

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** – We provide a broad range of investment banking services to a diverse group of corporations, financial institutions, governments and individuals.
- **TRADING AND PRINCIPAL INVESTMENTS** – We facilitate customer transactions with a diverse group of corporations, financial institutions, governments and individuals and take proprietary positions through market making in, and trading of, fixed income and equity products, currencies, commodities and derivatives on such products. In addition, we engage in floor-based and electronic market making as a specialist on U.S. equities and options exchanges and we clear customer transactions on major stock, options and futures exchanges worldwide. In connection with our merchant banking and other investment activities, we make principal investments directly and through funds that we raise and manage.
- **ASSET MANAGEMENT AND SECURITIES SERVICES** – We offer a broad array of investment strategies, advice and planning across all major asset classes to a diverse client base of institutions and individuals, and provide prime brokerage, financing services and securities lending services to mutual funds, pension funds, hedge funds, foundations, endowments and high-net-worth individuals.

Unless specifically stated otherwise, all references to 2003, 2002 and 2001 refer to our fiscal years ended, or the dates, as the context requires, November 28, 2003, November 29, 2002 and November 30, 2001, 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 beliefs 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 under “—Certain Factors That May Affect Our Business.”

EXECUTIVE OVERVIEW

Our diluted earnings per share were \$5.87 for 2003, a 46% increase compared with 2002. Return on average tangible shareholders' equity was 19.9%⁽¹⁾ and return on average shareholders' equity was 15.0%. Our results in 2003 reflected strong growth in Trading and Principal Investments, particularly in our Fixed Income, Currency and Commodities (FICC) business, which continued to operate in a favorable environment, generally characterized by low interest rates and narrow credit spreads. Results in our Principal Investments business improved in 2003, aided by an unrealized gain on our investment in the convertible preferred stock of Sumitomo Mitsui Financial Group, Inc. (SMFG). Our Equities business generated higher revenues in 2003, though results in Equities remained well below peak levels. Asset Management and Securities Services produced strong revenue growth, primarily reflecting higher assets under management and higher customer balances in securities and margin lending. In Investment Banking, despite a significant improvement in debt underwriting, we reported a third straight year of decreased revenues and earnings, reflecting declines in industry-wide mergers and acquisitions and equity underwriting activity.

Our operating results in 2003 also reflected a number of trends that have emerged in recent years and may continue in the future. Competitive pressures continued in our Investment Banking business and, in our Equities business, commission rates and spreads continued to

⁽¹⁾ Return on average tangible shareholders' equity is computed by dividing net earnings by average monthly tangible shareholders' equity. See “—Results of Operations” for further information regarding our return on average tangible shareholders' equity calculation.

decline, demand for capital increased and transaction volumes remained at low levels. We did, however, see increased trading and investing opportunities for our clients and ourselves in 2003, in part due to some of the same economic shocks and trends that have created challenging conditions for some of our other businesses in recent years. We increased our market risk in 2003 to take advantage of these perceived opportunities. Finally, in the current regulatory environment, corporations generally and financial services firms in particular have been subject to wide criticism and intense scrutiny and, consequently, the volume and amount of claims against financial intermediaries are increasing. Given the range of litigation and investigations presently under way, our litigation expenses may remain high. For a further discussion of these trends and other factors affecting our businesses, see “—Certain Factors That May Affect Our Business” included herein as well as in our Annual Report on Form 10-K for our 2003 fiscal year.

BUSINESS ENVIRONMENT

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. A favorable business environment is generally characterized by low inflation, low and declining interest rates, and strong equity markets. Over the business cycle, these factors provide a positive climate for our investment banking activities, for many of our trading businesses and for wealth creation, which contributes to growth in our asset management businesses. In recent years, we have been operating in a challenging environment for many of our businesses, characterized by equity market declines from record highs, lower levels of corporate activity, and a decline in investor confidence resulting from, among other factors, several highly publicized financial scandals and geopolitical uncertainty. However, in the second half of 2003, the business and economic environment improved somewhat around the world. For a further discussion of how market conditions can affect our businesses, see “—Certain Factors That May Affect Our Business.” A further discussion of the business environment in 2003 is set forth below.

GLOBAL—The pace of growth in the global economy improved in the second half of 2003, after a period of subdued growth earlier in the year. Geopolitical factors, particularly relating to the conflict in Iraq, and ongoing concerns about the sustainability of the economic recovery restrained capital spending in the early part of the year. Diminishing concerns and easing global monetary policy led to a stabilization of global activity around midyear, followed by an increase in activity in the second

half of 2003. In particular, the U.S. economy showed a sharp increase in economic growth in the second half, helped by fiscal and monetary stimulus. Global equity markets remained generally weak in the early part of the year, but rallied strongly from March, reflecting expectations of an improvement in the economic environment and corporate profitability. The fixed income markets, which generally performed well for a third straight year, were characterized by tightening corporate credit spreads, low interest rates, a steep yield curve and strong customer demand. In the currency markets, the U.S. dollar continued to weaken through the year, falling significantly against most major currencies. Corporate activity, as measured by industry-wide completed mergers and acquisitions and equity underwriting volumes, remained low. However, industry-wide debt origination levels increased significantly from 2002.

UNITED STATES—The U.S. economy grew at a modest pace in the first half of the year, but improved in the second half. Real gross domestic product in the 2003 calendar year rose by approximately 3.1%, with quarterly growth rising from 1.4% (annualized) in the first quarter to over 8% in the third quarter. The U.S. Federal Reserve reduced the federal funds rate target by 25 basis points in June in response to continued economic weakness and the risk of deflation. The easing in monetary conditions, combined with a large fiscal stimulus package and moderating geopolitical uncertainty, contributed to a sharp improvement in economic growth around midyear, as both consumer and investment spending picked up strongly. In addition, high productivity growth restrained labor costs and underpinned a sharp increase in corporate profitability through 2003. Indications from the Federal Reserve that it was prepared to act aggressively to prevent the risk of deflation, contributed to the 10-year U.S. Treasury note yield falling to 45-year lows in June. However, long-term yields subsequently rose significantly as the economic environment improved.

EUROPE—Economic conditions in Europe generally remained weak through most of 2003. Real gross domestic product growth in Europe, which was approximately 1.0% for the 2003 calendar year, was among the weakest in a decade, as firms continued to cut back on investment through much of the year. The Eurozone economies recorded negative growth in the first half of the 2003 calendar year, although a recovery in global activity led to modest economic growth in the second half of the year. The European Central Bank lowered interest rates by 125 basis points in the aggregate between December 2002 and June 2003 in response to continuing economic weakness. The U.K. economy continued to grow at a modest pace, but was stronger than continental Europe, primarily due to increased consumer spending. Improving economic activity in the latter part of the year led the Bank of

England to raise interest rates by 25 basis points in November 2003, after having lowered them by 50 basis points earlier in the year.

ASIA – Japan's economy improved during 2003. Economic growth was supported by improved domestic spending and continued strong export growth to China and other Asian trading partners. Corporate profitability improved and investment spending rose strongly through the year. The Bank of Japan continued to provide substantial liquidity to the market and continued to hold short-term interest rates at zero percent through the year. The Ministry of Finance engaged in substantial intervention in currency markets during the year to limit the strengthening of the yen against other major currencies. Strengthening global and local activity pushed bond yields significantly higher in the second half of the year.

Growth in other Asian economies improved from midyear, after slowing in the second quarter when a number of the region's economies were adversely affected by the spread of the SARS virus. As those adverse effects dissipated and as the pace of the U.S. economic recovery increased, growth in the region improved. China's growth remained very strong through 2003. While the adverse effects of the SARS virus led to a temporary slowdown in the Chinese economy in the second quarter, the pace of growth accelerated sharply in the second half of 2003, driven in part by very rapid growth in investment spending. Strong demand growth in China provided substantial support to other economies in the region and to several global commodities markets.

CERTAIN FACTORS THAT MAY AFFECT OUR BUSINESS

We face a variety of risks that are substantial and inherent in our businesses, including market, liquidity, credit, operational, legal and regulatory risks. For a discussion of how management seeks to manage some of these risks, see “—Risk Management.” A summary of some of the important factors that could affect our business follows below. For a further discussion of these and other important factors that could affect our business, see “Business—Certain Factors That May Affect Our Business” in our Annual Report on Form 10-K for our 2003 fiscal year.

MARKET CONDITIONS AND MARKET RISK – Our businesses are materially affected by conditions in the global financial markets and economic conditions generally. Although business conditions improved somewhat in the second half of 2003, in recent years we have been operating in a very challenging environment: the number and size of equity underwritings and mergers and acquisitions transactions have declined significantly; the equities markets in

the United States and elsewhere have been volatile and at levels below their record highs; investors have exhibited concerns over the integrity of the U.S. financial markets as a result of highly publicized financial and mutual fund 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.

Adverse or uncertain 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:

- Industry-wide declines in the size and number of equity underwritings and mergers and acquisitions and increased price competition may continue to have an adverse effect on our revenues and, because we may be unable to reduce expenses correspondingly, our profit margins.
- We have been committing increasing amounts of capital in many of our businesses and generally maintain large trading, specialist and investment positions. Market fluctuations and volatility may adversely affect the value of those positions or may reduce our willingness to enter into some new transactions.
- We have been operating in a low or declining interest rate market for the past several years. Increasing or high interest rates and/or widening credit spreads, especially if such changes are rapid, may create a less favorable environment for certain of our businesses.
- 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.
- 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. Further weakness in global equities markets, the trading of securities in multiple markets and on multiple exchanges, and the ongoing New York Stock Exchange (NYSE) and Securities and

Exchange Commission (SEC) investigations into the stock specialist business could adversely impact our trading businesses and impair the value of our goodwill and identifiable intangible assets. For a further discussion of our goodwill and identifiable intangible assets, see “—Critical Accounting Policies—Goodwill and Identifiable Intangible Assets.”

- 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 incentive and management fees we receive.

CREDIT RISK – 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 credit 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 and other 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.

LIQUIDITY RISK – Liquidity (i.e., ready access to funds) is essential to our businesses. Our liquidity could be impaired by an inability to access secured and/or unsecured debt markets, an inability to access funds from our subsidiaries 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 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, limit our access to the capital markets 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. For a discussion of the potential impact on Goldman Sachs of a reduction in our credit ratings, see “—Capital and Funding—Credit Ratings.”

OPERATIONAL AND INFRASTRUCTURE RISK – 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. Shortcomings or failures in our internal processes, people or systems could lead to, among other consequences, financial loss and reputational damage. In addition, despite the contingency plans we have in place, 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.

LEGAL AND REGULATORY RISK – Substantial legal liability or a significant regulatory action against Goldman Sachs could have material adverse financial effects 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 and regulatory proceedings against financial intermediaries have been increasing. For a discussion of how we account for our legal and regulatory exposures, see “—Use of Estimates.”

