

St. John's University Undergraduate
Student Managed Investment Fund
Presents:
The Goldman Sachs Group, Inc. (GS)



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Recommendations: Buy 150 shares (Limit Order @ \$215.00)

Share Data:

Price (5/3/07): \$221.56
Shares outstanding: 408.47
Market Cap: 90.50B
Beta: 1.2307
52 Week High: \$226.61
52 Week Low: \$136.79
Corporate credit rating S&P
Short-term Debt: A-1+
Long-term Debt: AA-
Subordinate Debt: A+
Preferred Securities: A

Fundamentals:

P/E (11/30/06): 9.893
Forward P/E, 2007 (E): 10.68
Diluted EPS, 2006: 19.69
Diluted EPS, 2007 (E): 29.98
Dividend Yield: .63%
Last Dividend: (4/30/07) \$0 .35



I. EXECUTIVE SUMMARY

After conducting an analysis on Goldman Sachs Group, Inc. financial statements, business operations and business environment as a whole, we recommend that 200 shares be added to the Student Managed Investment Fund portfolio. We based this decision on a number of factors:

- Increasing corporate activity that will lead to a surge in mergers and acquisitions activities.
- An increase in investment banking services for established companies and companies looking to issue an initial public offering.
- Goldman Sachs has established itself as a leader in the investment banking and securities brokerage industry and has shown that it will continue to grow due to the expansion of global equity markets and the need for new sources of financing for firms considering to buy an interest in other companies or acquire target companies.

II. COMPANY OVERVIEW

Company Overview

The Goldman Sachs Group, Inc. (Group Inc.), a securities brokerage corporation based in Delaware, together with its consolidated subsidiaries (collectively, the firm), is a leading global investment banking, securities and investment management firm that provides a wide range of services worldwide to a substantial and diversified client base that includes corporations, financial institutions, governments, and high-net-worth individuals. The company is recognized for its outstanding service. According to a Fortune's magazine article, Goldman Sachs Group is still among the best of the best, moving upward in rank from 41 to 23. In 2006 the company grossed \$5,613 million from its investment banking fees; \$24,027 million from its Trading and Principal Investment; and \$4,527 million from its Asset Management and Security Service.

The firm's activities include the following business segments:

- ***Investment Banking***- The firm provides a wide range of investment banking services to a diverse group of corporations, financial institutions, investment funds, governments and individuals, mostly high-net-worth individuals.
- ***Trading and Principal Investments***- The firm facilitates client transactions with a diverse group of corporations, financial institutions, investment funds, governments and individuals and takes proprietary positions through market making in, trading of and investing in fixed income and equity products, currencies, commodities and derivatives on these products. In addition, the firm engages in specialist and market-making activities on equities and options exchanges and clears client transactions on major stock, options and futures

exchanges worldwide. In connection with the firm's merchant banking and other investing activities, the firm makes principal investments directly and through funds that the firm raises and manages.

- ***Asset Management and Securities Services***- The firm provides investment advisory and financial planning services and offers investment products (primarily through separate accounts and funds) across all major asset classes to a diverse group of institutions and individuals worldwide and provides prime brokerage services, financing services and securities lending services to institutional clients, including hedge funds, mutual funds, pension funds and foundations, and to high-net-worth individuals worldwide.

History

German immigrant retailer, Marcus Goldman moved to New York in 1869 and began buying customers' promissory notes from jewelers to resell to bank Goldman's son-in-law came aboard in 1882 and the firm became Goldman, Sachs & Co. in 1885. Two years later Goldman Sachs began offering US-UK foreign exchange and currency services. To serve such clients as Sears, Roebuck, it expanded to Chicago and St. Louis. In 1896 it joined the NYSE. While the firm increased its European contracts, Goldman's son Henry made it a major source of financing for US industry. In 1906 it co-managed its first public offering, United Cigar Manufacturers (later General Cigar). By 1920 it had underwritten IPO's for Sears, B.F. Goodrich, and Merck. Sidney Weinberg made partner in 1927 and stayed until his death in 1969. In the 1930s Goldman Sachs entered securities dealing and sales. After WWII it became a leader in investment banking, co-managing Ford's 1956 IPO. In the 1970s it pioneered buying blocks of stock for resale. Under Weinberg's son John; Goldman Sachs became a leader in mergers and acquisitions. The 1981 purchase of J. Aron gave the firm a significant commodities presence and helped it grow in South America. Seeking capital after 1987's market crash, Goldman Sachs raised more than \$500 million from Sumitomo for a 12% nonvoting interest in the firm (since reduced to 3%). The Kamehameha Schools/Bishop Estate of Hawaii, an educational trust, also invested.

The 1994 bond crash and a decline in new debt issues led Goldman Sachs to cut staffing for the first time since the 1980s. Partners began leaving and taking their equity. Cost cuts, a stronger bond market, and the long bull market helped the firm rebound; firm members sought protection through limited liability partnership status. The firm also extended the period during which partners can cash out and limited the number of people entitled to a share of profits. Overseas growth in 1996 and 1997 focused on the UK and Asia. After three decades of resistance, the partners in 1998 voted to sell the public a minority stake in the firm, but market volatility led to postponement. Goldman Sachs also suffered from involvement with Long-Term Capital Management, ultimately contributing \$300 million to its bailout.

Innovation

The Goldman Sachs Economic Research report, dubbed BRICs (standing for Brazil, Russia, India and China) forecasts that, by 2050, the BRICs economies together could be larger in U.S. dollar terms than the G-6, consisting of the U.S., Germany, Japan, the U.K., France and Italy. By projecting emerging market GDP growth, income per capita and currency movements, the research team forecast a potential global economic realignment with significant implications for international policy-makers and investors.

In June 2003, Goldman Sachs raised its third mezzanine fund GS Mezzanine Partners III (GSMP III), with \$2.7 billion of available capital for investment in leveraged buyout, restructuring and recapitalization opportunities worldwide. The world's largest fund for mezzanine investment, GSMP III is able to target investments of \$40 million to \$200 million, significantly above the limits of traditional mezzanine capital providers. The fund was formed through the collective efforts of Goldman Sachs' Investment Management, Merchant Banking, Fixed Income, Currency and Commodities, and Investment Banking divisions. Since 1996, GS Mezzanine Partners has raised more than \$5 billion across its funds. A mezzanine fund is a fund designed to raise debt and equity capital for the financing of companies looking to expand.

Growth

Goldman Sachs helped Sears divest its credit and financial products business, creating significant shareholder value and substantially improving Sears' credit profile. Serving as Sears' exclusive financial advisor, Goldman Sachs' Investment Banking and Fixed Income professionals worked together to secure a strong buyer for the business. To support Sears during the sales process, the Goldman Sachs team arranged a \$2 billion secured credit facility as interim funding. Goldman Sachs has been advising Sears for over a century, including helping to manage the company's IPO in 1906.

Competitive Strategy

The firm achieves a competitive edge by meeting client expectations. Clients are at the core of Goldman Sachs daily activities, their business strategy and their culture. As the markets evolve and clients see their needs changing, Goldman Sachs people have had to change the manner in which they conduct business with clients. The firm continues to be selected for advice, execution and capital for significant strategic opportunities. However, Goldman Sachs deals with its clients on a more wide and complex basis. Clients may ask Goldman Sachs to create specialized products, finance a transaction or take part in one as a principal. Goldman Sachs flexibility in working with clients according to their specific and individual needs is an important factor in their efforts to grow.

Key Officers and Employees

| | |
|---|-----------------------|
| Chairman and CEO | Lloyd C. Blankfein |
| Co-Head, Global Investment Banking | John S. Weinberg |
| President, Co-COO and Director | Gary D. Cohn |
| President, Co-COO and Director | Jon Winkelried |
| EVP and Chief Administrative Officer | Edward C. Forst |
| EVP and Global Head of Compliance | Alan M. Cohen |
| EVP and CFO | David A. Viniar |
| EVP, General Counsel, Secretary, and Co-Head of the Legal Department | Gregory K. Palm |
| EVP, General Counsel, and Co-Head of the Legal Department | Esta Eiger Stecher |
| EVP, Human Capital Management | Kevin W. Kennedy |
| Chairman, Global Investment Banking | Christopher A. Cole |
| Chairman, Goldman Sachs International | Peter D. Sutherland |
| Co-CEO, Goldman Sachs International | Richard J. Gnodde |
| CEO, Goldman Sachs International | Michael S. Sherwood |
| Head, Global Financing | David M. Solomon |
| Co-Head, Investment Management | Peter S. Kraus |
| Co-Head, Investment Management | Eric S. Schwartz |
| Co-Head, Investment Banking, Russia | Magomed Galaev |
| Head, Merchant Banking | Richard A. Friedman |
| Chief US Investment Strategist Abby | Joseph Cohen |
| Principal Accounting Officer | Sarah E. Smith |
| VP and Head of Experienced Hire Recruiting | Joseph T. (Joe) Mella |
| Executive Director, Hong Kong Helen Zhu | |
| Chairman, Goldman Sachs Asia | J. Michael Evans |
| President, Goldman Sachs Japan | Masanori Mochida |
| Executive Director, Seoul | Kenneth Whee |
| Executive Director, | Taipei Jim Hung |
| Head, European Investment Banking | Yoel Zaoui |
| Managing Director, London | Lachlan Edwards |
| Managing Director, London | Andrew J.O. Wilkinson |

