SECURITIES LITIGATION & CONSULTING GROUP

# Structured Products Research Report

Report Prepared On: 08/02/13

## Structured Product Details

| | |
|---|---|
| **Name** | Buffered Performance Leveraged Upside Securities linked to Phila Housing Index |
| **Issue Size** | $1.80 million |
| **Issue Price** | $10 |
| **Term** | 24 Months |
| **Annualized Coupon** | 0.00% |
| **Pricing Date** | January 24, 2008 |
| **Issue Date** | January 31, 2008 |
| **Valuation Date** | January 15, 2010 |
| **Maturity Date** | January 20, 2010 |
| **Issuer** | Morgan Stanley |
| **CDS Rate** | 167.85 bps |
| **Swap Rate** | 2.97% |
| **Reference Asset** | the Phila Housing Index |
| **Initial Level** | 139.32 |
| **Dividend Rate** | 4.62% |
| **Implied Volatility** | 42.29% |
| **Delta**[1] | 0.48 |
| **Fair Price at Issue** | $8.35 |
| **Realized Return** | -6.89% |
| **CUSIP** | 61747W331 |
| **SEC Link** | www.sec.gov/Archives/edgar/data/895421/000095010308000181/dp08364_424b2-ps465.htm |

# Buffered Performance Leveraged Upside Securities linked to Phila Housing Index

## Description

Morgan Stanley issued $1.80 million of Buffered Performance Leveraged Upside Securities linked to Phila Housing Index on January 31, 2008 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 Phila Housing Index.

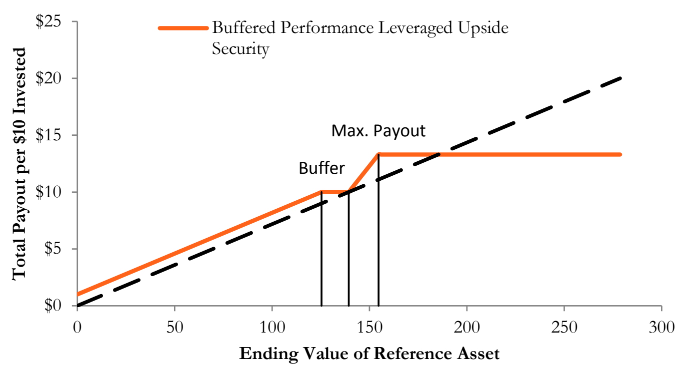
If on January 15, 2010 the Phila Housing Index level is higher than 139.32, but lower than 154.65, the notes pay a return equal to the percentage increase in the Phila Housing Index multiplied by 3.0, up to a cap of 33.00%. If on January 15, 2010 the refe is below 139.32 but not below 125.39, investors receive $10 face value per note. If the Phila Housing Index level on January 15, 2010 is lower than 125.39, investors receive face value per note reduced by the amount the reference asset is below 125.39 as a percent of the initial level, 139.32.

## 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 $8.35 when it was issued on January 31, 2008 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 $1.65 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 Phila Housing Index level (horizontal axis). For comparison, the dashed line shows the payoff if you invested in the Phila Housing 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.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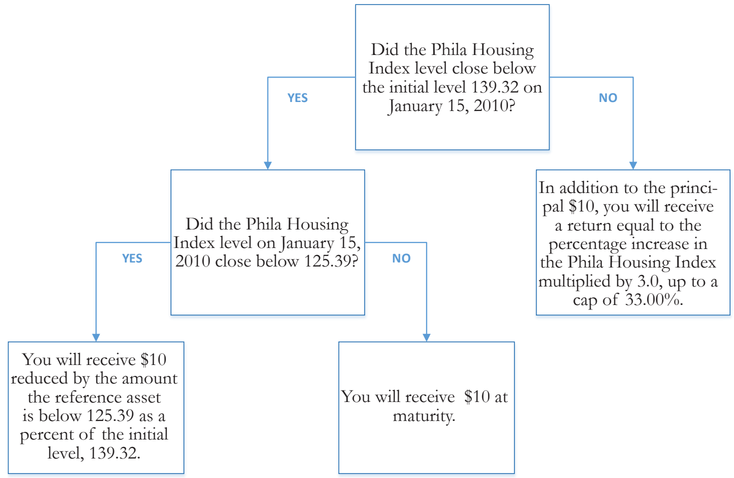
### Principal Payback Table

