UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Form 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended November 29, 2002

Commission File Number: 001-14965

The Goldman Sachs Group, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 13-4019460 (I.R.S. employer identification no.) 10004

(Zip Code)

85 Broad Street New York, N.Y. (Address of principal executive offices)

T111 - - **(** - - - **b** - -

(212) 902-1000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class:	Name of each exchange on which registered:
Common stock, par value \$.01 per share, and attached Shareholder Protection Rights	New York Stock Exchange
 Medium-Term Notes, Series B, 0.25% Exchangeable Notes due 2007; Index-Linked Notes due 2004; 1% Exchangeable Notes due 2007; 0.75% Exchangeable Notes due 2005; 1% Exchangeable Basket-Linked Notes due 2007; 0.25% Exchangeable Equity-Linked Notes due November 1, 2005; 0.25% Exchangeable Equity- Linked Notes due November 7, 2005; and 0.50% Exchangeable Equity-Linked Notes due 2007 	American Stock Exchange
Medium-Term Notes, Series B, 2.00% Exchangeable Notes due 2006; 7.35% Notes due 2009; 7.50% Notes due 2005; 7.80% Notes due 2010; and Floating Rate Notes due 2005	New York Stock Exchange
Medium-Term Notes, Series B, Callable Index- Linked Notes due December 2, 2003	Chicago Board Options Exchange
Securities registered pursuant to Section	12(g) of the Act: None

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes \boxtimes No \square

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes \boxtimes No \square

As of May 31, 2002, the aggregate market value of the common stock of the registrant held by non-affiliates of the registrant was approximately \$32 billion.

As of January 31, 2003, there were 471,946,312 shares of the registrant's common stock outstanding.

Documents incorporated by reference: Portions of The Goldman Sachs Group, Inc.'s 2002 Annual Report to Shareholders are incorporated by reference in this Form 10-K in response to Part II, Items 5, 6, 7, 7A and 8, and Part IV, Item 15. Portions of The Goldman Sachs Group, Inc.'s Proxy Statement dated February 27, 2003, for its 2003 Annual Meeting of Shareholders to be held on April 1, 2003, are incorporated by reference in this Form 10-K in response to Part II, Item 5 and Part III, Items 10, 11, 12 and 13.

THE GOLDMAN SACHS GROUP, INC.

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PART I

Item 1. Business

Overview

Goldman Sachs is a leading global investment banking, securities and investment management firm that provides a wide range of services worldwide to a substantial and diversified client base. As of November 29, 2002, we operated offices in over 20 countries and approximately 37% of our 19,739 employees were based outside the United States.

Goldman Sachs is the successor to a commercial paper business founded in 1869 by Marcus Goldman. On May 7, 1999, we converted from a partnership to a corporation and completed an initial public offering of our common stock.

All references to 2002, 2001 and 2000 refer to our fiscal year ended, or the date, as the context requires, November 29, 2002, November 30, 2001 and November 24, 2000, respectively.

When we use the terms "Goldman Sachs," "we," "us" and "our," we mean The Goldman Sachs Group, Inc., a Delaware corporation, and its consolidated subsidiaries.

Financial information concerning our business segments and geographic regions for each of 2002, 2001 and 2000 is set forth in "Management's Discussion and Analysis," and the consolidated financial statements and the notes thereto, in our 2002 Annual Report to Shareholders, which are incorporated by reference in Part II, Items 5, 6, 7, 7A and 8 of this Annual Report on Form 10-K.

Our Internet address is *www.gs.com* and the investor relations section of our web site is located at *www.gs.com/investor_relations*. We make available free of charge, on or through the investor relations section of our web site, annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission. Also posted on our web site are our charters for our Audit Committee, Compensation Committee and Corporate Governance and Nominating Committee, as well as Corporate Governance Guidelines and a Code of Business Conduct and Ethics governing our directors, officers and employees. Within the time period required by the SEC, we will post on our web site any amendment to such Code and any waiver applicable to our senior financial officers, as defined in the Code. In addition, information concerning purchases and sales of our equity securities by our executive officers and directors is posted on our web site.

Business Segments

Our activities are divided into three segments:

- Investment Banking;
- · Trading and Principal Investments; and
- Asset Management and Securities Services.

Our Investment Banking and Trading and Principal Investments activities were previously aggregated into one reporting segment — Global Capital Markets.

The following table sets forth the net revenues, operating expenses and pre-tax earnings of our segments:

Operating Results by Segment (in millions)

	Year Ended November		
	2002	2001	2000
Investment Banking			
Net revenues	\$ 2,830	\$ 3,836	\$ 5,371
Operating expenses	2,454	3,117	3,645
Pre-tax earnings	\$ 376	<u>\$719</u>	\$ 1,726
Trading and Principal Investments			
Net revenues	\$ 5,249	\$ 6,349	\$ 6,627
Operating expenses	4,273	5,134	4,199
Pre-tax earnings	\$ 976	\$ 1,215	\$ 2,428
Asset Management and Securities Services			
Net revenues	\$ 5,907	\$ 5,626	\$ 4,592
Operating expenses	3,794	3,501	3,008
Pre-tax earnings	\$ 2,113	\$ 2,125	\$ 1,584
Total			
Net revenues	\$13,986	\$15,811	\$16,590
Operating expenses(1)	10,733	12,115	11,570
Pre-tax earnings	\$ 3,253	\$ 3,696	\$ 5,020

Includes the following expenses that have not been allocated to our segments: (i) amortization of employee initial public offering awards of \$212 million, \$363 million and \$428 million for the years ended November 2002, November 2001 and November 2000, respectively, and (ii) nonrecurring acquisition awards of \$290 million related to our combination with Spear, Leeds & Kellogg for the year ended November 2000.

These segments consist of various product and service offerings that are set forth in the following chart:

Investment Banking	Trading and Principal Investments	Asset Management and Securities Services
 Equity and debt underwriting Financial restructuring advisory services Mergers and acquisitions advisory services 	 Commodities and commodity derivatives Credit products, including investment-grade corporate securities, high-yield securities, bank loans, municipal securities, credit derivatives and emerging market debt Currencies and currency derivatives Interest rate products, including interest rate derivatives and global government securities Money market instruments Mortgage-backed securities and loans Principal investments Proprietary trading Specialist and market maker in securities and options Spreads received on, and proprietary positions in, equity securities and derivatives 	 Commissions received on equity securities and derivatives Increased share of merchant banking fund income and gains Institutional and high-networth asset management Margin lending Matched book Merchant banking management fees Mutual funds Prime brokerage Securities lending Securities, futures and options clearing services

Primary Products and Activities by Business Segment

Investment Banking

Investment Banking represented 20% of 2002 net revenues. We provide a broad range of investment banking services to a diverse group of corporations, financial institutions, governments and individuals and seek to develop and maintain long-term relationships with these clients as their lead investment bank.

Our current structure, which is organized by regional, industry and product groups, seeks to combine client-focused investment bankers with execution and industry expertise. Because our businesses are global, we have adapted our organization to meet the demands of our clients in each geographic region. Through our commitment to teamwork, we believe that we provide services in an integrated fashion for the benefit of our clients.

Our investment banking activities are divided into two categories:

• *Financial Advisory.* Financial Advisory includes advisory assignments with respect to mergers and acquisitions, divestitures, corporate defense activities, restructurings and spin-offs; and

• **Underwriting.** Underwriting includes public offerings and private placements of equity and debt securities.

Financial Advisory

Goldman Sachs is a leading investment bank in worldwide mergers and acquisitions. Our mergers and acquisitions capabilities are evidenced by our significant share of assignments in large, complex transactions for which we provide multiple services, including "one-stop" acquisition financing and cross-border structuring expertise as well as services in other areas of the firm, such as currency hedging.

Underwriting

We underwrite a wide range of securities and other instruments, including common and preferred stock, convertible and exchangeable securities, investment-grade debt, high-yield debt, sovereign and emerging market debt, municipal debt, bank loans, asset-backed securities and real estate-related securities, such as mortgage-backed securities and the securities of real estate investment trusts.

Equity Underwriting. Equity underwriting has been a long-term core strength of Goldman Sachs. As with mergers and acquisitions, we have been particularly successful in winning mandates for large, complex equity underwritings. We believe our leadership in worldwide initial public offerings and worldwide public common stock offerings reflects our expertise in complex transactions, track record and distribution capabilities.

We believe that a key factor in our equity underwriting success is the close working relationship among the investment bankers, sales force and others as coordinated by our Equity Capital Markets group. With institutional sales professionals and high-net-worth relationship managers located in every major market around the world, Goldman Sachs has relationships with a large and diverse group of investors.

Debt Underwriting. We engage in the underwriting and origination of various types of debt instruments including:

- investment-grade debt;
- · high-yield debt and bank loans for non-investment-grade issuers;
- · emerging market debt, which includes corporate and sovereign issues; and
- structured securities, including asset-backed and mortgage-backed securities and collateralized debt obligations.

We have employed a focused approach in debt underwriting, emphasizing high value-added areas in servicing our clients.

Trading and Principal Investments

Trading and Principal Investments represented 38% of 2002 net revenues. Our Trading and Principal Investments business facilitates customer transactions with a diverse group of corporations, financial institutions, governments and individuals and takes proprietary positions through market making in, and trading of, fixed income and equity products, currencies, commodities, and swaps and other derivatives. In addition, we engage in floor-based and electronic market making as a specialist on U.S. equities and options exchanges. In order to meet the needs of our clients, our Trading and Principal Investments business is diversified across a wide range of products. We believe our willingness and ability to take risk distinguishes us from many of our competitors and substantially enhances our client relationships.

Trading and Principal Investments is divided into three categories:

- Fixed Income, Currency and Commodities. We make markets in and trade interest rate and credit products, currencies and commodities, structure and enter into a wide variety of derivative transactions, and engage in proprietary trading;
- Equities. We make markets in, act as a specialist for, and trade equities and equityrelated products, structure and enter into equity derivative transactions, and engage in proprietary trading; and
- Principal Investments. Principal Investments primarily represents net revenues from our merchant banking investments.

Fixed Income, Currency and Commodities

FICC is a large and diversified operation through which we engage in a variety of customerdriven market making and proprietary trading activities. FICC's principal product areas are:

- · Commodities and commodity derivatives;
- Credit products, including investment-grade corporate securities, high-yield securities, bank loans, municipal securities, credit derivatives and emerging market debt;
- · Currencies and currency derivatives;
- Interest rate products, including interest rate derivatives and global government securities;
- · Money market instruments; and
- Mortgage-backed securities and loans.

We generate trading net revenues from our customer-driven business in three ways. First, in large, highly liquid markets, we undertake a high volume of transactions for modest spreads. Second, by capitalizing on our strong market relationships and capital position, we also undertake transactions in less liquid markets where spreads are generally larger. Finally, we generate net revenues from structuring and executing transactions that address complex client needs.

In its customer-driven business, FICC strives to deliver high-quality service by offering broad market-making, research and market knowledge to our clients on a global basis and by creating innovative solutions to complex client problems by drawing upon our structuring and trading expertise. In addition, we use our expertise to take positions in markets to facilitate customer transactions.

In our proprietary activities, we assume a variety of risks and devote resources to identify, analyze and benefit from these exposures. We leverage our strong research capabilities and capitalize on our proprietary analytical models to analyze information and make informed trading judgments. We seek to benefit from perceived disparities in the value of assets in the trading markets and from macroeconomic and company-specific trends.

A core activity in FICC is market making in a broad array of securities and products. For example, we are a primary dealer in many of the largest government bond markets around the world, including the United States, Japan and the United Kingdom. We are a member of the major futures exchanges, and also have interbank dealer status in the currency markets in New York, London, Tokyo and Hong Kong. Our willingness to make markets in a broad range of fixed income, currency and commodity products and their derivatives is crucial both to our client relationships and to support our underwriting business by providing secondary market liquidity. Our FICC research capabilities include quantitative and qualitative analyses of global economic, currency and financial market trends, as well as credit analyses of corporate and sovereign fixed income securities.

Equities

Goldman Sachs trades equity securities and equity-related products (such as convertible securities, options, futures and over-the-counter (OTC) derivative instruments) on a global basis as an agent, a market maker and on a proprietary basis. As an agent and market maker we facilitate customer transactions, often by committing capital, to provide liquidity to clients with large blocks of stocks or options. In the U.S., we are one of the leading specialists on the New York Stock Exchange and in the listed options market and we are a designated market maker in over 5,000 stocks traded on the Nasdaq Stock Market. Goldman Sachs is a member of most of the world's major stock, futures and options exchanges, including those located in New York, Chicago, London, Paris, Frankfurt, Tokyo and Hong Kong.

We execute transactions in equity securities and derivatives as agents for institutional and individual customers that generate commission revenues. Commissions earned on these transactions are recorded in Asset Management and Securities Services.

In equity trading, as in FICC, we generate net revenues from our customer-driven business in three ways. First, by capitalizing on our strong market relationships and capital position, we undertake large transactions in which we benefit from spreads that are generally larger than in higher volume transactions. For example, Goldman Sachs is active in the execution of large block trades (trades of 50,000 or more shares). Second, in large, highly liquid principal markets, we undertake a high volume of transactions for modest spreads. Finally, we also benefit from structuring complex transactions.

In the listed options and futures markets, we structure, distribute and execute OTC derivatives on market indices, industry groups and individual company stocks to facilitate customer transactions and our proprietary activities. We develop quantitative strategies and render advice with respect to portfolio hedging and restructuring and asset allocation transactions. We also create specially tailored instruments to enable sophisticated investors to undertake hedging strategies and establish or liquidate investment positions. We are one of the leading participants in the trading and development of equity derivative instruments. We are an active participant in the trading of futures and options on most of the major exchanges in the United States, Europe and Asia.

Our proprietary trading businesses utilize a variety of strategies to take advantage of market conditions and events in different regions and markets. These include, among others, relative value trading (which involves trading strategies to take advantage of perceived discrepancies in the relative value of financial instruments, including debt and equity instruments), risk arbitrage (which focuses on event-oriented special situations such as corporate restructurings, recapitalizations, mergers and acquisitions and legal and regulatory events) and statistical arbitrage (which involves trading strategies based on analyses of historical price relationships among sectors of the equities markets).

Trading Risk Management

We believe that our trading and market-making capabilities are key ingredients to our success. While these businesses have generally earned attractive returns, we have in the past incurred significant trading losses in periods of market turbulence, such as in 1994 and the second half of 1998, and in connection with specific significant positions.

Our trading risk management process seeks to balance our ability to profit from trading positions with our exposure to potential losses. As part of this process, we analyze not only market risk but also credit and other financial risks. Risk management includes input from all levels of Goldman Sachs, from the trading desks to the Firmwide Risk Committee. For a further discussion of our risk management policies and procedures, see "Management's Discussion and

Analysis — Risk Management'' in the 2002 Annual Report to Shareholders, which is incorporated by reference in Part II, Items 7 and 7A of this Annual Report on Form 10-K.

In both our customer-driven and proprietary activities in Equities and FICC, we manage our exposure to credit and other financial risks on a global basis across all our products.

Principal Investments

In connection with our merchant banking activities, we invest by making principal investments directly and through funds that we raise and manage. As of November 2002, we managed private investment funds with total equity capital commitments from our clients and from Goldman Sachs of \$37.55 billion, including funded amounts; Goldman Sachs also had outstanding commitments to invest up to \$1.46 billion. The funds' investments generate capital appreciation or depreciation and, upon disposition, realized gains or losses. See "— Asset Management and Securities Services — Asset Management — Merchant Banking" for a discussion of our merchant banking funds. As of November 2002, the aggregate carrying value of our principal investments held directly or through our merchant banking funds was approximately \$1.78 billion, which consisted of corporate principal investments with an aggregate carrying value of approximately \$1.04 billion and real estate investments with an aggregate carrying value of approximately \$744 million.

Asset Management and Securities Services

The components of the Asset Management and Securities Services segment, which represented 42% of 2002 net revenues, are set forth below:

- Asset Management. Asset Management generates management fees by providing investment advisory services to a diverse client base of institutions and individuals;
- Securities Services. Securities Services includes prime brokerage, financing services and securities lending, and our matched book businesses, all of which generate revenues primarily in the form of interest rate spreads or fees; and
- **Commissions.** Commissions includes fees from executing and clearing client transactions on major stock, options and futures markets worldwide. Commissions also includes revenues from the increased share of the income and gains derived from our merchant banking funds when the return on a fund's investments exceeds certain threshold returns (typically referred to as an "override"). For a discussion regarding our increased share of the income and gains from our merchant banking funds, see "— Asset Management Merchant Banking" below.

In January 2002, we began to implement a new fee-based pricing structure in our Nasdaq trading business. Previously we did not charge explicit fees in this business but rather earned market-making revenues based generally on the difference between bid and ask prices. These market-making net revenues are reported in our Equities trading results. As a result of the change to the fee-based pricing structure, a substantial portion of our Nasdaq net revenues is reported in Commissions.

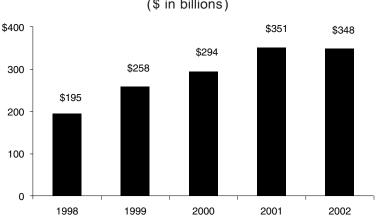
Asset Management

We offer a broad array of investment strategies and advice across all major asset classes: global equity, fixed income (including money markets), currency and alternative investment products (*i.e.*, investment vehicles with non-traditional investment objectives and/or strategies).

Assets under management typically generate fees based on a percentage of their value and include our mutual funds, separate accounts managed for institutional and individual investors, our merchant banking funds and other alternative investment funds. We also earn trading commissions on assets in brokerage accounts of high-net-worth individuals, although the trend in

our private wealth management business has been away from traditional brokerage accounts that generate commission revenue to accounts that pay fees based on the assets under management.

The amount of assets under management is set forth in the graph below. In the following graph, as well as in the following tables, substantially all assets under management are valued as of calendar month-end.



Assets Under Management (\$ in billions)

The following table sets forth assets under management by asset class:

Assets Under	Management by	Asset Class
	(in billions)	

	As of November		
	2002	2001	2000
Asset Class			
Money markets	\$108	\$122	\$ 72
Fixed income and currency	96	71	57
Equity	86	96	107
Alternative investments(1)	58	62	58
Total	\$348	\$351	\$294

(1) Includes merchant banking, quantitative asset allocation and other similar funds that we manage, as well as funds where we recommend one or more subadvisors for our clients.

Clients. Our clients are institutions and high-net-worth individuals as well as retail investors. We access institutional and high-net-worth clients through both direct and third-party channels and retail clients through third-party channels. Our institutional clients include pension funds, governmental organizations, corporations, insurance companies, foundations and endowments. In the third-party distribution channel, we distribute our mutual funds on a worldwide basis through banks, brokerage firms, insurance companies and other financial intermediaries.

The table below sets forth the amount of assets under management by distribution channel and client category as of November 2002:

Assets Under Management by Distribution Channel

(in billions)

	Assets Under Management(1)	Primary Investment Vehicles
 Directly Distributed 		
— Institutional	\$120	Separate managed accounts
— High-net-worth individuals	92	Commingled vehicles Mutual funds Brokerage accounts Private investment funds Separate managed accounts
Third-party distributed	447	
— Institutional and retail	117	Mutual funds
Total	<u>\$329</u>	

(1) Excludes \$19.26 billion in certain of our merchant banking funds.

Merchant Banking. Goldman Sachs has established a successful record in the corporate and real estate merchant banking business, sponsoring private investment funds with \$37.55 billion of committed capital as of November 2002, of which \$24.95 billion has been funded. We have provided a portion of those amounts. See "— Trading and Principal Investments" above. Our clients, including pension plans, endowments, charitable institutions and high-net-worth individuals, have provided the remainder.

Our strategy with respect to our merchant banking funds generally is to invest opportunistically to build a portfolio of investments that is diversified by industry, product type, geographic region and transaction structure and type. Some of these investment funds pursue, on a global basis, long-term investments in equity and debt securities in privately negotiated transactions, leveraged buyouts and acquisitions. As of November 2002, our corporate merchant banking funds had total committed capital of \$25.42 billion. Other funds, with total committed capital of \$12.12 billion as of November 2002, invest in real estate operating companies, debt and equity interests in real estate assets, and other real estate-related investments.

Merchant banking activities generate three revenue streams. First, we receive a management fee that is generally a percentage of a fund's committed capital, invested capital, total gross acquisition cost or asset value. These annual management fees are included in our Asset Management revenues. Second, Goldman Sachs, as a substantial investor in these funds, is allocated its proportionate share of the funds' unrealized appreciation or depreciation arising from changes in fair value as well as gains and losses upon realization. These items are included in our Trading and Principal Investments net revenues. Finally, after the fund has achieved a minimum return for fund investors, we receive an increased share of the fund's income and gains that is a percentage of the income and gains from the fund's investments. Revenues from the increased share of the funds' income and gains are included in Commissions.

Securities Services

Securities Services activities include prime brokerage, financing services and securities lending. We provide these services to a diversified U.S. and international customer base,

including mutual funds, pension funds, hedge funds, foundations, endowments and high-networth individuals. Securities Services also includes our matched book businesses.

We offer prime brokerage services to our clients, allowing them the flexibility to trade with most brokers while maintaining a single source for financing and consolidated portfolio reports. Our prime brokerage activities provide clearing and custody in 50 markets (with revenues from clearing and custody included in Commissions), consolidated multi-currency accounting and reporting and offshore fund administration. Additionally, we provide financing to our clients for their securities trading activities through margin and securities loans that are collateralized by securities, cash or other acceptable collateral held in the client's account.

Securities lending activities principally involve the borrowing and lending of equity securities to cover customer and Goldman Sachs' short sales and otherwise to make deliveries into the market. In addition, we are an active participant in the broker-to-broker securities lending business and the third-party agency lending business.

Commissions

Goldman Sachs generates fees from executing and clearing client transactions on major stock, options and futures markets worldwide. As discussed above, Commissions also includes the increased share of the income and gains derived from our merchant banking funds.

Global Investment Research

Our Global Investment Research Division provides fundamental research on industries and companies, macroeconomics, currencies, commodities and portfolio strategy on a worldwide basis.

Global Investment Research employs a team approach that as of November 2002 provided research coverage of approximately 1,850 companies worldwide, over 50 economies and 25 stock markets. This is accomplished by four groups:

- the Equity Analyst group, which consists of four regional departments, provides fundamental analysis, forecasts and investment opinions for companies and industries worldwide. Equity research analysts are organized regionally by industry team, which allows for extensive collaboration and knowledge sharing among analysts on important investment themes;
- the Economic Research group, which consists of four regional departments, formulates macroeconomic forecasts for economic activity, foreign exchange and interest rates based on the globally coordinated views of its regional economists;
- the Portfolio Strategy group, which consists of four regional departments, formulates equity market forecasts and provides opinions on both asset and industry sector allocation; and
- the Commodities Research group, which consists of departments in London and New York, provides research on the global commodity markets.

Further information regarding research at Goldman Sachs is provided under "--- Regulation --- Regulations applicable in and outside the United States," "--- Certain Factors That May Affect Our Business --- Legal and Regulatory" and "Legal Proceedings --- Research Independence Matters" in Item 3 of this Annual Report on Form 10-K.

Technology Strategy

Goldman Sachs is committed to the ongoing development, maintenance and use of technology throughout the organization. Our technology initiatives can be broadly categorized into four efforts:

- enhancing client service through increased connectivity and the provision of value-added, tailored services;
- improving our trading, execution and clearing capabilities;
- risk management; and
- overall efficiency, productivity and control.

We have tailored our services to our clients by providing them with electronic access to our products and services. In particular, we have extended our global electronic trading and information distribution capabilities to our clients via the Internet and other forms of electronic connectivity. These capabilities cover many of our fixed income, currency, commodity, equity and mutual fund products around the world. We have also used the Internet to improve the ease and quality of communication with our institutional and high-net-worth clients.

Internet technology and electronic commerce have changed and will continue to change the ways that securities and other financial products are traded, distributed and settled. This creates both opportunities and challenges for our businesses. We remain committed to being at the forefront of technological innovation in the global capital markets.

We have developed software that enables us to monitor and analyze our market and credit risks. This risk management software not only analyzes market risk on firmwide, divisional and trading desk levels, but also breaks down our risk into its underlying exposures, permitting management to evaluate exposures on the basis of specific interest rate, currency exchange rate, equity price or commodity price changes. To assist further in the management of our credit exposures, data from many sources are aggregated daily into credit management systems that give senior management and professionals in the Credit and Controllers departments the ability to receive timely information with respect to credit exposures worldwide, including netting information, and the ability to analyze complex risk situations effectively. Our software accesses this data, allows for quick analysis at the level of individual trades, and interacts with other Goldman Sachs systems.

Technology has also been a significant factor in improving the overall efficiency of many areas of Goldman Sachs. By automating many trading procedures and operational and accounting processes, we have substantially increased our efficiency and accuracy.

Employees

Management believes that one of the strengths and principal reasons for the success of Goldman Sachs is the quality and dedication of its people and the shared sense of being part of a team. We strive to maintain a work environment that fosters professionalism, excellence, diversity and cooperation among our employees worldwide.

Instilling the Goldman Sachs culture in all employees is a continuous process, in which training plays an important part. All employees are offered the opportunity to participate in education and periodic seminars that we sponsor at various locations throughout the world. Another important part of instilling the Goldman Sachs culture is our employee review process. Employees are reviewed by supervisors, co-workers and employees they supervise in a 360-degree review process that is integral to our team approach.

As of November 2002, we had 19,739 employees, which excludes employees of Goldman Sachs' property management subsidiaries. Substantially all of the costs of these property

management employees are reimbursed to Goldman Sachs by the real estate investment funds to which these subsidiaries provide property management services.

Competition

The financial services industry — and all of our businesses — are intensely competitive, and we expect them to remain so. Our competitors are other brokers and dealers, investment banking firms, insurance companies, investment advisors, mutual funds, hedge funds, commercial banks and merchant banks. We compete with some of our competitors globally and with others on a regional, product or niche basis. Our competition is based on a number of factors, including transaction execution, our products and services, innovation, reputation and price.

We also face intense competition in attracting and retaining qualified employees. Our ability to continue to compete effectively in our businesses will depend upon our ability to attract new employees and retain and motivate our existing employees.

In recent years, there has been substantial consolidation and convergence among companies in the financial services industry, due in part to U.S. federal legislation that has expanded the activities permissible for firms affiliated with a U.S. bank. In particular, a number of large commercial banks, insurance companies and other broad-based financial services firms have established or acquired broker-dealers or have merged with other financial institutions. Many of these firms have the ability to offer a wide range of products, from loans, deposit-taking and insurance to brokerage, asset management and investment banking services, which may enhance their competitive position. They also have the ability to support investment banking and securities products with commercial banking, insurance and other financial services revenues in an effort to gain market share, which could result in pricing pressure in our businesses. Moreover, we have faced, and expect to continue to face, pressure to retain market share by committing capital to businesses or transactions on terms that offer returns that may not be commensurate with their risks. In particular, corporate clients sometimes seek to require such commitments from financial services firms in connection with investment banking assignments.

The trend toward consolidation and convergence has significantly increased the capital base and geographic reach of some of our competitors. This trend has also hastened the globalization of the securities and other financial services markets. As a result, we have had to commit capital to support our international operations and to execute large global transactions. In order to take advantage of some of our most significant challenges and opportunities, we will have to compete successfully with financial institutions that are larger and better-capitalized and that may have a stronger local presence and longer operating history outside the United States.

We have experienced intense price competition in some of our businesses in recent years. For example, equity and debt underwriting discounts, as well as trading spreads, have been under pressure for a number of years and the ability to execute trades electronically, through the Internet and through other alternative trading systems, may increase the pressure on trading commissions. It appears that this trend toward alternative trading systems will continue. Moreover, the introduction of decimalization has led to a reduction in the revenues of our specialist business and to the implementation of a new fee-based pricing structure in our Nasdaq trading business, as discussed above under "— Asset Management and Securities Services." We believe that we may experience competitive pressures in these and other areas in the future as some of our competitors seek to obtain market share by reducing prices.

The trading of futures on single stocks commenced in November 2002. It is too early to tell what the exact impact of the introduction of single stock futures contracts will be on the businesses of Goldman Sachs. While commissions and clearing fees may increase, other aspects of our business, in particular, our OTC derivative business, may be adversely affected.

Regulation

Goldman Sachs, as a participant in the securities and commodity futures and options industries, is subject to extensive regulation in the United States and elsewhere. As a matter of public policy, regulatory bodies in the United States and the rest of the world are charged with safeguarding the integrity of the securities and other financial markets and with protecting the interests of customers participating in those markets. They are not, however, charged with protecting the interests of Goldman Sachs' shareholders or creditors.

Broker-dealers, in particular, are subject to regulations that cover all aspects of the securities business, including sales methods, trade practices, use and safekeeping of customers' funds and securities, capital structure, record-keeping, the financing of customers' purchases, and the conduct of directors, officers and employees. Additional legislation, changes in rules promulgated by self-regulatory organizations, or changes in the interpretation or enforcement of existing laws and rules, either in the United States or elsewhere, may directly affect the operation and profitability of Goldman Sachs.

Regulation in the United States

In the United States, the SEC is the federal agency responsible for the administration of the federal securities laws. Our principal broker-dealer in the United States is Goldman, Sachs & Co., which is registered as a broker-dealer and as an investment adviser with the SEC and as a broker-dealer in all 50 states and the District of Columbia. Self-regulatory organizations, such as the NYSE and the NASD, adopt rules that apply to, and examine, broker-dealers such as Goldman, Sachs & Co. In addition, state securities and other regulators also have regulatory or oversight authority over Goldman, Sachs & Co. Similarly, our businesses are also subject to regulation by various non-U.S. governmental and regulatory bodies and self-regulatory authorities in virtually all countries where we have offices. Spear, Leeds & Kellogg, L.P. and certain of its affiliates are registered U.S. broker-dealers and are regulated by the SEC, the NYSE and the NASD. Goldman Sachs Financial Markets, L.P. is registered with the SEC as an OTC derivatives dealer and conducts certain OTC derivatives businesses previously conducted by other affiliates.

The commodity futures and commodity options industry in the United States is subject to regulation under the Commodity Exchange Act, as amended. The Commodity Futures Trading Commission is the federal agency charged with the administration of the Commodity Exchange Act and the regulations thereunder. Several of Goldman Sachs' subsidiaries, including Goldman, Sachs & Co. and Spear, Leeds & Kellogg, L.P., are registered with the CFTC and act as futures commission merchants, commodity pool operators or commodity trading advisors and are subject to the Commodity Exchange Act and the regulations thereunder. The rules and regulations of various self-regulatory organizations, such as the Chicago Board of Trade, other futures exchanges and the National Futures Association, also govern the commodity futures and commodity options businesses of these entities.

As a registered broker-dealer and member of various self-regulatory organizations, Goldman, Sachs & Co. is subject to the SEC's uniform net capital rule, Rule 15c3-1. This rule specifies the minimum level of net capital a broker-dealer must maintain and also requires that a significant part of its assets be kept in relatively liquid form. Goldman, Sachs & Co. is also subject to the net capital requirements of the CFTC and various securities and commodity exchanges. See Note 14 to the consolidated financial statements incorporated by reference in Part II, Item 8 of this Annual Report on Form 10-K.

The SEC and various self-regulatory organizations impose rules that require notification when net capital falls below certain predefined criteria, limit the ratio of subordinated debt to equity in the regulatory capital composition of a broker-dealer and constrain the ability of a broker-dealer to expand its business under certain circumstances. Additionally, the SEC's uniform net capital rule imposes certain requirements that may have the effect of prohibiting a broker-dealer from distributing or withdrawing capital and requiring prior notice to the SEC for certain withdrawals of capital.

Goldman Sachs has established The Goldman Sachs Trust Company, N.A., a national bank limited to fiduciary activities, in order to provide personal trust and estate administration and related services to its high-net-worth clients on a nationwide basis. GSTC maintains collective investment funds for eligible pension and profit sharing plan clients. As a national bank, GSTC is subject to regulation by the Office of the Comptroller of the Currency and is a member bank of the Federal Reserve System. GSTC will not accept deposits or make loans and, as a result, it is not considered to be a bank for purposes of the Bank Holding Company Act. It also does not carry FDIC insurance and is not subject to the requirements of the Community Reinvestment Act.

The USA Patriot Act of 2001, enacted in response to the terrorist attacks on September 11, 2001, contains anti-money laundering and financial transparency laws and mandates the implementation of various new regulations applicable to broker-dealers and other financial services companies, including standards for verifying client identification at account opening, and obligations to monitor client transactions and report suspicious activities. Through these and other provisions, the Act seeks to promote cooperation among financial institutions, regulators and law enforcement entities in identifying parties that may be involved in terrorism or money laundering. Anti-money-laundering laws outside of the U.S. contain some similar provisions. The increased obligations of financial institutions, including Goldman Sachs, to identify their customers, watch for and report suspicious transactions, respond to requests for information by regulatory authorities and law enforcement agencies, and share information with other financial institutions, requires the implementation and maintenance of internal practices, procedures and controls which will increase our costs and may subject us to liability.

Regulation outside of the United States

Goldman Sachs is an active participant in the international fixed income and equities markets. Many of our affiliates that participate in these markets are subject to comprehensive regulations that include some form of capital adequacy rules and other customer protection rules. Goldman Sachs provides investment services in and from the United Kingdom under the regulation of The Financial Services Authority. Various Goldman Sachs entities operating in Europe are also regulated by, among others, the Federal Financial Supervisory Authority (BaFin), the Bundesbank and other regulatory authorities in Germany, French and Swiss banking authorities, the London Stock Exchange and other securities, derivatives and commodities exchanges of which they are members. The investment services that are subject to oversight by the FSA and other European regulators are regulated in accordance with European Union directives requiring, among other things, compliance with certain capital adequacy standards, customer protection requirements and conduct of business rules. These standards, requirements and rules are similarly implemented, under the same directives, throughout the European Union and are broadly comparable in scope and purpose to the regulatory capital and customer protection requirements imposed under the SEC and CFTC rules. European Union directives also permit local regulation in each jurisdiction, including those in which we operate, to be more restrictive than the requirements of such directives and these local requirements can result in certain competitive disadvantages to Goldman Sachs.

In addition, the Financial Services Agency, the Tokyo Stock Exchange, the Osaka Securities Exchange, the Tokyo International Financial Futures Exchange and the Japan Securities Dealers Association in Japan, the Securities and Futures Commission in Hong Kong, and the Monetary Authority of Singapore, among others, regulate various of our subsidiaries in Asia and also have capital standards and other requirements comparable to the rules of the SEC.

The European Financial Conglomerates Directive, adopted by the European Union on November 20, 2002, proposes certain changes to the way in which financial conglomerates and

other financial services organizations are regulated. These changes may affect the regulation of our European subsidiaries, and potentially of our business globally, and Goldman Sachs entities that are currently unregulated may become subject to regulation. We continue to work with our regulators to understand the impact of these changes.

Regulations applicable in and outside the United States

The U.S. and non-U.S. government agencies, regulatory bodies and self-regulatory organizations, as well as state securities commissions in the United States, are empowered to conduct administrative proceedings that can result in censure, fine, the issuance of cease-and-desist orders, or the suspension or expulsion of a broker-dealer or its directors, officers or employees. Occasionally, our subsidiaries have been subject to investigations and proceedings, and sanctions have been imposed for infractions of various regulations relating to our activities, none of which has had a material adverse effect on us or our businesses.

Compliance with the net capital requirements of U.S. and non-U.S. regulators could limit those operations of our subsidiaries that require the intensive use of capital, such as underwriting and trading activities, specialist activities and the financing of customer account balances, and also could restrict our ability to withdraw capital from our regulated subsidiaries, which in turn could limit our ability to repay debt or pay dividends on our common stock.

Our specialist businesses are subject to extensive regulation by a number of securities exchanges. The rules of these exchanges generally require our specialists to maintain orderly markets in the securities in which they are specialists. These requirements, in turn, may require us to commit significant amounts of capital to our specialist businesses.

The research departments of investment banks are the subject of increased regulatory scrutiny. In 2002, the SEC, the NYSE and the NASD adopted numerous rules affecting research analysts and their interaction with investment banking departments at member securities firms, as well as other companies. Also, acting in part pursuant to a mandate contained in the Sarbanes-Oxley Act of 2002, the SEC, the NYSE and the NASD proposed additional heightened restrictions on the interaction between research analysts and investment banking departments at member securities firms. Various non-U.S. jurisdictions have also changed or proposed to change their requirements with respect to research. In addition, several major securities firms, including Goldman, Sachs & Co., have recently reached agreements in principle with certain federal and state securities regulators and self-regulatory organizations to resolve investigations into the practices of their research departments. As part of this global settlement, restrictions will be imposed on the interaction between research and investment banking departments and these securities firms will be required to fund the provision of independent research to their customers. In connection with the agreements in principle, the firm also expects to be joining the other leading securities firms who are part of the proposed global settlement in an initiative that generally will prohibit the allocation of shares in initial public offerings to executives and directors of public companies. We do not know the practical effect that such restrictions or measures would have on our business, if adopted.

Certain Factors That May Affect Our Business

Market Conditions

As an investment banking, securities and investment management firm, our businesses are materially affected by conditions in the financial markets and economic conditions generally, both in the United States and elsewhere around the world. In the last year, we have been operating in a very challenging environment: the number and size of securities underwritings and mergers and acquisition transactions have declined significantly; the equities markets in the United States and elsewhere have been volatile and are at levels substantially below their record highs; investors have exhibited concerns over the integrity of the U.S. financial markets as a result of recent,

highly-publicized financial scandals; and the attention of management of many clients has been diverted from capital-raising transactions and acquisitions and dispositions in part as a result of corporate governance regulations, such as the Sarbanes-Oxley Act of 2002, and related uncertainty in capital markets. It is unclear how long this environment will last, but so long as it does, our businesses will be adversely affected.

These types of economic and market conditions have in the past adversely affected, and may in the future adversely affect, our business and profitability in many ways, including the following:

- We generally maintain large trading, specialist and investment positions. Market fluctuations and volatility may adversely affect the value of those positions, including our interest rate and credit products, currency, commodity and equity positions and our merchant banking investments, or may reduce our willingness to enter into some new transactions.
- A continuation of the industry-wide declines in the volume of equity underwritings and mergers and acquisitions is likely to have a continuing adverse effect on our revenues and, because we may be unable to reduce expenses correspondingly, our profit margins. In particular, because a significant portion of our investment banking revenues are derived from our participation in large transactions, a decrease in the number of large transactions due to uncertain or unfavorable market conditions may adversely affect our investment banking business.
- Declines in the volume and number of investment banking transactions may continue to increase price competition.
- Reductions in the level of the equities markets also tend to reduce the value of our clients' portfolios, which in turn may reduce the fees we earn for managing assets. Even in the absence of uncertain or unfavorable economic or market conditions, investment performance by our asset management business below the performance of benchmarks or competitors could result in a decline in assets under management and therefore in the fees we receive.
- Concentration of risk in the past has increased the losses that we have incurred in our proprietary trading, market-making, block trading, merchant banking, underwriting and lending businesses and may continue to do so in the future.
- The volume of transactions that we execute for our customers and as a specialist may decline, which would reduce the revenues we receive from commissions and spreads. In our specialist businesses, we are obligated by stock exchange rules to maintain an orderly market, including by purchasing shares in a declining market. This may result in trading losses and an increased need for liquidity. Finally, further weakness in global equities markets could adversely impact our trading businesses and impair the value of our goodwill and identifiable intangible assets.

Risk Management, Liquidity and Credit

If any of the variety of instruments and strategies we utilize to hedge or otherwise manage our exposure to various types of risk are not effective, we may incur losses. Our hedging strategies and other risk management techniques may not be fully effective in mitigating our risk exposure in all market environments or against all types of risk.

Liquidity (*i.e.*, ready access to funds) is essential to our businesses. Our liquidity could be impaired by an inability to access the long-term or short-term debt markets, an inability to access the repurchase and securities lending markets, or an inability to sell assets. This situation may arise due to circumstances that we may be unable to control, such as a general market

disruption, perceptions about our creditworthiness, or an operational problem that affects third parties or us. Further, our ability to sell assets may be impaired if other market participants are seeking to sell similar assets at the same time.

Our credit ratings are important to our liquidity. A reduction in our credit ratings could adversely affect our liquidity and competitive position, increase our borrowing costs or trigger our obligations under certain bilateral provisions in some of our trading and collateralized financing contracts. Under such provisions, counterparties could be permitted to terminate contracts with Goldman Sachs or require us to post additional collateral. Termination of our trading and collateralized financing contracts could cause us to sustain losses and impair our liquidity by requiring us to find other sources of financing or to make significant cash payments or securities movements.

The Goldman Sachs Group, Inc. is a holding company and, therefore, it depends on dividends, distributions and other payments from its subsidiaries to fund dividend payments and to fund all payments on its obligations, including debt obligations. Many of our subsidiaries, including Goldman, Sachs & Co., are subject to laws that authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to The Goldman Sachs Group, Inc. Regulatory action of that kind could impede access to funds that The Goldman Sachs Group, Inc. needs to make payments on obligations, including debt obligations, or dividend payments.

We are exposed to the risk that third parties that owe us money, securities or other assets will not perform their obligations. These parties may default on their obligations to us due to bankruptcy, lack of liquidity, operational failure or other reasons. The amount and duration of our credit exposures have been increasing over the past several years, as has the breadth of the entities to which we have such exposure. As a clearing member firm, we finance our customer positions and we could be held responsible for the defaults or misconduct of our customers. In addition, we have experienced, due to competitive factors, pressure to extend credit and price more aggressively the credit risks we take. In particular, corporate clients sometimes seek to require credit commitments from us in connection with investment banking assignments. Although we regularly review credit exposures to specific clients and counterparties and to specific industries, countries and regions that we believe may present credit concerns, default risk may arise from events or circumstances that are difficult to detect or foresee. In addition, concerns about, or a default by, one institution could lead to significant liquidity problems, losses or defaults by other institutions, which in turn could adversely affect Goldman Sachs.

Operations and Infrastructure

Our businesses are highly dependent on our ability to process, on a daily basis, a large number of transactions across numerous and diverse markets in many currencies, and the transactions we process have become increasingly complex. If any of our financial, accounting or other data processing systems do not operate properly or are disabled, we could suffer an impairment to our liquidity, financial loss, a disruption of our businesses, liability to clients, regulatory intervention or reputational damage. These systems may fail to operate properly or become disabled as a result of events that are wholly or partially beyond our control, including a disruption of electrical or communications services or our inability to occupy one or more of our buildings. The inability of our systems to accommodate an increasing volume of transactions could also constrain our ability to expand our businesses.

We also face the risk of operational failure or termination of any of the clearing agents, exchanges, clearing houses or other financial intermediaries we use to facilitate our securities transactions. Any such failure or termination could adversely affect our ability to effect transactions and manage our exposure to risk.

Our ability to conduct business may be adversely impacted by a disruption in the infrastructure that supports our businesses and the communities in which they are located. This

may include a disruption involving electrical, communications, transportation or other services used by Goldman Sachs or third parties with which we conduct business. These disruptions may occur, for example, as a result of events that affect only the buildings of Goldman Sachs or such third parties, or as a result of events with a broader impact on the cities where those buildings are located. Nearly all of our employees in our primary locations, including New York, London, Frankfurt, Hong Kong and Tokyo, work in close proximity to each other, in one or more buildings. If a disruption occurs in one location and our employees in that location are unable to communicate with or travel to other locations, our ability to service and interact with our clients may suffer and we may not be able to successfully implement contingency plans that depend on communication or travel.

Legal and Regulatory

Substantial legal liability or a significant regulatory action against Goldman Sachs could have a material adverse financial effect or cause significant reputational harm to Goldman Sachs, which in turn could seriously harm our business prospects. We face significant legal risks in our businesses, and the volume of claims and amount of damages claimed in litigation against financial intermediaries are increasing. Our experience has been that legal claims by customers and clients increase in a market downturn. In addition, employment related claims typically increase in periods when we have reduced the total number of employees.

Goldman Sachs, as a participant in the financial services industry, is subject to extensive regulation in jurisdictions around the world. We face the risk of significant intervention by regulatory authorities in all jurisdictions in which we conduct business. Among other things, we could be fined or prohibited from engaging in some of our business activities. New laws or regulations or changes in enforcement of existing laws or regulations applicable to our clients may also adversely affect our businesses.

As discussed under "Regulation" above, the research departments of investment banks are the subject of increased regulatory scrutiny which have led to increased restrictions on the interaction between research analysts and investment banking departments at securities firms. Various non-U.S. jurisdictions have also changed or proposed changing their requirements with respect to research matters. In addition, several major securities firms, including Goldman Sachs, have recently reached agreements in principle with certain federal and state securities regulators and self-regulatory organizations to resolve investigations into the practices of their research departments. Some of the proposals and restrictions could adversely impact our businesses, at least in the short term.

There have been a number of highly publicized cases involving fraud or other misconduct by employees in the financial services industry in recent years, and we run the risk that employee misconduct could occur. It is not always possible to deter or prevent employee misconduct and the precautions we take to prevent and detect this activity may not be effective in all cases.

Regulatory Impact on Capital Markets

Recent financial scandals have led to insecurity and uncertainty in the financial markets and contributed to declines in capital markets during 2002. In response to these scandals, the Sarbanes-Oxley Act of 2002 and the rules and rule proposals (if adopted) of the SEC, the NYSE and Nasdaq necessitate significant changes to corporate governance and public disclosure. These provisions generally apply to companies with securities listed on U.S. securities exchanges, and some provisions apply to non-U.S. issuers with securities traded on U.S. securities exchanges. To the extent that private companies, in order to avoid becoming subject to these new requirements, decide to forgo initial public offerings, our equity underwriting business may be adversely affected and our ability to successfully exit some of our merchant banking investments may be adversely affected. Similarly, it is possible that the imposition of those

provisions on non-U.S. issuers may make these issuers less likely to list their securities in the United States or undertake merger or acquisition transactions that would result in their securities being listed in the United States. If these measures result in less activity by non-U.S. issuers in the United States, the U.S. capital markets and our investment banking business may be adversely affected.

The provisions of Sarbanes-Oxley and the NYSE and Nasdaq corporate governance proposals, coupled with existing economic uncertainty, have diverted many companies' attention away from capital market transactions, including securities offerings and acquisition and disposition transactions. It is unclear how long this uncertainty and diversion will last, but so long as it does, it will have a negative impact on our investment banking business. In addition, proposed accounting and disclosure changes, including those relating to off-balance-sheet entities, may have an adverse effect on our financial advisory and other revenues relating to structured finance transactions.