BOARD MEMBERS

| | |
|--------------------------------|------------------------|
| Chairman and CEO | Lloyd C. Blankfein |
| President, Co-COO and Director | Gary D. Cohn |
| President, Co-COO and Director | Jon Winkelried |
| Director | Lord E. John P. Browne |
| Director | John H. Bryan |
| Director | Claes Dahlbäck |
| Director | Stephen Friedman |
| Director | William W. George |
| Director | Rajat Gupta |
| Director | James A. Johnson |
| Director | Lois D. Juliber |
| Director | Edward M. Liddy |
| Director | Ruth J. Simmons |
| Director | Mark Spilker |

III. INDUSTRY ANALYSIS

Sector: Financials

Industry: Investment Banking and Brokerage

Industry Overview (influencing Goldman Sachs)

Goldman Sachs Group, Inc. is one of the leaders in the investment banking and brokerage industry. They have been very successful particularly in the investment banking aspect of the business. Merger and Acquisition activities are booming globally, especially in Brazil, Russia, India, and China (BRIC). This helps increase both Goldman's revenues as well as the industry. In 2006, revenues in the industry exceeded \$700 billion, a 22% increase from 2005. This indicates that in 2007 we would expect revenues to have an increase.

A number of activities especially in the fixed income and M&A aspects of the investment banking division are helping to fuel this increase. In 2006, Bank of China went public by an initial public offering in the Hong Kong Stock Exchange which as a result raised \$11.2 billion in a very fluctuating market environment. Goldman acted as a joint global coordinator and joint global book runner which also initialized an intensive marketing process. As a result, total industry revenues increased because it received a total of more than \$70 billion from global investment banking fees. They are a crucial aspect to this business as we would expect it to grow in the next decade.

Global merger and acquisition activities rose 16% during the first nine months of 2006, exceeding \$2.5 trillion, indicating a relative growth and increase from the previous years.

In 2006, the value of global markets exceeded \$120 trillion, indicating another increase in the future as many firms like Merrill Lynch, Goldman Sachs, Citigroup, etc., are increasing their involvement in the investment aspect of the financial markets. Total market capitalization of the world's equity markets reached \$43.6 trillion in 2005.

There has been an increase in the issuance of bonds throughout the years. Since the 1990's, the size of the global bond market has increased by 250%, indicating a strong case for another increase in the future. "Regional firm-managed issuance in the municipal, corporate, federal agency, and structured finance market sectors surged to \$520.1 billion in 2006, 61.7% above the \$321.6 billion a year ago".¹ The year over year increase was due to the threefold increase of the securitized finance sector's volume in 2006 as compared to 2005.

The volume of the corporate bond's sector had also increased substantially, indicating upward trends in the industry revenues. "The regional dealer underwriting share increased to more than 9.7 percent of total U.S. issuance volume, compared to 6.5 percent in 2005".²

The issuance growth has taken place because of the favorable market conditions. Throughout 2006, the market conditions were very positive and the investment climate was healthy. During this period, there was strong investor demand for credit products, low default rates for loans, strong credit quality, and excess liquidity which have created a warm and favorable environment for the financial securities' performance.

Credit markets further increased their volume and performance during the fourth quarter of 2006 because of a more steady monetary policy from the Fed. "Strong liquidity and investor demand are keeping market conditions at a cyclical peak". This indicates that there would be stronger investor demand in the future as market conditions seem very favorable. Regional corporate underwriting volume totaled \$69.1 billion in 2006, more than twice the \$28.3 billion in the prior year of 2005. This also demonstrates the significant increasing trend and activity in the investment banking industry.

Securitized debt from the underwriting of many firms has increased dramatically from \$74.4 billion in 2005 to \$188.6 billion in 2006, indicating a growth in the underwriting sector for the following years. The favoring market conditions have also suggested growth in the financial markets at large, particularly in the investment banking and brokerage industry.

Credit derivatives reached \$26 trillion at end of 2006, up 52% from the end of 2005. Derivatives sector has also been in an increasing trend as more companies like Goldman Sachs, Citigroup, and Merrill Lynch are expanding their exposure of revenues and activities to new marketable securities. Derivatives have not been as common as stocks or bonds and are very recent. Many companies are looking to increase their activities with

¹ http://www.sifma.org/research/pdf/Regional_Report_2006Q4.pdf

² http://www.sifma.org/research/pdf/Regional_Report_2006Q4.pdf

derivatives and as a result you have an increasing revenue number for the derivatives sector in the industry.

U.S. bond issuance accounted for 46% of the global total in 2006 compared to 50% for all of the 2005. Many companies are also increasing their debt issuance to borrow more money for expanding its operations. As a result, global bond markets are also on an upward trend.

Global bond market issuance of \$6.3 trillion in the first half of 2006 indicates an increase of 13% from 2005. We would expect this number to increase in 2007 and also for the near future.

In 2006, the electronic execution by traders in the fixed income markets has been increasing dramatically. "According to data provided by operators of electronic trading systems for fixed income securities, 74 percent witnessed an increase in trading volume during the first three quarters of 2006 compared to 2005". This indicates that there is a major increase in the fixed income activity as the electronic trading system indicates the trading volume to be up 74 percent from the previous year. This major aspect has further added to the upward trend in the industry revenues and will continue to raise as more investors and companies are getting exposed to this system.

The investment banking and brokerage industry has been experiencing high levels of growth in all aspects of the business, particularly total revenues. Economic conditions in the US and globally are also very significant as the industry and individual companies are affected. All elements of the finance world are affected by economic conditions and changes. It is important to analyze the economic state not just from the U.S.'s point of view, but also from the world's.

The U.S. economy grew at an accelerated pace during the year of 2006 as financial conditions were favorable. Real gross domestic product rose by 3.4 percent, due to high growth in the industrial sector, high consumer spending, and a favorable labor market. In 2007, Federal Reserve districts reported only a modest growth in economic activity.

Retail sales across the district were positive, but the manufacturing activity was slow as it is related to the slowing housing market. Economic activity in the services sector has been increasing, particularly for those firms servicing the business customers. There was also an increasing demand for commercial and industrial loans, which indicates high profits in the banking and finance sector. Most districts reported continuing tight labor market conditions, especially for skilled occupations. This suggests a slight affect on the consumer spending, even though overall it was a positive trend, as more people are without jobs and spending less. Apart from this, Fed reported a wage increase for most parts of the United States. Sales of existing homes fell 8.4% in March, indicating signs of a slowing house market.

Analysis of Competitive Forces- Michael Porter Method

Rivalry

The investment banking and securities brokerage industry is very competitive. Companies are constantly looking for new opportunities to build client relationships and diversify their products. Client relationships are an integral part of the investment banking and securities brokerage industry because clients drive their revenues. Goldman Sachs faces intense competition from Bear Stearns, Merrill Lynch, Morgan Stanley, Lehman Brothers, Citigroup, and JP Morgan Chase in investment banking, trading and principal investments, and asset management. There is also competition in the niche markets that Goldman Sachs operates in. Goldman Sachs competition is based on a number of factors, including transaction execution, products and services, innovation, reputation and price. Economic conditions, efficient markets and corporate activity will continue to cause intense competition in the investment banking and securities brokerage industry. However, Goldman Sachs reputation and business principles will continue to make it a leader in the industry. Goldman Sachs will continue to make strategic acquisitions through smaller discount brokers and invest in projects with positive net present values.

Threat of New Entrants

The threat of new start-up companies entering the investment banking and securities brokerage industry is very difficult due to a number of factors. Start-up companies will have to compete with the larger corporations that have access to more funds, more resources, and have gained a modest share of the market. Hence, start-up ventures would be acquired by the larger companies thus eliminating competition and gaining more market share. Moreover, there are high compliance costs and an increasing price of market access. These extra costs can affect the bottom-line of new entrants and lead those firms to go out of business. Start-up companies are prone to consolidation within the industry.

Threat of Substitute Products or Services

The threat of substitute products or services arises when considering alternative investment sources. Currently, Goldman Sachs is a market dominator in creating products specifically suited for its clients and a premium pricer in the market. Hedge funds have made it possible for institutional investors and high-net-worth individuals to receive higher returns for their investments and mutual funds have allowed households or individuals with less income to invest in the market. Goldman Sachs, however, prides itself on meeting client expectations and being innovative and so creates new products or services for its clients' needs.

