Strategic Report for Goldman Sachs Group, Inc.

OASIS CONSULTING

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Executive Summary

Goldman Sachs Group, Inc. ("GS," "Goldman Sachs," "Goldman," or "the firm") is arguably the world's leading financial services institution. The firm has best-in-class operations in its investment banking, trading and principal investments, and asset management and securities services divisions. The current financial crisis has created a difficult environment for all investment banks, including Goldman Sachs, whose profitability slumped in fiscal year 2008 before rebounding in Q1 2009. Despite the crisis, however, the firm has continued to outperform its peers, further validating its reputation for superior risk management. Goldman's relative success notwithstanding, the investment banking industry is undergoing a period of deep self-evaluation, and structural fundamental shifts may be underway. Questions raised include:

- **Leverage**: Macroeconomic headwinds and investor uncertainty have necessitated rapid deleveraging across the industry, which raises broad questions about the sustainable future level of leverage for investment banks.
- **Regulatory reform**: Government capital injections into large financial institutions are accompanied by the prospect of extensive regulatory reform. Public fury over financial institutions deemed "too big to fail" is at a fever pitch. For systemically important institutions, the government may make specific demands. More generally, legislative and regulatory changes may undermine the current business models of the largest investment banks.
- **Compensation**: Mainstream opinion has accepted that compensation at least partially caused the type of risk-taking that led to the financial crisis. The question now becomes whether public firms will be allowed to make their own reforms or if the government will legislate compensation change. At stake is the very human capital which makes the large investment banks valuable.
- **Competitive landscape:** The elimination of weaker firms has left a vacuum. The business model of the large investment banks will compete with the boutique model over that market share.

Goldman is better-positioned to weather the storm than most or all of its peers. The firm must decide where aggression is appropriate and where caution is the optimal strategy.

Company Overview

Company History

The long history of Goldman Sachs Group dates back to 1869, when German immigrant Marcus Goldman moved to New York and began buying customers' promissory notes from jewelers to resell to banks for a profit. Goldman's son-in-law, Samuel Sachs, joined the business in 1882, followed by Goldman's son Henry and son-in-law Ludwig Dreyfus in 1885. That year, the firm became a general partnership as Goldman, Sachs & Co.

In 1887, Goldman Sachs formed a relationship with the British merchant bank Kleinwort Sons and began offering US-UK foreign exchange and currency services. Having established a presence in the northeast, the firm expanded its operations to Chicago and St. Louis to serve such clients as Sears, Roebuck and Co.

In 1896, soon after Samuel Sachs's brother Harry joined the company, Goldman Sachs joined the New York Stock Exchange. The next few years brought the steady expansion of the firm's operations, and by the turn of the century, the company had built the commercial paper market into a major source of short-term capital.

Goldman experienced a milestone in its history in 1906 when the firm co-managed its first initial public offering. That year, Goldman helped United Cigar Manufacturers expand by underwriting $4.5 million worth of United Cigar stock. Goldman Sachs next co-managed Sears Roebuck's IPO. Following the successful IPOs of the two companies, Henry Goldman was invited to join the boards of directors of both United Cigar and Sears. The practice of negotiating a seat on the boards of major clients continues today.

Although World War I slowed down financial activity until 1919, its aftermath brought strong economic expansion. Many of Goldman's clients, namely H.J. Heinz, Pillsbury, and General Foods, returned to the company for additional financing, and Goldman continued to grow into the 1920s.

In 1928, the firm formed an investment subsidiary called the Goldman Sachs Trading Corporation to operate a closed-end fun. With an initial $10 million capitalization, the new company expanded rapidly. However, the stock market crash of 1929 dealt Goldman Sachs Trading a devastating blow, and by 1933, it was worth only a fraction of its initial value. The failure tarnished Goldman's reputation for years to come.

In the 1930s, Goldman Sachs ventured into the securities business and continued to expand by taking over other commercial-paper firms in New York, Boston, Chicago, and St. Louis. Although World War II diverted attention and capital away from Goldman's activities, the company regained its prewar momentum several years after the war ended. As the economy experienced unprecedented growth, Goldman launched many new activities in finance and investment and emerged as a leader in investment banking.

In 1956, Goldman co-managed Ford's IPO. In doing so, the company helped market 10.2 million shares, worth $700 million. The firm set another record in October 1967, when it handled the floor trade of a single block of Alcan Aluminum stock consisting of 1.15 million shares, worth $26.5 million, at the time the largest block trade ever made.

During the 1970s, the firm expanded in several ways. In addition to opening its first international office in London in 1970, it created a private wealth division and a fixed income division in 1972.

Another milestone for the company came in 1981 when Goldman Sachs purchased J. Aron & Company, a commodities-trading firm which dealt in precious metals, coffee, and foreign exchange. The purchase helped Goldman establish a presence in the commodities industry and in South America.

In 1982, Goldman took over the London-based merchant bank First Dallas, Ltd., which it later renamed Goldman Sachs, Ltd.

Beginning in 1984, a new craze erupted on Wall Street in which investment companies engineered leveraged buyouts (LBOs) of entire firms. Although the risky practice could

generate sizable profits, Goldman Sachs chose to stress its transaction work instead of the higher risk LBOs. However, the market crash of October 1987 reduced the profitability of transaction work, and Goldman Sachs began to lose clients to more aggressive investment firms. The company was forced to cut costs, and several hundred employees would be laid off through the end of the decade.

In 1986, the firm formed Goldman Sachs Asset Management, which manages the majority of its mutual funds and hedge funds today. That year the company also underwrote the the IPO of Microsoft, advised General Electric on its acquisition of RCA, and joined the London and Tokyo stock exchanges.

After suffering heavy losses from the 1986 market crash, Goldman Sachs raised more than $500 million from Sumitomo Mitsui Financial Group (SMFG). Although Sumitomo was entitled to 12.5 percent of Goldman's profits, the newer partners would be prevented by federal law from having voting rights within the firm. Goldman Sachs would continue to accept such equity investments into the next decade.

The early 1990s were years of strong growth and record earnings for Goldman Sachs. By 1993, the company had become one of the most profitable in the world, with pre-tax earnings of $2.7 billion. However, the company was dealt a major setback in 1993, however, when a federal appeals court ruled that an investment banking firm could no longer advise a company in bankruptcy proceedings with whom it had a business relationship. This decision brought an end to a lucrative business practice for Goldman, which brought in more than $100 million a year in such transactions.

The crash in the market price of Treasury and other bonds in 1994 and the drop of the U.S. dollar in foreign markets also put financial strain on the company. Goldman was forced to cut costs through a wave of layoffs. However, a bull market helped Goldman rebound, and by the late nineties, the company focused on enhancing its international presence, particularly in the UK and Asia.

A landmark event came in 1999, when Goldman Sachs launched one of the largest financial services IPOs in U.S. history. The company listed on the New York Stock Exchange and raised $3.6 billion by selling off just under 12.5 percent of the company. It adopted the name The Goldman Sachs Group Inc. and named Henry Paulson, Jr., chairman and CEO.

In 1999 Goldman acquired Hull Trading Company, one of the world's premier market-making firms, for $531 million. It purchased Spear, Leeds, & Kellogg, one of the largest specialist firms on the New York Stock Exchange, for $6.3 billion the next year. Although earnings were healthy through 2000, the September 11th terrorist attacks weakened market conditions.

Nonetheless, Goldman stood as the leading advisor in merger activity in 2001and was involved in eight out of the ten largest deals completed that year. When IPO and merger activity slowed substantially in 2002, Goldman Sachs faced one of its most challenging years. To combat rumors that Goldman might be forced into a merger, Paulson insisted that Goldman Sachs would thrive on its own and laid out the company's strategy in a 2002 Business Week article.[1]

More recently, 2008 brought some of the most dramatic changes in Goldman's history and the history of Wall Street. In the midst of the financial crisis in September 2008, Goldman Sachs and Morgan Stanley received Federal Reserve approval to transition from an investment bank to a bank holding company. The change placed the banks under the supervision the bank regulators and gave them easier access to credit to help them ride out the financial crisis.[2]

Goldman Sachs initially received help from Warren Buffett's Berkshire Hathaway, in the form of $5 billion of preferred shares and warrants for another $5 billion of common stock.[3] Then the firm accept $10 billion dollars from the governments Troubled Asset Relief Program. Within the last few months, the firm has issued $25 billion of bonds guaranteed by the FDIC through the Temporary Liquidity Guarantee Program. Also, specifically in order to ramp up the pressure on the government to allow Goldman to repay its TARP money, Goldman issued $5 billion in equity.

