SECURITIES LITIGATION & CONSULTING GROUP

# Structured Products Research Report

**Report Prepared On: 07/30/13**

## Structured Product Details

| | |
|---|---|
| **Name** | Capped Buffered Equity Notes linked to S&P 500 Index |
| **Issue Size** | $1.61 million |
| **Issue Price** | $1,000 |
| **Term** | 18 Months |
| **Annualized Coupon** | 0.00% |
| **Pricing Date** | November 28, 2012 |
| **Issue Date** | December 3, 2012 |
| **Valuation Date** | May 28, 2014 |
| **Maturity Date** | June 2, 2014 |
| **Issuer** | JPMorgan |
| **CDS Rate** | 34.35 bps |
| **Swap Rate** | 0.62% |
| **Reference Asset** | the S&P 500 Index |
| **Initial Level** | 409.93 |
| **Dividend Rate** | 2.17% |
| **Implied Volatility** | 18.56% |
| **Delta**[1] | 0.49 |
| **Fair Price at Issue** | $982.30 |
| **CUSIP** | 48126DJL4 |
| **SEC Link** | www.sec.gov/Archives/edgar/data/19617/000095010312006430/dp34597_424b2-ps885.htm |

# Capped Buffered Equity Notes linked to S&P 500 Index

## Description

JPMorgan issued $1.61 million of Capped Buffered Equity Notes linked to S&P 500 Index on December 3, 2012 at $1,000 per note.

These notes are JPMorgan-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 S&P 500 Index.

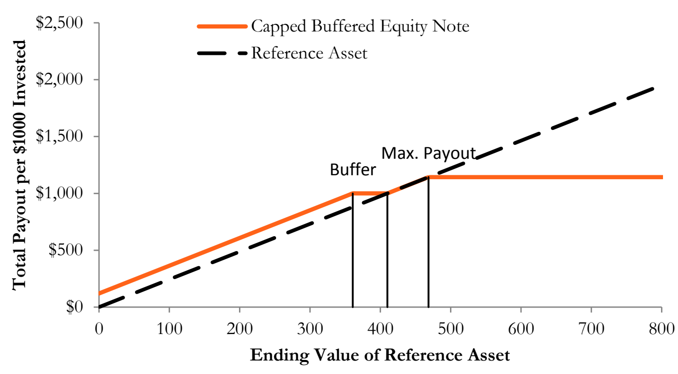
If on May 28, 2014 the S&P 500 Index level is higher than 409.93, but lower than 468.55, the notes pay a return equal to the percentage increase in the S&P 500 Index, up to a cap of 14.30%. If on May 28, 2014 the refe is below 409.93 but not below 360.74, investors receive $1,000 face value per note. If the S&P 500 Index level on May 28, 2014 is lower than 360.74, investors receive face value per note reduced by the amount the reference asset is below 360.74 as a percent of the initial level, 409.93.

## Valuation

This product can be valued as a combination of a note from JPMorgan, one short out-of-the-money put option, one long at-the-money call option, and one short out-of-the-money call option. For reasonable valuation inputs this note was worth $982.30 when it was issued on December 3, 2012 because the value of the options investors gave JPMorgan plus the interest investors would have received on JPMorgan's straight debt was worth $17.70 more than the 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 S&P 500 Index level (horizontal axis). For comparison, the dashed line shows the payoff if you invested in the S&P 500 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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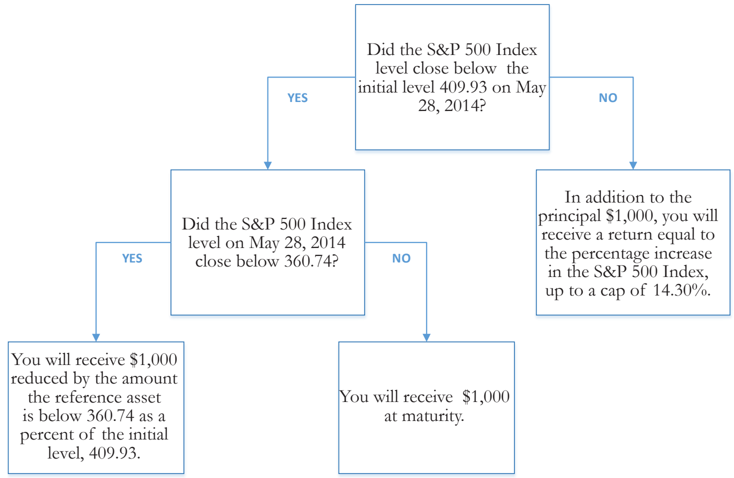
## Principal Payback Table