Competition and Conflicts of Interest

The financial services industry — and all of our businesses — are intensely competitive, and we expect them to remain so. We compete on the basis of a number of factors, including transaction execution, our products and services, innovation, reputation and price. We believe that we may experience pricing pressures in the future as some of our competitors seek to increase market share by reducing prices. In recent years, there has been substantial consolidation and convergence among companies in the financial services industry. U.S. federal legislation, which significantly expanded the activities permissible for firms affiliated with a U.S. bank, may accelerate this consolidation and further increase competition. This trend toward consolidation and convergence has significantly increased the capital base and geographic reach of our competitors. This trend has also hastened the globalization of the securities and other financial services markets. As a result, we have had to commit capital to support our international operations and to execute large global transactions.

Our reputation is one of our most important assets. As we have expanded the scope of our business and our client base, we increasingly have to address conflicts of interest. We have extensive procedures and controls that are designed to address these issues. However, appropriately dealing with conflicts of interest is complex and difficult and our reputation could be damaged if we fail, or appear to fail, to deal appropriately with conflicts of interest.

Technology is fundamental to our overall business strategy. The growth of the Internet and electronic trading, and the introduction of new technologies, is changing our business and presenting us with new challenges. Securities, futures and options transactions are now being conducted through the Internet and other alternative, non-traditional trading systems, and it appears that the trend toward alternative trading systems will continue and probably accelerate. Some of these alternative trading systems compete with our trading businesses, including our specialist businesses. A dramatic increase in electronic trading may adversely affect our commission and trading revenues, including our market-making revenues, reduce our participation in the trading markets and associated access to market information and lead to the creation of new and stronger competitors. These developments may also require us to make additional investments in technology or trading systems.

Recruiting and Employee Retention

Our performance is largely dependent on the talents and efforts of highly skilled individuals. Competition in the financial services industry for qualified employees is intense. In addition, competition with businesses outside the financial services industry for the most highly skilled individuals has become more intense as the economic downturn has lowered average compensation within the financial services industry significantly. Our continued ability to compete effectively in our businesses depends on our ability to attract new employees and to retain and motivate our existing employees. Changes in the business environment may cause us to move employees from one business to another or to reduce the number of employees in certain businesses; this may cause temporary disruptions as our employees adapt to new roles and may reduce our ability to take advantage of improvements in the business environment.

Acquisitions

We expect the growth of our core businesses to come principally through internal expansion and also through acquisitions. To the extent we make acquisitions or enter into combinations, such as our combination with Spear, Leeds & Kellogg in October 2000, we face numerous risks and uncertainties combining the businesses and systems, including the need to combine accounting and data processing systems and management controls and to integrate relationships with customers and business partners. We may not be able to meet these operational and business challenges.

International Operations

In conducting our businesses and maintaining and supporting our operations around the world, we are subject to political, economic, legal, operational and other risks that are inherent in operating in many countries, including risks of possible nationalization, expropriation, price controls, capital controls, exchange controls and other restrictive governmental actions, as well as the outbreak of hostilities. In many countries, the laws and regulations applicable to the securities and financial services industries are uncertain and evolving, and it may be difficult for us to determine the exact requirements of local laws in every market. Our inability to remain in compliance with local laws in a particular foreign market could have a significant and negative effect not only on our businesses in that market but also on our reputation generally. We are also subject to the risk that transactions we structure might not be legally enforceable in all cases.

In the last several years, various emerging market countries have experienced severe economic and financial disruptions, including significant devaluations of their currencies, capital and currency exchange controls, and low or negative growth rates in their economies. The possible effects of these conditions include an adverse impact on our businesses and increased volatility in financial markets generally.

Shares Available for Sale

A significant amount of our outstanding shares of common stock are held by our former limited partners. While a significant number of these shares are subject to restrictions on transfer, our board of directors and/or the shareholders' committee under our shareholders' agreement have in the past waived, and may in the future from time to time waive, these transfer restrictions. Future sales of substantial amounts of common stock, or the perception that such sales may occur, could adversely affect the prevailing market price of our common stock.

Cautionary Statement Pursuant to The Private Securities Litigation Reform Act of 1995

We have included or incorporated by reference in this Annual Report on Form 10-K, and from time to time our management may make, statements that may constitute "forward-looking statements" within the meaning of the safe harbor provisions of The Private Securities Litigation Reform Act of 1995. Forward-looking statements are not historical facts but instead represent only our belief regarding future events, many of which, by their nature, are inherently uncertain and outside of our control. These statements include statements other than historical information or statements of current condition and may relate to our future plans and objectives and results, among other things, and may also include our belief regarding the effect of various legal

proceedings, as set forth under "Legal Proceedings" in Part I, Item 3 of this Annual Report on Form 10-K, as well as statements about the objectives and effectiveness of our liquidity policies, and statements about our investment banking transaction backlog, incorporated by reference in Part II, Item 7 of this Annual Report on Form 10-K. It is possible that our actual results may differ, possibly materially, from the anticipated results indicated in these forward-looking statements. Important factors that could cause actual results to differ from those in the forward-looking statements include, among others, those discussed below and under "— Certain Factors That May Affect Our Business."

In the case of statements about our investment banking transaction backlog, such statements are subject to the risk that the terms of these transactions may be modified or that they may not be completed at all; therefore, the net revenues that we expect to earn from these transactions may differ, possibly materially, from those currently expected. Important factors that could result in a modification of the terms of a transaction or a transaction not being completed include, in the case of underwriting transactions, a decline in general economic conditions, outbreak of hostilities, volatility in the securities markets generally or an adverse development with respect to the issuer of the securities and, in the case of financial advisory transactions, a decline in the securities markets, an adverse development with respect to a party to the transaction or a failure to obtain a required regulatory approval.

Item 2. Properties

Our principal executive offices are located at 85 Broad Street, New York, New York, and comprise approximately 969,000 square feet of leased space, pursuant to a lease agreement expiring in June 2008 (with options to renew for up to 20 additional years). We also occupy over 680,000 square feet at One New York Plaza under lease agreements expiring primarily in September 2004 (with options to renew for up to ten additional years), and we lease space at various other locations in the New York metropolitan area. In total, we lease over 5.2 million square feet in the New York metropolitan area. We have additional offices in the United States and elsewhere in the Americas. Together, these offices comprise approximately 1.7 million square feet of leased space.

We own approximately four acres of land in Jersey City, New Jersey, a portion of which we are using for the construction of an office building. This project is being developed to complement our offices in lower Manhattan. The initial phase of development is expected to include approximately 1.4 million square feet of office space, with occupancy planned in phases beginning in 2004.

We also have offices in Europe, Asia, Africa and Australia. In Europe, we have offices that total approximately 1.9 million square feet. Our European headquarters is located in London at Peterborough Court, pursuant to a lease which expires in 2016. In total, we lease approximately 1.4 million square feet in London through various leases, relating to various properties.

In Asia and Australia, we have offices that total approximately 1 million square feet. Our headquarters in this region are in Tokyo, at the ARK Mori Building, and in Hong Kong, at the Cheung Kong Center. In Tokyo, we currently lease approximately 400,000 square feet under renewable leases with current terms extending, in some cases, to June 2005. In Hong Kong, we currently lease approximately 300,000 square feet under lease agreements, the majority of which expire in fiscal 2012.

Our occupancy expenses include costs associated with office space held in excess of our current requirements, primarily due to the impact of the levels of current business activity on our previously anticipated growth in headcount. This excess space is being held for potential future growth. We continually review our space requirements and may, from time to time, reduce capacity through the use of sublease contracts or early termination agreements. We may incur costs in connection with such reductions in our global office space. Where we have unoccupied

space that we may occupy in the future, we will continue to charge the underlying operating costs to earnings as incurred.

Item 3. Legal Proceedings

We are involved in a number of judicial, regulatory and arbitration proceedings (including those described below) concerning matters arising in connection with the conduct of our businesses. We believe, based on currently available information, that the results of such proceedings, in the aggregate, will not have a material adverse effect on our financial condition, but might be material to our operating results for any particular period, depending, in part, upon the operating results for such period.

IPO Process Matters

The Goldman Sachs Group, Inc. and Goldman, Sachs & Co. are among the numerous financial services companies that have been named as defendants in a variety of lawsuits alleging improprieties in the process by which those companies participated in the underwriting of public offerings in recent years.

Certain purported class actions have been brought in the U.S. District Court for the Southern District of New York by purchasers of securities in public offerings, who claim that the defendants engaged in conspiracies in violation of federal antitrust laws in connection with these offerings. The plaintiffs in each instance seek treble damages as well as injunctive relief. One of the actions, which was commenced on August 21, 1998, alleges that the defendants have conspired to discourage or restrict the resale of securities for a period after the offerings, including by imposing "penalty bids". Defendants moved to dismiss the complaint in November 1998. The plaintiffs amended their complaint in February 1999, modifying their claims in various ways, including limiting the proposed class to retail purchasers of public offerings. The defendants moved to dismiss the amended complaint on May 7, 1999, the motion was granted by a decision dated December 7, 2000, and the plaintiffs' motion for reconsideration of that decision was denied by an order dated January 22, 2001. Plaintiffs appealed, and by a decision dated December 20, 2002, the U.S. Court of Appeals for the Second Circuit affirmed the dismissal of their complaint.

Several other actions were commenced, beginning on November 3, 1998 by purchasers of securities in public offerings as well as certain purported issuers of such offerings, that allege that the defendants, many of whom are also named in the other action discussed above, have conspired to fix at 7% the discount that underwriting syndicates receive from issuers of shares in certain offerings. On March 15, 1999, the purchaser plaintiffs filed a consolidated amended complaint. The defendants moved to dismiss the consolidated amended complaint on April 29, 1999. On February 14, 2001, the federal district court granted with prejudice the defendants' motion to dismiss the claims asserted by the purchasers of securities on the ground that they lacked antitrust standing. The plaintiffs in those actions appealed, and by a decision dated December 13, 2002, the U.S. Court of Appeals for the Second Circuit vacated the dismissal on the ground that the lower court had engaged in improper fact-finding on the motion and remanded for consideration of other potential bases for dismissal. On September 28, 2001, the defendants moved to dismiss the complaints filed by the issuer plaintiffs on statute of limitations grounds. On September 25, 2002, the federal district court denied the underwriter defendants' motion to dismiss.

Goldman, Sachs & Co. is one of numerous financial services firms that have been named as defendants in purported class actions filed beginning on March 9, 2001 in the U.S. District Court for the Southern District of New York by purchasers of securities in public offerings, who claim that the defendants engaged in a conspiracy to "tie" allocations in certain offerings to higher customer brokerage commission rates as well as purchase orders in the aftermarket, in violation

of federal antitrust laws. The plaintiffs filed a consolidated amended complaint on January 2, 2002. The defendants moved to dismiss the consolidated amended complaint on May 24, 2002. Goldman, Sachs & Co. has also, together with other underwriters in certain offerings as well as the issuers and certain of their officers and directors, been named as a defendant in a number of related lawsuits alleging, among other things, that the prospectuses for the offerings violated the federal securities laws by failing to disclose the existence of the alleged "tying" arrangements. On July 1, 2002, the underwriter defendants moved to dismiss those complaints. By an opinion and order dated February 19, 2003, the federal district court denied the motion to dismiss in all material respects relating to the underwriter defendants.

Goldman, Sachs & Co. has been named as a defendant in several actions alleging that the firm intentionally underpriced public offerings for certain issuers. Each of the actions seeks, among other things, consequential damages resulting from the alleged lower amount of offering proceeds. Two of the lawsuits are purported shareholder derivative actions commenced on May 3, 2002 in California Superior Court for Santa Clara County and San Mateo County which Goldman, Sachs & Co. has removed to the U.S. District Court for the Northern District of California. On August 5, 2002, Goldman, Sachs & Co. moved for judgment on the pleadings in those actions, the motions were granted by decisions dated October 31, 2002 and November 6, 2002, and plaintiffs in both cases have appealed. Goldman, Sachs & Co. has also been named as a defendant in a similar underpricing action brought in New York Supreme Court, New York County on May 15, 2002 by an official committee of unsecured creditors on behalf of an issuer which is in bankruptcy. On August 1, 2002, Goldman, Sachs & Co. moved to dismiss that complaint.

The Goldman Sachs Group, Inc. has also been named as a defendant in a purported shareholder derivative action commenced in Delaware Court of Chancery on October 23, 2002 alleging that certain officers and directors of eBay, Inc. (who are also defendants), aided and abetted by The Goldman Sachs Group, Inc., breached their fiduciary duties and usurped corporate opportunities by receiving allocations of initial public offerings as customers of The Goldman Sachs Group, Inc. Defendants moved to dismiss the complaint on December 23, 2002.

The Goldman Sachs Group, Inc. has, together with other underwriters in certain offerings, received subpoenas for documents and information from various governmental agencies and the U.S. House of Representatives Committee on Financial Services in connection with investigations relating to the public offering process. In particular, the Securities and Exchange Commission has been conducting an investigation of certain allocation practices employed by Goldman, Sachs & Co. Goldman Sachs is cooperating with the investigations.

Stock Options Antitrust Litigation

Hull Trading Co. L.L.C. and Spear, Leeds & Kellogg, L.P., affiliates of The Goldman Sachs Group, Inc., are among the numerous market makers in listed equity options which have been named as defendants, together with five national securities exchanges, in a purported class action brought in the U.S. District Court for the Southern District of New York on behalf of persons who purchased or sold listed equity options. The consolidated class action complaint, filed on October 4, 1999 (which consolidated certain previously pending actions and added Hull Trading Co. L.L.C. and other market makers as defendants), generally alleges that the defendants engaged in a conspiracy to preclude the multiple listing of certain equity options on the exchanges and seeks treble damages under the antitrust laws as well as injunctive relief. Certain of the parties, including Hull Trading Co. L.L.C. and Spear, Leeds & Kellogg, L.P., have entered into a stipulation of settlement, subject to court approval, pursuant to which Hull Trading Co. L.L.C. will be required to pay an aggregate of \$2.48 million and Spear, Leeds & Kellogg, L.P. an aggregate of \$19.59 million. On February 14, 2001, the federal district court granted the motion of certain non-settling defendants for summary judgment. By a decision dated April 24, 2001, the district court ruled that in light of that order granting summary judgment, the court

lacked jurisdiction to entertain the proposed settlement. Plaintiffs appealed, and by a decision dated January 9, 2003, the U.S. Court of Appeals for the Second Circuit affirmed the grant of summary judgment, but held that the decision did not divest the lower court of jurisdiction to entertain the proposed settlement, and remanded for further proceedings.

Rockefeller Center Properties, Inc. Litigation

Several former shareholders of Rockefeller Center Properties, Inc. brought purported class actions in the U.S. District Court for the District of Delaware and the Delaware Court of Chancery arising from the acquisition of Rockefeller Center Properties, Inc. by an investor group in July 1996. The defendants in the actions include, among others, Goldman, Sachs & Co., Whitehall Real Estate Partnership V, a merchant banking fund advised by Goldman, Sachs & Co., a Goldman, Sachs & Co. managing director and other members of the investor group. The federal court actions, which have since been consolidated, were filed beginning on November 15, 1996, and the state court action was filed on May 29, 1998.

The complaints generally allege that the proxy statement disseminated to former Rockefeller Center Properties, Inc. stockholders in connection with the transaction was deficient, in violation of the disclosure requirements of the federal securities laws. The plaintiffs are seeking, among other things, unspecified damages, rescission of the acquisition, and/or disgorgement.

In a series of decisions, the federal district court granted summary judgment dismissing all the claims in the federal action. The plaintiffs appealed those rulings. On July 19, 1999, the U.S. Court of Appeals for the Third Circuit rendered its decision affirming in part and vacating in part the lower court's entry of summary judgment dismissing the action. With respect to the claim as to which summary judgment was vacated, the appellate court held that the district court had committed a procedural error in converting the defendants' motion to dismiss into a motion for summary judgment and remanded for the district court to reconsider that claim under appropriate standards applicable to motions to dismiss. Plaintiffs subsequently amended their complaint as to the remanded claim, defendants renewed their motion to dismiss with respect to the amended complaint, and the motion was granted by the federal district court on March 12, 2001. Plaintiffs appealed, and by a decision dated November 8, 2002, the U.S. Court of Appeals for the Third Circuit affirmed the dismissal order, and by a decision dated December 11, 2002 denied rehearing.

The state action has been stayed pending disposition of the federal action.

AMF Securities Litigation

The Goldman Sachs Group, L.P., Goldman, Sachs & Co. and a Goldman, Sachs & Co. managing director have been named as defendants in several purported class action lawsuits beginning on April 27, 1999 in the U.S. District Court for the Southern District of New York brought on behalf of purchasers of stock of AMF Bowling, Inc. in an underwritten initial public offering of 15,525,000 shares of common stock in November 1997 at a price of \$19.50 per share. Defendants are AMF Bowling, Inc., certain officers and directors of AMF Bowling, Inc. (including the Goldman, Sachs & Co. managing director), and the lead underwriters of the offering (including Goldman, Sachs & Co.). The consolidated amended complaint alleges violations of the disclosure requirements of the federal securities laws and seeks compensatory damages and/or rescission. The complaint also asserts that The Goldman Sachs Group, L.P. and the Goldman, Sachs & Co. managing director are liable as controlling persons of AMF Bowling, Inc. under the federal securities laws because certain merchant banking funds managed by Goldman Sachs owned a majority of the outstanding common stock of AMF Bowling, Inc. and the managing director served as its chairman at the time of the offering. On December 22, 1999, the defendants moved to dismiss the complaint. By a decision dated March 22, 2001, the federal district court denied the motion. By a decision dated March 25, 2002, the federal district court granted

plaintiffs' motion for class certification with respect to a class under Section 11 of the Securities Act of 1933, but denied the motion with respect to a subclass under Section 12 of the Securities Act. By a decision dated May 21, 2002, the federal district court reconsidered its March 25, 2002 decision with respect to plaintiffs' motion for class certification and determined that the class includes persons who purchased AMF stock pursuant to the initial public offering prior to February 26, 1999.

On July 30, 2001, AMF Bowling, Inc. filed for protection under the U.S. bankruptcy laws.

Iridium Securities Litigation

Goldman, Sachs & Co. has been named as a defendant in two purported class action lawsuits commenced, beginning on May 26, 1999, in the U.S. District Court for the District of Columbia brought on behalf of purchasers of Class A common stock of Iridium World Communications, Ltd. in a January 1999 underwritten secondary offering of 7,500,000 shares of Class A common stock at a price of \$33.40 per share, as well as in the secondary market. The defendants in the actions include Iridium, certain of its officers and directors, Motorola, Inc. (an investor in Iridium) and the lead underwriters in the offering, including Goldman, Sachs & Co. On May 13, 2002, plaintiffs filed a consolidated amended complaint alleging substantively identical claims as the original complaints. On July 15, 2002, the defendants moved to dismiss the consolidated amended complaint.

The complaints in both actions allege violations of the disclosure requirements of the federal securities laws and seek compensatory and/or rescissory damages. Goldman, Sachs & Co. underwrote 996,500 shares of common stock and Goldman Sachs International underwrote 320,625 shares of common stock for a total offering price of approximately \$44 million.

On August 13, 1999, Iridium World Communications, Ltd. filed for protection under the U.S. bankruptcy laws.

Laidlaw Bondholders Litigation

Goldman, Sachs & Co. has been named as a defendant in a purported class action filed on September 22, 2000 in the U.S. District Court for the Southern District of New York arising from certain offerings of debentures by Laidlaw, Inc. from 1997 to 1999. The defendants include Laidlaw, Inc., certain of its officers and directors, the lead underwriters for the offerings (including Goldman, Sachs & Co., which was lead manager in the offerings), and Laidlaw's outside auditors. The offerings included a total of \$1.125 billion principal amount of debentures, of which Goldman, Sachs & Co. underwrote \$286.25 million.

The lawsuit, brought by certain institutional purchasers of the debentures, alleges that the prospectuses issued in connection with the offerings were false and misleading in violation of the disclosure requirements of the federal securities laws. The plaintiffs are seeking, among other things, unspecified damages. By an order of the Judicial Panel on Multi-District Litigation filed on April 19, 2001, the lawsuit was transferred to the U.S. District Court for the District of South Carolina for purposes of consolidated or coordinated pretrial proceedings with related actions in that court pertaining to Safety Kleen Corporation and Laidlaw, Inc. On January 8, 2002, the parties entered into a Preliminary Memorandum of Understanding with respect to a settlement of the lawsuit pursuant to which Goldman, Sachs & Co. would contribute approximately \$2.5 million toward a settlement fund. The settlement has been embodied in a settlement agreement, and by order dated December 19, 2002, the South Carolina Court approved the settlement. The settlement is still subject to, among other things, the confirmation of a satisfactory plan of reorganization of Laidlaw, Inc.

On June 28, 2001, Laidlaw, Inc. filed for bankruptcy protection.

World Online Litigation

Several lawsuits have been commenced in the Netherlands courts based on alleged misstatements and omissions relating to the initial public offering of World Online in March 2000. Goldman Sachs and ABN AMRO Rothschild served as joint global coordinators of the offering, which raised approximately $\in 2.9$ billion. Goldman Sachs International underwrote 20,268,846 shares and Goldman, Sachs & Co. underwrote 6,756,282 shares for a total offering price of approximately $\notin 1.16$ billion.

On September 11, 2000, several Dutch World Online shareholders as well as a Dutch entity purporting to represent the interests of certain World Online shareholders commenced a proceeding in Amsterdam District Court against "ABN AMRO Bank N.V., also acting under the name of ABN AMRO Rothschild", alleging misrepresentations and omissions relating to the initial public offering of World Online. The lawsuit seeks, among other things, the return of the purchase price of the shares purchased by the plaintiffs or unspecified damages.

In March 2001, a Dutch shareholders association initiated legal proceedings in Amsterdam District Court in connection with the World Online offering. Goldman Sachs International is named as a defendant in the writ served on its Dutch attorneys on March 14, 2001. The amount of damages sought is not specified in the writ. Goldman Sachs International filed its Statement of Defense on January 16, 2002 and a rejoinder on January 14, 2003.

Owens Corning, Inc. Bondholder Litigation

Goldman, Sachs & Co. has been named as a defendant in a purported class action filed on April 27, 2001 in the U.S. District Court for the District of Massachusetts arising from a 1998 offering by Owens Corning, Inc. of two series of its notes. The defendants include certain of Owens Corning's officers and directors and the underwriters for the offering (including Goldman, Sachs & Co., which was the lead manager in the offering). The offering included a total of \$550 million principal amount of notes, of which Goldman, Sachs & Co. underwrote \$275 million.

The lawsuit, brought by certain institutional purchasers of the notes, alleges that the prospectus issued in connection with the offering was false and misleading in violation of the disclosure requirements of the federal securities laws. The plaintiffs are seeking, among other things, unspecified damages. The underwriter defendants moved to dismiss the complaint on November 14, 2001. By a decision dated August 26, 2002, the federal district court denied the underwriter defendants' motion to dismiss.

On October 5, 2000, Owens Corning, Inc. filed for protection under the U.S. bankruptcy laws.

Research Independence Matters

The Goldman Sachs Group, Inc. and its affiliates, together with other financial services firms, have received requests for information from various governmental agencies in connection with their review of research independence issues, including the New York State Attorney General, the Utah Attorney General, the NYSE (which has issued a joint inquiry together with the SEC and NASD), the U.S. Attorney's Office for the Southern District of New York, and the U.S. House of Representatives Committee on Financial Services. Goldman Sachs is cooperating with their requests. On December 20, 2002, as part of a proposed global settlement involving the leading securities firms operating in the United States, agreements in principle were announced among Goldman, Sachs & Co. and the SEC, the NYSE, the NASD, the Utah Division of Securities, the New York State Attorney General and the North American Securities Administrators Association (in the case of Utah and NASAA, on behalf of state securities regulators) to resolve their investigations of Goldman Sachs relating to investment research analysts' conflicts of interest. Pursuant to the agreements in principle, Goldman, Sachs & Co. has

agreed, among other things, to (i) pay \$50 million in retrospective relief, (ii) contribute \$50 million over five years to provide independent third-party research to clients, (iii) contribute \$10 million for investor education and (iv) adopt internal structural and other safeguards to further ensure the integrity of Goldman, Sachs & Co. investment research. In connection with the agreements, the firm also expects to be joining the other leading securities firms who are part of the proposed global settlement in an initiative that generally will prohibit the allocation of shares in initial public offerings to executives and directors of public companies.

Goldman, Sachs & Co. is one of several investment firms that have been named as defendants in substantively identical purported class actions filed in the U.S. District Court for the Southern District of New York on August 30, 2002 and September 12, 2002 alleging violations of the federal securities laws in connection with research coverage of Covad Communications Company and Allied Riser Communications Corp., respectively. The actions seek compensatory damages. On December 26, 2002, defendants moved to dismiss the action relating to Covad Communications Company, and on February 6, 2003, the motion was granted with leave to replead.

Enron Exchangeable Notes Litigation

Goldman, Sachs & Co. and/or co-managing underwriters have been named as defendants in certain purported securities class and individual actions commenced beginning on December 14, 2001 in the U.S. District Court for the Southern District of Texas and California Superior Court brought by purchasers of \$222,500,000 of Exchangeable Notes of Enron Corp. in August 1999. The notes were mandatorily exchangeable in 2002 into shares of Enron Oil & Gas Company held by Enron Corp. or their cash equivalent. The complaints also name as defendants certain past and present officers and directors of Enron Corp. and the company's outside accounting firm. The complaints generally allege violations of the disclosure requirements of the federal securities laws and/or state law, and seek compensatory damages. Goldman, Sachs & Co. underwrote \$111,250,000 principal amount of the notes.

Several funds which allegedly sustained investment losses of approximately \$125 million in connection with secondary market purchases of the notes as well as Zero Coupon Convertible Notes of Enron Corp. commenced an action in the U.S. District Court for the Southern District of New York on January 16, 2002. The lawsuit names as defendants the underwriters of the August 1999 offering as well as the company's outside accounting firm, and alleges violations of the disclosure requirements of the federal securities laws, fraud and misrepresentation. On March 20, 2002, Goldman, Sachs & Co. moved to dismiss the complaint. By an Order dated June 24, 2002, the Judicial Panel on Multidistrict Litigation entered an order transferring that action to the Texas federal district court for purposes of coordinated or consolidated pretrial proceedings with other matters relating to Enron.

On December 2, 2001, Enron Corp. filed for protection under the U.S. bankruptcy laws.

Exodus Securities Litigation

By an amended complaint dated July 11, 2002, Goldman, Sachs & Co. and the other lead underwriters for the February 2001 offering of 13,000,000 shares of common stock and \$575,000,000 of 5¼% convertible subordinated notes of Exodus Communications, Inc. were added as defendants in a purported class action pending in the U.S. District Court for the Northern District of California. The complaint, which also names as defendants certain officers and directors of Exodus Communications, Inc., alleges violations of the disclosure requirements of the federal securities laws and seeks compensatory damages. On October 23, 2002, the underwriter defendants moved to dismiss the complaint. Goldman, Sachs & Co. underwrote 5,200,000 shares of common stock for a total offering price of approximately \$96,200,000, and \$230,000,000 principal amount of the notes.

On September 26, 2001, Exodus Communications, Inc. filed for protection under the U.S. bankruptcy laws.

Montana Power Shareholders Litigation

Goldman, Sachs & Co. and The Goldman Sachs Group, Inc. have been named as defendants in a purported class action commenced against it on October 1, 2001 in Montana District Court, Second Judicial District on behalf of shareholders of Montana Power Company. The complaint generally alleges that Montana Power Company violated Montana law by failing to procure shareholder approval of certain corporate strategies and transactions, that the company's board breached its fiduciary duties in pursuing those strategies and transactions, and that Goldman, Sachs & Co. rendered negligent advice as well as aided and abetted the board's breaches in its role as financial advisor to the company. The complaint seeks, among other things, compensatory damages. In addition to Goldman, Sachs & Co. and The Goldman Sachs Group, Inc., the defendants include Montana Power Company, certain of its officers and directors, an outside law firm for the Montana Power Company, and certain companies that purchased assets from Montana Power Company. The Montana state court denied motions to dismiss by a decision dated August 1, 2002. On January 9, 2003, another defendant removed the action to the U.S. District Court for the District of Montana, and the plaintiffs moved to remand the action to state court on February 7, 2003.

WorldCom Bondholders Litigation

Goldman, Sachs & Co. and other underwriters of WorldCom, Inc. bonds have been named as defendants in certain purported securities class and individual actions commenced beginning on July 19, 2002 alleging that the offering materials issued in connection with certain securities offerings were false and misleading. Certain of the lawsuits (some of which were originally filed in various state courts and removed to federal court) have been transferred by order of the Judicial Panel on Multidistrict Litigation to the U.S. District Court for the Southern District of New York, and similar requests for transfer are pending in other actions. Goldman, Sachs & Co. underwrote \$75,000,000 principal amount of 8% notes due 2006 in a May 24, 2000 offering out of a total principal amount of \$1,250,000,000 of the notes. Among the defendants in these actions in addition to the underwriters are WorldCom, Inc., certain of WorldCom, Inc.'s present or former officers and/or directors, and/or WorldCom, Inc.'s outside accounting firm. Each of these actions seeks, among other things, compensatory damages.

On July 21, 2002, WorldCom, Inc. filed for protection under the U.S. bankruptcy laws.

Asia Global Crossing Securities Litigation

Goldman, Sachs & Co. has been named as a defendant in several purported class action lawsuits commenced, beginning on November 8, 2002, in the U.S. District Court for the Southern District of New York and the Central District of California brought on behalf of purchasers of common stock of Asia Global Crossing Corp. in a October 2000 initial public offering of 68,000,000 shares of common stock at a price of \$7 per share. The defendants in the actions include Asia Global Crossing Corp., certain of its officers and directors, and the lead underwriters in the offering, including Goldman, Sachs & Co. The complaints allege violations of the disclosure requirements of the federal securities laws and seek compensatory and/or rescissory damages. Goldman, Sachs & Co. underwrote 20,519,000 shares of common stock for a total offering price of approximately \$145 million.

On November 17, 2002, Asia Global Crossing Corp. filed for protection under the U.S. bankruptcy laws.

Global Crossing Securities Litigation

The Goldman Sachs Group, Inc. and Goldman, Sachs & Co. have been added as defendants in a purported class action lawsuit in the U.S. District Court for the Southern District of New York relating to Global Crossing, Ltd. The consolidated amended complaint, filed on January 28, 2003, includes claims relating to Global Crossing, Ltd.'s concurrent April 2000 offerings of 43 million shares of common stock at \$33 per share and 4 million shares of 6³/₄% cumulative preferred stock at \$250 per share. Goldman, Sachs & Co. acted as a co-lead underwriter of both offerings, underwriting 12.9 million shares of common stock and 400,000 shares of convertible preferred stock. The defendants in the action as to such claims include certain officers and directors of Global Crossing, Ltd., the lead underwriters in the offerings, and the company's former outside auditors. The complaint alleges violations of the disclosure requirements of the federal securities laws as to such offerings and seeks compensatory and/or rescissory damages.

On January 28, 2002, Global Crossing, Ltd. filed for protection under the U.S. bankruptcy laws.

Item 4. Submission of Matters to a Vote of Security Holders

There were no matters submitted to a vote of security holders during the fourth quarter of our fiscal year ended November 29, 2002.

EXECUTIVE OFFICERS OF THE GOLDMAN SACHS GROUP, INC.

Set forth below are the name, age, present title, principal occupation, and certain biographical information for the past five years for our executive officers as of February 1, 2003, all of whom have been appointed by and serve at the pleasure of our board of directors.

Henry M. Paulson, Jr., 56

Mr. Paulson has been our Chairman and Chief Executive Officer since May 1999, and has been a director since August 1998. He was Co-Chairman and Chief Executive Officer or Co-Chief Executive Officer of The Goldman Sachs Group, L.P. from June 1998 to May 1999 and served as Chief Operating Officer from December 1994 to June 1998. Mr. Paulson is not on the board of any public companies other than Goldman Sachs. He is a member of the Board of Directors of the NYSE. In addition, Mr. Paulson is affiliated with certain non-profit organizations, including as a member of the Board of Directors of Catalyst. He also serves on the Advisory Board of the J.L. Kellogg Graduate School of Management at Northwestern University and is a member of the Board of the Dean's Advisors of the Harvard Business School. He is a member of the Advisory Board of the Tsinghua University School of Economics and Management and a member of the Governing Board of the Indian School of Business. He is also a member of the Board of Governors of The Nature Conservancy, Co-Chairman of the Asia/Pacific Council of The Nature Conservancy and a member of the Board of Directors of The Peregrine Fund, Inc.

John A. Thain, 47

Mr. Thain has been our President and Co-Chief Operating Officer since May 1999, and has been a director since August 1998. He was President of The Goldman Sachs Group, L.P. from March 1999 to May 1999 and Co-Chief Operating Officer from January 1999 to May 1999. From December 1994 to March 1999, he served as Chief Financial Officer and Head of Operations, Technology and Finance. From July 1995 to September 1997, he was also Co-Chief Executive Officer for European Operations. Mr. Thain is not on the board of any public companies other than Goldman Sachs. He is affiliated with certain non-profit organizations, including as a member of The MIT Corporation, the Dean's Advisory Council — MIT/Sloan School of Management, INSEAD — U.S. National Advisory Board, the James Madison Council of the Library of Congress and the Federal Reserve Bank of New York's International Capital Markets Advisory Committee. He is also a member of the French-American Foundation, the Board of Trustees of the National Urban League and The Trilateral Commission, as well as a governor of the New York-Presbyterian Foundation, Inc., a trustee of New York-Presbyterian Hospital, a General Trustee of Howard University and Chairman of the US-Japan Private Sector/Government Commission.

John L. Thornton, 49

Mr. Thornton has been our President and Co-Chief Operating Officer since May 1999, and has been a director since August 1998. He was President of The Goldman Sachs Group, L.P. from March 1999 to May 1999 and Co-Chief Operating Officer from January 1999 to May 1999. From August 1998 until January 1999, he had oversight responsibility for International Operations. From September 1996 until August 1998, he was Chairman, Goldman Sachs — Asia, in addition to his senior strategic responsibilities in Europe. From July 1995 to September 1997, he was Co-Chief Executive Officer for European Operations. Mr. Thornton is also on the board of the following public companies other than Goldman Sachs: Ford Motor Company, BskyB PLC, Laura Ashley Holdings plc and Pacific Century Group, Inc. In addition, Mr. Thornton is affiliated with certain non-profit organizations, including as a member of the Council on Foreign Relations and a director or trustee of the Asia Society, The Brookings Institution, The Goldman Sachs Foundation, The Hotchkiss School, Morehouse College, and the Tsinghua University School of Economics and Management, and as a member of the Advisory Board of the Yale School of Management.

Lloyd C. Blankfein, 48

Mr. Blankfein has been our Vice Chairman since April 2002. Mr. Blankfein has management responsibility for the Fixed Income, Currency and Commodities Division (FICC) and the Equities Division. Prior to becoming Vice Chairman, he had been Co-Head of FICC since its formation in 1997. Previously, he headed the J. Aron Currency and Commodities Division since 1994. Mr. Blankfein has been nominated to serve as director of Goldman Sachs and is not on the board of any other public companies. He is affiliated with certain non-profit organizations, including as Co-Chair of the Harvard University Financial Aid Task Force and as a member of the Executive Committee of the Harvard University Committee on University Resources. Mr. Blankfein is also a former Director of the Futures Industry Association and a former member of the Foreign Exchange Committee of the Federal Reserve Bank of New York.

Robert S. Kaplan, 45

Mr. Kaplan has been our Vice Chairman since April 2002. Mr. Kaplan has management responsibility for the Investment Banking and Investment Management Divisions. He served as global Co-Head of the Investment Banking Division from 1999 through 2001 and was Co-Chief Operating Officer of global Investment Banking from 1998 to 1999. Mr. Kaplan became Head of the Americas Corporate Finance Department in 1994. Previously, he had been Head of Asia-Pacific Investment Banking from 1990 through 1993. Mr. Kaplan is a director of Bed Bath & Beyond Inc., which is a public company. In addition, Mr. Kaplan is affiliated with certain non-profit organizations, including as Co-Chairman of the Board of The TEAK Fellowship, Co-Chairman of the Board of Project A.L.S. and a director of The Jewish Theological Seminary, Everybody Wins, Inc. and The Jewish Museum.

Kevin W. Kennedy, 54

Mr. Kennedy has been our Executive Vice President — Human Capital Management since December 2001. From 1999 until 2001, he served as a member of the Executive Office. From 1994 to 1999, Mr. Kennedy served as Head of the Americas Group, a combination of Corporate Finance, Investment Banking Services and Structured Finance for the United States, Canada and Latin America, and, from 1988 to 1994, as Head of Corporate Finance. He is a life trustee and a former Chairman of the Board of Hamilton College, a Managing Director and Vice President of the Board of the Metropolitan Opera, a trustee of the New York Public Library and an honorary trustee of the Chewonki Foundation.

Gregory K. Palm, 54

Mr. Palm has been our General Counsel and Executive Vice President and Head or Co-Head of the Legal Department since May 1999. He was General Counsel of The Goldman Sachs Group, L.P. and Co-Head of the Legal Department from 1992 to May 1999. He also has senior oversight responsibility for the firm's Compliance, Management Controls and Tax Departments and is Co-Chairman of the Global Compliance and Control Committee. From 1982 to 1992, Mr. Palm was a partner in the law firm of Sullivan & Cromwell. Mr. Palm is a member of the American Law Institute, the MIT Corporation Department of Economics Visiting Committee and the Board of Trustees of the Skowhegan School of Painting and Sculpture.

Esta E. Stecher, 45

Ms. Stecher has been our General Counsel and Executive Vice President and Co-Head of the Legal Department since December 2000. From 1994 to 2000, she was Head of the firm's Tax Department. She also has senior oversight responsibility for the Compliance, Management Controls and Tax Departments. She is also a trustee of The Goldman Sachs Foundation. From 1990 to 1994, Ms. Stecher was a partner in the law firm of Sullivan & Cromwell.

Robert K. Steel, 51

Mr. Steel has been our Vice Chairman since April 2002. Mr. Steel has management responsibility for FICC and the Equities Division. He served as Co-Head of the Equities Division from 1998 through 2001, then as sole Head until his appointment as a Vice Chairman of the firm. From 1994 to 1998, he was responsible for all institutional equities in the United States. From 1988 to 1994, Mr. Steel was responsible for the Equities Division in Europe. Mr. Steel is a member of the NYSE, where he has served on various committees, and is a member of the Board of Directors of the Securities Industry Association. He is also Vice Chairman of Duke University's Board of Trustees and Chairman of the Duke University Management Co.

David A. Viniar, 47

Mr. Viniar has been our Chief Financial Officer and Executive Vice President since May 1999. He has been the Head of the Operations, Technology and Finance Division since December 2002. He was Head of the Finance Division and Co-Head of Credit Risk Management and Advisory and Firmwide Risk from December 2001 to December 2002. He was Co-Head of Operations, Finance and Resources from March 1999 to December 2001. He was Chief Financial Officer of The Goldman Sachs Group, L.P. from March 1999 to May 1999. From July 1998 until March 1999, he was Deputy Chief Financial Officer and from 1994 until July 1998, he was Head of Finance, with responsibility for Controllers and Treasury. From 1992 to 1994, Mr. Viniar was Head of Treasury and prior to that was in the Structured Finance Department of Investment Banking. Mr. Viniar is a member of the Board of Trustees of Children's Aid and Family Services, serves on the Board of Trustees of Union College and is a member of the Board of Trustees of the Financial Accounting Foundation.

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

The principal market on which our common stock is traded is the New York Stock Exchange. Information relating to the high and low sales prices per share on the New York Stock Exchange for each full quarterly period during fiscal 2001 and 2002 is set forth under the caption "Supplemental Financial Information — Common Stock Price Range" on page 91 of the 2002 Annual Report to Shareholders, which is incorporated herein by reference. As of January 31, 2003, there were 5,530 holders of record of our common stock.

During fiscal 2001 and 2002, dividends of \$0.12 per share of common stock were declared on December 18, 2000, March 19, 2001, June 18, 2001, September 25, 2001, December 19, 2001, March 18, 2002, June 19, 2002 and September 23, 2002. The holders of our common stock share proportionately on a per share basis in all dividends and other distributions declared by our board of directors.

The declaration of dividends by Goldman Sachs is subject to the discretion of our board of directors. Our board of directors will take into account such matters as general business conditions, our financial results, capital requirements, contractual, legal and regulatory restrictions on the payment of dividends by us to our shareholders or by our subsidiaries to us, the effect on our debt ratings and such other factors as our board of directors may deem relevant. See "Business — Regulation" in Item 1 of this Annual Report on Form 10-K for a discussion of potential regulatory limitations on our receipt of funds from our regulated subsidiaries.

On November 20, 2002, our board of directors authorized the repurchase of additional shares of The Goldman Sachs Group, Inc.'s common stock pursuant to our existing share repurchase program. The repurchase program is being effected from time to time, depending on market conditions and other factors, through open market purchases and privately negotiated transactions. The total remaining authorization under the repurchase program was 17.2 million shares as of January 31, 2003.

Information relating to compensation plans under which equity securities of The Goldman Sachs Group, Inc. are authorized for issuance is set forth under "Equity Compensation Plan Information" on page 15 of the Proxy Statement for our 2003 Annual Meeting of Shareholders to be held on April 1, 2003 (the "2003 Proxy Statement") and all such information is incorporated herein by reference.

Item 6. Selected Financial Data

The Selected Financial Data table is set forth on page 92 of the 2002 Annual Report to Shareholders and is incorporated herein by reference.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Management's Discussion and Analysis of Financial Condition and Results of Operations is set forth under the caption "Management's Discussion and Analysis" on pages 30 to 59 of the 2002 Annual Report to Shareholders and is incorporated herein by reference. All of such information should be read in conjunction with the consolidated financial statements and the notes thereto, which are incorporated by reference in Item 8 of this Annual Report on Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Quantitative and qualitative disclosure about market risk is set forth on pages 46 to 53 of the 2002 Annual Report to Shareholders under the caption "Management's Discussion and

Analysis — Risk Management'' and on pages 71 to 74 of such Annual Report in Note 4 to the consolidated financial statements, and is incorporated herein by reference.

Item 8. Financial Statements and Supplementary Data

The consolidated financial statements of the Registrant and its subsidiaries, together with the notes thereto and the Report of Independent Accountants thereon, are contained in the 2002 Annual Report to Shareholders on pages 60 to 89, and are incorporated herein by reference. In addition, the information on page 90 of the 2002 Annual Report to Shareholders under the caption "Supplemental Financial Information — Quarterly Results" is incorporated herein by reference.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

There were no changes in or disagreements with accountants on accounting and financial disclosure during the last two fiscal years.

PART III

Item 10. Directors and Executive Officers of the Registrant

Information relating to the Registrant's executive officers is included on pages 31 to 33 of this Annual Report on Form 10-K. Information relating to directors of the Registrant is set forth under the caption "Election of Directors" on pages 5 to 8 of the 2003 Proxy Statement and such information is incorporated herein by reference. Also incorporated herein by reference is the information under the caption "Other Matters — Section 16(a) Beneficial Ownership Reporting Compliance" on page 34 of the 2003 Proxy Statement.

Item 11. Executive Compensation

Information relating to the Registrant's executive officer and director compensation is set forth under the captions "Election of Directors — Employment Contracts and Change of Control Arrangements", "— Director Compensation", "— Executive Compensation", "— Stock Options" and "— Fiscal Year-End Option Holdings" on pages 9 to 14 of the 2003 Proxy Statement and all such information is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information relating to security ownership of certain beneficial owners of the Registrant's common stock is set forth under the caption "Beneficial Owners of More Than Five Percent" on page 24 of the 2003 Proxy Statement and information relating to the security ownership of the Registrant's management is set forth under the caption "Beneficial Ownership of Directors and Executive Officers" on pages 23 to 24 of the 2003 Proxy Statement and all such information is incorporated herein by reference. Information relating to compensation plans under which equity securities of the Registrant are authorized for issuance is set forth under "Equity Compensation Plan Information" on page 15 of the 2003 Proxy Statement and all such information is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions

Information regarding certain relationships and related transactions is set forth under the Caption "Certain Relationships and Related Transactions" on page 25 of the 2003 Proxy Statement and all such information is incorporated herein by reference.

Item 14. Controls and Procedures

Within the 90-day period prior to the filing of this report, an evaluation was carried out under the supervision and with the participation of Goldman Sachs' management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-14(c) under the Securities Exchange Act of 1934). Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the design and operation of these disclosure controls and procedures were effective. No significant changes were made in our internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation.

PART IV

Item 15. Exhibits, Financial Statement Schedules, and Reports on Form 8-K

(a) Documents filed as part of this Report:

1. Consolidated Financial Statements

The consolidated financial statements required to be filed in this Annual Report on Form 10-K are listed on page F-1 hereof and incorporated herein by reference to the corresponding page number in the 2002 Annual Report to Shareholders.

2. Financial Statement Schedules

The financial statement schedule required in this Annual Report on Form 10-K is listed on page F-1 hereof. The required schedule appears on pages F-3 through F-7 hereof.

- 3. Exhibits
 - 2.1 Plan of Incorporation.*
 - 3.1 Amended and Restated Certificate of Incorporation of The Goldman Sachs Group, Inc.**
 - 3.2 Amended and Restated By-Laws of The Goldman Sachs Group, Inc.
 - 4.1 Indenture, dated as of May 19, 1999, between The Goldman Sachs Group, Inc. and The Bank of New York, as trustee (incorporated by reference to Exhibit 6 to the Registrant's registration statement on Form 8-A, filed June 29, 1999).

Certain instruments defining the rights of holders of long-term debt securities of the Registrant and its subsidiaries are omitted pursuant to Item 601(b)(4)(iii) of Regulation S-K. The Registrant hereby undertakes to furnish to the SEC, upon request, copies of any such instruments.

- 10.1 Lease, dated June 11, 1985, between Metropolitan Life Insurance Company and Goldman, Sachs & Co.*
- 10.2 Lease, dated April 5, 1994, between The Chase Manhattan Bank (National Association) and The Goldman Sachs Group, L.P., as amended.*
- 10.3 Lease, dated September 24, 1992, from LDT Partners to Goldman Sachs International (incorporated by reference to Exhibit 10.34 to the Registrant's registration statement on Form S-1 (No. 333-74449)).
- 10.4 Agreement for Lease, dated November 29, 1998, between Turbo Top Limited and Goldman Sachs (Asia) Finance (incorporated by reference to Exhibit 10.13 to the Registrant's registration statement on Form S-1 (No. 333-74449)).