Business Overview

Goldman Sachs Group, Inc. is a bank holding company that specializes in investment banking, trading and principal investments, and asset management and securities transaction services. Headquartered in New York City, the company primarily operates in the U.S., Europe, and Asia and has offices in financial centers throughout the world. Long considered one of the most prestigious investment banks, Goldman boasts such notable alumni as Henry H. Fowler, Robert Rubin, and Henry Paulson, all former secretaries of the United States Treasury. Although Goldman has some government and high-net-worth individual clients, the firm sets itself apart by focusing almost exclusively on institutional clients. As of Q1 2009, Goldman employed 27,898 people, with a market capitalization of approximately $55 billion.[4]

Investment Banking

- **Financial advisory**: Advises corporate clients on activities including M&A, divestitures, corporate defense, restructurings, and spin-offs.
- **Underwriting**: Underwrites a wide range of securities and places them with investors. Offerings include common stock, preferred stock, convertible and exchangeable securities, investment-grade debt, high-yield debt, sovereign and emerging market debt, bank loans, asset-backed securities and real estate-related securities.

Trading and Principal Investments

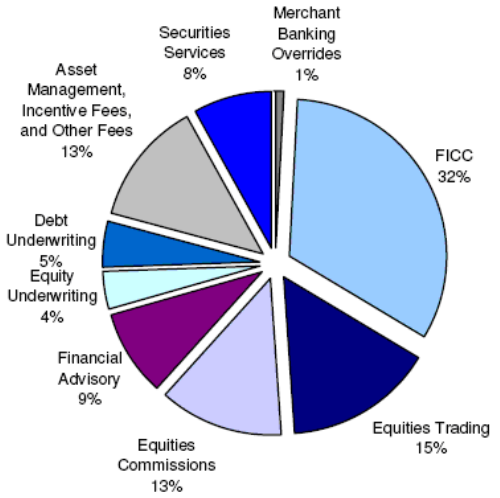
- **Fixed income, currency and commodities (FICC):** Trades and makes markets for commodities, credit products, currencies, interest rate products, money market instruments, real estate-related securities and loans, in addition to other asset-backed securities. Special situations groups focus on capital structure arbitrage, non-performing loans, and illiquid assets.
- **Equities:** Provides investment research, portfolio recommendations and hedging, client order execution, structuring derivatives trades, and market-making in equities, preferreds, and structured products.

- **Principal investments:** Operates in-house hedge funds and private equity funds, trading on the firm's behalf.

Asset Management and Securities Services

- **Asset management:** Offers investment advisory and financial planning. Investment offerings include money markets, fixed income, equities, mutual funds, alternative investment funds, and merchant banking funds.
- **Securities services:** Provides prime brokerage, financing, and securities lending for institutional clients and high-net-worth individuals.

Net Revenue Breakdown by Type, 2006–2008



Source: FBR Research and company reports

Net Revenue Breakdown by Segment, 2006-2008	
Trading and Principal Investments	61%
Investment Banking	18%
Asset Management and Securities Services	21%

Goldman's business model focuses on leveraging its elite brand to lure top employee talent, which allows the firm to provide the most value-added services for clients. Holding on to key employees is fundamental to the firm's success, and so it is imperative for compensation (whether financial or other) be very competitive. In practice, a great deal of the value of working for a firm like Goldman comes from the connections its employees develop during their tenure. Those relationships with influential clients can lead to very lucrative post-Goldman employment opportunities, and this possibility is a nontrivial component of Goldman's compensation scheme, whether explicit or implicit. Another key to Goldman's model is its relative lack of direct exposure to the consumer. Unlike giant competitors such

as Citigroup, JPMorgan Chase, and Bank of America, Goldman does not rely on deposits and credit cards. This is an especially salient fact during the current downturn, which is likely to get even worse for consumers going forward as unemployment rises.

Competitive Analysis

Rivalry

Investment Banking

Even in the wake of the current financial crisis, there will still be a large number of investment banks, both in the US and globally. As mentioned previously, brand differentiation does exist and helps, at the margin, to maintain a client base. However, even the most stable clients work regularly with several investment banks, and so competition is everywhere an issue. The legitimate hope to increase market share in the wake of bankrupt competitors does not change this fact.

Trading and Principal Investments

There are many competitors in the sales and trading space as well, and they run the gamut of quality. However, there is legitimate product differentiation between the proprietary trading systems at large banks.

Asset Management and Securities Services

Similar to the sales and trading operations, there are many competitors and companies use technological product differentiation as a buffer. An important difference in the asset management business is the fact that once a high net worth individual opens an account with Goldman's asset managers, there are practical and economic switching costs to deal with.

Buyer power

Across all three segments of the firm, buyer power is similar. There are an extremely large number of customers for most financial services firms, but there are also many financial institutions. The size of the pools of supply and demand balance out and there is relatively little asymmetrical buyer power. Investment banking advisory work can be done for dozens of corporations in any industry in any country. Sales and trading activities can be performed for numberless pension funds, endowments, and other institutional investors. Many of Goldman's businesses are also human relationships based around trust, which creates small-scale switching costs.

Supplier power

The major suppliers for most financial services firms are their employees. Even in this financial crisis, there is still an overabundance of college graduates seeking employment somewhere within the investment banking industry. There has been a great deal of talk in the press about how the "best and the brightest" are now looking to other careers after graduation, but few articles acknowledge that this is largely because bank hiring plummeted this year. Graduates considered other jobs as much out of necessity as out of disgust a lack of interest in investment banking. Thus, even though there are a wide variety of firms that compete over any individual potential employee, the excess supply of talented applicants still tilts the equation in favor of the banks, including Goldman Sachs.

Other suppliers include IT support functions, which can be either outsourced or internal to a bank's operations. Regardless, there are many competitors to choose from to provide this function, decreasing their supplier power.

Research tool providers such as Bloomberg have a great deal of power because there are few substitutes. Competitors such as Reuters are trying to enter that business, but at least up until this point, banks basically have to accept whatever prices Bloomberg decides to charge.

Finally, colleges and business schools, to the extent that they influence the pipeline of potential future employees for investment banks, have some supplier power. However,

there are too many of them to exert much control. Through coordinated efforts, they can achieve some concessions, such as widespread reductions in so-called "exploding offers"[1].

Barriers to Entry

Investment Banking

Starting an investment banking business is extremely simple. All that is required is human capital, a little office space, and a few computers with Microsoft Excel and Powerpoint. It is not infrequent for top dealmakers at large firms to split off to start their own boutique investment banking advisory firms, pulling with them other employees from the large firm. This is certainly an issue for Goldman Sachs because its investment banking relationships are ultimately individual relationships with specific dealmakers. Defection to start a new firm is a serious potential threat for any investment bank.

The top investment banking firms heavily brand their franchises and use prestige to promote their products. Thus, intuitively, it would make sense for it would be difficult for new entrants to break into the market. However, the media helps brand investment banks by writing articles about top dealmakers. Thus, in a sense, these dealmakers may already have a brand before they leave to start their own firm.

Traditional investment banking advisory and underwriting work does not require capital. It is simply a service provided for a fee. Thus, it is relatively less risky than many other segments within the financial services industry. It also contributes to low barriers to entry. Some capital is required for underwriting if the firm plans to hold any of the risk themselves at any point, so the barriers to entry may be slightly higher for that part of the business.

Trading and Principal Investments

Barriers to entry for trading and principal investments segment of the firm are higher than for the investment banking segment because it requires risking firm capital. Even in simple

[1] An "exploding offer" is a job offer that must be accepted on the spot or it will be given to someone else.

market-making, the firm cannot avoid putting up its own capital to take temporary risks on its balance sheet. Furthermore, in its proprietary trading unit, that is specifically the goal. Thus, in order for a new company to enter the sales and trading segment would require a substantial amount of capital.

Additionally, a trading operation requires significant technological investments. There may need to be some sort of proprietary trading software developed if the firm is to have any competitive advantage. At the very least, a firm will need many computers and costly Bloomberg subscriptions.