CRITICAL ACCOUNTING POLICIES

Fair Value

"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 use of fair value to measure these financial instruments, with

related unrealized gains and losses recognized immediately in our results of operations, is fundamental to our financial statements and is our most critical accounting policy. 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.

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

FINANCIAL INSTRUMENTS BY CATEGORY

(IN MILLIONS)	AS OF NOVEMBER			
	2003		2002	
	FINANCIAL INSTRUMENTS OWNED, AT FAIR VALUE	FINANCIAL INSTRUMENTS SOLD, BUT NOT YET PURCHASED, AT FAIR VALUE	FINANCIAL INSTRUMENTS OWNED, AT FAIR VALUE	FINANCIAL INSTRUMENTS SOLD, BUT NOT YET PURCHASED, AT FAIR VALUE
Cash trading instruments	\$110,157	\$ 60,813	\$ 85,791	\$44,552
Derivative contracts	45,733	41,886	42,205	38,921
Principal investments	3,755 ⁽¹⁾	—	1,779	—
Total	\$159,645	\$102,699	\$129,775	\$83,473

⁽¹⁾ Excludes assets of \$1.07 billion in employee-owned merchant banking funds that were consolidated in 2003.

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, other sovereign government obligations, liquid mortgage products, investment-grade corporate bonds, listed equities, money market securities, state, municipal and provincial obligations, and physical commodities.

instruments may include certain high-yield debt, corporate bank loans, mortgage whole loans and distressed debt. We value these instruments using methodologies such as the present value of known or estimated cash flows and generally do not adjust underlying valuation assumptions unless there is substantive evidence supporting a change in the value of the underlying instrument or valuation assumptions (such as similar market transactions, changes in financial ratios and changes in the credit ratings of the underlying companies).

Certain cash trading instruments trade infrequently and, therefore, have little or no price transparency. Such

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

CASH TRADING INSTRUMENTS BY PRICE TRANSPARENCY

(IN MILLIONS)	AS OF NOVEMBER			
	2003		2002	
	FINANCIAL INSTRUMENTS OWNED, AT FAIR VALUE	FINANCIAL INSTRUMENTS SOLD, BUT NOT YET PURCHASED, AT FAIR VALUE	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	\$102,306	\$60,673	\$81,125	\$44,357
Little or no price transparency	7,851	140	4,666	195
Total	\$110,157	\$60,813	\$85,791	\$44,552

Cash trading instruments we own (long positions) are marked to bid prices and instruments we have sold but not yet purchased (short positions) are marked to offer prices. If liquidating a position is reasonably expected to affect its prevailing market price, our valuation is adjusted

generally based on market evidence or predetermined policies. In certain circumstances, such as for highly illiquid positions, management's estimates are used to determine this adjustment.

DERIVATIVE CONTRACTS – Derivative contracts consist of exchange-traded and over-the-counter (OTC) derivatives. The following table sets forth the fair value of our exchange-traded and OTC derivative assets and liabilities:

DERIVATIVE ASSETS AND LIABILITIES

(IN MILLIONS)	AS OF NOVEMBER			
	2003		2002	
	ASSETS	LIABILITIES	ASSETS	LIABILITIES
Exchange-traded derivatives	\$ 5,182	\$ 6,339	\$ 8,911	\$ 8,630
OTC derivatives	40,551	35,547	33,294	30,291
Total ⁽¹⁾	\$45,733	\$41,886	\$42,205	\$38,921

⁽¹⁾ The fair values of our derivative assets and liabilities include cash we have paid and received (for example, option premiums or cash paid or received pursuant to credit support agreements) and may change significantly from period to period based on, among other factors, changes in our trading positions and market movements.

The fair values of our exchange-traded derivatives are generally determined from quoted market prices. OTC derivatives are valued using valuation models. We use a variety of valuation models including the present value of known or estimated cash flows, option-pricing models and option-adjusted spread models. The valuation models that we use to derive the fair values of our OTC derivatives require inputs including contractual terms, market prices, yield curves, credit curves, measures of volatility, prepayment rates and correlations of such inputs.

At the inception of an OTC derivative contract (day one), we value the contract at the model value if we can verify all of the significant model inputs to observable market data and verify the model value to market transactions. When appropriate, valuations are adjusted to take account of various factors such as liquidity, bid/offer and credit considerations. These adjustments are generally based on market evidence or predetermined policies. In certain circumstances, such as for highly illiquid positions, management's estimates are used to determine these adjustments.

Where we cannot verify all of the significant model inputs to observable market data and verify the model value to market transactions, we value the contract at the transaction price at inception and, consequently, record no day one gain or loss in accordance with Emerging Issues Task Force (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." For a further discussion of EITF Issue No. 02-3, see Note 2 to the consolidated financial statements.

Following day one, we adjust the inputs to our valuation models only to the extent that changes in such inputs can be verified by similar market transactions, third-party pricing services and/or broker quotes or can be derived from other substantive evidence such as empirical market data. In circumstances where we cannot verify the model value to market transactions, it is possible that a different valuation model could produce a materially different estimate of fair value.

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

OTC DERIVATIVES

(IN MILLIONS)

ASSETS	AS OF NOVEMBER 2003					TOTAL
	0-6 MONTHS	6-12 MONTHS	1-5 YEARS	5-10 YEARS	10 YEARS OR GREATER	
Contract type						
Interest rates	\$1,470	\$ 160	\$ 4,017	\$4,332	\$ 9,541	\$19,520
Currencies	5,486	1,230	4,069	1,842	897	13,524
Commodities	1,538	645	1,648	473	159	4,463
Equities	1,276	637	675	329	127	3,044
Total	\$9,770	\$2,672	\$10,409	\$6,976	\$10,724	\$40,551

LIABILITIES	AS OF NOVEMBER 2003					TOTAL
	0-6 MONTHS	6-12 MONTHS	1-5 YEARS	5-10 YEARS	10 YEARS OR GREATER	
Contract type						
Interest rates	\$ 2,026	\$ 381	\$3,896	\$2,894	\$2,475	\$11,672
Currencies	5,993	1,121	2,951	2,949	828	13,842
Commodities	2,059	921	1,461	232	183	4,856
Equities	3,267	669	1,027	182	32	5,177
Total	\$13,345	\$3,092	\$9,335	\$6,257	\$3,518	\$35,547

ASSETS	AS OF NOVEMBER 2002					TOTAL
	0-6 MONTHS	6-12 MONTHS	1-5 YEARS	5-10 YEARS	10 YEARS OR GREATER	
Contract type						
Interest rates	\$ 864	\$ 536	\$6,266	\$4,983	\$9,281	\$21,930
Currencies	2,955	917	1,007	486	211	5,576
Commodities	1,200	632	1,145	185	11	3,173
Equities	1,386	492	673	63	1	2,615
Total	\$6,405	\$2,577	\$9,091	\$5,717	\$9,504	\$33,294

LIABILITIES	AS OF NOVEMBER 2002					TOTAL
	0-6 MONTHS	6-12 MONTHS	1-5 YEARS	5-10 YEARS	10 YEARS OR GREATER	
Contract type						
Interest rates	\$1,084	\$ 393	\$ 6,870	\$5,556	\$2,291	\$16,194
Currencies	3,134	751	1,478	935	603	6,901
Commodities	1,432	836	977	62	2	3,309
Equities	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. Price transparency for interest rate and 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.

PRINCIPAL INVESTMENTS – In valuing our corporate and real estate principal investments, we separate our portfolio into investments in private companies and investments in public companies, including our investment in the convertible preferred stock of SMFG. The following table sets forth the carrying value of our principal investments portfolio:

PRINCIPAL INVESTMENTS

(IN MILLIONS)	AS OF NOVEMBER					
	2003			2002		
	CORPORATE	REAL ESTATE	TOTAL	CORPORATE	REAL ESTATE	TOTAL
Private	\$1,054	\$757	\$1,811	\$ 881	\$736	\$1,617
Public	219	42	261	154	8	162
SMFG convertible preferred stock ⁽¹⁾	1,683	—	1,683	—	—	—
Total	\$2,956	\$799	\$3,755 ⁽²⁾	\$1,035	\$744	\$1,779

⁽¹⁾ The fair value of our Japanese yen-denominated investment in SMFG convertible preferred stock includes the effect of foreign exchange revaluation. We hedge our economic exposure to exchange rate movements on our investment in SMFG by borrowing Japanese yen. Foreign exchange revaluation on the investment and the related borrowing are generally equal and offsetting. For example, if the Japanese yen appreciates against the U.S. dollar, the U.S. dollar carrying value of our SMFG investment will increase and the U.S. dollar value of the related borrowing will also increase by an equal and offsetting amount.

⁽²⁾ Excludes assets of \$1.07 billion in employee-owned merchant banking funds that were consolidated in 2003.

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 carrying value are made if there are third-party transactions evidencing a change in value. Downward adjustments are also made, in the absence of third-party transactions, 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.

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. If liquidating a position is reasonably expected to affect market prices, valuations are adjusted accordingly based on predetermined written policies.

Our investment in the convertible preferred stock of SMFG is carried at fair value, which is derived from a model that incorporates SMFG's common stock price and credit spreads, the impact of transfer restrictions on our investment and the downside protection on the conversion strike price. The fair value of our investment is particularly sensitive to movements in the SMFG common stock price. Since February 7, 2003, the date of our investment in the convertible preferred stock of SMFG, the fair

value of our investment increased 23% (expressed in Japanese yen), primarily due to a 66% increase in the SMFG common stock price. As a result of transfer restrictions and the downside protection on the conversion strike price, the relationship between changes in the fair value of our investment and changes in SMFG's common stock price is nonlinear.

CONTROLS OVER VALUATION OF FINANCIAL INSTRUMENTS – Proper controls, independent of the trading and principal investing functions, are fundamental to ensuring that our financial instruments are appropriately and consistently valued and that fair value measurements are reliable. This is particularly important in valuing instruments with lower levels of price transparency.

We employ an oversight structure that includes appropriate segregation of duties. Senior management, independent of the trading functions, is responsible for the oversight of control and valuation policies and procedures and reporting the results of such work to the Audit Committee. We seek to maintain the necessary resources, with the appropriate experience and training, to ensure that control and independent price verification functions are performed to the highest standards. In addition, we employ procedures for the approval of new transaction types and markets, independent price verification, review of daily profit and loss, and review of valuation models by personnel with appropriate technical knowledge of relevant markets and products. For a further discussion of how we manage the risks inherent in our trading and principal investing businesses, see “—Risk Management.”

Goodwill and Identifiable Intangible Assets

As a result of our business combinations, principally with SLK LLC (SLK) in fiscal 2000, we have acquired goodwill and identifiable intangible assets. Goodwill is the cost of acquired companies in excess of the fair value of net assets, including identifiable intangible assets, at the acquisition date.