| The S&P 500 Index | Note Payoff |
|---|---|
| 0.00 | $120.00 |
| 40.99 | $220.00 |
| 81.99 | $320.00 |
| 122.98 | $420.00 |
| 163.97 | $520.00 |
| 204.97 | $620.00 |
| 245.96 | $720.00 |
| 286.95 | $820.00 |
| 327.94 | $920.00 |
| 368.94 | $1,000.00 |
| **409.93** | **$1,000.00** |
| 450.92 | $1,100.00 |
| 491.92 | $1,143.00 |
| 532.91 | $1,143.00 |
| 573.90 | $1,143.00 |
| 614.90 | $1,143.00 |

## Maturity Payoff Diagram

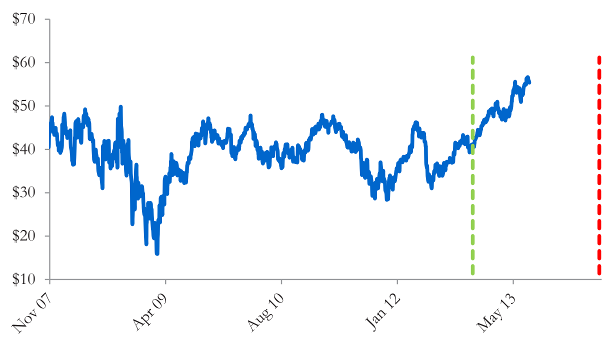



*The contingent payoffs of this Capped Buffered Equity Note.*

# Analysis

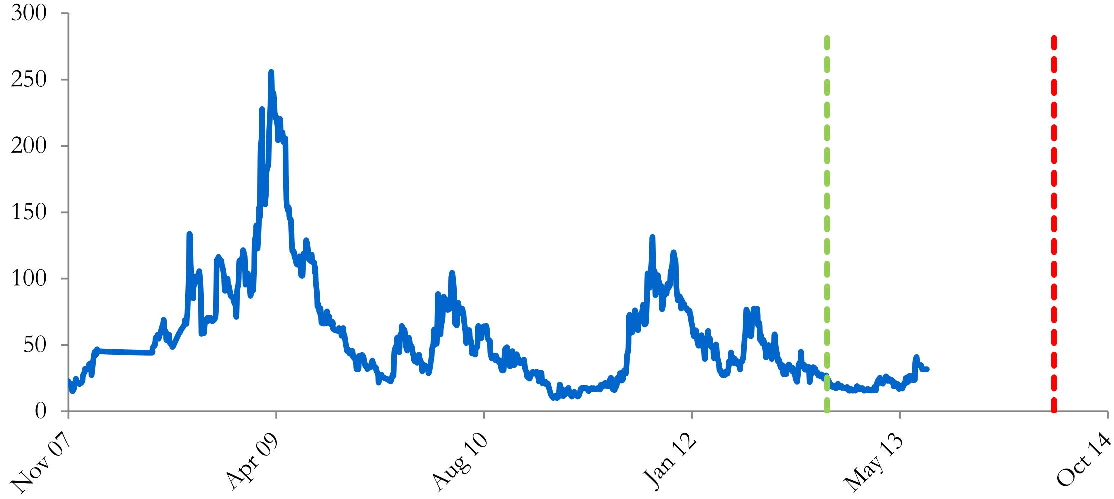
This Capped Buffered Equity Note pays investors the increase in the S&P 500 Index capped at 14.30%, but if the S&P 500 Index declines over the term of the note, investors will suffer losses equal to the percentage decline in the S&P 500 Index. In addition, investors bear the credit risk of JPMorgan. Investors purchasing this Capped Buffered Equity 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 Capped Buffered Equity 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