Asset Management and Securities Services

In the asset management and securities services segment, the firm is investing for clients, so it doesn't require capital. However, similar issues will exist with relation to technology and research tools. Thus, it would not be terribly difficult for an asset manager at a major firm to walk away with his book of clients, provided he could organize enough capital to provide for the infrastructure necessary to manage the money.

Substitutes

Investment Banking

So long as mergers and acquisitions exist, or firms need debt or equity financing in order to operate, there cannot truly be a substitute for investment banking advisory or underwriting. Surely, the business can and is changing as times change. But companies will still seek expert advice on mergers and acquisitions, and they will still need help in coordinating issuance of debt, equity, or other securities with potential investors. Internal M&A groups within corporations that are highly active in the M&A markets may decrease those firms' need for investment banking advice. But there will at least still be many firms who infrequently acquire or merge and need expert advice on those occasions.

Trading and Principal Investments

Access to electronic trading platforms may reduce customers' need for Goldman to act as a market-maker. But institutional investors will still have a need for customized prime brokerage service to meet their needs.

As far as Goldman's proprietary trading operations goes, they could theoretically invest that money through outside hedge funds and private equity firms, but that would drastically reduce their ability to monitor their own risk. In light of recent issues with risk management within the financial services industry, this substitution is unlikely.

Asset Management and Securities Services

For asset management, high net worth investors could invest their own money directly. If they are wealthy enough, it may make sense for them to invest directly in hedge funds or private equity funds. However, it will usually be more convenient for them to outsource the monitoring of these investments. If there are any true substitutes for this service, they are essentially commodities offered by retail brokerage firms.

Complements

The complements for the investment banking industry are usually all offered under one roof. Investment bankers underwrite securities, then GS salespeople find buyers for them, all the while the asset managers are developing relationships with high net worth individuals – many who work for investment banking clients – in order to solidify relationships and keep the cycle going.

One set of external complements is filled by securities exchanges and clearinghouses. Without these entities, Goldman's operations would be curtailed or eliminated in many departments.

SWOT

Strengths	Weaknesses
▪ Ability to raise capital ▪ Brand/human capital ▪ Global influence ▪ Little direct consumer exposure ▪ Deep connections ▪ Liquidity ▪ Risk management ▪ "Too big to fail" ▪ Uncorrelated revenue streams ▪ Already marked-to-market	▪ Government limitations ▪ "Black box" to investors ▪ "Too big to fail"
Opportunities	**Threats**
▪ Potential to seize market share ▪ International expansion ▪ Wider margins	▪ Government influence ▪ Continued writedowns ▪ Boutique firms ▪ Regulatory reform ▪ Low-leverage environment ▪ Public fury and legislative retribution over AIG concerns ▪ Market uncertainty and fear

Strengths

- **Ability to raise capital**: As evidenced by its $5 billion stock issuance just last week, Goldman's ability to raise capital has significantly improved.[5] Goldman's financing capacity surpasses many of its Troubled Asset Relief Program (TARP) counterparts and has shown eagerness to pay the government back early.[6] This access to capital both signals and enhances Goldman's solvency, which in turn improves the firm's ability to commit capital to operations.

- **Brand/human capital**: The Goldman Sachs name attracts the best employees. Those employees produce the best services, which attracts the most lucrative projects and clients. This, in turn, leads to high revenues, which means that the firm can provide employees with lucrative employment and interesting work, thereby creating a virtuous cycle.
- **Global influence**: Goldman's asset base and international presence provides Goldman the opportunity to maintain more consistent deal flow and increase its service base.
- **Little direct consumer exposure**: None of Goldman's business segments gives it direct exposure to consumers,[7] which partially protects it during downturns like the current one.
- **Deep connections**: The nature of the business necessitates networking and connections. None are better than Goldman, which is frequently cited in conspiracy theories for having its "tentacles" deep in the government. Connections lead, at the margin, to more favorable, or at least less unfavorable, treatment.
- **Liquidity**: Even before the recent $5 billion equity issuance, Goldman was a peer-leader in terms of liquidity. A historically high global core pool of liquidity around $164 billion dollars as of Q1 2009 gives Goldman operational flexibility and also increases investor confidence.[8]
- **Risk management**: Goldman's risk management is unsurpassed. Importantly, risk managers are seen as prestigious and important at the firm, instead of bureaucrats who do not produce revenue. This is arguably the greatest reason for Goldman's outperformance during the crisis.
- **"Too big to fail"**: Although it is unclear what would have happened in financial markets were TARP not enacted, Goldman's perception as being too big too fail certainly granted it access to government pools of capital that ensured its survival.
- **Uncorrelated revenue streams**: All three of the firm's business segments are capable of outperforming in up and down markets. Investment banking underwriting may be more prevalent in boom times, but consolidating M&A deals and restructurings will fuel the firm through bad times. The FICC business is also non-directional, which is significant considering how much of the firm's revenue come from the unit. High-net-worth individuals will still need their assets managed in bad times, and any surviving hedge funds will still need a prime broker even in bad times.[9]

Already marked-to-market:: From an accounting perspective, Goldman should also strive to stay the course. Currently, the firm attempts to mark all of its assets to market, maintaining maximum transparency for investors. This only adds to the confidence investors already feel because of Goldman's operational and risk management outperformance.

Crystal Clear

Goldman and Morgan Stanley try to show the market value of all their assets. Not so for banks.

	Mark To Market	Available For Sale	Held To Maturity
Morgan Stanley	97%	3%	0%
Goldman Sachs	100	0	0
Citigroup; Bank of America; JPMorgan Chase	28	18	54
Other Banks	3	20	77

Source: Goldman Sachs research

[10]

The following graph further illustrates how Goldman's already marked-to-market accounting strategy starkly differentiates the firm from the rest of the pack, who have broadly failed to mark assets to market.

Exhibit 4: Although leverage and cheap funding can improve the bid, banks still have assets marked at high levels
estimated carrying value by product; see footnote for methodology by bank

	Mortgage + HE Avg Carrying Value		Construction Avg Carrying Value		Commercial Mortgages Avg Carrying Value		C&I Avg Carrying Value		Consumer Loans Avg Carrying Value
CYN	100%	C	100%	CYN	100%	CMA	99%	CMA	98%
ZION	99%	WFC	97%	C	100%	CYN	99%	HBAN	98%
BBT	98%	JPM	97%	JPM	100%	BBT	98%	RF	97%
CMA	98%	BBT	97%	BAC	100%	STI	98%	STI	96%
USB	98%	HBAN	96%	ZION	100%	USB	98%	MI	96%
KEY	98%	USB	96%	FHN	100%	ZION	98%	CYN	94%
HBAN	96%	STI	95%	USB	100%	JPM	98%	USB	94%
RF	97%	BAC	94%	BBT	99%	RF	98%	FITB	94%
MI	97%	COF	94%	COF	99%	HBAN	97%	KEY	94%
FHN	97%	CYN	92%	STI	99%	MI	97%	FHN	93%
COF	96%	ZION	91%	CMA	99%	KEY	97%	BBT	93%
STI	96%	KEY	91%	KEY	99%	BAC	96%	ZION	93%
FITB	95%	CMA	90%	HBAN	98%	C	96%	JPM	92%
C	94%	RF	82%	MI	97%	FHN	95%	WFC	90%
BAC	93%	FHN	71%	RF	96%	PNC	94%	BAC	88%
WFC	87%	PNC	70%	FITB	90%	COF	93%	COF	87%
JPM	85%	MI	67%	PNC	88%	WFC	93%	C	86%
PNC	80%	FITB	66%	WFC	86%	FITB	92%	PNC	84%
Average	91%	Average	90%	Average	95%	Average	96%	Average	89%

(1): Carrying value estimated as par - LTM net charge-offs - reserves (estimated at 1X 4Q08 annualized NCOs) - any deal related marks. BAC, JPM, WFC and PNC adjusted for respective acquisitions of CFC, WM, WB, NCC. Carrying values include full marks announced against those portfolios. WFC mortgages also excludes $6bn of insured/guaranteed delinquent GNMA loans. USB is NOT adjusted with the view that any losses on DSL above and beyond those announced with the deal are mostly taken by the FDIC.

(2): All averages weighted by portfolio size.

Source: SNL, Company reports, Goldman Sachs Research.

