

Structured Product Details

Name Leveraged Buffered Equity Index-Linked Notes linked to Financial Select Sector SPDR Fund

Pricing Date September 18, 2008
Issue Date October 2, 2008
Valuation Date November 17, 2010
Maturity Date December 2, 2010

IssuerGoldman SachsCDS Rate584.42 bpsSwap Rate3.07%

 Reference Asset
 Financial Select Sector SPDR Fund

 Initial Level
 \$202.39

 Dividend Rate
 4.47%

 Implied Volatility
 53.13%

 Delta¹
 0.53

**Fair Price at Issue** \$745.26 **Realized Return** -67.91%

CUSIP 38145K218
SEC Link www.scc.gov/Archives/cdgar/
data/886982/000119312508199197/d424b2.htm

## Related Research

### Research Papers:

www.slcg.com/research.php

- "Are Structured Products Suitable for Retail Investors?" December 2006.
- "Structured Products in the Aftermath of Lehman Brothers," November 2009.
- 'What TiVo and JP Morgan Teach Us about Reverse Convertibles," June 2010.

# Leveraged Buffered Equity Index-Linked Notes linked to Financial Select Sector SPDR Fund

# Description

Report Prepared On: 08/02/13

Goldman Sachs issued \$5.76 million of Leveraged Buffered Equity Index-Linked Notes linked to Financial Select Sector SPDR Fund on October 2, 2008 at \$1,000 per note.

These notes are Goldman Sachs-branded Buffered PLUS securities that do not pay periodic coupons, but instead pay a single amount at maturity depending on the final level of Financial Select Sector SPDR Fund.

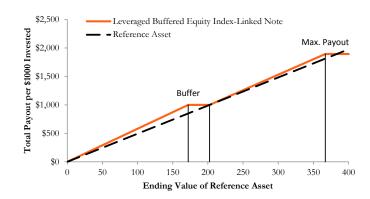
If on November 17, 2010 Financial Select Sector SPDR Fund's share price is higher than \$202.39, but lower than \$366.93, the notes pay a return equal to the percentage increase in Financial Select Sector SPDR Fund multiplied by 1.1, up to a cap of 89.43%. If on November 17, 2010 the refe is below \$202.39 but not below \$172.03, investors receive \$1,000 face value per note. If Financial Select Sector SPDR Fund's share price on November 17, 2010 is lower than \$172.03, investors receive face value per note reduced by 1.18 times the amount the reference asset is below \$172.03 as a percent of the initial level, \$202.39.

# **Valuation**

This product can be valued as a combination of a note from Goldman Sachs, 1.18 short out-of-the-money put options, 1.1 long at-the-money call options, and 1.1 short out-of-the-money call options. For reasonable valuation inputs this note was worth \$745.26 when it was issued on October 2, 2008 because the value of the options investors gave Goldman Sachs plus the interest investors would have received on Goldman Sachs's straight debt was worth \$254.74 more than the options investors received from Goldman Sachs.

There is no active secondary market for most structured products. Structured products, including this note, therefore are much less liquid than simple stocks, bonds, notes and mutual funds. Investors are likely to receive less than the structured product's estimated market value if they try to sell the structured product prior to maturity. Our valuations do not incorporate this relative lack of liquidity and therefore should be considered an upper bound on the value of the structured product.

#### Payoff Curve at Maturity



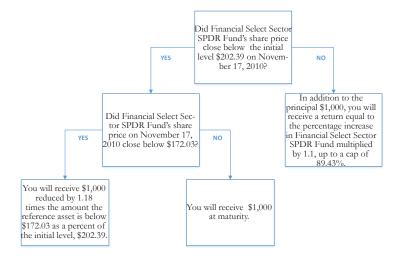
The payoff diagram shows the final payoff of this note given Financial Select Sector SPDR Fund's share price (horizontal axis). For comparison, the dashed line shows the payoff if you invested in Financial Select Sector SPDR Fund directly.

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### Principal Payback Table

Financial Select Sector SPDR Fund	Note Payoff
\$0.00	\$0.00
\$20.24	\$117.63
\$40.48	\$235.28
\$60.72	\$352.93
\$80.96	\$470.58
\$101.20	\$588.23
\$121.43	\$705.88
\$141.67	\$823.53
\$161.91	\$941.18
\$182.15	\$1,000.00
\$202.39	\$1,000.00
\$222.63	\$1,110.00
\$242.87	\$1,220.00
\$263.11	\$1,330.00
\$283.35	\$1,440.00
\$303.59	\$1,550.00

## Maturity Payoff Diagram

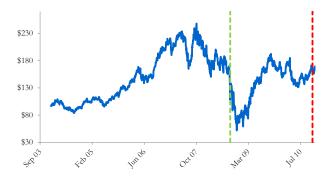


The contingent payoffs of this Leveraged Buffered Equity Index-Linked Note.

