
Assuming dilution	\$ 1.56	\$ 1.11	40.5%
Basic	\$ 1.59	\$ 1.12	42.0%
Weighted-average shares outstanding:			
Assuming dilution	1,745.7	1,728.7	1.0%
Basic	1,708.5	1,699.1	0.6%

\* 0.8 percent increase at constant currency

## Continuing Operations

The increase in IBM's fourth quarter 2003 Income from continuing operations and diluted earnings per share from continuing operations as compared to the fourth quarter of 2002 was due to:

- The increased demand for the company's offerings as a result of the reviving economy as well as the company's market share gains
- The charges recorded in the fourth quarter of 2002 associated with the acquisition of PwCC (approximately half of the increase)
- Favorable impact of currency translation partly offset by related hedging activity

The following is an analysis of external segment results.

The company achieved Global Services signings of over \$17 billion, including three over \$1 billion, and additionally, 18 over \$100 million. Included were several key signings for the company's relatively new BTO business, which totaled nearly \$3 billion in signings. Global Services revenue increased 8.3 percent (1 percent decrease at constant currency). The decline at constant currency was mainly due to lower BCS revenue as the positive impact of the economy had not yet driven increased corporate spending in this area by year-end. Although 2003 fourth quarter BCS revenue declined year-to-year, its BTO signings are a positive sign for the unit's future prospects as well as the fact that revenue for the unit increased sequentially from third quarter to fourth quarter.



## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

The company's Systems Group revenue grew 17.5 percent (8 percent at constant currency) driven by zSeries mainframes and xSeries servers. zSeries revenue increased due to the successful introduction of the z990 products that include additional memory capabilities, I/O channels, processors and secure-key cryptography. zSeries volumes increased 62 percent as measured in MIPS compared to the 2002 fourth quarter. xSeries revenues increased due to the company's successful blade strategy. Increased demand drove higher revenue for pSeries and Storage. iSeries revenue was generally flat.

Technology Group revenue declined 19.5 percent (20 percent at constant currency) primarily driven by the impact of divestitures in 2002. Personal Systems Group revenue increased 15.9 percent (8 percent at constant currency) due primarily to higher demand for personal computers, particularly mobile products, as increased volumes more than offset reductions in prices.

Software revenue increased 11.8 percent (2 percent at constant currency) primarily due to continued strength in demand for WebSphere, DB2 Database and Tivoli middleware products, as well as the acquisition of Rational. Rational, acquired during the 2003 first quarter, surpassed expectations and yielded 28 percent revenue growth over its separately reported results for the 2002 fourth quarter. Operating system revenue increased due to the favorable impact of currency movements.

Global Financing revenue declined 11.5 percent (18 percent at constant currency) due primarily to lower interest rates and a lower average asset base. Given the unit's annuity-like business, lower originations in years prior to 2003 resulted in lower revenue in 2003.

The company's gross profit margin declined slightly and was driven by declines in Global Services, Hardware and Global Financing, partially offset by Software. In Global Services, a 1.5 point decline was due to continued price pressures given current industry demand, higher investment costs associated with the early stages of an SO contract, and the rescoping of several outsourcing contracts. In Hardware, margins were flat in Systems Group and up in Technology Group, offset by a 3 point decline in the Personal Systems Group driven by increased warranty costs associated with desktop products and industry-wide price declines. The decline in Global Financing margins of 3 points was driven by a mix change toward lower margin remarketing sales away from financing income.

The decline in the company's Total expense and other income was due to the \$574 million pre-tax charge primarily associated with the fourth quarter 2002 acquisition of PwCC. This decline was partially offset by increases in expenses attributable to the newly acquired businesses (primarily Rational). The company's expense-to-revenue ratio improved by 3.9 points, of which 2.4 points were associated with the absence in the 2003 fourth quarter of the pre-tax charge that was incurred in the 2002 fourth quarter. The remaining 1.5 point improvement is associated with additional productivity and efficiency initiatives partially offset by the increased expenses associated with the acquired businesses. On specific expense items, retirement-related plans resulted in \$169 million of additional expense in the 2003 fourth quarter due to the net impact of assumption changes and contributions at year end 2002. The provision for doubtful accounts was \$144 million lower in the 2003 fourth quarter due to the stabilization of the general economy and specific client issues over the past twelve months.

The company's 2003 fourth quarter effective tax rate was 30.0 percent as compared to 29.5 percent in the 2002 fourth quarter.

Share repurchases totaled approximately \$3.1 billion in the fourth quarter. The weighted-average number of diluted common shares outstanding in the quarter was 1,745.7 billion compared with 1,728.7 billion in the 2002 fourth quarter, higher by 17.0 million shares. The increased amount of shares was driven primarily by additional diluted shares related to the company's higher share price compared with the prior-year period, and additional shares issued in conjunction with the company's acquisition of PwCC and the funding for the company's PPP in the fourth quarter 2002, offset by the company's ongoing common share repurchase program in the fourth quarter of 2003.

The company generated higher cash flows from operations in the 2003 fourth quarter as compared to the 2002 fourth quarter primarily due to the strong financial results described above, as well as lower pension funding in the fourth quarter of 2003 as compared to the fourth quarter of 2002. The company also reduced capital expenditures as it completes the 300 millimeter semiconductor facility. Finally, the company repurchased \$3,069 million in shares during the 2003 fourth quarter (\$3,010 million was settled in cash and the remainder was reflected in accounts payable and will be settled in 2004). This compared with \$74 million in shares repurchased during the 2002 fourth quarter.

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## PRIOR YEAR IN REVIEW

(dollars and shares in millions except per share amounts)

FOR THE YEAR DECEMBER 31:	2002	2001	YR. TO YR. CHANGE	
Revenue	\$ 81,186	\$ 83,067	(2.3)%*	
Gross profit margin	37.3%	38.4%	(1.1)pts.	
Total expense and other income	\$ 22,760	\$ 20,439	11.4%	
Total expense and other income-to-revenue ratio	28.0%	24.6%	3.4 pts.	
Provision for income taxes	\$ 2,190	\$ 3,304	(33.7)%	
Income from continuing operations	\$ 5,334	\$ 8,146	(34.5)%	
Earnings per share from continuing operations:				
Assuming dilution	\$ 3.07	\$ 4.59	(33.1)%	
Basic	\$ 3.13	\$ 4.69	(33.3)%	
Discontinued operations:				
Loss	\$ 1,755	\$ 423	NM	NM
Diluted earnings per share	\$ (1.01)	\$ (0.24)	NM	NM
Basic earnings per share	\$ (1.03)	\$ (0.24)	NM	NM
Weighted-average shares outstanding:				
Assuming dilution	1,730.9	1,771.2	(2.3)%	
Basic	1,703.2	1,733.3	(1.7)%	
Assets**	\$ 96,484	\$ 90,303	6.8%	
Liabilities**	\$ 73,702	\$ 66,855	10.2%	
Equity**	\$ 22,782	\$ 23,448	(2.8)%	

\* 2.9 percent decrease at constant currency

\*\* at December 31

NM—not meaningful

## CONTINUING OPERATIONS

Income from continuing operations and diluted earnings per share from continuing operations each declined over 30 percent in 2002 as compared to 2001. Over half of the decline was attributable to after-tax charges of \$1.2 billion and \$433 million associated with the 2002 second quarter Microelectronics and productivity actions and the charges related to the 2002 fourth quarter acquisition of PwCC, respectively. The remainder of the decline was primarily due to lower corporate spending on IT. Sector revenue in 2002 declined across all client sectors compared to 2001 with the exception of the Public sector, which had strong growth in a continuing tough economic climate. The Small & Medium Business sector gained traction despite the economy, reflecting the company's increased focus on this client sector.

Geographic revenue declines were due to lower corporate spending on IT given the economic trends prevalent from 2001 to 2002. Such declines were experienced in the Americas compared with 2001, whereas Asia Pacific revenue

was essentially the same in 2002 as compared to 2001. Asia Pacific's revenue performance was slowed by a weak economy in Japan (over 60 percent of Asia Pacific revenue), although revenue growth was achieved in the ASEAN region. Europe/Middle East/Africa's revenue increased 1.1 percent, although it declined 4 percent at constant currency, primarily due to weakness in the U.K., France and Germany, offset by good performance in Italy.

The following is an analysis of external segment results.

### Global Services

Revenue increased 4.0 percent (3 percent at constant currency) to \$36,360 million as a result of the fourth quarter 2002 acquisition of PwCC into the company's BCS business. SO revenue increased despite the economic downturn given its annuity-like characteristics. ITS revenue also increased due to increased deployment of network hardware and connectivity services, business continuity services and OEM alliances. The PwCC acquisition accounted for all of BCS's revenue increase. The company signed \$53 billion of services contracts in 2002, an increase of \$2 billion versus 2001. The estimated services backlog at December 31, 2002, was \$112 billion.

### Hardware Segments

Revenue declined 10.5 percent (11 percent at constant currency) to \$27,630 million and is more sensitive to changes in the economy and corporate IT spending levels relative to Global Services. Systems Group revenue declined 8.0 percent (10 percent at constant currency) across zSeries, iSeries, pSeries and storage, although zSeries MIPS deliveries increased 6 percent compared to 2001. xSeries also increased as the company launched its blade offerings. Personal Systems Group revenue declined 7.8 percent (9 percent at constant currency) for the same reasons cited above. Technology Group revenue declined 23.6 percent (23 percent at constant currency) primarily due to divestiture of multiple, non-core businesses during the year, including display and card manufacturing.

### Software Group

Revenue increased 1.0 percent (flat at constant currency) to \$13,074 million. The company noted two trends in 2002. First, clients were spending more time on the selection process for software solutions and second, clients were more inclined to negotiate smaller software arrangements, which are perceived to provide a faster return on investment. The company's focus on client base expansion offset these two trends. Modest growth in middleware products, particularly in Data Management, WebSphere and Tivoli, offset declines in operating system revenue, which is somewhat dependent on hardware volumes.

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## Global Financing

See pages 69 through 73 for prior year review of Global Financing.

## Enterprise Investments

Revenue decreased 8.6 percent (10.6 percent at constant currency) to \$1,022 million primarily as a result of lower revenue from document processors, partially offset by increased revenue from product life-cycle management software.

The decline in the total company gross profit margin primarily related to the Hardware segments as a result of lower volumes. Small declines in the Global Services gross profit margin, especially in the Communications and Financial Services industry sectors were offset by modest increases in Software margins from productivity initiatives.

The increase in the expense-to-revenue ratio was primarily due to:

- The second quarter Microelectronics and productivity actions (\$1,727 million)
- The fourth quarter actions associated with the acquisition of PwCC (\$614 million)
- An increase in bad debt expense resulting from the weakening economy in 2002 and exposures in the Communications sector (\$183 million)
- An increase in SG&A-base expenses primarily due to the acquired PwCC business (\$161 million)
- Lower IP and custom development income (\$376 million)
- Lower retirement-related plans income due to changes made to the pension assumptions at the beginning of 2002 (\$245 million)
- Absence of goodwill amortization expense due to a new accounting rule (\$262 million)
- Lower revenue

These items were partially offset by:

- Lower advertising expense resulting from a strategic initiative to consolidate and centralize certain advertising spending at the corporate level (\$188 million)
- Lower RD&E expense resulting from productivity initiatives (\$236 million)

The effective tax rate increased from 28.9 percent in 2001 to 29.1 percent in 2002. This increase was due primarily to a less favorable mix of geographic income offset by the tax effect of the Microelectronics portion of the 2002 actions.

The company made a \$3,963 million voluntary contribution to the PPP consisting of \$1,871 million of company stock and \$2,092 million of cash in the fourth quarter of 2002. As a result, the PPP was fully funded on an accumulated benefit obligation basis at December 31, 2002.

Assets increased in 2002 primarily due to the increase in the company's Prepaid pension assets from the company's

\$3,963 million contribution to the PPP as well as an increase in Goodwill primarily driven by the acquisition of PwCC.

Cash decreased almost \$1 billion from December 31, 2001 to December 31, 2002. The primary drivers of the decrease were the \$2.9 billion cash disbursed for PwCC and the \$2.1 billion cash contribution to the PPP. These were offset by cash received from the sale of the company's HDD business (\$1,170 million) and the monetization of interest rate swaps (\$650 million), the collection of 2001 taxes and interest (\$460 million), as well as cash generated by operations and other sources (the remainder).

Liabilities increased in 2002 primarily due to an increase in the company's Retirement and nonpension postretirement benefit obligations primarily attributable to the required accounting for the unfunded status of the non-U.S. pension plans, an increase in other accruals due to the 2002 actions taken by the company as described in note S, "2002 Actions," on pages 105 through 107 and the impact of foreign currencies.

In addition, non-Global Financing debt increased almost \$600 million due to the acquisition of PwCC and the cash contribution to the PPP.

Global Financing debt decreased \$1.7 billion in line with a decrease in Global Financing assets. The Global Financing debt to equity ratio increased from 6.8 to 6.9 at December 31, 2001 to December 31, 2002, respectively. These ratios are within management's target range. The Global Financing allowance for doubtful accounts coverage increased from 2.4 percent to 3.5 percent as a result of economic trends in 2002 and certain exposures in the Communications sector. The ratio of unguaranteed residual value as a percentage of the related original amount financed remained relatively flat at December 31, 2002, as compared to December 31, 2001.

## DISCONTINUED OPERATIONS

On December 31, 2002, the company sold its HDD business to Hitachi for approximately \$2 billion. The majority of the cash was received in 2002 with the remaining due within one and three years after closing. The HDD business was accounted for as a discontinued operation whereby the results of operations and cash flows were removed from the company's results from continuing operations for all periods presented.

The company incurred a loss on sale of \$382 million, net-of-tax. The increased loss from discontinued operations in 2002 as compared to 2001 was due to (amounts are net-of-tax):

- The loss on sale noted above
- An increase in certain actions taken by the company in the second and fourth quarters of 2002 (\$508 million)
- An increase in inventory write-offs resulting from a strategic decision to cease reworking and selling efforts for some of the older HDD products after the announcement of the divestiture plans (\$217 million)

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## LOOKING FORWARD

The following key drivers impacting IBM's business are discussed on page 50:

- Economic environment and corporate IT spending budgets for Enterprise Computing
- Internal business transformation and efficiency initiatives
- Technological innovations
- Open standards, including Linux

With respect to the economic environment, while it is always difficult to predict future economic trends, year-end 2003 signals indicate that the IT industry has stabilized and the next growth cycle in IT spending may be starting. The year-to-year and sequential quarterly growth trend comparisons achieved by the company are such signals (prior to considering the positive year-to-year comparison benefits associated with the acquisitions of PwCC and Rational).

With respect to business transformation and the continual conversion of IBM into an on demand business, the company's supply chain initiatives are expected to allow flexibility to drive additional competitive advantages. The company will focus on expense management and additional productivity initiatives with the aim of continuing to reduce the company's expense-to-revenue ratios.

Finally, with respect to technology, in 2003 the company has again been awarded more U.S. patents than any other company for the eleventh year in a row.

From a client-set perspective, the strong momentum in 2003 with respect to the Small & Medium Business sector should continue while the Financial and Public sectors should also continue to benefit from, among other things, the company's new z990 mainframes. The Communications, Distribution and Industrial sectors may not grow as fast. The company reorganized Global Services and Software to be better aligned with the company's industry sectors. This change will foster an even greater ability to create industry-specific solutions for clients.

From a Global Services perspective, the company finished 2003 with strong signings.

### Global Services Signings

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
Longer-term*	\$ 34,608	\$ 33,068	\$ 32,016
Shorter-term*	20,854	20,020	19,261
Total	\$ 55,462	\$ 53,088	\$ 51,277

\* Longer-term contracts generally 7 to 10 years in length and represent SO and BTO contracts as well as BCS contracts with the U.S. federal government and its agencies. Shorter-term contracts are generally 3 to 9 months in length and represent the remaining BCS and ITS contracts.

The estimated Global Services backlog, including SO, BCS, ITS and Maintenance, was \$120 billion at December 31, 2003. Backlog estimates are subject to change and are affected by several factors, including changes in scope of contracts (mainly long-term contracts), periodic revalidations and currency assumptions used to approximate constant currency. Included in the numbers above are several significant BTO contract signings within its BCS business. These key competitive wins represent strong momentum in the company's goal to drive the BTO business into a significant growth driver in the coming years.

To improve margins over the next year, the company is targeting roughly a 4-point improvement in the utilization rate of its consultants, optimizing the labor mix, and working to reduce overhead costs by 15 percent through additional productivity and efficiency initiatives.

The combination of the company's Systems Group and Technology Group, as discussed on page 118, will continue to benefit the company's ability to integrate key semiconductor and other core technology innovations into solutions for clients. The company continues to leverage its eServer zSeries mainframe technology investments across its server and storage portfolio. The ability to share elements of this technology, such as security, automation and virtualization, with the more commoditized platforms is a key competitive advantage for IBM.

The Technology Group's 2003 fourth quarter pre-tax loss was less than that for the third quarter, even with lower IP income. With the backdrop of meeting very strong demand for the Systems Group's key needs, the recent arrangement with Microsoft to supply technology for its new Xbox system and the continued growth of the relatively new E&TS business, the company believes that its Microelectronics and E&TS Divisions will continue to strongly benefit IBM's other businesses and to continue the modest momentum that began in the fourth quarter 2003.

Given the commoditized nature of the personal computer industry, future results may be more volatile than in the company's other businesses. The company's internal surveys, however, indicate that 57 percent of clients purchased IBM personal computers due to unique IBM features such as ThinkVantage technologies that often lower the cost to operate and maintain the machines. The company will attempt to continue to build on these types of differentiating factors.

As for the company's Software business, key to future growth will be the continued leveraging of ISVs as an overall business partner and an additional route to market. The new Lotus workplace messaging platform became generally available in late November 2003 and received positive reaction from both clients and industry analysts. Operating system software growth will be dependent, in part, on the growth of the underlying hardware sales.

See page 73 for forward-looking information regarding Global Financing.



## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

Given the declining interest rate environment, the company reduced its discount rate assumption for the PPP by 75 basis points. The company will keep the expected long-term return on PPP assets at 8 percent, despite the strong performance of the plan assets in 2003. With similar overall trends in these assumptions worldwide, as well as the impact of the recent years' changes in the market value of plan assets, the year-to-year impact from retirement-related plans on pre-tax income in 2004 will be approximately \$650 million (lower) as compared to year-to-year changes between 2002 and 2003 of approximately \$600 million (lower in 2003 versus 2002). See page 117 for a discussion of recently enacted Medicare legislation with respect to nonpension postretirement benefits.

The amount of IP and custom development income has been declining in recent years. Although it increased slightly in 2003, the overall declining trend may continue as the company does not expect it to be a contributor to growth.

In the normal course of business, the company expects that its effective tax rate will approximate 30 percent. The rate will change year-to-year based on nonrecurring events (such as the tax effect of the Microelectronics Division's actions in 2002) as well as recurring factors, including the geographic 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 2001, the World Trade Organization (WTO) determined that tax provisions of the FSC Repeal and Extraterritorial Income (ETI) Exclusion Act of 2000 constitute an export subsidy prohibited by the WTO Agreement on Subsidies and Countervailing Measures Agreement. The U.S. government appealed the panel's decision and lost its appeal. There are various proposals at this time before the U.S. Congress, and the company anticipates that the U.S. will repeal the ETI regime. If the ETI exclusion is repealed and suitable replacement legislation is not enacted, the loss of the ETI tax benefit may adversely impact the company's tax rate.

### LIQUIDITY AND CAPITAL RESOURCES

The company generates strong cash flow from operations, providing a source of funds ranging between \$8.8 billion and \$14.6 billion per year over the past 5 years. The company provides for additional liquidity through several sources — a sizable cash balance, access to global funding sources and two committed global credit facilities. The table below provides a summary of these major sources of liquidity as of the ends of fiscal years 1999 through 2003.

#### Cash Flow and Liquidity Trends

(dollars in billions)

FOR THE YEAR ENDED DECEMBER 31:	1999	2000	2001	2002	2003
Net cash from					
operating activities	\$ 9.0	\$ 8.8	\$ 14.0	\$ 13.8	\$ 14.6
Cash and marketable securities	5.8	3.7	6.4	6.0	7.6
Size of global credit facilities	10.0	10.0	12.0	12.0	10.0

The major rating agencies' ratings on the company's debt securities at December 31, 2003, appear in the table below and remain unchanged over the past 5 years. The company has no contractual arrangements that, in the event of a change in credit rating, would result in a material adverse effect on its financial position or liquidity.

	STANDARD AND POOR'S	MOODY'S INVESTORS SERVICE	FITCH RATINGS
Senior long-term debt	A+	A1	AA-
Commercial paper	A-1	Prime-1	f-1+

The company prepares its Consolidated Statement of Cash Flows in accordance with Statement of Financial Accounting Standards (SFAS) No. 95, "Statement of Cash Flows," on page 79 and discusses causes and events underlying sources and uses of cash in that format on page 58. For purposes of running its business, the company manages, monitors and analyzes cash flows in a different format.

As discussed on page 69, one of the company's two primary objectives of its Global Financing business is to generate strong return-on-equity. Increasing receivables is the basis for growth in a financing business. Accordingly, management considers Global Financing receivables as a profit-generating investment — not as working capital that should be minimized for efficiency. After classifying the Cash (from)/for Global Financing receivables as an investment, the remaining net cash flow is viewed by the company as the Cash available for investment and for distribution to shareholders. And with respect to the company's cash flow analysis for internal management purposes, Global Financing receivables are combined with Global Financing debt to represent the Net Global Financing receivables (a profit-generating investment).

Over the past 5 years, the company generated over \$57 billion in Cash available for investment and for distribution to shareholders. As a result, the company invested a net \$2.5 billion in its Global Financing business, made \$22.5 billion of net capital expenditures, invested \$7.6 billion in strategic acquisitions, received \$6.2 billion from divestitures and returned \$32.9 billion to shareholders through dividends and share repurchases. The amount of future year Returns to shareholders in the form of dividends and share repurchases vary based upon several factors including affordability, namely each year's operating results, capital expenditures, research and development, and acquisitions, as well as the factors discussed immediately following the first table on page 65.

## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

The table below represents the way in which management reviews its cash flow as described above.

(dollars in billions)

FOR THE YEAR ENDED DECEMBER 31:	1999	2000	2001	2002	2003
Net cash from operating activities (comprised of):	\$ 9.0	\$ 8.8	\$ 14.0	\$ 13.8	\$ 14.6
Cash (from)/for Global Financing accounts receivable	(1.7)	(2.5)	2.0	3.3	1.9
Cash available for investment and for distribution to shareholders	10.7	11.3	12.0	10.5	12.7
Net Global Financing receivables	(2.3)	(0.6)	0.9	0.2	(0.7)
Net capital expenditures	(4.8)	(4.3)	(4.9)	(4.6)	(3.9)
Net divestitures/(acquisitions)	3.5	(0.3)	(0.9)	(2.0)	(1.7)
Returns to shareholders	(8.2)	(7.6)	(6.5)	(5.2)	(5.4)
Other	0.8	—	2.2	0.2	0.9
Net change in cash and cash equivalents	\$ (0.3)	\$ (1.5)	\$ 2.8	\$ (0.9)	\$ 1.9

Events that could temporarily change the historical cash flow dynamics discussed on page 64 include unexpected adverse impacts from litigation or future pension funding during periods of severe and prolonged downturns in the capital markets. Whether any litigation has such an adverse impact will depend on a number of variables, which are more completely described on pages 101 and 102. With respect to pension funding, the company is not quantifying such impact because it is not possible to predict future timing or direction of the capital markets. However, for 2004, if actual returns on plan assets for the PPP were less than 5 percent,

the PPP's accumulated benefit obligation (ABO) would be greater than its Plan assets. As discussed on pages 110 to 115, such a situation may result in a voluntary contribution of cash or stock to the PPP or a charge to stockholders' equity.

The following table depicts the company's firm contractual commitments and must be reviewed within the context of the discussion above. While these commitments may vary from period to period and provide a view as to certain unavoidable cash outflows, they represent a small picture of the overall cash dynamics of the company in the table above.

### Contractual Obligations

(dollars in millions)

	TOTAL CONTRACTUAL PAYMENT STREAM	PAYMENTS DUE IN			
		2004	2005-06	2007-08	AFTER 2008
Long-term debt obligations	\$ 19,343	\$ 4,061	\$ 5,846	\$ 1,508	\$ 7,928
Capital (Finance) lease obligations	58	11	27	6	14
Operating lease obligations	6,414	1,401	2,078	1,533	1,402
Purchase obligations	3,362	2,024	1,063	210	65
Other long-term liabilities:					
Minimum pension funding (mandated)*	1,212	220	564	428	—
Executive compensation	657	79	82	90	406
Environmental liabilities	243	29	32	28	154
Long-term termination benefits	2,627	487	396	260	1,484
Other	255	47	125	64	19
Total	\$ 34,171	\$ 8,359	\$ 10,213	\$ 4,127	\$ 11,472

\* These amounts represent future pension payments that are mandated by local regulations or statute. They are all associated with non-U.S. pension plans. The projected payments beyond 2008 are not currently determinable. See note W, "Retirement-Related Benefits," on pages 110 to 115 for additional information on the non-U.S. plans' investment strategies and expected contributions.

Purchase obligations include all commitments to purchase goods or services of either a fixed or minimum quantity that meet any of the following criteria: (1) they are noncancelable, (2) the company would incur a penalty if the agreement was cancelled, or (3) the company must make specified minimum payments even if it does not take delivery of the contracted products or services ("take-or-pay"). If the obligation to purchase goods or services is noncancelable, the entire

value of the contract was included in the above table. If the obligation is cancelable, but the company would incur a penalty if cancelled, the dollar amount of the penalty was included as a purchase obligation. Contracted minimum amounts specified in take-or-pay contracts are also included in the above table as they represent the portion of each contract that is a firm commitment.