Weaknesses

- **Government Limitations**: The acceptance of TARP aid comes with limitations of dividends, stock buybacks, and executive compensation.
- **"Black box to investors"**: Due to the opaque nature of many of Goldman's businesses, investors can never be quite sure what risks underlie their investment.
- **"Too big to fail"**: Being too big to fail was a boon when it came to government aid programs, at least to the extent that it essentially eliminated short-term solvency concerns. However, there is now the risk that the government decides to exercise greater regulatory control over institutions deemed systemically significant. Anything from compensation limits to forced separation of businesses (à la Glass-Steagall II) is possible.

Opportunities

- **Potential to Seize Market Share**: Large bankruptcies and struggling competitors create the opportunity for increased market share across business segments. This can be achieved without growing operations simply through aggression. However, organic or inorganic growth could also build market share.
- **International expansion**: About half of Goldman's revenues and earnings come from the U.S. Goldman could take advantage of the global recession to increase its international footprint. This is attractive because BRIC and other emerging countries are likely to grow faster than the U.S. once they recover from the recession. Goldman has already started this process in China, through existing relationships with the Chinese Government and powerful businesses (such as its 4.9% stake in the Industrial and Commercial Bank of China, or "ICBC").
- **Wider margins**: Due to investors' and banks' risk-aversion in this period of deep market uncertainty, margins have widened for those banks willing to provide liquidity to markets. Goldman clearly took advantage of this in Q1 2009 with its FICC group, and can continue to do so.[11]

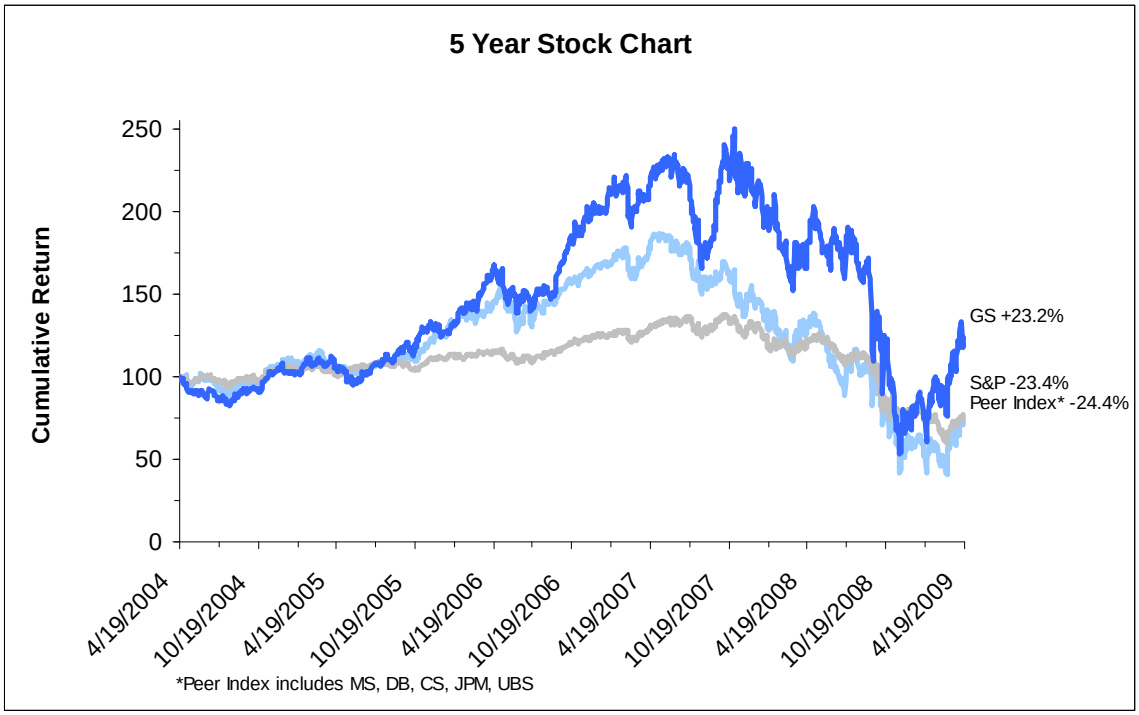
Threats

- **Government Influence**: The Obama administration has indicated willingness to exert a great deal of influence over the banking sector, whether through programs like TARP or through future legislation. Market uncertainty is at least significantly related to uncertainty about the future of government influence in the banking sector.
- **Continued writedowns**: There is no certainty that asset prices have stabilized. The loosening of mark-to-market accounting rules could slightly diffuse the problem, but the likelihood of further write-downs is still nontrivial.
- **Boutique firms**: Since executive compensation limitations were threatened on large investment banks, there has been an exodus of talent to unrestricted boutique firms or to new ventures. For instance, the recent departure of Byron Trott, who is leaving to start his own firm.[12] If this is not curtailed, it poses a legitimate threat to Goldman's business model.
- **Regulatory reform**: Regulatory reform could come in many shapes and forms. Compensation limits, Glass-Steagall-type separations, or even nationalization of competitors could all have serious effects on industry dynamics and the existing business model.
- **Low-leverage environment**: Market fear has demanded that firms de-leverage, thereby improving their capital ratios. This could hurt the bottom line and impair compensation expectations.
- **Public fury and legislative retribution over AIG concerns**: The government's erratic and ad hoc handling of various situations within the financial crisis raises concerns. Should public fury rise over the payments that flowed from the government through AIG to Goldman, there is no way of knowing the government will not stick its hands into Goldman's pockets to take the money back.
- **Market uncertainty and fear**: Severe market volatility has eroded investor confidence even in the most solvent institutions. It will take some time for that confidence to be rebuilt.

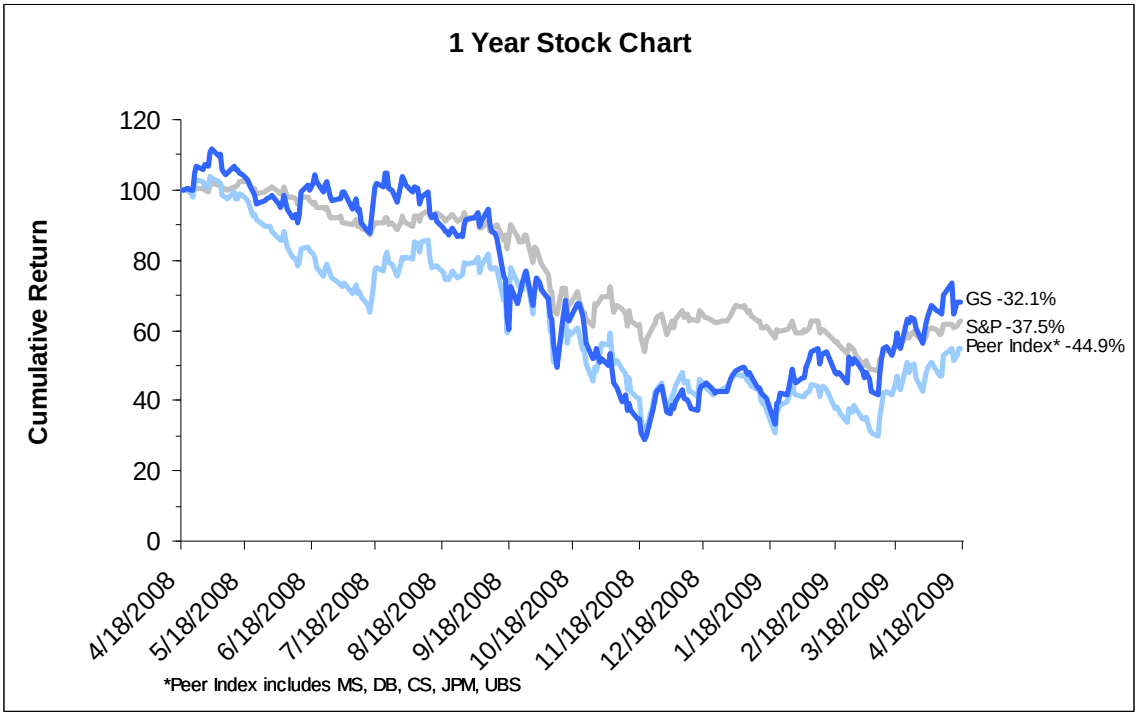
Financial Analysis

Overview

A brief glance at the stock charts below clearly illustrates the financial services industry's struggles since late 2007. After booming for years, the industry has gone through a period of acute uncertainty about solvency. A perfect storm of imprudent risk-taking, poor oversight, deflation of a housing market bubble, and frozen credit markets led to huge writedowns across the banking sector. Investors lost confidence in banks' financial statement. Once investors develop a fear of off-balance-sheet entities, it is difficult to overcome. Goldman's stock suffered along with the rest of the industry, albeit not quite as severely. And certainly, the firm was not innocent of many of the same mistakes crippling competitors, as shown by the slump in the firm's profitability. However, in the relative stability of the first few months of 2009, Goldman's stock has experienced a more robust recovery than its peers. This must be largely attributed to the firm's strong financial profile relative to its peers.



