

Report Prepared On: 08/02/13

## Structured Product Details

**Name** Return Enhanced Notes linked to  
NASDAQ-100 Index

**Issue Size** \$1.08 million  
**Issue Price** \$1,000  
**Term** 12 Months  
**Annualized Coupon** 0.00%

**Pricing Date** April 25, 2008  
**Issue Date** April 30, 2008  
**Valuation Date** May 5, 2009  
**Maturity Date** May 8, 2009

**Issuer** JPMorgan  
**CDS Rate** 74.96 bps  
**Swap Rate** 3.21%

**Reference Asset** the NASDAQ-100 Index

**Initial Level** 1,918.58  
**Dividend Rate** 0.47%  
**Implied Volatility** 23.88%  
**Delta<sup>1</sup>** 0.76

**Fair Price at Issue** \$959.48  
**Realized Return** -25.31%

**CUSIP** 48123MT44  
**SEC Link** [www.sec.gov/Archives/edgar/  
data/19617/000089109208002310/  
c31394\\_424b2.htm](http://www.sec.gov/Archives/edgar/data/19617/000089109208002310/c31394_424b2.htm)

## Return Enhanced Notes linked to NASDAQ-100 Index

### Description

JPMorgan issued \$1.08 million of Return Enhanced Notes linked to NASDAQ-100 Index on April 30, 2008 at \$1,000 per note.

These notes are JPMorgan-branded PLUS securities that do not pay periodic coupons, but instead pay a single amount at maturity depending on the NASDAQ-100 Index level at maturity.

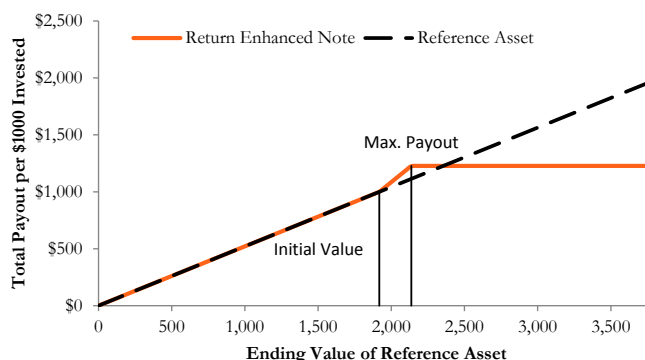
If the NASDAQ-100 Index level on May 5, 2009 is higher than 1,918.58, but lower than 2,136.82, the notes pay a return equal to the percentage increase in the NASDAQ-100 Index multiplied by 2.0. If on May 5, 2009 the NASDAQ-100 Index level is above the 2,136.82, the notes pay the maximum payout of \$1,227.50. If on May 5, 2009 the NASDAQ-100 Index level is below 1,918.58, investors receive the face value per note reduced by the percentage decline in the reference asset. The notes will pay nothing at maturity if the reference asset declines to zero.

### Valuation

This note can be valued as a combination of a note from JPMorgan, a short at-the-money put option, two long at-the-money call options, and two short out-of-the-money call options. The short at-the-money put option exposes investors to any decline in the NASDAQ-100 Index. The two short out-of-the-money call options has the strike price of 2,136.82, and limits the maximum return of the notes beyond the cap level. For reasonable valuation inputs this note was worth \$959.48 when it was issued on April 30, 2008 because the value of the options investors gave JPMorgan plus the interest investors would have received on JPMorgan's straight debt was worth \$40.52 more than the call options investors received from JPMorgan.

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 NASDAQ-100 Index level (horizontal axis). For comparison, the dashed line shows the payoff if you invested in the NASDAQ-100 Index directly.