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

In the ordinary course of business, the company enters into contracts that specify that IBM will purchase all or a portion of its requirements of a specific product, commodity, or service from a supplier or vendor. These contracts are generally entered into in order to secure pricing or other negotiated terms. They do not specify fixed or minimum quantities to be purchased and, therefore, the company does not consider them to be purchase obligations.

## CRITICAL ACCOUNTING ESTIMATES

The application of GAAP involves the exercise of varying degrees of judgment. While the resulting accounting estimates will, by definition, not always precisely equal the related actual results, eight of these estimates involve more judgment than others. Two of these estimates are the allowance for uncollectible financing receivables and the fair value of lease residual values. See page 73 for a discussion of these estimates. The others are discussed below.

The sensitivity analyses used below are not meant to provide a reader with management's predictions of the variability of the estimates used. Rather, the sensitivity levels selected (e.g., 5 percent, 10 percent, etc.) are included to allow users of the Annual Report to understand a general-direction cause and effect of changes in the estimates.

### *Useful Lives of Technology Group Plant and Equipment*

The company determines the estimated useful lives and related depreciation charges for its plant and equipment. For the Technology Group, this estimate is based on projected product life-cycles that could change significantly due to technical innovations and competitor actions in response to relatively severe industry cycles. To the extent actual useful lives are less than previously estimated lives, the company will increase its depreciation charge or will write-off or writedown technically obsolete or non-strategic assets that have been abandoned or sold.

The company estimates useful lives of its Technology Group equipment by reference to the current and projected dynamics in the semiconductor industry, product life-cycles and anticipated competitor actions.

To the extent that Technology Group actual useful lives differ from management's estimates by 10 percent, consolidated net income would be an estimated \$57 million higher/lower based upon 2003 results depending upon whether the actual lives were longer/shorter, respectively, than the estimates. To the extent that the actual lives were shorter by 10 percent, it is estimated that there would have also been a lower-of-cost-or-market inventory charge of less than \$5 million.

### *Pension Assumptions*

The expected long-term return on plan assets is used in calculating the net periodic pension cost/(income). See pages 110 to 115 for information regarding the expected long-term return on plan assets assumption. The differences between

the actual return on plan assets and expected long-term return on plan assets are recognized in the calculation of net periodic pension cost/(income) over five years.

As described on pages 110 through 115, if the fair value of the pension plan's assets is below the plan's ABO, the company will be required to record a minimum liability. In some situations, the pension asset must be partially reversed through a charge to stockholders' equity. If the amount of the ABO in excess of the fair value of plan assets is large enough, the company may be required, by law, to make an additional contribution to the pension plan. Actual results that differ from the estimates may result in more or less future company funding into the pension plans than is planned by management. See page 65 for additional information and near-term sensitivities of actual returns on funding decisions.

To the extent the outlook for long-term returns changes such that management changes its expected long-term return on plan assets assumptions, each 50 basis point change in the expected long-term return on PPP plan assets assumption will have an estimated increase or decrease of \$225 million on the following year's pre-tax net periodic pension income (based upon the PPP's plan assets at December 31, 2003) depending upon whether the expected long-term return assumption increases or decreases, respectively.

Another key management assumption is the discount rate. See pages 110 through 115 for information regarding the discount rate assumption. Changes in the discount rate assumption will impact the interest cost component of the net periodic pension income calculation and due to the fact that the ABO is calculated on a net present value basis, changes in the discount rate assumption will also impact the current ABO. As discussed above, the relationship between the ABO and the fair value of plan assets determines any required funding of the pension plans.

As discussed on page 64, the company reduced the discount rate assumption for the PPP by 75 basis points on December 31, 2003. This change will increase pre-tax cost and expense in 2004 by \$184 million. Had the discount rate assumption for the PPP increased by 75 basis points on December 31, 2003, 2004 pre-tax cost and expense would have increased by \$21 million in 2004. As mentioned above, changes in the discount rate assumption will impact the ABO which, in turn, may impact the company's funding decisions if the ABO exceeds plan assets. In order to analyze the sensitivity of discount rate movements, each 25 basis point increase or decrease in the interest rate will cause a corresponding decrease or increase, respectively, in the PPP's ABO of an estimated \$1 billion based upon December 31, 2003 data. Page 113 presents the PPP's ABO (after the reduction in discount rate discussed above) and plan assets as of December 31, 2003.

Impacts of these types of changes on the pension plans in other countries will vary depending upon the status of each respective plan.

## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

### *Costs to Complete Service Contracts*

The company enters into numerous service contracts through its SO and BCS businesses. SO contracts range for periods up to ten years and BCS contracts can be for several years. During the contractual period, revenue, cost and profits may be impacted by estimates of the ultimate profitability of each contract, especially contracts for which the company uses the percentage-of-completion method of accounting. See page 81 for the company's services revenue recognition accounting policies. If at any time, these estimates indicate the contract will be unprofitable, the entire estimated loss for the remainder of the contract is recorded immediately.

The company performs ongoing profitability analyses of its services contracts in order to determine whether the latest estimates require updating. Key factors reviewed by the company to estimate the future costs to complete each contract are future labor costs and productivity efficiencies.

To the extent actual estimated "to go" margins on percentage of completion services contracts differ from management's quarterly estimates by 1 percentage point, the company's consolidated net income would have improved/declined by an estimated \$35 million using 2003 results, depending upon whether the actual results were higher/lower, respectively, than the estimates. This amount excludes any accrual resulting from contracts in loss positions. For all long-term services contracts that are either in a "to go" loss position or have an estimated "to go" profit of 5 percent or less, if actual "to go" costs were 5 percent greater than expected, the consolidated net income would be reduced by an estimated \$13 million.

### *Net Realizable Value and Client Demand*

The company reviews the net realizable value of and demand for its inventory on a quarterly basis to ensure recorded inventory is stated at the lower of cost or net realizable value and that obsolete inventory is written off. Inventory at higher risk for writedowns or write-offs are those in the industries that have lower relative gross margins and that are subject to a higher likelihood of changes in industry cycles. The semiconductor and personal computer businesses are two such industries.

Factors that could impact estimated demand and selling prices are the timing and success of future technological innovations and the economy.

To the extent that semiconductor and personal computer inventory losses differ from management estimates by 5 percent, the company's consolidated net income in 2003 would have improved/declined by an estimated \$42 million using 2003 results, depending upon whether the actual results were better/worse, respectively, than expected.

### *Warranty Claims*

The company generally offers three-year warranties for its personal computer products and one-year warranties on most of its other products. The company estimates the amount and cost of future warranty claims for its current period sales. These estimates are used to record accrued warranty cost for current period product shipments. The company uses historical warranty claim information, as well as recent trends that might suggest that past cost information may differ from future claims.

Factors that could impact the estimated claim information include the success of the company's productivity and quality initiatives, as well as parts and labor costs.

To the extent that actual claims costs differ from management's estimates by 5 percent, consolidated net income will have improved/declined by an estimated \$30 million in 2003, depending upon whether the actual claims costs were lower/higher, respectively, than the estimates.

### *Income Taxes*

The company is subject to income taxes in both the U.S. and numerous foreign jurisdictions. Significant judgment is required in determining the worldwide provision for income taxes. During the ordinary course of business, there are many transactions and calculations for which the ultimate tax determination is uncertain. The company recognizes liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. To the extent that the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax provision in the period in which such determination is made.

To the extent that the provision for income taxes increases/decreases by 1 percent of income from continuing operations before income taxes, consolidated income from continuing operations would have declined/improved by \$109 million in 2003.

### **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, 2003, currency changes resulted in assets and liabilities denominated in local currencies being translated into more dollars than at year-end 2002. 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 L, "Derivatives and Hedging Transactions," on pages 96 to 99.



## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

The company earned approximately 56 percent of its net income in currencies other than the U.S. dollar. In general, these currencies appreciated against the U.S. dollar during 2003 so net income in these countries translated into more dollars than they would have in 2002. The company also maintains hedging programs to limit the volatility of currency impacts on the company's financial results. These hedging programs limit the impact of currency changes on the company's financial results but do not eliminate them. In addition to the translation of earnings and the company's hedging programs, the impact of currency changes also may affect the company's pricing and sourcing actions, although the impact of these actions on net income is difficult to track and quantify. For these reasons, the company believes that extended periods of dollar weakness are positive for net income and extended periods of dollar strength are negative, although the precise impact is difficult to assess.

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 by entering into foreign currency hedge contracts.

### MARKET RISK

In the normal course of business, the financial position of the company routinely is subject 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 L, "Derivatives and Hedging Transactions," on pages 96 to 99.

To meet disclosure requirements, the company performs a 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 generally includes interest rate swaps, interest rate options, foreign currency swaps, forward contracts and option contracts.

To perform the sensitivity analysis, the company assesses the risk of loss in fair value 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, 2003 and 2002. 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 impacting 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, 2003, and December 31, 2002, are as follows:

### *Interest Rate Risk*

At December 31, 2003, 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 \$170 million as compared with a decrease of \$237 million at December 31, 2002. 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 \$152 million as compared to \$210 million at December 31, 2002. Changes in the relative sensitivity of the fair value of the company's financial instrument portfolio for these theoretical changes in the level of interest rates are primarily driven by changes in the company's debt maturity, interest rate profile and amount. In 2003 versus 2002, the reported decrease in interest rate sensitivity is primarily due to a decrease in long-term fixed rate debt outstanding at December 31, 2003.

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## Foreign Currency Exchange Rate Risk

At December 31, 2003, 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 \$283 million as compared with a decrease of \$640 million at December 31, 2002. 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 \$296 million compared to \$660 million at December 31, 2002. In 2003 versus 2002, the reported decrease in foreign currency exchange rate sensitivity was primarily due to a reduction in foreign currency debt.

## FINANCING RISKS

See the Global Financing Description of Business (next column) for a discussion of the financing risks associated with the company's Global Financing business and management's goals to mitigate such risks while striving for superior return on Global Financing's equity.

## EMPLOYEES AND RELATED WORKFORCE

AT DECEMBER 31:	2003	2002	2001	PERCENTAGE CHANGES	
				2003-2002	2002-2001
IBM/wholly owned subsidiaries	319,273	315,889	319,876	1.1	(1.2)
Less-than-wholly owned subsidiaries	18,189	22,282	25,403	(18.4)	(12.3)
Complementary	17,695	17,250	21,300	2.6	(19.0)

Employees at IBM and its wholly owned subsidiaries in 2003 increased 3,384 from last year. The company continues to invest in Global Services and Software, growth areas of the business, through a combination of hiring and acquisitions (e.g., Rational). The company also continues to rebalance its workforce to improve IBM's competitiveness in the marketplace as well as to withdraw from certain businesses, thereby offsetting some of the growth.

In less-than-wholly owned subsidiaries, the number of employees decreased from last year, primarily as a result of the company's services subsidiary in Australia being converted to a wholly owned status.

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.

## GLOBAL FINANCING

### DESCRIPTION OF BUSINESS

Global Financing is a business segment within IBM, but is managed (on an arm's-length basis) and measured as if it were a standalone entity. Accordingly, the information presented in this section is consistent with this separate company view.

The mission of Global Financing is to generate a return on equity. It also facilitates the acquisition of IBM hardware, software and services.

Global Financing invests in financing assets, manages the associated risks and leverages with debt, all with the objective of generating consistently strong returns on equity. The focus on IBM products and IBM clients mitigates the risks normally associated with a financing company. Global Financing has the benefit of both a deep knowledge of its customer base and a clear insight into the products that are being leased. This pairing allows Global Financing to manage two of the major risks (credit and residual value) that are normally associated with financing.

Global Financing comprises three lines of business:

- Customer financing provides lease and loan financing to end users and internal customers for terms generally between two and five years. Internal financing is predominantly in support of Global Services' long-term customer service contracts. Global Financing also factors a selected portion of the company's accounts receivable, primarily for cash management purposes. All of these internal financing arrangements are at arm's-length rates and are based upon market conditions.
- Commercial financing provides primarily short-term inventory and accounts receivable financing to dealers and remarketers of IT products. Global Financing also participates as a lender in selected syndicated loan facilities that originated from 1999 through 2001. Syndicated loans are loans in which Global Financing purchased a fixed percentage of a loan facility from a bank or other lending institution. Global Financing no longer participates in new syndicated loan programs. There are, however, remaining amounts committed and outstanding. Outstandings represent less than 1 percent of total Global Financing assets at December 31, 2003, as compared to 2 percent at December 31, 2002.
- Remarketing includes the sale and lease of used equipment to new or existing customers. This equipment is primarily sourced from the conclusion of lease transactions.

In addition to the strength of the economy and its impact on corporate IT budgets, key drivers of Global Financing's results are interest rates and originations. Originations, which determine the asset base of Global Financing's annuity-like business, are impacted by IBM's non-Global Financing sales volumes and Global Financing's participation rates.

# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

Customer participation rates are the propensity of IBM's clients to finance their purchases through Global Financing in lieu of paying IBM up-front cash.

## RESULTS OF OPERATIONS

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
External revenue	\$ 2,827	\$ 3,203	\$ 3,407
Internal revenue	1,300	939	836
Total revenue	4,127	4,142	4,243
Cost	1,846	1,803	2,016
Gross profit	\$ 2,281	\$ 2,339	\$ 2,227
Gross profit margin	55.3%	56.5%	52.5%
Pre-tax income	\$ 1,182	\$ 955	\$ 1,143
After-tax income	\$ 766	\$ 627	\$ 727
Return on equity*	22.3%	17.2%	18.4%

\* Return on equity is calculated using a five-point average of equity and an estimated tax rate principally based on Global Financing's geographic mix of earnings, as IBM's provision for income taxes is determined on a consolidated basis. See page 55 for the IBM consolidated tax rate.

Global Financing revenue was flat in 2003 as compared to 2002. External revenue decreased 11.7 percent (18 percent at constant currency) in 2003 versus 2002 driven by lower financing income, due to declining interest rates and a lower average asset base, and a decrease in external used equipment sales. The lower average asset base was primarily due to lower originations in prior years. Internal revenue increased 38.4 percent in 2003 versus 2002 driven by internal used equipment sales, primarily zSeries. Global Financing remarketed used equipment, primarily resulting from returns off of lease, both externally and internally. Externally remarketed equipment represents sales to clients and resellers, while internally remarketed equipment primarily represents used equipment that is sold internally and then remarketed externally through the Hardware segment.

Global Financing revenue decreased 2.4 percent in 2002 versus 2001. The decrease in external revenue was driven by lower financing income due to a lower average asset base discussed above partially offset by an increase in external used equipment sales. The decline in external revenue was offset by an increase in internal revenue due to an increase in internal used equipment sales. See discussion above.

Global Financing gross profit dollars decreased 2.5 percent and the gross profit margin declined 1.2 points in 2003 versus 2002. The decrease in gross profit dollars was primarily driven by declining interest rates and a lower average asset base discussed above partially offset by improved financing margins. The decrease in gross profit margin was driven by a mix change towards lower margin remarketing sales and away from financing income partially offset by lower borrowing costs related to the current interest rate environment.

Global Financing gross profit dollars increased 5.0 percent and the gross profit margin increased 4.0 points in 2002 versus 2001. The increases in 2002 gross profit dollars and gross

profit margin were primarily driven by lower borrowing costs.

Global Financing pre-tax income increased 23.8 percent in 2003 versus 2002, following a decrease of 16.4 percent in 2002 versus 2001. The increase in 2003 was driven by a decrease in bad debt expense partially offset by a decrease in gross profit discussed above. The decrease in bad debt expense is reflective of the improved general economic environment and reduced exposure in specific sectors, particularly the Communications sector. (Also see pages 71 and 72 for an additional discussion of Global Financing Receivable Allowance for Doubtful Accounts.) The decrease in 2002 versus 2001 was due to increases in provisions for bad debt reflective of the general economic environment as well as specific client issues, such as the Communications sector, partially offset by an increase in gross profit discussed previously.

The increase in return on equity from 2002 to 2003 was due to higher earnings primarily associated with a decrease in provisions for bad debt expense. The decrease in return on equity from 2001 to 2002 was due to lower earnings associated with an increased provision for bad debt expense.

## FINANCIAL CONDITION

### Balance Sheet

(dollars in millions)

AT DECEMBER 31:	2003	2002
Cash	\$ 813	\$ 1,157
Net investment in sales-type leases	11,969	12,314
Equipment under operating leases:		
External customers	1,707	1,922
Internal customers (a)(b)	1,873	1,701
Customer loans	10,413	9,621
Total customer financing assets	25,962	25,558
Commercial financing receivables	5,835	5,525
Intercompany financing receivables (a)(b)	1,999	1,616
Other receivables	270	445
Other assets	1,037	941
Total financing assets	\$ 35,916	\$ 35,242
Intercompany payables (a)	\$ 6,754	\$ 5,383
Debt (c)	23,264	23,828
Other liabilities	2,546	2,556
Total financing liabilities	32,564	31,767
Total financing equity	3,352	3,475
Total financing liabilities and equity	\$ 35,916	\$ 35,242

(a) Amounts eliminated for purposes of IBM's consolidated results and therefore do not appear on page 75.

(b) These assets, along with the other assets in this table, are leveraged using Global Financing debt.

(c) Global Financing debt includes debt of the company and of the Global Financing units that support the Global Financing business.

### Sources and Uses of Funds

The primary use of funds in Global Financing is to originate customer and commercial financing assets. Customer financing assets for end users consist primarily of IBM hardware, software and services, but also include non-IBM equip-

## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

ment, software and services to meet IBM clients' total solutions requirements. Customer financing assets are primarily sales-type, direct financing and operating leases for equipment as well as loans for software and services with terms generally for two to five years. Customer financing also includes internal activity as described on page 69.

Commercial financing originations arise primarily from inventory and accounts receivable financing for dealers and remarketers of IBM and non-IBM products. Payment terms for inventory financing generally range from 30 to 75 days. Payment terms for accounts receivable financing generally range from 30 to 90 days. Syndicated loans are also included in commercial financing assets. See page 69 for discussion on syndicated loans.

### Originations

The following are total external and internal financing originations.

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
Customer finance:			
External	\$ 13,279	\$ 12,845	\$ 15,620
Internal	1,150	1,061	931
Commercial finance	24,291	22,546	25,071
Total	\$ 38,720	\$ 36,452	\$ 41,622

New financing originations of customer and commercial financing assets exceeded cash collections in 2003, which resulted in a net increase in financing assets at December 31, 2003, as compared to December 31, 2002. The increase in originations was due to favorable currency movements offset by a decline in participation rates. The decline in participation rates is in line with industry trends. Originations decreased in 2002 from 2001 due to lower demand for the company's IT equipment. Cash collections in 2003, 2002 and 2001 included \$105 million, \$218 million and zero, respectively, generated through sales of portions of Global Financing's syndicated loan portfolio. These sales transactions did not have a material impact on the company's Consolidated Statement of Earnings. Additionally, funds were generated through the sale and lease of used equipment sourced primarily from prior years' lease originations.

Cash generated by Global Financing was deployed to pay dividends to IBM and to reduce debt.

### Financing Assets by Sector

The following are the percentage of external financing assets by industry sector.

AT DECEMBER 31:	2003	2002
Financial Services	28%	31%
Business Partners*	18	14
Industrial	17	18
Communications	11	12
Distribution	10	11
Public	10	10
Other	6	4
Total	100%	100%

\* Business Partners financing assets represent a portion of commercial financing inventory and accounts receivable financing for terms generally less than 90 days.

### Financing Receivables and Allowances

The following table presents external financing receivables, excluding residual values, and the allowance for doubtful accounts.

(dollars in millions)

AT DECEMBER 31:	2003	2002
Financing receivables	\$ 28,451	\$ 28,007
Specific allowance for doubtful accounts	666	787
Unallocated allowance for doubtful accounts	199	184
Total allowance for doubtful accounts	865	971
Net financing receivables	\$ 27,586	\$ 27,036
Allowance for doubtful accounts coverage	3.0%	3.5%

### Roll-Forward of Financing Receivables Allowance for Doubtful Accounts

(dollars in millions)

JAN. 1, 2003	RESERVE USED*	ADDITIONS: BAD DEBT EXPENSE	OTHER**	DEC. 31, 2003
\$ 971	\$ (417)	\$ 206	\$ 105	\$ 865

\* Represents reserved receivables, net of recoveries, that were disposed of during the period.

\*\* Primarily represents translation adjustments.

The percentage of financing receivables reserved decreased from 3.5 percent at December 31, 2002, to 3.0 percent at December 31, 2003, primarily due to the write-off of receivables covered by specific reserves. Unallocated reserves increased 8.2 percent from \$184 million at December 31, 2002 to \$199 million at December 31, 2003, and the receivables balance increased 1.6 percent over the same period.

The unallocated reserve coverage increased slightly during the same period. While the overall credit quality of the portfolio remains stable, the increased unallocated reserve primarily reflects loss history. Specific reserves decreased 15.4 percent from \$787 million at December 31, 2002 to \$666 million at



## Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

December 31, 2003. The decrease in specific reserves was due to the write-off of reserved receivables during the period combined with lower requirements for additional specific reserves. This lower requirement is generally due to improving economic conditions as well as portfolio management to reduce risk in areas of concern such as the Communications sector.

Global Financing's bad debt expense declined to \$206 million for the year ended December 31, 2003, compared with \$576 million for the year ended December 31, 2002. The decline was primarily attributed to higher reserve additions required in 2002 primarily associated with the Communications sector, as compared to 2003. This issue has stabilized and contributed to the lower year-to-year charges.

### Residual Value

Residual value is a risk unique to the financing business and management of this risk is dependent upon the ability to accurately project future equipment values. Global Financing has insight into product plans and cycles for the IBM products under lease. Based upon this product information, Global Financing continually monitors projections of future equipment values and compares them to the residual values reflected in the portfolio. See note A, "Significant Accounting Policies," on page 85 for the company's accounting policy for residual values.

### Residual Value

(dollars in millions)

AT DECEMBER 31:	TOTAL		RUN OUT OF 2003 BALANCE			
	2002	2003	2004	2005	2006	2007 AND BEYOND
Sales-type leases	\$ 821	\$ 845	\$ 284	\$ 311	\$ 210	\$ 40
Operating leases	242	164	88	49	17	10
Total unguaranteed residual value	\$ 1,063	\$ 1,009	\$ 372	\$ 360	\$ 227	\$ 50
Related original amount financed	\$ 27,534*	\$ 27,820				
Percentage	3.9%	3.6%				

\* Reclassified to conform with 2003 presentation.

The decrease in the percentage of residual value to original amount financed was due to an increase in the percentage of leases that use bargain purchase options.

### Debt

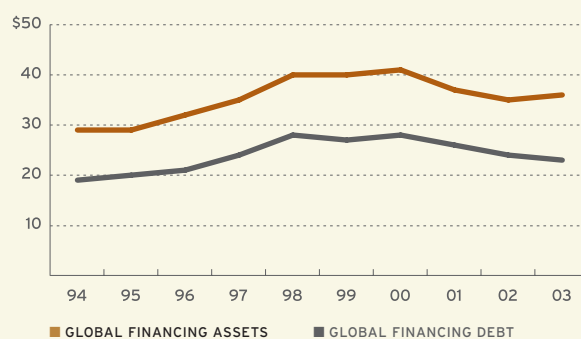
AT DECEMBER 31:	2003	2002
Debt to equity ratio	6.9x	6.9x

Global Financing funds its operations primarily through borrowings using a debt-to-equity ratio of approximately 7 to 1. The following table illustrates the correlation between Global Financing assets and Global Financing debt. Both assets and debt are presented in the Global Financing balance sheet on page 70.

Sales of equipment, which are primarily sourced from equipment returned at end of lease, represented 40.5 percent of Global Financing's revenue in 2003 and 32.1 percent in 2002. The increase is driven by higher internal used equipment sales, due to improved utilization of used inventory, primarily zSeries, combined with a decline in finance income driven by a lower average asset base. The gross margin on these sales was 30.2 percent and 28.5 percent in 2003 and 2002, respectively. In addition to selling assets that are sourced from end of lease, Global Financing also leases used equipment to new customers or extends leasing arrangements with current customers. These are other ways that Global Financing profitably recovers the residual values. The following table presents the recorded amount of unguaranteed residual value for sales-type and operating leases at December 31, 2002 and 2003. In addition, the table presents the residual value as a percentage of the original amount financed, and a run out of the unguaranteed residual value over the remaining lives of these leases at December 31, 2003. In addition to the unguaranteed residual value below, on a limited basis, Global Financing will purchase insurance to guarantee the future value of the equipment scheduled to be returned at end of lease.

### Global Financing Assets and Debt

(dollars in millions)



# Management Discussion

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

The company's Global Financing business provides funding predominantly for the company's external customers but also provides intercompany financing for the company (internal), as described in the "Description of Business" on page 69. As previously stated, IBM manages and measures Global Financing as if it were a standalone entity and accordingly, interest expense relating to debt supporting Global Financing's external customer and internal business is included in the "Global Financing Results of Operations" on page 70 and in note X, "Segment Information," on pages 117 to 120.

In the company's Consolidated Statement of Earnings on page 74, however, the interest expense supporting Global Financing's internal financing to the company is reclassified from Cost of financing to Interest expense.

### *Liquidity and Capital Resources*

Global Financing is a segment of IBM and as such, is supported by IBM's liquidity position and access to capital markets. Cash generated from operations in 2003 was deployed to reduce debt and pay dividends in order to maintain an appropriate debt to equity ratio.

### **CRITICAL ACCOUNTING ESTIMATES**

As discussed in note A, "Significant Accounting Policies," on page 80, the application of GAAP involves the exercise of varying degrees of judgment. The following areas require more judgment relative to the others and relate to Global Financing. Also see Critical Accounting Estimates on page 66.