Bargaining Power of Suppliers

The bargaining power of suppliers comes into effect with the advent of pension funds and their rapid growth, large investments by US insurance funds, and the large pool of mutual funds. This is a clear indication that there is more access to new sources of capital. With pension funds, insurance funds and mutual funds investing their capital in the markets through securities brokerages like Goldman Sachs, the pension funds, insurance funds and mutual funds become players and can affect change in management decisions. Many pension funds and mutual funds exercise their power by purchasing a considerable amount of shares outstanding and thus getting voting power or by investing large sums of money in funds operated by Goldman Sachs

Bargaining Power of Customers

Since customer relationships are an integral and important component of Goldman Sachs business principles, customers naturally have power in negotiating fees and prices with the firm. This fosters a growing relationship with clients because it shows that GS values its clients business. Customers have a choice of alternatives to conduct business or invest with, not just Goldman Sachs. The more Goldman Sachs meets its clients' expectations through negotiating on fees or financings or creating specific and unique products for its clients, the more business Goldman Sachs will receive due to retention in current customers and getting new customers due to their reputation.

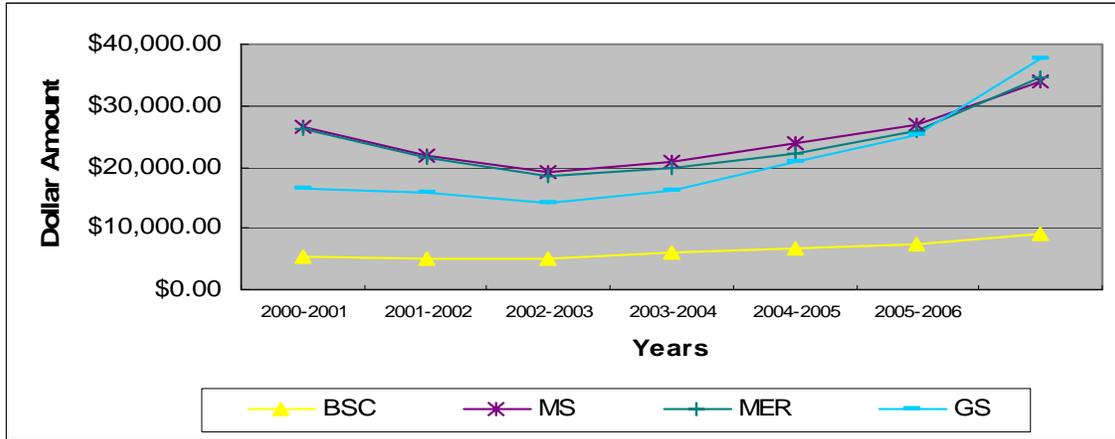
Relative Industry Valuation



IV. FUNDAMENTAL ANALYSIS

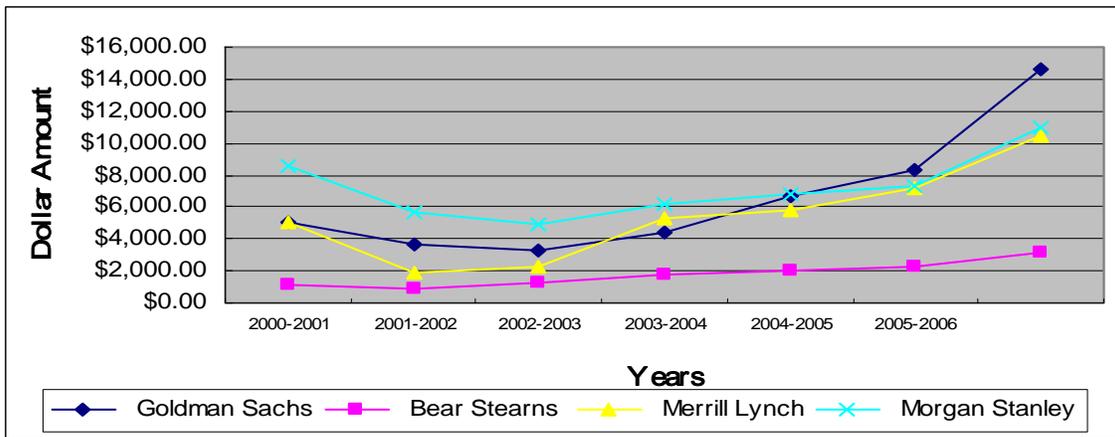
1. FINANCIAL PERFORMANCE:

Total Net Revenues



Total Net Revenues- Goldman Sachs revenues are represented by the total net revenues for a particular fiscal year. From 2000 to 2005 Goldman's total revenue did not exceed Merrill Lynch or Morgan Stanley however it did exceed Bear Stearns. In 2006, Goldman Sachs total net revenue yielded \$37,665 million and exceeded all of its competitors. Overall from 2000 to 2006 Goldman's Sachs total revenue grew year by year. The result indicated Goldman's performance outperformed all of its competitors for that fiscal year of 2006.

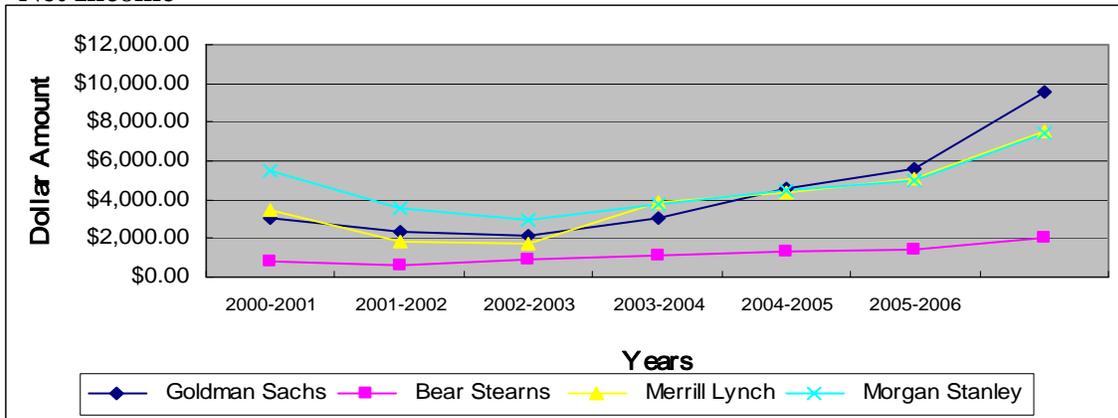
EBT



EBT- EBT is an indication of the company's profitability before taxes. Goldman's Sachs EBT from 2000 to 2002 is less than Morgan Stanley but greater than Merrill Lynch and Bear Stearns. In 2003, Goldman's EBT was less than Merrill Lynch and Morgan Stanley but was greater than Bear Stearns. In 2004, Goldman's EBT increase however was still lower than Morgan Stanley (greater than Merrill Lynch and Bear Stearns). However,

from 2005 to 2006 Goldman's Sachs EBT increases indicating profitability greater than Morgan Stanley, Merrill Lynch and Bear Stearns.

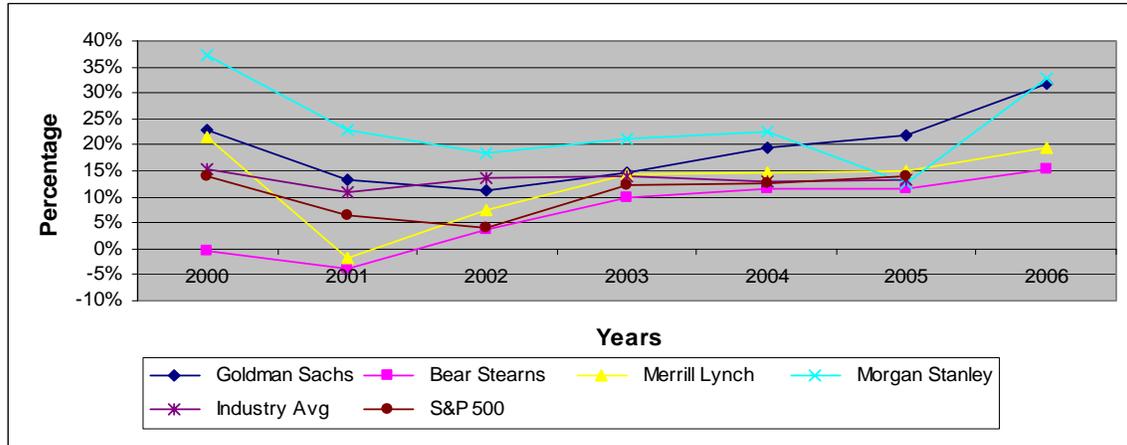
Net Income



Net Income- Net income was calculated by subtracting interest expense and operating expenses. From 2000 to 2002, Morgan Stanley had higher net income than Goldman Sachs. However during those years Goldman Sachs reported higher net income than Merrill Lynch and Bear Stearns. In 2003, Goldman Sachs net income fell putting it behind Merrill Lynch and Morgan Stanley. In 2004, Goldman's Sachs net income increased putting it just behind Merrill Lynch and from 2005 to 2006 Goldman's Sachs net income increased putting it first in the industry.

