

## Structured Product Details

Name S	Performance Leveraged Upside Securities linked to iShares MSCI Pacific ex-Japan	
Issue Size Issue Price Term Annualized Cou	\$2.01 million \$10 24 Months pon 0.00%	
Pricing Date Issue Date Valuation Date Maturity Date	December 14, 2012 December 19, 2012 December 16, 2014 December 19, 2014	
Issuer CDS Rate Swap Rate	Morgan Stanley 104.42 bps 0.36%	
Reference Asset Initial Level Dividend Rat Implied Volat Delta <sup>1</sup>		
Fair Price at Iss	ue \$9.07	
CUSIP SEC Link	61761M144 www.sec.gov/Archives/edgar/ data/895421/000095010312006791/ dp34941_424b2-ps485.htm	

Structured Products Research Report

Report Prepared On: 08/06/13

# Performance Leveraged Upside Securities linked to iShares MSCI Pacific ex-Japan

# Description

Morgan Stanley issued \$2.01 million of Performance Leveraged Upside Securities linked to iShares MSCI Pacific ex-Japan on December 19, 2012 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 iShares MSCI Pacific ex-Japan's stock.

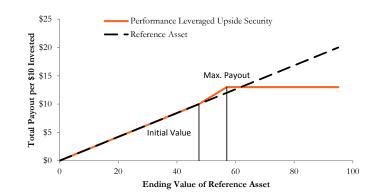
If on December 16, 2014 iShares MSCI Pacific ex-Japan's stock price is higher than \$47.51, but lower than \$57.01, the notes pay a return equal to the percentage increase in iShares MSCI Pacific ex-Japan's stock multiplied by 1.5, up to a cap of 30.00%. If on December 16, 2014 the refe is below \$47.51 but not below \$47.51, investors receive \$10 face value per note. If iShares MSCI Pacific ex-Japan's stock price on December 16, 2014 is lower than \$47.51, investors receive face value per note reduced by the amount the reference asset is below \$47.51 as a percent of the initial level, \$47.51.

# Valuation

This product can be valued as a combination of a note from Morgan Stanley, one short out-of-the-money put option, 1.5 long at-the-money call options, and 1.5 short out-of-the-money call options. For reasonable valuation inputs this note was worth \$9.07 when it was issued on December 19, 2012 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 \$0.93 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 iShares MSCI Pacific ex-Japan's stock price (horizontal axis). For comparison, the dashed line shows the payoff if you invested in iSbares MSCI Pacific ex-Japan's stock directly.

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### **Related Research**

#### **Research Papers:**

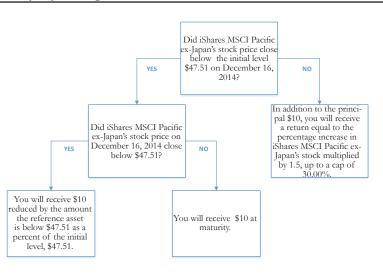
www.slcg.com/research.php

- "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.

#### Principal Payback Table

iShares MSCI Pacific ex-Japan's Stock	Note Payoff
\$0.00	\$0.00
\$4.75	\$1.00
\$9.50	\$2.00
\$14.25	\$3.00
\$19.00	\$4.00
\$23.76	\$5.00
\$28.51	\$6.00
\$33.26	\$7.00
\$38.01	\$8.00
\$42.76	\$9.00
\$47.51	\$10.00
\$52.26	\$11.50
\$57.01	\$13.00
\$61.76	\$13.00
\$66.51	\$13.00
\$71.27	\$13.00

#### Maturity Payoff Diagram

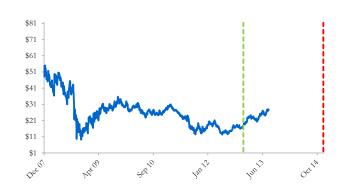


The contingent payoffs of this Performance Leveraged Upside Security.