### *Financing Receivables Reserves*

Global Financing reviews its financing receivables portfolio at least quarterly in order to assess collectibility. A description of the methods used by management to estimate the amount of uncollectible receivables is included on page 85. Factors that could result in actual receivable losses that are materially different from the estimated reserve include sharp changes in the economy, or a large change in the health of a particular industry segment that represents a concentration in Global Financing's receivables portfolio.

To the extent that actual collectibility differs from management's estimates by 5 percent, Global Financing's net income would be higher or lower by an estimated \$28 million (using 2003 data), depending upon whether the actual collectibility was better or worse, respectively, than the estimates.

### *Residual Value*

Residual value represents the estimated fair value of equipment under lease as of the end of the lease. Global Financing estimates the future fair value of residual values by using historical models, the current market for used equipment and forward-looking product information such as marketing plans and technological innovations. In addition, Global Financing also estimates the fair value by analyzing current market conditions for leasing and sales of both new and used equipment. These estimates are periodically reviewed and any other-than-temporary declines in estimated future residual values are recognized upon identification. Anticipated

increases in future residual value are not recognized until the equipment is remarketed. Factors that could cause actual results to differ materially from the estimates include severe changes in the used equipment market brought on by unforeseen changes in technology innovations and any resulting changes in the useful lives of used equipment.

To the extent that actual residual value recovery is lower than management's estimates by 5 percent, Global Financing's net income will be lower by an estimated \$18 million (using 2003 data). If the actual residual value recovery is higher than management's estimates, the increase in net income will be realized at the end of lease when the equipment is remarketed.

### **MARKET RISK**

See pages 68 and 69 for discussion of the company's overall market risk.

### **LOOKING FORWARD**

Given Global Financing's mission of supporting IBM's hardware, software and services businesses, originations for both customer and commercial finance businesses will be dependent upon the overall demand for IT hardware, software and services, as well as the customer participation rates.

Interest rates and the overall economy (including currency fluctuations) will have an effect on both revenue and gross profit. The company's interest rate risk management policy, however, combined with the Global Financing funding strategy (see page 72), should mitigate gross margin erosion due to changes in interest rates. The company's policy of matching asset and liability positions in foreign currencies will limit the impacts of currency fluctuations.

The economy could impact the credit quality of the Global Financing receivables portfolio and therefore the level of provision for bad debt. Global Financing will continue to apply rigorous credit policies in both the origination of new business and the evaluation of the existing portfolio.

As seen above, Global Financing has historically been able to manage residual value risk through both insight into the product cycles as well as through its remarketing business.

Global Financing has policies in place to manage each of the key risks involved in financing. These policies, combined with product and customer knowledge, should allow for the prudent management of the business going forward, even during periods of uncertainty with respect to the economy.

### **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 SEC, including the company's 2003 Form 10-K filed on or about March 8, 2004.

# Consolidated Statement of Earnings

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

(dollars in millions except per share amounts)

FOR THE YEAR ENDED DECEMBER 31:	NOTES	2003	2002	2001
<i>Revenue:</i>				
Global Services		\$ 42,635	\$ 36,360	\$ 34,956
Hardware		28,239	27,456	30,593
Software		14,311	13,074	12,939
Global Financing		2,826	3,232	3,426
Enterprise Investments/Other		1,120	1,064	1,153
<i>Total Revenue</i>		<b>89,131</b>	<b>81,186</b>	<b>83,067</b>
<i>Cost:</i>				
Global Services		31,903	26,812	25,355
Hardware		20,401	20,020	21,231
Software		1,927	2,043	2,265
Global Financing	K	1,248	1,416	1,693
Enterprise Investments/Other		634	611	634
<i>Total Cost</i>		<b>56,113</b>	<b>50,902</b>	<b>51,178</b>
<i>Gross Profit</i>		<b>33,018</b>	<b>30,284</b>	<b>31,889</b>
<i>Expense and Other Income:</i>				
Selling, general and administrative	Q	17,852	18,738	17,048
Research, development and engineering	R	5,077	4,750	4,986
Intellectual property and custom development income		(1,168)	(1,100)	(1,476)
Other (income) and expense		238	227	(353)
Interest expense	K & L	145	145	234
<i>Total Expense and Other Income</i>		<b>22,144</b>	<b>22,760</b>	<b>20,439</b>
<i>Income from Continuing Operations Before Income Taxes</i>		<b>10,874</b>	<b>7,524</b>	<b>11,450</b>
Provision for income taxes	P	3,261	2,190	3,304
<i>Income from Continuing Operations</i>		<b>7,613</b>	<b>5,334</b>	<b>8,146</b>
<i>Discontinued Operations:</i>				
Loss from discontinued operations	C	30	1,755	423
<i>Net Income</i>		<b>7,583</b>	<b>3,579</b>	<b>7,723</b>
Preferred stock dividends		—	—	10
<i>Net Income Applicable to Common Stockholders</i>		<b>\$ 7,583</b>	<b>\$ 3,579</b>	<b>\$ 7,713</b>
<i>Earnings/(Loss) per Share of Common Stock:</i>				
<i>Assuming Dilution:</i>				
Continuing operations	T	\$ 4.34	\$ 3.07	\$ 4.59
Discontinued operations	T	(0.02)	(1.01)	(0.24)
<i>Total</i>	T	<b>\$ 4.32</b>	<b>\$ 2.06</b>	<b>\$ 4.35</b>
<i>Basic:</i>				
Continuing operations	T	\$ 4.42	\$ 3.13	\$ 4.69
Discontinued operations	T	(0.02)	(1.03)	(0.24)
<i>Total</i>	T	<b>\$ 4.40</b>	<b>\$ 2.10</b>	<b>\$ 4.45</b>
<i>Weighted-Average Number of Common Shares Outstanding:</i>				
Assuming dilution		1,756,090,689	1,730,941,054	1,771,230,599
Basic		1,721,588,628	1,703,244,345	1,733,348,422

The accompanying notes on pages 80 through 121 are an integral part of the financial statements.

# Consolidated Statement of Financial Position

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

(dollars in millions)

AT DECEMBER 31:	NOTES	2003	2002*
<i>Assets</i>			
Current assets:			
Cash and cash equivalents		\$ 7,290	\$ 5,382
Marketable securities	D	357	593
Notes and accounts receivable — trade, net of allowances		10,026	9,915
Short-term financing receivables	F	17,583	15,996
Other accounts receivable		1,314	1,447
Inventories	E	2,942	3,148
Deferred taxes	P	2,542	2,617
Intangible assets — net	I	336	245
Prepaid expenses and other current assets		2,608	2,379
<b>Total current assets</b>		<b>44,998</b>	<b>41,722</b>
Plant, rental machines and other property	G	37,122	36,083
Less: Accumulated depreciation	G	22,433	21,643
Plant, rental machines and other property — net	G	14,689	14,440
Long-term financing receivables	F	10,741	11,440
Prepaid pension assets	W	18,426	16,003
Investments and sundry assets	H	8,108	8,272
Goodwill	I	6,921	4,115
Intangible assets — net	I	574	492
<b>Total Assets</b>		<b>\$ 104,457</b>	<b>\$ 96,484</b>
<i>Liabilities and Stockholders' Equity</i>			
Current liabilities:			
Taxes	P	\$ 5,475	\$ 5,476
Short-term debt	K & L	6,646	6,031
Accounts payable		8,460	7,630
Compensation and benefits		3,671	3,724
Deferred income		6,492	4,946
Other accrued expenses and liabilities		7,156	6,413
<b>Total current liabilities</b>		<b>37,900</b>	<b>34,220</b>
Long-term debt	K & L	16,986	19,986
Retirement and nonpension postretirement benefit obligations	W	14,251	13,215
Other liabilities	M	7,456	6,281
<b>Total Liabilities</b>		<b>76,593</b>	<b>73,702</b>
Contingencies and commitments	O		
Stockholders' equity:			
Common stock, par value \$.20 per share	N	16,269	14,858
Shares authorized: 4,687,500,000			
Shares issued (2003 — 1,937,393,604; 2002 — 1,920,957,772)			
Retained earnings		37,525	31,555
Treasury stock, at cost (shares: 2003 — 242,884,969; 2002 — 198,590,876)		(24,034)	(20,213)
Accumulated gains and (losses) not affecting retained earnings		(1,896)	(3,418)
<b>Total Stockholders' Equity</b>		<b>27,864</b>	<b>22,782</b>
<b>Total Liabilities and Stockholders' Equity</b>		<b>\$ 104,457</b>	<b>\$ 96,484</b>

\* Reclassified to conform with 2003 presentation.

The accompanying notes on pages 80 through 121 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
<i>2001*</i>							
Stockholders' equity, January 1, 2001	\$ 247	\$ 12,400	\$ 23,784	\$ (13,800)	\$ (1,712)	\$ (369)	\$ 20,550
Net income plus gains and (losses) not affecting retained earnings:							
Net income			7,723				\$ 7,723
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 (net of tax benefit of \$226)						(308)	(308)
Net unrealized gains on marketable securities (net of tax expense of \$58)						92	92
Total gains and (losses) not affecting retained earnings							(459)
Subtotal: Net income plus gains and (losses) not affecting retained earnings							\$ 7,264
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 (314,433 shares) and sales (11,801,053 shares) of treasury stock under employee plans — net		32	(391)	1,234			875
Other treasury shares purchased, not retired (50,764,698 shares)				(5,293)			(5,293)
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
Stockholders' equity, December 31, 2001	\$ —	\$ 14,248	\$ 30,142	\$ (20,114)	\$ —	\$ (828)	\$ 23,448

\* Reclassified to conform with 2003 presentation.

The accompanying notes on pages 80 through 121 are an integral part of the financial statements.

# Consolidated Statement of Stockholders' Equity

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

(dollars in millions)

	COMMON STOCK	RETAINED EARNINGS	TREASURY STOCK	ACCUMULATED GAINS AND (LOSSES) NOT AFFECTING RETAINED EARNINGS	TOTAL
<i>2002*</i>					
Stockholders' equity, January 1, 2002	\$ 14,248	\$ 30,142	\$ (20,114)	\$ (828)	\$ 23,448
Net income plus gains and (losses) not affecting retained earnings:					
Net income		3,579			<u>\$ 3,579</u>
Gains and (losses) not affecting retained earnings (net of tax):					
Net unrealized losses on SFAS No. 133 cash flow hedge derivatives during 2002 (net of tax benefit of \$372)				(659)	(659)
Foreign currency translation adjustments (net of tax benefit of \$197)				850	850
Minimum pension liability adjustment (net of tax benefit of \$1,574)				(2,765)	(2,765)
Net unrealized losses on marketable securities (net of tax benefit of \$8)				(16)	<u>(16)</u>
Total gains and (losses) not affecting retained earnings					<u>(2,590)</u>
Subtotal: Net income plus gains and (losses) not affecting retained earnings					<u>\$ 989</u>
Cash dividends declared — common stock		(1,005)			(1,005)
Common stock issued under employee plans (7,255,995 shares)	440	4			444
Purchases (189,797 shares) and sales (12,873,502 shares) of treasury stock under employee plans — net		(475)	1,311		836
Other treasury shares purchased, not retired (48,481,100 shares)			(4,212)		(4,212)
Treasury shares issued to fund the U.S. pension fund (24,037,354 shares)		(576)	2,447		1,871
Shares issued/to be issued in the PwCC acquisition (3,677,213 shares issued)	43	(114)	355		284
Decrease in shares remaining to be issued in acquisition	(9)				(9)
Tax effect — stock transactions	136				136
Stockholders' equity, December 31, 2002	<u>\$ 14,858</u>	<u>\$ 31,555</u>	<u>\$ (20,213)</u>	<u>\$ (3,418)</u>	<u>\$ 22,782</u>

\* Reclassified to conform with 2003 presentation.

The accompanying notes on pages 80 through 121 are an integral part of the financial statements.

## Consolidated Statement of Stockholders' Equity

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

(dollars in millions)

	COMMON STOCK	RETAINED EARNINGS	TREASURY STOCK	ACCUMULATED GAINS AND (LOSSES) NOT AFFECTING RETAINED EARNINGS	TOTAL
<i>2003</i>					
Stockholders' equity, January 1, 2003	\$ 14,858	\$ 31,555	\$ (20,213)	\$ (3,418)	\$ 22,782
Net income plus gains and (losses) not affecting retained earnings:					
Net income		7,583			\$ 7,583
Gains and (losses) not affecting retained earnings (net of tax):					
Net unrealized losses on SFAS No. 133 cash flow hedge derivatives during 2003 (net of tax benefit of \$51)				(91)	(91)
Foreign currency translation adjustments (net of tax benefit of \$125)				1,768	1,768
Minimum pension liability adjustment (net of tax benefit of \$124)				(162)	(162)
Net unrealized gains on marketable securities (net of tax expense of \$3)				7	7
Total gains and (losses) not affecting retained earnings					1,522
Subtotal: Net income plus gains and (losses) not affecting retained earnings					\$ 9,105
Cash dividends declared — common stock		(1,085)			(1,085)
Common stock issued under employee plans (16,445,473 shares)	1,205	(282)			923
Purchases (291,921 shares) and sales (5,992,342 shares) of treasury stock under employee plans — net		(246)	582		336
Other treasury shares purchased, not retired (49,994,514 shares)			(4,403)		(4,403)
Shares to be issued in the PwCC acquisition	8				8
Decrease in shares remaining to be issued in acquisition	(4)				(4)
Tax effect — stock transactions	202				202
<i>Stockholders' equity, December 31, 2003</i>	<i>\$ 16,269</i>	<i>\$ 37,525</i>	<i>\$ (24,034)</i>	<i>\$ (1,896)</i>	<i>\$ 27,864</i>

The accompanying notes on pages 80 through 121 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:	2003	2002	2001
<i>Cash Flow from Operating Activities from Continuing Operations:</i>			
Income from continuing operations	\$ 7,613	\$ 5,334	\$ 8,146
Adjustments to reconcile income from continuing operations to cash provided by operating activities:			
Depreciation	3,961	3,691	3,881
Amortization of software	740	688	625
Deferred income taxes	1,126	(67)	664
Net gain on asset sales and other	(275)	(343)	(340)
Other than temporary declines in securities and other investments	50	58	405
Noncash portion of special actions	—	1,350	—
Change in operating assets and liabilities, net of acquisitions/divestitures:			
Receivables	2,024	4,125	2,837
Inventories	293	793	287
Pension assets	(1,409)	(4,227)	(1,758)
Other assets	(352)	70	1,244
Accounts payable	617	(55)	(918)
Pension liabilities	(286)	83	(69)
Other liabilities	467	2,288	(1,038)
<i>Net Cash Provided by Operating Activities from Continuing Operations</i>	<i>14,569</i>	<i>13,788</i>	<i>13,966</i>
<i>Cash Flow from Investing Activities from Continuing Operations:</i>			
Payments for plant, rental machines and other property	(4,393)	(4,753)	(5,400)
Proceeds from disposition of plant, rental machines and other property	1,039	775	1,149
Investment in software	(581)	(597)	(655)
Purchases of marketable securities and other investments	(6,471)	(1,582)	(778)
Proceeds from disposition of marketable securities and other investments	7,023	1,185	738
Divestiture of businesses	97	1,233	—
Acquisition of businesses	(1,836)	(3,158)	(916)
<i>Net Cash Used in Investing Activities from Continuing Operations</i>	<i>(5,122)</i>	<i>(6,897)</i>	<i>(5,862)</i>
<i>Cash Flow from Financing Activities from Continuing Operations:</i>			
Proceeds from new debt	1,573	6,726	4,535
Short-term borrowings/(repayments) less than 90 days — net	777	(4,087)	2,926
Payments to settle debt	(5,831)	(5,812)	(7,898)
Preferred stock transactions — net	—	—	(254)
Common stock transactions — net	(3,232)	(3,087)	(3,652)
Cash dividends paid	(1,085)	(1,005)	(966)
<i>Net Cash Used in Financing Activities from Continuing Operations</i>	<i>(7,798)</i>	<i>(7,265)</i>	<i>(5,309)</i>
Effect of exchange rate changes on cash and cash equivalents	421	148	(83)
Net cash (used in)/provided by discontinued operations	(162)	(722)	55
Net change in cash and cash equivalents	1,908	(948)	2,767
Cash and cash equivalents at January 1	5,382	6,330	3,563
<i>Cash and Cash Equivalents at December 31</i>	<i>\$ 7,290</i>	<i>\$ 5,382</i>	<i>\$ 6,330</i>
<i>Supplemental Data:</i>			
Cash paid during the year for the total company:			
Income taxes	\$ 1,707	\$ 1,841	\$ 2,279
Interest	\$ 853	\$ 831	\$ 1,247

### *Noncash Investing and Financing Activities :*

The noncash portion of the purchase price paid to PwCC is a significant noncash investing activity. This transaction is described on pages 90 and 91.

The accompanying notes on pages 80 through 121 are an integral part of the financial statements.



# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## A

### SIGNIFICANT ACCOUNTING POLICIES

#### BASIS OF PRESENTATION

On December 31, 2002, the company sold its hard disk drive (HDD) business to Hitachi, Ltd. (Hitachi). See note C, “Acquisitions/Divestitures,” on pages 89 to 92. The HDD business was part of the company’s Technology Group reporting segment. The HDD business was accounted for as a discontinued operation under generally accepted accounting principles (GAAP) and therefore, the HDD results of operations and cash flows have been removed from the company’s results of continuing operations and cash flows for all periods presented in this document. The financial results reported as discontinued operations include the external original equipment manufacturer (OEM) HDD business and charges related to HDDs used in the company’s eServer and Storage products that were reported in the Technology Group segment. The discontinued operations results do not reflect HDD shipments to the company’s internal customers.

#### PRINCIPLES OF CONSOLIDATION

The Consolidated Financial Statements include the accounts of International Business Machines Corporation (IBM) and its controlled subsidiary companies, which in general are majority owned. The accounts of variable interest entities (VIEs) as defined by the Financial Accounting Standards Board’s (FASB) Interpretation No. 46 (FIN 46) and related interpretations (see note B, “Accounting Changes,” on page 86), created after January 31, 2003, are included in the Consolidated Financial Statements. 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 85 within “Marketable Securities.”

#### USE OF ESTIMATES

The preparation of Consolidated Financial Statements in conformity with GAAP 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 client, the sales price is fixed or determinable, and collectibility is reasonably assured. The company reduces revenue for estimated client returns and other allowances. In addition to the aforementioned general policy, the following are the specific revenue recognition policies for multiple-element arrangements and for each major category of revenue.

#### *Multiple-Element Arrangements*

The company enters into transactions that represent multiple-element arrangements, which may include any combination of services, software, hardware and financing. Multiple-element arrangements are assessed to determine whether they can be separated into more than one unit of accounting. A multiple-element arrangement is separated into more than one unit of accounting if all of the following criteria are met.

- The delivered item(s) has value to the client on a stand-alone basis.
- There is objective and reliable evidence of the fair value of the undelivered item(s).
- If the arrangement includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is considered probable and substantially in the control of the company.

If these criteria are not met, then revenue is deferred until such criteria are met or until the period(s) over which the last undelivered element is delivered. If there is objective and reliable evidence of fair value for all units of accounting in an arrangement, the arrangement consideration is allocated to the separate units of accounting based on each unit’s relative fair value. There may be cases, however, in which there is objective and reliable evidence of fair value of the undelivered item(s) but no such evidence for the delivered item(s). In those cases, the residual method is used to allocate the arrangement consideration. Under the residual method, the amount of consideration allocated to the delivered item(s) equals the total arrangement consideration less the aggregate fair value of the undelivered item(s). The revenue policies described below are then applied to each unit of accounting.

For any non-software products that are in a multiple-element arrangement whereby the software products in the arrangement are not essential to the functionality of the non-software items, the guidance for multiple-element arrangements described above apply to the non-software items. If, however, the software products are essential to the functionality of the non-software items, then the guidance described in Software on page 81 should be applied for purposes of separating and allocating consideration to the software and non-software items.

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## *Services*

The terms of services contracts generally range from less than one year to ten years. Revenue from time and material services contracts is recognized as the services are provided. Revenue from data center or Business Transformation Outsourcing (BTO) contracts in which IBM manages a client's data center or operates a client's specific business process, respectively, reflects the extent of actual services delivered in the period, based upon objective measures of output in accordance with the terms of the contract.

Revenue from Business Consulting Services (BCS) contracts that require IBM to design, develop, manufacture or modify complex information technology (IT) systems to a buyer's specifications, and to provide services related to the performance of such contracts, 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 on services contracts are recognized during the period in which the loss first becomes apparent. Revenue from maintenance is recognized over the contractual period or as the services are performed.

In some of the company's services contracts, the company bills the client prior to performing the services. This situation gives rise to deferred income of \$3.3 billion and \$2.6 billion at December 31, 2003 and 2002, respectively, and is reported as Deferred income in the Consolidated Statement of Financial Position. In other services contracts, the company performs the services prior to billing the client. This situation gives rise to unbilled accounts receivable of \$1.8 billion and \$1.3 billion at December 31, 2003 and 2002, respectively, and is recorded as Notes and accounts receivable-trade in 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 generally within four months, rarely exceeding nine months. The largest driver of the increase in unbilled accounts receivable is the favorable impacts from currency translation.

## *Hardware*

Revenue from hardware sales or sales-type leases is recognized when the product is shipped to the client and when there are no unfulfilled company obligations that affect the client'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 on a straight-line basis over the term of the rental or lease.

## *Software*

Revenue from one-time charge licensed software is recognized at the inception of the license term. Revenue from monthly license charge arrangements is recognized on a subscription

basis over the period that the client is using the program. Revenue from maintenance, unspecified upgrades and technical support is recognized over the period such items are delivered. For multiple-element arrangement software contracts and multiple-element arrangement software contracts that include non-software elements whereby the software is essential to the functionality of the non-software elements (collectively referred to as software multiple-element arrangements), the company applies the following rules:

A software multiple-element arrangement is separated into more than one unit of accounting if all of the following criteria are met:

- The functionality of the delivered element(s) is not dependent on the undelivered element(s).
- There is vendor-specific objective evidence (VSOE) of fair value of the undelivered element(s).
- Delivery of the delivered element(s) represents the culmination of the earnings process for those element(s).

If these criteria are not met, the revenue is deferred until such criteria are met or until the period(s) over which the last undelivered element is delivered. If there is VSOE for all units of accounting in an arrangement, the arrangement consideration is allocated to the separate units of accounting based on each unit's relative VSOE. There may be cases, however, in which there is VSOE of the undelivered item(s) but no such evidence for the delivered item(s). In these cases, the residual method is used to allocate the arrangement consideration. Under the residual method, the amount of consideration allocated to the delivered item(s) equals the total arrangement consideration less the aggregate VSOE of the undelivered elements.

## *Financing*

Finance income attributable to sales-type leases, direct financing leases and loans is recognized at level rates of return over the term of the leases or loans. Operating lease income is recognized on a straight-line basis over the term of the lease.

## **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 and services 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 a 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. Certain special

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

actions discussed in note S, “2002 Actions,” on pages 105 through 107 are also included in SG&A. 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 asset retirement obligations (for example, the required removal and restoration of chemical storage facilities and monitoring) are also accrued when it is probable that the costs will be incurred and the costs are reasonably estimable. The accounting for asset retirement obligations (AROs) is further discussed below in “Depreciation and Amortization.”

### *Research, Development and Engineering*

Research, development and engineering (RD&E) costs are expensed as incurred.

### *Intellectual Property and Custom Development Income*

As part of the company’s ongoing business model and as a result of the company’s ongoing investment in research and development (R&D), the company licenses and sells the rights to certain of its intellectual property (IP) including internally developed patents, trade secrets and technological know-how. Certain transfers of IP to third parties are licensing/royalty-based fees 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 (i.e., variable royalty, based upon licensee’s revenue). Sales and other transfers typically include transfers of IP 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 clients. 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 certain 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. ARO liabilities are the estimated costs associated with the retirement of long-lived assets for which a legal or contractual obligation exists. These liabilities are recorded at fair value and the carrying amount of the related

asset is increased by the same amount. These incremental carrying amounts are depreciated over the useful life of the related assets.

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. Capitalized costs for internal-use software are amortized on a straight-line basis over 2 years. See “Software Costs” on page 85 for additional information. Other intangible assets are amortized for periods up to 7 years. See “Standards Implemented” on page 88 for additional information on goodwill.

### **RETIREMENT-RELATED BENEFITS**

See note W, “Retirement-Related Benefits,” on pages 110 to 117 for the company’s accounting policy for retirement-related benefits.

### **STOCK-BASED COMPENSATION**

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. Accordingly, the company records expense for employee stock-based compensation plans equal to the excess of the market price of the underlying IBM shares at the date of grant over the exercise price of the stock-related award, if any (known as the intrinsic value). Generally, all employee stock options are issued with the exercise price equal to the market price of the underlying IBM shares at the grant date and therefore, no compensation expense is recorded. In addition, no compensation expense is recorded for purchases under the Employees Stock Purchase Plan (ESPP) in accordance with APB Opinion No. 25. This plan is described on page 110. The intrinsic value of restricted stock units and certain other stock-based compensation issued to employees as of the date of grant is amortized to compensation expense over the vesting period. To the extent there are performance criteria that could result in an employee receiving more or less (including zero) shares than the number of units granted, the unamortized liability is marked to market during the performance period based upon the intrinsic value at the end of each quarter.

The following table summarizes the pro forma operating results of the company had compensation cost for stock options granted and for employee stock purchases under the ESPP (see note V, “Stock-Based Compensation Plans,” on pages 109 and 110) been determined in accordance with the fair value-based method prescribed by Statement of Financial Accounting Standards (SFAS) No. 123, “Accounting for Stock-Based Compensation.”

