

## Structured Product Details

Name Performance Leveraged Upside Securities linked to OIL SERVICE SECTOR INDEX	
\$16.85 million \$10 13 Months n 0.00%	
February 21, 2007 February 28, 2007 March 18, 2008 March 20, 2008	
Morgan Stanley 6.87 bps 5.27%	
the OIL SERVICE SEC- TOR INDEX 197.92 0.55% y 27.01% 0.69	
\$9.61 22.56% 61750V592 www.sec.gov/Archives/edgar/ data/895421/000095010307000493/ dp04833_424b2-ps198.htm	

Report Prepared On: 08/02/13

# 3

Structured Products Research Report

# Performance Leveraged Upside Securities linked to OIL SERVICE SECTOR INDEX

## Description

Morgan Stanley issued \$16.85 million of Performance Leveraged Upside Securities linked to OIL SERVICE SECTOR INDEX on February 28, 2007 at \$10 per note.

These notes are Morgan Stanley-branded Buffered PLUS securities that do not pay periodic coupons, but instead pay a single amount at maturity depending on the final level of the OIL SERVICE SECTOR INDEX.

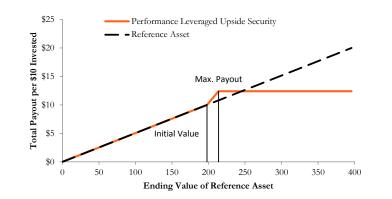
If on March 18, 2008 the OIL SERVICE SECTOR INDEX level is higher than 197.92, but lower than 213.75, the notes pay a return equal to the percentage increase in the OIL SERVICE SECTOR INDEX multiplied by 3.0, up to a cap of 24.00%. If on March 18, 2008 the refe is below 197.92 but not below 197.92, investors receive \$10 face value per note. If the OIL SERVICE SECTOR INDEX level on March 18, 2008 is lower than 197.92, investors receive face value per note reduced by the amount the reference asset is below 197.92 as a percent of the initial level, 197.92.

## Valuation

This product can be valued as a combination of a note from Morgan Stanley, one short out-of-the-money put option, three long at-the-money call options, and three short out-of-the-money call options. For reasonable valuation inputs this note was worth \$9.61 when it was issued on February 28, 2007 because the value of the options investors gave Morgan Stanley plus the interest investors would have received on Morgan Stanley's straight debt was worth \$0.39 more than the options investors received from Morgan Stanley.

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 the OIL SERVICE SECTOR INDEX level (borizontal axis). For comparison, the dashed line shows the payoff if you invested in the OIL SER-VICE SECTOR INDEX directly.

## **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.

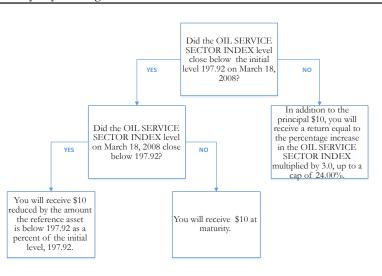
**Tim Husson, Ph.D.,** Senior Financial Economist, SLCG (+1) 703.890.0743 TimHusson@slcg.com

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### Principal Payback Table

The OIL SERVICE SECTOR INDEX	Note Payoff
0.00	\$0.00
19.79	\$1.00
39.58	\$2.00
59.38	\$3.00
79.17	\$4.00
98.96	\$5.00
118.75	\$6.00
138.54	\$7.00
158.34	\$8.00
178.13	\$9.00
197.92	\$10.00
217.71	\$12.40
237.50	\$12.40
257.30	\$12.40
277.09	\$12.40
296.88	\$12.40

### Maturity Payoff Diagram

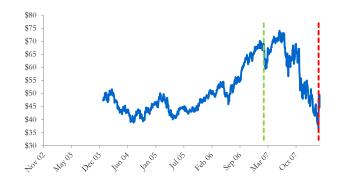


The contingent payoffs of this Performance Leveraged Upside Security.