- 10.5 Summary of Tokyo Leases (incorporated by reference to Exhibit 10.14 to the Registrant's registration statement on Form S-1 (No. 333-74449)).
- 10.6 The Goldman Sachs 1999 Stock Incentive Plan (incorporated by reference to Exhibit 10.15 to the Registrant's registration statement on Form S-1 (No. 333-75213)).†
- 10.7 The Goldman Sachs Defined Contribution Plan (incorporated by reference to Exhibit 10.16 to the Registrant's registration statement on Form S-1 (No. 333-75213)).†
- 10.8 The Goldman Sachs Partner Compensation Plan (incorporated by reference to Exhibit 10.18 to the Registrant's registration statement on Form S-1 (No. 333-75213)).†
- 10.9 Form of Employment Agreement (incorporated by reference to Exhibit 10.19 to the Registrant's registration statement on Form S-1 (No. 333-75213)).†
- 10.10 Form of Agreement Relating to Noncompetition and Other Covenants (incorporated by reference to Exhibit 10.20 to the Registrant's registration statement on Form S-1 (No. 333-75213)).†
- 10.11 Form of Pledge Agreement (incorporated by reference to Exhibit 10.21 to the Registrant's registration statement on Form S-1 (No. 333-75213)).†
- 10.12 Form of Award Agreement (Discretionary RSUs) (incorporated by reference to Exhibit 10.23 to the Registrant's registration statement on Form S-1 (No. 333-75213)).
- 10.13 Form of Option Agreement (Discretionary Options) (incorporated by reference to Exhibit 10.24 to the Registrant's registration statement on Form S-1 (No. 333-75213)).†
- 10.14 Form of 2002 Year-End Option Award Agreement.†
- 10.15 Form of 2002 Year-End RSU Award Agreement.†
- 10.16 Tax Indemnification Agreement, dated as of May 7, 1999, by and among The Goldman Sachs Group, Inc. and various parties (incorporated by reference to Exhibit 10.25 to the Registrant's registration statement on Form S-1 (No. 333-75213)).
- 10.17 Form of Shareholders' Agreement among The Goldman Sachs Group, Inc. and various parties (incorporated by reference to Exhibit 10.26 to the Registrant's Annual Report on Form 10-K for the fiscal year ended November 26, 1999).
- 10.18 Instrument of Indemnification (incorporated by reference to Exhibit 10.27 to the Registrant's registration statement on Form S-1 (No. 333-75213)).
- 10.19 Form of Indemnification Agreement (incorporated by reference to Exhibit 10.28 to the Registrant's Annual Report on Form 10-K for the fiscal year ended November 26, 1999).
- 10.20 Registration Rights Instrument, dated as of December 10, 1999 (incorporated by reference to Exhibit G to Amendment No. 1 to Schedule 13D, filed December 17, 1999, relating to the Registrant's common stock (No. 005-56295)).
- 10.21 Supplemental Registration Rights Instrument, dated as of December 10, 1999 (incorporated by reference to Exhibit H to Amendment No. 1 to Schedule 13D, filed December 17, 1999, relating to the Registrant's common stock).

- 10.22 Form of Indemnification Agreement (incorporated by reference to Exhibit 10.44 to the Registrant's Annual Report on Form 10-K for the fiscal year ended November 26, 1999).
- 10.23 Form of Indemnification Agreement, dated as of July 5, 2000 (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended August 25, 2000).
- 10.24 Pledge Agreement, dated as of May 7, 1999 (incorporated by reference to Exhibit F to Amendment No. 4 to Schedule 13D, filed July 11, 2000, relating to the Registrant's common stock).
- 10.25 Form of Amendment No. 1, dated as of July 10, 2000, to the Pledge Agreement (filed as Exhibit 10.52) (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the period ended August 25, 2000).
- 10.26 Amendment No. 1, dated as of September 5, 2000, to the Tax Indemnification Agreement, dated as of May 7, 1999 (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the period ended August 25, 2000).
- 10.27 Form of Non-Employee Director Option Agreement (incorporated by reference to Exhibit 10.55 to the Registrant's Annual Report on Form 10-K for the fiscal year ended November 24, 2000).†
- 10.28 Form of Non-Employee Director RSU Agreement (incorporated by reference to Exhibit 10.56 to the Registrant's Annual Report on Form 10-K for the fiscal year ended November 24, 2000).†
- 10.29 Supplemental Registration Rights Instrument, dated as of December 21, 2000 (incorporated by reference to Exhibit AA to Amendment No. 12 to Schedule 13D, filed January 23, 2001, relating to the Registrant's common stock).
- 10.30 Supplemental Registration Rights Instrument, dated as of December 21, 2001 (incorporated by reference to Exhibit 4.4 to Registrant's registration statement on Form S-3 (No. 333-74006)).
- 10.31 Supplemental Registration Rights Instrument, dated as of December 20, 2002 (incorporated by reference to Exhibit 4.4 to Registrant's registration statement on Form S-3 (No. 333-101093)).
- 10.32 Letter, dated February 6, 2001, from The Goldman Sachs Group, Inc. to Dr. Ruth J. Simmons (incorporated by reference to Exhibit 10.63 to the Registrant's Annual Report on Form 10-K for the fiscal year ended November 24, 2000).†
- 10.33 Letter, dated February 6, 2001, from The Goldman Sachs Group, Inc. to Mr. John H. Bryan (incorporated by reference to Exhibit 10.64 to the Registrant's Annual Report on Form 10-K for the fiscal year ended November 24, 2000).
- 10.34 Letter, dated February 6, 2001, from The Goldman Sachs Group, Inc. to Mr. James A. Johnson (incorporated by reference to Exhibit 10.65 to the Registrant's Annual Report on Form 10-K for the fiscal year ended November 24, 2000).†
- 10.35 Letter, dated February 6, 2001, from The Goldman Sachs Group, Inc. to Lord Browne of Madingley (incorporated by reference to Exhibit 10.66 to the Registrant's Annual Report on Form 10-K for the fiscal year ended November 24, 2000).†

- 10.36 Letter, dated September 24, 2001, from The Goldman Sachs Group, Inc. to Ms. Margaret C. Whitman (incorporated by reference to Exhibit 10.38 to the Registrant's Annual Report on Form 10-K for the fiscal year ended November 30, 2001).
- 10.37 Letter, dated November 19, 2001, from The Goldman Sachs Group, Inc. to Dr. Morris Chang (incorporated by reference to Exhibit 10.39 to the Registrant's Annual Report on Form 10-K for the fiscal year ended November 30, 2001).
- 10.38 Letter, dated April 15, 2002, from The Goldman Sachs Group, Inc. to Mr. Stephen Friedman (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the period ended May 31, 2002).†
- 10.39 Letter, dated December 18, 2002, from The Goldman Sachs Group, Inc. to Mr. William W. George.†
- 10.40 Amendment to The Goldman Sachs 1999 Stock Incentive Plan.†
- 12.1 Statement re computation of ratios of earnings to fixed charges.
- 13 The following portions of the Registrant's 2002 Annual Report to Shareholders, which are incorporated by reference in this Annual Report on Form 10-K, are filed as an exhibit:
- 13.1 "Management's Discussion and Analysis" (pages 30 to 59).
- 13.2 Consolidated Financial Statements of the Registrant and its subsidiaries, together with the Notes thereto and the Report of Independent Accountants thereon (pages 60 to 89).
- 13.3 "Supplemental Financial Information Quarterly Results" and "— Common Stock Price Range" (pages 90 and 91).
- 13.4 Selected Financial Data (page 92).
- 21.1 List of subsidiaries of The Goldman Sachs Group, Inc.
- 23.1 Consent of PricewaterhouseCoopers LLP.
- 24.1 Powers of Attorney (included on signature page).
- 99.1 Opinion of PricewaterhouseCoopers LLP with respect to the Selected Financial Data, which is incorporated by reference in Part II, Item 6 hereof.

† This exhibit is a management contract or a compensatory plan or arrangement.

(b) Reports on Form 8-K:

On September 24, 2002, we filed a Current Report on Form 8-K reporting our earnings for our fiscal third quarter ended August 30, 2002.

On December 19, 2002, we filed a Current Report on Form 8-K reporting our earnings for our fiscal fourth quarter ended November 29, 2002.

On December 23, 2002, we filed a Current Report on Form 8-K reporting a settlement of certain investigations into our investment research department.

On January 15, 2003, we filed a Current Report on Form 8-K reporting our purchase of convertible preferred stock of Sumitomo Mitsui Financial Group, Inc. and other related transactions.

^{*} Incorporated by reference to the corresponding exhibit to the Registrant's registration statement on Form S-1 (No. 333-74449).

^{**} Incorporated by reference to the corresponding exhibit to the Registrant's registration statement on Form S-1 (No. 333-75213).

THE GOLDMAN SACHS GROUP, INC. INDEX TO FINANCIAL STATEMENTS AND FINANCIAL STATEMENT SCHEDULE ITEMS 14(a)(1) AND 14(a)(2)

	Page Reference	
	Form 10-K	2002 Annual Report to Shareholders
Consolidated Financial Statements		
Report of Independent Accountants		60
Consolidated Statements of Earnings		61
Consolidated Statements of Financial Condition		62
Consolidated Statements of Changes in Shareholders' Equity		63
Consolidated Statements of Cash Flows		64
Consolidated Statements of Comprehensive Income		65
Notes to Consolidated Financial Statements		66
Financial Statement Schedule Schedule I — Condensed Financial Information of Registrant (Parent Company Only)		
Report of Independent Accountants	F-2	
Condensed Statements of Earnings	F-3 F-4	
Condensed Statements of Cash Flows	F-4 F-5	
Notes to Condensed Financial Statements	F-6	
Specifically incorporated elsewhere herein by reference are certa unaudited items:	ain portions o	f the following

(i) Management's Discussion and Analysis;	30 to 59
(ii) Supplemental Financial Information — Quarterly Results;	90
(iii) Supplemental Financial Information — Common Stock Price Range; and	91
(iv) Supplemental Financial Information — Selected Financial Data.	92

Schedules not listed are omitted because of the absence of the conditions under which they are required or because the information is included in the consolidated financial statements and notes thereto in the 2002 Annual Report to Shareholders, which information is incorporated herein by reference.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Directors and Shareholders of The Goldman Sachs Group, Inc.:

Our audits of the consolidated financial statements referred to in our report dated January 27, 2003 appearing in the 2002 Annual Report to Shareholders of The Goldman Sachs Group, Inc. and Subsidiaries (which report and consolidated financial statements are incorporated by reference in this Annual Report on Form 10-K) also included an audit of the financial statement schedule listed on page F-1 of this Form 10-K. In our opinion, this financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

/s/ PRICEWATERHOUSECOOPERS LLP

New York, New York January 27, 2003.

CONDENSED STATEMENTS OF EARNINGS (PARENT COMPANY ONLY)

	Year Ended November		
	2002	2001	2000
		(in millions)	
Revenues			
Equity in earnings of subsidiaries	\$2,754	\$3,820	\$3,986
Principal investments	2	(124)	561
Interest income	2,135	3,785	4,577
Total revenues	4,891	7,481	9,124
Interest expense	2,131	3,882	4,806
Revenues, net of interest expense	2,760	3,599	4,318
Compensation and benefits	118	167	186
Other	115	120	133
Total operating expenses	233	287	319
Pre-tax earnings	2,527	3,312	3,999
Provision for taxes	413	1,002	932
Net earnings	\$2,114	\$2,310	\$3,067

The accompanying notes are an integral part of these condensed financial statements.

CONDENSED STATEMENTS OF FINANCIAL CONDITION (PARENT COMPANY ONLY)

	As of November	
	2002 (in millions, and per sha	2001 except share amounts)
Assets	por one	,
Cash and cash equivalents	\$1	\$ —
Financial instruments owned, at fair value	5,089	4,862
Receivables from affiliates	56,026	49,184
Subordinated loan receivables from affiliates	13,312	12,112
Investments in subsidiaries	17,930	16,877
Other assets	2,875	2,659
Total assets	\$95,233	\$85,694
Liabilities and shareholders' equity		
Short-term borrowings, including the current portion of long-term		
borrowings	\$35,001	\$33,593
Payables to affiliates	2,294	2,624
Other liabilities and accrued expenses	968	1,148
Long-term borrowings	05 400	~~ ~~~
With third parties	35,123	29,769
With affiliates	2,844	329
Total liabilities	76,230	67,463
Commitments and contingencies		
Shareholders' equity		
Preferred stock, par value \$0.01 per share; 150,000,000 shares		
authorized, no shares issued and outstanding		
Common stock, par value \$0.01 per share; 4,000,000,000 shares		
authorized, 515,084,810 and 499,017,511 shares issued as of		
November 2002 and November 2001, respectively, and 472,940,724		
and 476,228,933 shares outstanding as of November 2002 and	_	_
November 2001, respectively	5	5
Restricted stock units	3,494	4,542
Nonvoting common stock, par value \$0.01 per share; 200,000,000 shares authorized, no shares issued and outstanding		
Additional paid-in capital	12,773	11,785
Retained earnings	7,259	5,373
Unearned compensation.	(845)	(1,220)
Accumulated other comprehensive loss	(122)	(168)
Treasury stock, at cost, par value \$0.01 per share; 42,144,086 and	· /	· · · ·
22,788,578 shares as of November 2002 and November 2001,		
respectively	(3,561)	(2,086)
Total shareholders' equity	19,003	18,231
Total liabilities and shareholders' equity	\$95,233	\$85,694
	<u>·</u>	

The accompanying notes are an integral part of these condensed financial statements.

CONDENSED STATEMENTS OF CASH FLOWS (PARENT COMPANY ONLY)

	Year Ended November		
	2002	2001	2000
	(in millions)		
Cash flows from operating activities			
Net earnings	\$ 2,114	\$ 2,310	\$ 3,067
Noncash items included in net earnings			<i></i>
Undistributed earnings of subsidiaries	(118)	(1,246)	(1,770)
Depreciation and amortization	97	90	108
Deferred income taxes	52	490	(240)
Stock-based compensation	31 (14)	23 (9)	49 (10)
Other, net Changes in operating assets and liabilities	(14)	(9)	(10)
Financial instruments owned, at fair value	938	879	(711)
Other, net.	(928)	34	(228)
Net cash provided by operating activities	2,172	2,571	265
Cash flows from investing activities	2,172	2,571	205
Financial instruments owned, at fair value	(1,165)	(1,391)	(165)
Receivables from affiliates, net	(6,568)	(3,547)	552
Subordinated loan receivables from affiliates	(1,200)	294	(3,358)
Investment in subsidiaries, net	(774)	(456)	(152)
Property, leasehold improvements and equipment	(44)	(134)	(269)
Business combinations, net of cash acquired	(68)	(314)	(1,988)
Net cash used for investing activities	(9,819)	(5,548)	(5,380)
Cash flows from financing activities			
Short-term borrowings, net	4,332	3,957	(610)
Issuance of long-term borrowings	13,616	6,315	15,704
Repayment of long-term borrowings, including the current	(9.657)	(5.601)	(0.116)
portion of long-term borrowings	(8,657) (1,475)	(5,631) (1,438)	(9,116) (648)
Dividends paid	(228)	(231)	(217)
Proceeds from issuance of common stock	60	(201)	(217)
Net cash provided by financing activities	7,648	2,977	5,114
Net increase / (decrease) in cash and cash equivalents	1,040	2,517	(1)
Cash and cash equivalents, beginning of year		_	1
Cash and cash equivalents, end of year	\$ 1	\$ —	<u> </u>
	Ψ Ι	Ψ	Ψ

SUPPLEMENTAL DISCLOSURES:

Cash payments for interest approximated the related expense for each of the fiscal years presented.

Payments of income taxes were \$546 million, \$545 million and \$1.23 billion for the years ended November 2002, November 2001 and November 2000, respectively.

Noncash activities:

The value of common stock issued in connection with business combinations was \$47 million, \$223 million and \$3.41 billion for the years ended November 2002, November 2001 and November 2000, respectively.

Stock-based compensation expense included in subsidiary net earnings was \$609 million, \$766 million and \$1.30 billion for the years ended November 2002, November 2001 and November 2000, respectively.

The accompanying notes are an integral part of these condensed financial statements.

THE GOLDMAN SACHS GROUP, INC. NOTES TO CONDENSED FINANCIAL STATEMENTS (PARENT COMPANY ONLY)

Note 1. Significant Accounting Policies

Basis of Presentation

The condensed unconsolidated financial statements of The Goldman Sachs Group, Inc. (the parent company) should be read in conjunction with the consolidated financial statements of The Goldman Sachs Group, Inc. and subsidiaries (the firm) and notes thereto, which are incorporated by reference in this Form 10-K.

Investments in subsidiaries are accounted for using the equity method.

These condensed unconsolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America that require management to make estimates and assumptions regarding investment valuations, the outcome of pending litigation and other matters that affect the condensed unconsolidated financial statements and related disclosures. These estimates and assumptions are based on judgment and available information and, consequently, actual results could be materially different from these estimates.

Certain reclassifications have been made to the prior years' financial statements to conform with the current year presentation.

Financial Instruments Owned

Financial instruments owned, including principal investments, are carried at fair value or amounts that approximate fair value, with related unrealized gains or losses recognized in the condensed statements of earnings. Fair value is based generally on listed market prices or broker or dealer price quotations. If prices are not readily determinable or if liquidating the position is reasonably expected to affect market prices, fair value is based on either internal valuation models or management's estimate of amounts that could be realized under current market conditions, assuming an orderly liquidation over a reasonable period of time. The firm's valuation models consider, among other inputs, contractual and market prices, yield curves, credits, volatility factors, prepayment rates and/or correlation of the underlying positions. Downward adjustments are made if management determines that realizable value is less than the carrying value.

Affiliate Financings

Most of the consolidated unsecured liquidity of the firm is raised by the parent company. The parent company then lends the necessary funds to its subsidiaries and affiliates, as represented by "Receivables from affiliates" and "Subordinated loan receivables from affiliates" on the condensed statements of financial condition. Intercompany exposure is managed by generally requiring intercompany loans to have maturities equal to or shorter than the maturities of the aggregate borrowings of the parent company. This policy ensures that the subsidiaries' obligations to the parent company will generally mature in advance of the parent company's third-party long-term borrowings. In addition, many of the subsidiaries and affiliates pledge collateral to cover their intercompany borrowings. Equity investments in subsidiaries are generally funded with equity capital.

The parent company guarantees certain obligations of its subsidiaries in the ordinary course of business.

NOTES TO CONDENSED FINANCIAL STATEMENTS (PARENT COMPANY ONLY) — (Continued)

Interest income is largely generated from loans made to affiliates.

Income Taxes

Income taxes are accounted for in accordance with SFAS No. 109, "Accounting for Income Taxes," which requires the recognition of tax benefits or expenses on the temporary differences between the financial reporting and tax bases of assets and liabilities. Tax assets and liabilities are presented as a component of "Other assets" and "Other liabilities and accrued expenses," respectively, in the condensed statements of financial condition.

Included in "Other assets" are deferred tax assets totaling approximately \$800 million and \$900 million as of November 2002 and November 2001, respectively.

Note 2. Restricted Stock Units

Total restricted stock units outstanding for the years ended November 2002, November 2001 and November 2000 were as follows:

	No Future Service Required	Future Service Required
November 2000(1)	33,502,219	46,335,940
November 2001	25,629,933	41,669,062
November 2002(2)	18,315,938	29,895,000

- Includes restricted stock units granted in connection with the combination with SLK and restricted stock units granted to employees, subsequent to year-end, as part of year-end compensation.
- (2) Includes restricted stock units granted to employees subsequent to year-end as part of year-end compensation.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

THE GOLDMAN SACHS GROUP, INC.

BY: /s/ DAVID A. VINIAR

Name: David A. Viniar Title: Chief Financial Officer

Date: February 27, 2003

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints John A. Thain, Gregory K. Palm, David A. Viniar and Esta E. Stecher, and each of them severally, his or her true and lawful attorney-in-fact with power of substitution and resubstitution to sign in his or her name, place and stead, in any and all capacities, to do any and all things and execute any and all instruments that such attorney may deem necessary or advisable under the Securities Exchange Act of 1934 and any rules, regulations and requirements of the U.S. Securities and Exchange Commission in connection with this Annual Report on Form 10-K and any and all amendments hereto, as fully for all intents and purposes as he or she might or could do in person, and hereby ratifies and confirms all said attorneys-in-fact and agents, each acting alone, and his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below on behalf of the registrant and in the capacities and on the dates indicated.

Signatures	Capacity	Date
/s/ HENRY M. PAULSON, JR. Henry M. Paulson, Jr.	Director, Chairman and Chief Executive Officer (Principal Executive Officer)	February 27, 2003
/s/ ROBERT J. HURST Robert J. Hurst	Director	February 27, 2003
/s/ Јонл А. Тнаіл John A. Thain	Director	February 27, 2003
/s/ Јонл L. Thornton John L. Thornton	Director	February 27, 2003
/s/ Lord Browne of Madingley Lord Browne of Madingley	Director	February 27, 2003
/s/ Јонл Н. Вryan John H. Bryan	Director	February 27, 2003
/s/ WILLIAM W. GEORGE William W. George	Director	February 27, 2003
/s/ James A. Johnson James A. Johnson	Director	February 27, 2003
/s/ Ruth J. Simmons Ruth J. Simmons	Director	February 27, 2003
/s/ David A. Viniar David A. Viniar	Chief Financial Officer (Principal Financial Officer)	February 27, 2003
/s/ SARAH E. SMITH Sarah E. Smith	Principal Accounting Officer	February 27, 2003

CERTIFICATIONS

I, Henry M. Paulson, Jr., certify that:

1. I have reviewed this annual report on Form 10-K of The Goldman Sachs Group, Inc.;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:

a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/ HENRY M. PAULSON, JR.

Name: Henry M. Paulson, Jr. Title: Chief Executive Officer

Date: February 27, 2003

CERTIFICATIONS

I, David A. Viniar, certify that:

1. I have reviewed this annual report on Form 10-K of The Goldman Sachs Group, Inc.;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:

a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/ David A. Viniar

Name: David A. Viniar Title: Chief Financial Officer

Date: February 27, 2003

BY-LAWS

OF

THE GOLDMAN SACHS GROUP, INC.

ARTICLE I

Stockholders

Section 1.1. Annual Meetings. An annual meeting of stockholders shall be held for the election of directors at such date, time and place either within or without the State of Delaware as may be designated by the Board of Directors from time to time. Any other business properly brought before the meeting may be transacted at the annual meeting.

Section 1.2. Special Meetings. Special meetings of stockholders may be called at any time by, and only by, the Board of Directors, to be held at such date, time and place either within or without the State of Delaware as may be stated in the notice of the meeting.

Section 1.3. Notice of Meetings. Whenever stockholders are required or permitted to take any action at a meeting, a written notice of the meeting shall be given which shall state the place, date and hour of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Unless otherwise required by law, the written notice of any meeting shall be given not less than ten nor more than sixty days before the date of the meeting to each stockholder entitled to vote at such meeting. If mailed, such notice shall be deemed to be given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation.

Section 1.4. Adjournments. Any meeting of stockholders, annual or special, may be adjourned from time to time, to reconvene at the same or some other place, and notice need not be given of any such adjourned meeting if the time and place thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting the Corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than thirty days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

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Section 1.5. Quorum. At each meeting of stockholders, except where otherwise required by law, the certificate of incorporation or these by-laws, the holders of a majority of the outstanding shares of stock entitled to vote on a matter at the meeting, present in person or represented by proxy, shall constitute a quorum. For purposes of the foregoing, where a separate vote by class or classes is required for any matter, the holders of a majority of the outstanding shares of such class or classes, present in person or represented by proxy, shall constitute a quorum to take action with respect to that vote on that matter. Two or more classes or series of stock shall be considered a single class if the holders thereof are entitled to vote together as a single class at the meeting. In the absence of a quorum of the holders of any class of stock entitled to vote on a matter, the meeting of such class may be adjourned from time to time in the manner provided by Sections 1.4 and 1.6 of these by-laws until a quorum of such class shall be so present or represented. Shares of its own capital stock belonging on the record date for the meeting to the Corporation or to another corporation, if a majority of the shares entitled to vote in the election of directors of such other corporation is held, directly or indirectly, by the Corporation, shall neither be entitled to vote nor be counted for quorum purposes; provided, however, that the foregoing shall not limit the right of the Corporation to vote stock, including but not limited to its own stock, held by it in a fiduciary capacity.

Section 1.6. Organization. Meetings of stockholders shall be presided over by a Chairman of the Board, if any, or in the absence of a Chairman of the Board by a Vice Chairman of the Board, if any, or in the absence of a Vice Chairman of the Board by a Chief Executive Officer, or in the absence of a Chief Executive Officer by a President, or in the absence of a President by a Chief Operating Officer, or in the absence of a Chief Operating Officer by a Vice President, or in the absence of the foregoing persons by a chairman designated by the Board of

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Directors, or in the absence of such designation by a chairman chosen at the meeting. A Secretary, or in the absence of a Secretary and Assistant Secretary, shall act as secretary of the meeting, but in the absence of a Secretary and any Assistant Secretary the chairman of the meeting may appoint any person to act as secretary of the meeting.

The order of business at each such meeting shall be as determined by the chairman of the meeting. The chairman of the meeting shall have the right and authority to adjourn a meeting of stockholders without a vote of stockholders and to prescribe such rules, regulations and procedures and to do all such acts and things as are necessary or desirable for the proper conduct of the meeting and are not inconsistent with any rules or regulations adopted by the Board of Directors pursuant to the provisions of the certificate of incorporation, including the establishment of procedures for the maintenance of order and safety, limitations on the time allotted to questions or comments on the affairs of the Corporation, restrictions on entry to such meeting after the time prescribed for the commencement thereof and the opening and closing of the voting polls for each item upon which a vote is to be taken.

Section 1.7. Inspectors, Prior to any meeting of stockholders, the Board of Directors, a Chairman of the Board, a Vice Chairman of the Board, a Chief Executive Officer, a President, a Chief Operating Officer, a Vice President or any other officer designated by the Board shall appoint one or more inspectors to act at such meeting and make a written report thereof and may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at the meeting of stockholders, the person presiding at the meeting shall appoint one or more inspectors to act at the meeting. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspectors shall ascertain the number of shares outstanding and the voting power of each, determine the shares represented at the meeting and the validity of proxies and ballots, count all votes and ballots, determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors and certify their determination of the number of shares represented at the meeting and their count of all votes and ballots. The inspectors may appoint or retain other persons to assist them in the performance of their duties. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at a meeting shall be announced at the meeting. No ballot, proxy or vote, nor any revocation thereof or change thereto, shall be accepted by the inspectors after the closing of the polls. In determining the validity and counting of proxies and ballots, the inspectors shall be limited to an examination of the proxies, any envelopes submitted therewith, any information provided by a stockholder who submits a proxy by telegram, cablegram or other electronic transmission from which it can be determined that the proxy was authorized by the stockholder, ballots and the regular books and records of the Corporation, and they may also consider other reliable information for the limited purpose of reconciling proxies and ballots submitted by or on behalf of banks, brokers, their nominees or similar persons which represent more votes than the holder of a proxy is authorized by the record owner to cast or more votes

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than the stockholder holds of record. If the inspectors consider other reliable information for such purpose, they shall, at the time they make their certification, specify the precise information considered by them, including the person or persons from whom they obtained the information, when the information was obtained, the means by which the information was obtained and the basis for the inspectors' belief that such information is accurate and reliable.

Section 1.8. Voting; Proxies. Unless otherwise provided in the certificate of incorporation, each stockholder entitled to vote at any meeting of stockholders shall be entitled to one vote for each share of stock held by such stockholder which has voting power upon the matter in question. If the certificate of incorporation provides for more or less than one vote for any share on any matter, every reference in these bylaws to a majority or other proportion of shares of stock shall refer to such majority or other proportion of the votes of such shares of stock. Each stockholder entitled to vote at a meeting of stockholders may authorize another person or persons to act for such stockholder by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A duly executed proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power, regardless of whether the interest with which it is coupled is an interest in the stock itself or an interest in the Corporation generally. A stockholder may revoke any proxy which is not irrevocable by attending the meeting and voting in person or by filing an instrument in writing revoking the proxy or another duly executed proxy bearing a later date with a Secretary. Voting at meetings of stockholders need not be by written ballot unless so directed by the chairman of the meeting or the Board of Directors. Directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors. In all other matters, unless otherwise required by law, the certificate of incorporation or these by-laws, the affirmative vote of the holders of a majority of the shares present in person or represented by proxy at the meeting and entitled to vote on the subject matter shall be the act of the stockholders. Where a separate vote by class or classes is required, the affirmative vote of the holders of a majority (or, in the case of an election of directors, a plurality) of the shares of such class or classes present in person or represented by proxy at the meeting shall be the act of such class or classes, except as otherwise required by law, the certificate of incorporation or these by-laws.

Section 1.9. Fixing Date for Determination of Stockholders of Record. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than sixty nor less than ten days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is

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waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than sixty days prior to the action for which a record date is being established. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 1.10. List of Stockholders Entitled to Vote. A Secretary shall prepare and make, at least ten days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten days prior to the meeting, either at a place within the municipality where the meeting is to be held, which place shall be specified in the notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof and may be inspected by any stockholder who is present.

Section 1.11. Advance Notice of Stockholder Nominees for Director and Other Stockholder Proposals. (a) The matters to be considered and brought before any annual or special meeting of stockholders of the Corporation shall be limited to only such matters, including the nomination and election of directors, as shall be brought properly before such meeting in compliance with the procedures set forth in this Section 1.11.

(b) For any matter to be properly brought before any annual meeting of stockholders, the matter must be (i) specified in the notice of annual meeting given by or at the direction of the Board of Directors, (ii) otherwise brought before the annual meeting by or at the direction of the Board of Directors or (iii) brought before the annual meeting in the manner specified in this Section 1.11(b)(x) by a stockholder that holds of record stock of the Corporation entitled to vote at the annual meeting on such matter (including any election of a director) or (y) by a person (a "Nominee Holder") that holds such stock through a nominee or "street name" holder of record of such stock and can demonstrate to the Corporation such indirect ownership of, and such Nominee Holder's entitlement to vote, such stock on such matter. In addition to any other requirements

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under applicable law, the certificate of incorporation and these by-laws, persons nominated by stockholders for election as directors of the Corporation and any other proposals by stockholders shall be properly brought before an annual meeting of stockholders only if notice of any such matter to be presented by a stockholder at such meeting (a "Stockholder Notice") shall be delivered to a Secretary at the principal executive office of the Corporation not less than ninety nor more than one hundred and twenty days prior to the first anniversary date of the annual meeting for the preceding year (or, in the case of the annual meeting of stockholders to be held in 2000, not less than ninety nor more than one hundred and twenty days prior to May 1, 2000); provided, however, that if and only if the annual meeting is not scheduled to be held within a period that commences thirty days before and ends thirty days after such anniversary date (or May 1, 2000, in the case of the annual meeting of stockholders to be held in 2000) (an annual meeting date outside such period being referred to herein as an "Other Meeting Date"), such Stockholder Notice shall be given in the manner provided herein by the later of (i) the close of business on the date ninety days prior to such Other Meeting Date or (ii) the close of business on the tenth day following the date on which such Other Meeting Date is first publicly announced or disclosed. Any stockholder desiring to nominate any person or persons (as the case may be) for election as a director or directors of the Corporation at an annual meeting of stockholders shall deliver, as part of such Stockholder Notice, a statement in writing setting forth the name of the person or persons to be nominated, the number and class of all shares of each class of stock of the Corporation owned of record and beneficially by each such person, as reported to such stockholder by such person, the information regarding each such person required by paragraphs (a), (e) and (f) of Item 401 of Regulation S-K adopted by the Securities and Exchange Commission, each such person's signed consent to serve as a director of the Corporation if elected, such stockholder's name and address, the number and class of all shares of each class of stock of the Corporation owned of record and beneficially by such stockholder and, in the case of a Nominee Holder, evidence establishing such Nominee Holder's indirect ownership of stock and entitlement to vote such stock for the election of directors at the annual meeting. Any stockholder who gives a Stockholder Notice of any matter (other than a nomination for director) proposed to be brought before an annual meeting of stockholders shall deliver, as part of such Stockholder Notice, the text of the proposal to be presented and a brief written statement of the reasons why such stockholder favors the proposal and setting forth such stockholder's name and address, the number and class of all shares of each class of stock of the Corporation owned of record and beneficially by such stockholder, any material interest of such stockholder in the matter proposed (other than as a stockholder), if applicable, and, in the case of a Nominee Holder, evidence establishing such Nominee Holder's indirect ownership of stock and entitlement to vote such stock on the matter proposed at the annual meeting. As used in these by-laws, shares "beneficially owned" shall mean all shares which such person is deemed to beneficially own pursuant to Rules 13d-3 and 13d-5 under the Securities Exchange Act of 1934 (the "Exchange Act"). If a stockholder is entitled to vote only for a specific class or category of directors at a meeting (annual or special), such stockholder's right to nominate one or more individuals for election as a director at the meeting shall be limited to such class or category of directors.

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Notwithstanding any provision of this Section 1.11 to the contrary, in the event that the number of directors to be elected to the Board of Directors of the Corporation at the next annual meeting of stockholders is increased by virtue of an increase in the size of the Board of Directors and either all of the nominees for director at the next annual meeting of stockholders or the size of the increased Board of Directors is not publicly announced or disclosed by the Corporation at least one hundred days prior to the first anniversary of the preceding year's annual meeting (or, in the case of the annual meeting of stockholders to be held in 2000, at least one hundred days prior to May 1, 2000), a Stockholder Notice shall also be considered timely hereunder, but only with respect to nominees to stand for election at the next annual meeting as the result of any new positions created by such increase, if it shall be delivered to a Secretary at the principal executive office of the Corporation not later than the close of business on the tenth day following the first day on which all such nominees or the size of the increased Board or disclosed.

(c) Except as provided in the immediately following sentence, no matter shall be properly brought before a special meeting of stockholders unless such matter shall have been brought before the meeting pursuant to the Corporation's notice of such meeting. In the event the Corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board of Directors, any stockholder entitled to vote for the election of such director(s) at such meeting may nominate a person or persons (as the case may be) for election to such position(s) as are specified in the Corporation's notice of such meeting, but only if the Stockholder Notice required by Section 1.11(b) hereof shall be delivered to a Secretary at the principal executive office of the Corporation not later than the close of business on the tenth day following the first day on which the date of the special meeting and either the names of all nominees proposed by the Board of Directors to be elected at such meeting or the number of directors to be elected shall have been publicly announced or disclosed.

(d) For purposes of this Section 1.11, a matter shall be deemed to have been "publicly announced or disclosed" if such matter is disclosed in a press release reported by the Dow Jones News Service, the Associated Press or a comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission.

(e) In no event shall the adjournment of an annual meeting or a special meeting, or any announcement thereof, commence a new period for the giving of notice as provided in this Section 1.11. This Section 1.11 shall not apply to (i) any stockholder proposal made pursuant to Rule 14a-8 under the Exchange Act or (ii) any nomination of a director in an election in which only the holders of one or more series of Preferred Stock of the Corporation issued pursuant to Article FOURTH of the certificate of incorporation are entitled to vote (unless otherwise provided in the terms of such stock).

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(f) The chairman of any meeting of stockholders, in addition to making any other determinations that may be appropriate to the conduct of the meeting, shall have the power and duty to determine whether notice of nominees and other matters proposed to be brought before a meeting has been duly given in the manner provided in this Section 1.11 and, if not so given, shall direct and declare at the meeting that such nominees and other matters shall not be considered.

Section 1.12. Approval of Stockholder Proposals. Except as otherwise required by law, any matter (other than a nomination for director) that has been properly brought before an annual or special meeting of stockholders of the Corporation by a stockholder (including a Nominee Holder) in compliance with the procedures set forth in Section 1.11 shall require for approval thereof the affirmative vote of the holders of not less than a majority of all outstanding shares of Common Stock of the Corporation and all other outstanding shares of stock of the Corporation entitled to vote on such matter, with such outstanding shares of Common Stock and other stock considered for this purpose as a single class. Any vote of stockholders required by this Section 1.12 shall be in addition to any other vote of stockholders of the Corporation that may be required by law, the certificate of incorporation or these by-laws, by any agreement with a national securities exchange or otherwise.

ARTICLE II

Board of Directors

Section 2.1. Powers; Number; Qualifications. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors, except as may be otherwise required by law or provided in the certificate of incorporation. The number of directors of the Corporation and the number of directors in each class of directors shall be fixed only by resolution of the Board of Directors from time to time. If the holders of any class or classes of stock or series thereof are entitled by the certificate of incorporation to elect one or more directors, the preceding sentence shall not apply to such directors and the number of such directors shall be as provided in the terms of such stock. Directors need not be stockholders.

Section 2.2. Election; Term of Office; Resignation; Removal; Vacancies. Each director shall hold office until the next election of the class or category for which such director shall have been chosen, and until his or her successor is elected and qualified or until his or her earlier resignation or removal. Any director may resign at any time upon written notice to the Board of Directors or to a Chairman of the Board, a Vice Chairman of the Board, a Chief Executive Officer, a President, a Chief Operating Officer or a Secretary. Such resignation shall take effect at the time specified therein, and unless otherwise specified therein no acceptance of such resignation shall be necessary to make it effective. No director may be removed except as provided in the certificate of incorporation. Vacancies and newly created directorships resulting from any increase in

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the authorized number of directors (other than any directors elected in the manner described in the next sentence) or from any other cause shall be filled by, and only by, a majority of the directors then in office, although less than a quorum, or by the sole remaining director. Whenever the holders of any class or classes of stock or series thereof are entitled by the certificate of incorporation to elect one or more directors, vacancies and newly created directorships of such class or classes or series may be filled by, and only by, a majority of the directors elected by such class or classes or series then in office, or by the sole remaining director so elected. Any director elected or appointed to fill a vacancy or a newly created directorship shall hold office until the next election of the class of directors of the director which such director replaced or the class of directors to which such director was appointed, and until his or her successor is elected and qualified or until his or her earlier resignation or removal.

Section 2.3. Regular Meetings. Regular meetings of the Board of Directors may be held at such places within or without the State of Delaware and at such times as the Board may from time to time determine, and if so determined notice thereof need not be given.

Section 2.4. Special Meetings. Special meetings of the Board of Directors may be held at any time or place within or without the State of Delaware whenever called by the Board, by a Chairman of the Board, if any, by a Vice Chairman of the Board, if any, by a Chairperson of the Corporate Governance and Nominating Committee, if any, by a Chief Executive Officer, if any, by a President, if any, by a Chief Operating Officer, if any, or by any two directors. Reasonable notice thereof shall be given by the person or persons calling the meeting.

Section 2.5. Participation in Meetings by Conference Telephone Permitted. Unless otherwise restricted by the certificate of incorporation or these by-laws, members of the Board of Directors, or any committee designated by the Board, may participate in a meeting of the Board or of such committee, as the case may be, by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting pursuant to this by-law shall constitute presence in person at such meeting.

Section 2.6. Quorum; Vote Required for Action. At each meeting of the Board of Directors, one-half of the number of directors equal to (i) the total number of directors fixed by resolution of the board of directors (including any vacancies) plus (ii) the number of directors elected by a holder or holders of Preferred Stock voting separately as a class, as described in the fourth paragraph of Article EIGHTH of the certificate of incorporation (including any vacancies), shall constitute a quorum for the transaction of business. The vote of a majority of the directors present at a meeting at which a quorum is present shall be the act of the Board unless the certificate of incorporation or these by-laws shall require a vote of a greater number. In case at any meeting of the Board a quorum shall not be present, the members or a majority of the

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members of the Board present may adjourn the meeting from time to time until a quorum shall be present.

Section 2.7. Organization. Meetings of the Board of Directors shall be presided over by a Chairman of the Board, if any, or in the absence of a Chairman of the Board by a Vice Chairman of the Board, if any, or in the absence of a Vice Chairman of the Board, by a Chief Executive Officer, or in the absence of a Chief Executive Officer, by a President, or in the absence of a President, by a Chief Operating Officer, or in the absence of a Chief Operating Officer, by a chairman chosen at the meeting. A Secretary, or in the absence of a Secretary and Assistant Secretary the chairman of the meeting may appoint any person to act as secretary of the meeting.

Section 2.8. Action by Directors Without a Meeting. Unless otherwise restricted by the certificate of incorporation or these by-laws, any action required or permitted to be taken at any meeting of the Board of Directors, or of any committee thereof, may be taken without a meeting if all members of the Board or of such committee, as the case may be, then in office consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the Board or committee.

Section 2.9. Compensation of Directors. Unless otherwise restricted by the certificate of incorporation or these by-laws, the Board of Directors shall have the authority to fix the compensation of directors.

ARTICLE III

Committees

Section 3.1. Committees. The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the Corporation. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board of Directors or in these by-laws, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to the following matters: (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by law to be submitted to stockholders for approval or (ii) adopting, amending or repealing these by-laws.

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Section 3.2. Committee Rules. Unless the Board of Directors otherwise provides, each committee designated by the Board may adopt, amend and repeal rules for the conduct of its business. In the absence of a provision by the Board or a provision in the rules of such committee to the contrary, a majority of the entire authorized number of members of such committee shall constitute a quorum for the transaction of business, the vote of a majority of the members present at a meeting at the time of such vote if a quorum is then present shall be the act of such committee, and in other respects each committee shall conduct its business in the same manner as the Board conducts its business pursuant to Article II of these by-laws.

ARTICLE IV

Officers

Section 4.1. Officers; Election or Appointment. The Board of Directors shall take such action as may be necessary from time to time to ensure that the Corporation has such officers as are necessary, under Section 5.1 of these by-laws and the Delaware General Corporation Law as currently in effect or as the same may hereafter be amended, to enable it to sign stock certificates. In addition, the Board of Directors at any time and from time to time may elect (i) one or more Chairmen of the Board and/or one or more Vice Chairmen of the Board from among its members, (ii) one or more Chief Executive Officers, one or more Presidents and/or one or more Chief Operating Officers, (iii) one or more Vice Presidents, one or more Treasurers and/or one or more Secretaries and/or (iv) one or more other officers, in the case of each of (i), (ii), (iii) and (iv) if and to the extent the Board deems desirable. The Board of Directors may give any officer such further designations or alternate titles as it considers desirable. In addition, the Board of Directors at any time and from time to time may authorize any officer of the Corporation to appoint one or more officers of the kind described in clauses (iii) and (iv) above. Any number of offices may be held by the same person and directors may hold any office unless the certificate of incorporation or these by-laws otherwise provide.

Section 4.2. Term of Office; Resignation; Removal; Vacancies. Unless otherwise provided in the resolution of the Board of Directors electing or authorizing the appointment of any officer, each officer shall hold office until his or her successor is elected or appointed and qualified or until his or her earlier resignation or removal. Any officer may resign at any time upon written notice to the Board or to such person or persons as the Board may designate. Such resignation shall take effect at the time specified therein, and unless otherwise specified therein no acceptance of such resignation shall be necessary to make it effective. The Board may remove any officer with or without cause at any time. Any officer authorized by the Board to appoint a person to hold an office of the Corporation may also remove such person from such office with or without cause at any time, unless otherwise provided in the resolution of the Board providing such authorization. Any such removal shall be without prejudice to the contractual rights of such officer, if any, with the Corporation, but the election or appointment of an officer shall not of itself create contractual rights. Any vacancy

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occurring in any office of the Corporation by death, resignation, removal or otherwise may be filled by the Board at any regular or special meeting or by an officer authorized by the Board to appoint a person to hold such office.

Section 4.3. Powers and Duties. The officers of the Corporation shall have such powers and duties in the management of the Corporation as shall be stated in these by-laws or in a resolution of the Board of Directors which is not inconsistent with these by-laws and, to the extent not so stated, as generally pertain to their respective offices, subject to the control of the Board. A Secretary or such other officer appointed to do so by the Board shall have the duty to record the proceedings of the meetings of the stockholders, the Board of Directors and any committees in a book to be kept for that purpose. The Board may require any officer, agent or employee to give security for the faithful performance of his or her duties.

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ARTICLE V

Stock

Section 5.1. Certificates; Uncertificated Shares. The shares of stock in the Corporation shall be represented by certificates, provided that the Board of Directors of the Corporation may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to any such shares represented by a certificate theretofore issued until such certificate is surrendered to the Corporation. Notwithstanding the adoption of such a resolution or resolutions by the Board of Directors of the Corporation, every holder of stock represented by certificates, and upon request every holder of uncertificated shares, shall be entitled to have a certificate signed by or in the name of the Corporation by a Chairman or Vice Chairman of the Board or a President or Vice President, and by a Treasurer, Assistant Treasurer, Secretary or Assistant Secretary, representing the number of shares of stock in the Corporation owned by such holder. If such certificate is manually signed by one officer or manually countersigned by a transfer agent or by a registrar, any other signature on the certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue. Certificates representing shares of stock of the Corporation may bear such legends regarding restrictions on transfer or other matters as any officer or officers of the Corporation may bear such egarding restrictions on transfer or other matters as any officer or officers of the Corporation may bear such legends regarding restrictions on transfer or other matters as any officer or officers of the Corporation may bear such legends regarding restrictions on transfer or other matters as any officer or officers of the Corporation may determine to be appropriate and lawful.

If the Corporation is authorized to issue more than one class of stock or more than one series of any class, the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate which the Corporation shall issue to represent such class or series of stock, provided that, except as otherwise required by law, in lieu of the foregoing requirements, there may be set forth on the face or back of the certificate which the Corporation shall issue to represent such class or series of stock, provided that, except as otherwise required by law, in lieu of the foregoing requirements, there may be set forth on the face or back of the certificate which the Corporation shall issue to represent such class or series of stock a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of such class or series of stock and the qualifications, limitations or restrictions of such preferences and/or rights. Within a reasonable time after the issuance or transfer of uncertificated shares of any class or series of stock, the Corporation shall send to the registered owner thereof a written notice containing the information required by law to be set forth or stated on certificates representing shares of such class or series or a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of such class or series and relative or transfer of uncertificated shares of any class or series of stock, the Corporation shall send to the registered owner thereof a written notice containing the information required by law to be set forth or stated on certificates

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Except as otherwise expressly provided by law, the rights and obligations of the holders of uncertificated shares and the rights and obligations of the holders of certificates representing stock of the same class and series shall be identical.

Section 5.2. Lost, Stolen or Destroyed Stock Certificates; Issuance of New Certificates. The Corporation may issue a new certificate of stock in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the Corporation may require the owner of the lost, stolen or destroyed certificate, or such owner's legal representative, to give the Corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate.

ARTICLE VI

Miscellaneous

Section 6.1. Fiscal Year. The fiscal year of the Corporation shall be determined by the Board of Directors.

Section 6.2. Seal. The Corporation may have a corporate seal which shall have the name of the Corporation inscribed thereon and shall be in such form as may be approved from time to time by the Board of Directors. The corporate seal may be used by causing it or a facsimile thereof to be impressed or affixed or in any other manner reproduced.

Section 6.3. Waiver of Notice of Meetings of Stockholders, Directors and Committees. Whenever notice is required to be given by law or under any provision of the certificate of incorporation or these by-laws, a written waiver thereof, signed by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, directors or members of a committee of directors need be specified in any written waiver of notice unless so required by the certificate of incorporation or these by-laws.