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

(dollars in millions except per share amounts)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
Net income applicable to common stockholders, as reported	\$ 7,583	\$ 3,579	\$ 7,713
Add: Stock-based employee compensation expense included in reported net income, net of related tax effects	76	112	104
Deduct: Total stock-based employee compensation expense determined under fair value method for all awards, net of related tax effects	1,101	1,315	1,343
<b>Pro forma net income applicable to common stockholders</b>	<b>\$ 6,558</b>	<b>\$ 2,376</b>	<b>\$ 6,474</b>
Earnings per share of common stock:			
Basic — as reported	\$ 4.40	\$ 2.10	\$ 4.45
Basic — pro forma	\$ 3.81	\$ 1.40	\$ 3.74
Assuming dilution — as reported	\$ 4.32	\$ 2.06	\$ 4.35
Assuming dilution — pro forma	\$ 3.74	\$ 1.39	\$ 3.69

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, 2003, 2002 and 2001.

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

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
Option term (years)*	5	5	4/5
Volatility**	39.9%	40.4%	37.7%
Risk-free interest rate (zero coupon U.S. treasury note)	2.9%	2.8%	4.4%
Dividend yield	0.7%	0.7%	0.5%
Weighted-average fair value per option	\$ 30	\$ 28	\$ 42

\* The Option term is the number of years that the company estimates, based upon history, that options will be outstanding prior to exercise or forfeiture. The Option term is 5 years for non-tax incentive options granted in 2001 through 2003. The Option term is 4 years for tax incentive options granted in 2001. There were no tax incentive options granted in 2003 or 2002.

\*\* 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.

## 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 the 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

All derivatives are recognized in the Consolidated Statement of Financial Position 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," as amended by SFAS No. 138, "Accounting for Certain Derivative Instruments and Certain Hedging Activities," and SFAS No. 149, "Amendment of Statement 133 on Derivative Instruments and Hedging Activities," (SFAS No. 133), 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 cash flows, 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



# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

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 or cash flows 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 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 the 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 Global 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, net of applicable taxes, 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 offsetting 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 net investment hedging derivatives and other non-derivative risk management instruments designated as net investment hedges are recorded as foreign currency translation adjustments, net of applicable taxes, 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 derivative are included in net income each period until the instrument matures. When the derivative transaction ceases to exist, a hedged asset or liability is no longer adjusted for changes in its fair value except as required under other relevant accounting standards. 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.

The company generally reports cash flows resulting from the company's derivative financial instruments consistent with the classification of cash flows from the underlying hedged items that the derivatives are hedging. Accordingly, the majority of cash flows associated with the company's derivative programs are classified in Cash flows from operating activities in the Consolidated Statement of Cash Flows. For currency swaps designated as hedges of foreign currency denominated debt (included in the company's debt risk management program as addressed in note L, "Derivatives and Hedging Transactions," on pages 96 to 99), cash flows directly associated with the settlement of the principal element of these swaps are reported in the Payment to settle debt line in the Cash flow from financing activities section of the Consolidated Statement of Cash Flows.

See note L, "Derivatives and Hedging Transactions," on pages 96 to 99 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 maturities of three months or less at the date of purchase are carried at fair value and considered to be cash equivalents.

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## 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 "Principles of Consolidation" on page 80, 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.

## ALLOWANCE FOR UNCOLLECTIBLE RECEIVABLES

### Trade

An allowance for uncollectible trade receivables is recorded based on a combination of write-off history, aging analysis, and any specific known troubled accounts.

### Financing

Financing receivables include sales-type leases, direct financing leases, and loans. Below are the methodologies the company uses to calculate both its specific and its unallocated reserves, which are applied consistently to its different portfolios.

*Specific* – The company reviews all accounts receivable considered at risk on a quarterly basis. The review primarily consists of an analysis based upon current information available about the client, such as financial statements, news reports and published credit ratings, as well as the current economic environment, collateral net of repossession cost and prior history. For loans that are collateral dependent, impairment is measured using the fair value of the collateral when foreclosure is probable. Using this information, the company determines the expected cash flow for the receivable and calculates a recommended estimate of the potential loss and the probability of loss. For those accounts where the loss is probable, the company records a specific reserve.

*Unallocated* – The company records an unallocated reserve that is calculated by applying a reserve rate to its different portfolios, excluding accounts that have been specifically reserved. This reserve rate is based upon credit rating, probability of default, term, asset characteristics, and loss history.

Receivable losses are charged against the allowance when management believes the uncollectibility of the receivable is confirmed. Subsequent recoveries, if any, are credited to the allowance.

Certain receivables for which the company recorded specific reserves may also be placed on nonaccrual status. Nonaccrual assets are those receivables (impaired loans or nonperforming leases) with specific reserves and other accounts for which it is likely that the company will be unable to collect all amounts due according to original terms of the lease or loan agreement. Income recognition is discontinued on these receivables. Receivables may be removed from nonaccrual status, if appropriate, based upon changes in client circumstances.

## 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. The company reassesses the realizable value of its lease residual values. Any anticipated increases in specific future residual values are not recognized before realization through remarketing efforts. Anticipated decreases in specific future residual values that are considered to be other than temporary are recognized immediately upon identification and are recorded as an adjustment to the residual value estimate. For sale type and direct financing leases, this reduction lowers the recorded net investment and is recognized as a loss charged to finance income in the period in which the estimate is changed, as well as an adjustment to unearned income to reduce future period finance income.

## SOFTWARE COSTS

Costs that are related to the conceptual formulation and design of licensed programs are expensed as R&D. 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 includes software coding, installation, testing and data conversion. Capitalized costs are amortized on a straight-line basis over 2 years.

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## PRODUCT WARRANTIES

The company estimates its warranty costs based on historical warranty claim experience and applies this estimate to the revenue stream for products under warranty. Included in the company's warranty accrual are costs for limited warranties and extended warranty coverage. Future costs for warranties applicable to revenue recognized in the current period are charged to cost of revenue. The warranty accrual is reviewed quarterly to verify that it properly reflects the remaining obligation based on the anticipated expenditures over the balance of the obligation period. Adjustments are made when actual warranty claim experience differs from estimates.

## 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 T, "Earnings Per Share of Common Stock," on page 108 for additional information.

## B

### ACCOUNTING CHANGES

#### STANDARDS IMPLEMENTED

In December 2003, the FASB revised SFAS No. 132, "Employers' Disclosures about Pensions and other Post-retirement Benefits, an amendment of FASB Statements No. 87, 88 and 106." This new SFAS No. 132 retains all of the disclosure requirements of SFAS No. 132; however, it also requires additional annual disclosures describing types of plan assets, investment strategy, measurement date(s), expected employer contributions, plan obligations, and expected benefit payments of defined benefit pension plans and other defined benefit postretirement plans. In accordance with the transition provisions of SFAS No. 132 (revised 2003), note W, "Retirement-Related Benefits," on pages 110 through 117 has been expanded to include the new disclosures required as of December 31, 2003.

In January 2003, the FASB issued FIN 46, "Consolidation of Variable Interest Entities," which addresses consolidation by business enterprises of VIEs that either: (1) do not have sufficient equity investment at risk to permit the entity to

finance its activities without additional subordinated financial support, or (2) have equity investors that lack an essential characteristic of a controlling financial interest.

Throughout 2003, the FASB released numerous proposed and final FASB Staff Positions (FSPs) regarding FIN 46, which both clarified and modified FIN 46's provisions. In December 2003, the FASB issued Interpretation No. 46 (FIN 46-R), which will replace FIN 46 upon its effective date. FIN 46-R retains many of the basic concepts introduced in FIN 46; however, it also introduces a new scope exception for certain types of entities that qualify as a "business" as defined in FIN 46-R, revises the method of calculating expected losses and residual returns for determination of the primary beneficiary, includes new guidance for assessing variable interests, and codifies certain FSPs on FIN 46.

Pursuant to the transition requirements of FSP FIN 46-6, the company previously disclosed in the third quarter 2003 Form 10-Q the planned adoption of the consolidation guidance applicable to existing VIEs as of December 31, 2003. In accordance with the transition requirements of FIN 46-R, the company has applied the provisions of FIN 46 as of December 31, 2003, to all special-purpose entities (SPEs) as defined within FIN 46-R to which it is associated and all non-SPEs created after January 31, 2003. It will defer adoption of FIN 46-R for all other non-SPEs until March 31, 2004.

The application of FIN 46 to VIEs created after January 31, 2003, did not result in any entities requiring consolidation that would not already have required consolidation under the voting equity interest model. Additionally, no new consolidation was required as a result of applying FIN 46 to the company's SPEs. The company's program to sell state and local government receivables, as described in note J, "Sale and Securitization of Receivables," on page 95, involves qualifying SPEs, and therefore is not subject to FIN 46. The company is continuing to evaluate the impact of FIN 46-R and its related guidance for its adoption as of March 31, 2004. However, it is not expected to have a material impact on the company's Consolidated Financial Statements.

In 2003, the Emerging Issues Task Force (EITF) reached a consensus on two issues relating to the accounting for multiple-element arrangements: Issue No. 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables," and Issue No. 03-05, "Applicability of AICPA SOP 97-2 to Non-Software Deliverables in an Arrangement Containing More Than Incidental Software." The consensus opinion in EITF No. 03-05 clarifies the scope of both EITF 00-21 and Statement of Financial Position (SOP) 97-2, "Software Revenue Recognition," and was reached on July 31, 2003. The transition provisions allow either prospective application or a cumulative effect adjustment upon adoption. IBM adopted the Issue prospectively as of July 1, 2003. EITF Nos. 00-21 and 03-05 did not have a material impact on the Consolidated Financial Statements.

## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

In April 2003, the FASB issued SFAS No. 149, "Amendment of Statement 133 on Derivative Instruments and Hedging Activities." SFAS No. 149 clarifies under what circumstances a contract with an initial net investment meets the characteristics of a derivative as discussed in SFAS No. 133. It also specifies when a derivative contains a financing component that requires special reporting in the Consolidated Statement of Cash Flows. SFAS No. 149 amends certain other existing pronouncements in order to improve consistency in reporting these types of transactions. The new guidance is effective for contracts entered into or modified after June 30, 2003, and for hedging relationships designated after June 30, 2003. SFAS No. 149 did not have a material effect on the Consolidated Financial Statements.

In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." It establishes classification and measurement standards for three types of freestanding financial instruments that have characteristics of both liabilities and equity. Instruments within the scope of SFAS No. 150 must be classified as liabilities within the company's Consolidated Financial Statements and be reported at settlement date value. The provisions of SFAS No. 150 are effective for (1) instruments entered into or modified after May 31, 2003, and (2) pre-existing instruments as of July 1, 2003. In November 2003, through the issuance of FSP 150-3, the FASB indefinitely deferred the effective date of certain provisions of SFAS No. 150, including mandatorily redeemable instruments as they relate to minority interests in consolidated finite-lived entities. The adoption of SFAS No. 150, as modified by FSP 150-3, did not have a material effect on the Consolidated Financial Statements.

In November 2002, the FASB issued Interpretation No. 45 (FIN 45), "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others," which addresses the disclosures to be made by a guarantor in its interim and annual financial statements about its obligations under guarantees. FIN 45 also requires the recognition of a liability by a guarantor at the inception of certain guarantees that are entered into or modified after December 31, 2002. The company has adopted the disclosure requirements of FIN 45 (see note A, "Significant Accounting Policies," on page 86 under "Product Warranties," in note O, "Contingencies and Commitments," on pages 101 to 103) and applied the recognition and measurement provisions for all material guarantees entered into or modified in periods beginning January 1, 2003. The initial adoption of the recognition and measurement provisions of FIN 45 did not have a material impact on the Consolidated Financial Statements. The impact of FIN 45 on the company's future Consolidated Financial Statements will depend upon whether the company enters into or modifies any material guarantee arrangements.

In July 2002, the FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities." SFAS No. 146 supersedes EITF No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (Including Certain Costs Incurred in a Restructuring)," and requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred. Such liabilities should be recorded at fair value and updated for any changes in the fair value each period. The company adopted this statement effective January 1, 2003, and its adoption did not have a material effect on the Consolidated Financial Statements. Going forward, the impact of SFAS No. 146 on the company's Consolidated Financial Statements will depend upon the timing of and facts underlying any future exit or disposal activity.

On January 1, 2003, the company adopted 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. SFAS No. 143 requires the recording of an asset and a liability equal to the present value of the estimated costs associated with the retirement of long-lived assets for which a legal or contractual obligation exists. The asset is required to be depreciated over the life of the related equipment or facility, and the liability is required to be accreted each year based on a present value interest rate. The adoption of the standard did not have a material effect on the company's Consolidated Financial Statements.

In April 2002, the FASB issued SFAS No. 145, "Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13, and Technical Corrections," effective May 15, 2002. SFAS No. 145 eliminates the requirement that gains and losses from the extinguishment of debt be aggregated and classified as an extraordinary item, net of tax, and makes certain other technical corrections. SFAS No. 145 did not have a material effect on the company's Consolidated Financial Statements.

Effective January 1, 2002, the company adopted SOP 01-6, "Accounting by Certain Entities (including entities with Trade Receivables) That Lend to or Finance the Activities of Others." With limited exception, SOP 01-6 applies to any entity that lends to, or finances the activities of, others and provides specialized guidance for certain transactions specific to financial institutions. This SOP reconciles and conforms, as appropriate, the accounting and financial reporting guidance established by the American Institute of Certified Public Accountants. The adoption did not have a material effect on the company's Consolidated 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



## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

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 did not have a material impact on the company’s Consolidated Financial Statements. The discontinued HDD operations are presented in the Consolidated Financial Statements in accordance with SFAS No. 144.

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. This guidance did not have a material effect on the company’s Consolidated 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 is already recorded in revenue.

In July 2001, the FASB issued SFAS No. 141, “Business Combinations,” and SFAS No. 142, “Goodwill and Other 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 current 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 effective 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. The company adopted SFAS No. 142 on January 1, 2002. The new rules also prohibit the amortization of goodwill associated with business combinations that closed after June 30, 2001.

In accordance with SFAS No. 141, the unamortized balance for acquired assembled workforce of \$33 million, which had been recognized as an intangible asset separate from goodwill, has been reclassified to goodwill effective January 1, 2002. In addition, an initial goodwill impairment test was required to be performed in 2002 as of January 1, 2002. This

initial test and the company’s first annual goodwill impairment test, performed as of October 1, 2002, resulted in no goodwill impairment charges. See note I, “Intangible Assets Including Goodwill,” on page 94 for current year changes in the amount of recorded goodwill.

The following table presents Reported income from continuing operations and net income adjusted to exclude goodwill amortization, which is no longer recorded under SFAS No. 142 effective January 1, 2002.

*(dollars in millions except per share amounts)*

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
Reported income from continuing operations	\$ 7,613	\$ 5,334	\$ 8,146
Add: Goodwill amortization, net of tax effects	—	—	262
Adjusted income from continuing operations	\$ 7,613	\$ 5,334	\$ 8,408
Basic earnings per share from continuing operations:			
Reported income from continuing operations	\$ 4.42	\$ 3.13	\$ 4.69
Goodwill amortization	—	—	0.15
Adjusted basic earnings per share from continuing operations	\$ 4.42	\$ 3.13	\$ 4.85*
Diluted earnings per share from continuing operations:			
Reported income from continuing operations	\$ 4.34	\$ 3.07	\$ 4.59
Goodwill amortization	—	—	0.15
Adjusted diluted earnings per share from continuing operations	\$ 4.34	\$ 3.07	\$ 4.74
Reported net income	\$ 7,583	\$ 3,579	\$ 7,723
Add: Goodwill amortization, net of tax effects	—	—	262
Adjusted net income	\$ 7,583	\$ 3,579	\$ 7,985
Basic earnings per share:			
Reported net income	\$ 4.40	\$ 2.10	\$ 4.45
Goodwill amortization	—	—	0.15
Adjusted basic earnings per share	\$ 4.40	\$ 2.10	\$ 4.60
Diluted earnings per share:			
Reported net income	\$ 4.32	\$ 2.06	\$ 4.35
Goodwill amortization	—	—	0.15
Adjusted diluted earnings per share	\$ 4.32	\$ 2.06	\$ 4.50

\* Does not total due to rounding.

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

On January 1, 2001, the company adopted SFAS No. 133, as amended. SFAS No. 133 establishes accounting and reporting standards for derivative instruments. 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. It also 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 Consolidated Financial Statements. The standard also requires new disclosures that are not applicable to the company.

## C

### ACQUISITIONS/DIVESTITURES

#### ACQUISITIONS

##### 2003

In 2003, the company completed nine acquisitions at an aggregate cost of \$2,536 million.

(dollars in millions)

	AMORTIZATION LIFE (IN YEARS)	RATIONAL			
		ORIGINAL AMOUNT DISCLOSED IN FIRST QUARTER 2003	PURCHASE ADJUSTMENTS*	TOTAL ALLOCATION	OTHER ACQUISITIONS
Current assets		\$ 1,179	\$ 51	\$ 1,230	\$ 19
Fixed assets/non-current		83	28	111	2
Intangible assets:					
Goodwill	NA	1,365	40	1,405	335
Completed technology	3	229	—	229	12
Client relationships	7	180	—	180	1
Other identifiable intangible assets	2–5	32	—	32	21
In-process R&D		9	—	9	—
<b>Total assets acquired</b>		<b>3,077</b>	<b>119</b>	<b>3,196</b>	<b>390</b>
Current liabilities		(347)	(81)	(428)	(28)
Non-current liabilities		(638)	33	(605)	11
<b>Total liabilities assumed</b>		<b>(985)</b>	<b>(48)</b>	<b>(1,033)</b>	<b>(17)</b>
<b>Total purchase price</b>		<b>\$ 2,092</b>	<b>\$ 71</b>	<b>\$ 2,163</b>	<b>\$ 373</b>

\* Adjustments primarily relate to acquisition costs, deferred taxes and other accruals.

*Rational Software Corporation (Rational)* – The largest acquisition in 2003 was that of Rational. The company purchased the outstanding stock of Rational for \$2,095 million in cash. In addition, the company issued replacement stock options with an estimated fair value of \$68 million to Rational employees. Rational provides open, industry standard tools, and best practices and services for developing business applications and building software products and systems. The Rational acquisition provides the company with the ability to offer a complete development environment for clients. The transaction was completed on February 21, 2003, from which time the results of this acquisition were included in the company's Consolidated Financial Statements. The company merged Rational's business operations and employees into the company's Software segment as a new division and brand.

The acquisition was accounted for as a purchase transaction, and accordingly, the assets and liabilities of the acquired entity were recorded at their estimated fair values at the date of the acquisition. The primary items that generated the goodwill are the value of the synergies between Rational and IBM and the acquired assembled workforce, neither of which qualify as an amortizable intangible asset. None of the goodwill is deductible for tax purposes. The overall weighted-average life of the identified intangible assets acquired in the purchase of Rational that are subject to amortization is 4.7 years. With the exception of goodwill, these identified intangible assets will be amortized on a straight-line basis over their useful lives. Goodwill of \$1,405 million has been assigned to the Software segment. The company recorded a pre-tax charge of \$9 million for in-process R&D.

## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

This amount, which reflects the relative value and contribution of the acquired R&D to the company's existing research or product lines, was charged to RD&E expense on the company's Consolidated Statement of Earnings. The acquired R&D had not reached technical feasibility, nor did it have an alternative future use, at date of acquisition.

As indicated above, \$2,095 million of the gross purchase price was paid in cash. However, as part of the transaction, IBM assumed cash and cash equivalents held in Rational of \$1,053 million, resulting in a net cash payment of \$1,042 million. In addition, the company assumed \$500 million in outstanding convertible debt. The convertible debt was subsequently called on March 26, 2003.

*Other Acquisitions* – The company paid substantially all cash for the other acquisitions in the table on page 89. Five of the acquisitions were for software companies, two related

to Strategic Outsourcing and Business Consulting Services companies and one was a hardware business. The primary items that generated goodwill are the synergies between the acquired businesses and the company, and the premium paid by the company for the right to control the businesses acquired. The company assigned approximately \$74 million of the goodwill to the Software segment; \$203 million of goodwill to the Global Services segment; and \$58 million of goodwill to the Hardware segment. These assignments were based upon an analysis of the segments that are expected to benefit from the acquisitions. Substantially all of the goodwill is not deductible for tax purposes. The overall weighted-average life of the intangible assets purchased is 4.3 years. The results of operations of the acquired businesses were included in the company's Consolidated Financial Statements from the respective dates of acquisition.

### 2002

In 2002, the company completed 12 acquisitions at an aggregate cost of \$3,958 million. In addition, the company paid an additional \$414 million in 2003 resulting from purchase price adjustments.

(dollars in millions)

	PwCC				
	AMORTIZATION LIFE (IN YEARS)	ORIGINAL AMOUNT DISCLOSED IN 2002 ANNUAL REPORT	PURCHASE ADJUSTMENTS*	TOTAL ALLOCATION	OTHER ACQUISITIONS
Current assets		\$ 1,197	\$ (228)	\$ 969	\$ 264
Fixed assets/non-current		199	(35)	164	102
Intangible assets:					
Goodwill	N/A	2,461	694	3,155	364
Completed technology	3	—	—	—	66
Strategic alliances	5	103	—	103	—
Non-contractual client relationships	4–7	131	—	131	—
Client contracts/backlog	3–5	82	—	82	6
Other identifiable intangible assets	3–5	95	—	95	10
In-process R&D		—	—	—	4
Total assets acquired		4,268	431	4,699	816
Current liabilities		(560)	(26)	(586)	(208)
Non-current liabilities		(234)	9	(225)	(124)
Total liabilities assumed		(794)	(17)	(811)	(332)
Total purchase price		\$ 3,474	\$ 414	\$ 3,888	\$ 484

\* Adjustments relate to the amount paid by the company to PricewaterhouseCoopers as a result of the review discussed below as well as other purchase accounting adjustments primarily related to accounts receivable, prepaid assets and other accruals.

*PricewaterhouseCoopers' Global Business Consulting and Technology Services Unit (PwCC) Acquisition* – On October 1, 2002, the company purchased PwCC for \$3,888 million. The acquisition of PwCC provides the company with new expertise in business strategy, industry-based consulting, process integration and application management. The company paid \$3,474 million of the cost related to the acquisition of PwCC in 2002. The balance was paid in 2003. The purchase price allocation

disclosed in the company's 2002 Annual Report, which was based on the initial \$3,474 million paid, included an estimated amount of net tangible assets to be transferred of approximately \$422 million. The recorded amount of net tangible assets transferred to IBM from PricewaterhouseCoopers (PwC) on October 1, 2002, was approximately \$454 million higher than the estimate. The amount of recorded net tangible assets transferred was subject to a review process between

## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

both parties under the terms of the agreement. As a result of the review process and other adjustments, the company paid an additional amount to PwC of \$397 million in July 2003. Substantially all of the payment was accounted for as incremental goodwill due to the fact that the net tangible assets recorded by IBM as of October 1, 2002, included the incremental amount. The difference between the \$397 million payment in July and the total purchase price adjustment in the table on page 90 is due to transaction costs incurred by the company.

The company paid \$3,266 million of the purchase price in cash, \$294 million primarily in the form of restricted shares of IBM common stock and \$328 million in notes convertible into restricted shares of IBM common stock.

In connection with the acquisition, the company incurred approximately \$196 million of pre-tax, one-time compensation costs for certain PwCC partners and employees. This amount relates to restricted stock awards and the compensation element of the convertible notes issued as part of the purchase consideration and was recorded in the fourth quarter of 2002. The portion of this amount recorded as part of SG&A in the Consolidated Statement of Earnings as compensation expense for the convertible notes equals the difference between the fair value and the face value of the notes.

As a result of its acquisition of PwCC, the company recorded a liability of approximately \$601 million in the fourth quarter of 2002 to rebalance its workforce and to vacate excess leased space. All employees affected by this action were notified as of December 31, 2002. The portion of the liability relating to IBM people and space was approximately \$318 million, substantially all of which was recorded as part of SG&A in the Consolidated Statement of Earnings. The portion of the liability relating to acquired PwCC workforce and leased space was approximately \$283 million and was included as part of the liabilities assumed for purchase accounting and are included in the table on page 90. Also see page 107 for additional information on these initiatives.

Almost half of the goodwill was estimated to be generated by the value of the acquired assembled workforce. The acquired assembled workforce is treated as goodwill under SFAS No. 141. The remaining items that generated goodwill are synergies between PwCC and the company created by the combination, and the premium paid by the company for the right to control PwCC. The goodwill has been assigned to the Global Services segment. The company estimates that approximately two-thirds of the goodwill is deductible for tax purposes. The overall weighted-average life of amortizable intangible assets purchased from PwC is 4.8 years. The results of operations of PwCC were included in the company's Consolidated Financial Statements as of October 1, 2002.

*Other Acquisitions* – The company paid cash for the other acquisitions. Six of the acquisitions were for software companies, including Crossworlds Software, Inc., and Access360. The other five acquisitions were Strategic Outsourcing and Business Consulting Services companies. The primary items that generated goodwill are the synergies between the acquired businesses and the company, and the premium paid by the company for the right to control the businesses acquired. Approximately \$300 million of the goodwill has been assigned to the Software segment and the balance to the Global Services segment. The goodwill is not deductible for tax purposes. The overall weighted-average life of the intangible assets purchased is 3.4 years. The results of operations of the acquired businesses were included in the company's Consolidated Financial Statements from the respective dates of acquisition.

### 2001

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

(dollars in millions)

	AMORTIZATION LIFE (IN YEARS)	INFORMIX	OTHER ACQUISITION
Current assets		\$ 156	\$ 57
Fixed/non-current assets		41	21
Intangible assets:			
Goodwill		591	25
Client lists	5	220	—
Completed technology	3	140	—
Trademarks	2	10	—
Total assets acquired		1,158	103
Deferred revenue		(101)	(2)
Payables/accrued expenses		(55)	(21)
Total liabilities assumed		(156)	(23)
Total purchase price		\$ 1,002	\$ 80

*Informix Corporation (Informix)* – The larger acquisition was Informix database software business. The company purchased Informix in the third quarter of 2001. The company paid approximately \$1 billion in cash for the net assets of the business. Under the terms of the acquisition, the company paid \$889 million of the purchase price in 2001. The balance was paid in January 2003. The Informix acquisition provided the company with a database software system for data warehousing, business intelligence and transaction-handling systems that are used by more than 100,000 clients. In addition, the acquisition significantly increased the size of the company's UNIX database business.



