

Report Prepared On: 12/05/12

## Structured Product Details

**Name** Reverse Convertible Notes linked to Range Resources Corp.

**Issue Size** \$784,000  
**Issue Price** \$1,000  
**Term** 6 Months  
**Annualized Coupon** 13.00%

**Pricing Date** April 11, 2008  
**Issue Date** April 16, 2008  
**Valuation Date** October 10, 2008  
**Maturity Date** October 16, 2008

**Issuer** Morgan Stanley  
**CDS Rate** 212.71 bps  
**Swap Rate** 2.69%

**Reference Asset** Range Resources Corp.'s stock  
**Initial Level** \$66.27  
**Trigger Price** \$49.70  
**Conversion Price** \$26.86  
**Dividend Rate** 0.21%  
**Implied Volatility** 47.15%  
**Delta<sup>1</sup>** 0.44

**Fair Price at Issue** \$928.79  
**Realized Return** -79.37%

**CUSIP** 6174465C9  
**SEC Link** [www.sec.gov/Archives/edgar/data/895421/000095010308001014/dp09543\\_424b2-ps582.htm](http://www.sec.gov/Archives/edgar/data/895421/000095010308001014/dp09543_424b2-ps582.htm)

## Related Research

### Research Papers:

[www.slcg.com/research.php](http://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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## Reverse Convertible Notes linked to Range Resources Corp.

### Description

Morgan Stanley issued \$784,000 of Reverse Convertible Notes linked to Range Resources Corp. on April 16, 2008 at \$1,000 per note.

These notes are Morgan Stanley-branded reverse convertibles. Reverse convertibles pay periodic interest coupons and at maturity convert into shares of the reference security if the price of the reference stock at the notes' maturity is below its price when the notes were issued and had closed below a specified "trigger" during the term of the notes.

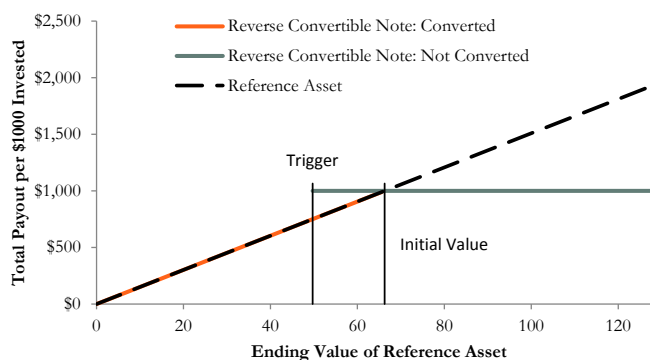
These 6-month notes pay monthly coupons at an annualized rate of 13.00%. In addition to the monthly coupons, at maturity on October 16, 2008 investors will receive the market value of 15.09 shares of Range Resources Corp.'s stock if on October 10, 2008 Range Resources Corp.'s stock price closes below \$66.27 (Range Resources Corp.'s stock price on April 11, 2008) and had ever closed at or below \$49.70 during the term of the notes. Otherwise, investors will receive the \$1,000 face value per note.

### Valuation

This Morgan Stanley reverse convertible linked to Range Resources Corp.'s stock can be valued as a combination of a note from Morgan Stanley and a short down-and-in, at-the-money put option on Range Resources Corp.'s stock. For reasonable valuation inputs this note was worth \$928.79 per \$1,000 when it was issued on April 16, 2008 because investors were effectively being paid only \$40.42 for giving Morgan Stanley an option which was worth \$111.63.

