# Goldman Sachs Presentation to the Credit Suisse Financial Services Conference Comments by David Viniar, CFO

February 9, 2011

### Slide 2

Thanks Howard, and good morning to everyone.

Over the last three years, the industry has been faced with numerous challenges. This period of flux has led some to question the industry's economic prospects and the validity of the business model. However, our industry is in a constant state of flux, and managing the dynamic nature of markets - and the cyclical nature of this business - has always been critical to the firm's success. The firm has a track record of relying on the adaptability of its people and its diverse set of businesses to succeed in an evolving competitive marketplace. On a managerial level, effective resource allocation has been instrumental in ensuring that Goldman Sachs is positioned for the opportunities that lie ahead.

## Slide 3

For 2011, we believe there are key themes underway within the broader marketplace - economic growth, capital market expansion, increased regulation and higher capital requirements. We feel that these themes will present a diversified set of challenges and opportunities.

To address these developments, our firm must make difficult decisions allocating resources like human capital, risk capacity, balance sheet, and financial capital.

We employ a rigorous and dynamic framework to help the firm quantitatively and qualitatively inform the decisions we make to serve our clients and our shareholders.

For example, our allocation process helps assess whether we should invest in growth versus developed markets, existing versus new business lines, or revenue producers versus infrastructure.

## Slide 4

Over time, client and industry evolution have served as the catalysts for our investments. As our business and product offerings have grown and become more electronic, Goldman Sachs has made more significant commitments to our infrastructure, principally in technology. The globalization of our business has also necessitated similar investments.

The emergence of technology is a trend that has been evident over the last few decades. While regulatory change may accelerate the pace of some of our investments, we have been ramping up our efforts in this area for quite some time. We remain focused on leveraging and improving our best in class systems to aid the transition of certain businesses, which will become more automated and transparent.

Serving our client franchise is critical to our success and accordingly we have also made significant investments with the goal of improving the client experience. Furthermore, our investments will position the firm to take advantage of high growth market opportunities and enable the firm to handle growth in product volumes and increased regulatory requirements.

#### Slide 5

As we mentioned, the industry has been constantly evolving and our investments over time have been critical to supporting the franchise.

Our commitment to Technological capabilities has driven a noticeable change in the composition of our employees over the past 10 years.

In 2000, Technology was 16% of our staff. By the end of 2010, that percentage had nearly doubled.

### Slide 6

We're all aware that post the tech bubble, there was a confluence of events within the Equities space that led to lower commissions, an explosion of volumes, and ultimately, the growth of our Equities business. We have seen similar trends within some FICC businesses as well. For example the foreign exchange markets have evolved significantly.

The emergence of diverse execution venues, increased liquidity, and a more competitive market place, have been the impetus for the rise of electronic foreign exchange trading. Today, electronically traded volumes represent more than 50% of our total foreign exchange volumes and their share of our total volumes has more than doubled over the past 5 years.

Since 2005, foreign exchange volumes have grown at a compounded rate of 20%, while electronic volumes are up more than 40%.

Within foreign exchange, revenue producing headcount has been largely flat, while technology and quantitative resources have grown 17%.

Despite a decline in bid/offer spreads, revenues have grown at an 11% rate and our technological investments have contributed to our margins, which have increased to 1.6 times that of our 2005 margin.

#### Slide 7

Another broad theme that we expect will continue to play an important role going forward is globalization.

Based on our expectation of above trend growth in markets like China, India, Brazil and Russia the firm has ramped up staff in response.

Here we identify the staff growth rates by country, with those in red indicating a compounded annual growth in excess of 25% over the past five years. Higher employee growth is evident in higher growth markets.

For example, headcount growth in China has been focused in large part on expanding our Securities Division efforts and expanding our A share research coverage. In Investment Management, we launched our onshore GaoHua China Asset Management capabilities. We also continue to build our onshore investment banking franchise.

Within India, our Mumbai office has grown considerably. We now have significant staff on the ground and as a Non-Bank Finance Corporation and a Securities firm we provide market making services to our clients within certain fixed income and equities products. We plan to commence Rates trading during the year and hope to launch our Investment Management business onshore as well.

Brazil has seen one of the highest growth rates over the past 5 years for the firm. Our franchise was first established through Investment Banking. Since then, the firm expanded its local mandate into Fixed Income and secured a number of necessary licenses. We've subsequently built out a full service onshore platform including equities, fixed income, rates, credit, currencies and commodities in sales, market making and investing. In addition we now have an asset manager license, which allows the firm to manage mutual funds in all asset classes.

Finally, in Russia we are focused on building our on-shore OTC derivatives offering and local bank infrastructure, expanding our Securities market making capabilities to include local futures markets and continuing to strengthen our client coverage in the region.

#### Slide 8

Even as the firm has grown and resource allocation decisions have evolved over time, our focus on risk management has remained paramount. Risk management is embedded in our culture and processes and remains one of our core competencies.