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The primary items that generated goodwill are the value of the acquired assembled workforce and the synergies between Informix and the company created by the combination. Goodwill of \$591 million has been assigned to the Software segment. Almost all of the goodwill is deductible for tax purposes. This transaction occurred after June 30, 2001, and therefore, the acquired goodwill is not subject to amortization. The overall weighted-average life of intangible assets purchased from Informix is 4.2 years. The results of operations of Informix were included in the company's Consolidated Financial Statements as of July 2, 2001.

*Other Acquisition* – The primary items that generated goodwill are the synergies between the acquired business and the company and the premium paid by the company for the right to control the business acquired. Goodwill of \$25 million has been assigned to the Global Services segment. The goodwill is not deductible for tax purposes. The results of operations of the acquired business were included in the company's Consolidated Financial Statements from the date of acquisition.

### Overall

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 values at the date of acquisition.

The acquired tangible net assets comprise primarily cash, accounts receivable, land, buildings and leasehold improvements. The acquired identifiable intangible assets comprise primarily completed technology, trademarks, client lists, employee agreements and leasehold interests. The identifiable intangible assets are amortized on a straight-line basis, generally not to exceed seven years. Goodwill from acquisitions that were consummated prior to July 1, 2001, was amortized over five years. The company adopted SFAS No. 142 on January 1, 2002, and ceased amortizing goodwill as of that date. The results of operations of all acquired businesses were included in the company's Consolidated Financial Statements from the respective dates of acquisition.

### DIVESTITURES

#### 2002

On December 31, 2002, the company sold its HDD business to Hitachi. The total gross proceeds of the sale were \$2 billion (excluding purchase price adjustments), of which \$1,414 million was received by IBM at closing. According to the terms of the agreement, the remaining proceeds will be received one and three years after closing. The remaining proceeds are fixed and are not dependent or variable based upon the sold business' earnings or performance. The company transferred approximately \$244 million of cash as part of the HDD business, resulting in a net cash inflow in 2002 related to the HDD transaction of \$1,170 million. The company

received approximately \$156 million from Hitachi on December 31, 2003 for the payment due one year after closing and paid approximately \$59 million to Hitachi for certain contractual items resulting in a net cash inflow in 2003 of \$97 million.

IBM has entered into an arms-length five-year supply agreement with Hitachi, effective January 1, 2003, designed to provide the company with a majority of its ongoing internal disk drive requirements for the company's Server, Storage and Personal Systems products.

The loss on disposal recorded in 2002 was approximately \$382 million, net of tax, and was recorded in Loss from discontinued operations in the Consolidated Statement of Earnings.

See note A, "Significant Accounting Policies," on page 80 for the "Basis of Presentation" for the discontinued operations.

In the second and fourth quarters of 2002, the company announced certain asset and workforce reduction actions, and excess leased space charges related to its discontinued HDD business. The company recorded a charge of approximately \$508 million, net of tax, in discontinued operations associated with these announced actions.

Summarized selected financial information for the discontinued operations is as follows:

<i>(dollars in millions)</i>			
FOR THE YEAR ENDED DECEMBER 31:	2003	2002*	2001
Revenue	\$ —	\$ 1,946	\$ 2,799
Loss before income taxes	\$ 29	\$ 2,037	\$ 497
Income tax expense/(benefit)	1	(282)	(74)
Loss from discontinued operations	\$ 30	\$ 1,755	\$ 423

\* At closing, the company incurred a significant U.S. tax charge of approximately \$248 million related to the repatriation of divestiture proceeds from certain countries with low tax rates. This amount was included in the Income tax expense/(benefit) line item of discontinued operations.

### 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.

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

(dollars in millions)

AT DECEMBER 31:	FAIR VALUE	
	2003	2002
Marketable securities — current:		
Time deposits and other obligations	\$ 357	\$ 593
Marketable securities — non-current:**		
Time deposits and other obligations	\$ 36	\$ 172
Non-U.S. government securities and other fixed-term obligations	23	20
Total	\$ 59	\$ 192
Non-equity method alliance investments**	\$ 234	\$ 249

\* Gross unrealized gains (before taxes) on marketable securities and alliance investments were \$11 million and \$9 million at December 31, 2003 and 2002, respectively. Gross unrealized losses (before taxes) on marketable securities and alliance investments were \$2 million and \$10 million at December 31, 2003 and 2002, respectively. See note N, "Stockholders' Equity Activity," on pages 100 and 101 for net change in unrealized gains and losses on marketable securities and certain other information regarding unrealized losses.

\*\* Included within Investments and sundry assets in the Consolidated Statement of Financial Position. See note H, "Investments and Sundry Assets," on page 94.

## E

### INVENTORIES

(dollars in millions)

AT DECEMBER 31:	2003	2002
Finished goods	\$ 992	\$ 960
Work in process and raw materials	1,950	2,188
Total	\$ 2,942	\$ 3,148

## F

### FINANCING RECEIVABLES

(dollars in millions)

AT DECEMBER 31:	2003	2002
Short-term:		
Net investment in sales-type leases	\$ 5,940	\$ 5,779
Commercial financing receivables	5,653	4,972
Customer loans receivable	5,235	4,462
Installment payment receivables	657	698
Other non-Global Financing related	98	85
Total	\$ 17,583	\$ 15,996
Long-term:		
Net investment in sales-type leases	\$ 6,010	\$ 6,505
Commercial financing receivables	197	462
Customer loans receivable	4,300	4,179
Installment payment receivables	217	273
Other non-Global Financing related	17	21
Total	\$ 10,741	\$ 11,440

Net investment in sales-type leases is for leases that relate principally to IBM equipment and are generally for terms ranging from two to five years. Net investment in sales-type leases includes unguaranteed residual values of \$845 million and \$821 million at December 31, 2003 and 2002, respectively, and is reflected net of unearned income of \$1,227 million and \$1,330 million and of allowance for uncollectible accounts of \$337 million and \$361 million at those dates, respectively. Scheduled maturities of minimum lease payments outstanding at December 31, 2003, expressed as a percentage of the total, are approximately as follows: 2004, 53 percent; 2005, 29 percent; 2006, 13 percent; 2007, 4 percent; and 2008 and beyond, 1 percent.

Customer loans receivable are provided by Global Financing to the company's clients to finance the purchase of the company's software and services. Global Financing is one of many sources of funding from which clients can choose. Separate contractual relationships on these financing arrangements are generally for terms ranging from one to three years requiring straight-line payments over the term. Each financing contract is priced independently at competitive market rates. The company has a history of enforcing the terms of these separate financing agreements.

## G

### PLANT, RENTAL MACHINES AND OTHER PROPERTY

(dollars in millions)

AT DECEMBER 31:	2003	2002
Land and land improvements	\$ 865	\$ 837
Buildings and building improvements	9,261	8,978
Plant, laboratory and office equipment	22,317	21,416
	32,443	31,231
Less: Accumulated depreciation	19,190	18,525
	13,253	12,706
Rental machines	4,679	4,852
Less: Accumulated depreciation	3,243	3,118
	1,436	1,734
Total	\$ 14,689	\$ 14,440

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## H

### INVESTMENTS AND SUNDRY ASSETS

(dollars in millions)

AT DECEMBER 31:	2003	2002*
Deferred taxes	\$ 4,288	\$ 4,314
Alliance investments:		
Equity method	560	562
Other	234	249
Software	814	834
Derivatives — non-current**	695	689
Receivable from Hitachi+	358	356
Marketable securities — non-current	59	192
Other assets	1,100	1,076
<b>Total</b>	<b>\$ 8,108</b>	<b>\$ 8,272</b>

\* Reclassified to conform with 2003 presentation.

\*\* See note L, "Derivatives and Hedging Transactions," on pages 96 to 99 for the fair value of all derivatives reported in the Consolidated Statement of Financial Position.

+ See note C, "Acquisitions/Divestitures," on pages 89 to 92 for additional information.

## I

### INTANGIBLE ASSETS INCLUDING GOODWILL

The following schedule details the company's intangible asset balances by major asset class.

(dollars in millions)

INTANGIBLE ASSET CLASS	AT DECEMBER 31, 2003		
	GROSS CARRYING AMOUNT	ACCUMULATED AMORTIZATION	NET CARRYING AMOUNT
Client-related	\$ 704	\$ (254)	\$ 450
Completed technology	448	(228)	220
Strategic alliances	118	(38)	80
Patents/trademarks	98	(66)	32
Other*	165	(37)	128
<b>Total</b>	<b>\$ 1,533</b>	<b>\$ (623)</b>	<b>\$ 910**</b>

### GOODWILL

The changes in the carrying amount of goodwill, by reporting segment, for the year ended December 31, 2003, are as follows:

(dollars in millions)

SEGMENT	BALANCE JAN. 1, 2003	GOODWILL ADDITIONS	PURCHASE PRICE ADJUSTMENTS	DIVESTITURES	FOREIGN CURRENCY TRANSLATION ADJUSTMENTS	BALANCE DEC. 31, 2003
Global Services	\$ 2,926	\$ 203*	\$ 694	\$ (6)	\$ 367	\$ 4,184
Systems Group	137	—	—	—	—	137
Personal Systems Group	13	58	—	—	—	71
Technology Group	24	—	—	—	—	24
Software	1,015	1,439	40	—	11	2,505
Global Financing	—	—	—	—	—	—
Enterprise Investments	—	—	—	—	—	—
<b>Total</b>	<b>\$ 4,115</b>	<b>\$ 1,700</b>	<b>\$ 734</b>	<b>\$ (6)</b>	<b>\$ 378</b>	<b>\$ 6,921</b>

\* Relates to the purchase of the minority interest in a consolidated subsidiary.

There were no goodwill impairment losses recorded during the period.

(dollars in millions)

INTANGIBLE ASSET CLASS	AT DECEMBER 31, 2002		
	GROSS CARRYING AMOUNT	ACCUMULATED AMORTIZATION	NET CARRYING AMOUNT
Client-related	\$ 517	\$ (124)	\$ 393
Completed technology	229	(108)	121
Strategic alliances	118	(15)	103
Patents/trademarks	109	(80)	29
Other*	98	(7)	91
<b>Total</b>	<b>\$ 1,071</b>	<b>\$ (334)</b>	<b>\$ 737**</b>

\* Other intangibles are primarily acquired proprietary and nonproprietary business processes, methodologies and systems.

\*\* The \$910 million at December 31, 2003, comprises \$336 million recorded as current assets and \$574 million recorded as non-current assets. The \$737 million at December 31, 2002, comprises \$245 million recorded as current assets and \$492 million recorded as non-current assets.

The net carrying amount of intangible assets increased by \$173 million for the year ended December 31, 2003, primarily due to the acquisition of Rational, offset by the amortization of existing intangible asset balances.

The aggregate amortization expense was \$349 million and \$181 million for the years ended December 31, 2003 and 2002, respectively.

The future amortization expense for each of the five succeeding years relating to intangible assets currently recorded in the Consolidated Statement of Financial Position is estimated to be the following at December 31, 2003:

(dollars in millions)

2004	\$ 336
2005	261
2006	141
2007	84
2008	51

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## J

### 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 of trade receivables through this facility in 2001. The company has not had any amounts outstanding under the trade receivables securitization facility since 2001. In addition, the company has a program to sell loans receivable from state and local government clients. This program was established in 1990 and has been used from time to time since then. The company sold \$278 million of loans receivable due from state and local government clients in 2001. No receivables were sold under either of these programs in 2003 or 2002.

At December 31, 2003 and 2002, the total balance of the state and local receivables securitized and under the company's management was \$21 million and \$101 million, respectively. Servicing assets net of servicing liabilities were insignificant.

The investors in the state and local loans receivable securitizations have recourse to the company via a limited guarantee of \$14 million at December 31, 2003. At year-end 2003, delinquent amounts from the receivables sold and net credit losses were insignificant.

## K

### BORROWINGS

#### SHORT-TERM DEBT

(dollars in millions)

AT DECEMBER 31:	2003	2002
Commercial paper	\$ 2,349	\$ 1,302
Short-term loans	1,124	1,013
Long-term debt—current maturities	3,173	3,716
<b>Total</b>	<b>\$ 6,646</b>	<b>\$ 6,031</b>

The weighted-average interest rates for commercial paper at December 31, 2003 and 2002, were 1.0 percent and 1.7 percent, respectively. The weighted-average interest rate for short-term loans was 2.5 percent at both December 31, 2003 and 2002.

#### LONG-TERM DEBT

##### Pre-Swap Activity

(dollars in millions)

AT DECEMBER 31:	MATURITIES	2003	2002
U.S. Dollars:			
Debentures:			
5.875%	2032	\$ 600	\$ —
6.22%	2027	500	500
6.5%	2028	319	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
3.43% convertible notes*	2007	309	328
Notes: 5.9% average	2004–2013	3,034	2,130
Medium-term note			
program: 3.7% average	2004–2018	4,690	7,113
Other: 4.0% average	2004–2009	508	610
		<b>12,860</b>	<b>14,281</b>
Other currencies			
(average interest rate at December 31, 2003, in parentheses):			
Euros (5.3%)	2004–2009	1,174	2,111
Japanese yen (1.1%)	2004–2015	4,363	4,976
Canadian dollars (5.8%)	2004–2011	201	445
Swiss francs (4.0%)	2003	—	180
Other (6.0%)	2004–2014	770	730
		<b>19,368</b>	<b>22,723</b>
Less: Net unamortized discount/(premium)		15	(1)
Add: SFAS No. 133 fair value adjustment**		806	978
		<b>20,159</b>	<b>23,702</b>
Less: Current maturities		3,173	3,716
<b>Total</b>		<b>\$ 16,986</b>	<b>\$ 19,986</b>

\* On October 1, 2002, as part of the purchase price consideration for the PwCC acquisition, as addressed in note C, "Acquisitions/Divestitures," on pages 89 to 92, the company issued convertible notes bearing interest at a stated rate of 3.43 percent with a face value of approximately \$328 million to certain of the acquired PwCC partners. The notes are convertible into 4,764,543 shares of IBM common stock at the option of the holders at any time after the first anniversary of their issuance based on a fixed conversion price of \$68.81 per share of the company's common stock. As of December 31, 2003, a total of 274,347 shares had been issued under this provision.

\*\* 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 and applicable foreign currency exchange rates.



# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

Annual contractual maturities on long-term debt outstanding, including capital lease obligations, at December 31, 2003, are as follows:

<i>(dollars in millions)</i>	
2004	\$ 4,072
2005	3,113
2006	2,760
2007	1,289
2008	225
2009 and beyond	7,942

## INTEREST ON DEBT

<i>(dollars in millions)</i>			
FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
Cost of Global Financing	\$ 503	\$ 633	\$ 964
Interest expense	145	145	234
Interest expense — discontinued operations	—	2	4
Interest capitalized	15	35	33
Total interest paid and accrued	\$ 663	\$ 815	\$ 1,235

Refer to the related discussion on page 119 in note X, “Segment Information,” for the total interest expense of the Global Financing segment. See note L, “Derivatives and Hedging Transactions,” on pages 96 to 99 for a discussion of the use of currency and interest rate swaps in the company’s debt risk management program.

## LINES OF CREDIT

Based on the company’s forward-looking liquidity requirements, management decided to renew the 364-day facility, upon its expiration on May 30, 2003, in the amount of \$2 billion, thereby reducing the total global lines of credit to \$10 billion. As of December 31, 2003, the company maintains two global credit facilities totaling \$10.0 billion in committed credit lines, including an \$8.0 billion multiyear facility that expires on May 31, 2006, and a \$2.0 billion, 364-day facility that expires on May 27, 2004. The total expense recorded by the company related to the facility was \$7.8 million, \$9.1 million and \$7.9 million for the years ended December 31, 2003, 2002 and 2001, respectively. The facility is irrevocable unless IBM is in breach of covenants, including interest coverage ratios, or if it commits an event of default, such as failing to pay any amount due under this agreement. The company believes that circumstances that might give rise to a breach of these covenants or an event of default, as specified in these agreements, are remote. The company’s other lines of credit, most of which are uncommitted, totaled \$8,202 million and \$7,190 million at December 31, 2003 and 2002, respectively. 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)*

AT DECEMBER 31:	2003	2002
Unused lines:		
From the committed global credit facility	\$ 9,907	\$ 11,945
From other committed and uncommitted lines	5,976	4,989
Total unused lines of credit	\$ 15,883	\$ 16,934

## L

## DERIVATIVES AND HEDGING TRANSACTIONS

The company operates in approximately 35 functional currencies and is a significant lender and 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, and to a lesser extent equity price changes and client credit risk. The company limits these risks by following established risk management policies and procedures including the 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 foreign 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.

In its hedging programs, the company employs the use of forward contracts, futures 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 in 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 commercial paper issuances to fixed rate (i.e., cash flow hedges).

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

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 INVESTMENT)**

A significant portion of the company's foreign currency denominated debt portfolio is designated as a hedge of net investment 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 \$200 million for the current period, net of tax) are reflected as a loss 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 nonfunctional 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. These contracts may have extended maturities beyond one year and from time to time that extend to three years. As of December 31, 2003, the maximum remaining maturity of these derivative instruments was approximately 18 months, commensurate with the underlying hedged anticipated cash flows.

## **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 nonfunctional 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 company is exposed to a potential loss if a client fails to pay amounts due the company under contractual terms ("credit risk"). The company has established policies and procedures for mitigating credit risk on principal transactions, including reviewing and establishing limits for credit exposure, maintaining collateral, and continually assessing the creditworthiness of counterparties. In 2003, the company began utilizing credit default swaps to economically hedge certain credit exposures. These derivatives have terms of two years. The swaps are not designated as accounting hedges and are recorded at fair value with gains and losses reported in SG&A in the Consolidated Statement of Earnings.

The tables on page 98 summarize the net fair value of the company's derivative and other risk management instruments at December 31, 2003 and 2002 (included in the Consolidated Statement of Financial Position).

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## RISK MANAGEMENT PROGRAM

(dollars in millions)

AT DECEMBER 31, 2003	HEDGE DESIGNATION			NON-HEDGE/ OTHER
	FAIR VALUE	CASH FLOW	NET INVESTMENT	
Derivatives — net asset/(liability):				
Debt risk management	\$ 297	\$ (23)	\$ —	\$ (10)
Long-term investments in foreign subsidiaries (net investments)	—	—	(27)	—
Anticipated royalties and cost transactions	—	(643)	—	—
Subsidiary cash and foreign currency asset/liability management	—	—	—	(31)
Equity risk management	—	—	—	39
Other derivatives	—	—	—	8
Total derivatives	297 (b)	(666)(c)	(27)(d)	6 (e)
Debt:				
Long-term investments in foreign subsidiaries (net investments)	—	—	(2,470)(a)	—
Total	\$ 297	\$ (666)	\$ (2,497)	\$ 6

(a) Represents fair value of foreign denominated debt issuances formally designated as a hedge of net investment.

(b) Comprises assets of \$1,083 million and liabilities of \$786 million.

(c) Comprises liabilities of \$666 million.

(d) Comprises liabilities of \$27 million.

(e) Comprises assets of \$73 million and liabilities of \$67 million.

(dollars in millions)

AT DECEMBER 31, 2002	HEDGE DESIGNATION			NON-HEDGE/ OTHER
	FAIR VALUE	CASH FLOW	NET INVESTMENT	
Derivatives — net asset/(liability):				
Debt risk management	\$ 643	\$ (7)	\$ —	\$ 3
Long-term investments in foreign subsidiaries (net investments)	—	—	2	—
Anticipated royalties and cost transactions	—	(469)	—	—
Subsidiary cash and foreign currency asset/liability management	—	—	—	(109)
Equity risk management	—	—	—	6
Other derivatives	—	—	—	10
Total derivatives	643 (b)	(476)(c)	2 (d)	(90)(e)
Debt:				
Long-term investments in foreign subsidiaries (net investments)	—	—	(2,474)(a)	—
Total	\$ 643	\$ (476)	\$ (2,472)	\$ (90)

(a) Represents fair value of foreign denominated debt issuances formally designated as a hedge of net investment.

(b) Comprises assets of \$754 million and liabilities of \$111 million.

(c) Comprises assets of \$2 million and liabilities of \$478 million.

(d) Comprises assets of \$2 million.

(e) Comprises assets of \$26 million and liabilities of \$116 million.

## ACCUMULATED DERIVATIVE GAINS OR LOSSES

As illustrated above, 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 \$454 million of net losses in Accumulated gains and (losses) not affecting retained earnings as of December 31, 2003, net of tax, of which approximately \$405 million is expected to be reclassified to net income within the next

year, providing an offsetting economic impact against the underlying anticipated cash flows hedged.

The table on page 99 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 periods January 1, 2001 (the date of the company's adoption of SFAS No. 133) through December 31, 2003:

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

<i>(dollars in millions, net of tax)</i>	DEBIT/(CREDIT)
Cumulative effect of adoption of SFAS No. 133 as of January 1, 2001	\$ (219)
Net gains reclassified into earnings from equity during 2001	379
Changes in fair value of derivatives in 2001	(456)
December 31, 2001	(296)
Net losses reclassified into earnings from equity during 2002	(5)
Changes in fair value of derivatives in 2002	664
December 31, 2002	363
Net losses reclassified into earnings from equity during 2003	(713)
Changes in fair value of derivatives in 2003	804
December 31, 2003	\$ 454

At December 31, 2003, 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.

## M

### OTHER LIABILITIES

<i>(dollars in millions)</i>	2003	2002*
AT DECEMBER 31:		
Deferred taxes	\$ 1,834	\$ 1,450
Deferred income	1,842	1,409
Executive compensation accruals	1,036	851
Restructuring actions	871	1,024
Postemployment/preretirement liability	579	572
Disability benefits	349	304
Environmental accruals	214	208
Other	731	463
Total	\$ 7,456	\$ 6,281

\* Reclassified to conform with 2003 presentation.

Each year the company takes certain workforce rebalancing actions to improve productivity and competitive position. The non-current contractually obligated future payments associated with these ongoing activities are reflected in the Post-employment/preretirement liability caption in the table above.

In addition, the company executed certain actions prior to 1994, and in 1999 and 2002. The non-current liabilities associated with these actions are reflected in restructuring actions in the following table. The reconciliation of the December 31, 2002 to 2003 balances of the current and non-current liabilities for restructuring actions are presented in the tables on pages 105 and 107. The current liabilities presented in the table are included in Other accrued expenses and liabilities in the Consolidated Statement of Financial Position.

<i>(dollars in millions)</i>	BALANCE AT JAN. 1, 2003	PAYMENTS	OTHER ADJUST- MENTS*	BALANCE AT DEC. 31, 2003
Current:				
Workforce	\$ 647	\$ 537	\$ 112	\$ 222
Space	181	229	177	129
Other	115	90	14	39
Total	\$ 943	\$ 856	\$ 303	\$ 390
Non-current:				
Workforce	\$ 574	\$ —	\$ 13	\$ 587
Space	419	—	(137)	282
Other	31	—	(29)	2
Total	\$ 1,024	\$ —	\$ (153)	\$ 871

\* The other adjustments column in the table above includes the reclassification of non-current to current and foreign currency translation adjustments. In addition, net adjustments of approximately \$106 million were made during the year ended December 31, 2003 to reduce previously recorded liabilities. These adjustments were for differences between the estimated and actual proceeds on the disposition of certain assets and changes in the estimated cost of employee terminations and vacant space for the 2002 actions (\$28 million), net adjustments for fourth quarter 2002 actions recorded in purchase accounting (\$36 million), HDD-related restructuring in 2002 (\$20 million) and actions prior to 1999 (\$22 million). Of the \$106 million of net adjustments, \$36 million was recorded as adjustments to Goodwill, \$20 million was included in Discontinued Operations (for the HDD related restructuring actions), with the remainder predominantly included in SG&A in the Consolidated Statement of Earnings.

The workforce accruals primarily relate to the company's Global Services business. The non-current portion of the liability relates to terminated employees who are no longer working for the company, but who were granted annual payments to supplement their incomes in certain countries. Depending on the individual country's legal requirements, these required payments will continue until the former employee begins receiving pension benefits or dies. Included in the December 31, 2003 workforce accruals above is \$133 million associated with the HDD related restructuring discussed in note C, "Acquisitions/Divestitures," on pages 89 to 92.

The space accruals 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 2016.

Other accruals are primarily the remaining liabilities (other than workforce or space) associated with the 2002 second quarter actions described in note S, "2002 Actions," on pages 105 through 107. In addition, there are \$7 million of remaining liabilities at December 31, 2003 associated with the HDD-related restructuring discussed in note C, "Acquisitions/Divestitures," on pages 89 to 92.

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



## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

or anticipated insurance recoveries, were \$243 million and \$247 million at December 31, 2003 and 2002, respectively.

Estimated environmental costs are not expected to materially affect the consolidated financial position or consolidated results of the company's operations in future periods. However, estimates of future costs are subject to change due to protracted cleanup periods and changing environmental remediation regulations.

### N

#### STOCKHOLDERS' EQUITY ACTIVITY

In the fourth quarter of 2002, in connection with the PwCC acquisition, IBM issued 3,677,213 shares of restricted stock valued at approximately \$254 million and recorded an additional \$30 million for stock to be issued in future periods as part of the purchase price consideration paid to the PwCC partners. See note C, "Acquisitions/Divestitures," on pages 89 to 92, for further information regarding this acquisition and related payments made by the company. Additionally, in the fourth quarter of 2002, in conjunction with the funding of the company's U.S. pension plan, the company issued an additional 24,037,354 shares of common stock from treasury shares valued at \$1,871 million.