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

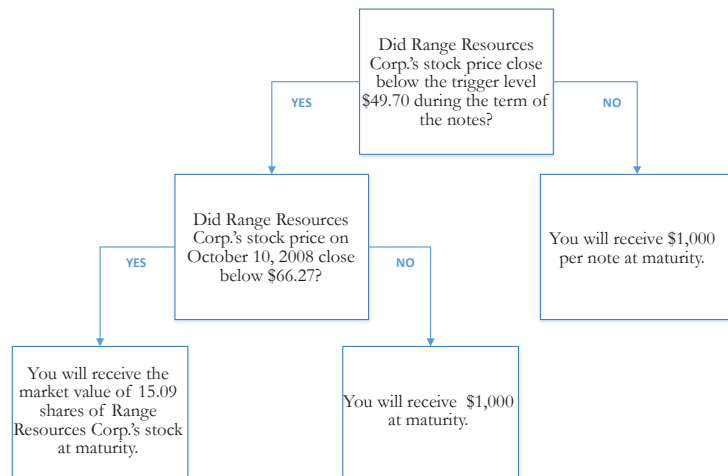


The payoff diagram shows the final payoff of this note given Range Resources Corp.'s stock price (horizontal axis). For comparison, the dashed line shows the payoff if you invested in Range Resources Corp.'s stock directly.

## Principal Payback Table

Range Resources Corp.'s Stock	Converted Note Payoff	Non-Converted Note Payoff
\$0.00	\$0.00	
\$6.63	\$100.00	
\$13.25	\$200.00	
\$19.88	\$300.00	
\$26.51	\$400.00	
\$33.14	\$500.00	
\$39.76	\$600.00	
\$46.39	\$700.00	
\$53.02	\$800.00	\$1,000.00
\$59.64	\$900.00	\$1,000.00
<b>\$66.27</b>	<b>\$1,000.00</b>	<b>\$1,000.00</b>
\$72.90	\$1,000.00	\$1,000.00
\$79.52	\$1,000.00	\$1,000.00
\$86.15	\$1,000.00	\$1,000.00
\$92.78	\$1,000.00	\$1,000.00
\$99.41	\$1,000.00	\$1,000.00

## Maturity Payoff Diagram



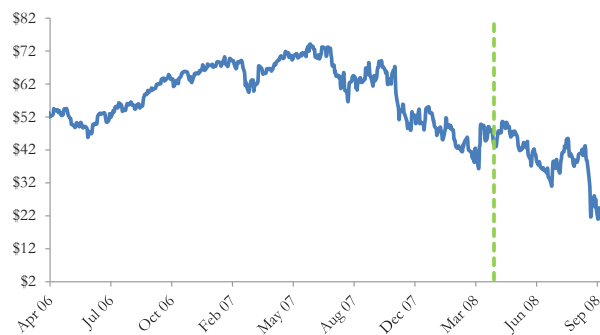
*The contingent payoffs of this Reverse Convertible Note.*

## Analysis

This reverse convertible's 13.00% coupon rate is higher than the yield Morgan Stanley paid on its straight debt but, in addition to Morgan Stanley's credit risk, investors bear the risk that they will receive shares of Range Resources Corp.'s stock when they are worth substantially less than the face value of the note at maturity.

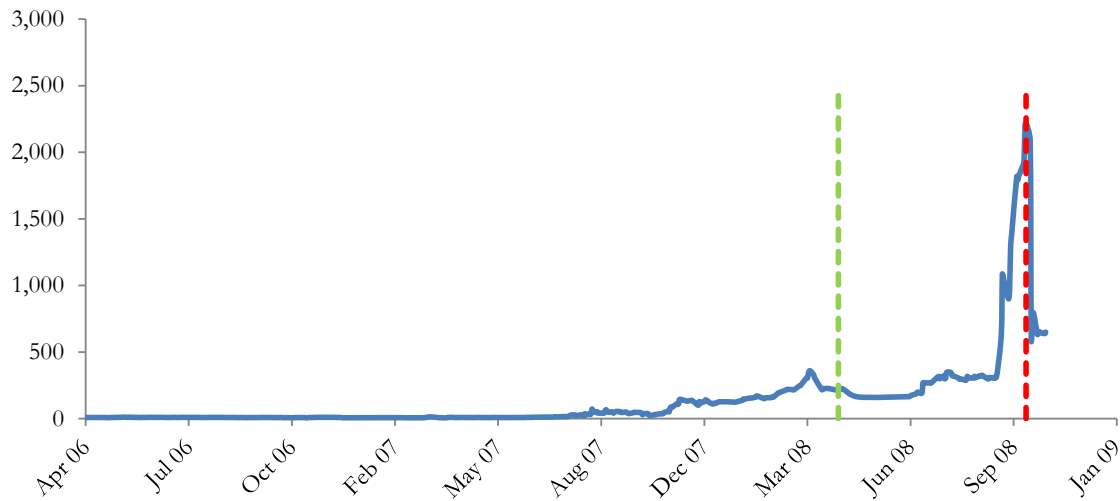
Investors purchasing reverse convertibles effectively sell put options to Morgan Stanley and post the note's issue price as collateral to secure satisfaction of the investors' obligations under the option contracts. Morgan Stanley pays investors a "coupon" that is part payment for the put options and part interest on the investors' posted collateral. This reverse convertible is fairly priced if and only if the excess of the reverse convertible's "coupon rate" above the interest Morgan Stanley pays on its straight debt equals the value of the put option investors are giving to Morgan Stanley. Whether the reverse convertible is suitable or not is equivalent to whether selling put options on the reference stock at the option premium being paid by Morgan Stanley was suitable for the investor.