GOODWILL – We test the goodwill in each of our operating segments for impairment at least annually in accordance with Statement of Financial Accounting Standards (SFAS) No. 142, “Goodwill and Other Intangible Assets,” by comparing the estimated fair value of each operating segment with its estimated net book value. We derive the fair value of each of our operating segments primarily based on earnings multiples. We derive the net book value of our operating segments by estimating the amount of shareholders’ equity required to support the assets of each operating segment. Our last annual impairment test was performed during our fiscal 2003 fourth quarter and no impairment was identified.

The following table sets forth the carrying value of our goodwill by operating segment:

GOODWILL BY OPERATING SEGMENT

(IN MILLIONS)	AS OF NOVEMBER	
	2003	2002
Investment Banking		
Financial Advisory	\$ —	\$ —
Underwriting	125	123
Trading and Principal Investments		
FICC	117	117
Equities ⁽¹⁾	2,384	2,374
Principal Investments	—	—
Asset Management and Securities Services		
Asset Management	419 ⁽²⁾	128
Securities Services	117	117
Total	\$3,162	\$2,859

⁽¹⁾ Primarily related to our combinations with SLK and The Hull Group.

⁽²⁾ Primarily related to our combination with The Ayco Company, L.P. (Ayco).

IDENTIFIABLE INTANGIBLE ASSETS – We amortize our identifiable intangible assets over their estimated useful lives in accordance with SFAS No. 142, and test for potential impairment whenever events or changes in circumstances suggest that an asset’s or asset group’s carrying value may not be fully recoverable in accordance with SFAS No. 144, “Accounting for the Impairment or Disposal of Long-Lived Assets.” An impairment loss, calculated as the difference between the estimated fair value and the carrying value of an asset or asset group, is recognized if the expected undiscounted cash flows relating to the asset or asset group are less than the corresponding carrying value.

During our fiscal fourth quarter, the American Stock Exchange, the Chicago Board Options Exchange and the Philadelphia Stock Exchange all announced proposed restructuring plans and continued to experience loss of market share to the International Securities Exchange, which became the leading U.S. options exchange during 2003. Consequently, we tested our related option specialist rights for impairment during the fourth quarter, and recognized an impairment charge of \$133 million. The estimated fair value of the option specialist rights was derived from expected discounted cash flows. We also surrendered certain option specialist rights in earlier quarters, recognizing total charges of \$20 million.

The following table sets forth the carrying value and range of remaining useful lives of our identifiable intangible assets by major asset class:

IDENTIFIABLE INTANGIBLE ASSETS BY ASSET CLASS

(\$ IN MILLIONS)	AS OF NOVEMBER		CARRYING VALUE
	2003	2002	
	CARRYING VALUE	RANGE OF REMAINING USEFUL LIVES (IN YEARS)	CARRYING VALUE
Customer lists	\$ 880 ⁽¹⁾	8 – 21	\$ 765
NYSE specialist rights	636	24 – 26	666
Option and exchange-traded fund (ETF) specialist rights	130	2 – 24	291
Other	174 ⁽²⁾	4 – 9	258
Total	\$1,820		\$1,980

⁽¹⁾ Includes primarily our clearance and execution and Nasdaq customer lists acquired in our combination with SLK and financial counseling customer lists acquired in our combination with Ayco.

⁽²⁾ Includes primarily technology-related assets acquired in our combination with SLK.

A prolonged period of weakness in global equity markets, the trading of securities in multiple markets and on multiple exchanges, and the ongoing NYSE and SEC investigations into the stock specialist business could adversely impact our businesses and impair the value of our goodwill and/or identifiable intangible assets. In addition, an announced restructuring by the NYSE or any other exchange on which we hold specialist rights or an adverse action or assessment by a regulator could indicate a potential impairment of the associated identifiable intangible assets.

USE OF ESTIMATES

The use of generally accepted accounting principles requires management to make certain estimates. In addition to the estimates we use in connection with fair value measurements and the accounting for goodwill and identifiable intangible assets, the use of estimates is also important in determining provisions for potential losses that may arise from litigation and regulatory proceedings.

We provide for potential losses that may arise out of litigation and regulatory proceedings to the extent that such losses are probable and can be estimated, in accordance with SFAS No. 5, "Accounting for Contingencies." Our total liability in respect of litigation and regulatory

proceedings, which is determined on a case-by-case basis, represents our best estimate of probable losses after considering, among other factors, the progress of each case, our experience and the experience of others in similar cases, and the opinions and views of legal counsel. However, significant judgment is required in making this estimate and our final liability may turn out to be materially different. During 2003, we recorded provisions of \$159 million in respect of a number of litigation and regulatory proceedings. See "Legal Proceedings" in our Annual Report on Form 10-K for our 2003 fiscal year for information on our judicial, regulatory and arbitration proceedings.

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. For a further discussion of the impact of economic and market conditions on our results of operations, see "—Business Environment" and "—Certain Factors That May Affect Our Business."

Financial Overview

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

FINANCIAL OVERVIEW

(\$ IN MILLIONS, EXCEPT PER SHARE AMOUNTS)	YEAR ENDED NOVEMBER		
	2003	2002	2001
Net revenues	\$16,012	\$13,986	\$15,811
Pre-tax earnings	4,445	3,253	3,696
Net earnings	3,005	2,114	2,310
Diluted earnings per share	5.87	4.03	4.26
Return on average shareholders' equity ⁽¹⁾	15.0%	11.3%	13.0%
Return on average tangible shareholders' equity ⁽²⁾	19.9%	15.3%	17.8%

⁽¹⁾ Return on average shareholders' equity is computed by dividing net earnings by average monthly shareholders' equity.

⁽²⁾ 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 equity deployed in our businesses. Return on average tangible shareholders' equity is computed by dividing net earnings by average monthly tangible shareholders' equity. The following table sets forth the reconciliation of average shareholders' equity to average tangible shareholders' equity:

(IN MILLIONS)	YEAR ENDED NOVEMBER		
	2003	2002	2001
Average shareholders' equity	\$20,031	\$18,659	\$17,704
Deduct: Average goodwill and identifiable intangible assets	(4,932)	(4,837)	(4,727)
Average tangible shareholders' equity	\$15,099	\$13,822	\$12,977

NET REVENUES

2003 VERSUS 2002 – Our net revenues were \$16.01 billion in 2003, an increase of 14% compared with 2002, primarily reflecting higher net revenues in Trading and Principal Investments. The increase in Trading and Principal Investments net revenues was primarily driven by FICC, which operated in a generally favorable environment throughout the year, and by Principal Investments, which included an unrealized gain on our investment in the convertible preferred stock of SMFG. Net revenues in Asset Management and Securities Services increased 14% compared with 2002, primarily reflecting higher assets under management and higher customer balances in Securities Services. Net revenues in Investment Banking declined 4% compared with 2002, due to generally lower levels of corporate activity. For a further discussion of our net revenues, see “—Operating Results by Segment.”

2002 VERSUS 2001 – Our net revenues were \$13.99 billion in 2002, a decrease of 12% compared with 2001, primarily reflecting lower net revenues in Investment Banking and Trading and Principal Investments. Net revenues in Investment Banking and Trading and Principal Investments decreased 26% and 10%, respectively,

compared with 2001, primarily reflecting a difficult economic and business environment, characterized by continued weakness in equity markets and generally lower levels of corporate activity. Net revenues in Asset Management and Securities Services increased 4% compared with 2001, primarily reflecting higher assets under management, partially offset by lower net revenues in Securities Services. For a further discussion of our net revenues, see “—Operating Results by Segment.”

OPERATING EXPENSES

Our operating expenses are primarily influenced by compensation, headcount and levels of business activity. A substantial portion of our compensation expense represents discretionary bonuses, with our overall compensation and benefits expenses generally targeted at 50% (plus or minus a few percentage points) of consolidated net revenues. In addition to the level of net revenues, our compensation expense in any given year is also influenced by, among other factors, prevailing labor markets, business mix and the structure of our equity-based compensation programs.

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

OPERATING EXPENSES AND EMPLOYEES

(\$ IN MILLIONS)	YEAR ENDED NOVEMBER		
	2003	2002	2001
Compensation and benefits	\$ 7,393	\$ 6,744	\$ 7,700
Amortization of employee initial public offering and acquisition awards	122	293	464
Non-compensation expenses	4,052	3,696	3,951
Total operating expenses	\$11,567	\$10,733	\$12,115
Employees at year end ⁽¹⁾	19,476 ⁽²⁾	19,739	22,677

⁽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 and loan services.

⁽²⁾ Includes 1,037 employees associated with our combination with Ayco, a provider of fee-based financial counseling in the United States, in July 2003.

2003 VERSUS 2002—Operating expenses were \$11.57 billion for 2003, 8% above 2002. Compensation and benefits expenses of \$7.39 billion increased 10% compared with the prior year, with higher discretionary compensation more than offsetting lower levels of employment. The ratio of compensation and benefits to net revenues for 2003 was 46%, down from 48% for 2002, in part reflecting lower employment levels in 2003, which decreased 1% compared with November 2002. Excluding 1,037 employees associated with our combination with Ayco, employment levels were down 7% from November 2002. Effective for fiscal 2003, we began to account for stock-based 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. The adoption of the recognition provisions of SFAS No. 123 did not have a material effect on our results of operations, principally because substantially all of the employee equity-based compensation granted for 2003 was in the form of restricted stock units. See Note 2 and Note 12 to the consolidated financial statements for further information regarding our stock-based compensation.

Non-compensation-related expenses of \$4.05 billion for 2003 increased 10% compared with 2002. This increase was primarily due to (i) higher professional services and other expenses, which included provisions of \$159 million for a number of litigation and regulatory proceedings; (ii) increased amortization of identifiable intangible assets, reflecting impairment charges of \$188 million, primarily in respect of option specialist rights; and (iii) exit costs of \$153 million associated with reductions in our global office space. These exit costs were primarily reflected in occupancy expenses, with the balance in depreciation and amortization expenses. Excluding the aggregate charges of \$500 million described above, our

non-compensation expenses declined slightly compared with 2002, reflecting lower depreciation and amortization, communications and technology, and market development expenses, and brokerage, clearing and exchange fees. These expense declines were primarily due to the impact of reduced employment levels, lower levels of business activity and continued cost-containment discipline. See "—Critical Accounting Policies—Goodwill and Identifiable Intangible Assets" for a discussion of our impairment charges in respect of option specialist rights and "—Capital and Funding—Contractual Obligations and Contingent Commitments" for a discussion of our excess office space.

Throughout 2003, we maintained our focus on cost containment in light of the continued challenging environment for certain of our businesses. We reduced employment levels and continued to closely manage our non-compensation expenses through 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 continued to defer or scale back some of our noncritical capital reinvestment plans in order to limit growth in our depreciation and amortization expenses.

2002 VERSUS 2001—Operating expenses of \$10.73 billion for 2002 decreased 11% compared with 2001. Compensation and benefits expenses of \$6.74 billion decreased 12% compared with 2001, 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 Note 2 and Note 12 to the consolidated financial statements for further information regarding our stock-based compensation.