## Related Research

### Research Papers:

[www.slcg.com/research.php](http://www.slcg.com/research.php)

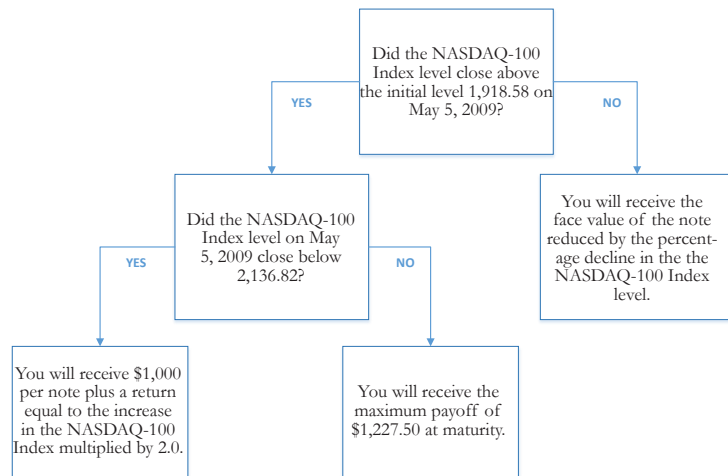
- "Are Structured Products Suitable for Retail Investors?" December 2006.
- "Structured Products in the Aftermath of Lehman Brothers," November 2009.
- "What TiVo and JP Morgan Teach Us about Reverse Convertibles," June 2010.

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## Principal Payback Table

| The NASDAQ-100 Index | Note Payoff       |
|----------------------|-------------------|
| 0.00                 | \$0.00            |
| 191.86               | \$100.00          |
| 383.72               | \$200.00          |
| 575.57               | \$300.00          |
| 767.43               | \$400.00          |
| 959.29               | \$500.00          |
| 1,151.15             | \$600.00          |
| 1,343.01             | \$700.00          |
| 1,534.86             | \$800.00          |
| 1,726.72             | \$900.00          |
| <b>1,918.58</b>      | <b>\$1,000.00</b> |
| 2,110.44             | \$1,200.00        |
| 2,302.30             | \$1,227.50        |
| 2,494.15             | \$1,227.50        |
| 2,686.01             | \$1,227.50        |
| 2,877.87             | \$1,227.50        |

## Maturity Payoff Diagram

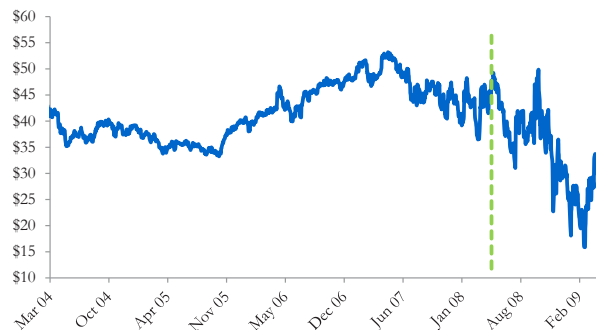


*The contingent payoffs of this Return Enhanced Note.*

## Analysis

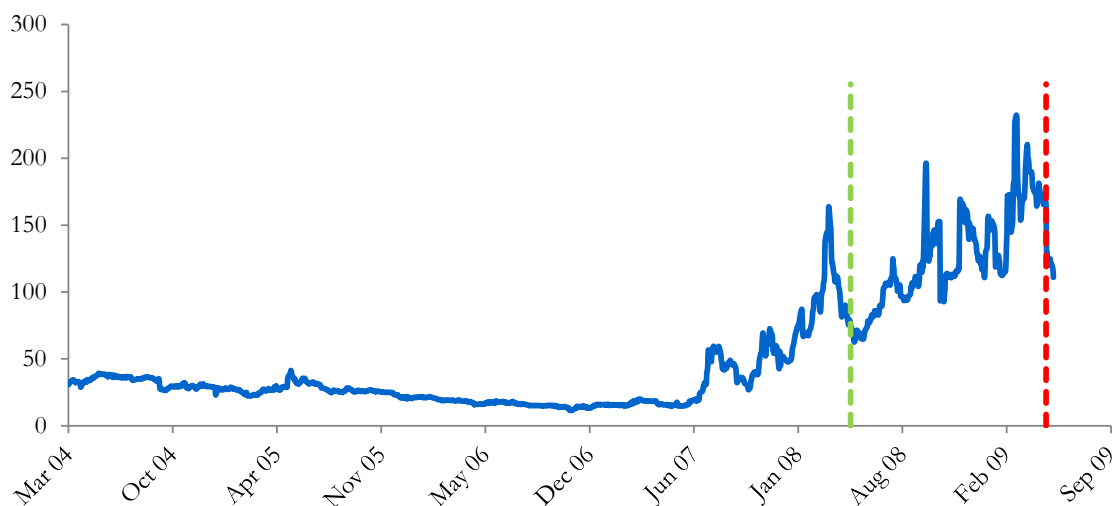
This Return Enhanced Note pays investors the increase in the NASDAQ-100 Index multiplied by 2.0 capped at 22.75%, but if the NASDAQ-100 Index declines over the term of the note, investors will suffer losses equal to the percentage decline in the NASDAQ-100 Index. In addition, investors bear the credit risk of JPMorgan. Investors purchasing this Return Enhanced Note effectively sell at-the-money put and out-of-the-money call options to JPMorgan, buy at-the-money call options, and a zero-coupon note from JPMorgan. This Return Enhanced Note is fairly priced if and only if the market value of the options investors received from JPMorgan equals the market value of the options investors gave JPMorgan plus the interest investors would have received on JPMorgan's straight debt.