Section 6.4. Indemnification. The Corporation shall indemnify to the full extent permitted by law any person made or threatened to be made a party to any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such person or such person's testator or intestate is or was a director or officer of the Corporation, is or was a director, officer, trustee, member, stockholder, partner, incorporator or liquidator of a Subsidiary of the Corporation, is or was a member

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of the Shareholders' Committee acting pursuant to the Shareholders' Agreement, to be entered into among the Corporation and certain of its Stockholders as contemplated by the Plan of Incorporation of The Goldman Sachs Group, L.P. adopted on March 8, 1999, as amended, or serves or served at the request of the Corporation as a director, officer, trustee, member, stockholder, partner, incorporator or liquidator of or in any other capacity for any other enterprise. Expenses, including attorneys' fees, incurred by any such person in defending any such action, suit or proceeding shall be paid or reimbursed by the Corporation promptly upon demand by such person and, if any such demand is made in advance of the final disposition of any such action, suit or proceeding, promptly upon receipt by the Corporation of an undertaking of such person to repay such expenses if it shall ultimately be determined that such person is not entitled to be indemnified by the Corporation. The rights provided to any person by this by-law shall be enforceable against the Corporation by such person, who shall be presumed to have relied upon it in serving or continuing to serve as a director or officer or in such other capacity as provided above. In addition, the rights provided to any person by this by-law shall survive the termination of such person as any such director, officer, trustee, member, stockholder, partner, incorporator or liquidator of or in any other capacity for any other enterprise, shall survive the termination of such request as to service prior to termination of such request. No amendment of this by-law shall impair the rights of any person arising at any time with respect to events occurring prior to such amendment.

Notwithstanding anything contained in this Section 6.4, except for proceedings to enforce rights provided in this Section 6.4, the Corporation shall not be obligated under this Section 6.4 to provide any indemnification or any payment or reimbursement of expenses to any director, officer or other person in connection with a proceeding (or part thereof) initiated by such person (which shall not include counterclaims or crossclaims initiated by others) unless the Board of Directors has authorized or consented to such proceeding (or part thereof) in a resolution adopted by the Board.

For purposes of this by-law, the term "Subsidiary" shall mean any corporation, partnership, limited liability company or other entity in which the Corporation owns, directly or indirectly, a majority of the economic or voting ownership interest; the term "other enterprise" shall include any corporation, partnership, limited liability company, joint venture, trust, association or other unincorporated organization or other entity and any employee benefit plan; the term "officer," when used with respect to the Corporation, shall refer to any officer elected by or appointed pursuant to authority granted by the Board of Directors of the Corporation pursuant to clauses (i), (ii), (iii) and (iv) of Section 4.1 of these by-laws, when used with respect to a Subsidiary or other enterprise that is a corporation, shall refer to any person elected or appointed pursuant to the by-laws of such Subsidiary or other enterprise or chosen in such manner as is prescribed by the by-laws of such Subsidiary or other enterprise or other enterprise, and when used with respect to a Subsidiary or other enterprise, and when used with respect to a Subsidiary or other enterprise.

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enterprise that is not a corporation or is organized in a foreign jurisdiction, the term "officer" shall include in addition to any officer of such entity, any person serving in a similar capacity or as the manager of such entity; service "at the request of the Corporation" shall include service as a director or officer of the Corporation which imposes duties on, or involves services by, such director or officer with respect to an employee benefit plan, its participants or beneficiaries; any excise taxes assessed on a person with respect to an employee benefit plan shall be deemed to be indemnifiable expenses; and action by a person with respect to an employee benefit plan which such person reasonably believes to be in the interest of the participants and beneficiaries of such plan shall be deemed to be action not opposed to the best interests of the Corporation.

To the extent authorized from time to time by the Board of Directors, the Corporation may provide to (i) any one or more employees and other agents of the Corporation, (ii) any one or more officers, employees and other agents of any Subsidiary and (iii) any one or more directors, officers, employees and other agents of any other enterprise, rights of indemnification and to receive payment or reimbursement of expenses, including attorneys' fees, that are similar to the rights conferred in this Section 6.4 on directors and officers of the Corporation or any Subsidiary or other enterprise. Any such rights shall have the same force and effect as they would have if they were conferred in this Section 6.4.

Nothing in this Section 6.4 shall limit the power of the Corporation or the Board of Directors to provide rights of indemnification and to make payment and reimbursement of expenses, including attorneys' fees, to directors, officers, employees, agents and other persons otherwise than pursuant to this Section 6.4.

Section 6.5. Interested Directors; Quorum. No contract or transaction between the Corporation and one or more of its directors or officers, or between the Corporation and any other corporation, partnership, limited liability company, joint venture, trust, association or other unincorporated organization or other entity in which one or more of its directors or officers serve as directors, officers, trustees or in a similar capacity or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the Board of Directors or committee thereof which authorizes the contract or transaction, or solely because his or her or their votes are counted for such purpose, if: (i) the material facts as to his or her relationship or interest and as to the contract or transaction are disclosed or are known to the Board or the committee, and the Board or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested directors, even though the disinterested directors be less than a quorum; (ii) the material facts as to his or her relationship or interest and as to the stockholders; or (iii) the contract or transaction is specifically approved in good faith by a vote of the stockholders; or (iii) the contract or transaction is fair as to the Corporation as of the time it is authorized, approved or ratified, by the Board, a committee thereof or the

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stockholders. Common or interested directors may be counted in determining the presence of a quorum at a meeting of the Board of Directors or of a committee which authorizes the contract or transaction.

Section 6.6. Form of Records. Any records maintained by the Corporation in the regular course of its business, including its stock ledger, books of account and minute books, may be kept on, or be in the form of, punch cards, magnetic tape, photographs, microphotographs or any other information storage device, provided that the records so kept can be converted into clearly legible form within a reasonable time. The Corporation shall so convert any records so kept upon the request of any person entitled to inspect the same.

Section 6.7. Laws and Regulations; Close of Business. (a) For purposes of these by-laws, any reference to a statute, rule or regulation of any governmental body means such statute, rule or regulation (including any successor thereto) as the same may be amended from time to time.

(b) Any reference in these by-laws to the close of business on any day shall be deemed to mean 5:00 P.M. New York time on such day, whether or not such day is a business day.

Section 6.8. Amendment of By-Laws. These by-laws may be amended, modified or repealed, and new by-laws may be adopted at any time, by the Board of Directors. Stockholders of the Corporation may adopt additional by-laws and amend, modify or repeal any by-law whether or not adopted by them, but only in accordance with Article SIXTH of the certificate of incorporation.

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THE GOLDMAN SACHS 1999 STOCK INCENTIVE PLAN 2002 YEAR-END OPTION AWARD

This Award Agreement sets forth the terms and conditions of the 2002 year-end award (this "Award") granted to you under The Goldman Sachs 1999 Stock Incentive Plan (the "Plan"), of options ("2002 Year-End Options") to purchase shares of Common Stock ("Shares").

1. The Plan. This Award is made pursuant to the Plan, the terms of which are incorporated in this Award Agreement. Capitalized terms used in this Award Agreement that are not defined in this Award Agreement, or in the attached Glossary of Terms, have the meanings as used or defined in the Plan.

2. Award. A statement separately delivered to you (the "Award Statement") sets forth (i) the Date of Grant of the 2002 Year-End Options, (ii) the number of Shares underlying the 2002 Year-End Options and (iii) the Exercise Price of each 2002 Year-End Option. Until the Shares are delivered to you pursuant to Paragraph 6, you have no rights as a shareholder of GS Inc. THIS AWARD IS CONDITIONED ON YOUR SIGNING THE RELATED SIGNATURE CARD AND RETURNING IT TO GS INC. BY THE DATE SPECIFIED ON THE SIGNATURE CARD, AND IS SUBJECT TO ALL TERMS, CONDITIONS AND PROVISIONS OF THE PLAN AND THIS AWARD AGREEMENT, INCLUDING, WITHOUT LIMITATION, THE ARBITRATION AND CHOICE OF FORUM PROVISIO NS SET FORTH IN PARAGRAPH 15. BY SIGNING AND RETURNING THE SIGNATURE CARD (WHICH OPENS THE CUSTODY ACCOUNT REFERRED TO IN PARAGRAPH 6 IF YOU HAVE NOT ALREADY DONE SO), YOU WILL HAVE CONFIRMED YOUR ACCEPTANCE OF THE TERMS AND CONDITIONS OF THIS AWARD AGREEMENT.

3. Expiration Date. Notwithstanding anything to the contrary in this Award Agreement, the 2002 Year-End Options shall expire and no longer be exercisable on November 30, 2012 (the "Expiration Date"), subject to earlier termination as provided in this Award Agreement, or otherwise in accordance with the Plan.

4. Vesting.

(a) In General. Except as provided below in Paragraphs 4(b), 4(c), 4(d), and 5(e), you shall become vested in the number and/or percentage of your outstanding 2002 Year-End Options on the applicable Vesting Date specified on the Award Statement. While continued active Employment is not required in order to exercise your outstanding 2002 Year-End Options that become vested, all other conditions of this Award Agreement shall continue to apply to such vested 2002 Year-End Options. Unless the Committee determines otherwise, and except as provided in Paragraphs 4(b), 4(d) and 5(e), if your Employment terminates for any reason, your rights with respect to all of your 2002 Year-End Options with respect to which the applicable Vesting Date has not occurred as of the effective date of such termination shall terminate, and no such 2002 Year-End Options shall be exercisable.

(b) Death. Notwithstanding any other provision of this Award Agreement, if you die prior to an applicable Vesting Date, and provided your rights in respect of your outstanding 2002 Year-End Options have not previously terminated, as soon as practicable after the date of death and after such documentation as may be requested by the Committee is provided to the Committee, any such outstanding 2002Year-End Options that have not vested shall vest.

(c) Termination of 2002 Year-End Options Upon Certain Events.

(i) Unless the Committee determines otherwise, and except as provided in Paragraphs 4(b), 4(d) and 5(e), your rights in respect of your outstanding 2002 Year-End Options the Vesting Date for which has not occurred shall immediately terminate (and no such 2002 Year-End Options shall be exercisable) if at any time prior to such Vesting Date your Employment with the Firm is terminated for any reason, or you are otherwise no longer actively employed with the Firm.

(ii) Unless the Committee determines otherwise, your rights in respect of all of your outstanding 2002 Year-End Options (whether or not vested) shall immediately terminate (and no such 2002 Year-End Options shall be exercisable) if at any time prior to the date you exercise such 2002 Year-End Options:

(A) you attempt to have any dispute under this Award Agreement resolved in any manner that is not provided for by Paragraph 15; or

(B) you in any manner, directly or indirectly, (I) Solicit any Client to transact business with a Competitive Enterprise or to reduce or refrain from doing any business with the Firm or (II) interfere with or damage (or attempt to interfere with or damage) any relationship between the Firm and any such Client or (III) Solicit any person who is an employee of the Firm to resign from the Firm or to apply for or accept employment with any Competitive Enterprise; or

(C) you fail to certify to GS Inc., in accordance with procedures established by the Committee, that you have complied, or the Committee determines that you in fact have failed to comply, with all the terms and conditions of this Award Agreement; or

- (D) any event constituting Cause occurs.
- (d) Extended Absence, Retirement; Downsizing

(i) Notwithstanding any other provision of this Award Agreement, if your Employment with the Firm is terminated by reason of Extended Absence or Retirement, the condition set forth in Paragraph 4(c)(i) shall be waived with respect to your outstanding unvested 2002 Year-End Options (as a result of which any such then unvested outstanding 2002 Year-End Options shall vest), but all other conditions of this Award Agreement shall continue to apply.

(ii) Without limiting the application of Paragraph 4(c)(ii), your rights in respect of any outstanding 2002 Year-End Options that become vested solely by reason of Paragraph 4(d)(i) immediately shall terminate, and no such 2002 Year-End Options shall be exercisable if, following the termination of your Employment with the Firm by reason of Extended Absence or Retirement and prior to the Vesting Date that otherwise would have occurred had your Employment continued, you (i) form or acquire a 5% or greater equity ownership, voting or profit participation interest in, any Competitive Enterprise, or (ii) associate (including, but not limited to, association as an officer, employee, partner, director, consultant, agent or adviser) with any Competitive Enterprise. Notwithstanding the foregoing, unless otherwise determined by the Committee in its discretion, this Paragraph 4(d)(ii) will not apply if your termination of employment by reason of Extended Absence or Retirement is characterized by the Firm as "involuntary" or by "mutual agreement" other than for Cause and if you execute an appropriate general waiver and release of claims and an agreement to pay any associated tax liability, both as may be

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prescribed by the Firm or its designee. No termination of Employment initiated by you, including any termination claimed to be a "constructive termination" or termination for "good reason" will constitute an "involuntary" termination of employment or a termination of employment by "mutual agreement."

(iii) Notwithstanding any other provision of this Award Agreement and subject to your executing a general waiver and release of claims and an agreement to pay any associated tax liability, both as may be prescribed by the Firm or its designee, if your Employment is terminated by the Firm without Cause solely by reason of a "downsizing," and provided your rights with respect to any outstanding 2002 Year-End Options have not previously terminated, the condition set forth in Paragraph 4(c)(i) shall be waived with respect to your then outstanding unvested 2002 Year-End Options (as a result of which any such then outstanding 2002 Year-End Options shall vest), but all other conditions of this Award Agreement shall continue to apply. Whether or not your Employment is terminated solely by reason of a "downsizing "shall be determined by the Firm in its sole discretion. No termination of Employment initiated by you, including any termination claimed to be a "constructive termination" or termination for "good reason" will constitute a termination by reason of a "downsizing."

5. Exercisability of Vested 2002 Year-End Options.

(a) In General. 2002 Year-End Options that are not vested may not be exercised. Outstanding vested 2002 Year-End Options may be exercised in accordance with procedures established by the Committee (but, subject to Paragraph 5(e), not earlier than the Initial Exercise Date). The Committee may from time to time prescribe periods during which the vested 2002 Year-End Options shall not be exercisable.

(b) Termination Upon Certain Events. Unless the Committee determines otherwise, and consistent with Paragraph 4(c), all of your vested 2002 Year-End Options shall cease to be exercisable, and your rights in respect of such vested 2002 Year-End Options shall immediately terminate, if, prior to the exercise of such vested 2002 Year-End Options, any of the events specified in Paragraph 4(c)(ii) occurs.

(c) Death. Notwithstanding any other provision of this Award Agreement, if you die and any of your outstanding vested 2002 Year-End Options remain unexercised, and provided your rights in respect of any such outstanding vested 2002 Year-End Options have not previously terminated, such outstanding vested 2002 Year-End Options (including any 2002 Year-End Options that vest pursuant to Paragraph 4(b)) shall be exercisable by the representative of your estate in accordance with Paragraph 5(a) beginning on the later of (i) the Initial Exercise Date and (ii) a date that is as soon as practicable after the date of death and after such documentation as may be requested by the Committee is provided to the Committee and shall, unless earlier terminated or cancelled in accordance with the terms of this Agreement, remain exercisable until the Expiration Date and shall thereafter terminate.

(d) Other Terminations. Subject to Paragraphs 4(c)(ii), 4(d)(ii), and 5(b), upon the termination of your Employment for any reason (other than death or Cause), if any of your outstanding vested 2002 Year-End Options remain unexercised, and provided your rights in respect of any such outstanding vested 2002 Year-End Options have not previously terminated, such outstanding vested 2002 Year-End Options (including any such 2002 Year-End Options that vest pursuant to Paragraph 4(d)) shall be exercisable in accordance with Paragraph 5(a) beginning on the Initial Exercise Date and shall, unless earlier terminated or cancelled in accordance with the terms of this Agreement, remain exercisable until the Expiration Date, and shall thereafter terminate.

(e) Change in Control. Notwithstanding anything to the contrary in this Award Agreement, if a Change in Control shall occur and within 18 months thereafter the Firm terminates your

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Employment without Cause or you terminate Employment with the Firm for Good Reason, all of your unvested 2002 Year-End Options that are outstanding at the date your Employment so terminates shall vest and all of your outstanding 2002 Year-End Options shall become exercisable and, unless earlier terminated or cancelled in accordance with the terms of this Agreement, shall remain exercisable until the Expiration Date, and shall thereafter terminate.

6. Delivery. Unless otherwise determined by the Committee, or as otherwise provided in this Award Agreement, and except as provided in Paragraphs 9 and 10, upon receipt of payment of the Exercise Price for Shares subject to 2002 Year-End Options, delivery of Shares shall be effected by book-entry credit to a custody account (the "Custody Account") maintained by you with The Chase Manhattan Bank or such successor custodian as may be designated by GS Inc. No delivery of Shares shall be made unless you have timely returned the Signature Card. You shall be the beneficial owner of any Shares properly credited to the Custody Account. You shall have no right to any dividend or distribution with respect to such Shares if the record date for such dividend or distribution is prior to the date the Custody Account is properly credited with such Shares. Unless otherwise provided in the Signature Card, the Firm may deliver cash in lieu of all or any portion of the Shares otherwise deliverable in accordance with this Paragraph 6.

7. Repayment. If, following the exercise of any 2002 Year-End Options, the Committee determines that all terms and conditions of this Award Agreement in respect of such exercise were not satisfied, the Firm shall be entitled to receive, and you shall be obligated to pay the Firm immediately upon demand therefor, an amount equal to the excess of the Fair Market Value (determined at the time of exercise) of the Shares that were delivered in respect of such exercised 2002 Year-End Options over the Exercise Price paid therefor (or to the extent cash is delivered in lieu of all or a portion of such Shares, an amount equal to such cash) and without reduction for any Shares applied to satisfy withholding tax or other obligations in respect of such Shares.

8. Non-transferability. Except as may otherwise be provided by the Committee, the limitations set forth in Section 3.4 of the Plan shall apply. Any assignment in violation of the provisions of this Paragraph 8 shall be void.

9. Withholding, Consents and Legends.

(a) The delivery of Shares upon exercise of your 2002 Year-End Options is conditioned on your satisfaction of any applicable withholding taxes (in accordance with Section 3.2 of the Plan, provided that the Committee may determine not to apply the minimum withholding rate specified in Section 3.2.2 of the Plan).

(b) Your rights in respect of your 2002 Year-End Options are conditioned on the receipt to the full satisfaction of the Committee of any required consents (as defined in Section 3.3 of the Plan) that the Committee may determine to be necessary or advisable (including, without limitation, your consenting to (i) the Firm's supplying to any third party recordkeeper of the Plan such personal information as the Committee deems advisable to administer the Plan and (ii) deductions from your wages, or another arrangement satisfactory to the Committee, to reimburse the Firm for advances made on your behalf to satisfy certain withholding and other tax obligations in connection with this Award).

(c) If you are or become a Managing Director, your rights in respect of your 2002 Year-End Options are conditioned on your becoming a party to any shareholders' agreement to which other similarly situated employees of the Firm are a party.

(d) GS Inc. may affix to Certificates representing Shares issued pursuant to this

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Award Agreement any legend that the Committee determines to be necessary or advisable (including to reflect any restrictions to which you may be subject under a separate agreement with GS Inc.). GS Inc. may advise the transfer agent to place a stop order against any legended Shares.

10. Right of Offset. GS Inc. (and any of its affiliates and subsidiaries) shall have the right to offset against the obligation to deliver Shares (or cash) under this Award Agreement any outstanding amounts (including, without limitation, travel and entertainment or advance account balances, loans, or amounts repayable to the Firm pursuant to tax equalization, housing, automobile or other employee programs) you then owe to the Firm and any amounts the Committee otherwise deems appropriate pursuant to any tax equalization policy or agreement.

11. No Rights to Continued Employment. Nothing in this Award Agreement or the Plan shall be construed as giving you any right to continued Employment by the Firm or affect any right that the Firm may have to terminate or alter the terms and conditions of your Employment.

12. Successors and Assigns of GS Inc. The terms and conditions of this Award Agreement shall be binding upon, and shall inure to the benefit of, GS Inc. and its successors and assigns.

13. Committee Discretion. The Committee shall have full discretion with respect to any actions to be taken or determinations to be made in connection with this Award Agreement, and its determinations shall be final, binding and conclusive.

14. Amendment. The Committee reserves the right at any time to amend the terms and conditions set forth in this Award Agreement, and the Board may amend the Plan in any respect; provided that, notwithstanding the foregoing and Sections 1.3.2(f), 1.3.2(g) and Section 3.1 of the Plan, no such amendment shall materially adversely affect your rights and obligations under this Award Agreement without your consent, except that the Committee reserves the right to accelerate the vesting of the 2002 Year-End Options and in its discretion provide that Shares acquired pursuant to the exercise of 2002 Year-End Options may not be transferable until the Vesting Date (and that in respect of such Shares you may remain subject to the repayment obligations of Paragraph 7 in the circumstances under which the 2002 Year-End Option would not have vested or become exercisable pursuant to Sections 4 or 5). Any amendment of this Award Agreement shall be in writing signed by an authorized member of the Committee or a person or persons designated by the Committee.

15. Arbitration; Choice of Forum.

(a) Any dispute, controversy or claim between the Firm and you, arising out of or relating to or concerning the Plan or this Award Agreement, shall be finally settled by arbitration in New York City before, and in accordance with the rules then obtaining of, the New York Stock Exchange, Inc. (the "NYSE") or, if the NYSE declines to arbitrate the matter (or if the matter is otherwise not arbitrable by it), the American Arbitration Association (the "AAA") in accordance with the commercial arbitration rules of the AAA. Prior to arbitration, all claims maintained by you must first be submitted to the Committee in accordance with claims procedures determined by the Committee. This paragraph is subject to the provisions of clauses (b) and (c) below.

(b) THE FIRM AND YOU HEREBY IRREVOCABLY SUBMIT TO THE EXCLUSIVE JURISDICTION OF ANY STATE OR FEDERAL COURT LOCATED IN THE CITY OF NEW YORK OVER ANY SUIT, ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO OR CONCERNING THE PLAN OR THIS AWARD AGREEMENT THAT IS NOT OTHERWISE ARBITRATED OR RESOLVED ACCORDING TO PARAGRAPH 15(a) OF THIS AWARD AGREEMENT. This includes any suit, action or proceeding to compel arbitration or to enforce an arbitration award. The Firm and you acknowledge that the forum designated by this Paragraph 15(b) has a reasonable relation to the Plan, this Award Agreement, and to your relationship with the Firm. Notwithstanding the foregoing, nothing herein shall preclude the Firm from bringing any action or proceeding in any other court for the purpose of enforcing the provisions of this Paragraph 15.

(c) The agreement by you and the Firm as to forum is independent of the law that may be applied in the action, and you and the Firm agree to such forum even if the forum may under applicable law choose to apply non-forum law. You and the Firm hereby waive, to the fullest extent permitted by applicable law, any objection which you or the Firm now or hereafter may have to personal jurisdiction or to the laying of venue of any such suit, action or proceeding in any court referred to in Paragraph 15(b). You and the Firm undertake not to commence any action arising out of or relating to or concerning this Award Agreement in any forum other than a forum described in this Paragraph 15. You and the Firm agree that, to the fullest extent permitted by applicable law, a final and non-appealable judgment in any such suit, action or proceeding in any such court shall be conclusive and binding upon you and the Firm.

(d) You irrevocably appoint the General Counsel of GS Inc. as your agent for service of process in connection with any action or proceeding arising out of or relating to or concerning this Award Agreement which is not arbitrated pursuant to the provisions of Paragraph 15 (a), who shall promptly advise you of any such service of process.

(e) You hereby agree to keep confidential the existence of, and any information concerning, a dispute described in this Paragraph 15, except that you may disclose information concerning such dispute to the arbitrator or court that is considering such dispute or to your legal counsel (provided that such counsel agrees not to disclose any such information other than as necessary to the prosecution or defense of the dispute).

(f) You recognize and agree that prior to the grant of this Award you have no right to any benefits hereunder. Accordingly, in consideration of the receipt of this Award, you expressly waive any right to contest the amount of this Award, terms of this Award Agreement, any determination, action or omission hereunder or under the Plan by the Committee, GS Inc. or the Board, or any amendment to the Plan or this Award Agreement (other than an amendment to which your consent is expressly required by Paragraph 14) and you expressly waive any claim related in any way to the Award including any claim based on any promissory estoppel or other theory in connection with this Award and your Employment with the Firm.

16. Governing Law. THIS AWARD SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, WITHOUT REGARD TO PRINCIPLES OF CONFLICT OF LAWS.

17. Headings. The headings in this Award Agreement are for the purpose of convenience only and are not intended to define or limit the construction of the provisions hereof.

IN WITNESS WHEREOF, GS Inc. has caused this Award Agreement to be duly executed and delivered as of the Date of Grant.

THE GOLDMAN SACHS GROUP, INC.

By: Hong to. Facking.

Name: Henry M. Paulson, Jr. Title: Chairman and Chief Executive Officer

Glossary of Terms

Solely for purposes of this award of 2002 Year-End Options, the following terms shall have the meanings set forth below. Capitalized terms not defined in this Glossary of Terms shall have the meanings as used or defined in the applicable Award Agreement or the Plan.

"Cause" means (i) your conviction, whether following trial or by plea of guilty or *nolo contendere* (or similar plea), in a criminal proceeding (A) on a misdemeanor charge involving fraud, false statements or misleading omissions, wrongful taking, embezzlement, bribery, forgery, counterfeiting or extortion, or (B) on a felony charge or (C) on an equivalent charge to those in clauses (A) and (B) in jurisdictions which do not use those designations; (ii) your engaging in any conduct which constitutes an employment disqualification under applicable law (including statutory disqualification as defined under the Exchange Act); (iii) your willful failure to perform your duties to the Firm; (iv) your violation of any securities or commodities laws, any rules or regulations issued pursuant to such laws, or the rules and regulations of any securities or commodities or association of which GS Inc. or any of its subsidiaries or affiliates is a member; (v) your violation of any Firm policy concerning hedging or pledging or confidential or proprietary information, or your material violation of any other Firm policy as in effect from time to time; (vi) your engaging in any act or making any statement which impairs, impugns, denigrates, disparages or negatively reflects upon the name, reputation or business interests of the Firm; or (vii) your engaging in any conduct detrimental to the Firm. The determination as to whether "Cause" has occurred shall be made by the Committee in its sole discretion. The Committee shall also have the authority in its sole discretion to waive the consequences under the Plan or any Award Agreement of the existence or occurrence of any of the events, acts or omissions constituting "Cause."

"Change in Control" means the consummation of a merger, consolidation, statutory share exchange or similar form of corporate transaction involving GS Inc. (a "Reorganization") or sale or other disposition of all or substantially all of GS Inc.'s assets to an entity that is not an affiliate of GS Inc. (a "Sale"), that in each case requires the approval of GS Inc.'s stockholders under the law of GS Inc.'s jurisdiction of organization, whether for such Reorganization or Sale (or the issuance of securities of GS Inc. in such Reorganization or Sale), unless immediately following such Reorganization or Sale, either: (i) at least 50% of the total voting power (in respect of the election of directors, or similar officials in the case of an entity other than a corporation) of (A) the entity resulting from such Reorganization, or the entity which has acquired all or substantially all of the assets of GS Inc. in a Sale (in either case, the "Surviving Entity"), or (B) if applicable, the ultimate parent entity that directly or indirectly has beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act, as such Rule is in effect on the date of the adoption of the Plan) of 50% or more of the total voting power (in respect of the election of directors, or similar officials in the case of an entity other than a corporation) of the Surviving Entity (the "Parent Entity"), is represented by GS Inc.'s securities (the "GS Inc. Securities") that were outstanding immediately prior to such Reorganization or Sale (or, if applicable, is represented by shares into which such GS Inc. Securities were converted pursuant to such Reorganization or Sale) or (ii) at least 50% of the members of the board of directors (or similar officials in the case of an entity other than a corporation) of the Parent Entity (or, if there is no Parent Entity, the Surviving Entity) following the consummation of the Reorganization or Sale were, at the time of the Board's approval of the execution of the initial agreement providing for such Reorganization or Sale, individuals (the "Incumbent Directors") who either (1) were members of the Board on the date of the Award or (2) became directors subsequent to the date of the Award and whose election or nomination for election was approved by a vote of at least two-thirds of the Incumbent Directors then on the Board (either by a specific vote or by approval of GS Inc.'s proxy statement in which such persons are named as a nominee for director).

"Client" means any client or prospective client of the Firm to whom you provided services, or for whom you transacted business, or whose identity became known to you in connection with your relationship with or employment by the Firm.

"Competitive Enterprise" means a business enterprise that (i) engages in any activity, or (ii) owns or controls a significant interest in any entity that engages in any activity, that, in either case, competes anywhere with any activity in which the Firm is engaged. The activities covered by the previous sentence include, without limitation, financial services such as investment banking, public or private finance, lending, financial advisory services, private investing (for anyone other than you and members of your family), merchant banking, asset or hedge fund management, insurance or reinsurance underwriting or brokerage, property management, or securities, futures, commodities, energy, derivatives or currency brokerage, sales, lending, custody, clearance, settlement or trading.

"Date of Grant" means the date specified as the Date of Grant on the Award Statement.

"Exercise Price" means the price specified on the Award Statement as the Exercise price-per-Share at which a Share can be purchased pursuant to a 2002 Year-End Option.

"Extended Absence" means you are unable to perform for six continuous months, due to illness, injury or pregnancy-related complications, substantially all the essential duties of your occupation, as determined by the Committee.

"Good Reason" means (i) as determined by the Committee, a materially adverse alteration in your position or in the nature or status of your responsibilities from those in effect immediately prior to the Change in Control, or (ii) the Firm's requiring your principal place of Employment to be located more than seventy-five (75) miles from the location where you are principally Employed at the time of the Change in Control (except for required travel on the Firm's business to an extent substantially consistent with your customary business travel obligations in the ordinary course of business prior to the Change in Control).

"Initial Exercise Date" means a date within ten (10) business days after the first trading day in January 2006 if that date is during a Window Period or, if that date is not during a Window Period, the first trading day of the first Window Period that begins thereafter.

"**Retirement**" means termination of your Employment (other than for Cause) on or after the Date of Grant at a time when (i) the sum of your age, plus years of service with the Firm (as determined by the Committee in its sole discretion) equals or exceeds 55 and (ii) you have completed at least 5 full years of service with the Firm (as determined by the Committee in its sole discretion).

"Solicit" means any direct or indirect communication of any kind whatsoever, regardless of by whom initiated, inviting, advising, encouraging or requesting any person or entity, in any manner, to take or refrain from taking any action.

"Vesting Date" means, with respect to twenty-five (25) percent of your 2002 Year-End Options, the Date of Grant, and with respect to your remaining 75% of your 2002 Year-End Options, November 25, 2005.

"Window Period" means a period designated by the Committee during which an employee of the Firm is permitted to purchase or sell Shares.

THE GOLDMAN SACHS 1999 STOCK INCENTIVE PLAN 2002 YEAR-END RSU AWARD

This Award Agreement sets forth the terms and conditions of the 2002 year-end award (this "Award") of restricted stock units ("2002 Year-End RSUs") granted to you under The Goldman Sachs 1999 Stock Incentive Plan (the "Plan").

1. The Plan. This Award is made pursuant to the Plan, the terms of which are incorporated in this Award Agreement. Capitalized terms used in this Award Agreement that are not defined in this Award Agreement, or in the attached Glossary of Terms, have the meanings as used or defined in the Plan.

2. Award. The number of 2002 Year-End RSUs subject to this Award is set forth in a statement separately delivered to you (the "Award Statement"). An RSU constitutes an unfunded and unsecured promise of GS Inc. to deliver (or cause to be delivered) to you, subject to the terms of this Award Agreement, a share of Common Stock (the "Share") (or cash equal to the Fair Market Value thereof) on a Delivery Date as provided herein. Until such delivery, you have only the rights of a general unsecured creditor, and no rights as a shareholder, of GS Inc. THIS AWARD IS CONDITIONED ON YOUR SIGNING THE RELATED SIGNATURE CARD AND RETURNING IT TO GS INC. BY THE DATE SPECIFIED ON THE SIGNATURE CARD, AND IS SUBJECT TO ALL TERMS, CONDITIONS AND PROVISIONS OF THE PLAN AND THIS AWARD AGREEMENT, INCLUDING, WITHOUT LIMITATION, THE ARBITRATION AND CHOICE OF FORUM PROVISIONS SET FORTH IN PARAGRAPH 16. BY SIGNING AND RETURNING THE SIGNATURE CARD (WHICH OPENS THE CUSTODY ACCOUNT REFERRED TO IN PARAGRAPH 3(b)), YOU WILL HAVE CONFIRMED YOUR ACCEPTANCE OF THE TERMS AND CONDITIONS OF THIS AWARD AGREEMENT.

3. Vesting and Delivery.

(a) Vesting. Except as provided in this Paragraph 3 and in Paragraphs 4, 6, 7, 10 and 11, on each Vesting Date you shall become vested in the number or percentage of the Shares specified next to such Vesting Date on the Award Statement (which amount may be rounded to avoid fractional Shares). While continued active Employment is not required in order to receive delivery of the Shares corresponding to your outstanding 2002 Year-End RSUs that are or become vested, all other conditions of this Award Agreement shall continue to apply to such vested 2002 Year-End RSUs and the Shares corresponding to such vested 2002 Year- End RSUs will not be delivered unless and until those conditions are satisfied. Unless the Committee determines otherwise, and except as provided in Paragraphs 3(c), 6 or 7, if your Employment terminates for any reason, your rights in respect of all of your 2002 Year-End RSUs with respect to which the Vesting Date has not occurred as of the effective date of such termination shall terminate, and no Shares (or cash) shall be delivered in respect of such 2002 Year-End RSUs.

(b) Delivery. Except as provided in this Paragraph 3 and in Paragraphs 4, 6, 7, 10 and 11, on each Delivery Date the number or percentage of Shares specified next to such Delivery Date on the Award Statement (which number of Shares may be rounded to avoid fractional Shares) with respect to your then outstanding 2002 Year-End RSUs shall be delivered. Unless otherwise provided in the Signature Card, the Firm may deliver cash in lieu of all or any portion of the Shares otherwise deliverable on any Delivery Date. Unless otherwise determined by the Committee, or as otherwise provided in this Award Agreement, delivery of Shares shall be effected by book-entry credit to a custody account (the "Custody Account") maintained by you with The Chase Manhattan Bank or such successor custodian as may be designated by GS Inc. No delivery of Shares shall be made unless you have timely returned the Signature Card. You shall be the beneficial owner of any Shares properly credited to the Custody Account. You shall have no right to any dividend or distribution with respect to such Shares if the record date for such dividend or distribution is prior to the date the Custody Account is properly credited with such Shares. Notwithstanding the foregoing, if a Delivery Date occurs at a time when you are considered by GS Inc. to be one of its "covered employees" within the meaning of Section 162(m) of the Code, then, unless the Committee determines otherwise, delivery of the Shares (or cash) automatically shall be deferred until the first day of the first Window Period after you have ceased to be such a covered employee.

(c) Death. Notwithstanding any other provision of this Award Agreement, if you die prior to any Delivery Date, and provided your rights in respect of your 2002 Year-End RSUs have not previously terminated, the Shares (or cash in lieu of all or any part thereof) corresponding to your outstanding 2002 Year-End RSUs shall be delivered to the representative of your estate as soon as practicable after the date of death and after such documentation as may be requested by the Committee is provided to the Committee.

4. Termination of 2002 Year-End RSUs and Non-Delivery of Shares.

(a) Unless the Committee determines otherwise, and except as provided in Paragraphs 3(c), 6 and 7, your rights in respect of your outstanding 2002 Year-End RSUs the Vesting Date for which has not occurred shall immediately terminate and no Shares (or cash) shall be delivered in respect of such 2002 Year-End RSUs, if at any time prior to the applicable Vesting Date your Employment with the Firm terminates for any reason, or you are otherwise no longer actively employed with the Firm.

(b) Unless the Committee determines otherwise, and except as provided in Paragraphs 6 and 7, your rights in respect of all of your 2002 Year-End RSUs (whether or not vested) shall immediately terminate, and no Shares (or cash) shall be delivered in respect of such 2002 Year-End RSUs, if at any time prior to the relevant Delivery Date:

- (i) you attempt to have any dispute under this Award Agreement resolved in any manner that is not provided for by Paragraph 16; or
- (ii) any event that constitutes Cause has occurred;

(iii) you in any manner, directly or indirectly, (A) Solicit any Client to transact business with a Competitive Enterprise or to reduce or refrain from doing any business with the Firm or (B) interfere with or damage (or attempt to interfere with or damage) any relationship between the Firm and any such Client or (C) Solicit any person who is an employee of the Firm to resign from the Firm or to apply for or accept employment with any Competitive Enterprise; or

(iv) you fail to certify to GS Inc., in accordance with procedures established by the Committee, with respect to each relevant Delivery Date that you have complied, or the Committee determines that you in fact have failed as of the relevant Delivery Date to comply, with all the terms and conditions of this Award Agreement. By accepting the delivery of Shares (or cash) under this Award Agreement, you shall be deemed to have represented and certified at such time that you have complied with all the terms and conditions of this Award Agreement.

(c) Unless the Committee determines otherwise, if the Delivery Date in respect of any outstanding 2002 Year-End RSUs occurs, and Shares (or cash) with respect to such 2002 Year-End RSUs would be deliverable under the terms and conditions of this Award Agreement, except that you have not complied with the conditions or your obligations under Paragraphs 3(b) and 4(b), all of your rights with respect to your outstanding 2002 Year-End RSUs shall terminate no later than the Delivery Date for such Shares.

5. Repayment. If, following the delivery of Shares (or cash), the Committee determines that all terms and conditions of this Award Agreement in respect of such delivery were not satisfied, the Firm shall be entitled to receive, and you shall be obligated to pay the Firm immediately upon demand therefore, the Fair Market Value of the Shares (determined as of the relevant Delivery Date) and the amount of cash (to the extent that cash was delivered in lieu of Shares) delivered with respect to such Delivery Date and without reduction for any Shares (or cash) applied to satisfy withholding tax or other obligations in respect of such Shares (or cash).

6. Extended Absence, Retirement; Downsizing.

(a) Notwithstanding any other provision of this Award Agreement, but subject to Paragraph 6(b), if your Employment with the Firm is terminated by reason of Extended Absence or Retirement, and provided your rights with respect to any outstanding 2002 Year-End RSUs have not previously terminated, the condition set forth in Paragraph 4(a) shall be waived with respect to your then outstanding unvested 2002 Year-End RSUs (as a result of which any such then outstanding 2002 Year-End RSUs shall vest), but all other conditions of this Award Agreement shall continue to apply.

(b) Without limiting the application of Paragraph 4(b) and Paragraph 4(c), your rights in respect of any outstanding 2002 Year-End RSUs that become vested solely by reason of Paragraph 6(a) immediately shall terminate and no Shares (or cash) shall be delivered in respect of such 2002 Year-End RSUs if, following the termination of your Employment with the Firm by reason of Extended Absence or Retirement and prior to the applicable Vesting Date that otherwise would have occurred had your Employment continued you (i) form, or acquire a 5% or greater equity ownership, voting or profit participation interest in, any Competitive Enterprise, or (ii) associate in any capacity (including, but not limited to, association as an officer, employee, partner, director, consultant, agent or advisor) with any Competitive Enterprise. Notwithstanding the foregoing, unless otherwise determined by the Committee in its discretion, this Paragraph 6(b) will not apply if your termination of employment by reason of Extended Absence or Retirement is characterized by the Firm as "involuntary" or by "mutual agreement" other than for Cause and if you execute an appropriate general waiver and release of claims and an agreement to pay any associated tax liability, both as may be prescribed by the Firm or its designee. No termination of Employment initiated by you, including any termination claimed to be a "constructive termination" or termination for "good reason" will constitute an "involuntary" termination of employment or a termination of employment by "mutual agreement."

(c) Notwithstanding any other provision of this Award Agreement and subject to your executing a general waiver and release of claims and an agreement to pay any associated tax liability, both as may be prescribed by the Firm or its designee, if your Employment is terminated by the Firm without Cause solely by reason of a "downsizing," and provided your rights with respect to any outstanding 2002 Year-End RSUs have

not previously terminated, the condition set forth in Paragraph 4(a) shall be waived with respect to your then outstanding unvested 2002 Year-End RSUs (as a result of which any such then outstanding 2002 Year-End RSUs shall vest), but all other conditions of this Award Agreement shall continue to apply. Whether or not your Employment is terminated solely by reason of a "downsizing" shall be determined by the Firm in its sole discretion. No termination of Employment initiated by you, including any termination claimed to be a "constructive termination" or termination for "good reason" will constitute a termination by reason of a "downsizing."

7. Change in Control. Notwithstanding anything to the contrary in this Award Agreement, in the event a Change in Control shall occur and within 18 months thereafter the Firm terminates your Employment without Cause or you terminate Employment with the Firm for Good Reason, all Shares underlying all your then outstanding 2002 Year-End RSUs, whether or not vested, (or the Fair Market Value of such Shares in cash) shall be delivered.

8. Dividend Equivalents. With respect to each of your outstanding 2002 Year-End RSUs, prior to the delivery of any Shares (or cash in lieu thereof) pursuant to this Award Agreement, at or after the time of distribution of any regular cash dividend paid by GS Inc. in respect of the Common Stock the record date for which occurs on or after the Date of Grant, you shall be entitled to receive an amount in cash (less applicable withholding) equal to such regular dividend payment as would have been made in respect of the Shares not yet delivered, as if the Shares had been actually delivered; *provided*, that no such payment in respect of any 2002 Year-End RSUs shall be made if, prior to the time such payment is due, your rights with respect to such 2002 Year-End RSUs have terminated under this Agreement.

9. Non-transferability. Except as otherwise may be provided by the Committee, the limitations set forth in Section 3.4 of the Plan shall apply. Any assignment in violation of the provisions of this Paragraph 9 shall be void.

10. Withholding, Consents and Legends.

(a) The delivery of Shares is conditioned on your satisfaction of any applicable withholding taxes (in accordance with Section 3.2 of the Plan).

(b) Your rights in respect of your 2002 Year-End RSUs are conditioned on the receipt to the full satisfaction of the Committee of any required consents (as defined in Section 3.3 of the Plan) that the Committee may determine to be necessary or advisable (including, without limitation, your consenting to (i) the Firm's supplying to any third party recordkeeper of the Plan such personal information as the Committee deems advisable to administer the Plan; and (ii) deductions from your wages, or another arrangement satisfactory to the Committee, to reimburse the Firm for advances made on your behalf to satisfy certain withholding and other tax obligations in connection with this Award).

(c) If you are or become a Managing Director, your rights in respect of the 2002 Year-End RSUs are conditioned on your becoming a party to any shareholders' agreement to which other similarly situated employees of the Firm are a party.

(d) GS Inc. may affix to Certificates representing Shares issued pursuant to this Award Agreement any legend that the Committee determines to be necessary or advisable (including to reflect any restrictions to which you may be subject under a separate agreement with GS Inc.). GS Inc. may advise the transfer agent to place a stop order against any legended Shares.

11. Right of Offset. GS Inc. (and any of its affiliates and subsidiaries) shall have the right to offset against the obligation to deliver Shares (or cash) under this Award Agreement any outstanding amounts (including, without limitation, travel and entertainment or advance account balances, loans, or amounts repayable to the Firm pursuant to tax equalization, housing, automobile or other employee programs) you then owe to the

Firm and any amounts the Committee otherwise deems appropriate pursuant to any tax equalization policy or agreement.

12. No Rights to Continued Employment. Nothing in this Award Agreement or the Plan shall be construed as giving you any right to continued Employment by the Firm or affect any right that the Firm may have to terminate or alter the terms and conditions of your Employment.

13. Successors and Assigns of GS Inc. The terms and conditions of this Award Agreement shall be binding upon and shall inure to the benefit of GS Inc. and its successors and assigns.

14. Committee Discretion. The Committee shall have full discretion with respect to any actions to be taken or determinations to be made in connection with this Award Agreement, and its determinations shall be final, binding and conclusive.

15. Amendment. The Committee reserves the right at any time to amend the terms and conditions set forth in this Award Agreement, and the Board may amend the Plan in any respect; *provided* that, notwithstanding the foregoing and Sections 1.3.2(f), 1.3.2(g) and 3.1 of the Plan, no such amendment shall materially adversely affect your rights and obligations under this Award Agreement without your consent, except that the Committee reserves the right to accelerate the delivery of the Shares and in its discretion provide that such Shares may not be transferable until the Delivery Date on which such Shares otherwise would have been delivered (and that in respect of such Shares you may remain subject to the repayment obligations of Paragraph 5 in the circumstances under which the Shares would not have been delivered pursuant to Paragraph 4 or Paragraph 6). Any amendment of this Award Agreement shall be in writing signed by an authorized member of the Committee or a person or persons designated by the Committee.

16. Arbitration; Choice of Forum.

(a) Any dispute, controversy or claim between the Firm and you, arising out of or relating to or concerning the Plan or this Award Agreement, shall be finally settled by arbitration in New York City before, and in accordance with the rules then obtaining of, the New York Stock Exchange, Inc. (the "NYSE") or, if the NYSE declines to arbitrate the matter (or if the matter otherwise is not arbitrable by it), the American Arbitration Association (the AAA) in accordance with the commercial arbitration rules of the AAA. Prior to arbitration, all claims maintained by you must first be submitted to the Committee in accordance with claims procedures determined by the Committee. This Paragraph is subject to the provisions of Paragraphs 16(b) and (c) below.

(b) THE FIRM AND YOU HEREBY IRREVOCABLY SUBMIT TO THE EXCLUSIVE JURISDICTION OF ANY STATE OR FEDERAL COURT LOCATED IN THE CITY OF NEW YORK OVER ANY SUIT, ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO OR CONCERNING THE PLAN OR THIS AWARD AGREEMENT THAT IS NOT OTHERWISE ARBITRATED OR RESOLVED ACCORDING TO PARAGRAPH 16(a) OF THIS AWARD AGREEMENT. This includes any suit, action or proceeding to compel arbitration or to enforce an arbitration award. The Firm and you acknowledge that the forum designated by this Paragraph 16(b) has a reasonable relation to the Plan, this Award Agreement, and to your relationship with the Firm. Notwithstanding the foregoing, nothing herein shall preclude the Firm from bringing any action or proceeding in any other court for the purpose of enforcing the provisions of this Paragraph 16.

(c) The agreement by you and the Firm as to forum is independent of the law that may be applied in the action, and you and the Firm agree to such forum even if the forum may under applicable law choose to apply non-forum law. You and the Firm hereby waive, to the fullest extent permitted by applicable law, any objection which you or the Firm now or hereafter may have to personal jurisdiction or to the laying of venue of any such suit, action or proceeding in any court referred to in Paragraph 16(b). You and the Firm undertake not to commence any action arising out of or relating to or concerning this Award Agreement in any forum other than a forum described in this Paragraph 16. You and the Firm agree that, to the fullest extent permitted by applicable law, a final and non-appealable judgment in any such suit, action or proceeding in any such court shall be conclusive and binding upon you and the Firm.

(d) You irrevocably appoint the General Counsel of GS Inc. as your agent for service of process in connection with any action or proceeding arising out of or relating to or concerning this Award Agreement which is not arbitrated pursuant to the provisions of Paragraph 16 (a), who shall promptly advise you of any such service of process.

