Structured Products
Research Report

Report Prepared On: 07/30/13

Structured Product Details

Name	Buffered Return Optimization Securities linked to S&P MidCap 400 Index
Issue Size	$1.74 million
Issue Price	$10
Term	24 Months
Annualized Coupon	0.00%
Pricing Date	August 26, 2011
Issue Date	August 31, 2011
Valuation Date	August 26, 2013
Maturity Date	August 30, 2013
Issuer	Deutsche Bank
CDS Rate	157.84 bps
Swap Rate	0.49%
Reference Asset	the S&P MidCap 400 Index
Initial Level	835.92
Dividend Rate	1.50%
Implied Volatility	31.12%
Delta[1]	0.53
Fair Price at Issue	$9.13
CUSIP	25154W340
SEC Link	www.sec.gov/Archives/edgar/data/1159508/000119312511236655/d424b2.htm

Buffered Return Optimization Securities linked to S&P MidCap 400 Index

Description

Deutsche Bank issued $1.74 million of Buffered Return Optimization Securities linked to S&P MidCap 400 Index on August 31, 2011 at $10 per note.

These notes are Deutsche Bank-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 MidCap 400 Index.

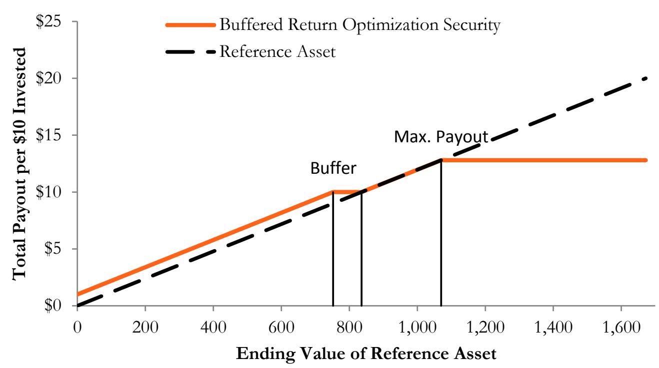
If on August 26, 2013 the S&P MidCap 400 Index level is higher than 835.92, but lower than 1,069.98, the notes pay a return equal to the percentage increase in the S&P MidCap 400 Index, up to a cap of 28.00%. If on August 26, 2013 the refe is below 835.92 but not below 752.33, investors receive $10 face value per note. If the S&P MidCap 400 Index level on August 26, 2013 is lower than 752.33, investors receive face value per note reduced by the amount the reference asset is below 752.33 as a percent of the initial level, 835.92.

Valuation

This product can be valued as a combination of a note from Deutsche Bank, 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 $9.13 when it was issued on August 31, 2011 because the value of the options investors gave Deutsche Bank plus the interest investors would have received on Deutsche Bank's straight debt was worth $0.87 more than the options investors received from Deutsche Bank.

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 MidCap 400 Index level (horizontal axis). For comparison, the dashed line shows the payoff if you invested in the S&P MidCap 400 Index directly.

Related Research

Research Papers:
www.slcg.com/research.php

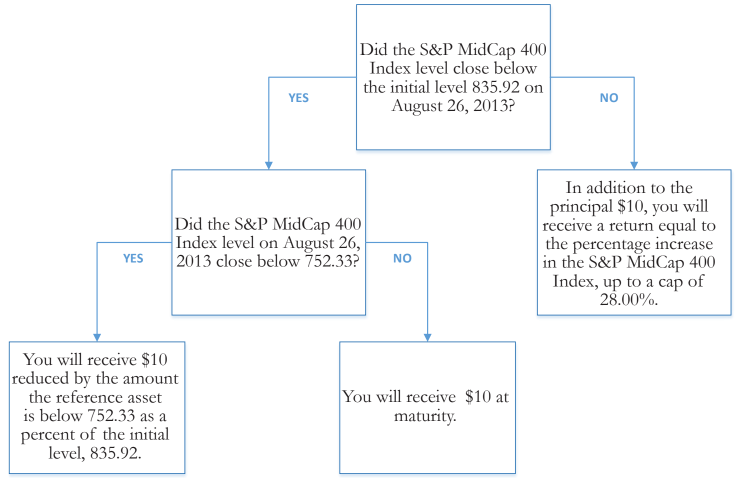
- *"Are Structured Products Suitable for Retail Investors?"* December 2006.
- *"Structured Products in the Aftermath of Lehman Brothers,"* November 2009.
- *"What TiVo and JP Morgan Teach Us about Reverse Convertibles,"* June 2010.