## JPMorgan's Stock Price



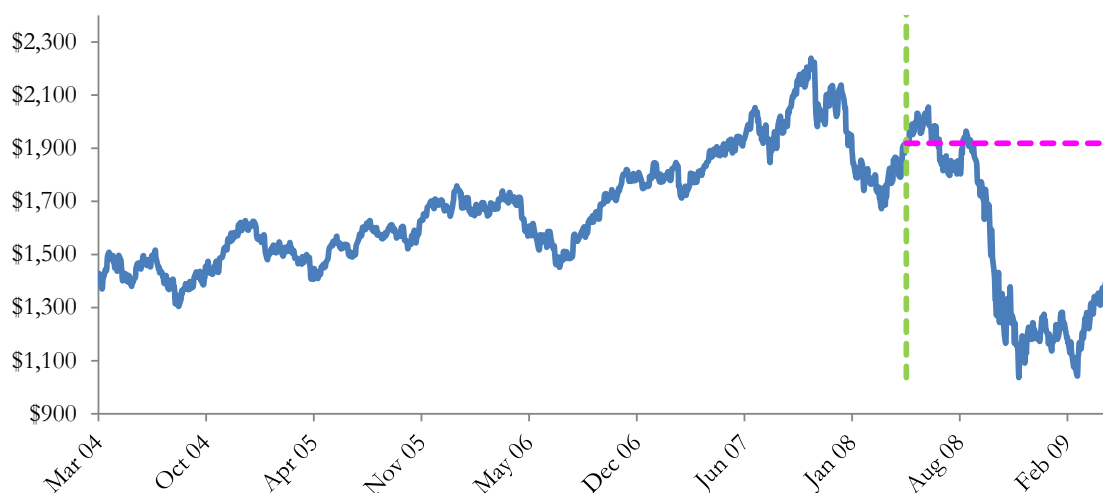
*The graph above shows the adjusted closing price of the issuer JPMorgan for the past several years. The stock price of the issuer is an indication of the financial strength of JPMorgan. The adjusted price shown above incorporates any stock split, reverse stock split, etc.*

## JPMorgan's CDS Rate



Credit default swap (CDS) rates are the market price that investors require to bear credit risk of an issuer such as JPMorgan. 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 JPMorgan's debt, including outstanding Return Enhanced Note. Fluctuations in JPMorgan's CDS rate impact the market value of the notes in the secondary market.

## The NASDAQ-100 Index Level

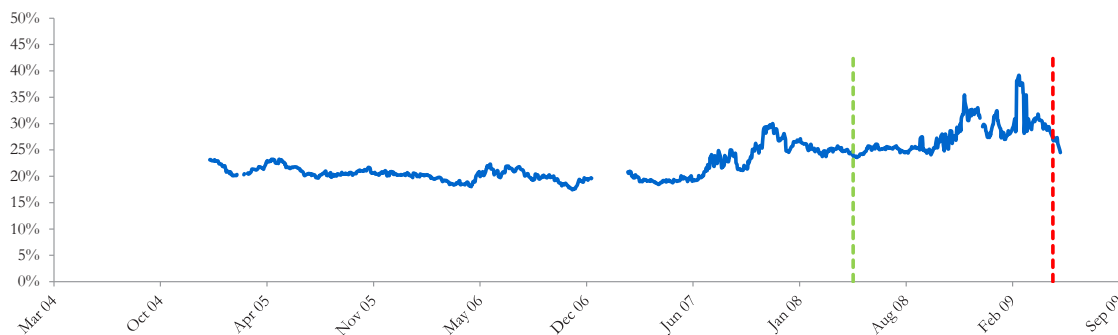


The graph above shows the historical levels of the NASDAQ-100 Index for the past several years. The final payoff of this note is determined by the NASDAQ-100 Index level at maturity. Higher fluctuations in the NASDAQ-100 Index level correspond to a greater uncertainty in the final payout of this Return Enhanced Note.