Bank stocks strongly outperforming the market until roughly Q3 2007, when the subprime crisis started to hit and take victims. Goldman consistently performed as well or better than its peers.



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Bank stocks underperforming, and likely dragging down, the market until the beginning of Q1 2009, when those same stocks have led a rebound. Goldman has paced its competitors during the recovery of the last few months.

Profitability and Growth

Explosive revenue growth from 2004-2007 (at a 3-year CAGR of 30.0%) led to record revenues in 2007 of over $45 billion. This growth was across business segments, as the business mix stayed relatively constant over that period, although it is worth noting that Trading and Principal Investments comprised roughly two thirds of revenue. Impressively, operating margins increased from 31.9% in 2004 to 38.3%.

In 2008, total revenue dropped by over 51%, with Trading and Principal Investments in particular seeing revenue decrease by 71%. Q1 2009 showed a large-scale turnaround. If the Q1 09 results could be maintained for all of 2009, revenues would increase by 69.7%, with Trading and Principal Investments revenue increasing by over 215%. It is definitely somewhat concerning that both the Investment Banking and Asset Management and Securities Services segments would still show significant further decreases in revenue if the Q1 data were maintained. Trading and Principal Investments are carrying the firm right

now, in large part because of strong results in the liquid products businesses of the FICC group. Meanwhile, the other segments have not started to recover yet.

Revenue by business segment ($ millions)	2004	2005	2006	2007	2008	Q1 2009	Q1 2009 Annualized
Investment Banking	$3,374	$3,671	$5,629	$7,555	$5,185	$823	$3,292
Trading and Principal Investments	$13,728	$16,818	$25,562	$31,226	$9,063	$7,150	$28,600
Asset Management and Securities Services	$3,849	$4,749	$6,474	$7,206	$7,974	$1,452	$5,808
Total	$20,951	$25,238	$37,665	$45,987	$22,222	$9,425	$37,700
% of Revenue	**2004**	**2005**	**2006**	**2007**	**2008**	**Q1 2009**	**Q1 2009 Annualized**
Investment Banking	16.1%	14.5%	14.9%	16.4%	23.3%	8.7%	8.7%
Trading and Principal Investments	65.5%	66.6%	67.9%	67.9%	40.8%	75.9%	75.9%
Asset Management and Securities Services	18.4%	18.8%	17.2%	15.7%	35.9%	15.4%	15.4%
Revenue - YOY Growth	**2004**	**2005**	**2006**	**2007**	**2008**	**Q1 2009**	**Q1 2009 Annualized***
Investment Banking		8.8%	53.3%	34.2%	-31.4%		-36.5%
Trading and Principal Investments		22.5%	52.0%	22.2%	-71.0%		215.6%
Asset Management and Securities Services		23.4%	36.3%	11.3%	10.7%		-27.2%
Total		20.5%	49.2%	22.1%	-51.7%		69.7%
Pretax Operating Profit	$6,676	$8,273	$14,560	$17,604	$2,336	$2,629	
Pretax Operating Margin	31.9%	32.8%	38.7%	38.3%	10.5%	27.9%	

*Q1 09 Annualized is compared to 2008

Source:FBR Research and company reports

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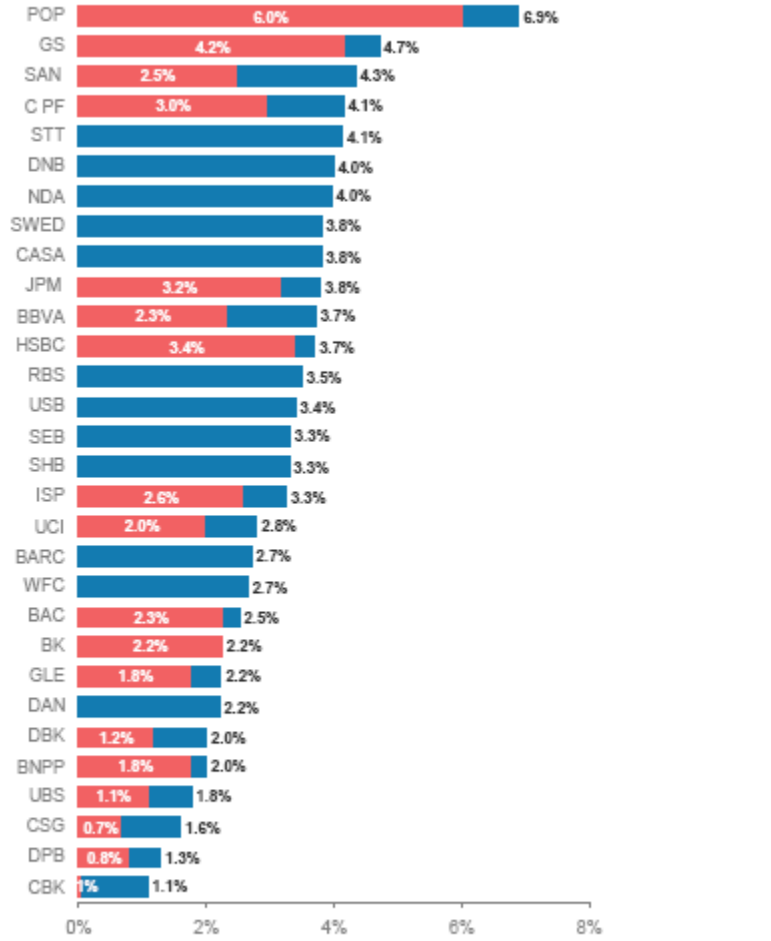
Solvency

Goldman is solvent and strong when compared to its peers. According to its Tangible Common Equity ratio, Goldman leads the pack of the major banks (see chart below). This ratio gives a sense of how well-capitalized a firm is. A higher ratio implies lower leverage (leverage is the inverse of this ratio), and therefore a smaller chance of failing to meet obligations.

TCE/TA



Notes: 1) Red bar deducts deferred tax assets; 2) All data as of 4Q08 except UCI, ISP and CASA; 3) BNPP and GLE calculations not pro-forma for second round of French government capital increases but assumes first capital injection is counted as TCE. Excludes accumulated fair value gains.
Source: Company data, Morgan Stanley Research

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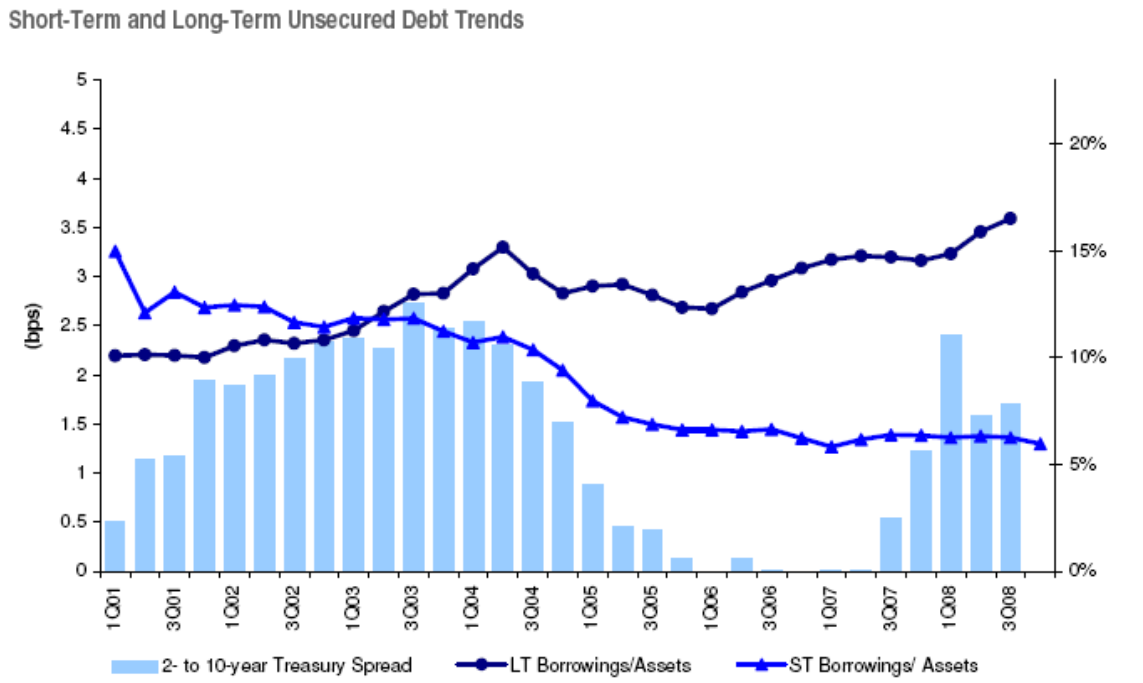
Financial companies' stock market struggles can in large part be traced to solvency fears. Surely, fears of decreased earnings power given lower leverage and questions about the business model played a role as well, but primarily investors were concerned that creditors would pull the short-term lending that is the lifeblood of investment banks. Goldman's more conservative leverage is likely a large factor in its stock outperformance.