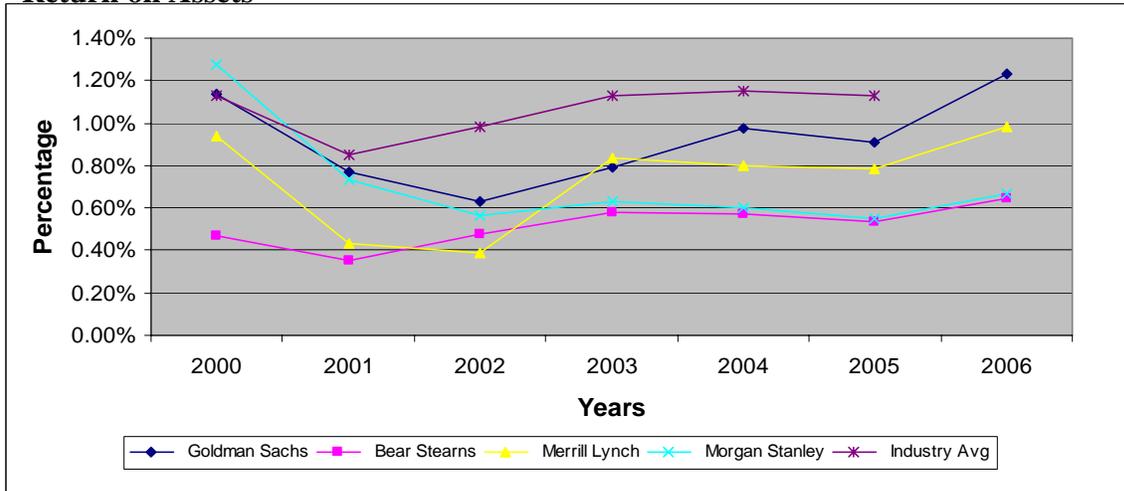
2. OPERATING PERFORMANCE:

Return on Equity



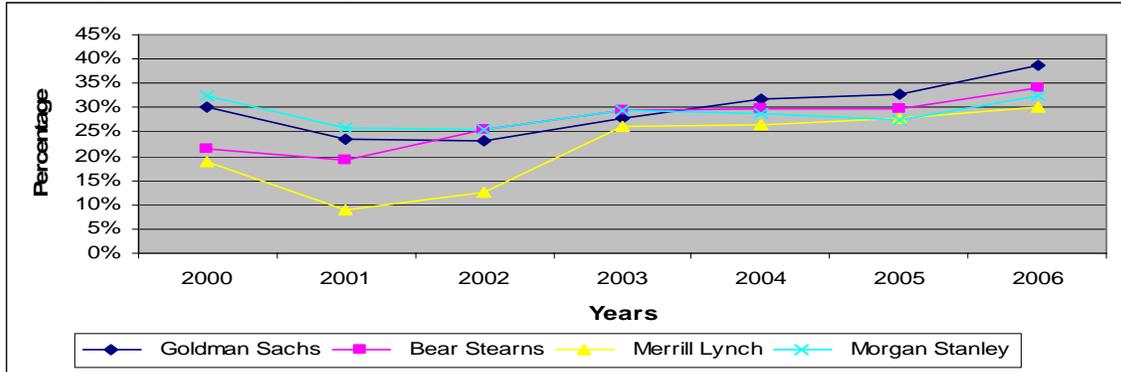
Return On Equity – Measures how much profit a company generates with the money shareholders have invested. GS has out performed its competitors except MS from 2000 to 2006. In 2006 GS ROE was 31.89% compared to MS ROE of 32.84%. Hence, GS ROE is gradually increasing.

Return on Assets



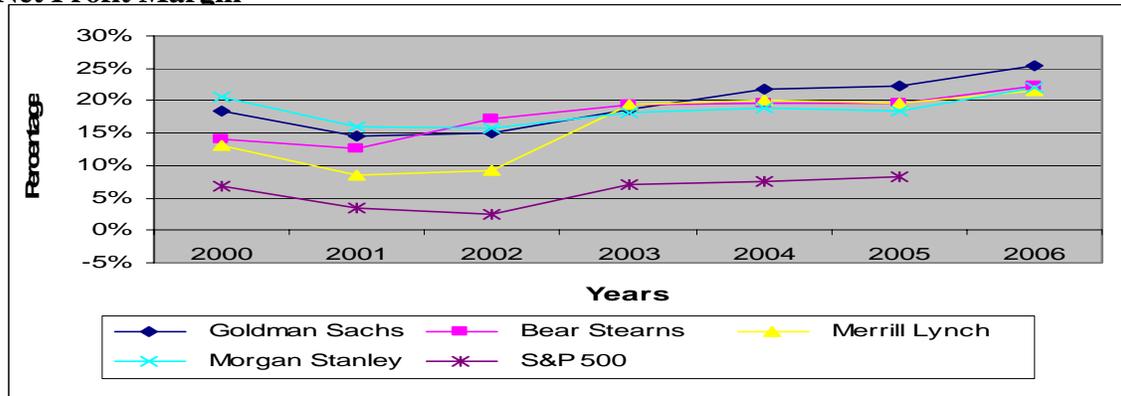
Return on Assets– shows income dollars generated per dollar of assets and also shows how profitable a company is relative to its assets. Goldman Sachs has beaten Bear Stearns for all the years, Merrill Lynch for all the years except 2003 and Morgan Stanley for all the years except 2000. Goldman Sachs, however, was below the industry average from 2001 to 2005 but was equal to the industry average in 2000.

Earnings before Tax Margin



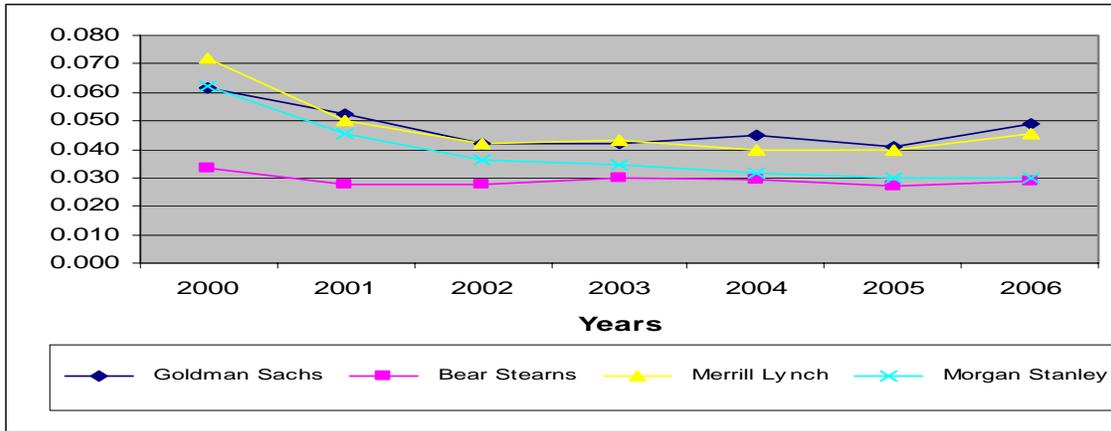
EBT Margin- the EBT margin divides earnings before taxes by total net revenue. From 2004 to 2006 Goldman Sachs has increase their earnings before tax relative to their competitors. However, from 2000 to 2003 Goldman Sachs has higher Earnings before tax compare to Bear Stearns, and Merrill Lynch but not Morgan Stanley.

Net Profit Margin



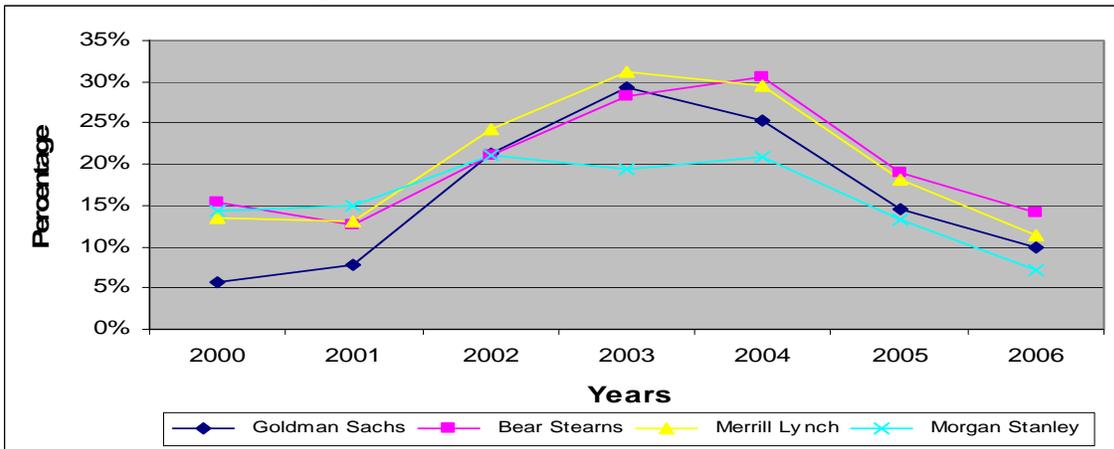
Net Profit Margin- is a ratio of profitability calculated as net income is divided by sales, or net earnings divided by total revenues. In 2003 GS was in line with its competitors. From 2004-2006 Goldman Sachs has outperformed its competitors. However, Morgan Stanley was the only competitor that outperformed GS from 2000-2002. Notice the S&P500 is below the four competitors.