(e) You hereby agree to keep confidential the existence of, and any information concerning, a dispute described in this Paragraph 16, except that you may disclose information concerning such dispute to the arbitrator or court that is considering such dispute or to your legal counsel (provided that such counsel agrees not to disclose any such information other than as necessary to the prosecution or defense of the dispute).

(f) You recognize and agree that prior to the grant of this Award you have no right to any benefits hereunder. Accordingly, in consideration of the receipt of this Award, you expressly waive any right to contest the amount of this Award, terms of this Award Agreement, any determination, action or omission hereunder or under the Plan by the Committee, GS Inc. or the Board, or any amendment to the Plan or this Award Agreement (other than an amendment to which your consent is expressly required by Paragraph 15) and you expressly waive any claim related in any way to the Award including any claim based on any promissory estoppel or other theory in connection with this Award and your employment with the Firm.

17. Governing Law. THIS AWARD SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, WITHOUT REGARD TO PRINCIPLES OF CONFLICT OF LAWS.

18. Headings. The headings in this Award Agreement are for the purpose of convenience only and are not intended to define or limit the construction of the provisions hereof.

IN WITNESS WHEREOF, GS Inc. has caused this Award Agreement to be duly executed and delivered as of the Date of Grant.

THE GOLDMAN SACHS GROUP, INC.

Name: Henry M. Paulson, Jr. Title: Chairman and Chief Executive Officer

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By:

Glossary of Terms

Solely for purposes of this award of 2002 Year-End RSUs, the following terms shall have the meanings set forth below. Capitalized terms not defined in this Glossary of Terms shall have the meanings as used or defined in the applicable Award Agreement or the Plan.

"Cause" means (i) your conviction, whether following trial or by plea of guilty or *nolo contendere* (or similar plea), in a criminal proceeding (A) on a misdemeanor charge involving fraud, false statements or misleading omissions, wrongful taking, embezzlement, bribery, forgery, counterfeiting or extortion, or (B) on a felony charge or (C) on an equivalent charge to those in clauses (A) and (B) in jurisdictions which do not use those designations; (ii) your engaging in any conduct which constitutes an employment disqualification under applicable law (including statutory disqualification as defined under the Exchange Act); (iii) your willful failure to perform your duties to the Firm; (iv) your violation of any securities or commodities laws, any rules or regulations issued pursuant to such laws, or the rules and regulations of any securities or commodities or association of which GS Inc. or any of its subsidiaries or affiliates is a member; (v) your violation of any Firm policy concerning hedging or pledging or confidential or proprietary information, or your material violation of any other Firm policy as in effect from time to time; (vi) your engaging in any act or making any statement which impairs, impugns, denigrates, disparages or negatively reflects upon the name, reputation or business interests of the Firm; or (vii) your engaging in any conduct detrimental to the Firm. The determination as to whether "Cause" has occurred shall be made by the Committee in its sole discretion. The Committee shall also have the authority in its sole discretion to waive the consequences under the Plan or any Award Agreement of the existence or occurrence of any of the events, acts or omissions constituting "Cause."

"Change in Control" means the consummation of a merger, consolidation, statutory share exchange or similar form of corporate transaction involving GS Inc. (a "Reorganization") or sale or other disposition of all or substantially all of GS Inc.'s assets to an entity that is not an affiliate of GS Inc. (a "Sale"), that in each case requires the approval of GS Inc.'s stockholders under the law of GS Inc.'s jurisdiction of organization, whether for such Reorganization or Sale (or the issuance of securities of GS Inc. in such Reorganization or Sale), unless immediately following such Reorganization or Sale, either: (i) at least 50% of the total voting power (in respect of the election of directors, or similar officials in the case of an entity other than a corporation) of (A) the entity resulting from such Reorganization, or the entity which has acquired all or substantially all of the assets of GS Inc. in a Sale (in either case, the "Surviving Entity"), or (B) if applicable, the ultimate parent entity that directly or indirectly has beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act, as such Rule is in effect on the date of adoption of the Plan) of 50% or more of the total voting power (in respect of the election of directors, or similar officials in the case of an entity other than a corporation) of the Surviving Entity (the "Parent Entity"), is represented by GS Inc.'s securities (the "GS Inc. Securities") that were outstanding immediately prior to such Reorganization or Sale (or, if applicable, is represented by shares into which such GS Inc. Securities were converted pursuant to such Reorganization or Sale) or (ii) at least 50% of the members of the board of directors (or similar officials in the case of an entity other than a corporation) of the Parent Entity (or, if there is no Parent Entity, the Surviving Entity) following the consummation of the Reorganization or Sale were, at the time of the Board's approval of the execution of the initial agreement providing for such Reorganization or Sale, individuals (the "Incumbent Directors") who either (1) were members of the Board on the date of the Award or (2) became directors subsequent to the date of the Award and whose election or nomination for election was approved by a vote of at least two-thirds of the Incumbent Directors then on the Board (either by a specific vote or by approval of GS Inc.'s proxy statement in which such persons are named as a nominee for director).

"Client" means any client or prospective client of the Firm to whom you provided services, or for whom you transacted business, or whose identity became known to you in connection with your relationship with or employment by the Firm.

"Competitive Enterprise" means a business enterprise that (i) engages in any activity, or (ii) owns or controls a significant interest in any entity that engages in any activity, that, in either case, competes anywhere with any activity in which the Firm is engaged. The activities covered by the previous sentence include, without limitation, financial services such as investment banking, public or private finance, lending, financial advisory services, private investing (for anyone other than you and members of your family), merchant banking, asset or hedge fund management, insurance or reinsurance underwriting or brokerage, property management, or securities, futures, commodities, energy, derivatives or currency brokerage, sales, lending, custody, clearance, settlement or trading.

"Date of Grant" means the Date of Grant specified on the Award Statement.

"Delivery Date" means a date within ten (10) business days after the first trading day in January 2006 if that date is during a Window Period or, if that date is not during a Window Period, the first trading day of the first Window Period that begins thereafter

"Extended Absence" means you are unable to perform for six continuous months, due to illness, injury or pregnancy-related complications, substantially all the essential duties of your occupation, as determined by the Committee.

"Good Reason" means (i) as determined by the Committee, a materially adverse alteration in your position or in the nature or status of your responsibilities from those in effect immediately prior to the Change in Control, or (ii) the Firm's requiring your principal place of Employment to be located more than seventy-five (75) miles from the location where you are principally Employed at the time of the Change in Control (except for required travel on the Firm's business to an extent substantially consistent with your customary business travel obligations in the ordinary course of business prior to the Change in Control).

"**Retirement**" means termination of your Employment (other than for Cause) on or after the Date of Grant on which (i) the sum of your age, plus years of service with the Firm (as determined by the Committee in its sole discretion) equals or exceeds 55 and (ii) you have completed at least 5 full years of service with the Firm (as determined by the Committee in its sole discretion).

"Solicit" means any direct or indirect communication of any kind whatsoever, regardless of by whom initiated, inviting, advising, encouraging or requesting any person or entity, in any manner, to take or refrain from taking any action.

"Vesting Date" means each Vesting Date specified on the Award Statement.

"Window Period" means a period designated by the Committee during which an employee of the Firm is permitted to purchase or sell Shares.

The Goldman Sachs Group, Inc. • 85 Broad Street • New York, New York 10004 Tel: 212-902-5904

Henry M. Paulson, Jr. Chairman Chief Executive Officer

December 18, 2002

PERSONAL AND CONFIDENTIAL

William W. George Medtronic, Inc. 4900 IDS Center 80 South 8th Street Minneapolis, MN 55402

Dear Bill:

We are all very pleased that you have agreed to join the Board of Directors of The Goldman Sachs Group, Inc. ("GS Inc.") and look forward to seeing you at the January 15th and 16th meetings in New York, if not before. I am writing to set forth the terms of your compensation as a director. The terms of directors' compensation are, of course, subject to future modification by the Board.

Your term as a director commenced on December 18, 2002 and will run through the 2003 annual meeting of shareholders of GS Inc. You have also been appointed a member of the Audit, Compensation and Corporate Governance and Nominating Committees as of December 18, 2002.

You will receive an initial grant of 3,000 fully vested restricted stock units ("RSUs") under The Goldman Sachs 1999 Stock Incentive Plan (the "SIP").

As additional compensation for your services, you will receive:

- \$35,000 per year (the "Annual Retainer");
- \$15,000 per year for serving on each Board committee of which you are a member (the "Committee Fees");
- \$1,000 for each meeting of the Board or of a Board committee that you attend (the "Meeting Fees"); and

• an annual grant (the "Annual Grant"), at your election, of (a) 2,000 fully vested RSUs; (b) fully vested options ("Options") to purchase 6,000 shares of GS Inc. common stock; or (c) 1,000 RSUs and Options to purchase 3,000 shares of GS Inc. common stock.

The Annual Retainer and the Committee Fees are paid annually in arrears in the form of RSUs unless GS Inc. determines to pay them in cash. The Meeting Fees are payable in cash, also annually in arrears. The Annual Grant is paid annually in advance of the fiscal year to which it pertains in the form of RSUs and/or Options as elected by you.

For fiscal year 2003, you will receive the Annual Retainer, Committee Fees and Annual Grant pro rated from the date of your appointment. Meeting Fees will be calculated based on the number of meetings you attend for the remainder of 2003 and will be paid in cash in arrears. I enclose a form for the 2003 Annual Grant election as between RSUs and Options.

The terms of the Options for the 2003 Annual Grant were set in November 2002 and have the same exercise price (\$78.87) as the options that were granted to employees for the 2002 fiscal year; will become exercisable on the earlier of (a) the first trading day in January 2006 unless that day is not during an "access person window period" ("Window Period") under GS Inc.'s trading policy, in which case, the first trading day of the first Window Period that begins thereafter, and (b) the date on which you cease to be a director of GS Inc.; and will expire on November 30, 2012.

Any Options granted to you as part of the Annual Grant for 2004 and thereafter will:

- (i) be granted on the same date as the date of grant of any year-end equity awards granted to employees of GS Inc. and its affiliates who are subject to Section 16 of the Securities Exchange Act ("Section 16 Persons") for the prior fiscal year or, if no such equity awards are granted, on the last business day of December in the fiscal year to which the Annual Grant pertains;
- (ii) first become exercisable on the earlier of (a) the same date that year-end options granted to Section 16 Persons for the prior fiscal year become exercisable or, if no such options are granted, on the first trading day in January three years after the date of grant unless that date is not during a Window Period, in which case the first trading day of the first Window Period that begins thereafter, and (b) the date on which you cease to be a director of GS Inc.;
- (iii) have an exercise price equal to the exercise price of any year-end options granted to Section 16 Persons for the prior fiscal year or, if no such options are granted, the closing price of GS Inc.'s common stock on the New York Stock Exchange on the date of grant of the Annual Grant; and
- (iv) will expire ten years after the date of grant.

RSUs for the Annual Retainer, the Committee Fees and, if applicable, the Annual Grant will:

- be granted to you as of the date of grant of any year-end equity award granted to Section 16 Persons or, if no such award is granted, as of the last business day of December of such fiscal year (or, in the case of RSUs for the Annual Grant, as of the last business day of December in the fiscal year to which the grant pertains); and
- (ii) provide for delivery of shares of GS Inc. common stock on the last business day in May in the year following the date on which you cease to be a director of GS Inc.

The number of RSUs you receive for the Annual Retainer and the Committee Fees will be determined in the same manner as grants to employees for year-end RSUs for that fiscal year or, if no such RSUs are granted, at a grant price equal to the average closing price of GS Inc.'s common stock on the New York Stock Exchange over the 10 trading days up to and including the last day of the fiscal year.

All Options and RSUs will be subject to the terms and conditions of the SIP and the relevant award agreements.

I have enclosed various documents in connection with these arrangements. Please complete them as necessary, sign where indicated and return them in the enclosed envelope. The remaining copies are for your records.

Very truly yours,

/s/ HENRY M. PAULSON, JR.

Henry M. Paulson, Jr.

Enclosures: The Goldman Sachs 1999 Stock Incentive Plan (and Prospectus Materials) Outside Director Initial RSU Award Agreement Custody Agreement Signature Card Election Form for 2003 Annual Grant Form W-9 On November 20, 2002, the Compensation Committee of the Board of Directors of The Goldman Sachs Group, Inc. approved the following resolution amending The Goldman Sachs 1999 Stock Incentive Plan. The Goldman Sachs 1999 Stock Incentive Plan is filed as Exhibit 10.6 to this Annual Report on Form 10-K.

RESOLVED, that, effective as of the date hereof, Section 1.6.1 of the SIP shall be amended to read in its entirety as follows:

"1.6.1 Total shares available. Subject to adjustment pursuant to Section 1.6.2, the total number of shares of Common Stock which may be delivered pursuant to Awards granted under the Plan shall not exceed three hundred million (300,000,000) shares. If, after the effective date of the Plan, any Award is forfeited or otherwise terminates or is canceled without the delivery of shares of Common Stock, shares of Common Stock are surrendered or withheld from any Award to satisfy a grantee's income tax or other withholding obligations, or shares of Common Stock owned by a grantee are tendered to pay the exercise price of any Award granted under the Plan, then the shares covered by such forfeited, terminated or canceled Award or which are equal to the number of shares surrendered, withheld or tendered shall again become available for transfer pursuant to Awards granted or to be granted under this Plan. Notwithstanding the foregoing, but subject to adjustment as provided in Section 1.6.2, no more than two hundred million shares of Common Stock shall be delivered pursuant to the exercise of Incentive Stock Options. The maximum number of shares of Common Stock with respect to which Options or stock appreciation rights may be granted to an individual grantee in any fiscal year shall equal three million five hundred thousand (3,500,000) shares of Common Stock. Any shares of Common Stock (a) delivered by GS Inc., (b) with respect to which Awards are made by GS Inc. and (c) with respect to which GS Inc. becomes obligated to make Awards, in each case through the assumption of, or in substitution for, outstanding awards previously granted by an acquired entity, shall not be counted against the shares of Common Stock available for Awards under this Plan. Shares of Common Stock which may be delivered pursuant to Awards may be authorized but unissued Common Stock or authorized and issued Common Stock held in GS Inc.'s treasury or otherwise acquired for the purposes of the Plan."

THE GOLDMAN SACHS GROUP, INC. and SUBSIDIARIES

COMPUTATION OF RATIOS OF EARNINGS TO FIXED CHARGES

(\$ in millions)

	Year Ended November				
	2002	2001	2000	1999	1998
Net earnings	\$ 2,114	\$ 2,310	\$ 3,067	\$ 2,708	\$ 2,428
Add:					
Provision for taxes	1,139	1,386	1,953	(716)	493
Portion of rents representative of an interest factor	120	111	80	51	35
Interest expense on all indebtedness	8,868	15,327	16,410	12,018	13,958
Earnings, as adjusted	\$12,241	\$19,134	\$21,510	\$14,061	\$16,914
Fixed charges ⁽¹⁾ :					
Portion of rents representative of an interest factor	\$ 122	\$ 111	\$ 80	\$ 51	\$ 35
Interest expense on all indebtedness	8,874	15,327	16,410	12,018	13,958
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Fixed charges	\$ 8,996	\$15,438	\$16,490	\$12,069	\$13,993
Ratio of earnings to fixed charges	1.36x	1.24x	1.30x	1.16x	1.21x

(1) Fixed charges include capitalized interest and the interest factor of capitalized rent.

MANAGEMENT'S DISCUSSION AND ANALYSIS

Goldman Sachs is a leading global investment banking, securities and investment management firm that provides a wide range of services worldwide to a substantial and diversified client base that includes corporations, financial institutions, governments and high-net-worth individuals.

Our activities are divided into three segments:

- Investment Banking. This segment comprises Financial Advisory and Underwriting;
- **Trading and Principal Investments.** This segment comprises Fixed Income, Currency and Commodities (FICC), Equities and Principal Investments (Principal Investments primarily represents net revenues from our merchant banking investments); and
- Asset Management and Securities Services. This segment comprises Asset Management, Securities Services and Commissions.

Our Investment Banking and Trading and Principal Investments activities were previously aggregated into one reporting segment—Global Capital Markets.

All references to 2002, 2001 and 2000 refer to our fiscal year ended, or the date, as the context requires, November 29, 2002, November 30, 2001 and November 24, 2000, respectively.

When we use the terms "Goldman Sachs," "we," "us" and "our," we mean The Goldman Sachs Group, Inc., a Delaware corporation, and its consolidated subsidiaries.

In this discussion, we have included statements that may constitute "forward-looking statements" within the meaning of the safe harbor provisions of The Private Securities Litigation Reform Act of 1995. These forward-looking statements are not historical facts but instead represent only our belief regarding future events, many of which, by their nature, are inherently uncertain and beyond our control. These statements relate to our future plans and objectives, among other things. By identifying these statements for you in this manner, we are alerting you to the possibility that our actual results may differ, possibly materially, from the results indicated in these forward-looking statements. Important factors, among others, that could cause our results to differ, possibly materially, from those indicated in the forward-looking statements are discussed below under "—Results of Operations—Certain Factors That May Affect Our Results of Operations."

Business Environment

The sharp slowdown in the global economy in 2001 proved short lived, but the pace of recovery in 2002 was modest. An acceleration in U.S. production in early 2002 as inventory liquidation slowed led to a strong increase in global economic growth in the first quarter, but momentum eased sharply the following quarter. Continued weakness in capital spending, combined with an erosion of corporate and investor confidence and increased geopolitical risks, was accompanied by significant declines in global equity prices and corporate activity. In addition, the U.S. Congress passed the Sarbanes-Oxley Act of 2002, in response to concerns regarding recent corporate scandals and several large corporate bankruptcies. The provisions of Sarbanes-Oxley, combined with rules and rule proposals (if adopted) of the U.S. Securities and Exchange Commission, New York Stock Exchange and Nasdaq, necessitate significant changes to corporate governance and public disclosure. In addition, investment banks have been and continue to be the subject of increased regulatory scrutiny regarding research and initial public offering practices. This difficult economic and regulatory environment, combined with a second consecutive year of declines in investment banking activity, continued to provide a challenging business climate for financial institutions. Reflecting this environment, during our fiscal year, industry-wide completed mergers and acquisitions declined 49%, industry-wide initial public offerings declined 17% and industry-wide equity underwriting volume declined 7%.⁽¹⁾ The fixed income markets, which generally performed well for a second straight year, were characterized by a steep yield curve, low interest rates and significant volatility in credit spreads.

⁽¹⁾ Source: Thomson Financial Securities Data – December 1, 2001 through November 29, 2002 and November 25, 2000 through November 30, 2001.

The U.S. economy recovered gradually from the recession in 2001. A slowing of inventory liquidation in late 2001 led to a sharp rise in production in early 2002, but underlying growth in demand remained weak. Real gross domestic product growth in the 2002 calendar year rose to approximately 2.4%, an increase from 0.3% in 2001 but well below the pace of most recoveries. Corporations remained cautious and investment continued to decline, while consumer and housing spending held up relatively well. Concerns about the quality of corporate earnings and the extent of the economic recovery prompted further declines in U.S. equity markets. Despite a rebound near year end, major indices ended the year well below 2001 year-end levels. After cutting overnight interest rates aggressively during 2001 (25 basis points of which fell in the first month of our 2002 fiscal year), the U.S. Federal Reserve left rates unchanged until November 2002, when renewed signs of economic weakness prompted a 50 basis point cut in the overnight lending rate. Long-term yields remained low, as evidenced by the 10-year U.S. Treasury yield hitting its lowest level in 40 years in October 2002.

The European economy remained weak in 2002, with the German economy showing particular weakness. An initial rise in business confidence in early 2002 did not translate into a meaningful recovery in activity. Real gross domestic product growth in Europe for the 2002 calendar year was approximately 1.1%, lower than the 1.6% recorded in 2001. European equity markets recorded particularly sharp declines through the year. The European Central Bank and Bank of England left interest rates unchanged throughout our 2002 fiscal year, but in response to continued economic weakness, the European Central Bank lowered interest rates by 50 basis points shortly after the end of our fiscal year.

In Japan, economic growth accelerated in the first half of 2002, but appears to have decelerated towards the end of 2002. Export demand and industrial production rebounded quite strongly in the middle of 2002, driving overall growth rates positive, as global demand improved and an improvement in other Asian economies lifted Japanese exports. In addition, consumer spending held up relatively well, despite falling personal incomes. The Bank of Japan continued to provide substantial liquidity by expanding purchases of government bonds and increasing money market operations, but concerns lingered as to the state of Japan's banking system and budget deficit. Equities markets in Japan rose early in 2002 but fell sharply as the outlook for a sustained recovery receded.

Growth in other Asian economies picked up sharply in late 2001, reflecting an improvement in technology demand in the United States and, in some countries, an increase in domestic spending. Export growth decelerated later in 2002, leading to renewed pressure on some economies, but the region generally remained stronger than other areas. China, in particular, has continued to record strong growth and its strength has benefited other regional trading partners. Despite large falls in global equities markets, most Asian equity markets (outside of Japan) performed better than those in other regions.

Results of Operations

The composition of our net revenues has varied over time as financial markets and the scope of our operations have changed. The composition of net revenues can also vary over the shorter term due to fluctuations in U.S. and global economic and market conditions. Over the last two years, we have been operating in a challenging economic and business environment. Industry-wide declines in the volume of equity underwritings and mergers and acquisitions have adversely affected the results of our Underwriting and Financial Advisory businesses, and continued weakness in global equities markets has adversely affected the results of certain of our Trading and Principal Investments businesses. In addition, our operating results have been affected by Goldman Sachs' combination with SLK LLC (SLK) in October 2000. As a result, period-to-period comparisons may not be meaningful.

The following table sets forth an overview of our financial results:

Financial Overview

(\$ in millions, except per share amounts)

	Yea	Year Ended November		
	2002	2002 2001		
Net revenues	\$13,986	\$15,811	\$16,590	
Pre-tax earnings	3,253	3,696	5,020	
Net earnings	2,114	2,310	3,067	
Diluted earnings per share	4.03	4.26	6.00	
Return on average shareholders' equity ⁽²⁾	11.3%	13.0%	26.9%	
Return on average tangible shareholders' equity ⁽³⁾	15.3%	17.8%	28.9%	

(1) As part of the combination with SLK, a \$702 million retention pool of restricted stock units was established for SLK employees. A charge of \$290 million (\$180 million after taxes) related to restricted stock units for which future service was not required as a condition to the delivery of the underlying shares of common stock was included in our operating results in 2000. Excluding this charge, our diluted earnings per share were \$6.35.

(2) Return on average shareholders' equity is computed by dividing net earnings by average monthly shareholders' equity. Return on average shareholders' equity for 2000 excludes the charge related to our combination with SLK.

(3) Tangible shareholders' equity equals total shareholders' equity less goodwill and identifiable intangible assets. We believe that return on average tangible shareholders' equity is a meaningful measure of our financial performance because it reflects the return on the equity deployed in our businesses. Return on average tangible shareholders' equity is computed by dividing net earnings by average monthly tangible shareholders' equity. Return on average tangible shareholders' equity for 2000 excludes the charge related to our combination with SLK. The following table sets forth the reconciliation of average shareholders' equity to average tangible shareholders' equity:

	Y	Year Ended November		
(in millions)	2002	2001	2000	
Average shareholders' equity Less: Average goodwill and identifiable intangible assets	\$18,659 4,837	\$17,704 4,727	\$12,078 818	
Average tangible shareholders' equity	\$13,822	\$12,977	\$11,260	

The following table sets forth the net revenues, operating expenses and pre-tax earnings of our segments:

Operating Results by Segment (in millions)

		Year Ended November		
		2002	2001	2000
Investment Banking	Net revenues	\$ 2,830	\$ 3,836	\$ 5,371
	Operating expenses	2,454	3,117	3,645
	Pre-tax earnings	\$ 376	\$ 719	\$ 1,726
Trading and Principal	Net revenues	\$ 5,249	\$ 6,349	\$ 6,627
Investments	Operating expenses	4,273	5,134	4,199
	Pre-tax earnings	\$ 976	\$ 1,215	\$ 2,428
Asset Management and	Net revenues	\$ 5,907	\$ 5,626	\$ 4,592
Securities Services	Operating expenses	3,794	3,501	3,008
	Pre-tax earnings	\$ 2,113	\$ 2,125	\$ 1,584
Total	Net revenues	\$13,986	\$15,811	\$16,590

Operating expenses ⁽¹⁾	10,733	12,115	11,570
Pre-tax earnings	\$ 3,253	\$ 3,696	\$ 5,020

⁽¹⁾ Includes the following expenses that have not been allocated to our segments: (i) amortization of employee initial public offering awards of \$212 million, \$363 million and \$428 million for the years ended November 2002, November 2001 and November 2000, respectively, and (ii) nonrecurring acquisition awards of \$290 million related to our combination with SLK for the year ended November 2000.

Net revenues in our segments include allocations of interest income and interest expense to specific securities, commodities and other positions in relation to the cash generated by, or funding requirements of, such underlying positions. See Note 15 to the consolidated financial statements for further information regarding our segments.

The cost structures of each of our segments are broadly similar to that of Goldman Sachs taken as a whole in that they are primarily influenced by discretionary compensation, headcount and levels of business activity. Our overall compensation and benefits expenses are generally targeted at 50% (plus or minus a few percentage points) of consolidated net revenues. A substantial portion of our compensation expense represents discretionary bonuses. Compensation expense within our segments reflects, among other factors, the overall performance of Goldman Sachs as well as the performance of individual business units.

Investment Banking

Goldman Sachs provides a broad range of investment banking services to a diverse group of corporations, financial institutions, governments and individuals. The activities of our Investment Banking segment are divided into two categories:

- **Financial Advisory.** Financial Advisory includes advisory assignments with respect to mergers and acquisitions, divestitures, corporate defense activities, restructurings and spin-offs; and
- **Underwriting.** Underwriting includes public offerings and private placements of equity and debt securities.

The following table sets forth the operating results of our Investment Banking segment:

Investment Banking Operating Results

(in millions)

	Year Ended November		
2002	2001	2000	
\$1,499	\$2,070	\$2,592	
1,331	1,766	2,779	
2,830	3,836	5,371	
2,454	3,117	3,645	
\$ 376	\$ 719	\$1,726	

2002 versus 2001. Net revenues in Investment Banking were \$2.83 billion for the year compared with \$3.84 billion in 2001. Net revenues in Financial Advisory decreased 28% from the prior year to \$1.50 billion, reflecting a 49% decline in industry-wide completed mergers and acquisitions.⁽¹⁾ Net revenues in our Underwriting business declined 25% to \$1.33 billion, primarily reflecting a 17% decline in industry-wide initial public offerings and a 7% decline in industry-wide total equity underwriting volume,⁽¹⁾ as well as a decline in Goldman Sachs' market share in global debt underwriting. The reduction in Investment Banking net revenues was primarily due to lower levels of activity across all sectors, particularly communications, media and entertainment, natural resources, high technology and healthcare. Our investment banking backlog at the end of 2002 was significantly lower than at the end of 2001.⁽²⁾

Operating expenses decreased 21%, primarily due to decreased compensation and benefits expenses, reflecting lower discretionary compensation and lower employment levels. Market development and communications and technology expenses also decreased, reflecting the continued impact of expense reduction initiatives first implemented in 2001, reduced employment levels and lower levels of business activity. For a further discussion of operating expenses and our expense reduction initiatives, see "—Operating Expenses" below. Pre-tax earnings were \$376 million in 2002 compared with \$719 million in 2001.

2001 versus 2000. Investment Banking generated net revenues of \$3.84 billion compared with \$5.37 billion for 2000, as the slowdown in global economic growth led to significantly lower equity valuations and reduced investment banking activity. Net revenues in Financial Advisory decreased 20% from the prior year to \$2.07 billion, primarily reflecting a 31% decline in industry-wide completed

⁽¹⁾ Source: Thomson Financial Securities Data – December 1, 2001 through November 29, 2002 and November 25, 2000 through November 30, 2001.

⁽²⁾ Our investment banking backlog represents an estimate of our future net revenues from investment banking transactions where we believe that future revenue realization is more probable than not.

mergers and acquisitions.⁽¹⁾ Net revenues in our Underwriting business declined 36% to \$1.77 billion, primarily reflecting a 53% decline in industry-wide equity underwriting volumes.⁽¹⁾ Debt underwriting net revenues were essentially unchanged from 2000. The reduction in Investment Banking net revenues was primarily due to lower levels of activity in the communications, media and entertainment, telecommunications, high technology and industrial sectors. Our investment banking backlog at the end of 2001 was significantly lower than at the end of $2000.^{(2)}$

Operating expenses decreased 14%, primarily due to decreased compensation and benefits expenses as lower discretionary compensation more than offset the impact of the growth in employment levels in 2000. Pre-tax earnings were \$719 million in 2001 compared with \$1.73 billion in 2000.

Trading and Principal Investments

Our Trading and Principal Investments business facilitates customer transactions with a diverse group of corporations, financial institutions, governments and individuals and takes proprietary positions through market making in, and trading of, fixed income and equity products, currencies, commodities, and swaps and other derivatives. In addition, we engage in floor-based and electronic market making as a specialist on U.S. equities and options exchanges. The activities of our Trading and Principal Investments segment are divided into three categories:

- **FICC.** We make markets in and trade interest rate and credit products, currencies and commodities, structure and enter into a wide variety of derivative transactions, and engage in proprietary trading;
- **Equities.** We make markets in, act as a specialist for, and trade equities and equity-related products, structure and enter into equity derivative transactions, and engage in proprietary trading; and
- **Principal Investments.** Principal Investments primarily represents net revenues from our merchant banking investments.

Substantially all of our inventory is marked-to-market daily and, therefore, its value and our net revenues are subject to fluctuations based on market movements. In addition, net revenues derived from our principal investments in privately held concerns and in real estate may fluctuate significantly depending on the revaluation or sale of these investments in any given period. We also regularly enter into large transactions as part of our trading businesses. The number and size of such transactions may affect our results of operations in a given period.

In January 2002, we began to implement a new fee-based pricing structure in our Nasdaq trading business. Previously we did not charge explicit fees in this business but rather earned market-making revenues based generally on the difference between bid and ask prices. Such market-making net revenues are reported in our Equities trading results. As a result of the change to the fee-based pricing structure, a substantial portion of our Nasdaq net revenues is reported in Commissions below and in "Asset management and securities services" in the consolidated statements of earnings.

Net revenues from Principal Investments do not include management fees and the increased share of the income and gains from our merchant banking funds (merchant banking overrides) to which we are entitled when the return on investments exceeds certain threshold returns to fund investors. These management fees and increased shares of income and gains are included in the net revenues of the Asset Management and Securities Services segment.

The following table sets forth the operating results of our Trading and Principal Investments segment:

Trading and Principal Investments Operating Results

(in millions)

	Year Ended November		
	2002	2001	2000
	\$4,470	\$4,047	\$3,004
3	1,008	2,923	3,489
5	(229)	(621)	134
	5,249	6,349	6,627
	4,273	5,134	4,199
	\$ 976	\$1,215	\$2,428

⁽²⁾ Our investment banking backlog represents an estimate of our future net revenues from investment banking transactions where we believe that future revenue realization is more probable than not.

⁽¹⁾ Source: Thomson Financial Securities Data – November 25, 2000 through November 30, 2001 and November 27, 1999 through November 24, 2000.

2002 versus 2001. Net revenues in Trading and Principal Investments were \$5.25 billion for the year compared with \$6.35 billion in 2001. FICC net revenues of \$4.47 billion increased 10% compared with 2001, reflecting strong performances in our currencies, mortgages, fixed income derivatives, and investment-grade credit businesses, partially offset by decreased net revenues in commodities and leveraged finance. Net revenues in Equities were \$1.01 billion compared with \$2.92 billion for 2001, primarily reflecting lower net revenues in our global shares businesses, which were affected by the continued weakness in the equities markets, the transfer of the Nasdaq fee-based business into Commissions and the negative effect of a single block trade in the first quarter of 2002. In addition, net revenues in equity derivatives and equity arbitrage were lower than the prior year. Principal Investments recorded negative net revenues of \$229 million, primarily due to declines in the value of certain investments in the high technology and telecommunications sectors, partially offset by real estate and energy sector disposition gains.

Operating expenses decreased 17%, primarily due to decreased compensation and benefits expenses, the transfer of the Nasdaq fee-based business to Commissions and the elimination of goodwill amortization. Communications and technology and market development expenses also decreased in 2002, reflecting the continued impact of expense reduction initiatives first implemented in 2001, reduced employment levels and lower levels of business activity. For a further discussion of operating expenses and our expense reduction initiatives, see "—Operating Expenses" below. Pre-tax earnings were \$976 million in 2002 compared with \$1.22 billion in 2001.

2001 versus 2000. Net revenues in Trading and Principal Investments were \$6.35 billion for 2001 compared with \$6.63 billion in 2000, as negative net revenues in Principal Investments and declines in Equities were partially offset by higher net revenues in FICC. Net revenues in FICC were \$4.05 billion, up 35% compared with 2000, as we capitalized on lower interest rates, increased volatility and strong customer demand. This increase in net revenues was driven by strong performances in commodities, currencies, our credit-sensitive businesses (which include high-yield debt, bank loans and investment-grade corporate debt) and fixed income derivatives. Equities net revenues were \$2.92 billion compared with \$3.49 billion in 2000, primarily reflecting declining volatility and customer flow, the introduction of decimalization and lower net revenues in equity arbitrage, partially offset by the contribution from SLK. Principal Investments experienced negative net revenues of \$621 million for 2001 due to mark-to-market losses on both private and public investments, primarily in the high technology and telecommunications sectors.

Operating expenses increased 22%, primarily due to increased compensation and benefits expenses, higher brokerage, clearing and exchange fees, higher amortization of goodwill and identifiable intangible assets, and increased communications and technology, depreciation and occupancy expenses. These increases were principally due to the inclusion of SLK and the growth in employment levels in 2000, partially offset by lower discretionary compensation and the effect of expense reduction initiatives implemented in 2001. For a further discussion of operating expenses and our expense reduction initiatives, see "—Operating Expenses" below. Pre-tax earnings were \$1.22 billion in 2001 compared with \$2.43 billion in 2000.

Asset Management and Securities Services

The components of our Asset Management and Securities Services segment are set forth below:

- Asset Management. Asset Management generates management fees by providing investment advisory services to a diverse client base of institutions and individuals;
- Securities Services. Securities Services includes prime brokerage, financing services and securities lending, and our matched book businesses, all of which generate revenues primarily in the form of interest rate spreads or fees; and
- **Commissions.** Commissions includes fees from executing and clearing client transactions on major stock, options and futures markets worldwide. Commissions also includes revenues from the increased share of the income and gains derived from our merchant banking funds when the return on a fund's investments exceeds certain threshold returns.

The following table sets forth the operating results of our Asset Management and Securities Services segment:

Asset Management and Securities Services Operating Results (in millions)

Year Ended November		
2002	2001	2000
\$1,653	\$1,473	\$1,345
981	1,133	940
3,273	3,020	2,307
5,907	5,626	4,592
3,794	3,501	3,008
\$2,113	\$2,125	\$1,584

Assets under management typically generate fees based on a percentage of their value and include our mutual funds, separate accounts managed for institutional and individual investors, our merchant banking funds and other alternative investment funds. Substantially all assets under management are valued as of calendar month end.

The following table sets forth our assets under management by asset class:

Assets Under Management by Asset Class

(in billions)

	Ĩ	As of November 30		
	2002	2001	2000	
Money markets	\$108	\$122	\$ 72	
Fixed income and currency	96	71	57	
Equity	86	96	107	
Alternative investments ⁽¹⁾	58	62	58	
Total	\$348	\$351	\$294	

(1) Includes merchant banking, quantitative asset allocation and other similar funds that we manage, as well as funds where we recommend one or more subadvisors for our clients.

The following table sets forth a summary of the changes in our assets under management:

Assets Under Management (in billions)

	Year	Year Ended November 30		
	2002	2001	2000	
Balance, beginning of year	\$351	\$294	\$258	
Net assets inflows	9	67	40	
Net market depreciation	(12)	(10)	(4)	
Balance, end of year	\$348	\$351	\$294	
	_			

2002 versus 2001. Net revenues in Asset Management and Securities Services were \$5.91 billion for the year, 5% higher than 2001. Asset Management net revenues of \$1.65 billion increased 12% compared with last year, primarily reflecting an 8% increase in average assets under management and increased incentive income. Assets under management were \$348 billion at the end of 2002, essentially flat compared with

the end of 2001. Market depreciation of \$12 billion, primarily in equity assets, was partially offset by net asset inflows of \$9 billion, primarily in fixed income and equity assets. The decline in net asset inflows compared with 2001 was primarily due to a reduction in money market net inflows, which were particularly strong in 2001. Securities Services net revenues were \$981 million compared with \$1.13 billion for 2001, primarily reflecting lower net revenues in our margin lending business and fixed income matched book. Commissions were \$3.27 billion, up 8% compared with 2001, primarily due to increased net revenues from equity commissions, in part due to the transfer of the Nasdaq fee-based business into Commissions, partially offset by lower merchant banking overrides (i.e., an increased share of a fund's income and gains when the return on the fund's investments exceeds certain threshold returns) and reduced clearing fees.

Operating expenses increased 8%, primarily due to the transfer of the Nasdaq fee-based business to Commissions, increased compensation and benefits expenses, higher occupancy expenses, brokerage, clearing and exchange fees, and depreciation expenses, partially offset by the elimination of goodwill amortization. For a further discussion of operating expenses, see "—Operating Expenses" below. Pre-tax earnings in Asset Management and Securities Services were \$2.11 billion in 2002 compared with \$2.13 billion in 2001.

2001 versus 2000. Net revenues in Asset Management and Securities Services were \$5.63 billion, an increase of 23% compared with 2000. All major components of the business contributed to the net revenue growth in 2001. Asset Management net revenues of \$1.47 billion increased 10% compared with 2000, primarily reflecting an increase of 11% in average assets under management. Net asset inflows of \$67 billion, principally in money market assets, were partially offset by declines in equity asset values due to market depreciation. Securities Services net revenues of \$1.13 billion increased 21% over 2000, primarily due to increased spreads in our fixed income matched book and the contribution from SLK, partially offset by lower net revenues in securities lending and margin lending. Commissions increased 31% compared with 2000 to \$3.02 billion, principally reflecting the contribution from SLK's clearing and execution business.

Operating expenses increased 16%, primarily due to increased compensation and benefits expenses, higher communications and technology expenses, higher amortization of goodwill and identifiable intangible assets, and increased brokerage, clearing and exchange fees and occupancy and depreciation expenses. These increases were principally due to the inclusion of SLK and the growth in employment levels in 2000, partially offset by lower discretionary compensation and the effect of expense reduction initiatives implemented in 2001. Pre-tax earnings in Asset Management and Securities Services were \$2.13 billion in 2001 compared with \$1.58 billion in 2000.

Operating Expenses

The following table sets forth our operating expenses and number of employees:

Operating Expenses and Employees (\$ in millions)

	Year Ended November		
	2002	2001	2000
Compensation and benefits	\$ 6,744	\$ 7,700	\$ 7,773
Nonrecurring acquisition awards	—		290
Amortization of employee initial public offering and acquisition awards	293	464	428
Non-compensation expenses	3,696	3,951	3,079
Total operating expenses	\$10,733	\$12,115	\$11,570
Employees at year end ⁽¹⁾	19,739	22,677	22,627

(1) Excludes employees of Goldman Sachs' property management subsidiaries. Substantially all of the costs of these employees are reimbursed to Goldman Sachs by the real estate investment funds to which these companies provide property management services.

During 2002, we continued to focus on cost containment in light of the difficult business environment. We reduced employment levels and maintained our focus on the expense reduction initiatives first implemented in 2001. These initiatives were largely focused on reducing expenses in areas such as travel and entertainment, advertising, consulting, telecommunications and occupancy-related services. In addition, we canceled, deferred or scaled back some of our non-critical capital reinvestment plans in order to limit growth in our depreciation and amortization expense. Given the highly discretionary nature of the expenses impacted by our cost reduction initiatives, the effect of these initiatives on future operating results will be largely dependent upon the prevailing business environment.

2002 versus 2001. Operating expenses were \$10.73 billion for 2002, 11% below 2001. Compensation and benefits expenses of \$6.74 billion decreased 12% compared with the prior year, primarily due to lower discretionary compensation, reduced employment levels, and lower consultants and temporary staff expense. The ratio of compensation and benefits to net revenues for 2002 was 48% compared with 49% for 2001. Employment levels decreased 13% from November 2001. Employee equity-based compensation granted for 2002 included roughly equal amounts of restricted stock units and stock options. See "—Recent Accounting Developments" below as well as Note 2 and Note 12 to the consolidated financial statements for

further information regarding our stock-based compensation, including our adoption, beginning in fiscal 2003, of the fair value method of accounting for stock-based compensation.

Non-compensation-related expenses were \$3.70 billion for 2002, 6% below 2001. Excluding amortization of goodwill and identifiable intangible assets, these expenses decreased 3% compared with last year, primarily reflecting lower market development and communications and technology expenses due to the continued impact of expense reduction initiatives first implemented in 2001, reduced employment levels and lower levels of business activity. These reductions were partially offset by higher occupancy expenses primarily related to new leases and one-time costs related to the postponement of construction plans for a smaller facility adjacent to our office building currently under construction in Jersey City, New Jersey. Amortization of goodwill and identifiable intangible assets was lower than in 2001, reflecting the adoption of the goodwill non-amortization provisions of Statement of Financial Accounting Standards (SFAS) No. 142, "Goodwill and Other Intangible Assets."

2001 versus 2000. Operating expenses were \$12.12 billion for 2001, 7% above 2000 excluding the SLK charge of \$290 million. Compensation and benefits of \$7.70 billion were essentially unchanged from the prior year as lower discretionary compensation was offset by incremental expense related to the inclusion of SLK. The ratio of compensation and benefits to net revenues for 2001 was 49% compared with 47% for 2000. Employment levels were essentially unchanged from November 2000. Substantially all of the equity-based compensation granted for 2001 was in the form of stock options. See "—Recent Accounting Developments" below as well as Note 2 and Note 12 to the consolidated financial statements for further information regarding our stock-based compensation.

Non-compensation expenses were \$3.95 billion, an increase of 28% compared with 2000, primarily due to higher brokerage, clearing and exchange fees, intangible asset amortization, communications and technology costs and occupancy and depreciation expenses partially offset by reduced market development expenses. In addition to the inclusion of SLK, the increase in our non-compensation expenses in 2001 was primarily due to growth in employment levels during 2000 partially offset by the effect of expense reduction initiatives implemented in 2001.

Certain properties occupied by Goldman Sachs were affected by the terrorist attack of September 11, 2001. We recorded expenses related to the attack in 2001, which were not material and were wholly offset by an expected insurance recovery. These expenses, and the related insurance recovery, pertain to write-offs of damaged technology and telecommunications equipment, certain employee-related expenditures and other business recovery costs.

Provision for Taxes

The effective income tax rate for 2002 was 35.0%, down from 37.5% in 2001. The decline in the effective income tax rate compared with 2001 was primarily due to a change in our geographic earnings mix combined with ongoing efforts to convert major operating subsidiaries around the world to corporate form and an increase in tax-exempt income and domestic tax credits.

The effective tax rate for 2001 was 37.5% compared with 38.9% in 2000. The decline in the effective tax rate in 2001 was primarily due to lower state and local taxes.

Our effective tax rate can vary from period to period depending on, among other factors, the geographic and business mix of our earnings. These same and other factors, including our history of pre-tax earnings, are taken into account in assessing our ability to realize our net deferred tax assets. See Note 13 to the consolidated financial statements for further information regarding our provision for taxes.

Certain Factors That May Affect Our Results of Operations

As an investment banking, securities and investment management firm, our businesses are materially affected by conditions in the financial markets and economic conditions generally, both in the United States and elsewhere around the world. In the last year, we have been operating in a very challenging environment: the number and size of securities underwritings and mergers and acquisition transactions have declined significantly; the equities markets in the United States and elsewhere have been volatile and are at levels substantially below their record highs; investors have exhibited concerns over the integrity of the U.S. financial markets as a result of recent, highly publicized financial scandals; and the attention of management of many clients has been diverted from capital-raising transactions and acquisitions and dispositions in part as a result of corporate governance regulations, such as the Sarbanes-Oxley Act of 2002, and related uncertainty in capital markets. It is unclear how long this environment will last, but so long as it does, our businesses will be adversely affected.

These types of economic and market conditions have in the past adversely affected, and may in the future adversely affect, our business and profitability in many ways, including the following:

- We generally maintain large trading, specialist and investment positions. Market fluctuations and volatility may adversely affect the value of those positions, including our interest rate and credit products, currency, commodity and equity positions and our merchant banking investments, or may reduce our willingness to enter into some new transactions.
- A continuation of the industry-wide declines in the volume of equity underwritings and mergers and acquisitions is likely to have a continuing adverse effect on our revenues and, because we may be unable to reduce expenses correspondingly, our profit margins. In particular, because a significant portion of our investment banking revenues are derived from our participation in large transactions, a decrease in the number of large transactions due to uncertain or unfavorable market conditions may adversely affect our investment banking business.
- Declines in the volume and number of investment banking transactions may continue to increase price competition.
- Reductions in the level of the equities markets also tend to reduce the value of our clients' portfolios, which in turn may reduce the fees we earn for managing assets. Even in the absence of uncertain or unfavorable economic or market conditions, investment performance by our asset management business below the performance of benchmarks or competitors could result in a decline in assets under management and therefore in the fees we receive.
- Concentration of risk in the past has increased the losses that we have incurred in our proprietary trading, market-making, block trading, merchant banking, underwriting and lending businesses and may continue to do so in the future.
- The volume of transactions that we execute for our customers and as a specialist may decline, which would reduce the revenues we receive from commissions and spreads. In our specialist businesses, we are obligated by stock exchange rules to maintain an orderly market, including by purchasing shares in a declining market. This may result in trading losses and an increased need for liquidity. Finally, further weakness in global equities markets could adversely impact our trading businesses and impair the value of our goodwill and identifiable intangible assets.

If any of the variety of instruments and strategies we utilize to hedge or otherwise manage our exposure to various types of risk are not effective, we may incur losses. Our hedging strategies and other risk management techniques may not be fully effective in mitigating our risk exposure in all market environments or against all types of risk.

Liquidity (i.e., ready access to funds) is essential to our businesses. Our liquidity could be impaired by an inability to access the long-term or short-term debt markets, an inability to access the repurchase and securities lending markets, or an inability to sell assets. This situation may arise due to circumstances that we may be unable to control, such as a general market disruption, perceptions about our creditworthiness, or an operational problem that affects third parties or us. Further, our ability to sell assets may be impaired if other market participants are seeking to sell similar assets at the same time.