GS's TCE ratio hovered around 4.7% as of Q4 2008, implying leverage of 21x. Until the government reveals the results of its stress tests, it remains unclear whether this will satisfy them enough to accept TARP repayment from GS. There are, of course, political and

systemic considerations related to TARP repayment in addition to company-specific financial strength.

Another strategy that has enhanced Goldman's solvency relates to the maturities of its debt. One concern during the peak of this crisis was that critical, short-term financing would be pulled, essentially dealing banks a death sentence. However, we see that even before the crisis started, Goldman was shifting away from short-term to more long-term borrowing. This was smart first because short-term lending was more attractive when the yield curve was more tilted between Q1 2002 and Q1 2005 (as shown in the graph below by the bars indicating the spread between the 2-year and 10-year Treasuries). Then, as the yield curve flattened and rates concurrently came down, Goldman shifted from short-term borrowing into long-term. Now, the firm has locked up long-term financing at relatively low rates, thereby decreasing its exposure to the threat of short-term creditors pulling their financing.



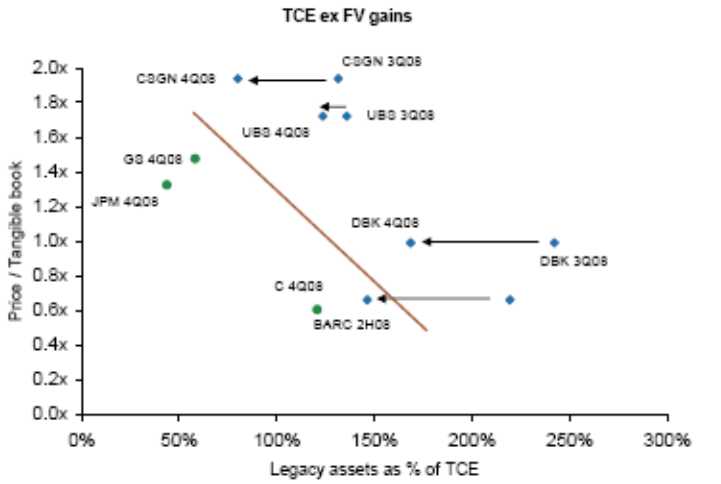
Source: FBR Research, FactSet, and Bloomberg

16

Liquidity

With respect to liquidity, Goldman is also in a strong position. In Q1 2009, its global core excess pool of liquidity averaged a record $164 billion, during a period of deleveraging. Some analysts on the earnings call were concerned that Goldman was hording too much cash, but CFO David Viniar said the firm was intentionally taking a cautious stance during this period of uncertainty.[17]

Another topic in the liquidity discussion is the amount of illiquid assets on the firm's balance sheet. The following chart examines the ratio of illiquid legacy assets to tangible common equity. The chart shows that GS is well positioned in terms of legacy assets, with fewer as a percentage of Tangible Common Equity than any firm other than J.P. Morgan.



Notes: 1) Market data as of March 26, 2009. 2) For DBK and UBS we 'add back' to the legacy asset calculation those legacy assets transferred from the trading book to the banking book under IAS39 provisions
Source: Company data, FactSet, Morgan Stanley Research

[18]

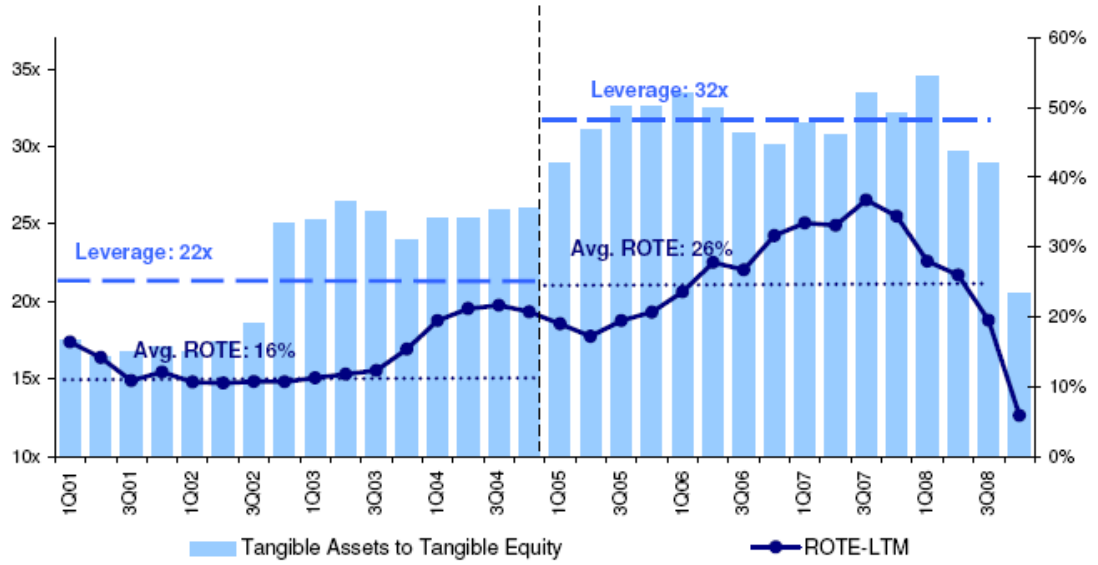
Strategic Recommendations

Leverage

During the boom times of 2006-2007, investment banks used leverage to boost their returns. This strategy seemed safer because of the prevailing wisdom that complex derivatives allowed banks to hedge away more risk. However, the crisis has made it clear that our financial infrastructure has systemic weaknesses. In particular, off-balance-sheet entities have deeply eroded confidence in financial institutions. Banks that seemed to have healthy financials owned off-balance-sheet Structured Investment Vehicles (SIVs) housing collateralized debt obligations (CDOs) financed by commercial paper. With the housing downturn, the CDOs began rapidly losing value, which caused the commercial paper investors to stop rolling over the SIVs' financing arrangements. All of a sudden, the SIVs had to be brought onto the balance sheet, along with their massive writedowns.

These blunders did massive violence to investor confidence in bank financial statements, and it will take time for banks to restore confidence that they are no longer concealing material risks from their investors. Until that confidence is fully replenished and the market stabilizes, banks would be smart to maintain conservative leverage, even if it means taking a hit to return-on-equity. Goldman has a very strong reputation for its risk management, and investors may allow it more flexibility with its capital structure than some of its competitors, but in the short term at least, maintaining confidence is at a high premium in these uncertain times. In the Q1 2009 earnings call, Goldman CFO David Viniar indicated that this is how Goldman views the situation as well. As mentioned previously, the firm has amassed a record $164 billion excess pool of liquidity. This pool cushions Goldman against a further downturn, but in the upside case of a quick recovery, the firm can easily and opportunistically move out of these liquid positions.[19]

Leverage vs. Return on Tangible Equity



Leverage defined as tangible assets/tangible common equity.

Source: FBR Research, FactSet, and Bloomberg

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Regulation

Troubled Asset Relief Program - TARP

Goldman needs to get out of the TARP program as soon as possible, and they know it. The threat of executive compensation limits is causing the loss of talented executive to unencumbered boutique firms. Also, participation in the program has brought with it too much bad publicity.