## Analysis

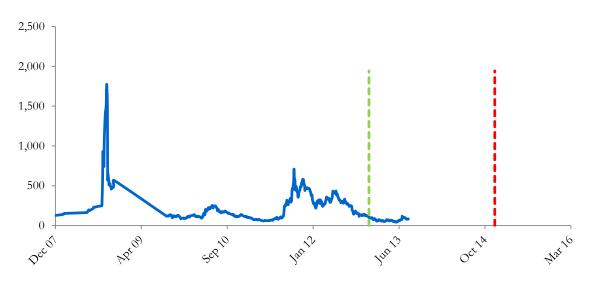
This Performance Leveraged Upside Security pays investors the increase in iShares MSCI Pacific ex-Japan's stock multiplied by 1.5 capped at 30.00%, but if iShares MSCI Pacific ex-Japan's stock declines over the term of the note, investors will suffer losses equal to the percentage decline in iShares MSCI Pacific ex-Japan's stock. 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

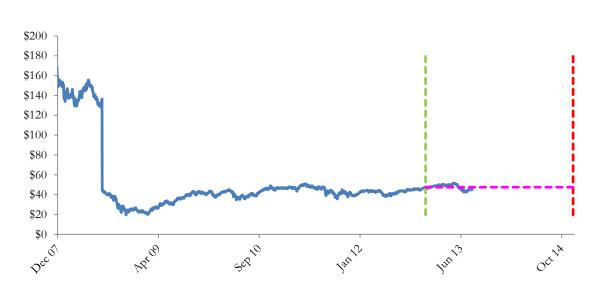


The graph above shows the adjusted closing price of the issuer Morgan Stanley for the past several years. The stock price of the issuer is an indication of the financial strength of Morgan Stanley. The adjusted price shown above incorporates any stock split, reverse stock split, etc.

### 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.



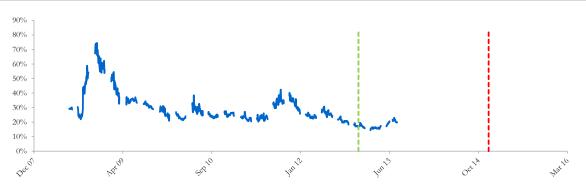
#### iShares MSCI Pacific ex-Japan's Stock Price

The graph above shows the historical levels of iShares MSCI Pacific ex-Japan's stock for the past several years. The final payoff of this note is determined by iShares MSCI Pacific ex-Japan's stock price at maturity. Higher fluctuations in iShares MSCI Pacific ex-Japan's stock price correspond to a greater uncertainty in the final payout of this Performance Leveraged Upside Security.

### **Realized Payoff**

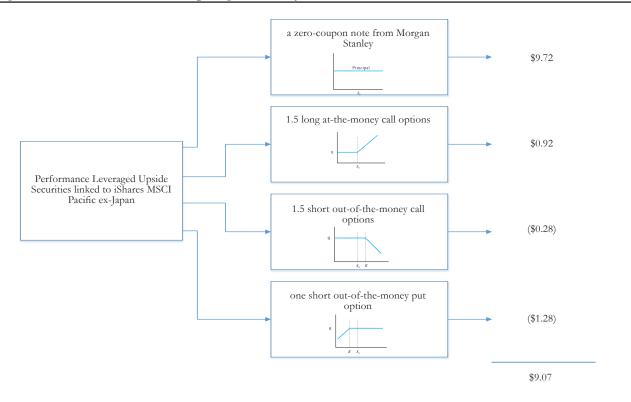
This product will mature on December 19, 2014.





The annualized implied volatility of iShares MSCI Pacific ex-Japan's stock on December 14, 2012 was 17.13%, meaning that options contracts on iShares MSCI Pacific ex-Japan's stock were trading at prices that reflect an expected annual volatility of 17.13%. The higher the implied volatility, the larger the expected fluctuations of iShares MSCI Pacific ex-Japan's stock price 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 Upside Security.

Delta measures the sensitivity of the price of the note to the iShares MSCI Pacific ex-Japan's stock price on December 14, 2012.
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 iShares MSCI Pacific ex-Japan's stock on December 14, 2012.
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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