## Morgan Stanley's Stock Price



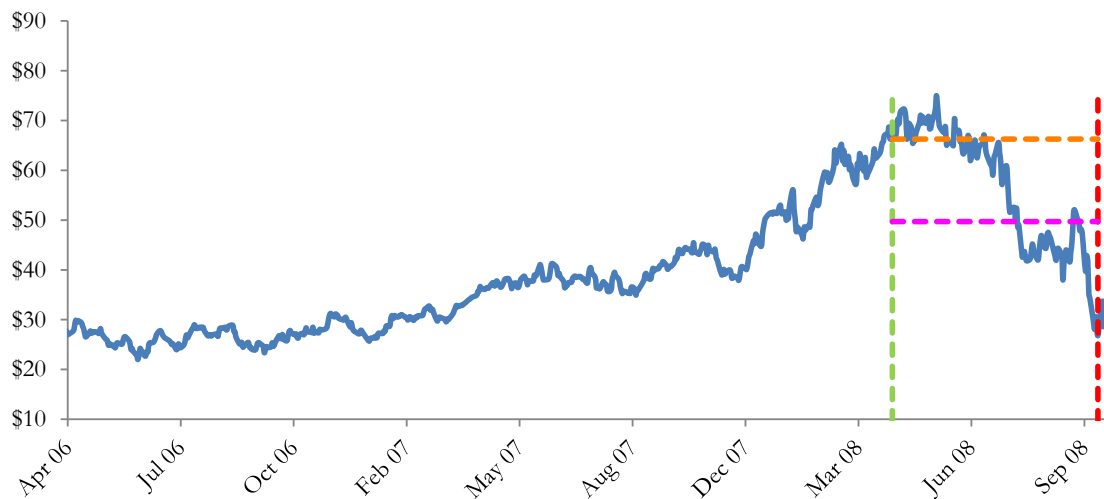
*The graph above shows the adjusted closing price of the issuer Morgan Stanley for the past several years. The stock price of the issuer is an indication of the financial strength of Morgan Stanley. The adjusted price shown above incorporates any stock split, reverse stock split, etc.*

### 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 Reverse Convertible Note. Fluctuations in Morgan Stanley's CDS rate impact the market value of the notes in the secondary market.

### Range Resources Corp.'s Stock Price

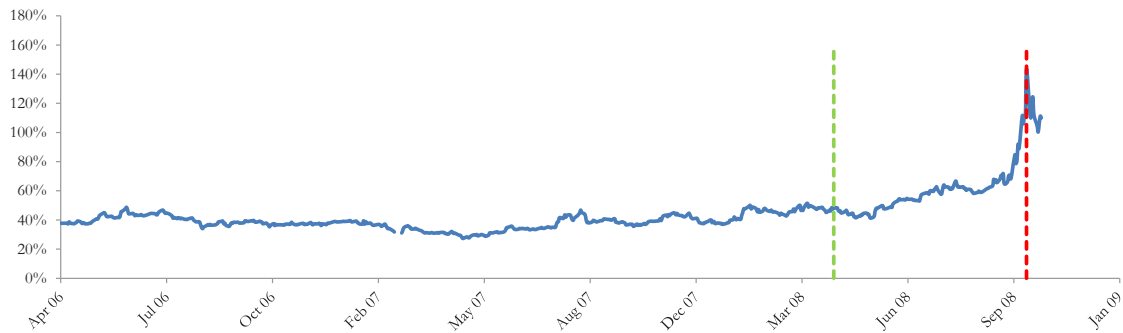


The graph above shows the historical levels of Range Resources Corp.'s stock for the past several years. The final payoff of this note is determined by Range Resources Corp.'s stock price at maturity. Higher fluctuations in Range Resources Corp.'s stock price correspond to a greater uncertainty in the final payout of this Reverse Convertible Note.

