slcg
SECURITIES LITIGATION & CONSULTING GROUP

Structured Products Research Report

Report Prepared On: 04/29/13

Yield Optimization Notes with Contingent Protection linked to JPMorgan

Structured Product Details

Name	Yield Optimization Notes with Contingent Protection linked to JPMorgan
Issue Size	$17.54 million
Issue Price	$36.60
Term	12 Months
Annualized Coupon	10.38%
Pricing Date	August 27, 2010
Issue Date	August 31, 2010
Valuation Date	August 25, 2011
Maturity Date	August 31, 2011
Issuer	Deutsche Bank
CDS Rate	72.65 bps
Swap Rate	0.85%
Reference Asset	JPMorgan's stock
Initial Level	$36.60
Trigger Price	$27.45
Conversion Price	$36.60
Dividend Rate	0.54%
Implied Volatility	37.58%
Delta[1]	0.39
Fair Price at Issue	$35.76
Realized Return	10.89%
CUSIP	25154N290
SEC Link	www.sec.gov/Archives/edgar/data/1159508/000119312510201727/d424b2.htm

Description

Deutsche Bank issued $17.54 million of Yield Optimization Notes with Contingent Protection linked to JPMorgan on August 31, 2010 at $36.60 per note.

These notes are Deutsche Bank-branded single observation reverse convertibles. Single observation reverse convertibles pay periodic interest coupons and at maturity convert into shares of the reference security if the price of the reference security at the notes' maturity is below the trigger price determined when the notes were issued.

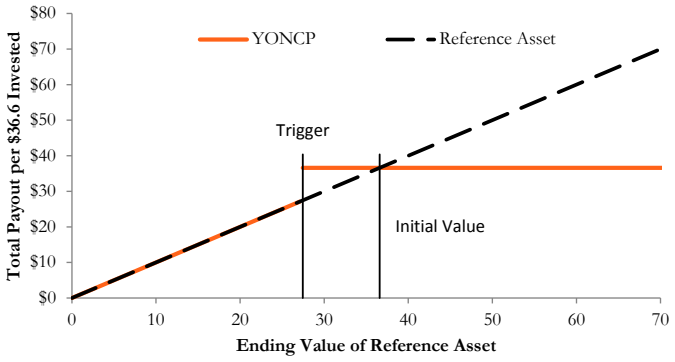
These 12-month notes pay monthly coupons at an annualized rate of 10.38%. In addition to the monthly coupons, on August 31, 2011 investors will receive the market value of one share of JPMorgan's stock if on August 25, 2011 JPMorgan's stock closes below $27.45 (75% of JPMorgan's stock price on August 27, 2010). Otherwise, investors will receive the $36.60 face value per note.

Valuation

This Deutsche Bank single observation reverse convertible linked to JPMorgan's stock can be valued as a combination of a note from Deutsche Bank and a short European out-of-the-money cash-or-nothing binary put option, and a short European out-of-the-money put option on JPMorgan's stock. For reasonable valuation inputs this note was worth $35.76 per $36.60 when it was issued on August 31, 2010 because investors were effectively being paid only $3.20 for giving Deutsche Bank options which were worth $4.04.

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 JPMorgan's stock price (horizontal axis). For comparison, the dashed line shows the payoff if you invested in JPMorgan's stock 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.

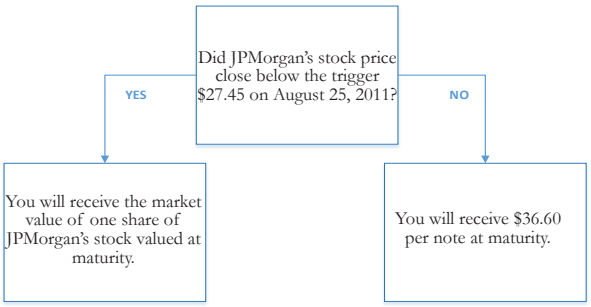
Mike Yan, Ph.D.,
Senior Financial Economist, SLCG
(+1) 703.539.6780
MikeYan@slcg.com

3998 FAIR RIDGE DRIVE, SUITE 250, FAIRFAX, VA 22033 | MAIN (703) 246-9380 | INFO@SLCG.COM
100 WILSHIRE BLVD, SUITE 950, SANTA MONICA, CA 90401 | MAIN (310) 917-1075

Principal Payback Table

JPMorgan's Stock	Note Payoff
$0.00	$0.00
$3.66	$3.66
$7.32	$7.32
$10.98	$10.98
$14.64	$14.64
$18.30	$18.30
$21.96	$21.96
$25.62	$25.62
$29.28	$36.60
$32.94	$36.60
$36.60	**$36.60**
$40.26	$36.60
$43.92	$36.60
$47.58	$36.60
$51.24	$36.60
$54.90	$36.60