## Realized Payoff

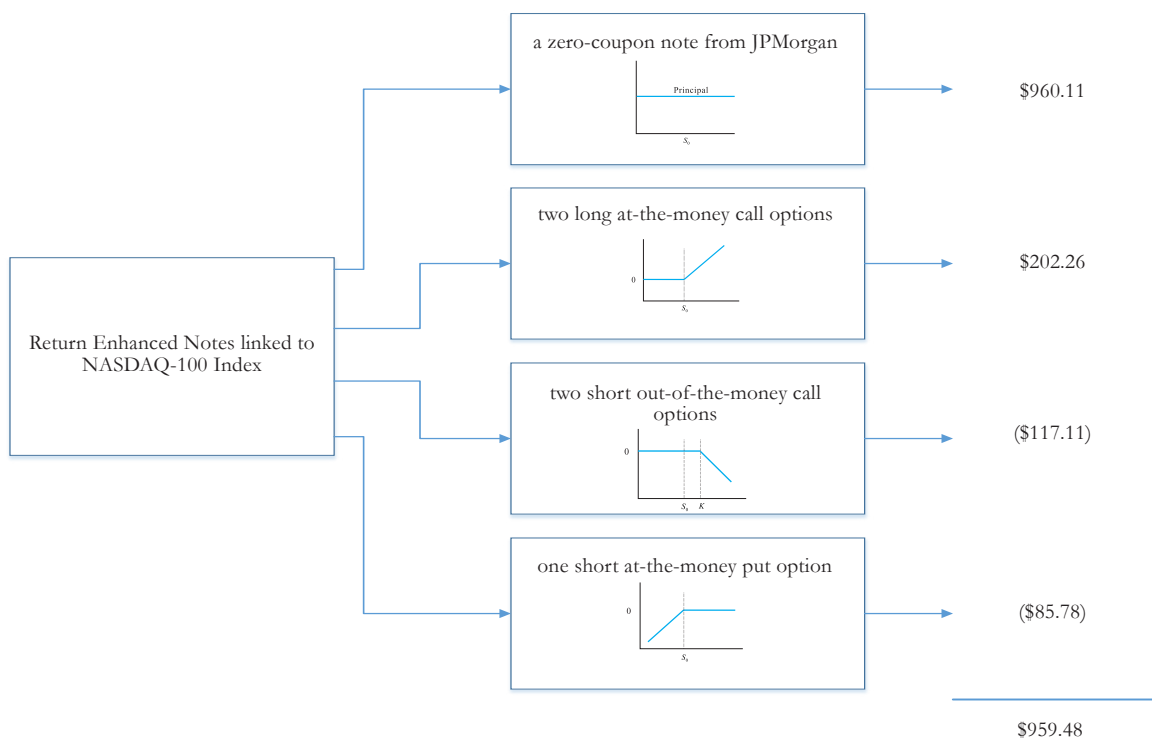
This note matured on May 8, 2009 and investors received \$742.12 per note.

## Reference Asset The NASDAQ-100 Index's Implied Volatility



The annualized implied volatility of the NASDAQ-100 Index on April 25, 2008 was 23.88%, meaning that options contracts on the NASDAQ-100 Index were trading at prices that reflect an expected annual volatility of 23.88%. The higher the implied volatility, the larger the expected fluctuations of the NASDAQ-100 Index level and of the Note's market value during the life of the Notes.

## Decomposition of this Return Enhanced 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 Return Enhanced Note.

1. Delta measures the sensitivity of the price of the note to the the NASDAQ-100 Index level on April 25, 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 NASDAQ-100 Index on April 25, 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.