Our credit ratings are important to our liquidity. A reduction in our credit ratings could adversely affect our liquidity and competitive position, increase our borrowing costs or trigger our obligations under certain bilateral provisions in some of our trading and collateralized financing contracts. Under such provisions, counterparties could be permitted to terminate contracts with Goldman Sachs or require us to post additional collateral. Termination of our trading and collateralized financing contracts could cause us to sustain losses and impair our liquidity by requiring us to find other sources of financing or to make significant cash payments or securities movements.

The Goldman Sachs Group, Inc. (Group Inc.) is a holding company and, therefore, it depends on dividends, distributions and other payments from its subsidiaries to fund dividend payments and to fund all payments on its obligations, including debt obligations. Many of our subsidiaries, including Goldman, Sachs & Co., are subject to laws that authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to Group Inc. Regulatory action of that kind could impede access to funds that Group Inc. needs to make payments on obligations, including debt obligations, or dividend payments.

We are exposed to the risk that third parties that owe us money, securities or other assets will not perform their obligations. These parties may default on their obligations to us due to bankruptcy, lack of liquidity, operational failure or other reasons. The amount and duration of our credit exposures have been increasing over the past several years, as has the breadth of the entities to which we have such exposure. As a clearing member firm, we finance our customer positions and we could be

held responsible for the defaults or misconduct of our customers. In addition, we have experienced, due to competitive factors, pressure to extend credit and price more aggressively the credit risks we take. In particular, corporate clients sometimes seek to require credit commitments from us in connection with investment banking assignments. Although we regularly review credit exposures to specific clients and counterparties and to specific industries, countries and regions that we believe may present credit concerns, default risk may arise from events or circumstances that are difficult to detect or foresee. In addition, concerns about, or a default by, one institution could lead to significant liquidity problems, losses or defaults by other institutions, which in turn could adversely affect Goldman Sachs.

Our ability to conduct business may be adversely impacted by a disruption in the infrastructure that supports our businesses and the communities in which they are located. This may include a disruption involving electrical, communications, transportation or other services used by Goldman Sachs or third parties with which we conduct business.

Substantial legal liability or a significant regulatory action against Goldman Sachs could have a material adverse financial effect or cause significant reputational harm to Goldman Sachs, which in turn could seriously harm our business prospects. We face significant legal risks in our businesses, and the volume of claims and amount of damages claimed in litigation against financial intermediaries are increasing. Our experience has been that legal claims by customers and clients increase in a market downturn. In addition, employment related claims typically increase in periods when we have reduced the total number of employees.

For additional important factors that may affect our results of operations, see "Business—Certain Factors That May Affect Our Business" in our Form 10-K for our fiscal year ended November 29, 2002.

Geographic Data

For a summary of the net revenues, pre-tax earnings and identifiable assets of Goldman Sachs by geographic region, see Note 15 to the consolidated financial statements.

Cash Flows

Our cash flows are primarily related to the operating and financing activities undertaken in connection with our trading and market-making businesses. We have reclassified net cash flows from "Securities sold under agreements to repurchase, net of agreements to resell" as operating activities, because secured funding is an integral aspect of our day-to-day operations. Previously, these cash flows were reported as financing activities.

Year Ended November 2002. Cash and cash equivalents decreased to \$4.82 billion in 2002. Cash of \$10.08 billion was used for operating activities, primarily reflecting an increase in financial instruments owned, partially offset by an increase in financial instruments sold, but not yet purchased. Cash of \$1.10 billion was used for investing activities, primarily for leasehold improvements and the purchase of telecommunications and technology-related equipment. Cash of \$9.09 billion was provided by financing activities, reflecting proceeds from the issuances of long-term and net short-term borrowings, partially offset by repayments of long-term borrowings (including the current portion of long-term borrowings) and common stock repurchases.

Year Ended November 2001. Cash and cash equivalents increased to \$6.91 billion in 2001. Cash of \$2.87 billion was provided by operating activities. Cash of \$1.91 billion was used for investing activities, primarily for leasehold improvements and the purchase of telecommunications and technology-related equipment. Cash of \$2.08 billion was provided by financing activities, reflecting proceeds from the issuances of long-term and net short-term borrowings, partially offset by repayments of long-term borrowings (including the current portion of long-term borrowings) and common stock repurchases.

Year Ended November 2000. Cash and cash equivalents increased to \$3.87 billion in 2000. Operating activities provided cash of \$1.61 billion. Cash of \$3.66 billion was used for investing activities, primarily for our combination with SLK and purchases of technology-related equipment. Cash of \$2.86 billion was provided by financing activities as proceeds from the issuances of long-term borrowings were partially offset by repayments of long-term borrowings (including the current portion of long-term borrowings).

Liquidity Risk Management

Liquidity is of critical importance to companies in the financial services sector. Most failures of financial institutions have occurred in large part due to insufficient liquidity. Accordingly, Goldman Sachs has in place a comprehensive set of liquidity and funding policies that are intended to maintain significant flexibility to address both firm-specific and broader industry or market liquidity events. Our principal objective is to be able to fund Goldman Sachs and to enable our core businesses

to continue to generate revenue and provide services to our clients, even under adverse circumstances.

Management has implemented a number of policies that are designed to achieve this objective. Our liquidity policies are intended to be conservative and, accordingly, reflect the following general assumptions:

- During a liquidity crisis, credit-sensitive funding, including unsecured debt and some types of collateralized financing agreements, may be unavailable and the terms or availability of other types of secured financing may change.
- Liquidity needs will come in different forms and may occur simultaneously; therefore, we assume that the same pool of funds cannot satisfy multiple liquidity needs.
- Because legal and regulatory requirements can restrict the flow of funds between entities, unless legally provided for, we assume funds or securities are not freely available from a subsidiary to the parent company.

Our liquidity policies are focused on the maintenance of excess liquidity and conservative asset-liability management.

Excess Liquidity Policies

Maintenance of a Pool of Highly Liquid Securities. Our most important liquidity policy is to maintain excess liquidity in the form of unencumbered, highly liquid securities. This liquidity is intended to allow us to meet immediate obligations without needing to sell other assets or depend on additional funding from credit-sensitive markets.

Our primary liquidity cushion consists of cash and unencumbered U.S. government and agency securities and highly liquid mortgage securities that may be sold or pledged to provide same-day liquidity. This pool of highly liquid assets averaged \$30.06 billion during 2002 and \$24.55 billion during 2001. We also maintain smaller pools of unencumbered French, German, United Kingdom and Japanese government bonds that can be used in a similar fashion to address local market crises. These pools, in the aggregate, averaged \$6.73 billion during 2002.

The size of our liquidity cushion is determined by an internal liquidity model together with a qualitative assessment of the condition of the financial markets and Goldman Sachs. The liquidity model identifies and estimates potential uses of liquidity over a short-term horizon, including:

- upcoming maturities of unsecured debt;
- potential buybacks of a portion of our outstanding negotiable debt;
- collateral outflows, assuming that collateral that has not been called by counterparties, but is available to them, will be called and all counterparties that can call collateral through marking transactions to market will do so continually;
- draws on our unfunded commitments; and
- upcoming cash outflows, such as tax or bonus payments.

In addition to the liquidity risk assumptions described above, we assume that no assets other than the liquidity cushion are available to source liquidity and that committed or advised bank facilities will be unavailable.

Other Unencumbered Assets. In addition to the liquidity cushion described above, we maintain a significant amount of other unencumbered securities in the United States, Europe and Asia, including other government bonds, high-grade money market securities, corporate bonds and marginable equities.

Maintenance of Liquidity Ratio. Our policy is to maintain total unencumbered assets, including our liquidity cushion and other unencumbered assets described above, in an amount that, if pledged or sold, is intended to provide the funds necessary to replace at least 100% of unsecured obligations that are scheduled to mature (or where holders have the option to redeem) within the coming year. This "liquidity ratio" of unencumbered assets at loan value divided by short-term unsecured liabilities is intended to ensure that we could fund our positions on a secured basis in the event we were unable to replace our unsecured debt maturing within one year. In calculating this ratio, we assume conservative loan values (the estimated amount of cash that would be advanced by counterparties against securities we own) that are based on stress-scenario borrowing capacity. The estimated loan value of the aggregate of our liquidity cushion and the other unencumbered assets averaged \$68.55 billion during 2002.

Committed Bank Facilities. While we assume committed or advised bank facilities will be unavailable in the event of a liquidity crisis, Goldman Sachs maintains over \$1 billion in undrawn bank facilities as an additional liquidity resource.



Asset-Liability Management Policies

Maintenance of a Highly Liquid Balance Sheet. Goldman Sachs seeks to maintain a highly liquid balance sheet. Many of our assets are readily funded in the repurchase agreement and securities lending markets, which generally have proven to be a consistent source of funding, even in periods of market stress. Substantially all of our inventory is marked-to-market daily.

Our balance sheet fluctuates significantly between financial statement dates and is lower at fiscal year end than would be observed on an average basis. We require our businesses to reduce balance sheet usage on a quarterly basis to demonstrate compliance with limits set by management, thereby providing a disincentive to committing our capital over longer periods of time. These balance sheet reductions are generally achieved during the last several weeks of each fiscal quarter through ordinary-course, open-market transactions in the most liquid portions of our balance sheet, principally U.S. government and agency securities, securities of foreign sovereigns, and mortgage and money market instruments, as well as through the roll-off of repurchase agreements and certain collateralized financing arrangements. Accordingly, over the last six quarters, our total assets and adjusted assets at quarter end have been, on average, 18% lower and 16% lower, respectively, than amounts that would have been observed, based on a weekly average, over that period. These differences, however, have not resulted in material changes to our credit risk, market risk or excess liquidity position because they are generally in highly liquid assets that are typically financed on a secured basis.

Funding of Assets With Longer Term Liabilities. While Goldman Sachs' liquidity policies generally do not rely on sales of assets (other than the liquidity cushions) to maintain liquidity in a distressed environment, we recognize that orderly asset sales may be prudent, and could be necessary, in a persistent liquidity crisis. As a result, we seek to manage the composition of our asset base and the maturity profile of our funding such that we should be able to liquidate our assets prior to our liabilities coming due, even in times of prolonged or severe liquidity stress.

We seek to maintain total capital (long-term borrowings plus shareholders' equity) substantially in excess of our less liquid assets. Our total capital of \$57.71 billion and \$49.25 billion as of November 2002 and November 2001, respectively, exceeded the assets that we believe may be more difficult to fund or sell, particularly during times of market stress. Such assets include, but are not limited to, bank loans, high-yield debt securities, emerging market debt securities and principal investments.

As of November 2002 and 2001, we held \$2.97 billion and \$3.45 billion, respectively, in bank loans, \$1.94 billion and \$1.78 billion, respectively, in high-yield debt securities and \$0.76 billion and \$1.32 billion, respectively, in emerging market debt securities. As of November 2002 and 2001, the aggregate carrying value of our principal investments held directly or through our merchant banking funds was \$1.78 billion and \$2.85 billion, respectively. These carrying values were comprised of corporate principal investments with an aggregate carrying value of \$1.04 billion and \$1.85 billion, respectively, and real estate investments with an aggregate carrying value of \$0.74 billion and \$1.00 billion, respectively. In addition, we held other financial assets such as certain mortgage whole loans, certain mortgage-backed securities and other distressed assets that could be less liquid, particularly during times of market stress.

In addition, we had illiquid non-financial assets of \$12.30 billion and \$12.01 billion as of November 2002 and November 2001, respectively. These assets, which are reported as "Other assets" in the consolidated statements of financial condition, include goodwill and identifiable intangible assets, property, plant and equipment, deferred tax assets, prepaid assets and our equity method investments.

Diversification of Funding Sources. Goldman Sachs seeks to maintain broad and diversified funding sources globally. These sources include insurance companies, mutual funds, banks, bank trust departments, corporations, individuals and other asset managers. We have imposed internal guidelines on how much of our commercial paper can be owned by any single investor or group of investors. We believe that our relationships with our creditors are critical to our liquidity.

We access funding in a variety of markets in the United States, Europe and Asia. We make extensive use of the repurchase agreement and securities lending markets, arrange for letters of credit to be issued on our behalf and raise funding in the public and private markets. In particular, we issue debt through syndicated U.S. registered offerings, U.S. registered and 144A medium-term notes programs, offshore medium-term notes offerings and other bond offerings, U.S. and non-U.S. commercial paper and promissory note issuances, and other methods.

Avoidance of Debt Maturity Concentrations. We seek to structure our liabilities to avoid maturity concentrations. To that end, we have created internal guidelines on the principal amount of debt maturing on any one day or during any single week or year. We also have average maturity targets for our long-term and total unsecured debt programs.

Subsidiary Funding and Foreign Exchange Policies. Most of our unsecured funding is raised by our parent company, The Goldman Sachs Group, Inc. The parent company then lends the necessary funds to its subsidiaries. We manage our intercompany exposure by generally requiring intercompany loans to have maturities equal to or shorter than the maturities of the aggregate borrowings of the parent company. This policy ensures that the subsidiaries' obligations to the parent company will generally mature in advance of the parent company's third-party long-term borrowings. In addition, many of our subsidiaries and affiliates pledge collateral to cover their intercompany borrowings. We generally fund our equity investments in subsidiaries with equity capital.

Our capital invested in foreign subsidiaries is generally exposed to foreign exchange risk, which we selectively hedge. In addition, we generally hedge the nontrading exposure to foreign exchange risk that arises from transactions denominated in currencies other than the transacting entity's functional currency.

Capital and Funding

Capital

Our capital requirements are determined by factors such as subsidiary regulatory requirements, rating agency guidelines, our capital policies regarding asset composition, leverage and risk of loss, business opportunities, and capital availability and cost. Goldman Sachs' total capital increased 17% to \$57.71 billion as of November 2002 compared with \$49.25 billion as of November 2001.

The increase in total capital resulted primarily from an increase in long-term borrowings to \$38.71 billion as of November 2002 from \$31.02 billion as of November 2001. The weighted average maturity of our long-term borrowings as of November 2002 was approximately 5 years. We swap a substantial portion of our long-term borrowings into U.S. dollar obligations with short-term floating interest rates in order to minimize our exposure to interest rates and foreign exchange movements.

Shareholders' equity increased by 4% to \$19.00 billion as of November 2002 from \$18.23 billion as of November 2001. During 2002, we repurchased 19.4 million shares of our common stock. The principal purpose of our stock repurchase program is to substantially offset the dilutive effect of employee equity-based compensation. The repurchase program has been effected through regular open-market purchases, the sizes of which have been and will be influenced by, among other factors, prevailing prices and market conditions. As of November 2002, we were authorized to repurchase up to 19.3 million additional shares of common stock pursuant to our common stock repurchase program. The average price paid per share for repurchased shares was \$76.49, \$88.22 and \$99.90 for the years ended November 2002, November 2001 and November 2000, respectively.

The following table sets forth information on our assets, shareholders' equity, leverage ratios and book value per share:

	As of N	As of November		
	2002	2001		
	(\$ in millions, excep	t per share amounts)		
Total assets	\$355,574	\$312,218		
Adjusted assets ⁽¹⁾	215,547	194,518		
Shareholders' equity	19,003	18,231		
Tangible shareholders' equity ⁽²⁾	14,164	13,423		
Leverage ratio ⁽³⁾	18.7 x	17.1x		
Adjusted leverage ratio ⁽⁴⁾	15.2x	14.5x		
Book value per share ⁽⁵⁾	\$ 38.69	\$ 36.33		

(1) Adjusted assets excludes (i) low-risk collateralized assets generally associated with our matched book and securities lending businesses (which we calculate by adding our securities purchased under agreements to resell and securities borrowed, and then subtracting our nonderivative short positions), (ii) cash and securities we segregate in compliance with regulations and (iii) goodwill and identifiable intangible assets. The following table sets forth a reconciliation of total assets to adjusted assets:

	As of No	vember
	2002	2001
	(in mill	lions)
Total assets	\$ 355,574	\$ 312,218
Deduct: Securities purchased under agreements to resell	(45,772)	(27,651)
Securities borrowed	(113,579)	(101,164)
Add: Financial instruments sold, but not purchased, at fair value (excluding derivatives)	44,552	38,057
Deduct: Cash and securities segregated in compliance with U.S. federal and other regulations	(20,389)	(22,134)

Goodwill and identifiable intangible assets	(4,839)	(4,808)
Adjusted assets	\$ 215,547	\$ 194,518

⁽²⁾ Tangible shareholders' equity equals total shareholders' equity less goodwill and identifiable intangible assets. The following table sets forth a reconciliation of shareholders' equity to tangible shareholders' equity:

		As of November	
	2002	_	2001
		(in millions)	
Shareholders' equity	\$19,003		\$18,231
Deduct: Goodwill and identifiable intangible assets	4,839		4,808
Tangible shareholders' equity	\$14,164		\$13,423
	_		

⁽³⁾ Leverage ratio equals total assets divided by shareholders' equity.

- (4) Adjusted leverage ratio equals adjusted assets divided by tangible shareholders' equity. We believe that the adjusted leverage ratio is a more meaningful measure of our capital adequacy because it excludes certain low-risk collateralized assets that are generally supported with little or no capital and reflects the tangible equity deployed in our businesses.
- (5) Book value per share is based on common shares outstanding, including restricted stock units granted to employees with no future service requirements, of 491.2 million as of November 2002 and 501.8 million as of November 2001.

Short-Term Borrowings

Goldman Sachs obtains unsecured short-term borrowings principally through issuance of promissory notes, commercial paper and bank loans. Short-term borrowings also include the portion of long-term borrowings maturing within one year.

The following table sets forth our short-term borrowings:

Short-Term Borrowings (in millions)

	As of N	lovember
	2002	2001
Promissory notes	\$20,433	\$15,281
Commercial paper	9,463	8,353
Bank loans and other	4,948	6,794
Current portion of long-term borrowings	5,794	7,169
Total	\$40,638	\$37,597

Our liquidity depends to an important degree on our ability to refinance these borrowings on a continuous basis. Investors who hold our outstanding promissory notes and commercial paper have no obligation to purchase new instruments when the outstanding instruments mature. As part of our overall liquidity policies, we maintain unencumbered assets in an amount that, if pledged or sold, would provide the funds necessary to replace unsecured obligations that are scheduled to mature (or where holders have the option to redeem) within the coming year. For a discussion of factors that could impair our ability to access these and other markets, see "-Results of Operations-Certain Factors That May Affect Our Results of Operations." See Note 5 to the consolidated financial statements for further information regarding our short-term borrowings.

Credit Ratings

Goldman Sachs relies upon the short-term and long-term debt capital markets to fund a significant portion of its day-to-day operations. The cost and availability of debt financing is influenced by our credit ratings. Credit ratings are important when we are competing in certain markets and when we seek to engage in longer term transactions, including over-the-counter (OTC) derivatives. We believe our credit ratings are determined primarily based on the credit rating agencies' assessment of the external operating environment, our liquidity, market and credit risk management practices, the level and variability of our earnings, our franchise, reputation and management and our capital base. An adverse change in any of these factors could result in a reduction in our credit ratings which, in turn, could increase our borrowing costs and limit our access to the capital markets or require us to post additional collateral and permit counterparties to terminate transactions, pursuant to our obligations under bilateral provisions in certain of our trading and collateralized financing contracts. This could reduce our earnings and adversely affect our liquidity.

As of November 2002, additional collateral that would have been callable in the event of a one level reduction in our long-term credit ratings, pursuant to bilateral agreements with certain counterparties, was not material.

The following table sets forth our credit ratings as of November 2002:

	Short-Term Debt	Long-Term Debt
Fitch ⁽¹⁾	F1+	AA-
Moody's Investors Service ⁽²⁾	P-1	Aa3
Standard & Poor's ⁽³⁾	A-1	A+

On May 17, 2002, Fitch affirmed Goldman Sachs' credit ratings but revised its outlook for the long-term debt rating from "stable" to "negative." (1)

(2) On August 9, 2002, Moody's Investors Service upgraded Goldman Sachs' long-term debt rating from A1 to Aa3.

On October 17, 2002, Standard & Poor's lowered Goldman Sachs' short-term debt rating from A-1+ to A-1. Standard & Poor's affirmed our long-term debt rating of A+ and revised (3) its outlook for the long-term debt rating from "negative" to "stable."

Management Oversight of Liquidity, Capital and Funding

Goldman Sachs has established management and infrastructure to oversee our liquidity, capital and funding. The Finance Committee establishes and assures compliance with our liquidity policies and has oversight responsibility for liquidity risk, the size and composition of our balance sheet, our capital base and our credit ratings. The Committee regularly reviews our funding position and capitalization and makes adjustments in light of current events, risks and exposures. See "—Risk Management—Risk Management Structure" below for a further description of the committees that participate in our risk management process.

Goldman Sachs maintains a Liquidity Crisis Plan that identifies a structure for analyzing and responding to a liquidity-threatening event. The Liquidity Crisis Plan provides the framework to estimate the likely impact of a liquidity event on Goldman Sachs and outlines which and to what extent liquidity maintenance activities should be implemented based on the severity of the event. It also lists the crisis management team and internal and external parties to be contacted to ensure effective distribution of information.

Contractual Obligations and Contingent Commitments

Goldman Sachs has contractual obligations to make future payments under long-term debt and long-term noncancelable lease agreements and has contingent commitments under a variety of commercial arrangements as disclosed in the notes to the consolidated financial statements.

The following table sets forth our contractual obligations as of November 2002:

Contractual Obligations (in millions)

	2003	2004-2005	2006-2007	2008- Thereafter	Total
Long-term borrowings by contract maturity	\$ —	\$15,909	\$4,642	\$18,160	\$38,711
Minimum rental commitments	350	620	505	1,827	3,302

As of November 2002, our long-term borrowings were \$38.71 billion. Substantially all of our long-term borrowings were unsecured and consisted principally of senior borrowings with maturities extending through 2032. See Note 6 to the consolidated financial statements for further information regarding our long-term borrowings.

As of November 2002, our minimum rental commitments, net of minimum sublease rentals, under non-cancelable leases were \$3.30 billion. These lease commitments, principally for office space, expire on various dates through 2029. Certain agreements are subject to periodic escalation provisions for increases in real estate taxes and other charges.

Our occupancy expenses include costs associated with office space held in excess of our current requirements, primarily due to the impact of the levels of current business activity on our previously anticipated growth in headcount. This excess space is being held for potential future growth. We continually review our space requirements and may, from time to time, reduce capacity through the use of sublease contracts or early termination agreements. We may incur costs in connection with such reductions in our global office space. Where we have unoccupied space that we may occupy in the future, we will continue to charge the underlying operating costs to earnings as incurred.

The following table sets forth our contingent commitments as of November 2002:

Contingent Commitments (in millions)

		Amount of Commitment Expiration by Period						
	2003	2004-2005	2006-2007	2008- Thereafter	Total			
Commitments to extend credit	\$ 6,126	\$1,224	\$1,089	\$ 975	\$ 9,414			
Commitments under letters of credit issued b	oy banks							
to counterparties	11,607	15	10	_	11,632			
Other commercial commitments ⁽¹⁾	572	832	1	493	1,898			
Total	\$18,305	\$2,071	\$1,100	\$1,468	\$22,944			

(1) Includes our merchant banking commitments and guarantees related to construction-related obligations and our fund management activities.

As of November 2002, we had commitments to enter into forward secured financing transactions, including certain repurchase and resale agreements and secured borrowing and lending arrangements, of \$40.04 billion. See Note 7 to the consolidated financial statements for further information regarding our commitments and contingencies.

Regulated Subsidiaries

Many of our principal subsidiaries are subject to extensive regulation in the United States and elsewhere. Goldman, Sachs & Co. and Spear, Leeds & Kellogg, L.P. are registered U.S. broker-dealers and futures commissions merchants, and their primary regulators include the Securities and Exchange Commission, the Commodity Futures Trading Commission, the Chicago Board of Trade, the New York Stock Exchange and The National Association of Securities Dealers, Inc. Goldman Sachs International, a registered U.K. broker-dealer, is subject to regulation by The Financial Services Authority. Goldman Sachs (Japan) Ltd., a Tokyo-based broker-dealer, is subject to regulation by the Financial Services Agency, the Tokyo Stock Exchange, the Osaka Securities Exchange, the Tokyo International Financial Futures Exchange and the Japan Securities Dealers Association. Several other subsidiaries of Goldman Sachs are regulated by securities, investment advisory, banking, and other regulators and authorities around the world, such as the Federal Financial Supervisory Authority (BaFin) and the Bundesbank in Germany, the Securities and Futures Commission in Hong Kong and the Monetary Authority of Singapore. Compliance with the rules of these regulators may prevent us from receiving distributions, advances or repayment of liabilities from these subsidiaries. See Note 14 to the consolidated financial statements for further information regarding our regulated subsidiaries.

Risk Management

Goldman Sachs has a comprehensive risk management process to monitor, evaluate and manage the principal risks assumed in conducting its activities. These risks include market, credit, liquidity, legal, reputational and other operational exposures.

Risk Management Structure

Goldman Sachs seeks to monitor and control its risk exposure through a variety of separate but complementary financial, credit, operational and legal reporting systems. We believe that we have effective procedures for evaluating and managing the market, credit and other risks to which we are exposed. Nonetheless, the effectiveness of our policies and procedures for managing risk exposure can never be completely or accurately predicted or fully assured. For example, unexpectedly large or rapid movements or disruptions in one or more markets or other unforeseen developments can have a material adverse effect on our results of operations and financial condition. The consequences of these developments can include losses due to adverse changes in inventory values, decreases in the liquidity of trading positions, higher volatility in our earnings, increases in our credit exposure to customers and counterparties, an inability to engage in new transactions and increases in general systemic risk.

Goldman Sachs has established risk control procedures at several levels throughout the organization. Trading desk managers have the first line of responsibility for managing risk within prescribed limits. These managers have in-depth knowledge of the primary sources of risk in their individual markets and the instruments available to hedge our exposures.

In addition, a number of committees are responsible for establishing trading limits, for monitoring adherence to these limits and for general oversight of our risk management process. These committees, whose responsibilities as of 2003 are described below, meet regularly and consist of senior members of both our revenue-producing units and departments that are independent of our revenue-producing units.

Management Committee. All risk control functions ultimately report to the Management Committee. Through both direct and delegated authority, the Management Committee approves all of Goldman Sachs' operating activities, trading risk parameters and customer review guidelines.

Risk Committees. The Firmwide Risk Committee:

- reviews the activities of existing businesses;
- approves new businesses and products;
- approves divisional market risk limits and reviews business unit market risk limits;
- approves inventory position limits for selected country exposures and business units;
- approves sovereign credit risk limits and credit risk limits by ratings group; and
- reviews scenario analyses and approves limits based on abnormal or "catastrophic" market movements.

The FICC and Equities Risk Committees set market risk limits for their respective product lines based on a number of measures including Value at Risk (VaR), scenario analyses and inventory levels. The Asset Management Control Oversight and the Asset Management Risk Committees oversee various operational, credit, pricing and business practice issues.

Global Compliance and Control Committee. The Global Compliance and Control Committee assists management in the identification and review of certain compliance, reputational and other operational risks and in the development of policies and communication and training programs designed to mitigate these risks.

Capital Committee. The Capital Committee reviews and approves all transactions involving commitments of our capital. Such capital commitments include extensions of credit, liquidity commitments, bond underwritings, and other unusual financing structures and transactions that involve significant capital exposure. The Capital Committee is also responsible for ensuring that business and reputational standards for capital commitments are maintained on a global basis.

Commitments Committee. The Commitments Committee reviews and approves our underwriting and distribution activities and sets and maintains policies and procedures designed to ensure that legal, reputational, regulatory, and business standards are maintained in conjunction with these activities. In addition to reviewing specific transactions, the Commitments Committee periodically conducts strategic reviews of industry sectors and products and establishes policies in connection with transaction practices.

Credit Policy Committee. The Credit Policy Committee establishes and reviews broad credit policies and parameters that are implemented by the Credit Department.

Operational Risk Committee. The Operational Risk Committee provides oversight of the ongoing development and implementation of our operational risk policies, framework and methodologies, and monitors the effectiveness of operational risk management.

Finance Committee. The Finance Committee is responsible for oversight of our capital, liquidity and funding needs and for setting certain inventory position limits.

Segregation of duties and management oversight are fundamental elements of our risk management process. In addition to the committees described above, departments that are independent of the revenue-producing units, such as the Firmwide Risk, Credit, Controllers, Treasury, Global Operations, Compliance, Management Controls (Internal Audit) and Legal departments, in part perform risk management functions, which include monitoring, analyzing and evaluating risk. Furthermore, the Controllers Department, in conjunction with the Firmwide Risk Department, independently reviews, on a regular basis, internal valuation models and the pricing of positions determined by individual business units.

Risk Limits

Business unit risk limits are established by the various risk committees and may be further allocated by the business unit managers to individual trading desks.

Market risk limits are monitored on a daily basis by the Firmwide Risk Department, and are reviewed regularly by the appropriate risk committee. Limit violations are reported to the appropriate risk committee and the appropriate business unit managers.

Inventory position limits are monitored by the Controllers Department and position limit violations are reported to the appropriate business unit managers, the Finance Committee and the appropriate risk committee.

Market Risk

The potential for changes in the market value of our trading positions is referred to as "market risk." Our trading positions result from underwriting, market-making, specialist and proprietary trading activities.

Categories of market risk include exposures to interest rates, equity prices, currency rates and commodity prices. A description of each market risk category is set forth below:

- Interest rate risks primarily result from exposures to changes in the level, slope and curvature of the yield curve, the volatility of interest rates, mortgage prepayment speeds and credit spreads.
- Equity price risks result from exposures to changes in prices and volatilities of individual equities, equity baskets and equity indices.
- Currency rate risks result from exposures to changes in spot prices, forward prices and volatilities of currency rates.
- Commodity price risks result from exposures to changes in spot prices, forward prices and volatilities of commodities, such as electricity, natural gas, crude oil, petroleum products, and precious and base metals.

We seek to manage these risk exposures through diversifying exposures, controlling position sizes and establishing hedges in related securities or derivatives. For example, we may hedge a portfolio of common stock by taking an offsetting position in a related equity-index futures contract. The ability to manage an exposure may, however, be limited by adverse changes in the liquidity of the security or the related hedge instrument and in the correlation of price movements between the security and related hedge instrument.

In addition to applying business judgment, senior management uses a number of quantitative tools to manage our exposure to market risk. These tools include:

- risk limits based on a summary measure of market risk exposure referred to as VaR;
- risk limits based on scenario analyses that measure the potential effects on our trading net revenues of various market events, including a large widening of credit spreads, a substantial decline in equities markets and significant moves in emerging markets; and
- inventory position limits for selected business units and country exposures.

VaR. VaR is the potential loss in value of Goldman Sachs' trading positions due to adverse market movements over a defined time horizon with a specified confidence level.

For the VaR numbers reported below, a one-day time horizon and a 95% confidence level were used. This means that there is a one in 20 chance that daily trading net revenues will fall below the expected daily trading net revenues by an amount at least as large as the reported VaR. Thus, shortfalls from expected trading net revenues on a single trading day greater than the reported VaR would be anticipated to occur, on average, about once a month. Shortfalls on a single day can exceed reported VaR by significant amounts. Shortfalls can also accumulate over a longer time horizon such as a number of consecutive trading days.

The VaR numbers below are shown separately for interest rate, equity, currency and commodity products, as well as for our overall trading positions. These VaR numbers include the underlying product positions and related hedges that may include positions in other product areas. For example, the hedge of a foreign exchange forward may include an interest rate futures position, and the hedge of a long corporate bond position may include a short position in the related equity.

The modeling of the risk characteristics of our trading positions involves a number of assumptions and approximations. While management believes that these assumptions and approximations are reasonable, there is no uniform industry methodology for estimating VaR, and different assumptions and/or approximations could produce materially different VaR estimates.

We use historical data to estimate our VaR and, to better reflect current asset volatilities, we generally weight historical data to give greater importance to more recent observations. Given its reliance on historical data, VaR is most effective in estimating risk exposures in markets in which there are no sudden fundamental changes or shifts in market conditions. An inherent limitation of VaR is that the distribution of past changes in market risk factors may not produce accurate predictions of future market risk. Different VaR methodologies and distributional assumptions could produce a materially different VaR. Moreover, VaR calculated for a one-day time horizon does not fully capture the market risk of positions that cannot be liquidated or offset with hedges within one day.

The following tables set forth the daily VaR for substantially all of our trading positions:

Average Daily VaR

(in millions)

Risk Categories	Y.	Year Ended November			
	2002	2001	2000		
Interest rates	\$ 34	\$ 20	\$ 13		
Equity prices	22	20	21		
Currency rates	16	15	6		
Commodity prices	12	9	8		
Diversification effect ⁽¹⁾	(38)	(25)	(20)		
Firmwide	\$ 46	\$ 39	\$ 28		
	_				

Our average daily VaR increased to \$46 million in 2002 from \$39 million in 2001, primarily due to an increase in interest rate risk in response to higher levels of customer activity and increased market opportunities. The increase in average daily VaR to \$39 million in 2001 from \$28 million in 2000 was attributable to increased exposures in interest rates and currencies and higher measured interest rate volatility, particularly during the second half of the year.

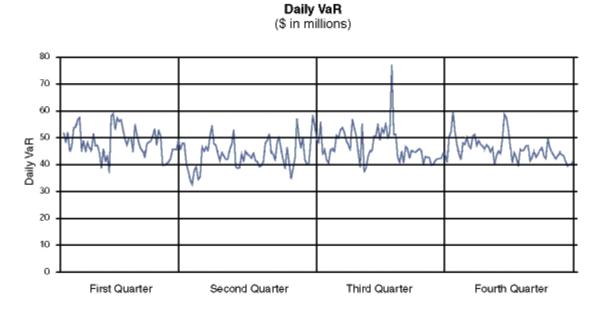
Daily VaR

(in millions)

Risk Categories	As of N	ovember	Year Ended November 200		
	2002	2001	High	Low	
Interest rates	\$ 29	\$ 39	\$68	\$19	
Equity prices	33	21	49	15	
Currency rates	9	13	35	5	
Commodity prices	14	12	17	8	
Diversification effect ⁽¹⁾	(44)	(33)			
	_				
Firmwide	\$ 41	\$ 52	77	32	

Equals the difference between firmwide daily VaR and the sum of the daily VaRs for the four risk categories. This effect arises because the four market risk categories are not (1) perfectly correlated.

The following chart presents the daily VaR for substantially all of our trading positions during 2002:



Trading Net Revenues Distribution

Substantially all of our inventory positions are marked-to-market on a daily basis and changes are recorded in net revenues. The following chart sets forth the frequency distribution for substantially all of our daily trading net revenues for the year ended November 2002:



Daily Trading Net Revenues (\$ in millions)

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As part of our overall risk control process, daily trading net revenues are compared with VaR calculated as of the end of the prior business day. Trading losses incurred on a single day exceeded our 95% one-day VaR on one occasion during 2002.

Nontrading Risk

The market risk for financial instruments in our nontrading portfolio, including our merchant banking investments, is measured using a sensitivity analysis that estimates the potential reduction in our net revenues associated with a 10% decline in equity markets. This sensitivity analysis is based on certain assumptions regarding the relationship between changes in the stock price indices and changes in the fair value of the individual financial instruments in our nontrading portfolio. Different assumptions could produce materially different risk estimates. The sensitivity of our nontrading portfolio to a 10% equity market decline was \$80 million as of November 2002 compared with \$155 million as of November 2001, reflecting asset dispositions and market depreciation in the portfolio.

Credit Risk

Credit risk represents the loss that we would incur if a counterparty, or an issuer of securities or other instruments we hold, fails to perform under its contractual obligations to us. To reduce our credit exposures, we seek to enter into netting agreements with counterparties that permit us to offset receivables and payables with such counterparties. In addition, we attempt to further reduce credit risk with certain counterparties by entering into agreements that enable us to obtain collateral from a counterparty or to terminate or reset the terms of transactions after specified time periods or upon the occurrence of credit-related events, by seeking third-party guarantees of the counterparty's obligations, and through the use of credit derivatives and other structures and techniques.

For most businesses, counterparty credit limits are established by the Credit Department, which is independent of the revenue-producing departments, based on guidelines set by the Firmwide Risk Committee and the Credit Policy Committee. For most products, we measure and limit credit exposures by reference to both current and potential exposure. We typically measure potential exposure based on projected worst-case market movements over the life of a transaction within a 95% confidence interval. For collateralized transactions we also evaluate potential exposure over a shorter collection period, and give effect to the value of received collateral. We further seek to measure credit exposure through the use of scenario analyses, stress tests and other quantitative tools. Our global credit management systems monitor current and potential credit exposure to individual counterparties and on an aggregate basis to counterparties and their affiliates. The systems also provide management, including the Firmwide Risk and Credit Policy Committees, with information regarding overall credit risk by product, industry sector, country and region.

Derivatives

Derivative contracts are financial instruments, such as futures, forwards, swaps or option contracts, that derive their value from underlying assets, indices, reference rates or a combination of these factors. Derivative instruments may be privately negotiated contracts, which are often referred to as OTC derivatives, or they may be listed and traded on an exchange.

Most of our derivative transactions are entered into for trading purposes. We use derivatives in our trading activities to facilitate customer transactions, to take proprietary positions and as a means of risk management. We also enter into derivative contracts to manage the interest rate and currency exposure on our long-term borrowings.

Derivatives are used in many of our businesses, and we believe that the associated market risk can only be understood relative to the underlying assets or risks being hedged, or as part of a broader trading strategy. Accordingly, the market risk of derivative positions is managed with all of our other nonderivative risk.

Derivative contracts are reported on a net-by-counterparty basis in our consolidated statements of financial condition where management believes a legal right of setoff exists under an enforceable netting agreement. For an OTC derivative, our credit exposure is directly with our counterparty and continues until the maturity or termination of such contract.

The following table sets forth the distribution, by credit rating, of substantially all of our exposure with respect to OTC derivatives as of November 2002, after taking into consideration the effect of netting agreements. The categories shown reflect our internally determined public rating agency equivalents.

Over-the-Counter Derivative Credit Exposure

(\$ in millions)

Credit Rating Equivalent	Exposure	Collateral Held ⁽²⁾	Exposure Net of Collateral	Percentage of Exposure Net of Collateral
AAA/Aaa	\$ 3,747	\$ 170	\$ 3,577	13%
AA/Aa2	7,271	1,147	6,124	21
A/A2	12,831	996	11,835	41
BBB/Baa2	6,036	733	5,303	18
BB/Ba2 or lower	2,666	747	1,919	7
Unrated ⁽¹⁾	743	609	134	_
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Total	\$33,294	\$4,402	\$28,892	100%

The following tables set forth our OTC derivative credit exposure, net of collateral, by remaining contractual maturity:

Exposure Net of Collateral (in millions)						
Credit Rating Equivalent	0–6 Months	6–12 Months	1–5 Years	5–10 Years	10 Years or Greater	Total ⁽³⁾
AAA/Aaa	\$ 233	\$ 112	\$1,033	\$ 884	\$1,315	\$ 3,577
AA/Aa2	1,424	508	1,472	1,408	1,312	6,124
A/A2	1,721	734	2,288	1,444	5,648	11,835
BBB/Baa2	1,241	672	2,252	727	411	5,303
BB/Ba2 or lower	693	185	711	274	56	1,919
Unrated ⁽¹⁾	111	14	7	1	1	134
Total	\$5,423	\$2,225	\$7,763	\$4,738	\$8,743	\$28,892
		—				_
	0-6	6-12	1-5	5-10	10 Years	
Product	Months	Months	Years	Years	or Greater	Total ⁽³⁾
Interest rate contracts	\$ 779	\$ 452	\$5,237	\$4,039	\$8,563	\$19,070
Currency contracts	2,513	742	868	458	170	4,751
Commodity contracts	1,159	619	1,094	178	9	3,059
Equity contracts	972	412	564	63	1	2,012
Total	\$5,423	\$2,225	\$7,763	\$4,738	\$8,743	\$28,892

(1) In lieu of making an individual assessment of the credit of unrated counterparties, we make a determination that the collateral held in respect of such obligations is sufficient to cover a substantial portion of our exposure. In making this determination, we take into account various factors, including legal uncertainties and market volatility.

(2) Collateral is usually received under agreements entitling Goldman Sachs to require additional collateral upon specified increases in exposure or the occurrence of adverse credit events.

(3) Where we have obtained collateral from a counterparty under a master trading agreement that covers multiple products and transactions, we have allocated the collateral ratably based on exposure before giving effect to such collateral.

Derivatives transactions may also involve the legal risk that they are not authorized or appropriate for a counterparty, that documentation has not been properly executed or that executed agreements may not be enforceable against the counterparty. We attempt to minimize these risks by obtaining advice of counsel on the enforceability of agreements as well as on the authority of a counterparty to effect the derivative transaction.

Operational Risks

Operational risk is the risk of reputational damage, regulatory intervention or financial loss resulting from inadequate or failed internal processes or systems. Operational failures can occur in mechanical or technological systems or infrastructure, and they can take place during the ordinary course of business or as the result of extraordinary events, including events external to Goldman Sachs. They also may be caused by human error or by malfeasance.

Goldman Sachs manages operational risk through the application of control standards; the review, training and supervision of our people; the active participation and commitment of senior management; a continuous review of our processes designed to identify key operational risks; a commitment to continuous improvement; and a system of control departments each with responsibilities and processes for managing specific aspects of operational risk relevant to each department. Together, these elements comprise a strong firmwide control culture that helps Goldman Sachs remain focused on minimizing operational failures and the damage they can cause.

In 2000, we established an Operational Risk Management Department to monitor our firmwide operational risk. While each business unit has processes and systems in place to address operational risks within the unit, it is the job of Operational Risk Management to develop a framework for measuring our operational risk more broadly. Operational Risk Management's long-term goal is to provide consistent measures of operational performance so that it can evaluate that performance over time and across Goldman Sachs and identify areas that need special attention. In addition, it is the role of Operational Risk Management to report its findings to senior management to help them bring increased business focus on operational risk and facilitate improvements in operational risk management.

The Operational Risk Management Department works closely with other control and support areas — Compliance, Legal, Management Controls (Internal Audit), Technology, Human Capital Management, Controllers and Global Operations — as well as the business units to monitor, measure, and help them improve our overall operational risk management.

Off-Balance-Sheet Arrangements

In the normal course of business, Goldman Sachs enters into arrangements with unconsolidated entities. These arrangements may involve retained interests in assets transferred to special-purpose entities (SPEs) in connection with our securitization activities, variable interests in SPEs to which we did not transfer assets and obligations under certain guaranty contracts.

Goldman Sachs utilizes SPEs to securitize commercial and residential mortgages and home equity loans, government and corporate bonds and other types of financial assets. SPEs are critical to the functioning of several significant investor markets, including the mortgage-backed and asset-backed securities markets, since they provide market liquidity to financial assets by offering investors access to specific cash flows and risks created through the securitization process. In addition to retained interests in assets that we transferred to SPEs, we also hold variable interests in similar SPEs to which we did not transfer assets. Our variable interests in these SPEs include the rights to specific cash flows from purchased interests as well as derivative transactions.

Certain of these SPEs are not consolidated for one or more of the following reasons: (i) the entity is a qualifying SPE under SFAS No. 140 to which we have transferred financial assets, (ii) the entity is not controlled by us, (iii) we do not have a majority of the entity's substantive risks and rewards or (iv) independent investors have substantive majority equity investments in legal form. Our retained and other variable interests in, and derivative transactions with, unconsolidated SPEs are accounted for at fair value, in the same manner as our other financial instruments. As of November 2002, we had no material additional financial commitments or guarantees in respect of these entities. In addition, we have not entered into any derivative contracts that are indexed or linked to our stock.

As discussed below in "—Recent Accounting Developments," in January 2003, the Financial Accounting Standards Board (FASB) issued FASB Interpretation (FIN) No. 46, "Consolidation of Variable Interest Entities." SPEs are generally considered variable interest entities under FIN No. 46. See Note 2 and Note 4 to the consolidated financial statements for additional information about our basis of presentation, our retained interests, securitization activities and variable interests in variable interest entities. See Note 7 to the consolidated financial statements for information about our guarantees to entities that are not SPEs.

Critical Accounting Policies

"Financial instruments owned, at fair value" and "Financial instruments sold, but not yet purchased, at fair value" in the consolidated statements of financial condition are carried at fair value or amounts that approximate fair value, with related unrealized gains or losses recognized in our results of operations. The determination of fair value is fundamental to our statements of financial condition and earnings and, in certain circumstances, it requires management to make complex judgments.

How We Determine Fair Value

The fair value of a financial instrument is the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

Quoted market prices in active markets are the best evidence of fair value and we use them when available. Such prices provide the best price transparency and we typically obtain them through electronic quotations or published prices. If quoted market prices in active markets are not available, our estimate of fair value is based on, if available, quoted prices or recent transactions in less active markets and/or prices of similar instruments. These alternative pricing sources provide some price transparency and we typically obtain this type of information through broker quotes or third-party pricing services.

If prices are not readily available either through quoted market prices in active markets or alternative pricing sources, or if liquidating a position is reasonably expected to affect market prices, fair value is based on valuation models or management's estimate, using the best information available, of amounts that could be realized under current market conditions, assuming an orderly liquidation over a reasonable period of time. Our valuation models consider, among other inputs, contractual and market prices, yield curves, credit, volatility factors, prepayment rates and/or correlations of the underlying positions. Examples of valuation models we use include the present value of estimated cash flows, option-pricing models, matrix pricing, option-adjusted spread models and fundamental analysis. The inputs to and the design of our valuation models incorporate assumptions that we believe other market participants would use in their estimates of fair values. However, different valuation models and assumptions could produce materially different estimates of fair value.

In determining fair value, we separate our financial instruments into three categories, cash trading instruments (i.e., non-derivative trading instruments), derivative contracts and principal investments, as set forth in the following table as of November 2002:

Financial Instruments by Category

(in millions)

	Financial Instruments Owned, At Fair Value	Financial Instruments Sold, But Not Yet Purchased, At Fair Value
Cash trading instruments	\$ 85,791	\$44,552
Derivative contracts	42,205	38,921
Principal investments	1,779	
Total	\$129,775	\$83,473

Cash Trading Instruments

The fair values of cash trading instruments are generally obtained from quoted market prices in active markets, broker or dealer price quotations, or alternative pricing sources with a reasonable level of price transparency. The types of instruments valued in this manner include U.S. government and agency securities, sovereign government obligations, liquid mortgage products, investment-grade corporate bonds, listed equities, money market securities, state, municipal and provincial obligations, and physical commodities. Certain cash trading instruments have little or no price transparency, including certain high-yield debt, corporate bank loans, whole loan mortgages and distressed debt.

The following table sets forth the valuation of our cash trading instruments by level of price transparency as of November 2002:

Cash Trading Instruments by Price Transparency

(in millions)

	Financial Instruments Owned, At Fair Value	Financial Instruments Sold, But Not Yet Purchased, At Fair Value
Quoted prices or alternative pricing sources with reasonable price transparency	\$81,125	\$44,357
Little or no price transparency	4,666	195
Total	\$85,791	\$44,552

We generally do not adjust the valuation assumptions for cash trading instruments with little or no price transparency unless there is substantial evidence supporting a change in value (for example, comparable third-party transactions) or if management determines that expected realizable value is less than carrying value.