Asset Turnover



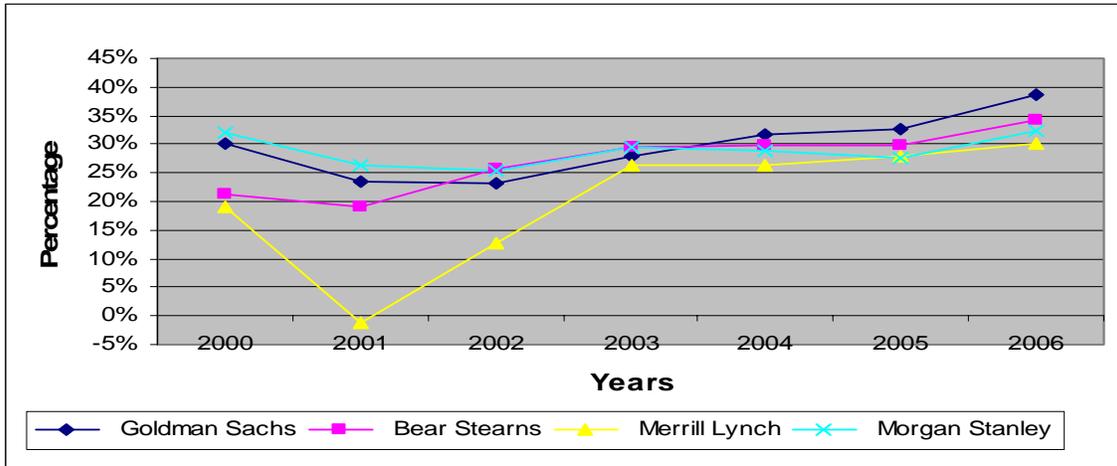
Asset Turnover- is sales generated per dollar of assets or how efficiently assets are used to generate sales, it is calculated as sales divided by average assets. Merrill Lynch outperformed GS in 2000, from 2001-2003 GS outperformed Bear Stearns but was in line with Morgan Stanley. Following 2003 Goldman has outperformed all other competitors.

Interest Revenue Margin



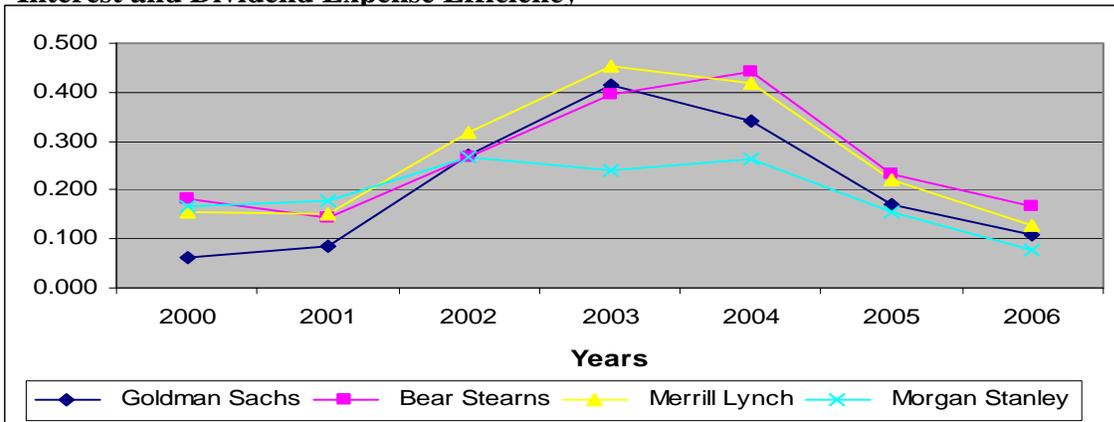
Interest Revenue Margin- is interest and dividend revenue minus interest expense divided by interest revenue. It is a ratio that shows how much dollars of interest and dividend revenue is derived after accounting for interest expense. Goldman Sachs underperformed its competitors throughout 2000-2006 except Bear Stearns and Morgan Stanley from 2002-2003 and continued to outperform Morgan Stanley from 2004-2006.

Total Revenue Margin



Total Revenue Margin- is calculated as total net revenues minus non-interest expenses divided by total net revenues. This ratio shows how much dollars of revenue Goldman Sachs makes after deducting non-interest expenses. Goldman Sachs outperformed its competitors. From 2000-2003 Goldman Sachs outperformed both Bear Stearns and Merrill Lynch and from 2004-2006 underperformed Morgan Stanley.

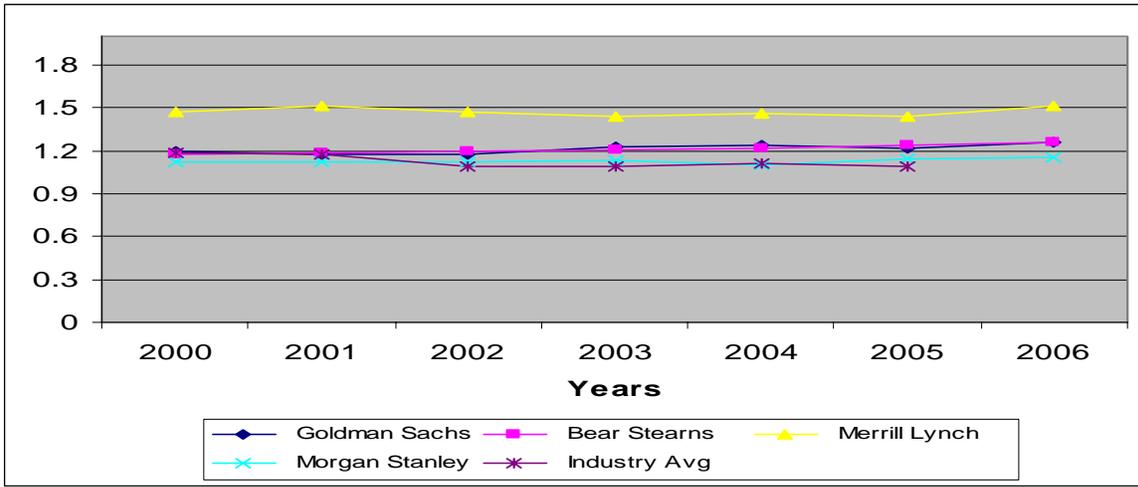
Interest and Dividend Expense Efficiency



Interest and Dividend Expense Efficiency- is calculated as interest and dividend minus interest expense divided by interest expense. This ratio shows how much dollars of interest expense comes out of interest and dividend revenue. Goldman Sachs underperformed compared to Bear Stearns and Merrill Lynch but outperformed Morgan Stanley from 2002-2006.

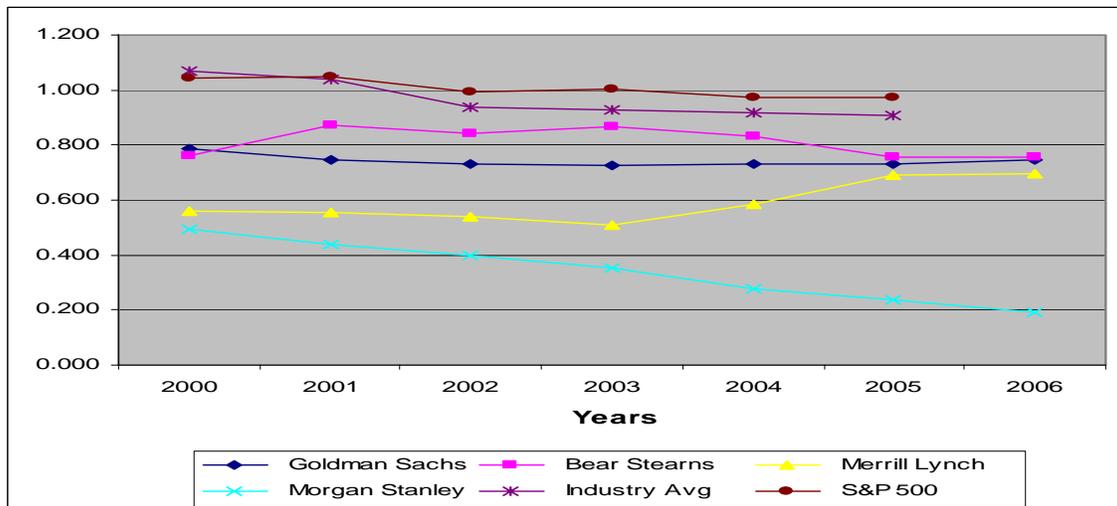
3. SHORT-TERM LIQUIDITY:

Current Ratio



Current Ratio- is the ability to pay back its short-term liabilities with its short-term assets. Goldman Sachs was in line with Bears Stearns and the industry average from 2000-2006 but outperformed the industry average from 2002-2006. However, Goldman underperformed MER for all the years.