Tim Husson, Ph.D.,
Senior Financial Economist, SLCG
(+1) 703.890.0743
TimHusson@slcg.com

Principal Payback Table

The S&P MidCap 400 Index	Note Payoff
0.00	$1.00
83.59	$2.00
167.18	$3.00
250.78	$4.00
334.37	$5.00
417.96	$6.00
501.55	$7.00
585.14	$8.00
668.74	$9.00
752.33	$10.00
835.92	**$10.00**
919.51	$11.00
1,003.10	$12.00
1,086.70	$12.80
1,170.29	$12.80
1,253.88	$12.80

Maturity Payoff Diagram

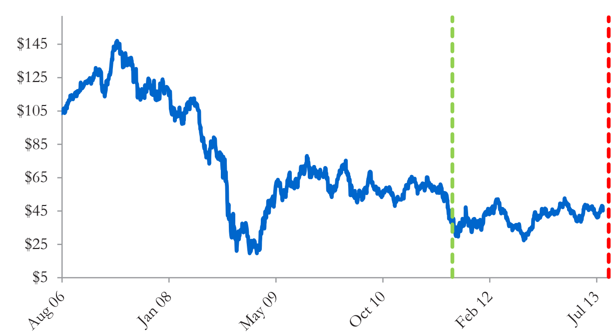


The contingent payoffs of this Buffered Return Optimization Security.

Analysis

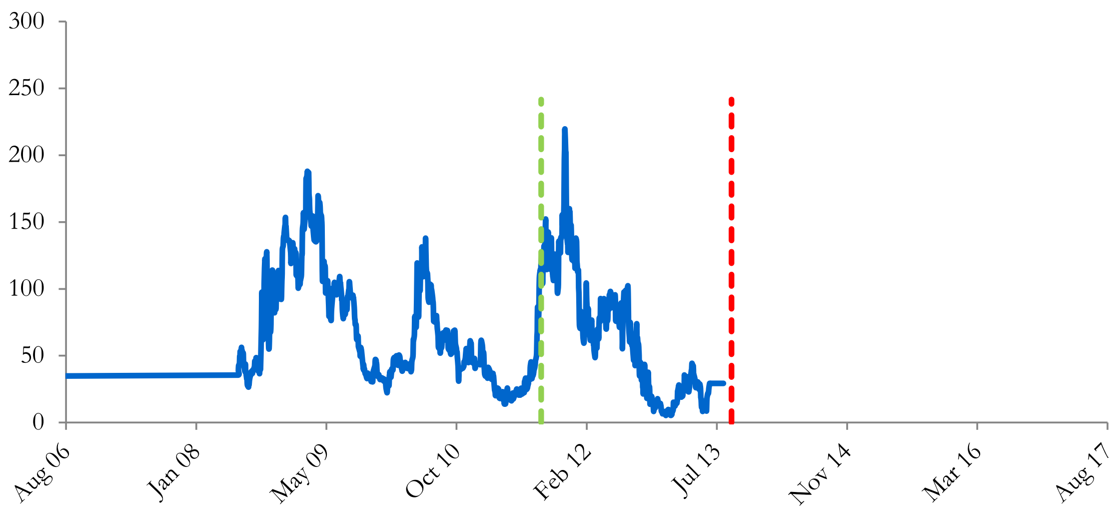
This Buffered Return Optimization Security pays investors the increase in the S&P MidCap 400 Index capped at 28.00%, but if the S&P MidCap 400 Index declines over the term of the note, investors will suffer losses equal to the percentage decline in the S&P MidCap 400 Index. In addition, investors bear the credit risk of Deutsche Bank. Investors purchasing this Buffered Return Optimization Security effectively sell at-the-money put and out-of-the-money call options to Deutsche Bank, buy at-the-money call options, and a zero-coupon note from Deutsche Bank. This Buffered Return Optimization Security is fairly priced if and only if the market value of the options investors received from Deutsche Bank equals the market value of the options investors gave Deutsche Bank plus the interest investors would have received on Deutsche Bank's straight debt.