Maturity Payoff Diagram



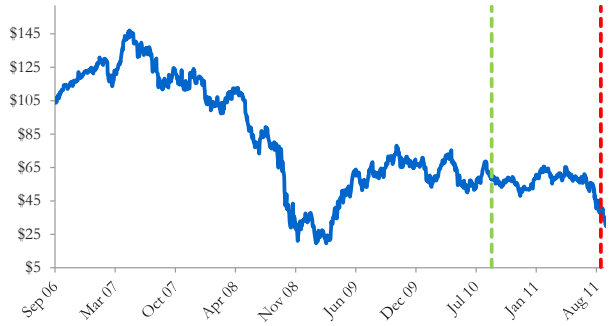
The contingent payoffs of this Yield Optimization Note with Contingent Protection.

Analysis

This single observation reverse convertible's 10.38% coupon rate is higher than the yield Deutsche Bank paid on its straight debt but, in addition to Deutsche Bank's credit risk, investors bear the risk that they will receive shares of JPMorgan's stock when those shares are worth substantially less than the face value of the note at maturity.

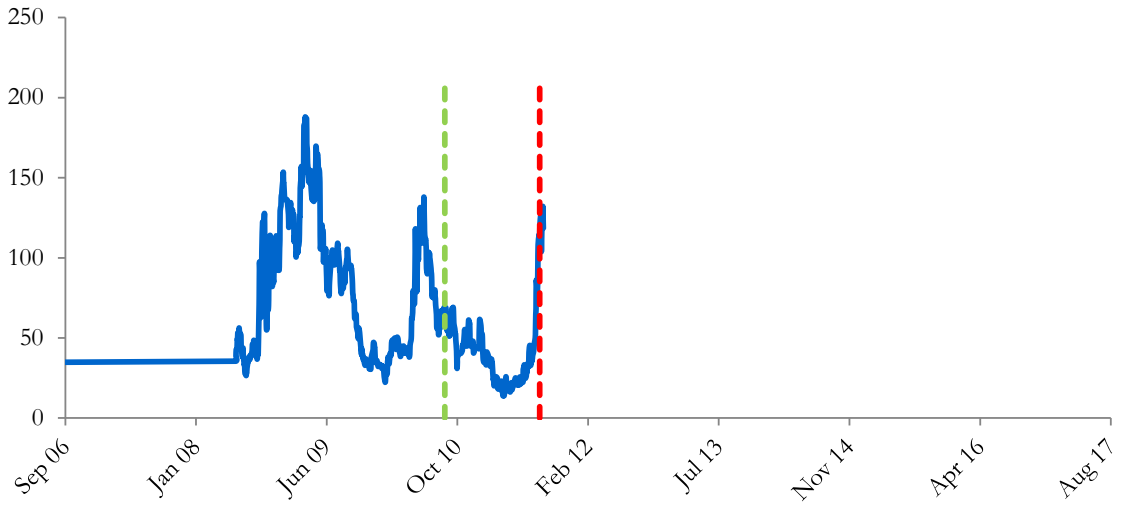
Investors purchasing these reverse convertibles effectively sell put options to Deutsche Bank and post the note's issue price as collateral to secure satisfaction of the investors' obligations under the option contracts. Deutsche Bank pays investors a "coupon" that is part payment for the put options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

Deutsche Bank's Stock Price



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

Deutsche Bank's CDS Rate



Credit default swap (CDS) rates are the market price that investors require to bear credit risk of an issuer such as Deutsche Bank. 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 Deutsche Bank's debt, including outstanding Yield Optimization Note with Contingent Protection. Fluctuations in Deutsche Bank's CDS rate impact the market value of the notes in the secondary market.