| The Phila Housing Index | Note Payoff |
|---|---|
| 0.00 | $1.00 |
| 13.93 | $2.00 |
| 27.86 | $3.00 |
| 41.80 | $4.00 |
| 55.73 | $5.00 |
| 69.66 | $6.00 |
| 83.59 | $7.00 |
| 97.52 | $8.00 |
| 111.46 | $9.00 |
| 125.39 | $10.00 |
| **139.32** | **$10.00** |
| 153.25 | $13.00 |
| 167.18 | $13.30 |
| 181.12 | $13.30 |
| 195.05 | $13.30 |
| 208.98 | $13.30 |

### Maturity Payoff Diagram

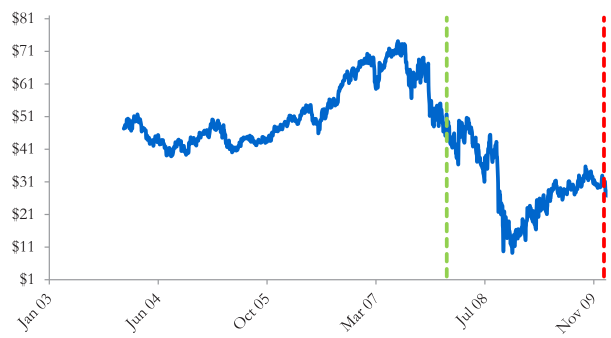



*The contingent payoffs of this Buffered Performance Leveraged Upside Security.*

# Analysis

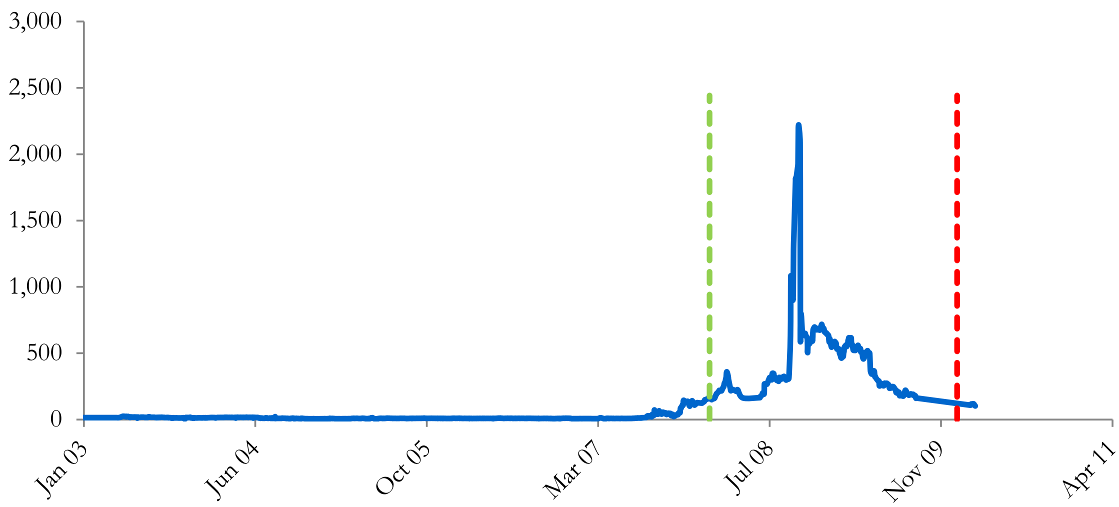
This Buffered Performance Leveraged Upside Security pays investors the increase in the Phila Housing Index multiplied by 3.0 capped at 33.00%, but if the Phila Housing Index declines over the term of the note, investors will suffer losses equal to the percentage decline in the Phila Housing Index. In addition, investors bear the credit risk of Morgan Stanley. Investors purchasing this Buffered 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 Buffered 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