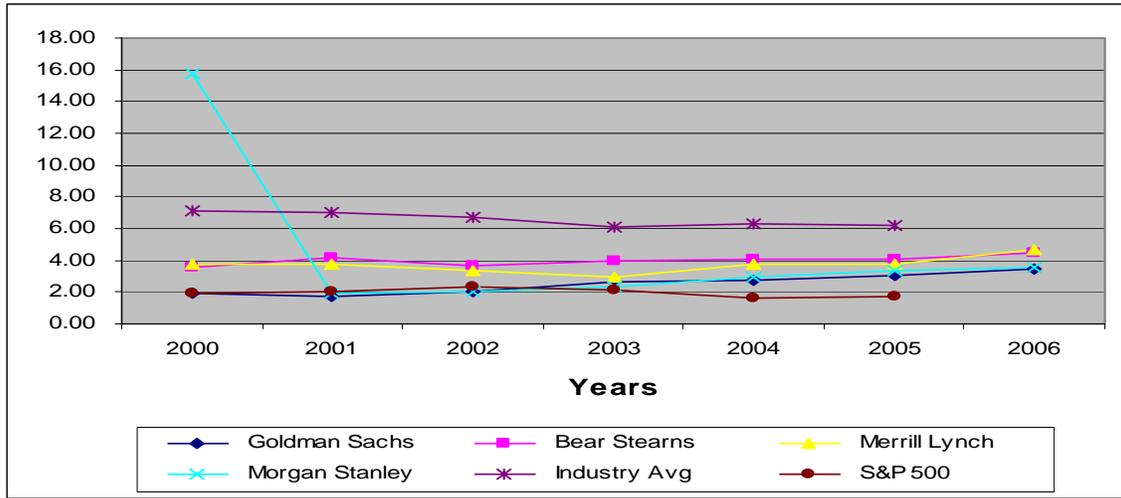
Quick Ratio



Quick Ratio- The quick ratio we employed for Goldman Sachs business and calculated as cash plus accounts receivable plus marketable securities divided by current liabilities. This ratio measures a company's ability to meet short term obligations with its most liquid assets. Goldman Sachs outperformed Merrill Lynch and Morgan Stanley for all the years but underperformed Bears Stearns from 2001-2006 and the industry average and the S&P500 for all the years.

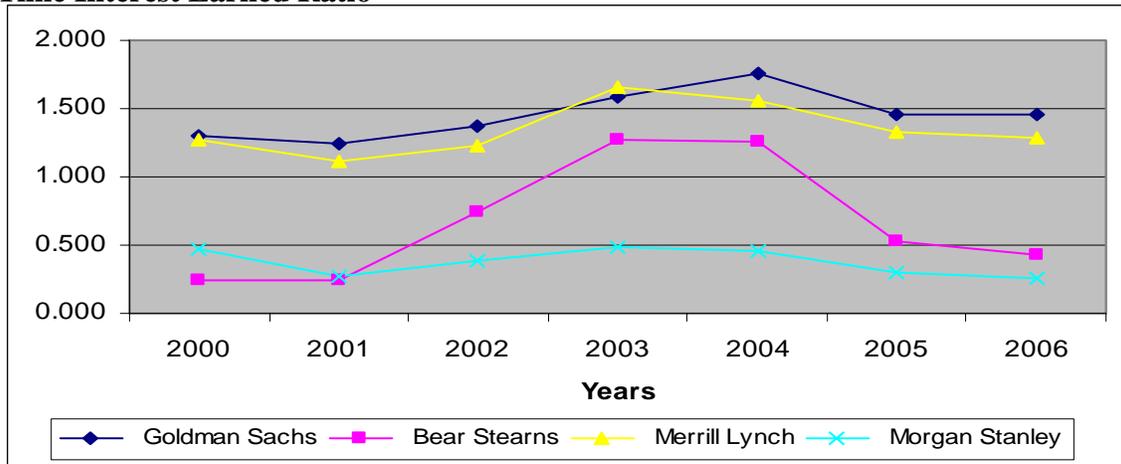
4. LONG-TERM SOLVENCY AND DEBT CAPACITY:

Debt-to-Equity Ratio



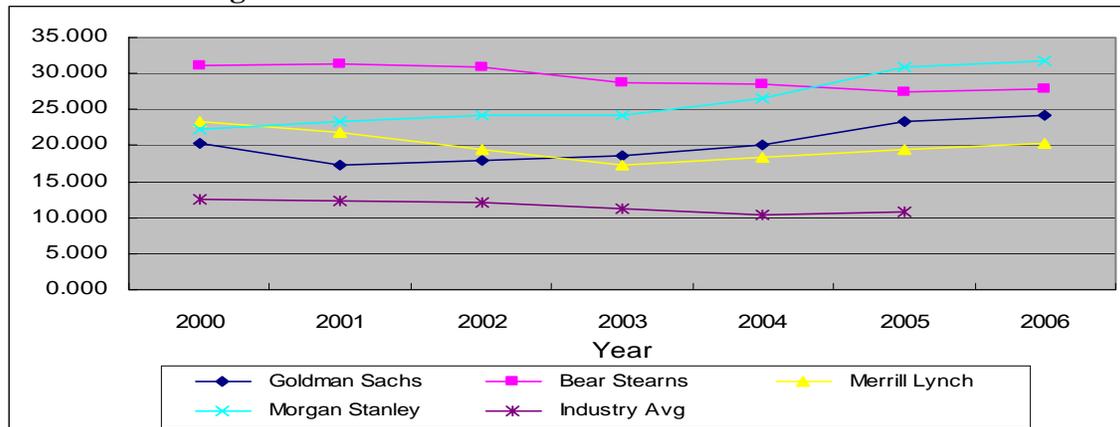
Debt-To-Equity Ratio- The debt-to-equity ratio indicates what proportion of equity and debt the company is using to finance its assets. Goldman Sachs is below the majority of its competitors and the industry average for all the years but was in-line with Morgan Stanley from 2001-2006 and the S&P 500 from 2000-2003. This indicates relatively less debt in its capital structure. However, Goldman Sachs' D/E ratio was above the S&P 500 over 2004-2005.

Time Interest Earned Ratio



TIE Ratio- the TIE ratio is calculated by taking the company's earnings before interest taxes and dividing it by their interest expense. The reason behind the TIE ratio being an important ratio is because it measures the company's ability to meet the interest on its debts obligations. Goldman Sachs outperformed all the three competitors for all the years but was below Merrill Lynch TIE ratio for 2003.

Financial Leverage



Financial Leverage- The financial leverage ratio we used for Goldman Sachs is calculated as average assets divided by average equity. It is a measure of debt in their capital structure. Goldman Sachs was below its competitors for all the years due to the fact that Goldman Sachs uses debt to finance many mergers and acquisitions activities.

DUPONT ANALYSIS:

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|
| Net Profit Margin | 18.49% | 14.61% | 15.12% | 18.77% | 21.73% | 22.29% | 25.32% |
| Asset Turnover | 0.061 | 0.053 | 0.042 | 0.042 | 0.045 | 0.041 | 0.049 |
| Financial Leverage | 20.253 | 17.318 | 17.935 | 18.688 | 20.021 | 23.326 | 24.221 |
| ROE | 23.00% | 13.29% | 11.36% | 14.79% | 19.49% | 21.10% | 29.50% |

DuPont Analysis- Decomposes ROE into its components (Asset Turnover, Net Profit Margin, and Financial Leverage) in order to analyze what might be trying to change ROE. Here, net profit margin has an increasing trend however asset turnover from 2000 to 2001 decreases because GS pledged some of its assets as collateral.