# **Analysis**

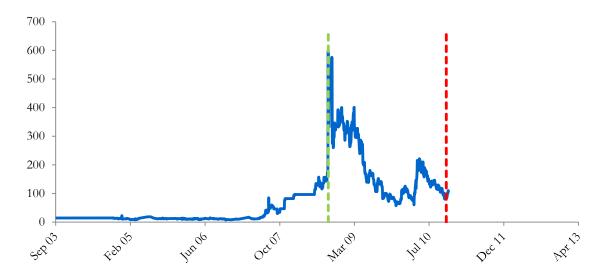
This Leveraged Buffered Equity Index-Linked Note pays investors the increase in Financial Select Sector SPDR Fund multiplied by 1.1 capped at 89.43%, but if Financial Select Sector SPDR Fund declines over the term of the note, investors will suffer losses equal to the percentage decline in Financial Select Sector SPDR Fund. In addition, investors bear the credit risk of Goldman Sachs. Investors purchasing this Leveraged Buffered Equity Index-Linked Note effectively sell at-the-money put and out-of-the-money call options to Goldman Sachs, buy at-the-money call options, and a zero-coupon note from Goldman Sachs. This Leveraged Buffered Equity Index-Linked Note is fairly priced if and only if the market value of the options investors received from Goldman Sachs equals the market value of the options investors gave Goldman Sachs plus the interest investors would have received on Goldman Sachs's straight debt.

# Goldman Sachs's Stock Price



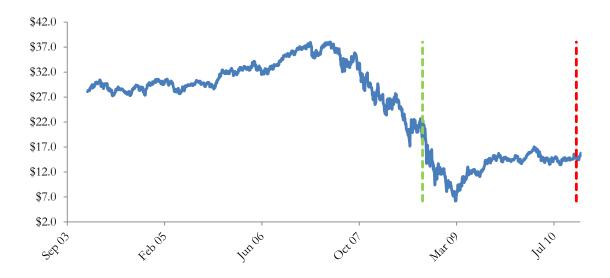
The graph above shows the adjusted closing price of the issuer Goldman Sachs for the past several years. The stock price of the issuer is an indication of the financial strength of Goldman Sachs. The adjusted price shown above incorporates any stock split, reverse stock split, etc.

## Goldman Sachs's CDS Rate



Credit default swap (CDS) rates are the market price that investors require to bear credit risk of an issuer such as Goldman Sachs. CDS rates are usually given in basis points (bps). One basis point equals 0.01%. Higher CDS rates reflect higher perceived credit risk, higher required yields, and therefore lower market value of Goldman Sachs's debt, including outstanding Leveraged Buffered Equity Index-Linked Note. Fluctuations in Goldman Sachs's CDS rate impact the market value of the notes in the secondary market.

#### Financial Select Sector SPDR Fund's Share Price

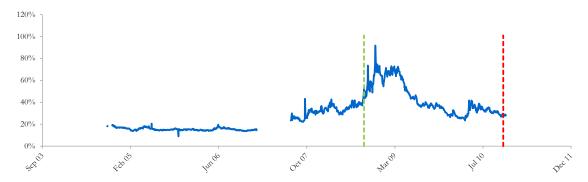


The graph above shows the historical levels of Financial Select Sector SPDR Fund for the past several years. The final payoff of this note is determined by Financial Select Sector SPDR Fund's share price correspond to a greater uncertainty in the final payout of this Leveraged Buffered Equity Index-Linked Note.

# Realized Payoff

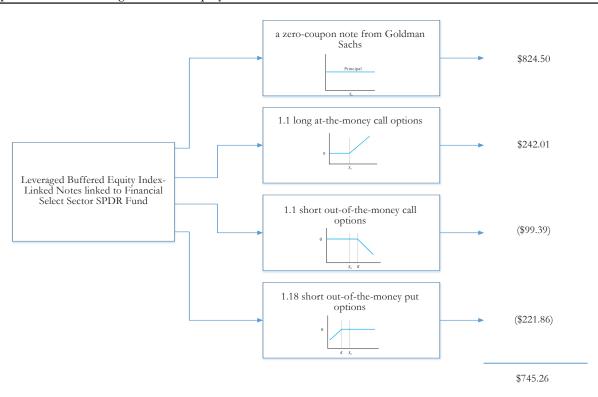
This note matured on December 2, 2010 and investors received \$85.17 per note.

## Reference Asset Financial Select Sector SPDR Fund's Implied Volatility



The annualized implied volatility of Financial Select Sector SPDR Fund on September 18, 2008 was 53.13%, meaning that options contracts on Financial Select Sector SPDR Fund were trading at prices that reflect an expected annual volatility of 53.13%. The higher the implied volatility, the larger the expected fluctuations of Financial Select Sector SPDR Fund's share price and of the Note's market value during the life of the Notes.

### Decomposition of this Leveraged Buffered Equity Index-Linked Note



This note can be decomposed into different components, and each component can be valued separately. The chart above shows the value of each component of this Leveraged Buffered Equity Index-Linked Note.

- Delta measures the sensitivity of the price of the note to the Financial Select Sector SPDR Fund's share price on September 18, 2008.
   CDS rates can be considered a measure of the probability that an issuer will default over a certain period of time and the likely loss given a default. The lower the CDS rate, the lower the default probability. CDS rate is given in basis points (1 basis point equals 0.01%), and is considered as a market premium, on top of the risk-free rate, that investors require to insure against a potential default.
   Fair price evaluation is based on the Black-Scholes model of the Financial Select Sector SPDR Fund on September 18, 2008.
   Calculated payout at maturity is only an approximation, and may differ from actual payouts at maturity.
   Our evaluation does not include any transaction fees, broker commissions, or liquidity discounts on the notes.