Deutsche Bank's Stock Price



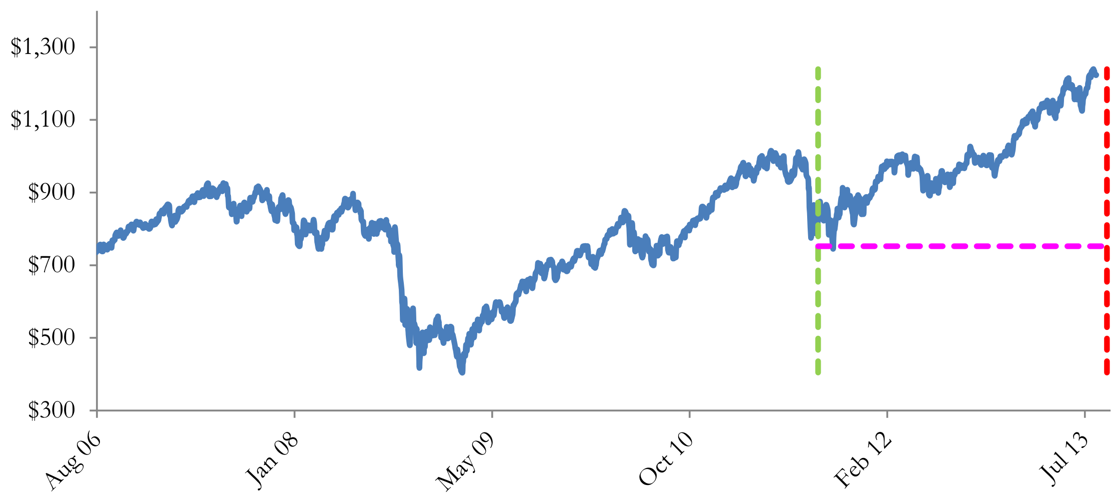
The graph above shows the adjusted closing price of the issuer Deutsche Bank for the past several years. The stock price of the issuer is an indication of the financial strength of Deutsche Bank. The adjusted price shown above incorporates any stock split, reverse stock split, etc.

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 Buffered Return Optimization Security. Fluctuations in Deutsche Bank's CDS rate impact the market value of the notes in the secondary market.

The S&P MidCap 400 Index Level

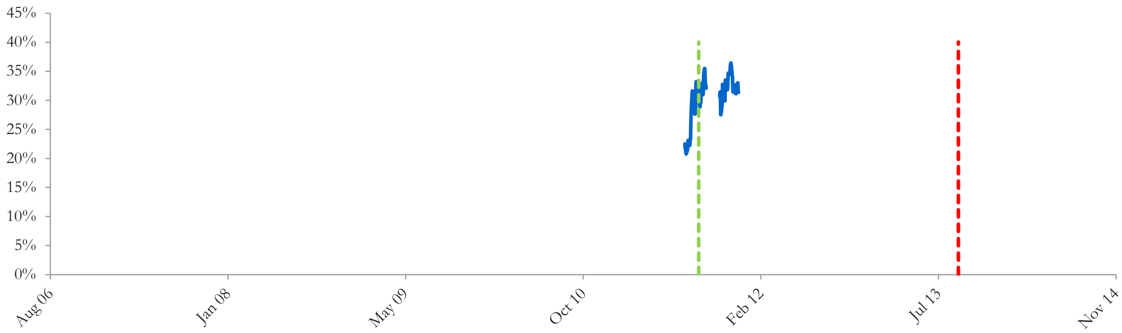


The graph above shows the historical levels of the S&P MidCap 400 Index for the past several years. The final payoff of this note is determined by the S&P MidCap 400 Index level at maturity. Higher fluctuations in the S&P MidCap 400 Index level correspond to a greater uncertainty in the final payout of this Buffered Return Optimization Security.