#### STOCK REPURCHASES

From time to time, the Board of Directors authorizes the company to repurchase IBM common stock. The company repurchased 49,994,514 common shares at a cost of \$4,403 million and 48,481,100 common shares at a cost of \$4,212 million in 2003 and 2002, respectively. In 2003 and 2002, the company issued 2,120,293 and 979,246 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, 2003, \$2,961 million 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 291,921 common shares at a cost of \$24 million and 189,797 common shares at a cost of \$18 million in 2003 and 2002, 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. Accordingly, these shares are no longer outstanding. Dividends on preferred stock, represented by the depositary shares, ceased to accrue on the redemption date.

#### 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 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 had not used the trust, nor was 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 did 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/(LOSSES) ON CASH FLOW HEDGE DERIVATIVES	FOREIGN CURRENCY TRANSLATION ADJUSTMENTS	MINIMUM PENSION LIABILITY ADJUSTMENT	NET UNREALIZED GAINS/(LOSSES) ON MARKETABLE SECURITIES	ACCUMULATED GAINS/(LOSSES) NOT AFFECTING RETAINED EARNINGS
December 31, 2001	\$ 296	\$ (612)	\$ (526)	\$ 14	\$ (828)
Change for period	(659)	850	(2,765)	(16)	(2,590)
December 31, 2002	(363)	238	(3,291)	(2)	(3,418)
Change for period	(91)	1,768	(162)	7	1,522
<i>December 31, 2003</i>	<i>\$ (454)</i>	<i>\$ 2,006</i>	<i>\$ (3,453)</i>	<i>\$ 5</i>	<i>\$ (1,896)</i>

\* net of tax

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

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

(dollars in millions)

AT DECEMBER 31:	2003	2002
Net unrealized gains/(losses) arising during the period	\$ 4	\$ (13)
Less: Net (losses)/gains included in net income for the period	(3)*	3*
Net change in unrealized gains/(losses) on marketable securities	\$ 7	\$ (16)

\* Includes writedowns of \$7 million and \$36 million in 2003 and 2002, respectively.

The following table shows the company's investments' gross unrealized losses and fair value, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position, at December 31, 2003.

(dollars in millions)

DESCRIPTION OF SECURITIES	LESS THAN 12 MONTHS		12 MONTHS OR MORE		TOTAL	
	FAIR VALUE	UNREALIZED LOSSES	FAIR VALUE	UNREALIZED LOSSES	FAIR VALUE	UNREALIZED LOSSES
U.S. Treasury obligations and direct obligations of U.S. government agencies	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Foreign government bonds	—	—	23	2	23	2
Corporate bonds	—	—	—	—	—	—
Subtotal, debt securities	—	—	23	2	23	2
Common Stock	—	—	—	—	—	—
Total temporarily impaired securities	\$ —	\$ —	\$ 23	\$ 2	\$ 23	\$ 2

## CONTINGENCIES AND COMMITMENTS

### CONTINGENCIES

The company is involved in a variety of claims, suits, investigations and proceedings that arise from time to time in the ordinary course of its business, including actions with respect to contracts, IP, product liability, employment, securities and environmental matters. The following is a discussion of some of the more significant legal matters involving the company.

On July 31, 2003, the U.S. District Court for the Southern District of Illinois, in Cooper et al. vs. The IBM Personal Pension Plan and IBM Corporation, held that IBM's pension plan violated the age discrimination provisions of the Employee Retirement Income Security Act of 1974 (ERISA). The plaintiffs filed a claim for remedial relief. IBM filed its own brief on remedies, arguing that the remedies requested by the plaintiffs were unsupported factually and as a matter of law and estimating that remedies under plaintiffs' theories could amount to at least \$6.5 billion, as of the date of the trial District Court's decision on liability. The company intends to appeal the District Court's rulings when the remedies phase concludes. The company believes it is likely to be successful on appeal with respect to the claims that have been decided by the District Court. Given IBM's belief in the merit of its defenses and the wide range of possible remedies, no provision has been recorded under SFAS No. 5, "Accounting for Contingencies" at this time. The company will review whether a provision is appropriate under SFAS No. 5 upon conclusion of the remedies phase.

The company is a defendant and/or third-party defendant in a number of cases in which claims have been brought 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. As of year end, the cases of two former employee plaintiffs were being tried in state court in Santa Clara County, California. The company expects another trial, in state court in Westchester County, New York, in 2004.

The company is a defendant in an action brought by Compuware in the District Court for the Eastern District of Michigan in 2002, asserting causes of action for copyright infringement, trade secret misappropriation, Sherman Act and Lanham Act violations, breach of contract, tortious interference and unfair competition under various state statutes. IBM has asserted counterclaims for copyright infringement, unfair competition, and patent infringement. In March 2003, Compuware moved for Preliminary Injunction on all but its antitrust claims and in December 2003, the Court denied that motion. Trial is scheduled for September 2004.

The company is a defendant in an action filed on March 6, 2003 in state court in Salt Lake City, Utah by the SCO Group. The company removed the case to Federal Court in Utah. Plaintiff is successor in interest to some of AT&T's UNIX IP rights, and alleges misappropriation of trade secrets, unfair competition, interference with contract and

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

breach of contract with regard to the company's contribution of unspecified code to Linux. The company has asserted counterclaims, including breach of contract, violation of the Lanham Act, unfair competition, intentional torts, unfair and deceptive trade practices, breach of the General Public License that governs open source distributions, patent infringement, promissory estoppel and copyright infringement. Trial is scheduled for April 2005.

On June 2, 2003 the company announced that it received notice of a formal, nonpublic investigation by the Securities and Exchange Commission (SEC). The SEC is seeking information relating to revenue recognition in 2000 and 2001 primarily concerning certain types of client transactions. IBM believes that the investigation arises from a separate investigation by the SEC of Dollar General Corporation, a client of IBM's Retail Stores Solutions unit, which markets and sells point of sale products.

On January 8, 2004, IBM announced that it received a "Wells Notice" from the staff of the SEC in connection with the staff's investigation of Dollar General Corporation, which as noted above, is a client of IBM's Retail Stores Solutions unit. It is IBM's understanding that an employee in IBM's Sales & Distribution unit also received a Wells Notice from the SEC in connection with this matter. The Wells Notice notifies IBM that the SEC staff is considering recommending that the SEC bring a civil action against IBM for possible violations of the U.S. securities laws relating to Dollar General's accounting for a specific transaction, by participating in and aiding and abetting Dollar General's misstatement of its 2000 results. In that transaction, IBM paid Dollar General \$11 million for certain used equipment as part of a sale of IBM replacement equipment in Dollar General's 2000 fourth fiscal quarter. Under the SEC's procedures, IBM responded to the SEC staff regarding whether any action should be brought against IBM by the SEC. The separate SEC investigation noted above, relating to the recognition of revenue by IBM in 2000 and 2001 primarily concerning certain types of client transactions, is not the subject of this Wells Notice.

In January 2004, the Seoul District Prosecutors Office in South Korea announced it had brought criminal bid rigging charges against several companies, including IBM Korea and LG IBM (a joint venture between IBM Korea and LG Electronics) and had also charged employees of some of those entities with, among other things, bribery of certain officials of government-controlled entities in Korea, and bid rigging. In addition, the U.S. Department of Justice and the SEC have both contacted the company in connection with this matter.

In accordance with SFAS No.5, the company records a provision with respect to a claim, suit, investigation or proceeding when it is probable that a liability has been incurred and the amount of the loss can reasonably be estimated. Any provisions are reviewed at least quarterly and are adjusted to

reflect the impact and status of settlements, rulings, advice of counsel and other information pertinent to a particular matter. Any recorded liabilities for the above items, including any changes to such liabilities during each of the three years in the period ended December 31, 2003, were not material to the Consolidated Financial Statements. Based on its experience, the company believes that the damage amounts claimed in the matters referred to above are not a meaningful indicator of the company's potential liability.

Litigation is inherently uncertain and it is not possible to predict the ultimate outcome of the matters discussed above. While the company will continue to defend itself vigorously in all such matters, it is possible that the company's business, financial condition, results of operations or cash flows, could be affected in any particular period by the resolution of one or more of these matters. Whether any losses, damages or remedies finally determined in any such claim, suit, investigation or proceeding could reasonably have a material effect on the company's business, financial condition, results of operations or cash flows will depend on a number of variables, including the timing and amount of such losses or damages, the structure and type of any such remedies, the significance of the impact any such losses, damages or remedies may have on IBM's Consolidated Financial Statements, and the unique facts and circumstances of the particular matter which may give rise to additional factors, such as, among other things, in the Cooper case referred to on page 101, the amount of any additional obligations that may be imposed on the pension plan by the remedies finally determined, whether such additional obligations would require additional contributions by the company and the size of any such additional contributions.

## COMMITMENTS

The company's extended lines of credit include unused amounts of \$2,208 million and \$3,482 million at December 31, 2003 and 2002, respectively. A portion of these amounts was available to the company's business partners to support their working capital needs. In addition, the company committed to provide future financing to its clients in connection with client purchase agreements for approximately \$263 million and \$288 million at December 31, 2003 and 2002, respectively.

The company has applied the disclosure provisions of FIN 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others," to its agreements that contain guarantee or indemnification clauses. These disclosure provisions expand those required by SFAS No. 5, by requiring a guarantor to disclose certain types of guarantees, even if the likelihood of requiring the guarantor's performance is remote. The following is a description of arrangements in which the company is the guarantor.

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

The company is a party to a variety of agreements pursuant to which it may be obligated to indemnify the other party with respect to certain matters. Typically, these obligations arise in the context of contracts entered into by the company, under which the company customarily agrees to hold the other party harmless against losses arising from a breach of representations and covenants related to such matters as title to assets sold, certain IP rights, specified environmental matters, and certain income taxes. In each of these circumstances, payment by the company is conditioned on the other party making a claim pursuant to the procedures specified in the particular contract, which procedures typically allow the company to challenge the other party's claims. Further, the company's obligations under these agreements may be limited in terms of time and/or amount, and in some instances, the company may have recourse against third parties for certain payments made by the company.

It is not possible to predict the maximum potential amount of future payments under these or similar agreements due to the conditional nature of the company's obligations and the unique facts and circumstances involved in each particular agreement. Historically, payments made by the company under these agreements did not have a material effect on the company's business, financial condition or results of operations. The company believes that if it were to incur a loss in any of these matters, such loss should not have a material effect on the company's business, financial condition or results of operations.

In addition, the company guarantees certain loans and financial commitments. The maximum potential future payment under these financial guarantees was \$74 million and \$126 million at December 31, 2003 and 2002, respectively. These amounts include the limited guarantee associated with the company's loans receivable securitization program. See note J, "Sale and Securitization of Receivables," on page 95.

Changes in the company's warranty liability balance are illustrated in the following table.

<i>(dollars in millions)</i>		
	2003	2002
Balance at January 1	\$ 614	\$ 520
Current period accruals	971	863
Accrual adjustments to reflect actual experience	65	121
Charges incurred	(870)	(890)
Balance at December 31	\$ 780	\$ 614

Accrual adjustments in 2002 principally reflect a significant increase in the failure rates of HDD components in the company's Server and Storage products as a result of product transitions.

## P

### TAXES

<i>(dollars in millions)</i>			
FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
Income from continuing operations before income taxes:			
U.S. operations	\$ 4,611	\$ 3,838	\$ 5,644
Non-U.S. operations	6,263	3,686	5,806
Total income from continuing operations before income taxes	\$ 10,874	\$ 7,524	\$ 11,450

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

<i>(dollars in millions)</i>			
FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
U.S. operations	\$ 1,234	\$ 934	\$ 1,543
Non-U.S. operations	2,027	1,256	1,761
Total continuing operations provision for income taxes	\$ 3,261	\$ 2,190	\$ 3,304

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

<i>(dollars in millions)</i>			
FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
U.S. federal:			
Current	\$ 234	\$ 287	\$ 434
Deferred	339	(3)	333
	573	284	767
U.S. state and local:			
Current	46	184	73
Deferred	183	3	155
	229	187	228
Non-U.S.:			
Current	1,855	1,786	2,133
Deferred	604	(67)	176
	2,459	1,719	2,309
Total continuing operations provision for income taxes	3,261	2,190	3,304
Provision for social security, real estate, personal property and other taxes	3,277	2,789	2,730
Total continuing operations provision for taxes	\$ 6,538	\$ 4,979	\$ 6,034



## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

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

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
Statutory rate	35%	35%	35%
Foreign tax differential	(5)	(7)	(6)
State and local	1	1	1
Other	(1)	—	(1)
Effective rate	30%	29%	29%

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 in the Consolidated Statement of Financial Position were as follows:

### DEFERRED TAX ASSETS

(dollars in millions)

AT DECEMBER 31:	2003	2002*
Retirement benefits	\$ 3,566	\$ 3,587
Capitalized research and development	1,907	2,251
Alternative minimum tax credits	1,344	1,316
Bad debt, inventory and warranty reserves	1,092	992
Employee benefits	1,021	1,069
General business credits	884	798
Deferred income	598	733
Infrastructure reduction charges	440	560
Foreign tax loss carryforwards	311	304
State and local tax loss carryforwards	205	239
Capital loss carryforwards	195	—
Other	2,253	2,474
Gross deferred tax assets	13,816	14,323
Less: Valuation allowance	722	628
Net deferred tax assets	\$ 13,094	\$ 13,695

\* Reclassified to conform with 2003 presentation.

### DEFERRED TAX LIABILITIES

(dollars in millions)

AT DECEMBER 31:	2003	2002*
Retirement benefits	\$ 6,644	\$ 5,904
Leases	693	1,088
Software development costs	285	219
Other	1,188	1,308
Gross deferred tax liabilities	\$ 8,810	\$ 8,519

\* Reclassified to conform with 2003 presentation.

The valuation allowance at December 31, 2003, principally applies to certain foreign, state and local, and capital loss carryforwards that, in the opinion of management, are more likely than not to expire before the company can use them.

For tax return purposes, the company has available tax credit carryforwards of approximately \$2,228 million, of which \$1,344 million have an indefinite carryforward period and the remainder begin to expire in 2005. The company also has foreign, state and local, and capital loss carryforwards, the tax effect of which is \$711 million. Most of these carryforwards are available for five years or have an indefinite carryforward period.

During 2003, the Internal Revenue Service (IRS) commenced an examination of the years 1998 through 2000. Although the outcome of tax audits is always uncertain, the company believes that adequate amounts of tax have been provided for any adjustments that are expected to result for these years. The resolution of this audit will likely result in the reduction of existing tax credit carryforwards rather than a significant cash payment.

Undistributed earnings of non-U.S. subsidiaries included in consolidated retained earnings were \$18,120 million at December 31, 2003, and \$16,631 million at December 31, 2002. These earnings, which reflect full provision for non-U.S. income taxes, are indefinitely reinvested in non-U.S. operations or will be remitted substantially free of additional tax.

### Q

#### ADVERTISING AND PROMOTIONAL EXPENSE

Advertising and promotional expense, which includes media, agency and promotional expense, was \$1,406 million, \$1,427 million and \$1,615 million in 2003, 2002 and 2001, respectively, and is recorded in SG&A expense.

### R

#### RESEARCH, DEVELOPMENT AND ENGINEERING

RD&E expense was \$5,077 million in 2003, \$4,750 million in 2002 and \$4,986 million in 2001.

The company incurred expense of \$4,609 million in 2003, \$4,247 million in 2002 and \$4,321 million in 2001 for scientific research and the application of scientific advances to the development of new and improved products and their uses as well as services and their application. Of these amounts, software-related expense was \$2,300 million, \$1,974 million and \$1,926 million in 2003, 2002 and 2001, respectively. Included in the expense was a charge of \$9 million and \$4 million in 2003 and 2002, respectively, for acquired in-process R&D. There was no in-process R&D expense recorded in 2001.

Expense for product-related engineering was \$468 million, \$503 million and \$665 million in 2003, 2002 and 2001, respectively.

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## S

### 2002 ACTIONS

#### SECOND QUARTER ACTIONS

During the second quarter of 2002, the company executed several actions in its Microelectronics Division. The Microelectronics Division is within the company's Technology Group segment. These actions were the result of the company's announced intentions to refocus and direct its Microelectronics business to the high-end foundry, Application Specific Integrated Circuits (ASICs) and standard products, while creating a technology services business. A major part of the actions related to a significant reduction in the company's manufacturing capacity for aluminum technology.

In addition, the company rebalanced both its workforce and its leased space resources primarily in response to the decline in corporate spending on technology services in 2001 and 2002.

The following table summarizes the significant components of these actions.

(dollars in millions)

	PRE-TAX CHARGES	WRITE-OFF OF ASSETS	LIABILITY RECORDED IN 2ND QTR. 2002	PAYMENTS	OTHER ADJUST- MENTS <sup>+</sup>	LIABILITY AS OF DEC. 31, 2002	PAYMENTS	OTHER ADJUST- MENTS <sup>++</sup>	LIABILITY AS OF DEC. 31, 2003
Microelectronics:									
Machinery/equipment:	\$ 423	\$ 323 (a)							
Current*			\$ 67 (b)	\$ 38	\$ 13	\$ 42	\$ 39	\$ 13	\$ 16
Non-current**			33 (b)	—	(16)	17	—	(15)	2
Noncancelable purchase commitments:	60								
Current*			35 (c)	15	4	24	24	15	15
Non-current**			25 (c)	—	(12)	13	—	(13)	—
Employee terminations:	45								
Current*			44 (d)	35	(8)	1	1	—	—
Non-current**			1 (d)	—	—	1	—	—	1
Vacant space:	11								
Current*			5 (e)	1	1	5	5	3	3
Non-current**			6 (e)	—	(1)	5	—	(2)	3
Sale of Endicott facility*	223	221 (f)	2 (f)	3	11	10	6	(3)	1
Sale of certain operations*	63	53 (g)	10 (g)	9	—	1	1	—	—
Global Services and other:									
Employee terminations:	722								
Current*			671 (h)	505	(23)	143	109	(2)	32
Non-current**			51 (h)	—	27	78	—	(3)	75
Vacant space:	180	29 (i)							
Current*			57 (i)	29	16	44	72	71	43
Non-current**			94 (i)	—	(8)	86	—	(55)	31
<b>Total</b>	<b>\$ 1,727</b>	<b>\$ 626</b>	<b>\$ 1,101</b>	<b>\$ 635</b>	<b>\$ 4</b>	<b>\$ 470</b>	<b>\$ 257</b>	<b>\$ 9</b>	<b>\$ 222</b>

\* Recorded in Accounts payable and accruals in the Consolidated Statement of Financial Position.

\*\* Recorded in Other liabilities in the Consolidated Statement of Financial Position.

<sup>+</sup> Principally represents currency translation adjustments and reclassification of non-current to current. In addition, net adjustments of \$(40) million were recorded in SG&A expense in the fourth quarter of 2002 to reduce previously recorded liabilities and \$10 million was recorded in Other (income) and expense to increase previously recorded liabilities in the fourth quarter of 2002. These adjustments, along with adjustments of \$(19) million were recorded in SG&A expense and \$9 million were recorded in Other (income) and expense for assets previously written off, were for differences between the estimated and actual proceeds on the disposition of certain assets and changes in the estimated cost of employee terminations.

<sup>++</sup> Principally represents currency translation adjustments and reclassification of non-current to current. In addition, adjustments of \$(26) million were recorded in SG&A expense in 2003 to reduce previously recorded liabilities and \$4 million was recorded in Other (income) and expense to increase previously recorded liabilities. These adjustments, along with adjustments of \$(7) million were recorded in SG&A expense and \$(2) million were recorded in Other (income) and expense for assets previously written off, were primarily for differences between the estimated and actual proceeds on the disposition of certain assets as well as changes in the estimated cost of employee terminations and in vacant space accrual estimates.

## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

- (a) This amount was recorded in SG&A expense in 2002 and primarily represents the abandonment and loss on sale of certain capital assets during the second quarter of 2002.
- (b) This amount comprises costs incurred to remove abandoned capital assets and the remaining lease payments for leased equipment that was abandoned in the second quarter of 2002. The liability at December 31, 2003 relates to the remaining lease payments, which will continue through 2005. These amounts were recorded in SG&A expense in 2002.
- (c) The company is subject to certain noncancelable purchase commitments. As a result of the decision to significantly reduce aluminum capacity, the company no longer has a need for certain materials subject to these agreements. The required future payments for materials no longer needed under these contracts are expected to be paid through June 30, 2004. This amount was recorded in SG&A expense in 2002.
- (d) The workforce reductions represent 1,400 people, all of whom left the company as of June 30, 2003. This amount was recorded in SG&A expense in 2002. The remaining liability relates to terminated employees who were granted annual payments to supplement their income in certain countries. Depending on individual country legal requirements, these required payments will continue until the former employee begins receiving pension benefits or dies.
- (e) The space accruals 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 arrangements. The length of these obligations varies by lease with the longest extending through 2006. These amounts were recorded in Other (income) and expense in 2002.
- (f) As part of the company's strategic realignment of its Microelectronics business to exit the manufacture and sale of certain products and component technologies, the company signed an agreement in the second quarter of 2002 to sell its interconnect products operations in Endicott to Endicott Interconnect Technologies, Inc. (EIT). As a result of this transaction, the company incurred a \$223 million loss on sale, primarily relating to land, buildings, machinery and equipment. This loss was recorded in Other (income) and expense in 2002. This transaction closed in the fourth quarter of 2002. The company entered into a limited supply agreement with EIT for future products, and it will also lease back, at fair market value rental rates, approximately one-third of the Endicott campus' square footage for operations outside the interconnect OEM business.
- (g) As part of the strategic realignment of the company's Microelectronics business, the company agreed to sell certain assets and liabilities comprising its Mylex business to LSI Logic Corporation and the company sold part of its wireless phone chipset operations to TriQuint Semiconductor, Inc. in June 2002. The Mylex transaction was completed in August 2002. The loss of \$74 million for the Mylex transaction and the realized gain of \$11 million for the chipset sale were recorded in Other (income) and expense in 2002.
- (h) The majority of the workforce reductions relate to the company's Global Services business. The workforce reductions represent 14,213 people, all of whom left the company as of June 30, 2003. See (c) above for information on the remaining liability. These charges were recorded in SG&A expense in 2002.
- (i) The space accruals 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 arrangements. This space relates primarily to workforce dynamics in the Global Services business and the downturn in corporate technology spending on services. The length of these obligations varies by lease with the longest extending through 2016. These amounts were recorded in Other (income) and expense in 2002.

## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

### FOURTH QUARTER ACTIONS

During the fourth quarter of 2002, the company executed several actions related to the company's acquisition of PwCC. Specifically, the company rebalanced both its workforce and its leased space resources. The following table summarizes the significant components of these actions.

(dollars in millions)

	RECORDED IN THE CONSOLIDATED STATEMENT OF EARNINGS			RECORDED IN PURCHASE ACCOUNTING (SEE NOTE C)	TOTAL LIABILITY RECORDED IN 4TH QTR.	PAYMENTS	OTHER ADJUSTMENTS <sup>+</sup>	LIABILITY AS OF DEC. 31, 2002
	TOTAL PRE-TAX CHARGES	SALE OR WRITE-OFF OF ASSETS	LIABILITY RECORDED IN 4TH QTR.	LIABILITY RECORDED IN 4TH QTR.				
Workforce:	\$ 305 (a)	\$ —						
Current*			\$ 248	\$ 48 (a)	\$ 296	\$ 16	\$ (2)	\$ 278
Non-current**			57 (a)	—	57	—	—	57
Vacant space:	17 (b)	4						
Current*			6	62 (b)	68	1	—	67
Non-current**			7	173 (b)	180	—	—	180
<b>Total</b>	<b>\$ 322</b>	<b>\$ 4</b>	<b>\$ 318</b>	<b>\$ 283</b>	<b>\$ 601</b>	<b>\$ 17</b>	<b>\$ (2)</b>	<b>\$ 582</b>

(dollars in millions)

	TOTAL LIABILITY AS OF DEC. 31, 2002	PAYMENTS	OTHER ADJUSTMENTS <sup>++</sup>	LIABILITY AS OF DEC. 31, 2003
Workforce:				
Current*	\$ 278	\$ 246	\$ 6	\$ 38
Non-current**	57	—	22	79
Vacant space:				
Current*	67	64	37	40
Non-current**	180	—	(47)	133
<b>Total</b>	<b>\$ 582</b>	<b>\$ 310</b>	<b>\$ 18</b>	<b>\$ 290</b>

\* Recorded in Accounts payable and accruals in the Consolidated Statement of Financial Position.

\*\* Recorded in Other liabilities in the Consolidated Statement of Financial Position.

+ Principally represents currency translation adjustments.

++ Principally represents currency translation adjustments and reclassifications between current and non-current. In addition, net adjustments of \$(6) million were recorded in SG&A expense in 2003 to reduce previously recorded liabilities. These adjustments were for changes in the estimated cost of employee terminations. There were also net adjustments in 2003 to reduce goodwill and previously recorded liabilities of \$36 million for changes in the estimated cost of employee terminations and vacant space relating to people and space acquired from PwC.

(a) The majority of the workforce reductions relate to the company's Global Services business. The workforce reductions represent 3,541 people all of whom left the company as of December 31, 2003. The non-current workforce accrual relates to terminated employees in certain countries outside the U.S., for whom the company is required to make annual payments to supplement their incomes. Depending on individual country legal requirements, these required payments will continue until the former employee begins receiving pension benefits or dies.

These charges (\$305 million in the table above) were included in SG&A expense. The workplace reductions also affected 1,203 acquired PwCC employees all of whom left the company as of December 31, 2003 (\$48 million in the table above). These costs were included as part of the liabilities assumed for purchase accounting in 2002.