Non-compensation-related expenses of \$3.70 billion for 2002 decreased 6% compared with 2001. Excluding amortization of goodwill and identifiable intangible assets, these expenses decreased 3% compared with 2001, 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 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 SFAS No. 142.

PROVISION FOR TAXES

The effective income tax rate for 2003 was 32.4%, down from 35.0% for 2002. The lower effective income tax

rate reflected an increase in tax credits and a decrease in state and local 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 for 2002 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 tax credits.

Our effective income tax rate can vary from period to period depending on, among other factors, the geographic and business mix of our earnings and the level of our tax credits. 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.

Operating Results by Segment

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		
		2003	2002	2001
Investment Banking	Net revenues	\$ 2,711	\$ 2,830	\$ 3,836
	Operating expenses	2,504	2,454	3,117
	Pre-tax earnings	\$ 207	\$ 376	\$ 719
Trading and Principal Investments	Net revenues	\$10,443	\$ 8,647	\$ 9,570
	Operating expenses	6,938	6,505	7,310
	Pre-tax earnings	\$ 3,505	\$ 2,142	\$ 2,260
Asset Management and Securities Services	Net revenues	\$ 2,858	\$ 2,509	\$ 2,405
	Operating expenses	1,890	1,562	1,325
	Pre-tax earnings	\$ 968	\$ 947	\$ 1,080
Total	Net revenues	\$16,012	\$13,986	\$15,811
	Operating expenses ⁽¹⁾	11,567	10,733	12,115
	Pre-tax earnings	\$ 4,445	\$ 3,253	\$ 3,696

⁽¹⁾ Includes the following expenses that have not been allocated to our segments: (i) the amortization of employee initial public offering awards of \$80 million, \$212 million and \$363 million for the years ended November 2003, November 2002 and November 2001, respectively, and (ii) provisions for a number of litigation and regulatory proceedings of \$155 million for the year ended November 2003.

We made certain changes to our segment reporting structure in 2003. These changes included:

- reclassifying equity commissions and clearing and execution fees from the Commissions component of the Asset Management and Securities Services segment to the Equities component of the Trading and Principal Investments segment;
- reclassifying merchant banking overrides from the Commissions component of the Asset Management and Securities Services segment to the Principal Investments component of the Trading and Principal Investments segment; and
- reclassifying the matched book businesses from the Securities Services component of the Asset Management and Securities Services segment to the FICC component of the Trading and Principal Investments segment.

These reclassifications did not affect our previously reported consolidated results of operations. Prior period segment operating results have been changed to conform to the new segment reporting structure.

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 drivers of Goldman Sachs taken as a whole—compensation, headcount and levels of business activity—are broadly similar in each of our business segments. Compensation expenses within our segments reflect, among other factors, the performance of individual business units as well as the overall performance of Goldman Sachs. Consequently, pre-tax margins in one segment of our business may be significantly affected by

the performance of our other business segments. For example, despite the decline in net revenues in our Investment Banking segment in 2003, compensation expenses increased, reflecting in part our strong overall performance. A discussion of segment operating results follows below.

INVESTMENT BANKING

Our Investment Banking segment is divided into two components:

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

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

INVESTMENT BANKING OPERATING RESULTS

(IN MILLIONS)	YEAR ENDED NOVEMBER		
	2003	2002	2001
Financial Advisory	\$1,202	\$1,499	\$2,070
Equity Underwriting	678	734	983
Debt Underwriting	831	597	783
Total Underwriting	1,509	1,331	1,766
Total net revenues	2,711	2,830	3,836
Operating expenses	2,504	2,454	3,117
Pre-tax earnings	\$ 207	\$ 376	\$ 719

2003 VERSUS 2002 – Net revenues in Investment Banking of \$2.71 billion for 2003 decreased 4% compared with 2002. Net revenues in Financial Advisory of \$1.20 billion decreased 20% from the prior year, primarily reflecting a decline in industry-wide completed mergers and acquisitions. Net revenues in our Underwriting business of \$1.51 billion increased 13%, reflecting an increase in industry-wide debt new issuance activity. Equity Underwriting net revenues decreased compared with 2002, primarily reflecting a decline in industry-wide total equity underwriting volume, including initial public offerings, partially offset by higher net revenues from convertible issuances. The reduction in Investment Banking net revenues reflects lower levels of activity in the industrial and financial institutions sectors, partially offset by increased activity in the healthcare and natural

resources sectors. Our investment banking backlog at the end of 2003 was slightly higher than at the end of 2002.⁽¹⁾

Operating expenses were \$2.50 billion in 2003, 2% higher than 2002, primarily due to increased compensation and benefits expenses, with higher discretionary compensation more than offsetting the impact of lower levels of employment. The increase in discretionary compensation in Investment Banking reflects, among other factors, the overall performance of Goldman Sachs, continued strong relative performance in the business (as evidenced by our high rankings and market share), as well as the somewhat improved business environment at the end of 2003. Operating expenses also increased due to intangible asset impairment charges in respect of certain distribution rights and higher occupancy expenses,

⁽¹⁾ 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 likely than not.

primarily related to exit costs associated with reductions in our global office space. These expense increases were partially offset by lower market development and communications and technology expenses, reflecting the impact of reduced employment levels, lower levels of business activity and continued cost-containment discipline. Pre-tax earnings of \$207 million in 2003 decreased 45% compared with 2002.

2002 VERSUS 2001 – Net revenues in Investment Banking of \$2.83 billion for 2002 decreased 26% compared with 2001. Net revenues in Financial Advisory of \$1.50 billion decreased 28% from 2001, reflecting a decline in industry-wide completed mergers and acquisitions. Net revenues in our Underwriting business of \$1.33 billion decreased 25%, primarily reflecting a decline in industry-wide total equity underwriting volume, including initial public offerings, 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 technology, media and telecommunications, natural resources and healthcare. Our investment banking backlog at the end of 2002 was significantly lower than at the end of 2001.⁽¹⁾

Operating expenses were \$2.45 billion in 2002, 21% lower than 2001, 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. Pre-tax earnings of \$376 million in 2002 decreased 48% compared with 2001.

TRADING AND PRINCIPAL INVESTMENTS

Our Trading and Principal Investments segment is divided into three components:

- **FICC** – We make markets in and trade interest rate and credit products, mortgage-backed securities and loans, 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. We also execute and clear customer transactions on major stock, options and futures exchanges worldwide.
- **PRINCIPAL INVESTMENTS** – Principal Investments primarily represents net revenues from our merchant banking investments, including 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 (merchant banking overrides), as well as unrealized gains or losses on our investment in the convertible preferred stock of SMFG.

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 Equities Commissions. Both market-making revenues and explicit fees from our Nasdaq business are reported in "Trading and principal investments" in the consolidated statements of earnings.

Net revenues from Principal Investments do not include management fees generated from our merchant banking funds. These management fees are included in the net revenues of the Asset Management and Securities Services segment.

⁽¹⁾ 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 likely than not.

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		
	2003	2002	2001
FICC	\$ 5,596	\$4,680	\$4,272
Equities Trading	1,738	1,008	2,923
Equities Commissions	2,543	2,994	2,603
Total Equities	4,281	4,002	5,526
Principal Investments	566	(35)	(228)
Total net revenues	10,443	8,647	9,570
Operating expenses	6,938	6,505	7,310
Pre-tax earnings	\$ 3,505	\$2,142	\$2,260

2003 VERSUS 2002 – Net revenues in Trading and Principal Investments of \$10.44 billion for 2003 increased 21% compared with 2002. FICC net revenues of \$5.60 billion increased 20% compared with 2002, primarily due to higher net revenues in credit products, as well as improved performances in interest rate products, commodities and mortgages, partially offset by lower net revenues in currencies, which performed particularly well in 2002. During 2003, FICC operated in a generally favorable environment characterized by tightening corporate credit spreads, low interest rates, a steep yield curve and strong customer demand. Equities net revenues of \$4.28 billion increased 7% compared with 2002, primarily due to higher net revenues in principal strategies.⁽¹⁾ This increase was partially offset by lower net revenues in our global equities product groups⁽²⁾, primarily reflecting lower commission volumes and clearance and execution fees in our U.S. shares business. Principal Investments recorded net revenues of \$566 million, which included an unrealized gain related to our convertible preferred stock investment in SMFG of \$293 million (net of unrealized foreign exchange losses on the Japanese yen-denominated borrowing funding this investment), gains from real estate and other corporate principal investments, as well as the recognition of merchant banking overrides.

Operating expenses were \$6.94 billion in 2003, 7% higher than 2002, primarily due to increased compensation and benefits expenses, with higher discretionary compensation, reflecting increased net revenues, more than offsetting the impact of lower levels of employment. Operating expenses also increased due to intangible asset impairment charges in respect of option specialist rights, higher professional services and other expenses, and higher occupancy expenses, primarily related to exit costs associated with reductions in our global office space. These expense increases were partially offset by lower

communications and technology expenses, depreciation and amortization expenses, brokerage, clearing and exchange fees, and market development expenses, reflecting the impact of reduced employment levels, lower levels of business activity and continued cost-containment discipline. Pre-tax earnings of \$3.51 billion in 2003 increased 64% compared with 2002.

2002 VERSUS 2001 – Net revenues in Trading and Principal Investments of \$8.65 billion for 2002 decreased 10% compared with 2001. FICC net revenues of \$4.68 billion increased 10% compared with 2001, reflecting strong performances in currencies, interest rate products and mortgages, partially offset by decreased net revenues in commodities. Net revenues in Equities of \$4.00 billion decreased 28% compared with 2001, primarily reflecting lower net revenues in our global equities product groups⁽²⁾, particularly in our shares businesses, which were affected by continued weakness in the equities markets and the negative effect of a single block trade in the first quarter of 2002. In addition, equity derivatives net revenues and clearance fees within our global equities product groups were lower. Net revenues in principal strategies⁽¹⁾ also declined from 2001. Principal Investments recorded negative net revenues of \$35 million, primarily due to declines in the value of certain investments in the high technology and telecommunications sectors, partially offset by the recognition of merchant bank overrides and real estate and energy sector disposition gains.

Operating expenses were \$6.51 billion in 2002, 11% lower than 2001, primarily due to decreased compensation and benefits expenses and the elimination of goodwill amortization. Market development, communications and technology, and professional services and other expenses also decreased in 2002, reflecting the continued impact of expense-reduction initiatives first implemented

⁽¹⁾ The equities principal strategies business includes equity arbitrage, as well as other proprietary trading in convertible bonds and derivatives.

⁽²⁾ The equities product groups include primarily customer-driven activities in our shares, convertible bonds and derivatives businesses.

in 2001, reduced employment levels and lower levels of business activity. Pre-tax earnings of \$2.14 billion in 2002 decreased 5% compared with 2001.

ASSET MANAGEMENT AND SECURITIES SERVICES

Our Asset Management and Securities Services segment is divided into two components:

- **ASSET MANAGEMENT** – Asset Management provides investment advisory and financial planning

services to a diverse client base of institutions and individuals and generates revenues in the form of management and incentive fees.