Derivative Contracts

Assets

Derivative contracts consist of exchange-traded and OTC derivatives. The fair values of our exchange-traded derivatives are generally determined from quoted market prices. OTC derivatives are valued using valuation models.

The following table sets forth our exchange-traded and OTC derivative assets and liabilities as of November 2002:

Derivative Assets and Liabilities

(in millions)

	Assets	Liabilities
Exchange-traded derivatives OTC derivatives	\$ 8,911 33,294	\$ 8,630 30,291
Total		
10(a)	\$42,205	\$38,921

The fair values of our derivative assets and liabilities include cash we have paid and received (for example, option premiums) and will change significantly from period to period based on, among other factors, changes in our trading positions and market movements.

The following tables set forth the fair values of our OTC derivative assets and liabilities as of November 2002 by product and by remaining contractual maturity:

OTC Derivatives (in millions)

A33C13						
Product	0–6 Months	6–12 Months	1–5 Years	5–10 Years	10 Years or Greater	Total
Interest rate contracts	\$ 864	\$ 536	\$ 6,266	\$4,983	\$9,281	\$21,930
Currency contracts	2,955	917	1,007	486	211	5,576
Commodity contracts	1,200	632	1,145	185	11	3,173
Equity contracts	1,386	492	673	63	1	2,615
Total	\$6,405	\$2,577	\$ 9,091	\$5,717	\$9,504	\$33,294
Liabilities	0-6	6-12	1-5	5-10	10 Years	
Product	Months	Months	Years	Years	or Greater	Total
Interest rate contracts	\$1,084	\$ 393	\$ 6,870	\$5,556	\$2,291	\$16,194
Currency contracts	3,134	751	1,478	935	603	6,901
Commodity contracts	1,432	836	977	62	2	3,309
Equity contracts	1,958	938	844	147		3,887
Total	\$7,608	\$2,918	\$10,169	\$6,700	\$2,896	\$30,291

Price transparency for OTC derivative model inputs varies depending on, among other factors, product type, maturity and the complexity of the contract. In general, there is significant price transparency for simple interest rate contracts. Price transparency for currency contracts varies by the underlying currencies, with the currencies of the leading industrialized nations having the most price transparency. Price transparency for commodity contracts varies by type of underlying commodity. Price transparency for equity contracts varies by market, with the equity markets

of the leading industrialized nations having the most price transparency. For more complex structures, price transparency is inherently more limited because they often combine one or more product types, requiring additional inputs such as correlations and volatilities.

The inputs used in our valuation models are based on quoted market prices in active markets, if available, or, if not, quoted market prices or recent transactions in less active markets and/or prices of similar instruments. Where such data is not readily available, inputs are derived from other market data, taking into account observable market movements that could reasonably be expected to affect the derived input.

Principal Investments

In valuing our corporate and real estate principal investments, we separate our portfolio into two categories – public securities and private securities. The following table sets forth the carrying value of our principal investments portfolio as of November 2002:

Principal Investments

(in millions)

	Corporate	Real Estate	Total
Private	\$ 881	\$736	\$1,617
Public	154	8	162
Total	\$1,035	\$744	\$1,779

Our public principal investments, which tend to be large, concentrated holdings that resulted from initial public offerings or other corporate transactions, are valued using quoted market prices discounted for restrictions on sale.

Our private principal investments, by their nature, have little to no price transparency. Such investments are initially carried at cost as an approximation of fair value. Adjustments to cost (above or below) are made if there are third-party transactions evidencing a change in value. Downward adjustments are also made if we determine that the expected realizable value of the investment is less than the carrying value. In reaching that determination, we consider many factors including, but not limited to, the operating cash flows and financial performance of the companies or properties relative to budgets or projections, trends within sectors and/or regions, underlying business models, expected exit timing and strategy, and any specific rights or terms associated with the investment, such as conversion features and liquidation preferences.

Controls Over Valuation of Financial Instruments

Proper controls, independent of the trading and principal investing functions, are fundamental to ensuring that financial instruments are appropriately valued and the resulting fair value measurements are reliable, particularly where certain levels of price discovery may require additional analysis. These controls include independent review of valuation models and price verification by personnel with technical knowledge of relevant markets and products.

Recent Accounting Developments

In June 2002, the FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities." The statement specifies the accounting for certain employee termination benefits, contract termination costs and costs to consolidate facilities or relocate employees and is effective for exit and disposal activities initiated after December 31, 2002. We do not expect the statement to have a material effect on our financial condition or results of operations.

Effective in fiscal 2003, we will begin to account for stock-based employee compensation in accordance with the fair-value method prescribed by SFAS No. 123, "Accounting for Stock-Based Compensation," as amended by SFAS No. 148, "Accounting for Stock-Based Compensation—Transition and Disclosure," using the prospective adoption method. Under this method of adoption, compensation expense will be recognized based on the fair value of stock options and restricted stock units granted for fiscal 2003 and future years over the related service period while stock options and restricted stock units granted for fiscal 2002 and prior years, unless modified, will continue to be accounted for under Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," generally resulting in no recognized under SFAS No. 123 in fiscal 2003 and beyond is not currently determinable because the number and value of stock options and/or restricted stock units to be granted to employees in the future is not yet known, nor are the related future service provisions. We elected to adopt the disclosure provisions of SFAS No. 148 for the fiscal year-ended 2002. See Note 2 and Note 12 to the consolidated financial statements for additional information on our stock-based compensation.

In November 2002, the FASB issued FIN No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others." FIN No. 45 specifies the disclosures to be made about obligations under certain issued guarantees and requires a liability to be recognized for the fair value of a guarantee obligation. The recognition and measurement provisions of the interpretation apply prospectively to guarantees issued after December 31, 2002. The disclosure provisions are effective beginning with our first fiscal quarter in 2003. Adoption of the recognition and measurement provisions will not have a material effect on our financial condition or results of operations.

In January 2003, the FASB issued FIN No. 46, "Consolidation of Variable Interest Entities." FIN No. 46 requires a company to consolidate a variable interest entity (VIE) if the company has variable interests that give it a majority of the expected losses or a majority of the expected residual returns of the entity. Prior to FIN No. 46, VIEs were commonly referred to as SPEs. FIN No. 46 is effective immediately for VIEs created after January 31, 2003. Goldman Sachs must apply FIN No. 46 to VIEs created before February 1, 2003 as of the beginning of the fiscal 2003 fourth quarter. We are evaluating the impact of adoption but do not expect it to have a material effect on our financial condition or results of operations. We have disclosed information about our VIEs in Note 4 to the consolidated financial statements.

In November 2002, the Emerging Issues Task Force (EITF) reached a consensus on Issue No. 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables." EITF Issue No. 00-21 addresses the accounting for arrangements under which a vendor will perform multiple revenue-generating activities. EITF Issue No. 00-21 is effective for revenue arrangements entered into beginning with our fourth fiscal quarter in 2003. We do not expect it to have a material effect on our financial condition or results of operations.

In November 2002, the EITF reached a consensus on EITF Issue No. 02-3, "Issues Involved in Accounting for Derivative Contracts Held for Trading Purposes and Contracts Involved in Energy Trading and Risk Management Activities." EITF Issue No. 02-3 precludes mark-to-market accounting for energy-trading contracts that are not derivatives pursuant to SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities." We have adopted the provisions of EITF Issue No. 02-3 related to energy-trading contracts as of the beginning of the fiscal 2003 first quarter and the effect of adoption was not material to our financial condition or results of operations. EITF Issue No. 02-3 also communicates the FASB staff's belief that the transaction price for a derivative contract is the best information available with which to estimate fair value at the inception of a contract when the estimate is not based on other observable market data. We are currently evaluating the impact of the FASB staff's view on our financial condition and results of operations.

Subsequent Events

Research Settlement

On December 20, 2002, as part of a proposed global settlement involving the leading securities firms operating in the United States, agreements in principle were announced among Goldman Sachs' U.S. broker-dealer subsidiary Goldman, Sachs & Co. and various regulatory authorities to resolve their investigations of Goldman, Sachs & Co. relating to investment research analysts' conflicts of interest. Pursuant to the agreements in principle, Goldman, Sachs & Co. has agreed, among other things, to (i) pay \$50 million in retrospective relief, (ii) contribute \$50 million over five years to provide independent third-party research to clients, (iii) contribute \$10 million for investor education and (iv) adopt internal structural and other safeguards to further ensure the integrity of Goldman, Sachs & Co. investment research. The cost of the agreements in principle has been provided for in our consolidated financial statements. In connection with the agreements, we also expect to be joining the other leading securities firms who are part of the proposed global settlement in an initiative that generally will prohibit the allocation of shares in initial public offerings to executives and directors of public companies. Current or future civil lawsuits implicating investment research analysts' conflicts of interest were not settled as part of the agreements in principle. Our total potential liability in respect of such civil cases cannot be reasonably estimated but could be material to results of operations in a given period.

Transactions with Sumitomo Mitsui Financial Group, Inc.

On February 7, 2003, Goldman Sachs and Sumitomo Mitsui Financial Group, Inc. (together with its subsidiaries, "SMFG") entered into a series of related transactions with three primary components: (i) the purchase by Goldman Sachs of convertible preferred stock of SMFG having a liquidation preference equal to ¥150.3 billion (\$1.25 billion); (ii) the provision by SMFG to Goldman Sachs' affiliates of first loss credit protection up to an aggregate of \$1 billion and additional second loss credit protection of up to \$1.125 billion, in exchange for the underlying commitment fees, to mitigate in part the credit risk to Goldman Sachs associated with certain credit extensions to its investment-grade clients; and (iii) the enhancement and development of certain business cooperation understandings between SMFG and Goldman Sachs.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Shareholders of The Goldman Sachs Group, Inc.:

In our opinion, the accompanying consolidated statements of financial condition and the related consolidated statements of earnings, changes in shareholders' equity, cash flows and comprehensive income present fairly, in all material respects, the financial position of The Goldman Sachs Group, Inc. and its subsidiaries (the Company) at November 29, 2002 and November 30, 2001, and the results of their operations and their cash flows for each of the three fiscal years in the period ended November 29, 2002, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these financial statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

ricewaterhouseloopen LLP

PricewaterhouseCoopers LLP New York, New York January 27, 2003

CONSOLIDATED STATEMENTS OF EARNINGS

	Year Ended November		
	2002	2001	2000
	(in millions, except per share amounts		re amounts)
Revenues	*		
Investment banking	\$ 2,572	\$ 3,677	\$ 5,339
Trading and principal investments	4,063	6,254	6,528
Asset management and securities services	4,950	4,587	3,737
Interest income	11,269	16,620	17,396
Total revenues	22,854	31,138	33,000
Interest expense	8,868	15,327	16,410
Revenues, net of interest expense	13,986	15,811	16,590
Operating expenses			
Compensation and benefits	6,744	7,700	7,773
Nonrecurring acquisition awards	_	—	290
Amortization of employee initial public offering and acquisition awards	293	464	428
Brokerage, clearing and exchange fees	852	843	573
Market development	306	406	506
Communications and technology	528	604	435
Depreciation and amortization	617	613	441
Amortization of goodwill and identifiable intangible assets	127	260	45
Occupancy	637	591	440
Professional services and other	629	634	639
Total non-compensation expenses	3,696	3,951	3,079
Total operating expenses	10,733	12,115	11,570
Pre-tax earnings	3,253	3,696	5,020
Provision for taxes	1,139	1,386	1,953
Net earnings	\$ 2,114	\$ 2,310	\$ 3,067
Earnings per share			
Basic	\$ 4.27	\$ 4.53	\$ 6.33
Diluted	4.03	4.26	6.00
Average common shares outstanding			
Basic	495.6	509.7	484.6
Diluted	525.1	541.8	511.5

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF FINANCIAL CONDITION

	As of November	
	2002	2001
		s, except share hare amounts)
Assets		
Cash and cash equivalents	\$ 4,822	\$ 6,909
Cash and securities segregated in compliance with U.S. federal and other regulations	20,389	22,134
Receivables from brokers, dealers and clearing organizations	5,779	5,453
Receivables from customers and counterparties	23,159	28,010
Securities borrowed	113,579	101,164
Securities purchased under agreements to resell	45,772	27,651
Financial instruments owned, at fair value	123,318	99,654
Financial instruments owned and pledged as collateral, at fair value	6,457	9,231
Total financial instruments owned, at fair value	129,775	108,885
Other assets	12,299	12,012
Total assets	\$355,574	\$312,218
10tal assets	\$ 333,374	\$512,218
Liabilities and shareholders' equity		
Short-term borrowings, including the current portion of long-term borrowings	\$ 40,638	\$ 37,597
Payables to brokers, dealers and clearing organizations	1,893	4,014
Payables to customers and counterparties	93,697	93,283
Securities loaned	12,238	6,862
Securities sold under agreements to repurchase	59,919	39,369
Financial instruments sold, but not yet purchased, at fair value	83,473	74,717
Other liabilities and accrued expenses	6,002	7,129
	,	31,016
Long-term borrowings	38,711	51,010
Total liabilities	336,571	293,987
Commitments and contingencies		
Shareholders' equity	_	
Preferred stock, par value \$0.01 per share; 150,000,000 shares authorized, no shares issued and outstanding		
Common stock, par value \$0.01 per share; 4,000,000,000 shares authorized, 515,084,810 and		
499,017,511 shares issued as of November 2002 and November 2001, respectively, and 472,940,724		_
and 476,228,933 shares outstanding as of November 2002 and November 2001, respectively	5	5
Restricted stock units	3,494	4,542
Nonvoting common stock, par value \$0.01 per share; 200,000,000 shares authorized, no shares issued and outstanding		
	12 772	11,785
Additional paid-in capital	12,773	
Retained earnings	7,259	5,373
Unearned compensation	(845)	(1,220)
Accumulated other comprehensive loss	(122)	(168)
Treasury stock, at cost, par value \$0.01 per share; 42,144,086 and 22,788,578 shares as of November 2002 and November 2001, respectively	(3,561)	(2,086)
Total shareholders' equity	19,003	18,231
Total liabilities and shareholders' equity	\$355,574	\$312,218
Total Information and Sharoholders - equity	φ555,57 -	φ512,210

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

	Yea	Year Ended November		
	2002	2001	2000	
	(in millions	(in millions, except per sha		
Common stock, par value \$0.01 per share			. .	
Balance, beginning of year	\$ 5	\$ 5	\$ 4	
Issued	_	—	1	
Balance, end of year	5	5	5	
Restricted stock units				
Balance, beginning of year	4,542	4,760	4,339	
Granted	498	648	1,150	
Delivered	(1,293)	(600)	(507)	
Forfeited	(253)	(266)	(222)	
Balance, end of year	3,494	4,542	4,760	
Nonvoting common stock, par value \$0.01 per share				
Balance, beginning of year				
Exchanged	_		_	
Balance, end of year	—	_	_	
Additional paid-in capital				
Balance, beginning of year	11,785	11,127	7,359	
Issuance of common stock	869	535	3,651	
Issuance of common stock contributed to a defined contribution plan			1	
Tax benefit related to delivery of equity-based awards	119	123	116	
Balance, end of year	12,773	11,785	11,127	
Retained earnings				
Balance, beginning of year	5,373	3,294	444	
Net earnings	2,114	2,310	3,067	
Dividends declared	(228)	(231)	(217)	
	(220)	(231)	(217)	
Balance, end of year	7,259	5,373	3,294	
Unearned compensation				
Balance, beginning of year	(1,220)	(1,878)	(2,038)	
Restricted stock units granted	(387)	(375)	(842)	
Restricted stock units forfeited	95	108	163	
Amortization of restricted stock units	667	925	839	
Balance, end of year	(845)	(1,220)	(1,878)	
	. ,	·		
Accumulated other comprehensive (loss)/income	(1.6)	(120)	27	
Balance, beginning of year	(168)	(130)	37	
Currency translation adjustment	46	(38)	(167)	
Balance, end of year	(122)	(168)	(130)	
Freasury stock, at cost, par value \$0.01 per share				
Balance, beginning of year	(2,086)	(648)		
Shares repurchased	(1,475)	(1,438)	(648)	
Balance, end of year	(3,561)	(2,086)	(648)	

\$19,003	\$18,231	\$16,530

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended November		mber
	2002	2001	2000
		(in millions)	
Cash flows from operating activities			
Net earnings	\$ 2,114	\$ 2,310	\$ 3,067
Noncash items included in net earnings			
Depreciation and amortization	617	613	441
Amortization of goodwill and identifiable intangible assets	127	260	45
Deferred income taxes	230	52	(352)
Stock-based compensation	639	789	1,345
Changes in operating assets and liabilities			
Cash and securities segregated in compliance with U.S. federal and other regulations	1,745	(5,002)	(5,389)
Net receivables from brokers, dealers and clearing organizations	(2,423)	931	336
Net payables to customers and counterparties	5,265	20,056	14,570
Securities borrowed, net of securities loaned	(7,039)	(21,098)	(916)
Securities sold under agreements to repurchase, net of agreements to resell	2,429	18,046	(9,528)
Financial instruments owned, at fair value	(20,977)	(14,390)	(8,386)
Financial instruments sold, but not yet purchased, at fair value	8,756	1,809	5,507
Other, net	(1,560)	(1,511)	867
Net cash (used for)/provided by operating activities	(10,077)	2,865	1,607
Cash flows from investing activities			
Property, leasehold improvements and equipment	(1,008)	(1,370)	(1,552)
Business combinations, net of cash acquired	(68)	(314)	(1,988)
Other, net	(27)	(225)	(116)
Net cash used for investing activities	(1,103)	(1,909)	(3,656)
Cash flows from financing activities			
Short-term borrowings, net	6,354	1,261	(726)
Issuance of long-term borrowings	12,740	6,694	16,060
Repayment of long-term borrowings, including the current portion of long-term borrowings	(8,358)	(4,208)	(11,606)
Common stock repurchased	(1,475)	(1,438)	(648)
Dividends paid	(228)	(231)	(217)
Proceeds from issuance of common stock	60	5	1
Net cash provided by financing activities	9,093	2,083	2,864
Net (decrease)/increase in cash and cash equivalents	(2,087)	3,039	815
Cash and cash equivalents, beginning of year	6,909	3,870	3,055
Cash and cash equivalents, end of year	\$ 4,822	\$ 6,909	\$ 3,870

SUPPLEMENTAL DISCLOSURES:

Cash payments for interest approximated the related expense for each of the fiscal years presented.

Payments of income taxes were \$1.22 billion, \$1.30 billion and \$1.96 billion for the years ended November 2002, November 2001 and November 2000, respectively.

Noncash activities:

The value of common stock issued in connection with business combinations was \$47 million, \$223 million and \$3.41 billion for the years ended November 2002, November 2001 and November 2000, respectively.

The accompanying notes are an integral part of these consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Yea	Year Ended November	
	2002	2002 2001 20	
		(in millions))
Net earnings	\$2,114	\$2,310	\$3,067
Currency translation adjustment, net of tax	46	(38)	(167)
Comprehensive income	\$2,160	\$2,272	\$2,900

The accompanying notes are an integral part of these consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Description of Business

The Goldman Sachs Group, Inc. (Group Inc.), a Delaware corporation, together with its consolidated subsidiaries (collectively, the firm), is a leading global investment banking, securities and investment management firm that provides a wide range of services worldwide to a substantial and diversified client base that includes corporations, financial institutions, governments and high-net-worth individuals.

The firm's activities are divided into three segments:

- Investment Banking. This segment comprises Financial Advisory and Underwriting;
- **Trading and Principal Investments.** This segment comprises Fixed Income, Currency and Commodities (FICC), Equities and Principal Investments (Principal Investments primarily represents net revenues from the firm's merchant banking investments); and
- Asset Management and Securities Services. This segment comprises Asset Management, Securities Services and Commissions.

Note 2. Significant Accounting Policies

Basis of Presentation

The consolidated financial statements include the accounts of Group, Inc. and all other entities in which the firm has a controlling financial interest. All material intercompany transactions and balances have been eliminated.

The usual condition for a controlling financial interest in an entity is ownership of a majority of the voting interest. Accordingly, the firm consolidates entities in which it has all, or a majority of, the voting interest. A controlling financial interest can also exist in entities whose activities are predetermined or significantly limited, or whose independent equity investors do not hold an equity investment with substantive risks and rewards. These types of entities are commonly referred to as special-purpose entities (SPEs).

The firm consolidates all SPEs it controls and those in which it holds a majority of the SPE's substantive risks and rewards. The firm also consolidates all SPEs to which it has transferred assets unless independent investors have made a substantive majority equity investment in legal form or the transferred assets are financial instruments and the SPE is a qualifying SPE as defined in Statement of Financial Accounting Standards (SFAS) No. 140, "Accounting for Transfers and Servicing of Financial Assets and Extinguishment of Liabilities." The firm's financial interests in, and derivative transactions with, non-consolidated SPEs are accounted for at fair value, in the same manner as other financial instruments. As of November 2002, the firm had no material additional financial commitments or guarantees in respect of these entities.

When the firm does not have a controlling financial interest in an entity but exerts significant influence over the entity's operating and financial policies (generally defined as owning a voting or economic interest of 20% to 50%), the firm accounts for its investment in accordance with the equity method of accounting as prescribed by Accounting Principles Board (APB) Opinion No. 18, "The Equity Method of Accounting for Investments in Common Stock."

If the firm does not have a controlling financial interest in, or exert significant influence over, the entity, the firm accounts for its investment at fair value.

The firm also has formed numerous non-consolidated private investment funds with third-party investors that are typically organized as limited partnerships. The firm acts as general partner and also holds limited partnership interests in the funds. The firm does not hold a majority of the residual interests in any of the funds. The firm's investments in these funds are included in "Financial instruments owned, at fair value" in the consolidated statements of financial condition. As of September 30, 2002 (the latest investment fund reporting date), the funds' total assets were approximately \$11.85 billion.

The firm's principal U.S. and international subsidiaries include Goldman, Sachs & Co. (GS&Co.), J. Aron & Company and Spear, Leeds & Kellogg, L.P. in New York, Goldman Sachs International (GSI) in London and Goldman Sachs (Japan) Ltd. (GSJL) in Tokyo.

These consolidated financial statements have been prepared in accordance with generally accepted accounting principles that require management to make estimates and assumptions regarding trading inventory valuations,



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

the outcome of pending litigation and other matters that affect the consolidated financial statements and related disclosures. These estimates and assumptions are based on judgment and available information, and, consequently, actual results could be materially different from these estimates.

Unless otherwise stated herein, all references to 2002, 2001 and 2000 refer to the firm's fiscal year ended or the date, as the context requires, November 29, 2002, November 30, 2001 and November 24, 2000, respectively. Certain reclassifications have been made to prior-year amounts to conform to the current-year presentation.

Revenue Recognition

Investment Banking. Underwriting revenues and fees from mergers and acquisitions and other corporate finance advisory assignments are recorded when the services related to the underlying transaction are completed under the terms of the engagement. Expenses associated with such transactions are deferred until the related revenue is recognized or the engagement is otherwise concluded. Underwriting revenues are presented net of related expenses. Expenses associated with advisory transactions are recorded as non-compensation expenses, net of client reimbursements.

Repurchase Agreements and Collateralized Financing Arrangements. Securities purchased under agreements to resell and securities sold under agreements to repurchase, principally U.S. government, federal agency and investment-grade non-U.S. sovereign obligations, represent short-term collateralized financing transactions and are carried in the consolidated statements of financial condition at their contractual amounts plus accrued interest. These amounts are presented on a net-by-counterparty basis when the requirements of Financial Accounting Standards Board (FASB) Interpretation No. 41 are satisfied. The firm takes possession of securities purchased under agreements to resell, monitors the market value of these securities on a daily basis and obtains additional collateral as appropriate.

Securities borrowed and loaned are recorded based on the amount of cash collateral advanced or received. These transactions are generally collateralized by either cash, securities or letters of credit. The firm takes possession of securities borrowed, monitors the market value of securities loaned and obtains additional collateral as appropriate. Income or expense on repurchase agreements and collateralized financing arrangements is recognized as interest over the life of the transaction.

Financial Instruments. Gains and losses on financial instruments are recorded on a trade-date basis in the consolidated statements of earnings. The consolidated statements of financial condition generally reflect purchases and sales of financial instruments on a trade-date basis.

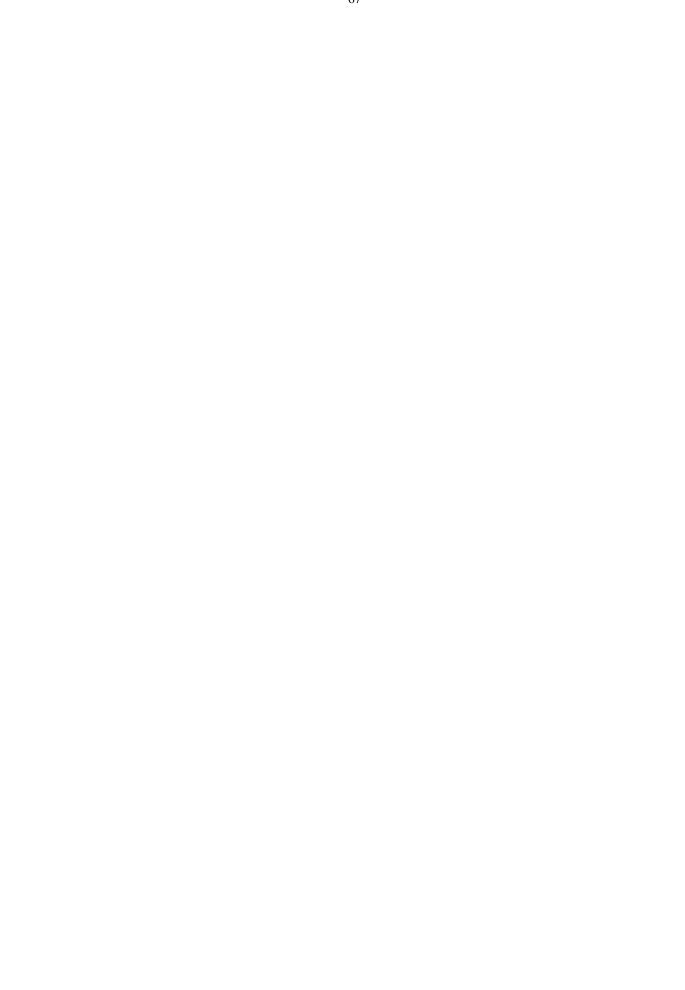
"Financial instruments owned, at fair value" and "Financial instruments sold, but not yet purchased, at fair value" in the consolidated statements of financial condition are carried at fair value or amounts that approximate fair value, with related unrealized gains or losses recognized in the firm's results of operations. The fair value of a financial instrument is the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale.

Quoted market prices in active markets are the best evidence of fair value and the firm uses them when available. If quoted market prices in active markets are not available, management's estimate of fair value is based on, if available, quoted prices or recent transactions in less active markets and/or prices of similar instruments.

If prices are not readily available either through quoted market prices in active markets or alternative pricing sources, or if liquidating a position is reasonably expected to affect market prices, fair value is based on valuation models or management's estimate, using the best information available, of amounts that could be realized under current market conditions, assuming an orderly liquidation over a reasonable period of time. The firm's valuation models consider, among other inputs, contractual and market prices, yield curves, credit, volatility factors, prepayment rates and/or correlations of the underlying positions.

The inputs used in the firm's valuation models are based on quoted market prices in active markets, if available, or, if not, from quoted market prices or recent transactions in less active markets, and prices of similar instruments. Where such data is not readily available, inputs are derived from other market data taking into account observable market movements that could reasonably be expected to affect the derived input. Different valuation models and assumptions could produce materially different estimates of fair value.

In general, transfers of financial assets are accounted for as sales under SFAS No. 140 when the firm has relinquished control over the transferred assets. For transfers accounted for as sales, any related gains or losses are recognized in net revenues. Transfers that are not accounted for as sales are accounted for as repurchase agreements and collateralized financing arrangements, with the



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

related interest expense recognized in net revenues over the life of the transaction.

Principal investments are initially carried at cost as an approximation of fair value. The carrying value of such investments is adjusted when changes in the underlying fair values are readily determinable. For public investments, values are determined using quoted market prices discounted for restrictions on sale. For private investments, adjustments to cost (above or below) are made if there are third-party transactions evidencing a change in value. Downward adjustments are also made if management determines that the expected realizable value of the investment is less than the carrying value. In reaching that determination, management considers many factors including, but not limited to, the operating cash flows and financial performance of the companies or properties relative to budgets or projections, trends within sectors and/or regions, underlying business models, expected exit timing and strategy, and any specific rights or terms associated with the investment, such as conversion features and liquidation preferences.

Asset Management. Asset management fees are generally recognized over the period the related service is provided based upon average net asset values. In certain circumstances, the firm is entitled to receive incentive fees when the return on assets under management exceeds certain benchmark returns or other performance targets. Incentive fees are generally based on investment performance over a 12-month period and are not subject to adjustment once the measurement period ends. Accordingly, incentive fees are recognized in the consolidated statements of earnings when the measurement period ends. Asset management fees and incentive fees are included in "Asset management and securities services" in the consolidated statements of earnings.

Commissions. The firm generates commissions from executing and clearing client transactions on stock, options and futures markets worldwide. These commissions are recorded on a trade-date basis in "Asset management and securities services" in the consolidated statements of earnings.

Merchant Banking Override. The firm is entitled to receive merchant banking overrides (i.e., an increased share of a fund's income and gains) when the return on the fund's investments exceeds certain threshold returns. Overrides are based on investment performance over the life of each merchant banking fund, and future investment underperformance may require amounts previously distributed to the firm to be returned to the funds. Accordingly, overrides are recognized in the consolidated statements of earnings only when all material contingencies have been resolved. Overrides are included in "Asset management and securities services" in the consolidated statements of earnings.

Cash and Cash Equivalents

The firm defines cash equivalents as highly liquid overnight deposits held in the ordinary course of business.

Goodwill and Identifiable Intangible Assets

The cost of acquired companies in excess of the fair value of net assets at acquisition date is recorded as goodwill. Prior to December 1, 2001, goodwill was amortized over periods of 15 to 20 years on a straight-line basis. Effective December 1, 2001, the firm adopted SFAS No. 142, "Goodwill and Other Intangible Assets" and, consequently, goodwill is no longer amortized but, instead, is tested at least annually for impairment. Identifiable intangible assets, which consist primarily of specialist rights and customer lists, continue to be amortized over their useful lives.

Property, Leasehold Improvements and Equipment

Property, leasehold improvements and equipment, net of accumulated depreciation and amortization, are included in "Other assets" in the consolidated statements of financial condition. Effective December 1, 2001, the firm changed to the straight-line method of depreciation for certain property, leasehold improvements and equipment placed in service after November 2001. This change did not have a material effect on the firm's results of operations for the year ended November 2002.

The firm's depreciation and amortization expense is generally computed using the methods set forth below:

Property and Equipment	Leasehold Improvements		Certain Internal Use Software Costs
	Term of Lease Greater Than Useful Life	Term of Lease Less Than Useful Life	

Placed in service prior to December 1, 2001	Accelerated cost recovery	Accelerated cost recovery	Straight-line over the term of the lease	Straight-line over useful life of the asset
Placed in service on or after December 1, 2001	Straight-line over useful life of the asset	Straight-line over useful life of the asset	Straight-line over the term of the lease	Straight-line over useful life of the asset

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Earnings Per Share

Basic earnings per share (EPS) is calculated by dividing net earnings by the weighted average number of common shares outstanding. Common shares outstanding includes common stock and nonvoting common stock as well as restricted stock units for which no future service is required as a condition to the delivery of the underlying common stock. Diluted EPS includes the determinants of basic EPS and, in addition, reflects the dilutive effect of the common stock deliverable pursuant to stock options and to restricted stock units for which future service is required as a condition to the delivery of the underlying common stock.

Stock-Based Compensation

The firm has historically accounted for stock-based employee compensation plans in accordance with APB No. 25, "Accounting for Stock Issued to Employees," as permitted by SFAS No. 123, "Accounting for Stock-Based Compensation." In accordance with APB No. 25, compensation expense is not recognized for stock options that have no intrinsic value on the date of grant. Compensation expense is recognized immediately for restricted stock units for which future service is not required as a condition to the delivery of the underlying shares of common stock. For restricted stock units with future service requirements, compensation expense is recognized over the relevant service period using amortization methodologies determined by the applicable vesting provisions.

Effective in fiscal 2003, the firm will begin to account for stock-based employee compensation in accordance with the fair-value method prescribed by SFAS No. 123, as amended by SFAS No. 148, "Accounting for Stock-Based Compensation—Transition and Disclosure," using the prospective adoption method. Under this method of adoption, compensation expense will be recognized based on the fair value of stock options and restricted stock units granted for fiscal 2003 and future years over the related service period. The amount of stock-based compensation to be recognized under SFAS No. 123 in fiscal 2003 and beyond is not currently determinable because the number and value of stock options and/or restricted stock units to be granted to employees in the future is not yet known, nor are the related future service provisions. The firm elected to adopt the disclosure provisions of SFAS No. 148 for the fiscal year ended 2002.

Stock options granted for the years ended November 2002, November 2001 and November 2000 were accounted for, and will continue to be accounted for, under the intrinsic value-based method as prescribed by APB No. 25. Therefore, no compensation expense was recognized for those stock options that had no intrinsic value on the date of grant. If the firm were to recognize compensation expense over the relevant service period, under the fair value method of SFAS No. 123 with respect to these stock options, net earnings would have decreased, resulting in pro forma net earnings and EPS as presented below:

	Year Ended November		
	2002	2001	2000
		cept ints)	
Net earnings, as reported	\$2,114	\$2,310	\$3,067
Add: Stock-based employee compensation expense, net of related tax benefits, included in reported net earnings	416	499	822
Deduct: Stock-based employee compensation, net of related tax effects, determined under fair-value based method for all awards	(785)	(844)	(918)
Pro forma net earnings	\$1,745	\$1,965	\$2,971
EPS, as reported			
Basic	\$ 4.27	\$ 4.53	\$ 6.33
Diluted	4.03	4.26	6.00
Pro forma EPS			
Basic	\$ 3.52	\$ 3.86	\$ 6.13
Diluted	3.32	3.63	5.81

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Income Taxes

Deferred tax assets and liabilities are recognized for temporary differences between the financial reporting and tax bases of the firm's assets and liabilities. Valuation allowances are established to reduce deferred tax assets to the amount that more likely than not will be realized. The firm's tax assets and liabilities are presented as a component of "Other assets" and "Other liabilities and accrued expenses," respectively, in the consolidated statements of financial condition.

Foreign Currency Translation

Assets and liabilities denominated in non-U.S. currencies are translated at rates of exchange prevailing on the date of the consolidated statement of financial condition, and revenues and expenses are translated at average rates of exchange for the fiscal year. Gains or losses on translation of the financial statements of a non-U.S. operation, when the functional currency is other than the U.S. dollar, are reflected, net of hedges, as a separate component of equity and included in the consolidated statements of comprehensive income. Gains or losses on foreign currency transactions are included in the consolidated statements of earnings.

Recent Accounting Developments

In June 2002, the FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities." The statement specifies the accounting for certain employee termination benefits, contract termination costs and costs to consolidate facilities or relocate employees and is effective for exit and disposal activities initiated after December 31, 2002. Management does not expect the statement to have a material effect on the firm's financial condition or results of operations.

In November 2002, the FASB issued FASB Interpretation (FIN) No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others." FIN No. 45 specifies the disclosures to be made about obligations under certain issued guarantees and requires a liability to be recognized for the fair value of a guarantee obligation. The recognition and measurement provisions of the interpretation apply prospectively to guarantees issued after December 31, 2002. The disclosure provisions are effective beginning with the firm's first fiscal quarter in 2003. Adoption of the recognition and measurement provisions will not have a material effect on the firm's financial condition or results of operations.

In January 2003, the FASB issued FIN No. 46, "Consolidation of Variable Interest Entities." FIN No. 46 requires a company to consolidate a variable interest entity (VIE) if the company has variable interests that give it a majority of the expected losses or a majority of the expected residual returns of the entity. Prior to FIN No. 46, VIEs were commonly referred to as SPEs. FIN No. 46 is effective immediately for VIEs created after January 31, 2003. The firm must apply FIN No. 46 to VIEs created before February 1, 2003 as of the beginning of the fiscal 2003 fourth quarter. Management is evaluating the impact of adoption but does not expect it to have a material effect on the firm's financial condition or results of operations.

In November 2002, the Emerging Issues Task Force (EITF) reached a consensus on Issue No. 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables." EITF Issue No. 00-21 addresses the accounting for arrangements under which a vendor will perform multiple revenue-generating activities. EITF Issue No. 00-21 is effective for revenue arrangements entered into beginning with the firm's fourth quarter in fiscal 2003. Management does not expect it to have a material effect on the firm's financial condition or results of operations.

In November 2002, the EITF reached a consensus on EITF Issue No. 02-3, "Issues Involved in Accounting for Derivative Contracts Held for Trading Purposes and Contracts Involved in Energy Trading and Risk Management Activities." EITF Issue No. 02-3 precludes mark-to-market accounting for energy-trading contracts that are not derivatives pursuant to SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities." The firm has adopted the provisions of EITF Issue No. 02-3 related to energy-trading contracts as of the beginning of the fiscal 2003 first quarter and the effect of adoption was not material to the firm's financial condition or results of operations. EITF Issue No. 02-3 also communicates the FASB staff's belief that the transaction price for a derivative contract is the best information available with which to estimate fair value at the inception of a contract when the estimate is not based on other observable market data. Management is currently evaluating the impact of the FASB staff's view on the firm's financial condition and results of operations.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Note 3. Spear, Leeds & Kellogg

On October 31, 2000, the firm completed its combination with SLK LLC (SLK), a leader in securities clearing and execution, floor-based market making and off-floor market making. The combination was accounted for under the purchase method of accounting for business combinations. In exchange for the membership interests in SLK and subordinated debt of certain retired members, the firm issued 35.3 million shares of common stock valued at \$3.5 billion, issued \$149 million in debentures and paid \$2.1 billion in cash. The purchase price was allocated to tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values as of the effective date of the combination. The excess of consideration paid over the estimated fair value of net assets acquired was \$4.2 billion, of which \$2.4 billion was recorded as goodwill and \$1.8 billion was recorded as identifiable intangible assets.

As part of the combination with SLK, the firm established a \$702 million retention pool of restricted stock units for SLK employees. A charge of \$290 million (\$180 million after taxes) related to restricted stock units for which future service was not required as a condition to the delivery of the underlying shares of common stock was included in the firm's operating results in 2000. The remaining restricted stock units, for which future service is required, are being amortized over the five-year service period following the date of consummation.

The following table sets forth the unaudited pro forma combined operating results of the firm and SLK for the year ended November 2000. These pro forma results were prepared as if the firm's combination with SLK had taken place at the beginning of fiscal 2000.

Pro Forma Operating Results (unaudited)

	Year Ended
	November 2000
	(in millions, except per share amounts)
Revenues, net of interest expense	\$18,630
Net earnings	3,459
Basic EPS	6.66
Diluted EPS	6.32

Note 4. Financial Instruments

Financial instruments, including both cash instruments and derivatives, are used to manage market risk, facilitate customer transactions, engage in proprietary transactions and meet financing objectives. These instruments can be either executed on an exchange or negotiated in the overthe-counter (OTC) market.

Transactions involving financial instruments sold, but not yet purchased, generally entail an obligation to purchase a financial instrument at a future date. The firm may incur a loss if the market value of the financial instrument subsequently increases prior to the purchase of the instrument.

Fair Value of Financial Instruments

The following table sets forth the firm's financial instruments owned, including those pledged as collateral, at fair value, and financial instruments sold, but not yet purchased, at fair value:

		As of November			
		2002 200		2001	
	Assets	Liabilities	Assets	Liabilities	
		(in mi	llions)		
r, certificates of deposit and time deposits	\$ 1,092	\$	\$ 1,351	\$ —	

U.S. government, federal agency and sovereign obligations	36,053	22,272	31,173	18,606
Corporate debt	25,425	6,902	16,697	6,453
Equities and convertible debentures	23,624	14,398	20,075	12,201
State, municipal and provincial obligations	715	_	771	_
Derivative contracts	42,205	38,921	38,521	36,660
Physical commodities	661	980	297	797
Total	\$129,775	\$83,473	\$108,885	\$74,717

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Credit Concentrations

Credit concentrations may arise from trading, underwriting and securities borrowing activities and may be impacted by changes in economic, industry or political factors. As of November 2002 and 2001, U.S. government and federal agency obligations represented 6% and 7%, respectively, of the firm's total assets. In addition, most of the firm's securities purchased under agreements to resell are collateralized by U.S. government, federal agency and other sovereign obligations.

Derivative Activities

Derivative contracts are financial instruments, such as futures, forwards, swaps or option contracts, that derive their value from underlying assets, indices, reference rates or a combination of these factors. Derivatives may involve future commitments to purchase or sell financial instruments or commodities, or to exchange currency or interest payment streams. The amounts exchanged are based on the specific terms of the contract with reference to specified rates, securities, commodities or indices.

Derivative contracts exclude certain cash instruments, such as mortgage-backed securities, interest-only and principal-only obligations, and indexed debt instruments, that derive their values or contractually required cash flows from the price of some other security or index. The firm includes certain commodity-related contracts in its derivative disclosure, although not required to do so, as these contracts may be settled in cash or are readily convertible into cash.

Most of the firm's derivative transactions are entered into for trading purposes. The firm uses derivatives in its trading activities to facilitate customer transactions, to take proprietary positions and as a means of risk management. Risk exposures are managed through diversification, by controlling position sizes and by establishing hedges in related securities or derivatives. For example, the firm may hedge a portfolio of common stock by taking an offsetting position in a related equity-index futures contract. Gains and losses on derivatives used for trading purposes are generally included in "Trading and principal investments" in the consolidated statements of earnings.

The firm also enters into derivative contracts, to manage the interest rate, currency and equity-linked exposure on its long-term borrowings. These derivatives generally include interest rate futures contracts, interest rate swap agreements, currency swap agreements and equity-linked contracts, which are primarily utilized to convert a substantial portion of the firm's long-term debt into U.S. dollar-based floating rate obligations. Certain interest rate swap contracts are designated as fair-value hedges. The gains and losses associated with the ineffective portion of these fair-value hedges are included in "Trading and principal investments" in the consolidated statements of earnings and were not material for the years ended November 2002 and November 2001.

Derivative contracts are reported on a net-by-counterparty basis in the firm's consolidated statements of financial condition when management believes a legal right of setoff exists under an enforceable netting agreement. The fair value of derivative financial instruments, computed in accordance with the firm's netting policy, is set forth below:

		As of November					
		2002	2001				
	Assets	Assets Liabilities		Liabilities			
		(in m	illions)				
Forward settlement contracts	\$ 4,293	\$ 4,602	\$ 5,265	\$ 4,491			
Swap agreements	22,426	18,516	18,438	15,931			
Option contracts	15,486	15,803	14,818	16,238			
Fotal	\$42,205	\$38,921	\$38,521	\$36,660			

Securitization Activities

The firm securitizes commercial and residential mortgages and home equity loans, government and corporate bonds, and other types of financial assets. The firm acts as underwriter of the beneficial interests that are sold to investors. The firm derecognizes financial assets transferred in securitizations provided it has relinquished control over such assets. Transferred assets are accounted for at fair value prior to

securitization. Underwriting net revenues are recognized in connection with the sales of the underlying beneficial interests to investors.

The firm may retain interests in securitized financial assets, which it generally attempts to sell as quickly as possible, subject to prevailing market conditions. Retained interests are accounted for at fair value and are included in "Total financial instruments owned, at fair value" in the consolidated statements of financial condition.

During the years ended November 2002 and November 2001, the firm securitized \$107.1 billion and \$68.8 billion of financial assets, respectively, including \$89.3 billion

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

and \$47.6 billion of agency mortgage-backed securities, respectively. Cash flows received on retained interests and other securitization cash flows were approximately \$534 million for the year ended November 2002. As of November 2002, the firm held \$3.7 billion of retained interests, including \$737 million of retained interests for which the fair value is based on quoted market prices in active markets.

The following table sets forth the weighted average key economic assumptions used in measuring the fair value of retained interests for which fair value is based on alternative pricing sources with reasonable, little or no price transparency and the sensitivity of those fair values to immediate adverse changes of 10% and 20% in those assumptions:

	As of	November 2002
	Type of	Retained Interests
	Mortgage	Other Asset-Backed ⁽²⁾
	(5	in millions)
Fair value of retained interests	\$1,977	\$1,022
Weighted average life (years)	4.1	4.7
Annual prepayment rate	25.4%	N/A
Impact of 10% adverse change	\$ (7)	_
Impact of 20% adverse change	(11)	—
Annual credit losses ⁽¹⁾	2.5%	1.7%
Impact of 10% adverse change	\$ (1)	\$ (8)
Impact of 20% adverse change	(2)	(15)
Annual discount rate	7.1%	7.1%
Impact of 10% adverse change	\$ (38)	\$ (4)
Impact of 20% adverse change	(74)	(8)

(1) The impact of adverse changes takes into account credit mitigants incorporated in the retained interests, including overcollateralization and subordination provisions.

(2) Includes retained interests in government and corporate bonds and other types of financial assets that are not subject to prepayment risk.

The preceding table does not give effect to the offsetting benefit of other financial instruments that are held to hedge risks inherent in these retained interests. Changes in fair value based on a 10% adverse variation in assumptions generally cannot be extrapolated because the relationship of the change in assumptions to the change in fair value is not usually linear. In addition, the impact of a change in a particular assumption is calculated independently of changes in any other assumption. In practice, simultaneous changes in assumptions might magnify or counteract the sensitivities disclosed above.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Variable Interest Entities (VIEs)

The firm, in the ordinary course of its business, utilizes VIEs such as trusts, limited partnerships and limited liability companies to securitize commercial and residential mortgages and home equity loans, government and corporate bonds, and other types of financial instruments. Prior to the issuance of FIN No. 46, VIEs were commonly referred to as SPEs. The firm holds variable interests in such entities in the form of senior and subordinated debt, preferred and common stock, interest rate, foreign currency and credit derivatives as well as residual interests in asset-backed securitizations. The following table summarizes the firm's maximum exposure to loss as a result of its significant variable interests in consolidated VIEs as well as the total assets of such VIEs:

	As of Nov	As of November 2002		
	Variable Int	erest Entities ⁽¹⁾		
	Consolidated ⁽²⁾	Non-Consolidated		
	(in m	nillions)		
Maximum exposure to loss	``````````````````````````````````````	,		
Mortgages	\$ 73	\$ 265		
Other asset-backed	197	630		
Total maximum exposure to loss	\$ 270	\$ 895		
VIE assets				
Mortgages	\$ 651	\$5,176		
Other asset-backed	1,095	3,540		
Total VIE assets	\$1,746	\$8,716		
	_			

(1) Excludes qualifying special-purpose entities (QSPEs), in accordance with FIN No. 46.