Nonetheless, exiting the program will not be so easy. The government is concerned with ensuring that allowing healthy banks out of the program does not bring back the systemic risks the program was designed to eliminate.

Term Asset-Backed Securities Loan Facility - TALF

The TALF program has not worked as planned, due to lack of interest. As of the morning of the April deadline, only two lenders had applied for the program, for a total issuance of under $1.4 billion. March's issuance was $4.7 billion, also well below expectations. One article summarized the problems with TALF as follows[21]:

- **Inadequate demand**: The economic environment does not favor the kinds of real-estate or other fixed asset investment that a couple of years ago would have been rapidly bundled into the kinds of asset-backed securities TALF was designed for.
- **Better options exist**: Investors may be choosing to utilize other government programs, whose terms seem friendlier, such as the Public-Private Investment Partnership.
- **Government fear and uncertainty**: After seeing how TALF participation has created deep problems for members, there is widespread fear that the government will exercise the same unexpected control over TALF participants.

Temporary Liquidity Guarantee Program – TLGP

Goldman has been organized large bond issues under the Temporary Liquidity Guarantee Program (TLGP), which provides and FDIC guarantee on relatively short bonds. One analysis estimated that the program was saving Goldman two to three percentage points of interest that they would have to offer to place bonds not guaranteed by the FDIC. With the $25 billion of bonds that Goldman has issued under the program, those savings amount to between $500 and $750 million a year in government subsidies.

FDIC Debt Program

Company	Amount Issued (bil)
Bank of America	$44
GE Capital	35
JPMorgan	32
Goldman Sachs	25
Morgan Stanley	23
Citigroup	21

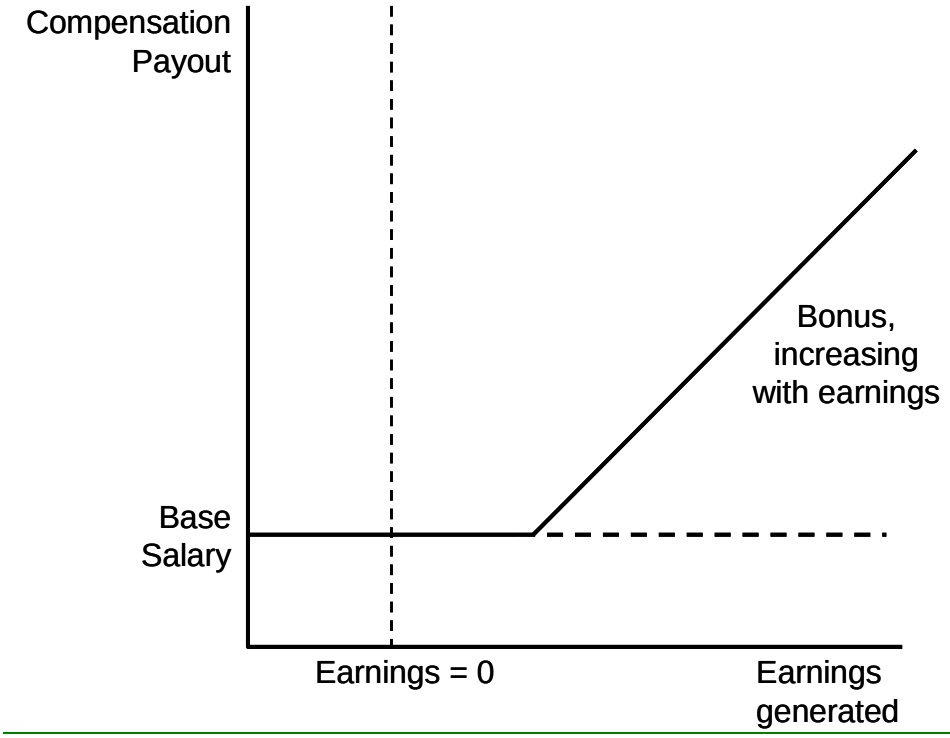
Source: Company reports [22]

In the most recent earnings call, Goldman CFO David Viniar repeated that he does not believe the TLGP program will be subjected to the same kind of legislative attacks that TARP participants experienced. Also, he said he did not believe that TARP repayment would disqualify Goldman from TLGP participation, citing as evidence the fact that TARP non-participants were already taking advantage of the TLGP.

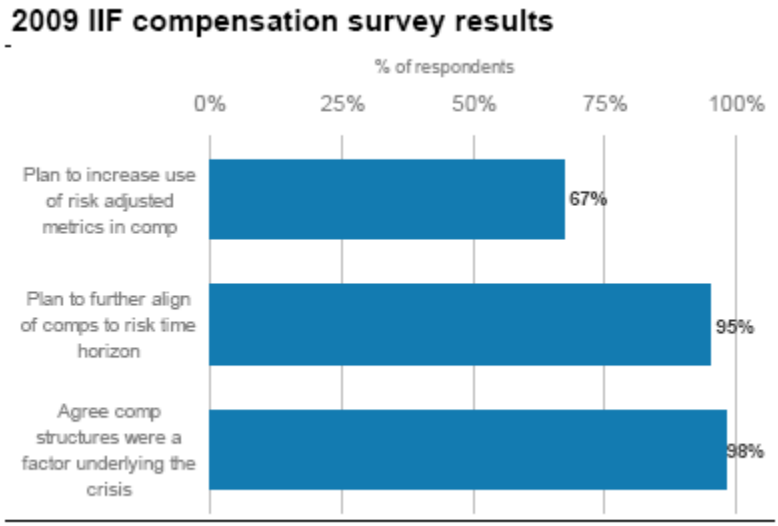
Compensation

There is a clear principal-agent problem with executive compensation, which can be viewed as a series of annual call options (see graph below). So long as employment is maintained, the executive has great incentives to take on high-risk, high-return projects because he doesn't participate in the downside except through potential severance or lawsuits. This perverse incentive will increase earnings volatility, since large ups and downs enrich executives at their investors' expense. The situation is not quite this simple, however, much of the bonus is stock-based compensation, which has a sort of embedded clawback clause in it. In other words, if the executive engages in risky activities that manifest themselves in decreased earnings before his stock-based compensation vests, his bonus will shrink appropriately. However, the problem is that often the risky nature of projects can depress earnings long after the vesting and cashing out have occurred.

The public outcry over executive compensation generally decries income inequality. While that is a concern for our country, it is certainly not an investment bank's duty to pay below-market rates in the name of some national ideal. A greater concern for investment banks should be their own investors, and they have deeply failed on this account, because pay practices deeply exacerbated principal-agent issues.



Compensation structure was the catalyst of improper risk-taking. The option-like payout structure encouraged executives to search out projects that would show up fast in net income, regardless of the level of future risk. So long as projects could keep company stock prices inflated until options of restricted stock units vested, executives could cash out and then watch the stock price drop as risks became realized. There is a growing consensus that compensation needs to change. The following graph shows that firms plan in particular to use risk-adjustments when determining compensation. Additionally, vesting periods will be tailored to attempt to align executives' incentives with their firms'.



Source: Oliver Wyman, IIF: a survey of wholesale banks covering 57% of industry revenues [23]

These alterations to compensation practices have already clearly been absorbed into the mainstream. Thus, at this point, the more relevant question becomes exactly what risk metrics to use to determine compensation and how best to determine the risk time horizon associated with any given position.

Another incredibly important strategic issue for investment banks in general, and GS in particular, is the threat of legislated compensation restrictions. The clearest threat is from the TARP program. If the government refuses to accept repayment of TARP funds, GS may be saddled with pay limits that will cripple its ability to compete with boutique investment banks for top executive talent. This cannot be allowed to happen. In the short term, GS continue to focus on TARP repayment. If that fails or takes longer than expected,

GS should consider raising base salaries and lowering bonuses, both potentially dramatically. The firm and its brand are worthless without the stock of human capital stored up in its employees. GS may decide that the incentives created by the bonus structure are critical to operational success, in which case the firm should consider some sort of break-up. Only by removing the label "too big to fail" can GS truly ensure that it will have the freedom to pay its employees market rates.

Potential for Growth

The firm has a record amount of excess cash on its balance sheet, which theoretically endows it with a great deal of power for potential acquisitions. Additionally, the Goldman's revenues are highly concentrated in the U.S., with around 50% of revenues and earnings in the U.S. (see chart below). Through acquisitions the firm could gain access to the higher growth likely in emerging countries once stability returns to financial markets.