- **SECURITIES SERVICES** – Securities Services includes prime brokerage, financing services and securities lending, all of which generate revenues primarily in the form of interest rate spreads or fees.

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		
	2003	2002	2001
Asset Management	\$1,853	\$1,653	\$1,473
Securities Services	1,005	856	932
Total net revenues	2,858	2,509	2,405
Operating expenses	1,890	1,562	1,325
Pre-tax earnings	\$ 968	\$ 947	\$1,080

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)	AS OF NOVEMBER 30		
	2003	2002	2001
Money markets	\$ 89	\$108	\$122
Fixed income and currency	115	96	71
Equity	98	86	96
Alternative investments ⁽¹⁾	71	58	62
Total	\$373	\$348	\$351

⁽¹⁾ Includes merchant banking funds, quantitatively driven investment funds and other funds with nontraditional investment strategies 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 ENDED NOVEMBER 30		
	2003	2002	2001
Balance, beginning of year	\$348	\$351	\$294
Net asset (outflows)/inflows	(4)	9	67
Net market appreciation/(depreciation)	29	(12)	(10)
Balance, end of year	\$373	\$348	\$351

The following table sets forth our net asset (outflows)/inflows by asset class:

NET ASSET (OUTFLOWS)/INFLOWS BY ASSET CLASS

(IN BILLIONS)	YEAR ENDED NOVEMBER 30		
	2003 ⁽¹⁾⁽²⁾	2002	2001
Money markets	\$ (19)	\$(13)	\$52
Fixed income and currency	10	18	7
Equity	(1)	6	3
Alternative investments	6	(2)	5
Total non-money markets	15	22	15
Total net asset (outflows)/inflows	\$ (4)	\$ 9	\$67

⁽¹⁾ Includes \$4 billion in non-money market assets acquired in our combination with Ayco.

⁽²⁾ Includes \$16 billion in non-money market net asset outflows resulting from British Coal Pension Schemes' planned program of diversification among its asset managers.

2003 VERSUS 2002 – Net revenues in Asset Management and Securities Services of \$2.86 billion for 2003 increased 14% compared with 2002. Asset Management net revenues of \$1.85 billion increased 12% compared with last year, primarily reflecting an increase in average assets under management, the contribution from Ayco and increased incentive income. During 2003, assets under management increased 7% to \$373 billion, reflecting market appreciation of \$29 billion in equity, fixed income and alternative investment assets. Net asset outflows for the year were \$4 billion, primarily reflecting net outflows in money market assets, partially offset by net inflows in fixed income assets and alternative investments. Net asset outflows for the year included \$16 billion in net outflows related to British Coal Pension Schemes' planned program of diversification among its asset managers and \$4 billion in inflows acquired from Ayco. Securities Services net revenues of \$1.01 billion for 2003 increased 17% compared with 2002, primarily reflecting higher customer balances in our securities lending and margin lending businesses.

Operating expenses were \$1.89 billion in 2003, 21% higher than 2002, primarily due to increased compensation and benefits expenses resulting from higher discretionary compensation. Operating expenses also increased due to our combination with Ayco, higher professional services and other expenses, and increased occupancy expenses, primarily related to exit costs associated with reductions in our global office space. Pre-tax earnings of \$968 million in 2003 increased 2% compared with 2002.

2002 VERSUS 2001 – Net revenues in Asset Management and Securities Services of \$2.51 billion for 2002 increased 4% compared with 2001. Asset Management net revenues of \$1.65 billion increased 12% compared with 2001, 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 of \$856 million for 2002 decreased 8% compared with 2001, primarily reflecting lower net revenues in our margin lending business.

Operating expenses were \$1.56 billion in 2002, 18% higher than 2001, primarily due to increased compensation and benefits expenses, higher professional services and other, occupancy and depreciation and amortization expenses, partially offset by the elimination of goodwill amortization. Pre-tax earnings of \$947 million in 2002 decreased 12% compared with 2001.

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.

OFF-BALANCE-SHEET ARRANGEMENTS

We have various types of off-balance-sheet arrangements that we enter into in the ordinary course of business. We enter into nonderivative guarantees, hold retained or contingent interests in assets transferred by us to nonconsolidated entities, and incur obligations arising out of variable interests we have in nonconsolidated entities, for a variety of business purposes, including securitizing commercial and residential mortgages and home equity loans, government and corporate bonds, and other types of financial assets. Variable interest entities (VIEs) and, to a greater extent, qualifying special-purpose entities (QSPEs) are utilized in the securitization process. VIEs and QSPEs 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.

Other reasons for entering into these arrangements include underwriting client securitization transactions; providing secondary market liquidity; making principal

investments in performing and nonperforming debt, real estate and other assets; providing investors with credit-linked and asset-repackaged notes; receiving or posting collateral under derivative and other margin agreements; and facilitating the clearance and settlement process.

Our involvement in these arrangements can take many different forms, including purchasing and retaining residual and other interests in mortgage-backed and asset-backed securitization vehicles; holding senior and subordinated debt, limited and general partnership interests, and preferred and common stock; entering into interest rate, foreign currency, equity, commodity and credit derivatives; and providing guarantees, indemnifications, letters of credit, representations and warranties.

Our financial interests in, and derivative transactions with, nonconsolidated entities are accounted for at fair value, in the same manner as our other financial instruments, except in cases where we exert significant influence over an entity and apply the equity method of accounting.

Our other types of off-balance-sheet arrangements include derivative transactions, leases, letters of credit, and loan and other commitments. The following table sets forth where a discussion of these and other off-balance-sheet arrangements may be found in this Annual Report:

Type of Off-Balance-Sheet Arrangement	Disclosure in Annual Report
Nonderivative guarantees	See Note 6 to the consolidated financial statements.
Retained interests or contingent interests in assets transferred by us to nonconsolidated entities	See Note 3 to the consolidated financial statements.
Other obligations, including contingent obligations, arising out of variable interests we have in nonconsolidated entities	See Note 3 to the consolidated financial statements.
Derivative contracts	See "—Critical Accounting Policies" and "—Risk Management" and Note 3 to the consolidated financial statements.
Leases, letters of credit, and loans and other commitments	See "—Capital and Funding" and Note 6 to the consolidated financial statements.

In addition, see Note 2 to the consolidated financial statements for a discussion of our consolidation policies.

CAPITAL AND FUNDING

Capital

The amount of capital we hold is principally determined by subsidiary capital requirements, rating agency guidelines, and the size and composition of our balance sheet. Goldman Sachs' total capital increased 37% to \$79.11 billion as of November 2003 compared with \$57.71 billion as of November 2002. See "—Risk Management—Liquidity Risk—Cash Flows" for a discussion of how we deployed capital raised as part of our financing activities.

The increase in total capital resulted primarily from an increase in long-term borrowings to \$57.48 billion as of November 2003 from \$38.71 billion as of November 2002. The weighted average maturity of our long-term borrowings as of November 2003 was approximately 6 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 14% to \$21.63 billion as of November 2003 from \$19.00 billion as of November 2002. During 2003, we repurchased 12.2 million shares of our common stock. The principal purpose of our stock repurchase program is to substantially offset increases in share count over time resulting from employee equity-based compensation. The repurchase program has been effected through regular open-market purchases, the sizes of which have been and will continue to be influenced by, among other factors, prevailing prices and market conditions. As of November 2003, we were authorized to repurchase up to 8.6 million additional shares of common stock pursuant to our common stock repurchase program. The average price paid per share for repurchased shares was \$76.83, \$76.49 and \$88.22 for the years ended November 2003, November 2002 and November 2001, respectively. For additional information on our share repurchase program, see "Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities" in our Annual Report on Form 10-K for our 2003 fiscal year.

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

(\$ IN MILLIONS, EXCEPT PER SHARE AMOUNTS)	AS OF NOVEMBER	
	2003	2002
Total assets	\$403,799	\$355,574
Adjusted assets ⁽¹⁾	273,941	215,547
Shareholders' equity	21,632	19,003
Tangible shareholders' equity ⁽²⁾	16,650	14,164
Leverage ratio ⁽³⁾	18.7x	18.7x
Adjusted leverage ratio ⁽⁴⁾	16.5x	15.2x
Book value per share ⁽⁵⁾	\$ 43.60	\$ 38.69
Tangible book value per share ⁽⁶⁾	33.56	28.84

⁽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:

(IN MILLIONS)	AS OF NOVEMBER	
	2003	2002
Total assets	\$ 403,799	\$ 355,574
Deduct: Securities purchased under agreements to resell	(26,856)	(45,772)
Securities borrowed	(129,118)	(113,579)
Add: Financial instruments sold, but not yet purchased, at fair value (excluding derivatives)	60,813	44,552
Deduct: Cash and securities segregated in compliance with U.S. federal and other regulations	(29,715)	(20,389)
Goodwill and identifiable intangible assets	(4,982)	(4,839)
Adjusted assets	\$ 273,941	\$ 215,547

⁽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:

(IN MILLIONS)	AS OF NOVEMBER	
	2003	2002
Shareholders' equity	\$21,632	\$19,003
Deduct: Goodwill and identifiable intangible assets	(4,982)	(4,839)
Tangible shareholders' equity	\$16,650	\$14,164

⁽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 496.1 million as of November 2003 and 491.2 million as of November 2002.

⁽⁶⁾ Tangible book value per share is computed by dividing tangible shareholders' equity by the number of common shares outstanding, including restricted stock units granted to employees with no future service requirements.

Short-Term Borrowings

Goldman Sachs 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 and certain long-term borrowings that may be payable within one year at the option of the holder.

The following table sets forth our short-term borrowings:

SHORT-TERM BORROWINGS

(IN MILLIONS)	AS OF NOVEMBER	
	2003	2002
Promissory notes	\$24,119	\$20,433
Commercial paper	4,767	9,463
Bank loans and other	8,183	4,948
Current portion of long-term borrowings	7,133	5,794
Total	\$44,202	\$40,638

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 (short-term unsecured debt that is nontransferable and in which Goldman Sachs does not make a market) and commercial paper have no obligation to purchase new instruments when the outstanding instruments mature. See “—Risk Management—Liquidity Risk” for a discussion of the liquidity policies we have in place to manage the liquidity risk associated with our short-term borrowings. For a discussion of factors that could impair our ability to access these and other markets, see “—Certain Factors That May Affect Our Business.” See Note 4 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 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. See “—Certain Factors That May Affect Our Business” for a discussion of the risks associated with a reduction in our credit ratings.

The following table sets forth our credit ratings as of November 2003:

	SHORT-TERM DEBT	LONG-TERM DEBT
Dominion Bond Rating		
Service Limited	R-1 (middle)	A (high)
Fitch	F1+	AA-
Moody's Investors Service	P-1	Aa3
Standard & Poor's	A-1	A+

As of November 2003, collateral of \$220 million 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. In evaluating our liquidity requirements, we consider additional collateral that could be called in the event of further reductions in our long-term credit ratings, as well as collateral that has not been called by counterparties, but is available to them. For a further discussion of our excess liquidity policies, see “—Risk Management—Liquidity Risk—Excess Liquidity Policies—Maintenance of a Pool of Highly Liquid Securities.”