(b) The majority of the space accruals are for ongoing obligations to pay rent for vacant space of PwCC that could not be sublet or space that was sublet at rates lower than the committed lease arrangements. The length of these obligations varies by lease with the longest extending through 2012. The charges related to IBM space (\$17 million) were included in Other (income) and expense in 2002. The costs related to acquired PwCC space are included as part of the liabilities assumed for purchase accounting in 2002 (\$235 million in the first table above comprise \$62 million current and \$173 million non-current).



# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## T

### 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:	2003	2002	2001
Weighted-average number of shares on which earnings per share calculations are based:			
Basic	1,721,588,628	1,703,244,345	1,733,348,422
Add— incremental shares under stock compensation plans	29,399,287	24,807,025	36,595,476
Add— incremental shares associated with convertible notes	4,695,956	1,191,136	—
Add— incremental shares associated with contingently issuable shares	406,818	1,698,548	1,277,222
Add— incremental shares associated with put options*	—	—	9,479
Assuming dilution	1,756,090,689	1,730,941,054	1,771,230,599

(dollars in millions except per share amounts)

Income from continuing operations applicable to common stockholders	\$ 7,613	\$ 5,334	\$ 8,136
Loss from discontinued operations	30	1,755	423
Net income from total operations on which basic earnings per share is calculated	\$ 7,583	\$ 3,579	\$ 7,713
Income from continuing operations applicable to common stockholders	\$ 7,613	\$ 5,334	\$ 8,136
Add— income effect of contingently issuable shares	2	(18)	(4)
Income from continuing operations on which diluted earnings per share is calculated	7,615	5,316	8,132
Loss from discontinued operations on which basic and diluted earnings per share are calculated	30	1,755	423
Net income from total operations on which diluted earnings per share is calculated	\$ 7,585	\$ 3,561	\$ 7,709
Earnings/(loss) per share of common stock:			
Assuming dilution:			
Continuing operations	\$ 4.34	\$ 3.07	\$ 4.59
Discontinued operations	(0.02)	(1.01)	(0.24)
Total	\$ 4.32	\$ 2.06	\$ 4.35
Basic:			
Continuing operations	\$ 4.42	\$ 3.13	\$ 4.69
Discontinued operations	(0.02)	(1.03)	(0.24)
Total	\$ 4.40	\$ 2.10	\$ 4.45

\* 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 in the Consolidated Statement of Financial Position. As of December 31, 2003 and 2002, the company did not have any put option obligations outstanding.

Stock options to purchase 124,840,510 common shares in 2003, 111,713,072 common shares in 2002 and 67,596,737 common shares in 2001 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.

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## U

### RENTAL EXPENSE AND LEASE COMMITMENTS

Rental expense from continuing operations, including amounts charged to inventories and fixed assets, and excluding amounts previously reserved, was \$1,419 million in 2003, \$1,377 million in 2002 and \$1,324 million in 2001. The table below depicts gross minimum rental commitments from continuing operations under noncancelable leases, amounts related to vacant space associated with infrastructure reduction and restructuring actions taken through 1993, and in 1999 and 2002 (previously reserved), and sublease income commitments. These amounts reflect activities primarily related to office space as well as manufacturing equipment.

(dollars in millions)

	2004	2005	2006	2007	2008	BEYOND 2008
Gross minimum rental commitments (including vacant space below)	\$ 1,401	\$ 1,127	\$ 951	\$ 832	\$ 701	\$ 1,402
Vacant space	149	116	72	78	35	58
Sublease income commitments	(53)	(47)	(32)	(31)	(27)	(21)

## V

### STOCK-BASED COMPENSATION PLANS

The following is a description of the terms of the company's stock-based compensation plans:

#### INCENTIVE PLANS

Incentive awards are provided to employees and members of the Board of Directors under the terms of the company's plans (the Plans). Employee awards are administered by the Executive Compensation and Management Resources Committee of the Board of Directors (the Committee). The Committee determines the type and terms of the awards to be granted to employees, including vesting provisions.

Awards under the Plans may include stock options, stock appreciation rights, restricted stock, cash or stock awards, or any combination thereof. The amount of shares authorized to be issued under the company's existing Plans is 274.1 million at December 31, 2003. Certain incentive awards granted under previous plans, if and when those awards are cancelled, can be

reissued under the company's existing Plans. As such, 40.5 million additional awards are considered authorized to be issued under the company's Plans as of December 31, 2003. There were 87.1 million option awards outstanding under previous plans included in the total number of shares under option at December 31, 2003. There were 148.1 million and 183.3 million unused shares available to be granted under the Plans as of December 31, 2003 and 2002, respectively. Awards under the Plans resulted in compensation expense of \$117 million, \$183 million and \$170 million in 2003, 2002 and 2001, respectively.

#### Stock Option Grants

Stock options are granted to employees and directors 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 2003, 2002 and 2001.

	2003		2002		2001	
	WTD. AVG. EXERCISE PRICE	NUMBER OF SHARES UNDER OPTION	WTD. AVG. EXERCISE PRICE	NUMBER OF SHARES UNDER OPTION	WTD. AVG. EXERCISE PRICE	NUMBER OF SHARES UNDER OPTION
Balance at January 1	\$ 84	222,936,700	\$ 85	177,956,490	\$ 73	160,557,003
Options granted	83	41,275,832	77	59,966,106	110	43,410,364
Options exercised	40	(11,205,228)	33	(7,490,424)	37	(20,354,701)
Options canceled/expired	100	(8,041,252)	103	(7,495,472)	100	(5,656,176)
Balance at December 31	\$ 86	244,966,052	\$ 84	222,936,700	\$ 85	177,956,490
Exercisable at December 31	\$ 85	134,735,326	\$ 75	108,347,895	\$ 62	80,773,980

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

The shares under option at December 31, 2003, were in the following exercise price ranges:

EXERCISE PRICE RANGE	OPTIONS OUTSTANDING			OPTIONS CURRENTLY EXERCISABLE	
	WTD. AVG. EXERCISE PRICE	NUMBER OF SHARES UNDER OPTION	WTD. AVG. REMAINING CONTRACTUAL LIFE (IN YEARS)	WTD. AVG. EXERCISE PRICE	NUMBER OF SHARES UNDER OPTION
\$13–\$60	\$ 45	58,085,692	5	\$ 42	46,673,075
\$61–\$85	77	59,168,633	9	71	7,482,142
\$86–\$105	98	58,170,230	7	97	29,229,856
\$106 and over	117	69,541,497	7	119	51,350,253
	\$ 86	244,966,052	7	\$ 85	134,735,326

In connection with various acquisition transactions, there are an additional 3.5 million options outstanding at December 31, 2003, as a result of the company's assumption of options granted by the acquired entities. The weighted-average exercise price of these options is \$90.

#### IBM EMPLOYEES STOCK PURCHASE PLAN

In July 2003, the IBM 2003 ESPP became effective and 50 million additional shares of authorized common stock were reserved and approved for issuance. The ESPP enables substantially all regular employees to purchase full or fractional shares of IBM common stock through payroll deductions of up to 10 percent of eligible compensation. The 2003 ESPP provides for semi-annual offerings commencing July 1, 2003, and continuing as long as shares remain available under the ESPP, unless terminated earlier at the discretion of the Board of Directors. The share price paid by an employee

equals 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. Individual 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. Approximately 44.2 million, 4.6 million and 16.5 million reserved unissued shares were available for purchase under the 2003 ESPP (or a predecessor plan) at December 31, 2003, 2002 and 2001, respectively.

#### PRO FORMA DISCLOSURE

See "Stock-Based Compensation" on pages 82 and 83, in note A, "Significant Accounting Policies," for the pro forma disclosures of net income and earnings per share required under SFAS No. 123.

## W

#### RETIREMENT-RELATED BENEFITS

IBM offers defined benefit pension plans, defined contribution pension plans, as well as 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)

FOR THE YEAR ENDED DECEMBER 31:	U.S.			NON-U.S.			TOTAL		
	2003	2002	2001	2003	2002	2001	2003	2002	2001
Total retirement-related plans — cost/(income)	\$ 67	\$ (154)	\$ (256)	\$ 295	\$ (17)	\$ (181)	\$ 362	\$ (171)*	\$ (437)*
Comprise:									
Defined benefit and contribution pension plans — (income)/cost	\$ (227)	\$ (478)	\$ (632)	\$ 254	\$ (46)	\$ (209)	\$ 27	\$ (524)	\$ (841)
Nonpension postretirement benefits — cost	294	324	376	41	29	28	335	353	404

\* Includes amounts for discontinued operations costs of \$77 million and \$56 million for 2002 and 2001, respectively.

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## ACCOUNTING POLICY

### *Defined Benefit Pension and*

### *Nonpension Postretirement Benefit Plans*

The company accounts for its defined benefit pension plans and its nonpension postretirement benefit plans using actuarial models required by 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 average 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. 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.

One of the principal components of the net periodic pension cost/(income) calculation is the expected long-term rates 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 calculation of net periodic pension cost/(income) over five years as provided for in the accounting rules.

These expected returns on plan assets are developed in conjunction with external advisors, and take into account long-term expectations for future returns and investment strategy. Amounts are tested for reasonableness against their historical averages, usually over a ten year period.

The discount rate assumptions used for pension and nonpension postretirement benefit plan accounting reflect the prevailing rates available on high-quality, fixed-income debt instruments. 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.

As required by SFAS No. 87, for instances in which pension plan assets are less than the accumulated benefit obligation (ABO) as of the end of the reporting period (defined as an unfunded ABO position), a minimum liability equal to this difference is established in the Consolidated Statement of

Financial Position. The ABO is the present value of the actuarially determined company obligation for pension payments assuming no further salary increases for the employees. The offset to the minimum liability is a charge to equity, net of tax. In addition, any prepaid pension asset in excess of unrecognized prior service cost must be reversed through a net-of-tax charge to equity. The charge to equity is included in the Accumulated gains and (losses) not affecting retained earnings section of Stockholders' equity in the Consolidated Statement of Financial Position.

The company uses a December 31 measurement date for the majority of its pension plans.

### *Defined Contribution Pension Plans*

The company records pension expense for defined contribution plans when the employee renders service to the company, essentially coinciding with the cash contributions to the plans.

## 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 Personal Pension Plan (PPP)* – IBM provides U.S. regular, full-time and part-time employees with noncontributory defined benefit pension benefits (PPP). The PPP comprises a tax qualified plan and a non-qualified plan. The qualified plan is funded by company contributions to an irrevocable trust fund, which is held for the sole benefit of participants. The non-qualified plan, which provides benefits in excess of IRS limitations for qualified plans, is unfunded.

The number of individuals receiving benefits from the PPP at December 31, 2003 and 2002, was 136,302 and 136,365, respectively. The pre-tax net periodic pension income for the qualified plan for the years ended December 31, 2003, 2002 and 2001, was \$(692) million, \$(917) million and \$(1,086) million, respectively. The pre-tax net periodic pension cost for the non-qualified plan was \$107 million, \$106 million and \$118 million for the years ended December 31, 2003, 2002 and 2001, respectively. The costs of the non-qualified plan are reflected in Cost of other defined benefit plans on page 112.

The funded status reconciliation for the qualified plan is on page 113. The benefit obligation of the non-qualified plan was \$1,068 million and \$940 million at December 31, 2003 and 2002, respectively, and the amounts included in Retirement and nonpension postretirement benefit obligations in the Consolidated Statement of Financial Position at December 31, 2003 and 2002, were liabilities of \$901 million and \$798 million, respectively.



## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

**IBM Savings Plan** – U.S. regular, full-time and part-time employees are eligible to participate in the IBM Savings Plan, which is a tax-qualified defined contribution plan under section 401(k) of the Internal Revenue Code. 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 company stock, and there are no restrictions on transferring amounts out of the company's stock to another investment choice. The total cost of all of the company's U.S. defined contribution plans was \$333 million, \$315 million and \$313 million for the years ended December 31, 2003, 2002 and 2001, respectively.

**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 benefit pension benefits in addition to the PPP to eligible executives based on average earnings, years of service and age at retirement. Effective July 1, 1999, the company adopted the SERP (which replaced the previous Supplemental Executive Retirement Plan). Some participants of the prior 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, 2003, 2002 and 2001, was \$25 million, \$18 million and \$23 million, respectively. These amounts are reflected in Cost of other defined benefit plans in the table below. At December 31, 2003 and 2002, the benefit obligation was \$181 million and \$130 million, respectively, and the amounts included in Retirement and nonpension postretirement benefit obligations in the Consolidated Statement of Financial Position at December 31, 2003 and 2002, were liabilities of \$186 million and \$165 million, 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 either on years of service and the employee's compensation, generally during a fixed number of years immediately before retirement, or on annual credits. The range of assumptions that are used for the non-U.S. defined benefit plans reflects the different economic environments within various countries. The total non-U.S. retirement plan cost/(income) of these plans for the years ended December 31, 2003, 2002 and 2001, was \$254 million, \$(46) million and \$(209) million, respectively.

### Cost/(Income) of Pension Plans

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	U.S. PLANS*			NON-U.S. PLANS		
	2003	2002	2001	2003	2002	2001
Service cost	\$ 576	\$ 650	\$ 647	\$ 537	\$ 505	\$ 429
Interest cost	2,518	2,591	2,560	1,477	1,270	1,214
Expected return on plan assets	(3,703)	(4,121)	(4,202)	(2,228)	(2,132)	(2,062)
Amortization of transition assets	(144)	(144)	(143)	(15)	(12)	(10)
Amortization of prior service cost	61	61	52	17	28	28
Recognized actuarial losses/(gains)	—	—	—	101	33	(12)
Divestitures/settlement losses/(gains)	—	46	—	—	26	(12)
Net periodic pension income — U.S. Plan and material non-U.S. Plans	(692)*	(917)*	(1,086)*	(111)	(282)	(425)
Cost of other defined benefit plans	132	124	141	100	58	54
Total net periodic pension income for all defined benefit plans	(560)	(793)	(945)	(11)	(224)	(371)
Cost of defined contribution plans	333	315	313	265	178	162
Total retirement plan (income)/cost recognized in the Consolidated Statement of Earnings	\$ (227)	\$ (478)	\$ (632)	\$ 254	\$ (46)	\$ (209)

\* Represents the qualified portion of the PPP.

See beginning of note W, "Retirement-Related Benefits," on page 110 for the company's total retirement-related benefits cost/(income).

## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

The changes in the benefit obligations and plan assets of the qualified portion of the PPP and the significant non-U.S. defined benefit plans for 2003 and 2002 were as follows:

(dollars in millions)

	PPP-QUALIFIED PORTION		NON-U.S. PLANS	
	2003	2002	2003	2002
Change in benefit obligation:				
Benefit obligation at beginning of year	\$ 38,357	\$ 37,762	\$ 25,699	\$ 21,801
Service cost	576	650	537	505
Interest cost	2,518	2,591	1,477	1,270
Plan participants' contributions	—	—	43	34
Acquisitions/divestitures, net	—	32	75	246
Amendments	—	18	—	(280)
Actuarial losses	3,472	47	1,167	80
Benefits paid from trust	(2,819)	(2,743)	(1,093)	(866)
Direct benefit payments	—	—	(253)	(221)
Foreign exchange impact	—	—	4,166	3,104
Plan curtailments/settlements/termination benefits	—	—	57	26
<b>Benefit obligation at end of year</b>	<b>42,104</b>	<b>38,357</b>	<b>31,875</b>	<b>25,699</b>
Change in plan assets:				
Fair value of plan assets at beginning of year	36,984	39,565	20,637	21,531
Actual return on plan assets	7,514	(3,801)	2,829	(3,135)
Employer contribution	—	3,963	542	225
Acquisitions/divestitures, net	—	—	7	191
Plan participants' contributions	—	—	43	34
Benefits paid from trust	(2,819)	(2,743)	(1,093)	(866)
Foreign exchange impact	—	—	3,581	2,657
<b>Fair value of plan assets at end of year</b>	<b>41,679</b>	<b>36,984</b>	<b>26,546</b>	<b>20,637</b>
Fair value of plan assets in excess of benefit obligation	(425)	(1,373)	(5,329)	(5,062)
Unrecognized net actuarial losses	11,849	12,187	10,775	8,991
Unrecognized prior service costs	523	584	(170)	(187)
Unrecognized net transition assets	(72)	(216)	(26)	(36)
<b>Net prepaid pension asset recognized in the Consolidated Statement of Financial Position</b>	<b>\$ 11,875</b>	<b>\$ 11,182</b>	<b>\$ 5,250</b>	<b>\$ 3,706</b>
Amounts recognized in the Consolidated Statement of Financial Position captions include:				
Prepaid pension assets	\$ 11,875	\$ 11,182	\$ 6,129	\$ 4,397
Intangible assets	—	—	52	54
<b>Total prepaid pension assets</b>	<b>11,875</b>	<b>11,182</b>	<b>6,181</b>	<b>4,451</b>
Retirement and nonpension postretirement benefit obligation	—	—	(6,982)	(5,865)
Accumulated gains and (losses) not affecting retained earnings	—	—	3,888	3,277
Deferred tax assets (investments and sundry assets)	—	—	2,163	1,843
<b>Net amount recognized</b>	<b>\$ 11,875</b>	<b>\$ 11,182</b>	<b>\$ 5,250</b>	<b>\$ 3,706</b>
<b>Accumulated benefit obligation</b>	<b>\$ 40,423</b>	<b>\$ 36,738</b>	<b>\$ 30,240</b>	<b>\$ 24,186</b>

Differences between the aggregate balance sheet amounts listed above (material pension plans) and on page 116 (material nonpension postretirement plan) and the totals listed in the Consolidated Statement of Financial Position and Consolidated Statement of Stockholders' Equity, relate to the non-material plans. The increase in the company's Prepaid pension asset balance from 2002 to 2003 was primarily

due to pension income and foreign exchange impacts. The increase in the company's Retirement and nonpension postretirement benefit obligation was primarily attributable to the required accounting for the unfunded status of the non-U.S. pension plans as discussed on page 114 as well as accrued pension costs and foreign exchange impacts.

## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

Assumptions used to determine the year-end benefit obligations for principal pension plans follow:

WEIGHTED-AVERAGE ASSUMPTIONS AT DECEMBER 31:	U.S. PLANS			NON-U.S. PLANS		
	2003	2002	2001	2003	2002	2001
Discount rate	6.0%	6.75%	7.0%	3.0–6.0%	4.25–6.5%	4.5–7.1%
Rate of compensation increase	4.0%	4.0%	6.0%	1.5–5.0%	2.2–5.0%	2.0–6.1%

Assumptions used to determine the net periodic pension cost/(income) for principal pension plans during the year follow:

WEIGHTED-AVERAGE ASSUMPTIONS FOR YEARS ENDED DECEMBER 31:	U.S. PLANS			NON-U.S. PLANS		
	2003	2002	2001	2003	2002	2001
Discount rate	6.75%	7.0%	7.25%	4.25–6.5%	4.5–7.1%	4.5–7.1%
Expected long-term return on plan assets	8.0%	9.50%	10.0%	5.0–8.0%	5.0–9.25%	5.0–10.0%
Rate of compensation increase	4.0%	6.0%	6.0%	2.2–5.0%	2.0–6.1%	2.6–6.1%

The changes in the Expected long-term return on plan assets in 2003 and 2002 for the PPP decreased net periodic pension income by approximately \$715 million and \$224 million, respectively, for the year ended December 31, 2003 as compared to the year ended December 31, 2002 and for the year ended December 31, 2002 as compared to the year ended December 31, 2001, respectively. The change in the Rate of compensation increase assumption for the PPP increased net periodic pension income by approximately \$145 million for the year ended December 31, 2003 as compared to the year ended December 31, 2002. The changes in the Discount rate assumption since 2001 for the PPP did not have a material impact on net periodic pension income for the years ended December 31, 2003, 2002, and 2001.

Net changes in assumptions for the material non-U.S. plans had the net impact of decreasing net periodic pension income by approximately \$225 million and \$200 million for the year ended December 31, 2003 as compared to the year ended December 31, 2002 and for the year ended December 31, 2002 as compared to the year ended December 31, 2001, respectively.

### Funded Status for Defined Benefit Pension Plans

It is the company's general practice to fund amounts for pensions sufficient to meet the minimum requirements set forth in applicable employee benefits laws and local tax laws, generally up to the ABO level. From time to time, the company contributes additional amounts as it deems appropriate.

In the fourth quarter of 2002, the company voluntarily fully funded the qualified portion of the PPP, as measured by its ABO, through a total contribution of \$3,963 million. The contribution comprised \$2,092 million in cash and \$1,871 million, or 24,037,354 shares, of IBM common stock. This contribution increased net periodic pension income by

approximately \$375 million during the year ended December 31, 2003 as compared to the year ended December 31, 2002. There was no contribution to the PPP during the year ended December 31, 2003.

There were contributions of \$542 million and \$225 million for the material non-U.S. plans during the year ended December 31, 2003 and December 31, 2002, respectively.

The company, however, decided not to fund certain of the company's non-U.S. plans that had unfunded positions to the ABO level. As a result and consistent with the accounting rules required by SFAS No. 87 for these "unfunded" positions as described on page 111, the company recorded an additional minimum liability of \$560 million and a reduction to stockholders' equity of \$72 million as of December 31, 2003. The differences between these amounts and the amounts included in the Consolidated Statement of Financial Position and Consolidated Statement of Stockholders' Equity relate to the non-material plans. This accounting transaction did not impact 2003 retirement-related plans cost/(income).

The company's Benefit Obligation (BO) for its material plans is disclosed at the top of page 113. BO is calculated similarly to ABO except for the fact that BO includes an estimate for future salary increases. SFAS No. 132 (revised 2003), "Employers' Disclosures about Pensions and Other Post-retirement Benefits — an amendment of FASB Statements No. 87, 88 and 106," requires that companies disclose the aggregate BO and plan assets of all plans in which the BO exceeds plan assets. Similar disclosure is required for all plans in which the ABO exceeds plan assets. The aggregate BO and plan assets are also disclosed for plans in which the plan assets exceed the BO. The following table excludes the U.S. plans due to the fact that these plans' BO and plan assets, if any, appear either in the narrative on pages 111 and 112 or the table on page 113.

(dollars in millions)

AT DECEMBER 31:	2003		2002	
	BENEFIT OBLIGATION	PLAN ASSETS	BENEFIT OBLIGATION	PLAN ASSETS
Plans with BO in excess of plan assets	\$ 21,101	\$ 12,985	\$ 20,212	\$ 13,132
Plans with ABO in excess of plan assets	\$ 19,902	\$ 12,985	\$ 15,978	\$ 10,086
Plans with assets in excess of BO	\$ 10,774	\$ 13,561	\$ 5,487	\$ 7,505

## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

### PLAN ASSETS

The company's pension plan weighted-average asset allocations at December 31, 2003 and 2002 and target allocation for 2004, by asset category, are as follows:

#### U.S. Plans

ASSET CATEGORY	PLAN ASSETS AT DECEMBER 31:		2004 TARGET ALLOCATION
	2003	2002	
Equity securities*	67.5%	61.9%	65.0%
Debt securities	29.2%	34.5%	31.0%
Real estate	3.3%	3.6%	4.0%
Total	100.0%	100.0%	100.0%

#### Non-U.S. Plans

ASSET CATEGORY	PLAN ASSETS AT DECEMBER 31:		2004 TARGET ALLOCATION
	2003	2002	
Equity securities	59.1%	55.2%	58.2%
Debt securities	38.5%	40.9%	39.6%
Real estate	1.9%	2.2%	1.8%
Other	0.5%	1.7%	0.4%
Total	100.0%	100.0%	100.0%

\* See discussion below regarding certain private market assets, and future funding commitments thereof, that are not as liquid as the rest of the publicly traded securities.

The investment objectives of the PPP portfolio of assets (the Fund) are designed to generate returns that will enable the Fund to meet its future obligations. The precise amount for which these obligations will be settled depends on future events, including the life expectancy of the Plan's members and salary inflation. The obligations are estimated using actuarial assumptions, based on the current economic environment. The strategy balances the requirement to generate return, using higher-returning assets such as equity securities, with the need to control risk in the Fund with less volatile assets, such as fixed income securities. Risks include, among others, the likelihood of the Plans becoming underfunded, thereby increasing their dependence on contributions from the company. Within each asset class, careful consideration is given to balancing the portfolio among industry sectors, geographies, interest rate sensitivity, dependence on economic growth, currency and other factors that affect investment returns.

The assets are managed by professional investment firms as well as by investment professionals who are IBM employees. They are bound by precise mandates and are measured against specific benchmarks. Among managers, consideration is given, among others, to balancing security concentration, issuer concentration, investment style, and reliance on particular active investment strategies. Market liquidity risks are tightly controlled, with only a small percentage of the PPP portfolio invested in private market assets consisting of private equities and private real estate investments, which are less liquid than publicly traded securities. The PPP

included private market assets comprising approximately 10.5 percent and 11.1 percent of total assets at December 31, 2003 and 2002, respectively. The target allocation for private market assets in 2004 is 10.5 percent. The Fund has \$2,465 million in commitments for future private market investments to be made over a number of years from plan assets. These commitments are expected to be fulfilled from plan assets. Derivatives are primarily used to hedge currency, adjust portfolio duration, and reduce specific market risks.

Outside the U.S., the investment objectives are similar, subject to local regulations. In some countries, a higher percentage allocation to fixed income securities is required. In others, the responsibility for managing the investments typically lies with a board that may include up to 50 percent of members elected by employees and retirees. This can result in slight differences compared to the strategies described above. Generally, these non-U.S. funds are not permitted to invest in liquid assets, such as private equities, and their use of derivatives is usually limited to passive currency hedging.

Equity securities include IBM common stock in the amounts of \$2,144 million (5.1 percent of total PPP plan assets at December 31, 2003) and \$2,006 million (5.4 percent of total PPP plan assets at December 31, 2002).

### EXPECTED CONTRIBUTIONS

In 2004, the company expects to contribute to its non-U.S. plans in an amount that is equal to or greater than such contributions in 2003 (\$542 million). The legally mandated minimum contributions to the company's non-U.S. plans are expected to be \$220 million. Depending upon market conditions, the company may elect to contribute to the qualified portion of the PPP.