Every day we rigorously mark to market our balance sheet, which produces comprehensive and accurate data. We use this information to analyze our risk using a variety of tools like aged inventory, value at risk, stress tests, balance sheet and counterparty credit. We take a conservative approach in our assessment of these risks and set low limits to stimulate an ongoing dialogue between risk management and the business side.

We currently allocate 289 market risk limits including VaR limits and stress limits to 42 trading desks and over 110 thousand credit limits that are broken down by counterparty, geography, product and sector. Exposures are benchmarked relative to limits on a daily basis.

#### Slide 9

The vast majority of our balance sheet is used to facilitate client transactions. In order to do this, the firm maintains inventory, which turns over very quickly.

In fact, since the beginning of 2007, more than half of our trading exposures were on our balance sheet for less than one and a half months and more than 80% of our inventory turned over within 6 months. Only 8% of our inventory was on the balance sheet longer than one year.

This is a reflection of the primary service that we are providing clients as a market maker, and our goal to maintain a highly liquid balance sheet.

The aged inventory process assigns higher carrying costs the longer our traders hold an asset. The costs to hold inventory go up the farther you go out on the curve and the P&L implications incentivize managers and traders to devote resources to high turnover activities.

#### Slide 10

Value at risk, which is driven by volatility and position size, is another metric the firm uses to track and allocate risk.

We allocate VaR to individual trading desks and distribute it to individual traders. We heavily weight near-term volatility, which ensures that real-time market moves are immediately captured within our calculations. This process enables the firm to see real-time trends and react more quickly as conditions change.

This was critical throughout the recent crisis as management witnessed swift increases in volatility and was often able to mitigate losses by reducing exposures.

In the last few years, we have seen two volatility spikes in the equity markets: in the fourth quarter of 2008 and the second quarter of 2010. Although volatility was markedly higher in both quarters, you can see a reduction in equity VaR within each quarter, reflecting active derisking of the balance sheet that more than offset the rise in volatility.

## Slide 11

Given that value at risk does not capture tail risk or the risk characteristics of illiquid positions, we supplement VaR with a diverse array of stress tests, including market, credit and liquidity risks.

We use a variety of scenarios to calculate losses from a wide range of market moves and forecast potential liquidity outflows that the firm could endure in a crisis. These scenarios can include the default of a single corporate or sovereign entities or the impact of a move in equity prices across all positions.

The goal of our tests is to delineate extremely conservative loss and outflow scenarios and ensure that the firm is well positioned with enough capital and liquidity.

## Slide 12

One of the key lessons learned through the crisis was the importance of asset liquidity. Although we ended up with more illiquid risk than we would have liked, our focus on absolute limits helped the firm respond quickly to reshape the balance sheet.

Leading up to the crisis, the firm's less liquid exposures increased close to 40%, whereas liquid assets were up 24%. However, post peak levels in the first quarter of 2008, we reduced our balance sheet limits and significantly downsized the balance sheet with more difficult to fund assets declining at twice the rate of liquid assets.

# Slide 13

In addition to measuring, monitoring and managing risk, the firm must assess business level performance and determine how to maximize returns through scarce resource allocation. A

simplified version of our framework starts with balance sheet allocation and ends with calculating returns by business.

Every quarter, we undertake balance sheet planning, where independent risk managers meet with the businesses to review performance and discuss expectations for the upcoming quarter. 90 senior professionals are involved in the process and balance sheet allocations are discussed with 40 businesses throughout the firm. Consequently, over the past year limits for individual businesses were changed almost 400 times.

Post allocating balance sheet to a particular business, we monitor revenues that each business generates on a daily basis.

## Slide 14

In order to calculate earnings on a desk by desk basis, we deduct the cost of carry from revenues in addition to compensation related costs.

To calculate carry, we charge out the full funding cost that a desk is currently utilizing and also incorporate charges for what is theoretically needed in a stressed environment.

#### Slide 15

The return optimization framework culminates with capital attribution by business and a rigorous performance assessment, which looks at return on assets and return on equity, among other metrics.

Through the process, we attribute capital on a four walls basis, which does not assume diversification benefits. We then calculate return on equity by business and use this ratio along with a suite of other metrics to determine the resource needs for each business.

Once the balance sheet is reallocated, the framework begins again.

#### Slide 16

As I mentioned, making resource allocation determinations is a dynamic and ongoing process. We make decisions on a daily basis and do so largely in response to our clients' needs.

Our consistent investment in technology has been essential in this process and enables the firm to understand which businesses are profitable and allocate resources more efficiently. We believe this provides a significant competitive advantage as we are able to maximize returns in different operating environments.

Excelling at this framework is a testament to the strength of our franchise and allows us to provide consistent, high quality service to our clients.

# Slide 17

The combination of our rigorous and ongoing efforts to effectively allocate resources and the firm's track record of periodically returning excess capital to shareholders has contributed to a long-standing ROE outperformance.

While safety and soundness are paramount to Goldman Sachs, the firm's adaptable model puts us in position to meet our clients' needs and react to them.

We believe staying focused on effective resource allocation will be crucial to meeting our clients' needs in the future and providing best in class returns to our shareholders.

With that, I would like to thank you and I'd be happy to take your questions.