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.

See Note 6 to the consolidated financial statements for further information regarding our commitments, contingencies and guarantees.

The following table sets forth our contractual obligations as of November 2003:

CONTRACTUAL OBLIGATIONS

(IN MILLIONS)	2004	2005-2006	2007-2008	2009-THEREAFTER	TOTAL
Long-term borrowings by contract maturity ⁽¹⁾⁽²⁾	\$ —	\$20,161	\$7,489	\$29,832	\$57,482
Minimum rental payments	422	688	592	2,220	3,922

⁽¹⁾ Long-term borrowings maturing within one year and certain long-term borrowings that may be redeemable within one year at the option of the holder are included as short-term borrowings in the consolidated statements of financial condition.

⁽²⁾ Long-term borrowings redeemable at the option of Goldman Sachs are reflected at their contractual maturity dates. Certain long-term borrowings redeemable prior to maturity at the option of the holder are reflected at the date such options first become exercisable.

As of November 2003, our long-term borrowings were \$57.48 billion. Substantially all of our long-term borrowings were unsecured and consisted principally of senior borrowings with maturities extending to 2033. As of November 2003, long-term borrowings included non-recourse debt of \$5.4 billion, consisting of \$3.2 billion issued during the year by William Street Funding Corporation (Funding Corp) (a wholly owned subsidiary of The Goldman Sachs Group, Inc. (Group Inc.) formed to raise funding to support loan commitments made by another wholly owned William Street entity to investment-grade clients), \$1.6 billion issued by consolidated VIEs and \$0.6 billion issued by other consolidated entities, primarily associated with our ownership of East Coast Power L.L.C. Nonrecourse debt is debt that Group Inc. is not directly or indirectly obligated to repay through a guarantee, general partnership interest or contractual arrangement. See Note 3 and Note 5, respectively, to the consolidated financial statements for further information regarding financial instruments, including VIEs, and our long-term borrowings.

As of November 2003, our future minimum rental payments, net of minimum sublease rentals, under non-cancelable leases were \$3.92 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. This excess space, the cost of which is charged to earnings as incurred, is being held for potential growth or to replace currently occupied space that we may exit in the future. We continually evaluate our current and future space capacity in relation to current and projected future staffing levels. In 2003, we reduced our global office space and incurred exit costs of \$153 million. We may incur additional exit costs in 2004 and thereafter to the extent we (i) further reduce our capacity or (ii) commit to new properties in the locations in which we operate and, consequently, dispose of existing space that had been held for potential growth. Such exit costs may be material to our results of operations in a given period.

The following table sets forth our contingent commitments as of November 2003:

CONTINGENT COMMITMENTS

(IN MILLIONS)	COMMITMENT AMOUNT BY PERIOD OF EXPIRATION				TOTAL
	2004	2005-2006	2007-2008	2009-THEREAFTER	
Commitments to extend credit	\$ 8,276	\$1,814	\$2,087	\$3,653	\$15,830
Commitments under letters of credit issued by banks to counterparties	12,451	14	2	132	12,599
Other commercial commitments ⁽¹⁾	249	645	408	420	1,722
Total	\$20,976	\$2,473	\$2,497	\$4,205	\$30,151

⁽¹⁾ Includes our corporate and real estate investment fund commitments, construction-related obligations and other purchase commitments.

Our commitments to extend credit are agreements to lend to counterparties that have fixed termination dates and are 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. As of November 2003, \$4.32 billion of our outstanding commitments have been issued through the William Street credit extension program. Substantially all of the credit risk associated with these commitments has been hedged through credit loss protection provided by SMFG. We have also hedged the credit risk of certain non-William Street commitments using a variety of other financial instruments. See Note 6 to the consolidated financial statements for further information regarding our commitments, contingencies and guarantees.

As of November 2003, we had commitments to enter into forward secured financing transactions, including certain repurchase and resale agreements and secured borrowing and lending arrangements, of \$35.25 billion.

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 SEC, the Commodity Futures Trading Commission, the Chicago Board of Trade, the NYSE, the National Association of Securities Dealers, Inc. and the National Futures Association. 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 Securities Trading Supervisory Authority (BaFin) and the Bundesbank in Germany, the Autorité des Marchés Financiers and Banque de France in France, the Commissione Nazionale per le Società e la Borsa (CONSOB) in Italy and the Swiss Federal Banking Commission, the Securities and Futures Commission in Hong Kong and the Monetary Authority of Singapore. See Note 14 to the consolidated financial statements for further information regarding our

regulated subsidiaries. For a discussion of our potential inability to access funds from our regulated entities, see “—Risk Management—Liquidity Risk—Asset-Liability Management Policies—Subsidiary Funding and Foreign Exchange Policies.”

RISK MANAGEMENT

Management believes that effective risk management is of primary importance to the success of Goldman Sachs. Accordingly, we have a comprehensive risk management process to monitor, evaluate and manage the principal risks we assume in conducting our activities. These risks include market, credit, liquidity, operational, legal and reputational 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. In addition, a number of committees are responsible for monitoring risk exposures and for general oversight of our risk management process. These committees, whose responsibilities as of 2004 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 our Management Committee. Through both direct and delegated authority, the Management Committee approves all of our 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 firmwide and divisional market risk limits, reviews business unit market risk limits, approves market risk limits for selected emerging markets and business units, approves sovereign credit risk limits and credit risk limits by ratings group, and reviews scenario analyses based on abnormal or “catastrophic” market movements.

The Divisional Risk Committee sets market risk limits, subject to overall firmwide risk limits, for both FICC and Equities based on a number of measures, including Value-at-Risk (VaR), scenario analyses and inventory levels. In our asset management business, the Control Oversight Committee, the Investment Policy Group and the Valuation Committee oversee various operational, credit, pricing and business practice issues.

CAPITAL COMMITTEE – The Capital Committee reviews and approves transactions involving commitments of our capital. Such capital commitments include extensions of credit, alternative liquidity commitments, certain bond underwritings, certain distressed debt and principal finance activities, and certain equity block trades. 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 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.

BUSINESS PRACTICES COMMITTEE – The Business Practices Committee assists management in its oversight of our compliance and operational risk and related reputational issues, and ensures that policies and practices are implemented in accordance with our business principles.

STRUCTURED PRODUCTS REVIEW COMMITTEE – The Structured Products Committee reviews and approves structured transactions that raise legal, regulatory, tax or accounting issues, or present other reputational risks.

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 establishes and assures compliance with our liquidity policies, sets certain inventory position limits 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.

Segregation of duties and management oversight are fundamental elements of our risk management process. In addition to the committees described above, divisions

that are independent of the revenue-producing units, such as Compliance, Finance, Legal, Management Controls (Internal Audit) and Operations, in part perform risk management functions, which include monitoring, analyzing and evaluating risk.

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. 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.

Market risk limits are monitored on a daily basis by the Finance Division, and are reviewed regularly by the appropriate risk committee. Limit violations are reported to the appropriate risk committee and the appropriate business unit managers. Selected business unit inventory position limits are also monitored by the Finance Division 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 and investing positions is referred to as “market risk.” Such positions result from underwriting, market-making, specialist and proprietary trading and investing 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:

- 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.
- 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.
- Currency rate risks result from exposures to changes in spot prices, forward prices and volatilities of currency rates.
- Equity price risks result from exposures to changes in prices and volatilities of individual equities, equity baskets and equity indices.

We seek to manage these risks 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;
- scenario analyses, stress tests and other analytical tools that measure the potential effects on our trading net revenues of various market events, including, but not limited to, a large widening of credit spreads, a substantial decline in equities markets and significant moves in selected emerging markets; and
- inventory position limits for selected business units.

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 1 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. Changes in VaR between reporting periods are generally due to changes in levels of exposure, volatilities and/or correlations among asset classes.

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

AVERAGE DAILY VaR⁽¹⁾

(IN MILLIONS)

RISK CATEGORIES	YEAR ENDED NOVEMBER		
	2003	2002	2001
Interest rates	\$ 38	\$ 34	\$ 20
Equity prices	27	22	20
Currency rates	18	16	15
Commodity prices	18	12	9
Diversification effect ⁽²⁾	(43)	(38)	(25)
Firmwide	\$ 58	\$ 46	\$ 39

Our average daily VaR increased to \$58 million in 2003 from \$46 million in 2002. The increase was due to higher levels of exposure in all product categories, partially offset by reduced measured volatilities, particularly in equity assets. The increase in average daily VaR to \$46 million

in 2002 from \$39 million in 2001 was primarily attributable to an increase in interest rate risk in response to higher levels of customer activity and increased market opportunities.

DAILY VaR⁽¹⁾

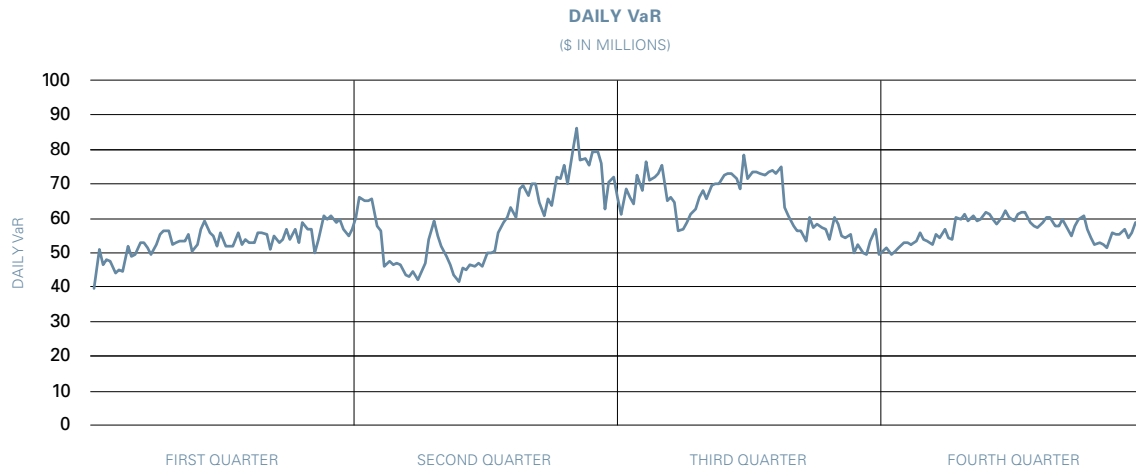
(IN MILLIONS)

RISK CATEGORIES	AS OF NOVEMBER		YEAR ENDED NOVEMBER 2003	
	2003	2002	HIGH	LOW
Interest rates	\$ 35	\$ 29	\$64	\$25
Equity prices	33	33	38	21
Currency rates	24	9	38	4
Commodity prices	11	14	27	11
Diversification effect ⁽²⁾	(40)	(44)		
Firmwide	\$ 63	\$ 41	86	40

⁽¹⁾ During the fourth quarter of 2003, we made certain changes to our model for calculating VaR. The effect of these changes was not material and accordingly, prior periods have not been adjusted.