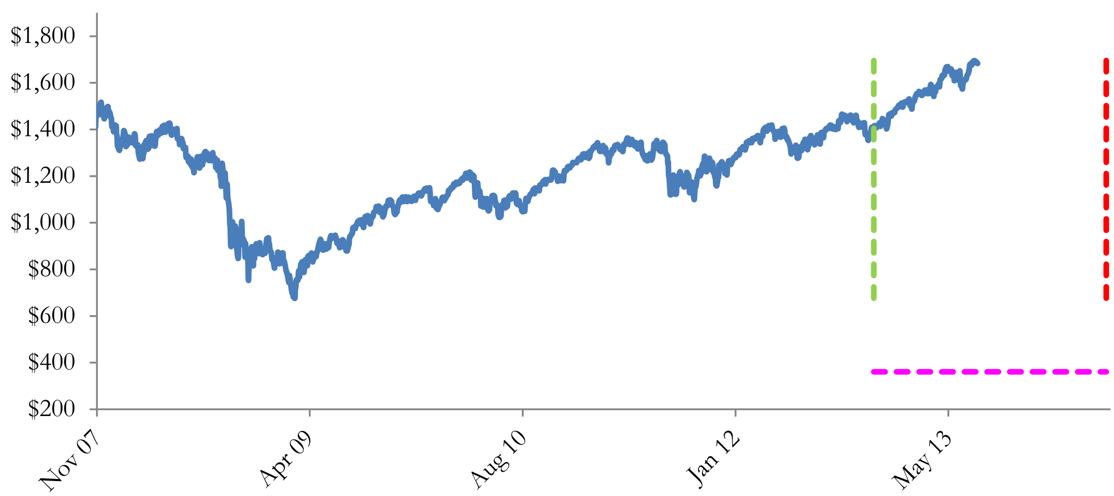

*The graph above shows the adjusted closing price of the issuer JPMorgan for the past several years. The stock price of the issuer is an indication of the financial strength of JPMorgan. The adjusted price shown above incorporates any stock split, reverse stock split, etc.*

## 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 Capped Buffered Equity Note. Fluctuations in JPMorgan's CDS rate impact the market value of the notes in the secondary market.*

## The S&P 500 Index Level

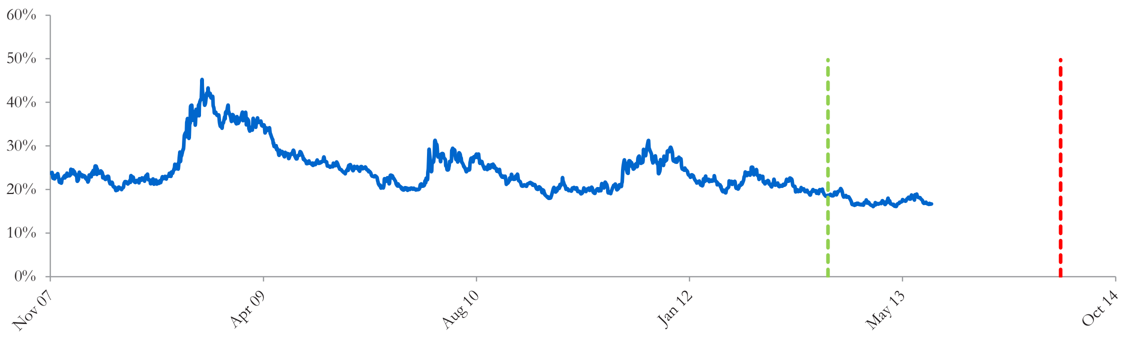



*The graph above shows the historical levels of the S&P 500 Index for the past several years. The final payoff of this note is determined by the S&P 500 Index level at maturity. Higher fluctuations in the S&P 500 Index level correspond to a greater uncertainty in the final payout of this Capped Buffered Equity Note.*