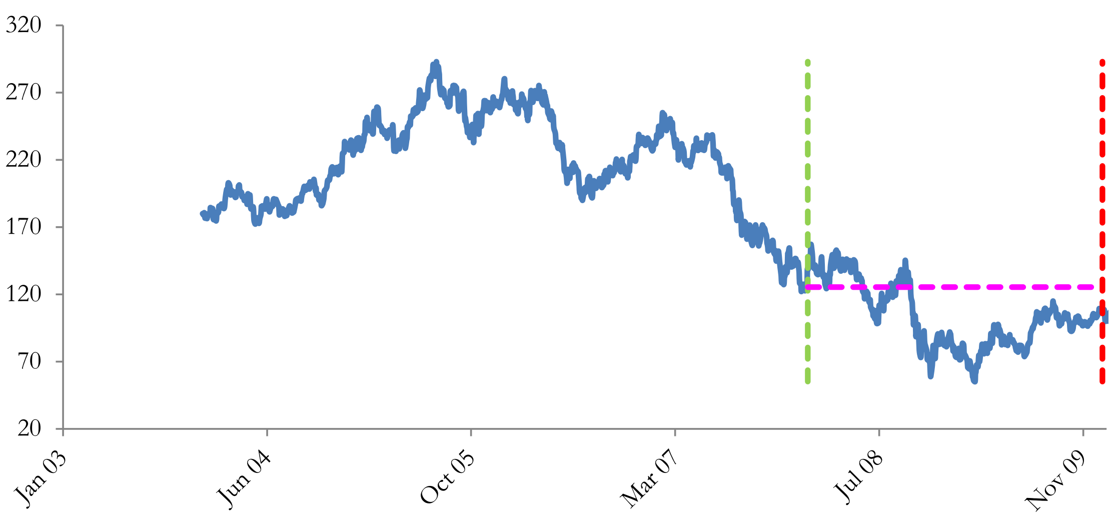

*The graph above shows the adjusted closing price of the issuer Morgan Stanley for the past several years. The stock price of the issuer is an indication of the financial strength of Morgan Stanley. The adjusted price shown above incorporates any stock split, reverse stock split, etc.*

**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 Buffered Performance Leveraged Upside Security. Fluctuations in Morgan Stanley's CDS rate impact the market value of the notes in the secondary market.*

**The Phila Housing Index Level**

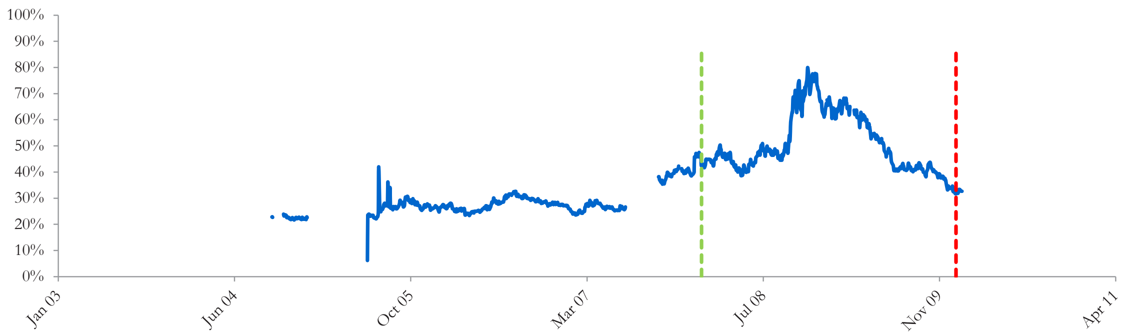



*The graph above shows the historical levels of the Phila Housing Index for the past several years. The final payoff of this note is determined by the Phila Housing Index level at maturity. Higher fluctuations in the Phila Housing Index level correspond to a greater uncertainty in the final payout of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