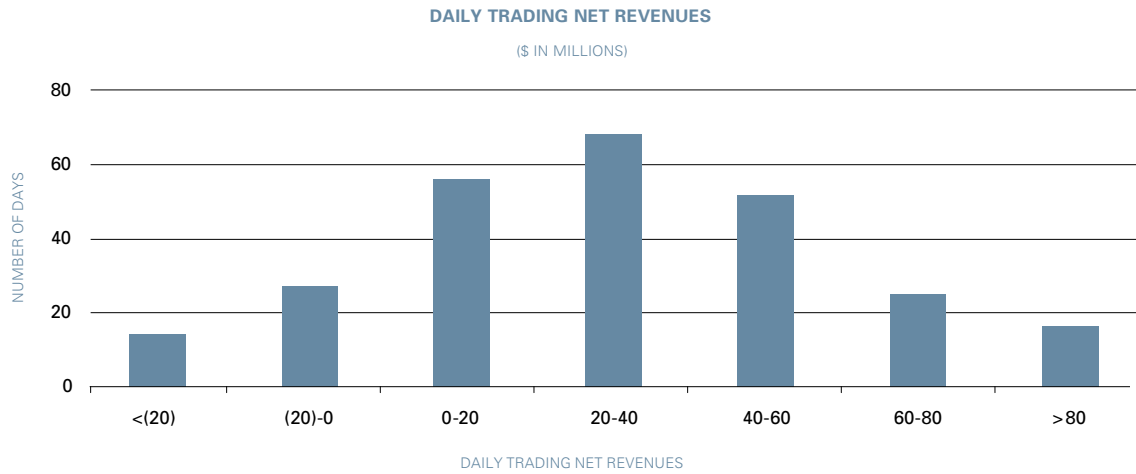
⁽²⁾ Equals the difference between firmwide VaR and the sum of the VaRs for the four risk categories. This effect arises because the four market risk categories are not perfectly correlated.

The following chart presents the daily VaR for substantially all of our trading positions during 2003:



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 2003:



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 did not exceed our 95% one-day VaR during 2003.

NONTRADING RISK

The market risk for financial instruments in our non-trading portfolio, including our merchant banking investments but excluding our investment in the convertible preferred stock of SMFG, 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 stock price indices and changes in the fair value of the individual financial instruments in our non-trading portfolio. Different assumptions could produce materially different risk estimates. As of November 2003, the sensitivity of our nontrading portfolio (excluding our investment in the convertible preferred stock of SMFG) to a 10% equity market decline was \$104 million compared with \$80 million as of November 2002, primarily reflecting an increase in the carrying value of the portfolio.

The market risk of our investment in the convertible preferred stock of SMFG is measured using a sensitivity analysis that estimates the potential reduction in our net revenues associated with a 10% decline in the SMFG common stock price. As of November 2003, the sensitivity of our investment to a 10% decline in the SMFG common stock price was \$75 million. This sensitivity should not be extrapolated to other movements in the SMFG common stock price, as the relationship between the fair value of our investment and the SMFG common stock price is nonlinear.

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 collateral received. 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.

As of both November 2003 and November 2002, we held U.S. government and federal agency obligations that represented 6% of our total assets. In addition, most of our securities purchased under agreements to resell are collateralized by U.S. government, federal agency and other sovereign obligations. As of November 2003 and November 2002, we did not have credit exposure to any other counterparty that exceeded 5% of our total assets. However, over the past several years, the amount and duration of our credit exposures have been increasing, due to, among other factors, the growth of our lending and OTC derivatives activities. A further discussion of our derivative activities follows below.

Derivatives

Derivative contracts are 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, currency and equity-linked 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 when 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 2003, 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	\$ 2,991	\$ 144	\$ 2,847	8%
AA/Aa2	8,980	803	8,177	23
A/A2	17,048	2,126	14,922	43
BBB/Baa2	6,421	1,033	5,388	15
BB/Ba2 or lower	4,251	822	3,429	10
Unrated ⁽¹⁾	860	479	381	1
Total	\$40,551	\$5,407	\$35,144	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	\$ 315	\$ 113	\$1,229	\$ 560	\$ 630	\$ 2,847
AA/Aa2	2,198	412	2,566	1,605	1,396	8,177
A/A2	3,105	1,032	2,585	1,167	7,033	14,922
BBB/Baa2	1,874	539	1,556	1,128	291	5,388
BB/Ba2 or lower	1,022	255	1,291	624	237	3,429
Unrated ⁽¹⁾	142	70	109	58	2	381
Total	\$8,656	\$2,421	\$9,336	\$5,142	\$9,589	\$35,144

CONTRACT TYPE	0-6 MONTHS	6-12 MONTHS	1-5 YEARS	5-10 YEARS	10 YEARS OR GREATER	TOTAL ⁽³⁾
Interest rates	\$1,323	\$ 80	\$3,250	\$2,494	\$8,411	\$15,558
Currencies	4,948	1,148	3,934	1,829	898	12,757
Commodities	1,456	586	1,522	476	148	4,188
Equities	929	607	630	343	132	2,641
Total	\$8,656	\$2,421	\$9,336	\$5,142	\$9,589	\$35,144

⁽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 significant 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.

Derivative transactions may also involve legal risks including, among other risks, 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.

Liquidity Risk

Liquidity (i.e., ready access to funds) 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 grow and generate revenue by providing services to our clients, even under adverse circumstances.

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

- During a liquidity crisis, credit-sensitive funding, including unsecured debt and some types of secured financing agreements, may be unavailable and the terms or availability of other types of secured financing may change.
- Focus must be maintained on all potential cash outflows, not just disruptions to financing flows. Goldman Sachs' businesses are diverse, and its cash needs are driven by many factors, including market movements, collateral requirements, client commitments and market-making requirements, all of which can change dramatically in a difficult environment.
- The first days or weeks of a liquidity crisis are the most critical to a company's survival.
- 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 its parent company.

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

EXCESS LIQUIDITY POLICIES

MAINTENANCE OF A POOL OF HIGHLY LIQUID SECURITIES –

Our most important liquidity policy is to pre-fund what we estimate will be our likely cash needs during a liquidity crisis and hold such excess liquidity in the form of unencumbered, highly liquid securities that may be sold or pledged to provide same-day liquidity. This "Global Core Excess" 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. We believe that this pre-funded pool of excess liquidity provides us with a reliable source of funds and gives us significant flexibility in managing through a difficult funding environment.

The loan value (the estimated amount of cash that would be advanced by counterparties against securities we own) of our Global Core Excess liquidity averaged \$38.46 billion⁽¹⁾ in 2003 and \$36.29 billion in 2002. The loan value of the U.S. dollar-denominated component of our Global Core Excess liquidity averaged \$32.22 billion in 2003 and \$28.66 billion in 2002. The U.S. dollar-denominated component includes overnight cash deposits and Federal Reserve repo-eligible securities, including unencumbered U.S. government and agency securities and highly liquid mortgage securities, of which overnight cash deposits and U.S. Treasuries, on average, comprised 95%. Our Global Core Excess liquidity also includes unencumbered French, German, United Kingdom and Japanese government bonds and non-U.S. dollar overnight cash deposits. The aggregate loan value of our non-U.S. dollar-denominated Global Core Excess liquidity averaged \$6.24 billion in 2003 and \$7.63 billion in 2002.

The size of our Global Core Excess liquidity is determined by an internal liquidity model together with a qualitative assessment of the condition of the financial markets and of Goldman Sachs. Our liquidity model identifies and estimates cash and collateral outflows over a short-term horizon in a liquidity crisis, including, but not limited to:

- upcoming maturities of unsecured debt;
- potential buybacks of a portion of our outstanding negotiable unsecured debt;
- adverse changes in the terms or availability of secured funding;
- collateral outflows, assuming that collateral that has not been called by counterparties, but is available to them, will be called and all counterparties

⁽¹⁾ The Global Core Excess liquidity excludes liquid assets that Funding Corp holds separately to support the William Street credit extension program.

that can call collateral through marking transactions to market will do so continually;

- additional collateral that could be called in the event of a downgrade in our debt ratings;
- draws on our unfunded commitments not supported by our William Street credit extension program⁽¹⁾; and
- upcoming cash outflows, such as tax and bonus payments.

As a result of our policy to pre-fund liquidity that we estimate may be needed in a crisis, we hold more unencumbered securities and larger unsecured debt balances than our business would otherwise require.

OTHER UNENCUMBERED ASSETS – In addition to our Global Core Excess liquidity described above, we have a significant amount of other unencumbered securities as a result of our business activities. These assets, which are located in the United States, Europe and Asia, include other government bonds, high-grade money market securities, corporate bonds and marginable equities.

Our policy is to maintain Global Core Excess liquidity and other unencumbered assets in an amount that, if pledged or sold, would provide the funds necessary to replace at least 100% of our unsecured obligations that are scheduled to mature (or where holders have the option to redeem) within the next twelve months. This policy is intended to ensure that we could fund our positions on a secured basis for one year in the event we were unable to issue new unsecured debt or liquidate assets. To determine the amount of unencumbered assets required, we assume conservative loan values that are based on stress-scenario borrowing capacity. We review these assumptions asset-by-asset at least annually. The estimated aggregate loan value of our Global Core Excess liquidity and our other unencumbered assets averaged \$76.42 billion in 2003 and \$68.55 billion in 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 committed 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 and substantially all of our inventory is marked-to-market daily. Many of our assets are readily funded in the repurchase agreement and securities lending markets.

⁽¹⁾ The Global Core Excess liquidity excludes liquid assets that Funding Corp holds separately to support the William Street credit extension program.

Our balance sheet fluctuates significantly between financial statement dates and is lower at fiscal period 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 14% 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 – We seek to maintain total capital (long-term borrowings plus shareholders' equity) substantially in excess of the aggregate of the following long-term financing requirements:

- the portion of financial instruments owned that we believe could not be funded on a secured basis in periods of market stress;
- goodwill and identifiable intangible assets, property, leasehold improvements and equipment, and other illiquid assets;
- derivatives margin requirements and collateral outflows; and
- anticipated draws on our unfunded commitments, including the William Street credit extension program.

Our total capital of \$79.11 billion and \$57.71 billion as of November 2003 and November 2002, respectively, substantially exceeded these requirements.

We assume conservative loan values when we estimate the portion of a financial instrument that we believe could not be funded on a secured basis in a stress scenario. Certain financial instruments that may be difficult to fund on a secured basis during times of market stress, such as certain mortgage whole loans, mortgage-backed

securities, bank loans and high-yield securities, generally require higher levels of unsecured long-term financing than more liquid types of financial instruments, such as U.S. government and agency securities. See Note 3 to the consolidated financial statements for information on the financial instruments we hold and Note 10 to the consolidated financial statements for further information regarding other assets.