V. RELATIVE VALUATION

Relative Valuation

This part of the report allows us to view the company's position relative to Morgan Stanley, Merrill Lynch, Bear Stearns, Industry, and the S&P 500. The following charts show how five price estimates came about using the P/E ratios from 200-2006 along with expected multiples for 2007 and the 7-year industry average, the arithmetic averages, and E[EPS2007]:

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007(E) |
|------------|--------|--------|--------|--------|--------|--------|--------|---------|
| P/E | | | | | | | | |
| GS | 13.687 | 20.892 | 19.571 | 16.368 | 11.744 | 11.504 | 9.893 | 7.246 |
| BSC | 8.587 | 13.466 | 9.892 | 8.505 | 9.998 | 10.765 | 10.685 | 10.078 |
| MER | 18.233 | 23.590 | 21.441 | 15.155 | 13.646 | 13.126 | 12.266 | 10.937 |
| MS | 13.400 | 17.183 | 16.391 | 15.104 | 12.229 | 11.649 | 10.742 | 10.436 |
| Industry | 20.040 | 22.410 | 14.780 | 14.660 | 14.580 | 14.130 | 13.264 | 12.539 |
| S&P500 | 23.520 | 29.550 | 19.110 | 20.330 | 17.910 | 16.330 | 15.550 | 15.586 |

Looking at Goldman Sachs P/E from 2000 to 2006, it was increasing then decreasing since 2001. However, this does not mean that Goldman Sachs was in trouble or had reached its peak of the growth. It means that Goldman Sachs has been undervalued these years. And we expect a price to grow relative to attractive expected earnings in 2007.

| P/E | | | | | | | | |
|-------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| GS | 13.687 | 20.892 | 19.572 | 16.368 | 11.744 | 11.504 | 9.893 | 7.246 |
| Industry | 20.040 | 22.410 | 14.780 | 14.660 | 14.580 | 14.130 | 13.264 | 12.539 |
| 7-Yr Industry Average 16.266 | | | | | | | | |

In comparison to the Finance Industry, GS has pretty close relationship with industry except larger difference in 2000. Goldman Sachs had higher numbers in 2002 and 2003, but only slightly lower numbers in the others years.

| P/E | | | | | | | | |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| GS | 13.687 | 20.892 | 19.572 | 16.368 | 11.744 | 11.504 | 9.893 | 7.246 |
| S&P500 | 23.520 | 29.550 | 19.110 | 20.330 | 17.910 | 16.330 | 15.550 | 15.586 |

In comparison to the S&P500, GS had lower P/E numbers every year except for 2002, the time Goldman Sachs with higher P/E. However, this means that Goldman had been undervalued.

| GS Relative to Competitors, Industry Average, S&P500 | | | | | | | | | |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | Avg. | Median |
| GS/BSC | 1.594 | 1.551 | 1.978 | 1.925 | 1.175 | 1.069 | 0.926 | 1.460 | 1.551 |
| GS/MER | 0.751 | 0.886 | 0.913 | 1.080 | 0.861 | 0.876 | 0.807 | 0.882 | 0.876 |
| GS/MS | 1.021 | 1.216 | 1.194 | 1.084 | 0.960 | 0.988 | 0.921 | 1.055 | 1.021 |
| GS/Ind. Avg | 0.683 | 0.932 | 1.324 | 1.117 | 0.806 | 0.814 | 0.746 | 0.917 | 0.814 |
| GS/S&P500 | 0.582 | 0.707 | 1.024 | 0.805 | 0.656 | 0.704 | 0.636 | 0.731 | 0.704 |

The arithmetic averages were achieved by adding the relative P/E's in each row, where a number was listed, and dividing by the number of years. These are key figures as they were part of the equation in determining each price estimate.

| E[EPS2007] | | Price Estimate | Average of 5 Price Estimates |
|-------------------|-------------------------|-----------------------|-------------------------------------|
| \$29.98 | BSC | \$276.45 | \$303.93 |
| | MER | \$259.69 | |
| | MS | \$297.23 | |
| | Industry | \$344.86 | 7-Yr Ind. Avg. Value |
| | S&P500 | \$341.41 | \$487.66 |
| | | | |
| | Current Price | \$218.61 | |
| | (As of 04/30/07) | | |

The above price estimates were calculated by multiplying the expected 2007 P/E's of each comparable listed, the E[EPS2007], and the arithmetic average of the historical relationship between GS and each comparable. The average of the five price estimates is \$303.93; about \$80 more than its current trading price. The \$487.66 was calculated using the 7-year industry average P/E, which was 16.266%. As we can see, using this valuation model signifies that Goldman Sachs is currently undervalued across the board. Given these estimates from this model, the company cannot be overlooked as this seems to be an ideal buying opportunity.

VI. ABSOLUTE VALUATION

This valuation model allowed us to estimate Goldman Sachs' intrinsic value by discounting their cash flows (CF's) through the use of the Dividend Discount Model (DDM). The first step was to determine two different costs of capital, k_1 and k_2 , to calculate the PV of the dividend CF's. This can be seen through the following:

Cost of Capital, K

1) CAPM:

$$\begin{aligned}
 &10\text{-year treasury strip (04/30/07)} = 4.810\% \\
 &\text{Risk Premium} = 6.500\% \\
 &\text{Beta} = 1.2307 \\
 &\text{CAPM} = 0.0481 + 1.2307 \cdot (0.065) = 12.810\%
 \end{aligned}$$

2) Another cost of capital

$$\begin{aligned}
 &\text{YTM on GS bonds outstanding} = 5.404\% \\
 &\text{Equity Premium} = 3.000\% \\
 &\text{K2} = 8.404\%
 \end{aligned}$$

3) $\text{K3} = 10.000\%$

We applied sensitivity analysis to CAPM, therefore using three different K's. The first K we used is from CAPM, 12.81%, and the K based on Goldman's bond yield is 8.404%. We chose a third k of 10% to see what the intrinsic value would be if K was in between the other two Ks since they were so far apart.

Then, in order to estimate the dividend for 2007, we had to calculate the average payout ratio over the last ten years (9.4%) and use our estimate of E [EPS2007], or \$29.98, to derive an E[DPS2007]. Since that estimated dividend, $.094 \cdot 29.98 = \$2.82$ is over twice as high as their 2006 actual DPS, we noticed that Goldman Sachs has historically displayed a similar pattern in the way they payout dividends. Thus, we decided to estimate dividends from 2007 to 2012 using a certain percentage. Goldman has average annual growth rate of dividends per share (8-years, because they did not pay dividends before the last two quarters of 1999) at 27.3%. And since there is no difference with the 4-years growth, we decided to use 8-years growth at 27.3%. And Goldman Sachs shows no sign of slowing down in the near future. The chart below gives us a better understanding of how Goldman Sachs paid out dividends:

GS PAYOUT RATIOS FOR LAST 8 YEARS

| YEARS | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| DPS | 0.24 | 0.48 | 0.48 | 0.48 | 0.74 | 1.00 | 1.00 | 1.30 |
| ROE | 0.165 | 0.230 | 0.133 | 0.114 | 0.148 | 0.195 | 0.219 | 0.319 |
| DPR | 0.043 | 0.080 | 0.113 | 0.119 | 0.126 | 0.112 | 0.089 | 0.066 |

Average Annual Growth Rate (Geometric Average)

8-years: 27.3%

5-years: 22.1%

4-years: 28.3%

E [EPS2007] = \$29.98

E[Payout2007] = 0.055

E [DPS2007] = \$1.65

| YEARS | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------|------|------|------|------|------|------|
| DPS | 1.65 | 2.11 | 2.68 | 3.41 | 4.35 | 5.53 |

Next, assuming a dividend of \$5.53 for 2012, we grew his figure by seven different growth rates to estimate 2013 dividends. Once these figures were calculated, we implemented the DDM to estimate intrinsic values of all post-2012 dividends using the formula of $E [DPS1] / (k-g)$. As mentioned and shown earlier, the three costs of capital (K1 from CAPM, K2 from YTM on 10-year bonds from GS, and K3 from adjustment) were used in separate charts showing seven different PV's as of 2012.

| DPS2012 | (1+g) | Est.(DPS2013) |
|---------|-------|---------------|
| \$5.53 | 1.03 | 5.70 |
| \$5.53 | 1.04 | 5.75 |
| \$5.53 | 1.05 | 5.81 |
| \$5.53 | 1.06 | 5.86 |
| \$5.53 | 1.07 | 5.92 |
| \$5.53 | 1.08 | 5.97 |
| \$5.53 | 1.09 | 6.03 |