## Analysis

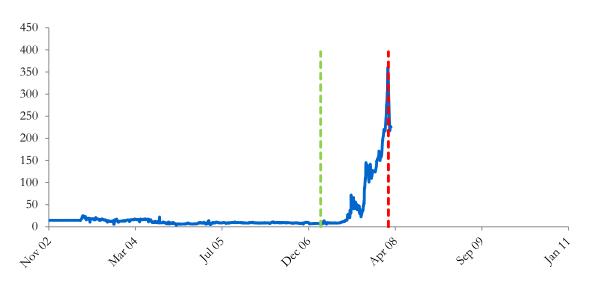
This Performance Leveraged Upside Security pays investors the increase in the OIL SER-VICE SECTOR INDEX multiplied by 3.0 capped at 24.00%, but if the OIL SERVICE SECTOR INDEX declines over the term of the note, investors will suffer losses equal to the percentage decline in the OIL SERVICE SECTOR INDEX. In addition, investors bear the credit risk of Morgan Stanley. Investors purchasing this Performance Leveraged Upside Security effectively sell at-the-money put and out-of-the-money call options to Morgan Stanley, buy at-the-money call options, and a zero-coupon note from Morgan Stanley. This Performance Leveraged Upside Security is fairly priced if and only if the market value of the options investors received from Morgan Stanley equals the market value of the options investors gave Morgan Stanley plus the interest investors would have received on Morgan Stanley's straight debt.

#### Morgan Stanley's Stock Price



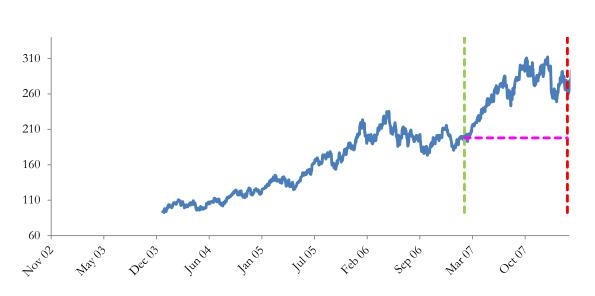
The graph above shows the adjusted closing price of the issuer Morgan Stanley for the past several years. The stock price of the issuer is an indication of the financial strength of Morgan Stanley. The adjusted price shown above incorporates any stock split, reverse stock split, etc.

## Morgan Stanley's CDS Rate



Credit default swap (CDS) rates are the market price that investors require to bear credit risk of an issuer such as Morgan Stanley. 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 Morgan Stanley's debt, including outstanding Performance Leveraged Upside Security. Fluctuations in Morgan Stanley's CDS rate impact the market value of the notes in the secondary market.

## The OIL SERVICE SECTOR INDEX Level

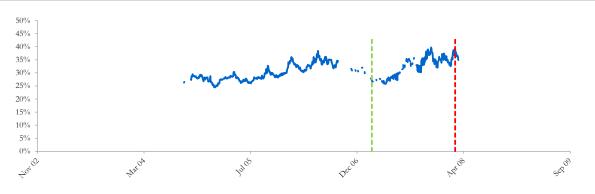


The graph above shows the historical levels of the OIL SERVICE SECTOR INDEX for the past several years. The final payoff of this note is determined by the OIL SERVICE SECTOR INDEX level at maturity. Higher fluctuations in the OIL SERVICE SECTOR INDEX level correspond to a greater uncertainty in the final payout of this Performance Leveraged Upside Security.

## **Realized Payoff**

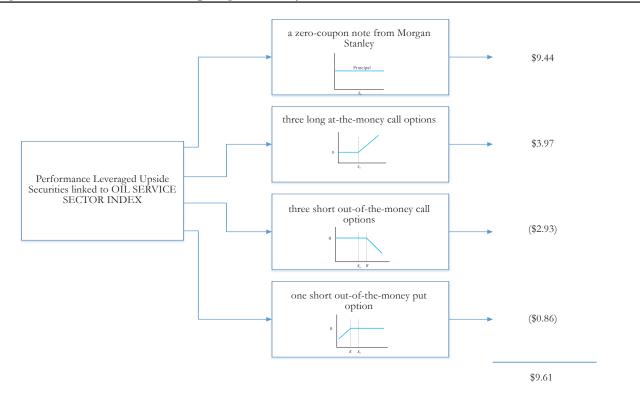
This note matured on March 20, 2008 and investors received \$12.40 per note.

## Reference Asset The OIL SERVICE SECTOR INDEX's Implied Volatility



The annualized implied volatility of the OIL SERVICE SECTOR INDEX on February 21, 2007 was 27.01%, meaning that options contracts on the OIL SERVICE SEC-TOR INDEX were trading at prices that reflect an expected annual volatility of 27.01%. The higher the implied volatility, the larger the expected fluctuations of the OIL SERVICE SECTOR INDEX level and of the Note's market value during the life of the Notes.

### Decomposition of this Performance Leveraged Upside Security



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 Performance Leveraged Upide Security.

Delta measures the sensitivity of the price of the note to the the OIL SERVICE SECTOR INDEX level on February 21, 2007.
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 the OIL SERVICE SECTOR INDEX on February 21, 2007.
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.

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