Realized Payoff

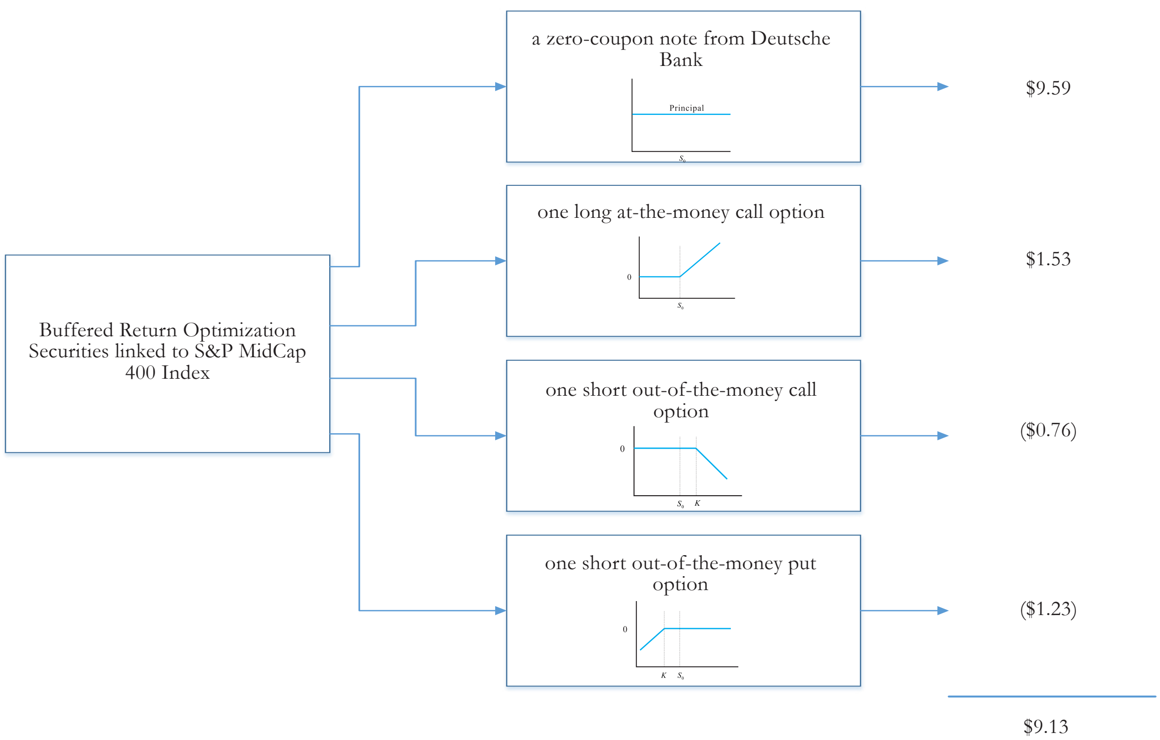
This product will mature on August 30, 2013.

Reference Asset The S&P MidCap 400 Index's Implied Volatility



The annualized implied volatility of the S&P MidCap 400 Index on August 26, 2011 was 31.12%, meaning that options contracts on the S&P MidCap 400 Index were trading at prices that reflect an expected annual volatility of 31.12%. The higher the implied volatility, the larger the expected fluctuations of the S&P MidCap 400 Index level and of the Note's market value during the life of the Notes.

Decomposition of this Buffered Return Optimization 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 Buffered Return Optimization Security.

1. Delta measures the sensitivity of the price of the note to the the S&P MidCap 400 Index level on August 26, 2011.
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 MidCap 400 Index on August 26, 2011.
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.