**Realized Payoff**

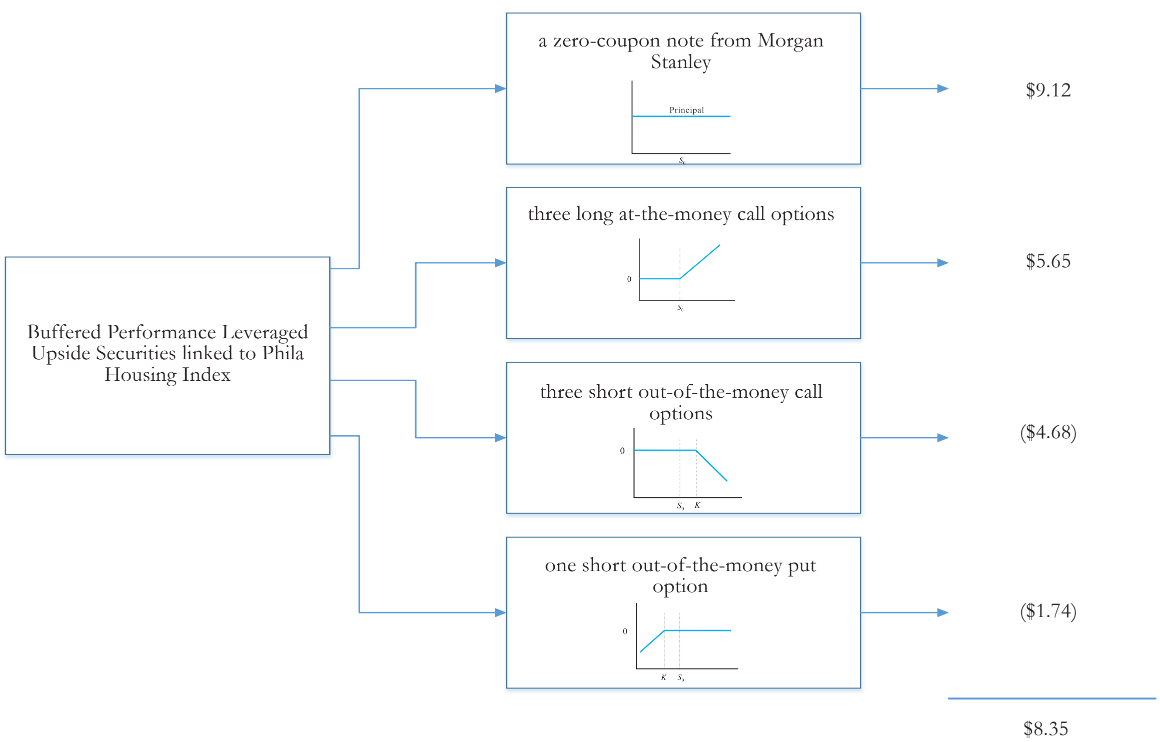
This note matured on January 20, 2010 and investors received $8.69 per note.

## Reference Asset The Phila Housing Index's Implied Volatility




*The annualized implied volatility of the Phila Housing Index on January 24, 2008 was 42.29%, meaning that options contracts on the Phila Housing Index were trading at prices that reflect an expected annual volatility of 42.29%. The higher the implied volatility, the larger the expected fluctuations of the Phila Housing Index level and of the Note's market value during the life of the Notes.*

## Decomposition of this Buffered 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 Buffered Performance Leveraged Upside Security.*

1. Delta measures the sensitivity of the price of the note to the the Phila Housing Index level on January 24, 2008.
2. 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.
3. Fair price evaluation is based on the Black-Scholes model of the the Phila Housing Index on January 24, 2008.
4. Calculated payout at maturity is only an approximation, and may differ from actual payouts at maturity.
5. Our evaluation does not include any transaction fees, broker commissions, or liquidity discounts on the notes.