DDM...E [DPS1] / (k-g)

| | E[DPS2013] | K1 | G | est.(IV2012) |
|----------------|------------|--------|------|--------------|
| Est(IV2012)1 = | 5.70 | 0.1281 | 0.03 | \$58.08 |
| Est(IV2012)2 = | 5.75 | 0.1281 | 0.04 | \$65.30 |
| Est(IV2012)3 = | 5.81 | 0.1281 | 0.05 | \$74.37 |
| Est(IV2012)4 = | 5.86 | 0.1281 | 0.06 | \$86.10 |
| Est(IV2012)5 = | 5.92 | 0.1281 | 0.07 | \$101.87 |
| Est(IV2012)6 = | 5.97 | 0.1281 | 0.08 | \$124.20 |
| Est(IV2012)7 = | 6.03 | 0.1281 | 0.09 | \$158.26 |

| | E[DPS2013] | K2 | G | est.(IV2012) |
|----------------|------------|---------|------|--------------|
| Est(IV2012)1 = | 5.70 | 0.08404 | 0.03 | \$105.43 |
| Est(IV2012)2 = | 5.75 | 0.08404 | 0.04 | \$130.63 |
| Est(IV2012)3 = | 5.81 | 0.08404 | 0.05 | \$170.63 |
| Est(IV2012)4 = | 5.86 | 0.08404 | 0.06 | \$243.91 |

| | | | | |
|----------------|------|---------|------|-------------|
| Est(IV2012)5 = | 5.92 | 0.08404 | 0.07 | \$421.57 |
| Est(IV2012)6 = | 5.97 | 0.08404 | 0.08 | \$1,478.76 |
| Est(IV2012)7 = | 6.03 | 0.08404 | 0.09 | -\$1,011.67 |

| | | | | |
|----------------|------------|------|------|--------------|
| | E[DPS2013] | K3 | G | Est.(IV2012) |
| Est(IV2012)1 = | 5.70 | 0.10 | 0.03 | \$81.39 |
| Est(IV2012)2 = | 5.75 | 0.10 | 0.04 | \$95.88 |
| Est(IV2012)3 = | 5.81 | 0.10 | 0.05 | \$116.17 |
| Est(IV2012)4 = | 5.86 | 0.10 | 0.06 | \$146.59 |
| Est(IV2012)5 = | 5.92 | 0.10 | 0.07 | \$197.30 |
| Est(IV2012)6 = | 5.97 | 0.10 | 0.08 | \$298.71 |
| Est(IV2012)7 = | 6.03 | 0.10 | 0.09 | \$602.95 |

Using the above intrinsic values, we had to calculate PV's using different costs of capital under a series of growth rates. There are three K's that we had to calculate for intrinsic values. The final task was to find the growth rates which would produce a PV that matched the price of GS as of 04/30/2007 (\$218.61). These values signify that if Goldman Sachs experiences post-2012 dividend growth of 11.362% using k1, 6.626% using k2, and 8.35% using k3, its value will be \$425.43, \$331.73, and \$363.25 in 2012.

| | | | | |
|------------|------------|--------|---------|--------------|
| Est(IVnow) | E[DPS2013] | K1 | G | Est.(IV2012) |
| \$218.57 | \$6.16 | 0.1281 | 0.11362 | \$425.43 |

| | | | | |
|------------|------------|---------|---------|--------------|
| Est(IVnow) | E[DPS2013] | K2 | G | Est.(IV2012) |
| \$218.62 | \$5.91 | 0.08404 | 0.06626 | \$331.73 |

| | | | | |
|------------|------------|--------|--------|--------------|
| Est(IVnow) | E[DPS2013] | K3 | G | Est.(IV2012) |
| \$218.46 | \$5.99 | 0.1000 | 0.0835 | \$363.25 |

As we saw on the previous page, Goldman Sachs had experienced dividend growth at 27.3% (8-years) and 28.3% (4-years). Based on this valuation model, we believe the company's growth will not slow down to growth levels of 11.362%, 6.626%, or 8.35%, which leads us to believe that the value of the stock should be higher than its current price. Thus, the company is undervalued.

VII. GOLDMAN SACHS' RISK

Goldman Sachs is subjected to certain risk which affects the operation of the firm. These risks include Market Condition and Market Risk, Liquidity Risk, Credit Risk, Operational Risk and Legal and Regulatory Risk.

Goldman Sachs revolves around Market Condition and Market Risk. Ultimately the company is faced with any changes produced by either one, global financial market or two, economic conditions. These conditions are subjected to sudden and dramatic changes. A favorable Market Condition will be define as one that has high global gross domestic product growth, stable geopolitical conditions, transparent and efficient markets, low inflation, high investor confidence and high business earnings. Unfavorable market conditions are those which have been caused either by outbreaks of hostility, geopolitical instability, decline in business confidence, increase in inflation, corporate, political or other scandals that may reduce investor confidence in capital markets, and natural disasters. There can be any combination of these factors that will impact Goldman Sachs opportunities.

For the past few years, Goldman Sachs had been operating in a market with low Interest rates. Increasing Interest Rates or High Interest Rates will widen the credit spread. However, market volatility may aversely affect some of the products offered by Goldman Sachs. For instance, an increase in Interest Rate may aversely affect currency, commodity, equity and merchant position of the company. Furthermore, certain trading business depends on market volatility to provide trading and arbitrage opportunities.

Increases in Interest Rates tend to reduce the value of a client's portfolio. It may also entice clients to transfer their assets out of their portfolio to other products. This will cause a decline in assets, a decline in investment performance relative to benchmark or competitors. As a result there will be decline in management fees, and reputation damage.

Industry wide declines in the size of underwriting and mergers and acquisition may have an effect on revenues (making it unable to reduce expense as well as profit margins). A significant portion of revenue is derived from participation in large transaction. A decrease in large transaction due to market uncertainty may aversely affect the investment banking business.

In the specialist business, Goldman Sachs is obligated by that stock exchange to purchase securities even in a declining market. This may result in a trading loss and an increase in liquidity.

Liquidity Risk may be due to the inability of accessing secured and unsecured debt. It can arise from either general market disruptions or operational problems. Because Goldman Sachs develops complex structured products for both clients and institutional investors, these complex products do not have a readily available market to access in time for liquidity purpose. Investing activities may be restricted to these markets. In addition, Goldman Sachs ability to sell their assets may be limited due to other market participants

selling similar assets at the same time. Goldman's Credit Rating is directly related to their liquidity. A reduction in Goldman's Credit Rating could affect their liquidity and competition position, increase borrowing cost, limit access to capital markets or trigger their obligation in some of their trading and financing collateralized obligations. Under these circumstances counterparties would be permitted to terminate their contracts and require Goldman Sachs to provide additional collateral. Termination of these trading and financing obligations could cause a loss and require Goldman Sachs to find other resources to make significant cash payments and or security movement.

Goldman Sachs is also exposed to Credit Risk. This exposure is due to third parties that owe Goldman Sachs money, securities, or all other assets that will not perform their obligations. These third parties may default on their obligations because of bankruptcy, lack of liquidity, operation failure or other circumstances. Goldman Sachs also faces the risk that their rights against third parties may not be enforceable. Goldman Sachs has experience pressure to extend and price credit at levels that may not always fully compensate the firm for the amount of risk taken. This is primarily due to competitive factors.

Failures in internal processes, people or systems, or external events results in Operational Risk. This could lead to impairment of Goldman's Liquidity, financial loss, disruption of their business, liability to clients, regulatory interventions or reputation damages.

Goldman Sachs is faced with Legal and Regulatory Risk. Goldman Sachs is subjected to an extensive regulation from around the world. Substantial legal liabilities could hurt Goldman Sachs finances and reputation which in turn could hurt future business prospects. Goldman Sachs faces significant legal risk and the amount of damages and penalties claimed in litigations and regulatory proceedings against financial institutions remain high.

VIII. INVESTMENT DRIVERS

Goldman Sachs is the leading global investment banking, securities and investment management firm serving new business and strengthening existing firms. They provide service to a diversified client base that includes corporations, financial institution, governments and high net worth individuals. Their business is divided into three segments: Investment Banking, Trading and Principal Investments and Asset Management and Security Services.

With the rise of a Global Equity Market growing to and exceeding \$43.6 trillion and a rise in mergers and acquisition the demand for global investment banking and securities and investment management will continue to grow. Goldman Sachs will continue to see an increase in revenue due to the participation in the Global Equity Market and Mergers and Acquisition.

IX. RECOMMENDATION

From the inception, Goldman Sachs had been building a company that provides a wide range of service world wide to a diversified set of clients. As of 2006, Goldman Sachs had seen much growth due to an increase in large transaction (mergers and acquisition). This has help Goldman Sachs keep competitive as well as being the best in the industry.

Goldman Sachs will continue to see growth due to an increase of a Global Equity Market, Emerging Markets, Mergers and Acquisition, Low Competitive Pricing and Good Reputation. This strategy will help Goldman Sachs keep competitive in the Financial Industry and respond to the demanding need of its diversified client base.

Over all the company has seen growth from 2000 to 2006 in ROE, ROA, EBT, Net Profit Margins, Total Revenue Margin and Time Interest Earned. The company remains highly competitive in Asset Turnover relative to other firms, and is continuing to grow their Net Income. In addition, the company has a relatively low P/E ratio to other firms in its industry which is an indication that the firm is undervalued. Along with the absolute valuation we believe Goldman Sachs Group, Inc. is a qualified buy candidate for the Student Managed Investment Portfolio.

Therefore, we recommend the purchase of 200 shares at the current market price, \$218.58 (May 1, 2007) for a total investment of \$43,716.

However, the class voted on a Limit Order for 150 shares at \$215.00 for the total of \$32,250.

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