While Goldman Sachs generally does not rely on immediate sales of assets (other than from our Global Core Excess liquidity) 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.

DIVERSIFICATION OF FUNDING SOURCES – Goldman Sachs seeks to maintain broad and diversified funding sources globally. We have imposed various internal guidelines, including the amount of our commercial paper that can be owned and letters of credit that can be issued by any single investor or group of investors. We benefit from distributing our debt issuances through our own sales force to a large, diverse global creditor base, including insurance companies, mutual funds, banks, bank trust departments, corporations, individuals and other asset managers. 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. We emphasize the use of promissory notes (short-term unsecured debt that is nontransferable and in which Goldman Sachs does not make a market) over commercial paper in order to improve the stability of our unsecured financing base.

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 – Substantially all of our unsecured funding is raised by our parent company, Group Inc. The parent company then lends the necessary funds to its subsidiaries, some of which are regulated, to meet their asset financing requirements. The benefits of this strategy include enhanced control and greater flexibility to meet the funding requirements of our subsidiaries.

We recognize that regulatory and other legal restrictions may limit the free flow of funds from subsidiaries where assets are held, to the parent company, or other subsidiaries. In particular, many of our subsidiaries 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. Group Inc. has substantial amounts of equity and subordinated indebtedness invested, directly or indirectly, in its regulated subsidiaries; for example, as of November 2003, Group Inc. had \$12.79 billion of such equity and subordinated indebtedness invested in Goldman, Sachs & Co., its principal U.S. regulated broker-dealer, \$8.58 billion invested in Goldman Sachs International, a registered U.K. broker-dealer, \$2.30 billion invested in Spear, Leeds & Kellogg, L.P., a U.S. regulated broker-dealer, and \$1.91 billion invested in Goldman Sachs (Japan) Limited, a Tokyo-based broker-dealer. Group Inc. also had \$39.98 billion of unsubordinated loans to these entities as of November 2003, as well as significant amounts of capital invested in and loans to its other regulated subsidiaries.

Because of these restrictions, we manage our intercompany exposure by generally requiring senior and subordinated 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 borrowings. In addition, many of our subsidiaries and affiliates pledge collateral at loan value to the parent company to cover their intercompany borrowings (other than subordinated debt) in order to mitigate parent company liquidity risk. Equity investments in subsidiaries are generally funded with parent company equity capital. As of November 2003, Group Inc.'s equity investment in subsidiaries was \$20.62 billion compared with its shareholders' equity of \$21.63 billion.

Our capital invested in non-U.S. subsidiaries is generally exposed to foreign exchange risk, substantially all of which is hedged. In addition, we generally hedge the non-trading exposure to foreign exchange risk that arises from transactions denominated in currencies other than the transacting entity's functional currency.

LIQUIDITY CRISIS PLAN

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.

CASH FLOWS

As a global financial institution, our cash flows are complex and interrelated and bear little relation to our net earnings and net assets and, consequently, we believe that traditional cash flow analysis is less meaningful in evaluating our liquidity position than the excess liquidity and asset-liability management policies described above. Cash flow analysis may, however, be helpful in highlighting certain macro trends and strategic initiatives in our business. A further discussion of our cash flows follows.

YEAR ENDED NOVEMBER 2003 – Our cash and cash equivalents increased by \$2.27 billion to \$7.09 billion at the end of 2003. We raised \$20.58 billion in net cash from financing activities, primarily in long-term debt. We used net cash of \$18.32 billion in our operating and investing activities primarily to capitalize on opportunities in our trading and principal investing businesses, including the purchase of investments that could be difficult to fund in periods of market stress. We also increased our Global Core Excess liquidity, provided funding support for our William Street loan commitments program, invested in the convertible preferred stock of SMFG and financed the acquisition of East Coast Power L.L.C.

YEAR ENDED NOVEMBER 2002 – Our cash and cash equivalents decreased by \$2.09 billion to \$4.82 billion at the end of 2002. We raised \$9.09 billion in net cash from financing activities, primarily in net short-term debt and long-term debt (net of repayments of long-term debt). We used net cash of \$11.18 billion in our operating and investing activities, primarily to capitalize on opportunities in our trading and principal investing businesses, including the purchase of investments that could be difficult to fund in periods of market stress. We also increased our Global Core Excess liquidity, made leasehold

improvements, and purchased telecommunications and technology-related equipment.

YEAR ENDED NOVEMBER 2001 – Our cash and cash equivalents increased by \$3.04 billion to \$6.91 billion at the end of 2001. We raised net cash of \$2.08 billion from financing activities, primarily from long-term debt issuances (net of repayments of long-term debt) and net short-term borrowings, partially offset by common stock repurchased. Net cash of \$2.87 billion was provided from our operating activities. We used net cash of \$1.91 billion in our investing activities, primarily to make leasehold improvements and to purchase technology-related equipment.

Operational Risks

Operational risk is a broad concept that relates to the risk of loss arising from shortcomings or failures in internal processes, people or systems. Operational risk can arise from many factors ranging from more or less “routine” processing errors to potentially costly incidents arising, for example, from major systems failures. Operational risk may also entail reputational harm. Thus, efforts to identify, manage and mitigate operational risk must be equally sensitive to the risk of reputational damage as well as the risk of financial loss.

We manage operational risk through the application of long standing, but continuously evolving, firmwide control standards; the training, supervision and development of our people; the active participation and commitment of senior management in a continuous process of identifying and mitigating key operational risks at both the business unit level and for the firm as a whole and a framework of strong and independent control departments that monitor quantitative and qualitative indicators of operational risk. Together, these elements comprise a strong firmwide control culture that is at the center of our efforts aimed at minimizing operational shortcomings and the damage they can cause.

The Operational Risk Management Department is responsible for the oversight and coordination of the design, implementation and maintenance of our overall operational risk management framework. This framework, which evolves with the changing needs of business complexities and regulatory guidance, takes into account internal and external operational risk events, business unit specific risk assessments, the ongoing analysis of business specific risk metrics and the use of scenario analyses. While the direct responsibility for the control and mitigation of operational risk lies with the individual business units, this framework provides a consistent methodology for identifying and monitoring operational risk factors for both individual business unit managers and senior management.

RECENT ACCOUNTING DEVELOPMENTS

In June 2002, the Financial Accounting Standards Board (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. Adoption of this statement did not have a material effect on our financial condition, results of operations or cash flows.

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 were effective beginning with our first fiscal quarter in 2003. Adoption of the recognition and measurement provisions did not 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 which 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 adopted the provisions of EITF Issue No. 02-3 related to energy-trading contracts as of the beginning of the first quarter of fiscal 2003, and the effect of adoption was not material to our financial condition, results of operations or cash flows. EITF Issue No. 02-3 also communicates the FASB staff's view that the transaction price for a derivative contract is the best information available to estimate fair value at the inception of a contract when the estimate is not based on other observable market data. The application of the FASB staff's view did not have a material effect on our financial condition, results of operations or cash flows.

In December 2002, the FASB issued SFAS No. 148, which amends the disclosure requirements of SFAS No. 123 and provides alternative methods of transition for the adoption of the fair-value method of SFAS No. 123. Effective

for fiscal 2003, we began to account for stock-based employee compensation in accordance with the fair-value method prescribed by SFAS No. 123 using the prospective adoption method. Under this method of adoption, compensation expense is recognized over the relevant service period based on the fair value of stock options and restricted stock units granted for fiscal 2003 and future years. Compensation expense resulting from stock options and restricted stock units granted for the years ended November 2002, November 2001 and prior years was, and continues to be, accounted for under the intrinsic-value-based method prescribed by Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees." Therefore, no compensation expense was, or will be, recognized for those stock options that had no intrinsic value on the date of grant. Adoption of SFAS No. 123 did not have a material effect on our financial condition, results of operations or cash flows.

In January 2003, the FASB issued FIN No. 46, "Consolidation of Variable Interest Entities." In accordance with its original provisions, we adopted FIN No. 46 immediately for all VIEs created after January 31, 2003. For VIEs created before February 1, 2003 (pre-existing VIEs), Goldman Sachs was initially required to adopt FIN No. 46 no later than November 2003. In October 2003, the FASB deferred the effective date of FIN No. 46 for pre-existing VIEs to no later than February 2004 (our first quarter of fiscal 2004). In December 2003, the FASB issued a revision to FIN No. 46 (FIN No. 46-R), which incorporated the October 2003 deferral provisions and clarified and revised the accounting guidance for VIEs. Under its transition provisions, early application of FIN No. 46 or FIN No. 46-R to some or all VIEs was permitted. We applied either FIN No. 46 or FIN No. 46-R to substantially all pre-existing VIEs in which we held a variable interest as of November 2003. All VIEs, regardless of when created, are required to be evaluated under FIN No. 46-R no later than May 2004. The effect of our adoption of FIN No. 46 and the early application of FIN No. 46-R to certain structures was not material to our financial condition, results of operations or cash flows. Management is still evaluating the effect of full adoption of FIN No. 46-R for our second quarter of fiscal 2004, but does not currently expect full adoption to have a material effect on our financial condition, results of operations or cash flows.

In April 2003, the FASB issued SFAS No. 149, "Amendment of Statement 133 on Derivative Instruments and Hedging Activities." SFAS No. 149 amends and clarifies the accounting for derivative instruments, including certain derivative instruments embedded in other contracts, and for hedging activities. In addition, the statement clarifies when a contract is a derivative and when a derivative contains a financing component that warrants special reporting in the statement of cash flows. As required, we adopted SFAS No. 149 prospectively for contracts entered into or modified, and hedging relationships designated, after June 30, 2003. Adoption did not have a material effect on our financial condition, results of operations or cash flows.

In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." SFAS No. 150 establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity and imposes certain additional disclosure requirements. The provisions of SFAS No. 150 are generally effective for financial instruments entered into or modified after May 31,

2003, except for those provisions relating to noncontrolling interests that have been deferred. As required, we adopted the applicable provisions of SFAS No. 150 to all financial instruments at the beginning of our fourth quarter of fiscal 2003. Adoption did not have a material effect on our financial condition, results of operations or cash flows. If the deferred provisions are finalized in their current form, management does not expect adoption to have a material effect on our financial condition, results of operations or cash flows.

In December 2003, the FASB issued SFAS No. 132 (revised 2003), "Employers' Disclosures about Pensions and Other Postretirement Benefits." SFAS No. 132 revises employers' disclosures about pension plans and other postretirement benefits by requiring additional disclosures such as descriptions of the types of plan assets, investment strategies, measurement dates, plan obligations, cash flows and components of net periodic benefit costs recognized during interim periods. The statement does not change the measurement or recognition of the plans. Interim period disclosure is generally effective for our second quarter of 2004. Required annual disclosure is effective for our fiscal year ending 2004.