### NONPENSION POSTRETIREMENT BENEFITS

The total cost of the company's nonpension postretirement benefits for the years ended December 31, 2003, 2002 and 2001, was \$335 million, \$353 million and \$404 million, respectively. The company has a defined benefit postretirement plan that provides medical and dental benefits as well as life insurance for U.S. retirees and eligible dependents. The total cost of this plan for the years ended December 31, 2003, 2002 and 2001, was \$294 million, \$324 million and \$376 million, respectively. The changes in the benefit obligation and plan assets for this plan are presented on page 116. Effective July 1, 1999, the company established a "Future Health Account" (FHA) 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 benefit arrangements. Under either the FHA or the prior retirees health benefit arrangements, there is a maximum cost to the company for retiree health benefits. For employees who retired before January 1, 1992, that maximum became effective in 2001. For all other employees, the maximum is effective upon retirement. Effective January 1, 2004, the company



## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

amended its postretirement plan to provide that new hires will no longer be eligible for company-subsidized benefits.

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, 2003, 2002 and 2001, was \$41 million, \$29 million and \$28 million, respectively. At December 31, 2003 and 2002, Other liabilities in the Consolidated Statement of Financial Position include non-U.S. postretirement benefit liabilities of \$270 million and \$211 million, respectively.

The net periodic postretirement benefit cost for the U.S. plan includes the following components:

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
Service cost	\$ 36	\$ 49	\$ 65
Interest cost	382	421	437
Amortization of prior service costs	(130)	(147)	(148)
Recognized actuarial losses	6	30	22
Divestiture	—	(29)	—
Net periodic post-retirement benefit cost	\$ 294	\$ 324	\$ 376

The changes in the benefit obligation and plan assets of the U.S. plan for 2003 and 2002 are as follows:

(dollars in millions)

	2003	2002
Change in benefit obligation:		
Benefit obligation at beginning of year	\$ 5,882	\$ 6,148
Service cost	36	49
Interest cost	382	421
Actuarial losses/(gains)	419	(170)
Direct benefit payments	(538)	(566)
Benefit obligation at end of year	6,181	5,882
Change in plan assets:		
Fair value of plan assets at beginning of year	10	8
Actual return on plan assets	—	2
Participant contributions	153	119
Benefits paid from trust	(149)	(119)
Fair value of plan assets at end of year	14	10
Benefit obligation in excess of plan assets	(6,167)	(5,872)
Unrecognized net actuarial losses	1,004	595
Unrecognized prior service costs	(363)	(493)
Accrued postretirement benefit liability recognized in the Consolidated Statement of Financial Position	\$ (5,526)	\$ (5,770)

The BO 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.

WEIGHTED-AVERAGE DISCOUNT RATE ASSUMPTIONS USED TO DETERMINE:	2003	2002	2001
The year-end benefit obligation at December 31	6.0%	6.75%	7.0%
The net periodic post-retirement benefit costs for years ended December 31	6.75%	7.0%	7.25%

For the years ended December 31, 2003, 2002 and 2001, the plan assets of \$14 million, \$10 million and \$8 million invested in short-term highly liquid securities, and as a result, the expected long-term return on plan assets and the actual return on those assets were not material for those years.

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, 2003, 2002 and 2001.

ASSUMED HEALTH CARE COST TREND RATES AT DECEMBER 31:	2003	2002
Health care cost trend rate assumed for next year	8.9%	10.0%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)	4.5%	4.5%
Number of years to ultimate trend rate	4	5

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 as of December 31, 2003:

(dollars in millions)

	ONE-PERCENTAGE-POINT INCREASE	ONE-PERCENTAGE-POINT DECREASE
Effect on total service and interest cost	\$ 1	\$ (1)
Effect on postretirement benefit obligation	\$ 6	\$ (7)

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## PLAN ASSETS

The company's nonpension postretirement benefit plan assets at December 31, 2003 and 2002 are comprised of short-term fixed-income investments.

This plan is not funded. The company makes payments from company funds as they become due and also maintains a nominal, highly liquid fund balance to ensure payments are made timely.

## RECENTLY ENACTED LEGISLATION

The Medicare Prescription Drug Improvement and Modernization Act of 2003 (the Act) was signed into law on December 8, 2003. The Act introduces a prescription drug benefit under Medicare (Medicare Part D) as well as a federal subsidy to sponsors of retiree health care benefit plans that provide a prescription drug benefit that is at least actuarially equivalent to Medicare Part D.

SFAS No. 106, requires presently enacted changes in relevant laws to be considered in current period measurements of postretirement benefit costs and the BO. See page 116 for the BO and cost of the company's U.S. nonpension postretirement benefit plan.

In accordance with FSP FAS 106-1, "Accounting and Disclosure Requirements Related to the Medicare Prescription Drug, Improvement and Modernization Act of 2003," any measures of the BO or net periodic postretirement benefit cost in the Consolidated Financial Statements or accompanying notes do not reflect the effects of the Act on the company's postretirement health care plan.

The method of determining whether a sponsor's plan will qualify for actuarial equivalency is pending until the U.S. Department of Health and Human Services (HHS) completes its interpretative work on the Act. Once the interpretative guidance is released by HHS and the FASB releases its authoritative guidance on the appropriate method of accounting for the subsidy, if eligible, the company could be required to account for the subsidy (or a portion thereof) in previously released financial statements. The FASB has not finalized the accounting for the subsidy nor has it determined its transition provisions.

## X

## SEGMENT INFORMATION

IBM uses business insight and its portfolio of IT capabilities to create client solutions. The company operates primarily in a single industry using several segments that create value by offering solutions that include, either singularly or in some combination, services, software, hardware and financing.

Organizationally, the company's major operations comprise a Global Services segment; a Software segment; three hardware product segments — Systems Group, Personal Systems Group and Technology Group; a Global Financing

segment; and an Enterprise Investments segment. The segments are determined based on several factors, including client base, homogeneity of products, technology and delivery channels.

Information about each segment's business and the products and services that generate each segment's revenue is located in the "Description of Business" section of the Management Discussion on page 48 and pages 55 to 57.

In 2003, the company renamed all of its hardware segments without changing the organization of these segments. The Enterprise Systems segment was renamed the Systems Group segment, the Personal and Printing Systems segment was renamed the Personal Systems Group segment and the Technology segment was renamed the Technology Group segment.

Due to the 2002 sale of the HDD business as described in note C, "Acquisitions/Divestitures," on page 92 and consistent with the "Basis of Presentation" discussed in note A, "Significant Accounting Policies," on page 80, the income statement and cash flow statement information for the Technology Group segment has been reclassified to exclude or to separate the results of the discontinued HDD business.

Segment revenue and pre-tax income include transactions between the segments that are intended to reflect an arm's-length transfer price. Specifically, semiconductors are sourced internally from the Technology Group segment for use in the manufacture of the Systems Group segment and Personal Systems Group segment products. In addition, hardware and software that are used by the Global Services segment in outsourcing engagements are mostly sourced internally from the Systems Group, Personal Systems Group and Software segments. For the internal use of IT 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 services 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 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,

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

certain IP income, miscellaneous tax items, pre-divestiture HDD internal activity from continuing operations and the unallocated corporate expense pool are recorded in net income but are not allocated to the segments.

Over recent years, the company has been developing and enhancing a “one team” approach to the collaboration between the Systems Group and Technology Group. This relationship is crucial given the core technology of the Systems Group products are a key competitive differentiator for the company. The degree of this collaboration has increased whereby in 2004, the company is managing these groups as one. Accordingly, in the first quarter of 2004, the company combined the two segments into one reporting segment. The new Systems and Technology Group segment will generate one consolidated set of financial results, which

senior management will use for joint strategy, budgets, and resource allocation decisions, as well as performance and compensation scoring.

The following tables reflect the results of continuing operations of the segments consistent with the company’s management system. These results are not necessarily a depiction that is in conformity with GAAP; e.g., employee retirement plan costs are developed using actuarial assumptions on a country-by-country basis and allocated to the segments based 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.

## MANAGEMENT SYSTEM SEGMENT VIEW

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	HARDWARE						GLOBAL FINANCING	ENTERPRISE INVESTMENTS	TOTAL SEGMENTS
	GLOBAL SERVICES	SYSTEMS GROUP	PERSONAL SYSTEMS GROUP	TECHNOLOGY GROUP	SOFTWARE				
<i>2003:</i>									
External revenue	\$ 42,635	\$ 14,002	\$ 11,387	\$ 2,871	\$ 14,311	\$ 2,827	\$ 1,065	\$ 89,098	
Internal revenue	2,837	837	171	805	1,613	1,300	5	7,568	
Total revenue	\$ 45,472	\$ 14,839	\$ 11,558	\$ 3,676	\$ 15,924	\$ 4,127	\$ 1,070	\$ 96,666	
Pre-tax income/(loss)	\$ 4,499	\$ 2,046	\$ (118)	\$ (252)	\$ 3,808	\$ 1,182	\$ (252)	\$ 10,913	
Revenue year-to-year change	16.0%	11.5%	3.3%	(23.6)%	11.4%	(0.4)%	4.3%	9.9%	
Pre-tax income year-to-year change	23.0%	31.1%	(307.0)%	76.2%	7.1%	23.8%	14.0%	29.4%	
Pre-tax income margin	9.9%	13.8%	(1.0)%	(6.9)%	23.9%	28.6%	(23.6)%	11.3%	
<i>2002:</i>									
External revenue	\$ 36,360	\$ 12,646	\$ 11,049	\$ 3,935	\$ 13,074	\$ 3,203	\$ 1,022	\$ 81,289	
Internal revenue	2,854	659	139	877	1,225	939	4	6,697	
Total revenue	\$ 39,214	\$ 13,305	\$ 11,188	\$ 4,812	\$ 14,299	\$ 4,142	\$ 1,026	\$ 87,986	
Pre-tax income/(loss)	\$ 3,657	\$ 1,561	\$ 57	\$ (1,057)	\$ 3,556	\$ 955	\$ (293)	\$ 8,436	
Revenue year-to-year change	4.3%	(7.9)%	(7.2)%	(27.1)%	2.7%	(2.4)%	(8.6)%	(2.2)%	
Pre-tax income year-to-year change	(29.1)%	(14.7)%	137.3%	(697.2)%	12.2%	(16.4)%	7.6%	(23.4)%	
Pre-tax income margin	9.3%	11.7%	0.5%	(22.0)%	24.9%	23.1%	(28.6)%	9.6%	
<i>2001:</i>									
External revenue	\$ 34,956	\$ 13,743	\$ 11,982	\$ 5,149	\$ 12,939	\$ 3,407	\$ 1,118	\$ 83,294	
Internal revenue	2,647	710	73	1,451	981	836	4	6,702	
Total revenue	\$ 37,603	\$ 14,453	\$ 12,055	\$ 6,600	\$ 13,920	\$ 4,243	\$ 1,122	\$ 89,996	
Pre-tax income/(loss)	\$ 5,161	\$ 1,830	\$ (153)	\$ 177	\$ 3,168	\$ 1,143	\$ (317)	\$ 11,009	
Revenue year-to-year change	5.7%	(2.6)%	(20.5)%	(8.0)%	3.7%	(4.5)%	(18.2)%	(2.2)%	
Pre-tax income year-to-year change	14.3%	(4.8)%	(251.5)%	(74.6)%	13.4%	(2.8)%	(6.7)%	0.9%	
Pre-tax income margin	13.7%	12.7%	(1.3)%	2.7%	22.8%	26.9%	(28.3)%	12.2%	

## Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

### Reconciliations to IBM as Reported

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
<i>Revenue:</i>			
Total reportable segments	\$ 96,666	\$ 87,986	\$ 89,996
Other revenue and adjustments	33	(103)	(227)
Elimination of internal revenue	(7,568)	(6,697)	(6,702)
<b>Total IBM consolidated</b>	<b>\$ 89,131</b>	<b>\$ 81,186</b>	<b>\$ 83,067</b>

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	2003	2002	2001
<i>Pre-Tax Income:</i>			
Total reportable segments	\$ 10,913	\$ 8,436	\$ 11,009
Elimination of internal transactions	(55)	(164)	108
Unallocated corporate amounts	16	(748)	333
<b>Total IBM consolidated</b>	<b>\$ 10,874</b>	<b>\$ 7,524</b>	<b>\$ 11,450</b>

### 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 material 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, goodwill, maintenance inventory, and plant, property and equipment including those associated with the segment's outsourcing business. The Software segment assets mainly are

goodwill, plant, property and equipment, and investment in capitalized software. The assets of the Hardware segments primarily are inventory and plant, property and equipment. The assets of the Global Financing segment are primarily financing receivables and fixed assets under operating leases.

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 120. 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 120 for Interest income and Cost of Global Financing interest expense reflect the interest income and interest expense associated with the Global Financing business, including the intercompany financing activities discussed on page 69 as well as the income from the investment in cash and marketable securities. The explanation of the difference between Cost of Global Financing and Interest expense for segment presentation versus presentation in the Consolidated Statement of Earnings is included on page 73 of the Management Discussion.



# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## MANAGEMENT SYSTEM SEGMENT VIEW

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	HARDWARE					SOFTWARE	GLOBAL FINANCING	ENTERPRISE INVESTMENTS	TOTAL SEGMENTS
	GLOBAL SERVICES	SYSTEMS GROUP	PERSONAL SYSTEMS GROUP	TECHNOLOGY GROUP					
<b>2003:</b>									
Assets	\$ 16,683	\$ 2,916	\$ 1,894	\$ 5,852	\$ 5,017	\$ 35,916	\$ 69	\$ 68,347	
Depreciation/amortization:									
Continuing operations	1,487	344	95	766	883	2,160	7	5,742	
Discontinued operations	—	—	—	10	—	—	—	10	
Capital expenditures/ investment in software:									
Continuing operations	1,753	301	109	940	691	2,318	6	6,118	
Discontinued operations	—	—	—	5	—	—	—	5	
Interest income	—	—	—	—	—	2,349	—	2,349	
Interest expense	—	—	—	—	—	653	—	653	
<b>2002:</b>									
Assets	\$ 14,462	\$ 3,124	\$ 1,776	\$ 5,771	\$ 3,361	\$ 35,242	\$ 88	\$ 63,824	
Depreciation/amortization:									
Continuing operations	1,213	335	116	1,167	809	2,413	8	6,061	
Discontinued operations	—	—	—	617	—	—	—	617	
Capital expenditures/ investment in software:									
Continuing operations	1,294	307	96	1,365	687	2,561	9	6,319	
Discontinued operations	—	—	—	323	—	—	—	323	
Interest income	—	—	—	—	—	2,703	—	2,703	
Interest expense	—	—	—	—	—	825	—	825	
<b>2001:</b>									
Assets	\$ 10,340	\$ 3,208	\$ 1,904	\$ 9,136	\$ 3,356	\$ 36,670	\$ 106	\$ 64,720	
Depreciation/amortization:									
Continuing operations	1,219	308	131	676	782	2,476	8	5,600	
Discontinued operations	—	—	—	429	—	—	—	429	
Capital expenditures/ investment in software:									
Continuing operations	1,519	390	128	1,495	839	3,143	7	7,521	
Discontinued operations	—	—	—	360	—	—	—	360	
Interest income	—	—	—	—	—	2,941	—	2,941	
Interest expense	—	—	—	—	—	1,140	—	1,140	

# Notes to Consolidated Financial Statements

INTERNATIONAL BUSINESS MACHINES CORPORATION AND SUBSIDIARY COMPANIES

## Reconciliations to IBM as Reported

(dollars in millions)

AT DECEMBER 31:	2003	2002	2001
Assets:			
Total reportable segments	\$ 68,347	\$ 63,824	\$ 64,720
Elimination of internal transactions	(5,613)	(5,061)	(4,884)
Unallocated amounts:			
Cash and marketable securities	6,523	4,568	5,313
Notes and accounts receivable	3,334	3,553	2,810
Deferred tax assets	6,486	6,631	4,624
Plant, other property and equipment	3,380	3,239	3,260
Pension assets	18,416	15,996	11,398
Other	3,584	3,734	3,062
<b>Total IBM consolidated</b>	<b>\$ 104,457</b>	<b>\$ 96,484</b>	<b>\$ 90,303</b>

## REVENUE BY CLASSES OF SIMILAR PRODUCTS OR SERVICES

For the Personal Systems Group, Software and Global Financing segments, the segment data on page 118 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 Group, Systems Group, Global Services and Enterprise Investments segments. The Technology Group segment's OEM hardware comprises revenue primarily from the sale of semiconductors and display devices. Technology services comprise the Technology Group's circuit design business for its OEM clients, as well as the component design services, strategic

outsourcing of client's design team work, and technology and manufacturing consulting services associated with the Engineering & Technology Services Division. The Systems Group segment's storage comprises revenue from the Enterprise Storage Server, other disk storage products and tape subsystems. Enterprise Investments software revenue is primarily from product life-cycle management products. The following table is presented on a continuing operations basis.

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	CONSOLIDATED		
	2003	2002	2001
Technology Group:			
OEM	\$ 2,546	\$ 3,612	\$ 4,805
Technology services	325	323	344
Systems Group:			
Servers	\$ 11,148	\$ 10,047	\$ 10,947
Storage	2,849	2,581	2,755
Networking products	5	18	41
Global Services:			
Services	\$ 37,178	\$ 31,290	\$ 29,953
Maintenance	5,457	5,070	5,003
Enterprise Investments:			
Software	\$ 981	\$ 916	\$ 913
Hardware	72	95	181
Others	12	11	24

## MAJOR CLIENTS

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

## GEOGRAPHIC INFORMATION

(dollars in millions)

FOR THE YEAR ENDED DECEMBER 31:	REVENUE*			LONG-LIVED ASSETS***		
	2003	2002	2001	2003	2002**	2001**
United States	\$ 33,762	\$ 32,759	\$ 34,233	\$ 29,594	\$ 27,819	\$ 22,658
Japan	11,694	10,939	11,512	2,738	2,814	4,034
Other countries	43,675	37,488	37,322	16,373	13,027	11,560
<b>Total</b>	<b>\$ 89,131</b>	<b>\$ 81,186</b>	<b>\$ 83,067</b>	<b>\$ 48,705</b>	<b>\$ 43,660</b>	<b>\$ 38,252</b>

\* Revenues are attributed to countries based on location of client and are for continuing operations.

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

+ At December 31.

\*\*+ Reclassified to conform with 2003 presentation.

## FIVE-YEAR COMPARISON OF SELECTED FINANCIAL DATA

(dollars in millions except per share amounts)

FOR THE YEAR:	2003	2002	2001	2000	1999
Revenue	\$ 89,131	\$ 81,186	\$ 83,067	\$ 85,089	\$ 83,334
Income from continuing operations	7,613	5,334	8,146	7,874	7,359
(Loss)/income from discontinued operations	(30)	(1,755)	(423)	219	353
Net income	7,583	3,579	7,723	8,093	7,712
Earnings/(loss) per share of common stock:					
Assuming dilution:					
Continuing operations	4.34	3.07	4.59	4.32	3.93
Discontinued operations	(0.02)	(1.01)	(0.24)	0.12	0.19
Total	4.32	2.06	4.35	4.44	4.12
Basic:					
Continuing operations	4.42	3.13	4.69	4.45	4.06
Discontinued operations	(0.02)	(1.03)	(0.24)	0.12	0.20
Total	4.40	2.10	4.45	4.58*	4.25*
Cash dividends paid on common stock	1,085	1,005	956	909	859
Per share of common stock	0.63	0.59	0.55	0.51	0.47
Investment in plant, rental machines and other property	4,398	5,022	5,660	5,616	5,959
Return on stockholders' equity	29.9%	15.5%	35.3%	40.0%	39.1%
AT END OF YEAR:					
Total assets	\$ 104,457	\$ 96,484	\$ 90,303	\$ 90,412	\$ 89,571
Net investment in plant, rental machines and other property	14,689	14,440	16,504	16,714	17,590
Working capital**	7,098	7,502	7,484	7,474	3,577
Total debt	23,632	26,017	27,151	28,576	28,354
Stockholders' equity	27,864	22,782	23,448	20,550	20,426

\* Does not total due to rounding.

\*\* Prior years reclassified to conform with 2003 presentation.

## SELECTED QUARTERLY DATA

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

	FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER	FULL YEAR
<b>2003:</b>					
Revenue	\$ 20,065	\$ 21,631	\$ 21,522	\$ 25,913	\$ 89,131
Gross profit	7,233	7,998	7,812	9,975	33,018
Income from continuing operations	1,387	1,725	1,785	2,716	7,613
Loss from discontinued operations	3	20	—	7	30
Net income	1,384	1,705	1,785	2,709	7,583
Earnings/(loss) per share of common stock:					
Assuming dilution:					
Continuing operations	0.79	0.98	1.02	1.56	4.34**
Discontinued operations	—	(0.01)	—	—	(0.02)**
Total	0.79	0.97	1.02	1.55 <sup>+</sup>	4.32**
Basic:					
Continuing operations	0.80	1.00	1.04	1.59	4.42**
Discontinued operations	—	(0.01)	—	—	(0.02)**
Total	0.80	0.99	1.04	1.59	4.40**
Dividends per share of common stock	0.15	0.16	0.16	0.16	0.63
Stock prices: <sup>++</sup>					
High	\$ 88.95	\$ 90.40	\$ 93.47	\$ 94.54	
Low	73.17	78.12	78.73	87.53	
<b>2002:</b>					
Revenue	\$ 18,030	\$ 19,651	\$ 19,821	\$ 23,684	\$ 81,186
Gross profit	6,500	7,270	7,323	9,191	30,284
Income from continuing operations	1,284	445*	1,694	1,911*	5,334
Loss from discontinued operations	92	389	381	893	1,755
Net income	1,192	56	1,313	1,018	3,579
Earnings/(loss) per share of common stock:					
Assuming dilution:					
Continuing operations	0.73	0.25	0.99	1.11	3.07**
Discontinued operations	(0.05)	(0.22)	(0.22)	(0.52)	(1.01)
Total	0.68	0.03	0.76 <sup>+</sup>	0.59	2.06
Basic:					
Continuing operations	0.75	0.26	1.00	1.12	3.13
Discontinued operations	(0.05)	(0.23)	(0.23)	(0.53)	(1.03)**
Total	0.69 <sup>+</sup>	0.03	0.78 <sup>+</sup>	0.60 <sup>+</sup>	2.10
Dividends per share of common stock	0.14	0.15	0.15	0.15	0.59
Stock prices: <sup>++</sup>					
High	\$ 126.39	\$ 104.00	\$ 82.85	\$ 89.46	
Low	95.76	66.10	57.99	54.01	

\* The company executed special actions in the second and fourth quarter of 2002 recording charges of \$1,727 million and \$322 million, respectively. See note S, "2002 Actions," on pages 105 through 107 for additional information regarding these actions.

\*\* 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.

<sup>+</sup> Does not total due to rounding.

<sup>++</sup> 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.

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*\* Retiring effective April 27, 2004*

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### IBM STOCKHOLDER SERVICES

Stockholders with questions about their accounts should contact:  
EquiServe Trust Company, N.A.  
P.O. Box 43072  
Providence, Rhode Island 02940-3072  
(888) IBM-6700

Investors residing outside the United States, Canada and Puerto Rico should call (781) 575-2727.

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 (781) 575-2694.

### IBM ON THE INTERNET

Topics featured in this Annual Report can be found via the IBM home page on the Internet ([www.ibm.com](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 ([www.ibm.com/investor](http://www.ibm.com/investor)).

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

IBM files reports with the Securities and Exchange Commission (SEC), including annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any other filings required by the SEC. Certifications by IBM's Chief Executive Officer and Chief Financial Officer are included in SEC reports as required.

IBM's website ([www.ibm.com](http://www.ibm.com)) contains a significant amount of information about IBM, including our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC ([www.ibm.com/investor](http://www.ibm.com/investor)). These materials are available free of charge on or through our website.

IBM's website also includes our Corporate Governance Guidelines and the charters for our Audit Committee, Executive Compensation and Management Resources Committee, and Directors and Corporate Governance Committee ([www.ibm.com/investor/corporategovernance](http://www.ibm.com/investor/corporategovernance)). In addition, our website contains IBM's Business Conduct Guidelines (BCGs), which is our code of business conduct and ethics for our directors, executive officers and employees. Any amendment to our BCGs that applies to our directors or executive officers will be disclosed on IBM's website, and any waiver of the BCGs for directors or executive officers may be made only by the IBM Board of Directors or a Board committee and will be disclosed on IBM's website. These materials are also available in print to any stockholder who requests them.

The public may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 450 Fifth Street, NW, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at (800) SEC-0330. The SEC maintains an Internet site ([www.sec.gov](http://www.sec.gov)) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

### IBM INVESTOR SERVICES PROGRAM

The Investor Services Program brochure outlines a number of services provided for IBM stockholders and potential IBM investors, including the reinvestment of dividends, direct purchase and the deposit of IBM stock certificates for safekeeping. Call (888) 421-8860 for a copy of the brochure. Investors residing outside the United States, Canada and Puerto Rico should call (781) 575-2727.

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 and 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 27, 2004, at 10 a.m. at the Rhode Island Convention Center, One Sabin Street, Providence, Rhode Island.

### 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:  
EquiServe Trust Company, N.A.  
P.O. Box 43072  
Providence, Rhode Island 02940-3072  
(888) IBM-6700

Investors residing outside the United States, Canada and Puerto Rico should call (781) 575-2727.

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 2003 Annual Report will be available for sight-impaired stockholders in June.

"What is the value of a company? IBM Corporate Responsibility Report" reports on IBM's community relations programs and employee programs, its commitment to improving education, the company's corporate governance and management system, its health and safety programs, environmental and energy priorities, and the importance for IBM of diversity in the workplace and the 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

International Business Machines Corporation  
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