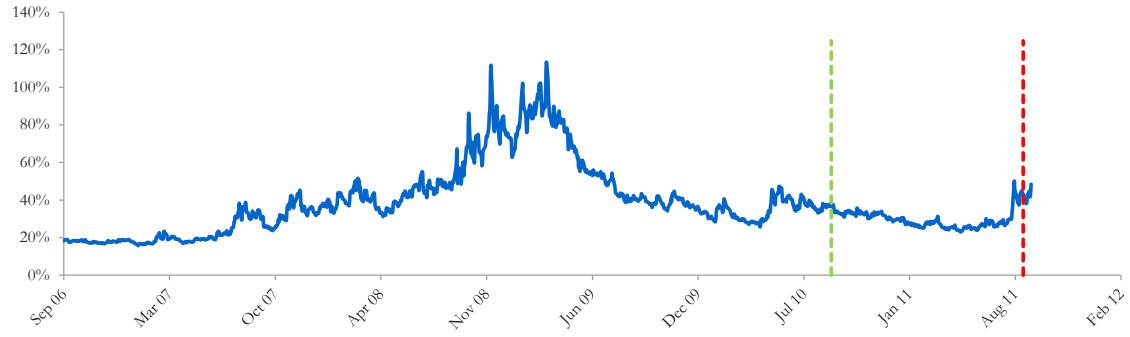
JPMorgan's Stock Price

The graph above shows the historical levels of JPMorgan's stock for the past several years. The final payoff of this note is determined by JPMorgan's stock price at maturity. Higher fluctuations in JPMorgan's stock price correspond to a greater uncertainty in the final payout of this Yield Optimization Note with Contingent Protection.

Realized Payoff

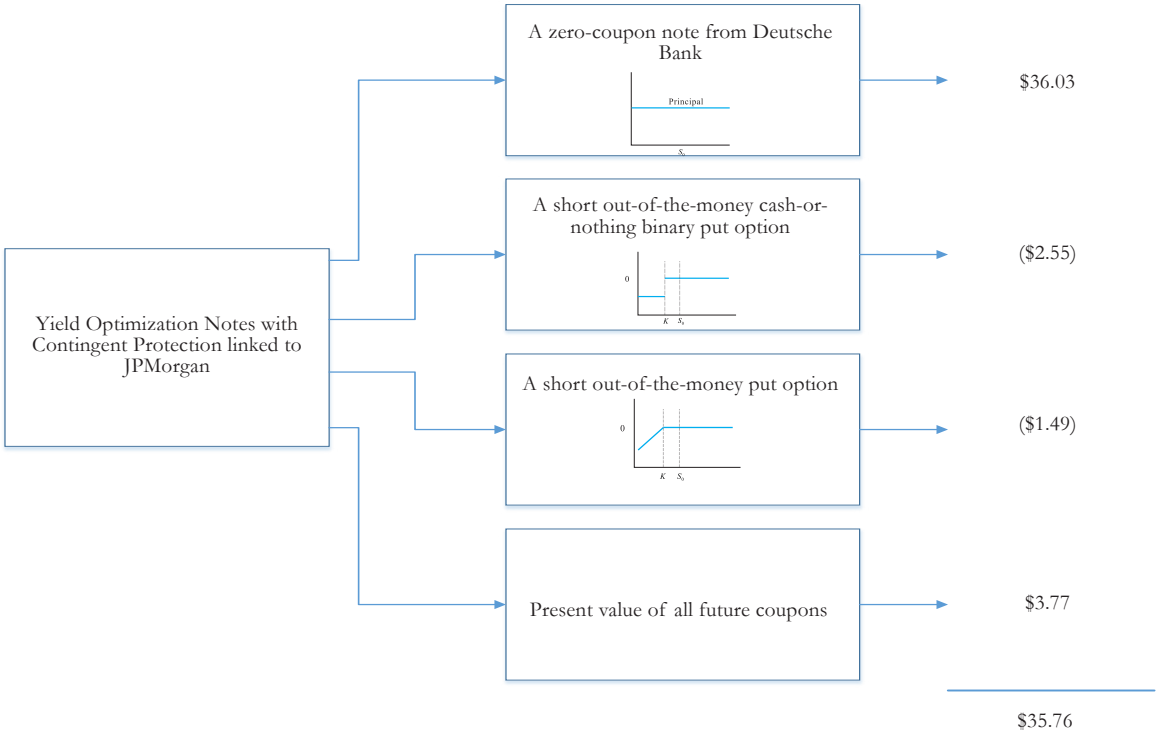
This note matured on August 31, 2011 and investors received $36.60 per note.

Reference Asset JPMorgan's Stock's Implied Volatility



The annualized implied volatility of JPMorgan's stock on August 27, 2010 was 37.58%, meaning that options contracts on JPMorgan's stock were trading at prices that reflect an expected annual volatility of 37.58%. The higher the implied volatility, the larger the expected fluctuations of JPMorgan's stock price and of the Note's market value during the life of the Notes.

Decomposition of this Yield Optimization Note with Contingent Protection



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 Yield Optimization Note with Contingent Protection.

1. Delta measures the sensitivity of the price of the note to the JPMorgan's stock price on August 27, 2010.
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 JPMorgan's stock on August 27, 2010.
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.