## Realized Payoff

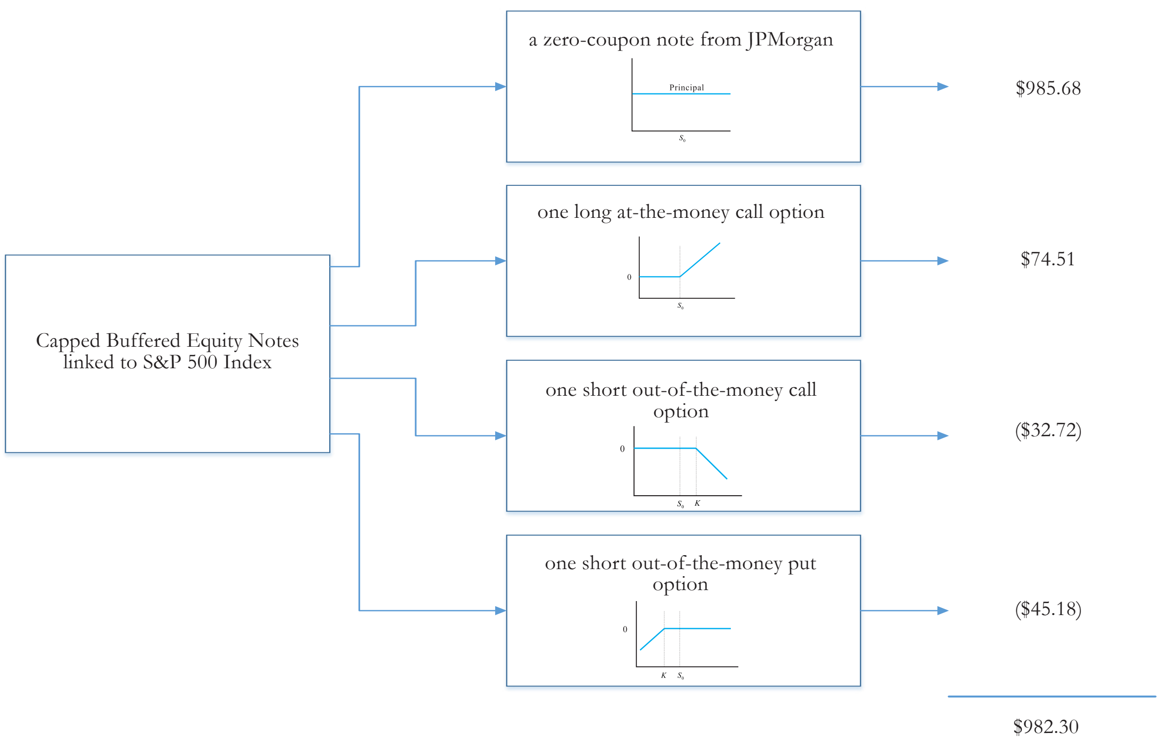
This product will mature on June 2, 2014.

## Reference Asset The S&P 500 Index's Implied Volatility




*The annualized implied volatility of the S&P 500 Index on November 28, 2012 was 18.56%, meaning that options contracts on the S&P 500 Index were trading at prices that reflect an expected annual volatility of 18.56%. The higher the implied volatility, the larger the expected fluctuations of the S&P 500 Index level and of the Note's market value during the life of the Notes.*

## Decomposition of this Capped Buffered Equity 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 Capped Buffered Equity Note.*

1. Delta measures the sensitivity of the price of the note to the the S&P 500 Index level on November 28, 2012.
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 S&P 500 Index on November 28, 2012.
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.