(2) Consolidated total VIE assets in excess of total maximum exposure to loss represents variable interests held by third parties that have no recourse to the general credit of the firm.

Secured Borrowing and Lending Activities

The firm obtains secured short-term financing principally through the use of repurchase agreements and securities lending agreements to obtain securities for settlement, to finance inventory positions and to meet customers' needs. In these transactions, the firm either provides or receives collateral, including U.S. government, federal agency, mortgage-backed, investment-grade foreign sovereign obligations and equity securities.

The firm receives collateral in connection with resale agreements, securities lending transactions, derivative transactions, customer margin loans and other secured lending activities. In many cases, the firm is permitted to sell or repledge securities held as collateral. These securities may be used to secure repurchase agreements, enter into securities lending or derivative transactions, or cover short positions. As of November 2002 and November 2001, the fair value of securities received as collateral by the firm that it was permitted to sell or repledge was \$316.3 billion and \$267.7 billion, respectively, of which the firm sold or repledged \$272.5 billion and \$224.4 billion, respectively.

The firm also pledges its own assets to collateralize repurchase agreements and other secured financings. As of November 2002 and November 2001, the carrying value of securities included in "Financial instruments owned, at fair value" that had been loaned or pledged to counterparties that did not have the right to sell or repledge was \$34.7 billion and \$22.3 billion, respectively.

Note 5. Short-Term Borrowings

The firm obtains unsecured short-term borrowings through issuance of promissory notes, commercial paper and bank loans. Short-term borrowings also include the portion of long-term borrowings maturing within one year. The carrying value of these short-term obligations approximates fair value due to their short-term nature.



Short-term borrowings are set forth below:

	As of N	lovember
	2002	2001
	(in m	illions)
Promissory notes	\$20,433	\$15,281
Commercial paper	9,463	8,353
Bank loans and other	4,948	6,794
Current portion of long-term borrowings	5,794	7,169
Total ⁽¹⁾	\$40,638	\$37,597

(1) As of November 2002 and November 2001, weighted average interest rates for short-term borrowings, including commercial paper, were 2.09% and 3.05%, respectively.

Note 6. Long-Term Borrowings

The firm's long-term borrowings are set forth below:

	As of N	As of November		
	2002	2001		
	(in m	illions)		
Fixed rate obligations ⁽¹⁾				
U.S. dollar	\$19,550	\$14,462		
Non-U.S. dollar	4,407	3,425		
Floating rate obligations ⁽²⁾				
U.S. dollar	10,175	10,415		
Non-U.S. dollar	4,579	2,714		
Total ⁽³⁾	\$38,711	\$31,016		

(1) During 2002 and 2001, interest rates on U.S. dollar fixed rate obligations ranged from 5.50% to 12.00% and from 5.90% to 12.00%, respectively. During 2002 and 2001, non-U.S. dollar fixed rate obligations interest rates ranged from 1.20% to 8.88%.

(2) Floating interest rates generally are based on LIBOR, the U.S. treasury bill rate or the federal funds rate. Certain equity-linked and indexed instruments are included in floating rate obligations.

(3) Long-term borrowings have maturities that range from one to 30 years from the date of issue.

Long-term borrowings by fiscal maturity date are set forth below:

As of November

		2002 ⁽¹⁾			2001	
	U.S. Dollar	Non-U.S. Dollar	Total	U.S. Dollar	Non-U.S. Dollar	Total
			(in n	nillions)		
2003	\$ —	\$ —	\$ —	\$ 5,810	\$ 371	\$ 6,181
2004	6,846	184	7,030	3,172	119	3,291
2005	5,804	3,075	8,879	4,694	2,608	7,302
2006	1,575	1,020	2,595	1,734	804	2,538
2007	1,094	953	2,047	1,018	114	1,132
2008-thereafter	14,406	3,754	18,160	8,449	2,123	10,572

Total	\$29,725	\$8,986	\$38,711	\$24,877	\$6,139	\$31,016

(1) Long-term borrowings maturing within one year are included in "short-term borrowings" in the consolidated statements of financial condition.

The firm enters into derivative contracts, such as interest rate futures contracts, interest rate swap agreements, currency swap agreements and equity-linked contracts, to effectively convert a substantial portion of its long-term borrowings into U.S. dollar-based floating rate obligations. Accordingly, the aggregate carrying value of these long-term borrowings and related hedges approximates fair value.

The effective weighted average interest rates for long-term borrowings, after hedging activities, are set forth below:

		As of November				
	2002		2001			
	Amount	Rate	Amount	Rate		
		(in mi	illions)			
ations	\$ 1,057	8.35%	\$ 757	10.58%		
igations	37,654	2.24	30,259	3.02		
	\$38,711	2.40	\$31,016	3.20		

Note 7. Commitments and Contingencies

Litigation

The firm is involved in a number of judicial, regulatory and arbitration proceedings concerning matters arising in connection with the conduct of its businesses. Management believes, based on currently available information, that the results of such proceedings, in the aggregate, will not have a material adverse effect on the firm's financial condition, but may be material to the firm's operating results for any particular period, depending, in part, upon the operating results for such period.

On December 20, 2002, as part of a proposed global settlement involving the leading securities firms operating in the United States, agreements in principle were announced among the firm's U.S. broker-dealer subsidiary GS&Co. and various regulatory authorities to resolve their investigations of GS&Co. relating to investment research analysts' conflicts of interest. Pursuant to the agreements in principle, GS&Co. has agreed, among other things, to (i) pay \$50 million in retrospective relief, (ii) contribute \$50 million over five years to provide independent third-party research to clients, (iii) contribute \$10 million for investor education and (iv) adopt internal structural and other safeguards to further ensure the integrity of GS&Co. investment research. The cost of the agreements in principle has been provided for in the firm's consolidated financial statements. In connection with the agreements, the firm also expects to be joining the other leading securities firms who are a part of the proposed global settlement in an initiative that generally will prohibit the allocation of shares in initial public offerings to executives and directors of public companies. Current or future civil lawsuits implicating investment research analysts' conflicts of interest were not settled as part of the agreements in principle. The firm's total potential liability in respect of such civil cases cannot be reasonably estimated but could be material to results of operations in a given period.

Leases

The firm has obligations under long-term noncancelable lease agreements, principally for office space, expiring on various dates through 2029. Certain agreements are subject to periodic escalation provisions for increases in real estate taxes and other charges. Minimum rental commitments, net of minimum sublease rentals, under non-cancelable leases for 2003 and the succeeding four years and thereafter and rent charged to operating expense for the last three years are set forth below:

	(in millions)
Minimum rental commitments	
2003	\$ 350
2004	354
2005	266
2006	280
2007	225
2008-thereafter	1,827
Total	\$3,302
Net rent expense	
2000	\$ 240
2001	299
2002	359

The firm had commitments to enter into forward secured financing transactions, including certain repurchase and resale agreements and secured borrowing and lending arrangements, of \$40.04 billion and \$47.54 billion as of November 2002 and November 2001, respectively.

In connection with its lending activities, the firm had outstanding commitments of \$9.41 billion and \$13.35 billion as of November 2002 and November 2001, respectively. These commitments are agreements to lend to counterparties, have fixed termination dates and are

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

contingent on all conditions to borrowing set forth in the contract having been met. Since these commitments may expire unused, the total commitment amount does not necessarily reflect the actual future cash flow requirements.

The firm provides letters of credit issued by various banks to counterparties in lieu of securities or cash to satisfy various collateral and margin deposit requirements. Letters of credit outstanding were \$11.63 billion and \$11.50 billion as of November 2002 and November 2001, respectively.

The firm acts as an investor in merchant banking transactions, which includes making long-term investments in equity and debt securities in privately negotiated transactions, corporate acquisitions and real estate transactions. In connection with these activities, the firm had commitments to invest up to \$1.46 billion and \$1.63 billion in corporate and real estate merchant banking investment funds as of November 2002 and November 2001, respectively.

The firm had outstanding commitments and guarantees of \$136 million and \$134 million relating primarily to client and fund management activities as of November 2002 and November 2001, respectively. The firm also had construction-related commitments of \$301 million and \$199 million as of November 2002 and November 2001, respectively.

Note 8. Equity Capital

Dividends declared per common share were \$0.48 in each of 2002, 2001 and 2000. On December 19, 2002, the Board of Directors of Group Inc. (the Board) declared a dividend of \$0.12 per share to be paid on February 27, 2003 to common shareholders of record on January 28, 2003.

On March 18, 2002 and on November 20, 2002, the Board authorized the repurchase of an aggregate additional 30 million shares of common stock pursuant to the firm's existing share repurchase program. The total share authorization under the repurchase program was 60 million shares as of November 2002, of which approximately 40.66 million had been repurchased at a cost of \$3.45 billion. The average price paid per share for repurchased shares was \$76.49, \$88.22 and \$99.90 for the years ended November 2002, November 2001 and November 2000, respectively.

On August 21, 2000, SMBC Capital Markets, Inc., formerly Sumitomo Bank Capital Markets, Inc., exchanged all 7.4 million shares of its nonvoting common stock, par value \$0.01 per share, of Group Inc. for an equal number of shares of voting common stock.

Note 9. Earnings Per Share

The computations of basic and diluted EPS are set forth below:

	Year Ended November		
	2002	2001	2000
		in millions, ex per share amou	-
Numerator for basic and diluted EPS—earnings available to common shareholders	\$2,114	\$2,310	\$3,067
Denominator for basic EPS—weighted average number of common shares Effect of dilutive securities	495.6	509.7	484.6
Restricted stock units	22.1	22.0	16.2
Stock options	7.4	10.1	10.7
Dilutive potential common shares Denominator for diluted EPS—weighted average number of common shares and dilutive potential	29.5	32.1	26.9
common shares ⁽¹⁾	525.1	541.8	511.5
Basic EPS	\$ 4.27	\$ 4.53	\$ 6.33
Diluted EPS	4.03	4.26	6.00

(1) The diluted EPS computations do not include the antidilutive effect of the following options:

	Year	Year Ended November			
	2002	2001	2000		
Number of antidilutive options	28.1	(in millions) 0.7	_		

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Note 10. Goodwill And Identifiable Intangible Assets

Goodwill

As of November 2002, goodwill of \$2.86 billion was included in "Other assets" in the consolidated statement of financial condition. Prior to December 1, 2001, goodwill was amortized over periods of 15 to 20 years on a straight-line basis. The following table sets forth reported net earnings and EPS, as adjusted to exclude goodwill amortization expense:

	Year Ended	Year Ended November		
	2001	2000		
	(in millions except	per share amounts)		
Net earnings, as reported	\$2,310	\$3,067		
Net earnings, as adjusted	2,404	3,096		
EPS, as reported:				
Basic	\$ 4.53	\$ 6.33		
Diluted	4.26	6.00		
EPS, as adjusted:				
Basic	\$ 4.72	\$ 6.39		
Diluted	4.44	6.05		

Identifiable Intangible Assets

The following table sets forth the gross carrying amount, accumulated amortization and net carrying amount of identifiable intangible assets:

	As of N	As of November	
	2002	2001	
	(in m	nillions)	
Gross carrying amount	\$2,239	\$2,092	
Accumulated amortization	(259)	(132)	
Net carrying amount	\$1,980	\$1,960	

Identifiable intangible assets consist primarily of specialist rights and customer lists and are amortized over a weighted average life of approximately 21 years.

Amortization expense associated with identifiable intangible assets was \$127 million, \$115 million and \$7 million for the fiscal years ended November 2002, November 2001 and November 2000, respectively. Estimated amortization expense for existing identifiable intangible assets is \$129 million for each of the fiscal years ending November 2003 through November 2007.

Note 11. Employee Benefit Plans

The firm sponsors various pension plans and certain other postretirement benefit plans, primarily healthcare and life insurance, which cover most employees worldwide. The firm also provides certain benefits to former or inactive employees prior to retirement. A summary of these plans is set forth below:

Defined Benefit Pension Plans and Postretirement Plans

The firm maintains a defined benefit pension plan for substantially all U.S. employees. Employees of certain non-U.S. subsidiaries participate

in various local defined benefit plans. These plans generally provide benefits based on years of credited service and a percentage of the employee's eligible compensation. In addition, the firm has unfunded postretirement benefit plans that provide medical and life insurance for eligible retirees, employees and dependents in the United States.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table provides a summary of the changes in the plans' benefit obligations and the fair value of assets for 2002 and 2001 and a statement of the funded status of the plans as of November 2002 and November 2001:

		As of or for the Year Ended November				
	2002			2001		
	U.S. Pension	Non-U.S. Pension	Post- Retirement	U.S. Pension	Non-U.S. Pension	Post- Retirement
			(in mill	ions)		
Benefit obligation	****	***	* • • •		\$1.63	¢ 5 0
Balance, beginning of year	\$140	\$184	\$ 84	\$120	\$163	\$ 59
Service cost	6	37	8	4	35	6
Interest cost	10	9	9	9	7	5
Plan amendments		1	40			
Actuarial loss/(gain)	8	7	50	9	(12)	18
Benefits paid	(2)	(9)	(7)	(2)	(7)	(4)
Effect of foreign exchange rates	_	16	_		(2)	_
Balance, end of year	\$162	\$245	\$ 184	\$140	\$184	\$ 84
Fair value of plan assets	* 1 * 2	****	*	*****	* . * 0	* • •
Balance, beginning of year	\$138	\$164	\$ 12	\$148	\$128	\$ 15
Actual return on plan assets	(14)	(21)	(1)	(8)	(18)	(3)
Firm contributions	45	56	7	—	61	4
Benefits paid	(2)	(9)	(7)	(2)	(7)	(4)
Other distributions			(11)	—		
Effect of foreign exchange rates	_	16	_	_	_	_
Balance, end of year	\$167	\$206	\$ —	\$138	\$164	\$ 12
						_
Prepaid/(accrued) benefit cost						
Funded status	\$ 5	\$ (39)	\$(184)	\$ (2)	\$(20)	\$(72)
Unrecognized actuarial loss	72	79	62	40	36	12
Unrecognized transition (asset)/obligation	(28)	15	1	(31)	16	2
Unrecognized prior service cost		4	31		3	(1)
Adjustment to recognize additional minimum liability	_	(1)	_	_	_	_
Prepaid/(accrued) benefit cost	\$ 49	\$ 58	\$ (90)	\$ 7	\$ 35	\$(59)

For plans in which the accumulated benefit obligation exceeded plan assets, the aggregate projected benefit obligation and accumulated benefit obligation was \$72 million and \$55 million, respectively, as of November 2002, and \$63 million and \$46 million, respectively, as of November 2001. The fair value of plan assets for each of these plans was \$39 million and \$35 million as of November 2002 and November 2001, respectively.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The components of pension expense/(income) and postretirement expense are set forth below:

	Y	Year Ended November		
	2002	2001	2000	
		(in millions)		
U.S. pension		,		
Service cost	\$ 6	\$4	\$4	
Interest cost	10	9	8	
Expected return on plan assets	(12)	(12)	(10)	
Net amortization	(2)	(3)	(3)	
Fotal	\$ 2	\$ (2)	\$ (1)	
	_			
Non-U.S. pension				
Service cost	\$ 37	\$ 35	\$ 28	
Interest cost	9	7	7	
Expected return on plan assets	(12)	(9)	(8)	
Net amortization	4	1	1	
	—	_	_	
Fotal	\$ 38	\$ 34	\$ 28	
	_			
Postretirement				
Service cost	\$ 8	\$6	\$ 2	
Interest cost	9	5	4	
Expected return on plan assets	(1)	(1)		
Net amortization	10		—	
°otal	\$ 26	\$ 10	\$6	
	_	_		

The weighted average assumptions used to develop net periodic pension cost and the actuarial present value of the projected benefit obligation are set forth below. The assumptions represent a weighted average of the assumptions used for the U.S. and non-U.S. plans and are based on the economic environment of each applicable country.

	Year Ended November		
	2002	2001	2000
Defined benefit pension plans			
U.S. pension			
Discount rate	6.75%	7.00%	7.50%
Rate of increase in future compensation levels	5.00	5.00	5.00
Expected long-term rate of return on plan assets	8.50	8.50	8.50
Non-U.S. pension			
Discount rate	4.78	4.93	4.66
Rate of increase in future compensation levels	4.14	4.11	4.29
Expected long-term rate of return on plan assets	5.86	5.74	5.81
Postretirement plans			
Discount rate	6.75%	7.00%	7.50%
Rate of increase in future compensation levels	5.00	5.00	5.00
Expected long-term rate of return on plan assets	8.50	8.50	_

For measurement purposes, an annual growth rate in the per capita cost of covered healthcare benefits of 11% was assumed for the fiscal year

ending November 2003. The rate was assumed to decrease ratably to 5% for the fiscal year ending November 2009 and remain at that level thereafter.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The assumed cost of healthcare has an effect on the amounts reported for the firm's postretirement plans. A 1% change in the assumed healthcare cost trend rate would have the following effects:

1% In	1% Increase		crease
2002	2001	2002	2001
	(in mi	llions)	
\$ 3	\$ 2	\$ (2)	\$(1)
25	10	(22)	(9)

Defined Contribution Plans

The firm contributes to employer-sponsored U.S. and non-U.S. defined contribution plans. The firm's contribution to these plans was \$154 million, \$193 million and \$129 million for 2002, 2001 and 2000, respectively. Contributions in 2002 and 2001 each reflect a full year of contributions with respect to employees added as a result of the firm's combination with SLK.

The firm has also established a nonqualified defined contribution plan (the Plan) for certain senior employees. Shares of common stock contributed to the Plan and outstanding as of November 2002 were 8.6 million. The shares of common stock will vest and generally be distributable to the participant on specified future dates if the participant satisfies certain conditions and the participant's employment with the firm has not been terminated, with certain exceptions for terminations of employment due to death or a change in control. Dividends on the underlying shares of common stock are paid currently to the participants. Forfeited shares remain in the Plan and are reallocated to other participants. Contributions to the Plan are expensed on the date of grant. Plan expense was immaterial for the years ended November 2002, November 2001 and November 2000.

Note 12. Employee Incentive Plans

Stock Incentive Plan

The firm sponsors a stock incentive plan that provides for grants of incentive stock options, nonqualified stock options, stock appreciation rights, dividend equivalent rights, restricted stock, restricted stock units and other stock-based awards.

The total number of shares of common stock that may be issued under the stock incentive plan through fiscal 2002 may not exceed 300 million shares. As of November 2002 and November 2001, 128.6 million shares and 135.0 million shares, respectively, were available for grant under the stock incentive plan, after considering stock-based compensation awards that were issued subsequent to year end, as part of year-end compensation.

Restricted Stock Units

The firm issued restricted stock units to employees under the stock incentive plan, primarily in connection with its initial public offering, acquisitions and as part of year-end compensation. Of the total restricted stock units outstanding as of November 2002 and November 2001, (i) 29.9 million units and 41.7 million units, respectively, required future service as a condition to the delivery of the underlying shares of common stock and (ii) 18.3 million units and 25.6 million units, respectively, did not require future service. In all cases, delivery of the underlying shares of common stock is conditioned on the grantee's satisfying certain other requirements outlined in the award agreements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The activity related to these restricted stock units is set forth below:

	Restricted Stock Units Outstanding		
	No Future Service Required	Future Service Required	
Outstanding, November 1999	35,703,923	40,344,481	
Granted ⁽¹⁾	6,401,796	10,900,941	
Forfeited	(1,189,406)	(2,752,278)	
Delivered	(9,571,298)		
Vested	2,157,204	(2,157,204)	
Outstanding, November 2000	33,502,219	46,335,940	
Granted	116,968	1,638,536	
Forfeited	(975,713)	(3,065,731)	
Delivered	(10,253,224)		
Vested	3,239,683	(3,239,683)	
Outstanding, November 2001	25,629,933	41,669,062	
Granted ⁽²⁾	1,484,153	4,855,553	
Forfeited	(591,957)	(3,135,134)	
Delivered	(21,700,672)		
Vested	13,494,481	(13,494,481)	
Outstanding, November 2002	18,315,938	29,895,000	

(1) Includes restricted stock units granted in connection with the combination with SLK and restricted stock units granted to employees, subsequent to year end, as part of year-end compensation.

(2) Includes restricted stock units granted to employees subsequent to year end as part of year-end compensation.

Total employee stock compensation expense, net of forfeitures, was \$645 million, \$798 million and \$1.35 billion for the years ended November 2002, November 2001 and November 2000, respectively.

Stock Options

In general, stock options granted to employees in connection with the firm's initial public offering vest and become exercisable in equal installments on or about the third, fourth and fifth anniversaries of the grant date. Stock options granted to employees subsequent to the firm's initial public offering generally vest as outlined in the applicable stock option agreement and first become exercisable on the third anniversary of the grant date. All employee stock option agreements provide that vesting is accelerated in certain circumstances, such as upon retirement, death and extended absence. In general, all stock options expire on the tenth anniversary of the grant date, although they may be subject to earlier termination or cancellation in certain circumstances in accordance with the terms of the firm's stock incentive plan and the applicable stock option agreement. The dilutive effect of the firm's outstanding stock options is included in "Average common shares outstanding — Diluted," on the consolidated statements of earnings.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The activity related to these stock options is set forth below:

	Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Life (years)
Outstanding, November 1999	40,359,666	\$52.91	9.42
Granted ⁽¹⁾	19,685,230	82.89	
Exercised	(18,901)	48.13	
Forfeited	(2,590,237)	52.88	
Outstanding, November 2000	57,435,758	63.19	8.96
Granted ⁽¹⁾	29,004,359	91.89	
Exercised	(104,155)	52.03	
Forfeited	(1,969,077)	64.46	
Outstanding, November 2001	84,366,885	73.04	8.65
Granted ⁽¹⁾	15,908,162	79.16	
Exercised	(1,138,087)	52.78	
Forfeited	(4,867,859)	68.77	
Outstanding, November 2002	94,269,101	74.53	8.08
Exercisable, November 2002	10,642,579	\$52.87	6.44

(1) Includes stock options granted to employees subsequent to year end as part of year-end compensation.

The options outstanding as of November 2002 are set forth below:

Exercise Price	Options Outstanding	Weighted Average Exercise Price	Weighted Average Remaining Life (years)
\$45.00 - \$59.99	32,636,115	\$52.93	6.44
60.00 - 74.99	_		
75.00 - 89.99	33,596,260	81.10	8.92
90.00 - 104.99	28,036,726	91.81	9.00
	94,269,101		

The weighted average fair value of options granted during 2002, 2001 and 2000 was \$27.38 per option, \$30.82 per option and \$28.13 per option, respectively. Fair value was estimated as of the grant date based on a binomial option pricing model using the following weighted average assumptions:

Y	Year Ended November		
2002	2001	2000	
3.5%	5.2%	5.6%	
35.0	35.0	35.0	
0.6	0.5	0.6	
5 years	7 years	7 years	



NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Note 13. Income Taxes

The components of the net tax expense reflected in the consolidated statements of earnings are set forth below:

		Year Ended November		
	2002	2001	2000	
		(in millions)		
Current taxes		(
U.S. federal	\$ 543	\$ 781	\$1,063	
State and local	35	64	285	
Non-U.S	331	489	957	
Total current tax expense	909	1,334	2,305	
Deferred taxes				
U.S. federal	7	(9)	(299)	
State and local	102	95	49	
Non-U.S	121	(34)	(102)	
Total deferred tax expense/(benefit)	230	52	(352)	
-				
Net tax expense	\$1,139	\$1,386	\$1,953	

Deferred income taxes reflect the net tax effects of temporary differences between the financial reporting and tax bases of assets and liabilities. These temporary differences result in taxable or deductible amounts in future years and are measured using the tax rates and laws that will be in effect when such differences are expected to reverse.

Significant components of the firm's deferred tax assets and liabilities are set forth below:

	As of N	lovember
	2002	2001
	(in m	illions)
Deferred tax assets		
Compensation and benefits	\$1,415	\$1,768
Unrealized losses	173	
Other, net	185	197
	1,773	1,965
Valuation allowance ⁽¹⁾	(17)	(7)
Total deferred tax assets	1,756	1,958
Deferred tax liabilities		
Depreciation and amortization	207	111
Unrealized gains		20
Total deferred tax liabilities	207	131
Net deferred tax assets	\$1,549	\$1,827

⁽¹⁾ Relates primarily to the ability to utilize certain state and local and foreign tax credits.

The firm permanently reinvests eligible earnings of certain foreign subsidiaries that were incorporated for U.S. income tax purposes at the end of 2001 and, accordingly, does not accrue any U.S. income taxes that would arise if such earnings were repatriated. As of November 2002, this policy resulted in an unrecognized net deferred tax liability of approximately \$33 million attributable to reinvested earnings of approximately \$209 million. Additionally, during 2002, the valuation allowance was increased by \$10 million, primarily due to an increase in certain state and local and foreign tax credits. Acquired net operating loss carryforwards of approximately \$58 million are subject to annual limitations on utilization and will begin to expire in 2018.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

A reconciliation of the U.S. federal statutory income tax rate to the firm's effective income tax rate is set forth below:

	Year	Year Ended November		
	2002	2001	2000	
U.S. federal statutory income tax rate	35.0%	35.0%	35.0%	
Increase related to state and local taxes, net of U.S. income tax effects	2.7	2.8	4.3	
Domestic tax credits	(1.3)			
Tax-exempt income, including dividends	(1.3)	(0.6)	(0.2)	
Foreign operations	(0.9)	_		
Other	0.8	0.3	(0.2)	
Effective income tax rate	35.0%	37.5%	38.9%	

Tax benefits of approximately \$119 million in 2002, \$123 million in 2001 and \$116 million in 2000, related to the delivery of restricted stock units and the exercise of options, were credited directly to "Additional paid-in capital" in the consolidated statements of financial condition and changes in shareholders' equity.

Note 14. Regulated Subsidiaries

GS&Co. and Spear, Leeds and Kellogg, L.P. are registered U.S. broker-dealers and futures commission merchants subject to Rule 15c3-1 of the Securities and Exchange Commission and Rule 1.17 of the Commodity Futures Trading Commission, which specify uniform minimum net capital requirements, as defined, for their registrants. They have elected to compute their net capital in accordance with the "Alternative Net Capital Requirement" as permitted by Rule 15c3-1. As of November 2002 and November 2001, GS&Co. had regulatory net capital, as defined, of \$4.75 billion and \$4.59 billion respectively, which exceeded the amounts required by \$4.09 billion and \$3.91 billion, respectively. As of November 2002 and November 2002 and November 2001, Spear, Leeds and Kellogg, L.P. had regulatory net capital, as defined, of \$1.28 billion and \$952 million, respectively, which exceeded the amounts required by \$100 million, respectively.

GSI, a registered U.K. broker-dealer, is subject to the capital requirements of The Financial Services Authority, and GSJL, a Tokyo-based broker-dealer, is subject to the capital requirements of the Financial Services Agency. As of November 2002 and November 2001, GSI and GSJL were in compliance with their local capital adequacy requirements.

Certain other subsidiaries of the firm are also subject to capital adequacy requirements promulgated by authorities of the countries in which they operate. As of November 2002 and November 2001, these subsidiaries were in compliance with their local capital adequacy requirements.

Note 15. Business Segments

In reporting to management, the firm's operating results are categorized into the following three segments: Investment Banking, Trading and Principal Investments, and Asset Management and Securities Services. The Investment Banking and Trading and Principal Investments segments were previously aggregated into one reporting segment — Global Capital Markets.

Investment Banking

The Investment Banking segment provides a broad range of investment banking services to a diverse group of corporations, financial institutions, governments and individuals. Investment banking activities are divided into two categories:

- **Financial Advisory.** Financial Advisory includes advisory assignments with respect to mergers and acquisitions, divestitures, corporate defense activities, restructurings and spin-offs; and
- Underwriting. Underwriting includes public offerings and private placements of equity and debt securities.

Trading and Principal Investments

The Trading and Principal Investments business facilitates customer transactions with a diverse group of corporations, financial institutions, governments and individuals and takes proprietary positions through market making in, and trading of, fixed income and equity products, currencies, commodities, and swaps and other derivatives. In addition, the firm engages in floor-based and electronic market making as a specialist on U.S. equities and

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

options exchanges. Trading and Principal Investments is divided into three categories:

- **FICC.** The firm makes markets in and trades interest rate and credit products, currencies and commodities, structures and enters into a wide variety of derivative transactions, and engages in proprietary trading;
- Equities. The firm makes markets in, acts as a specialist for, and trades equities and equity-related products, structures and enters into equity derivative transactions, and engages in proprietary trading; and
- Principal Investments. Principal Investments primarily represents net revenues from the firm's merchant banking investments.

Asset Management and Securities Services

The Asset Management and Securities Services segment includes services related to the following:

- Asset Management. Asset Management generates management fees by providing investment advisory services to a diverse client base of institutions and individuals;
- Securities Services. Securities Services includes prime brokerage, financing services and securities lending, and the firm's matched book businesses, all of which generate revenues primarily in the form of interest rate spreads or fees; and
- **Commissions.** Commissions includes fees from executing and clearing client transactions on major stock, options and futures markets worldwide. Commissions also includes revenues from the increased share of the income and gains derived from the firm's merchant banking funds when the return on a fund's investments exceeds certain threshold returns.

Basis of Presentation

In reporting segments, certain of the firm's business lines have been aggregated where they have similar economic characteristics and are similar in each of the following areas: (i) the nature of the services they provide, (ii) their methods of distribution, (iii) the types of clients they serve and (iv) the regulatory environments in which they operate.

The cost structures of each of the firm's segments are broadly similar to that of the firm taken as a whole in that they are primarily influenced by discretionary compensation, headcount and levels of business activity. The firm's overall compensation and benefits expenses are generally targeted at 50% (plus or minus a few percentage points) of consolidated net revenues. A substantial portion of the firm's compensation expense represents discretionary bonuses. Compensation expense within a segment reflects, among other factors, the overall performance of the firm as well as the performance of the individual business unit.

The firm allocates revenues and expenses among the three segments. Due to the integrated nature of the business segments, estimates and judgments have been made in allocating certain revenue and expense items. Transactions between segments are based on specific criteria or approximate third-party rates. Total operating expenses include corporate items that have not been allocated to individual business segments. The allocation process is based on the manner in which management views the business of the firm.

The segment information presented in the table below is prepared according to the following methodologies:

- Revenues and expenses directly associated with each segment are included in determining pre-tax earnings.
- Net revenues in the firm's segments include allocations of interest income and interest expense to specific securities, commodities and other positions in relation to the cash generated by, or funding requirements of, the underlying positions. Net interest is included within segment net revenues as it is consistent with the way in which management assesses segment performance.
- Overhead expenses not directly allocable to specific segments are allocated ratably based on direct segment expenses.
- The nonrecurring expenses associated with the firm's acquisition awards and conversion to corporate form and related transactions are not allocated to individual segments as management excludes them in evaluating segment performance.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Segment Operating Results

Management believes that the following information provides a reasonable representation of each segment's contribution to consolidated pretax earnings and total assets:

		As of and for Year Ended November			
		2002	2001	2000	
			(in millions)		
Investment Banking	Net revenues ⁽¹⁾	\$ 2,830	\$ 3,836	\$ 5,371	
	Operating expenses ⁽²⁾	2,454	3,117	3,645	
	Pre-tax earnings	\$ 376	\$ 719	\$ 1,726	
	Segment assets	\$ 4,555	\$ 3,938	\$ 2,333	
Trading and	Net revenues ⁽¹⁾	\$ 5,249	\$ 6,349	\$ 6,627	
Principal Investments	Operating expenses ⁽²⁾	4,273	5,134	4,199	
	Pre-tax earnings	\$ 976	\$ 1,215	\$ 2,428	
	Segment assets	\$184,895	\$164,965	\$143,900	
Asset Management	Net revenues ⁽¹⁾	\$ 5,907	\$ 5,626	\$ 4,592	
and Securities Services	Operating expenses ⁽²⁾	3,794	3,501	3,008	
	Pre-tax earnings	\$ 2,113	\$ 2,125	\$ 1,584	
	Segment assets	\$165,328	\$142,477	\$137,091	
Total	Net revenues ⁽¹⁾	\$ 13,986	\$ 15,811	\$ 16,590	
	Operating expenses ⁽²⁾⁽³⁾	10,733	12,115	11,570	
	Pre-tax earnings	\$ 3,253	\$ 3,696	\$ 5,020	
	Total assets ⁽⁴⁾	\$355,574	\$312,218	\$284,410	

(1) Net revenues include net interest as set forth in the table below:

		Year Ended Novembe	r
	2002	2001	2000
		(in millions)	
ment Banking	\$ 258	\$ 159	\$ 32
nd Principal Investments	1,186	95	99
ment and Securities Services	957	1,039	855
	\$2,401	\$1,293	\$ 986

(2) Operating expenses include depreciation and amortization, including the amortization of goodwill and intangible assets, as set forth in the table below:

Year Ended November 2001

		(in millions)	
Investment Banking	\$ 140	\$ 172	\$ 148
Trading and Principal Investments	293	386	188
Asset Management and Securities Services	311	315	150
Total depreciation and amortization	\$ 744	\$ 873	\$ 486

(3) Includes the following expenses that have not been allocated to the firm's segments: (i) amortization of employee initial public offering awards of \$212 million, \$363 million and \$428 million for the years ended November 2002, November 2001 and November 2000, respectively, and (ii) nonrecurring acquisition awards of \$290 million related to the firm's combination with SLK for the year ended November 2000.

(4) Includes deferred tax assets relating to the firm's conversion to corporate form and certain assets that management believes are not allocable to a particular segment.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table sets forth the net revenues of the firm's three segments:

	Year Ended November		
	2002	2001	2000
		(in millions)	
Financial Advisory	\$ 1,499	\$ 2,070	\$ 2,592
Underwriting	1,331	1,766	2,779
Total Investment Banking	2,830	3,836	5,371
FICC	4,470	4,047	3,004
Equities	1,008	2,923	3,489
Principal Investments	(229)	(621)	134
Total Trading and Principal Investments	5,249	6,349	6,627
Asset Management	1,653	1,473	1,345
Securities Services	981	1,133	940
Commissions	3,273	3,020	2,307
Total Asset Management and Securities Services	5,907	5,626	4,592
Total net revenues	\$13,986	\$15,811	\$16,590

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Geographic Information

Due to the highly integrated nature of international financial markets, the firm manages its businesses based on the profitability of the enterprise as a whole. Accordingly, management believes that profitability by geographic region is not necessarily meaningful. The firm's revenues, expenses and identifiable assets are generally allocated based on the country of domicile of the legal entity providing the service.

The following table sets forth the total net revenues, pre-tax earnings and identifiable assets of the firm and its consolidated subsidiaries by geographic region allocated on the basis described above:

As of or for Year Ended November		
2002	2001	2000
	(in millions)	
	, , , , , , , , , , , , , , , , , , ,	
\$ 8,643	\$ 10,181	\$ 9,767
342	234	189
2,991	3,483	4,400
479	473	622
1,531	1,440	1,612
\$ 13,986	\$ 15,811	\$ 16,590
\$ 1,973	\$ 2,487	\$ 2,845
170	191	104
525	665	1,882
173	241	391
624	475	516
(212)	(363)	(718)
\$ 3,253	\$ 3,696	\$ 5,020
\$ 389,096	\$ 337,061	\$ 287,938
7,521	5,985	7,791
144,608	131,812	121,257
8,573	8,129	7,979
25,422	25,367	16,848
(219,646)	(196,136)	(157,403)
¢ 255 574	\$ 212 219	¢ 204 410
\$ 355,574	\$ 312,218	\$ 284,410

⁽¹⁾ Includes the following expenses that have not been allocated to the firm's segments: (i) amortization of employee initial public offering awards of \$212 million, \$363 million and \$428 million for the years ended November 2002, November 2001 and November 2000, respectively, and (ii) non-recurring acquisition awards of \$290 million related to the firm's combination with SLK for the year ended November 2000.

⁽²⁾ Reflects eliminations and certain assets that are not allocable to a particular geographic region.

SUPPLEMENTAL FINANCIAL INFORMATION

Quarterly Results (unaudited)

The following represents the firm's unaudited quarterly results for 2002 and 2001. These quarterly results were prepared in accordance with U.S. generally accepted accounting principles and reflect all adjustments that are, in the opinion of the management, necessary for a fair presentation of the results. These adjustments are of a normal recurring nature.

		2002 Fiscal Quarter		
	First	Second	Third	Fourth
		(in millions, except per share data)		ta)
Total revenues	\$5,700	\$6,234	\$5,872	\$5,048
Interest expense	2,102	2,383	2,223	2,160
Revenues, net of interest expense	3,598	3,851	3,649	2,888
Operating expenses	2,759	2,950	2,855	2,169
Pre-tax earnings	839	901	794	719
Provision for taxes	315	338	272	214
Net earnings	\$ 524	\$ 563	\$ 522	\$ 505
Earnings per share				
Basic	\$ 1.05	\$ 1.13	\$ 1.05	\$ 1.03
Diluted	0.98	1.06	1.00	0.98
Dividends declared per common share	0.12	0.12	0.12	0.12
*				

		2001 Fiscal Quarter			
	First	Second	Third	Fourth	
		(in millions, exc	ept per share dat	ta)	
Total revenues	\$9,502	\$8,158	\$7,360	\$6,118	
Interest expense	4,769	4,168	3,699	2,691	
L					
Revenues, net of interest expense	4,733	3,990	3,661	3,427	
Operating expenses	3,474	3,044	2,894	2,703	
Pre-tax earnings	1,259	946	767	724	
Provision for taxes	491	369	299	227	
Net earnings	\$ 768	\$ 577	\$ 468	\$ 497	
	_				
Earnings per share					
Basic	\$ 1.49	\$ 1.12	\$ 0.92	\$ 0.99	
Diluted	1.40	1.06	0.87	0.93	
Dividends declared per share	0.12	0.12	0.12	0.12	

Common Stock Price Range

The following table sets forth, for the fiscal quarters indicated, the high and low sales prices per share of the firm's common stock as reported by the Consolidated Tape Association.

		Sales Price							
	20	002	200)1	2000				
	High	Low	High	Low	High	Low			
First Quarter	\$97.25	\$77.52	\$120.00	\$77.00	\$ 94.81	\$74.38			
Second Quarter	92.25	74.00	105.15	77.00	128.00	69.38			
Third Quarter	81.97	65.55	98.14	75.05	121.75	70.63			
Fourth Quarter	81.00	58.57	92.75	63.27	133.63	79.25			

As of January 31, 2003, there were approximately 5,530 holders of record of the firm's common stock.

On January 31, 2003, the last reported sales price for the firm's common stock on the New York Stock Exchange was \$68.10 per share.

Selected Financial Data

	As of or for Year Ended November				
	2002	2001	2000 ⁽⁴⁾	1999 ⁽⁵⁾	1998
Income statement data (in millions)		_			
Total revenues	\$ 22,854	\$ 31,138	\$ 33,000	\$ 25,363	\$ 22,478
Interest expense	8,868	15,327	16,410	12,018	13,958
Net revenues	13,986	15,811	16,590	13,345	8,520
Compensation and benefits ⁽¹⁾	6,744	7,700	7,773	6,459	3,838
Nonrecurring employee initial public offering and acquisition awards			290	2,257	_
Amortization of employee initial public offering and acquisition awards	293	464	428	268	—
Other operating expenses	3,696	3,951	3,079	2,369	1,761
Pre-tax earnings ⁽¹⁾	\$ 3,253	\$ 3,696	\$ 5,020	\$ 1,992	\$ 2,921
Balance sheet data (in millions)					
Total assets	\$355,574	\$312,218	\$284,410	\$248,348	\$205,739
Long-term borrowings	38,711	31,016	31,395	20,952	19,906
Total liabilities	336,571	293,987	267,880	238,203	199,355
Shareholders' equity	19,003	18,231	16,530	10,145	_
Partners' capital		_	_		6,310
Common share data (in millions, except per share amounts)					
Earnings per share					
Basic	\$ 4.27	\$ 4.53	\$ 6.33	\$ 5.69	_
Diluted	4.03	4.26	6.00	5.57	—
Dividends declared per share	0.48 38.69	0.48 36.33	0.48 32.18	0.24 20.94	_
Book value per share Average common shares outstanding	38.09	30.33	32.18	20.94	
Basic	495.6	509.7	484.6	475.9	
Diluted	495.0 525.1	541.8	511.5	485.8	_
Selected data (unaudited)					
Employees					
United States	12,511	14,565	14,755	9,746	8,349
International	7,228	8,112	7,872	5,615	4,684
Total employees ⁽²⁾	19,739	22,677	22,627 ⁽⁶⁾	15,361	13,033
Assets under management (in billions)					
Asset class					
Money markets	\$ 108	\$ 122	\$ 72	\$ 48	\$ 46
Fixed income and currency	96	71	57	58	50
Equity	86	96	107	98	69
Alternative investments ⁽³⁾	58	62	58	54	30
Total assets under management	\$ 348	\$ 351	\$ 294	\$ 258	\$ 195

(1) As a partnership, payments for services rendered by profit-participating limited partners were accounted for as distributions of partners' capital rather than as compensation and benefits expense. As a result, pre-tax earnings in 1998 is not comparable with 2002, 2001, 2000 or 1999.

(2) Excludes employees of Goldman Sachs' property management subsidiaries. Substantially all of the costs of these employees are reimbursed to Goldman Sachs by the real estate investment funds to which these subsidiaries provide property management services.

(3) Includes merchant banking, quantitative asset allocation and other similar funds that the firm manages, as well as funds where the firm recommends one or more subadvisors for the firm's clients.

- (4) In 2000, pre-tax earnings included a charge of \$290 million (\$180 million after taxes) related to the firm's combination with SLK. Excluding this charge, diluted earnings per share were \$6.35.
- (5) In 1999, pre-tax earnings were reduced by nonrecurring expenses of \$2.26 billion associated with the conversion to corporate form and the charitable contribution to The Goldman Sachs Foundation of \$200 million made at the time of the initial public offering.
- (6) Includes 2,600 employees related to the combination with SLK.

Significant Subsidiaries of the Registrant

The following are significant subsidiaries of The Goldman Sachs Group, Inc. as of November 29, 2002 and the states or jurisdictions in which they are organized. Indentation indicates the principal parent of each subsidiary. Except as otherwise specified, in each case The Goldman Sachs Group, Inc. owns, directly or indirectly, at least 99% of the voting securities of each subsidiary. The names of particular subsidiaries have been omitted because, considered in the aggregate as a single subsidiary, they would not constitute, as of the end of the year covered by this report, a "significant subsidiary" as that term is defined in Rule 1-02(w) of Regulation S-X under the Securities Exchange Act of 1934.

Name

State or Jurisdiction of Entity

The Goldman Sachs Group, Inc.	Delaware			
Goldman, Sachs & Co.	New York			
Goldman Sachs (Asia) Finance Holdings L.L.C.	Delaware			
Goldman Sachs (Asia) Finance	Mauritius			
Goldman Sachs (UK) L.L.C.	Delaware			
Goldman Sachs Holdings (U.K.)	United Kingdom			
Goldman Sachs International	United Kingdom			
GS Financial Services L.P. (Del)	Delaware			
Goldman Sachs Capital Markets, L.P.	Delaware			
Goldman Sachs (Japan) Ltd.	British Virgin Islands			
J. Aron Holdings, L.P.	Delaware			
J. Aron & Company	New York			
Goldman Sachs Mortgage Company	New York			
Goldman Sachs Credit Partners L.P.	Bermuda			
Goldman Sachs Holdings (Netherlands) B.V.	Netherlands			
Goldman Sachs Mitsui Marine Derivative Products, L.P. ⁽¹⁾	Delaware			
Goldman Sachs (Cayman) Holding Company	Cayman Islands			
Goldman, Sachs & Co. oHG	Germany			
Goldman Sachs Financial Markets, L.P.	Delaware			
GS Hull Holding, Inc.	Delaware			
The Hull Group, L.L.C.	Illinois			
Hull Trading UK Limited	United Kingdom			
SLK - Hull Derivatives L.L.C.	Delaware			
SLK LLC	New York			
Spear, Leeds & Kellogg, L.P.	New York			
SLK Holdings, Inc.	Delaware			
SLK Acquisition Co.	Delaware			
First Options of Chicago, Inc.	Delaware			

(1) Represents a joint venture owned by Goldman Sachs Holdings (Netherlands) B.V. (49%), Mitsui Sumitomo Insurance Co., Ltd. (50%) and GSMMDPGP Inc. (1%).

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (File Nos. 333-34042, 333-90677, 333-75213, 333-36178, 333-49958, 333-63082, 333-74006 and 333-101093) and on Form S-8 (File Nos. 333-80839 and 333-42068) of our report dated January 27, 2003 relating to the financial statements of The Goldman Sachs Group, Inc. and subsidiaries, which appears in the 2002 Annual Report to Shareholders and is incorporated by reference in this Annual Report on Form 10-K for the year ended November 29, 2002. We also consent to the incorporation by reference in the Registration Statements on Form S-3 (File Nos. 333-34042, 333-90677, 333-75213, 333-36178, 333-49958, 333-63082, 333-74006 and 333-101093) and on Form S-8 (File Nos. 333-80839 and 333-42068) of our reports dated January 27, 2003 relating to the Financial Statement Schedule and Selected Financial Data, which appear in this Annual Report on Form 10-K.

/s/ PRICEWATERHOUSECOOPERS LLP

New York, New York February 27, 2003

REPORT OF INDEPENDENT ACCOUNTANTS

To the Directors and Shareholders of The Goldman Sachs Group, Inc.:

We have audited the consolidated financial statements of The Goldman Sachs Group, Inc. and subsidiaries (the "Company") at November 29, 2002 and November 30, 2001, and for each of the three fiscal years in the period ended November 29, 2002 and have issued our report thereon appearing on page 60 of the Company's Annual Report to Shareholders, which expresses an unqualified opinion, dated January 27, 2003. Such consolidated statements and our report thereon are incorporated by reference in Part II, Item 8 "Financial Statements and Supplementary Data," of this Annual Report on Form 10-K.

We have also previously audited, in accordance with auditing standards generally accepted in the United States of America, the consolidated statements of financial condition at November 24, 2000, November 26, 1999 and November 27, 1998, and the related consolidated statements of earnings, changes in shareholders' equity and partners' capital, cash flows and comprehensive income for the years ended November 26, 1999 and November 27, 1998 (none of which are presented herein); we expressed unqualified opinions on those consolidated financial statements. In our opinion, the information set forth in the selected financial data for each of the five years in the period ended November 29, 2002, appearing on page 92 of the Company's Annual Report to Shareholders, which is incorporated by reference in Part II, Item 6 of this Annual Report on Form 10-K, is fairly stated, in all material respects, in relation to the consolidated financial statements from which it has been derived.

/s/ PRICEWATERHOUSECOOPERS LLP

New York, New York January 27, 2003