### Realized Payoff

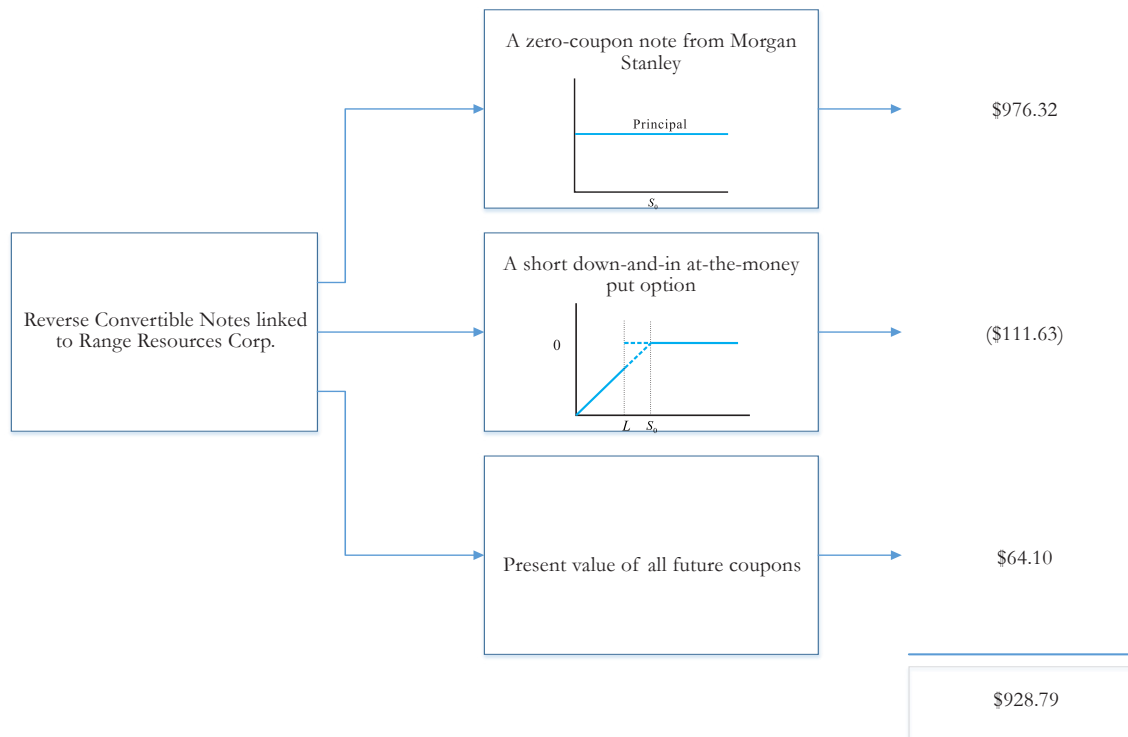
This note matured on October 16, 2008 and investors received \$405.31 per note (or equal to the value of 15.09 shares of Range Resources Corp. stock's closing price on October 10, 2008).

## Reference Asset Range Resources Corp.'s Stock's Implied Volatility



The annualized implied volatility of Range Resources Corp.'s stock on April 11, 2008 was 47.15%, meaning that options contracts on Range Resources Corp.'s stock were trading at prices that reflect an expected annual volatility of 47.15%. The higher the implied volatility, the larger the expected fluctuations of Range Resources Corp.'s stock price and of the Note's market value during the life of the Notes.

## Decomposition of this Reverse Convertible 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 Reverse Convertible Note.

1. Delta measures the sensitivity of the price of the note to the Range Resources Corp.'s stock price on April 11, 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 Range Resources Corp.'s stock on April 11, 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.