Net revenues ($ millions)	2008		2007		2006	
Americas[1]	15,485	70%	23,412	51%	20,361	54%
EMEA[2]	5,910	27%	13,538	29%	9,354	25%
Asia	827	4%	9,037	20%	7,950	21%
Total net revenues	22,222	100%	45,987	100%	37,665	100%
Pre-tax earnings	**2008**		**2007**		**2006**	
Americas[1]	4,879	N.M.	7,673	44%	7,515	52%
EMEA[2]	169	N.M.	5,458	31%	3,075	21%
Asia	(2,716)	N.M.	4,510	26%	4,015	28%
Corporate[3]	4	—	(37)	—	(45)	—
Total pre-tax earnings	2,336	100%	17,604	100%	14,560	100%
Net earnings	**2008**		**2007**		**2006**	
Americas[1]	3,371	N.M.	4,981	43%	4,855	51%
EMEA[2]	694	N.M.	3,735	32%	2,117	22%
Asia	(1,746)	N.M.	2,907	25%	2,594	27%
Corporate[3]	3	—	(24)	—	(29)	—
Total net earnings	2,322	100%	11,599	100%	9,537	100%

[1] Substantially all relates to the U.S.
[2] EMEA (Europe, Middle East and Africa).
[3] Consists of net provisions for a number of litigation and regulatory proceedings.

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Brazil – Banco Pactual

Just recently, UBS announced its intention to sell its "highly profitable" Brazilian financial services business Banco Pactual for around $2.5 billion to its original, Brazilian owners, BTG Investments. Banco Pactual is primarily engaged in asset and wealth management, with $24 billion in assets under management. Goldman was reportedly interested in buying the firm but was beat out by UBS. One wonders why they would not be interested in it again now.[25]

According to UBS's 2008 20-F filing, Banco Pactual, renamed UBS Pactual Asset Management after the acquisition, was the seventh largest asset manager in Brazail as of 12/31/08, with CHF 19 billion of invested assets. As a recently acquired subsidiary, UBS does not break out any information on the unit in its financials. Oblique references are made to Pactual having a positive effect on UBS's FICC unit performance for 2008, but no hard numbers are given.

Eastern Europe – UniCredit Group

UniCredit Group's Central and Eastern European (CEE) division could be a potentially attractive acquisition for Goldman. It is by far the market-leader in the region, with nearly double the market share of its competitors. The division was steadily and increasingly profitable through 2008, as is detailed in the partial CEE income statement below. The division earned €1.6 billion in 2008, after earning €1.1 billion in 2007.

Income Statement (€ million)

	YEAR		CHANGE %		2008		2007	CHANGE % ON Q4 '07	
CEE DIVISION	2008	2007	ACTUAL	NORMALIZED[1]	Q4	Q3	Q4	ACTUAL	NORMALIZED[1]
Operating income	4,736	3,367	+40.7%	+ 21.8%	1,325	1,266	953	+39.0%	+21.1%
Operating costs	-2,233	-1,729	+29.1%	+ 15.3%	-613	-563	-526	+16.5%	+7.4%
Operating profit	2,503	1,638	+52.8%	+ 28.7%	712	703	427	+66.7%	+38.5%
Net write-downs on loans	-537	-211	+154.5%	+ 55.7%	-214	-124	-62	+245.2%	+103.3%
Profit before tax	2,021	1,342	+50.6%	+ 36.0%	487	608	318	+53.1%	+39.8%
Profit (Loss) for the period	1,598	1,092	+46.3%	+ 33.5%	369	487	257	+43.6%	+37.4%

1. At constant exchange rates and perimeter

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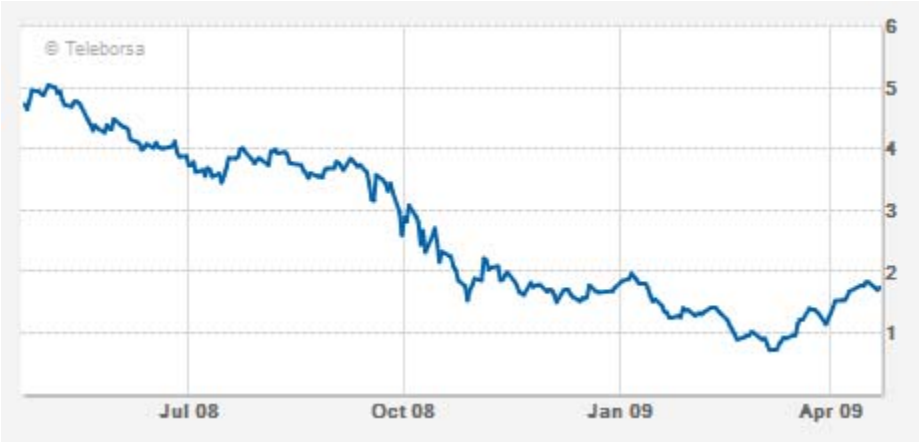
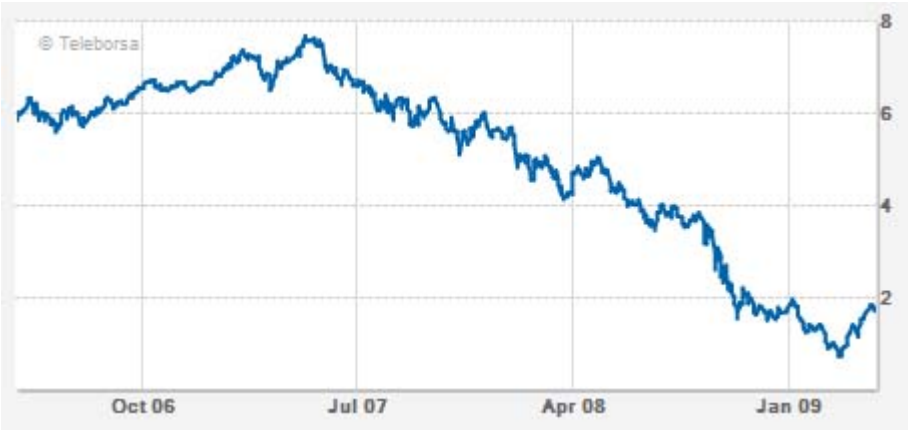
The stock has traded heavily downwards over the last year, as can be seen in the stock charts below, making it a potentially attractive buy. Using 2008 earnings, UniCredit's P/E is around 5.5-6.0. Granted, that is the P/E for the whole firm, which may not be growing as fast as the CEE region, but that is still cheap for a market-leading firm with steady profits even during troubled times.

1 Year Stock Chart



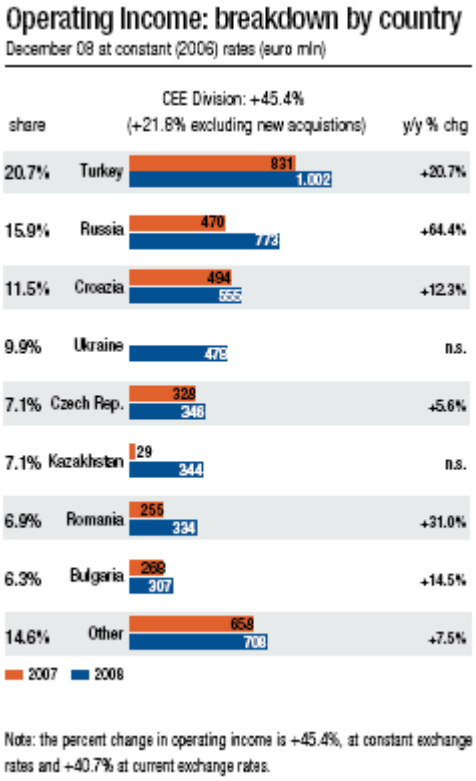
[27]

3 **Year Stock Chart**



[28]

The firm's results are remarkable across a variety of countries. The following graph shows that operating income increased in every country in the region (using constant 2006 euros).



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More would need to be known about the nature of the division's non-performing assets before progress could be made on this topic. Eastern Europe has been hit hard by the financial crisis, and this period of uncertainty might not be the right time to enter the region. Nonetheless, I believe Goldman should keep its eye on this firm. If global market conditions stabilize somewhat, this could be an attractive acquisition target.

Endnotes

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[17] 1Q 09 Earnings Call.

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[28] From UniCredit website.

[29] UniCredit Provisional 2008 consolidated Reports and Accounts.