Structured Product Details

Name	Yield Optimization Notes with Contingent Protection linked to Schlumberger, Ltd.
Issue Size	$11.32 million
Issue Price	$64.15
Term	6 Months
Annualized Coupon	14.50%
Pricing Date	May 17, 2010
Issue Date	May 20, 2010
Valuation Date	November 17, 2010
Maturity Date	November 22, 2010
Issuer	Deutsche Bank
CDS Rate	100.32 bps
Swap Rate	0.65%
Reference Asset	Schlumberger, Ltd.'s stock
Initial Level	$64.15
Trigger Price	$51.32
Conversion Price	$64.15
Dividend Rate	1.30%
Implied Volatility	41.77%
Delta[1]	0.41
Fair Price at Issue	$62.51
Realized Return	15.28%
CUSIP	25154N571
SEC Link	www.sec.gov/Archives/edgar/ data/1159508/000119312510124385/d424b2.htm

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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Yield Optimization Notes with Contingent Protection linked to Schlumberger, Ltd.

Description

Deutsche Bank issued $11.32 million of Yield Optimization Notes with Contingent Protection linked to Schlumberger, Ltd. on May 20, 2010 at $64.15 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.
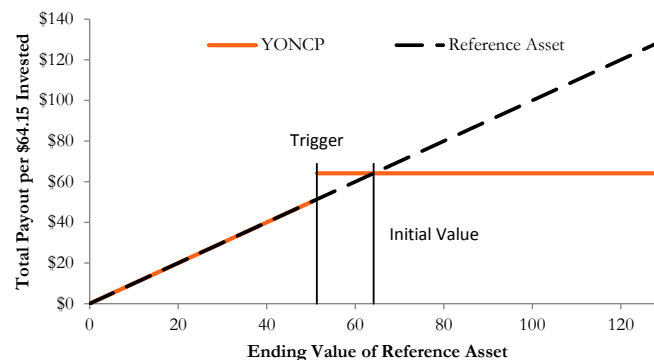
These 6-month notes pay monthly coupons at an annualized rate of 14.50%. In addition to the monthly coupons, on November 22, 2010 investors will receive the market value of one share of Schlumberger, Ltd.'s stock if on November 17, 2010 Schlumberger, Ltd.'s stock closes below $51.32 (80% of Schlumberger, Ltd.'s stock price on May 17, 2010). Otherwise, investors will receive the $64.15 face value per note.

Valuation

This Deutsche Bank single observation reverse convertible linked to Schlumberger, Ltd.'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 Schlumberger, Ltd.'s stock. For reasonable valuation inputs this note was worth $62.51 per $64.15 when it was issued on May 20, 2010 because investors were effectively being paid only $4.13 for giving Deutsche Bank options which were worth $5.76.

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

Principal Payback Table

Schlumberger, Ltd.'s Stock	Note Payoff
$0.00	$0.00
$6.42	$6.42
$12.83	$12.83
$19.25	$19.25
$25.66	$25.66
$32.08	$32.08
$38.49	$38.49
$44.91	$44.91
$51.32	$64.15
$57.74	$64.15
$64.15	**$64.15**
$70.57	$64.15
$76.98	$64.15
$83.40	$64.15
$89.81	$64.15
$96.23	$64.15

## Maturity Payoff Diagram
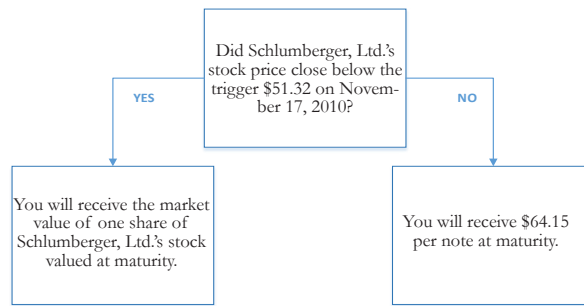
The contingent payoffs of this Yield Optimization Note with Contingent Protection.

Analysis

This single observation reverse convertible's 14.50% 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 Schlumberger, Ltd.'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
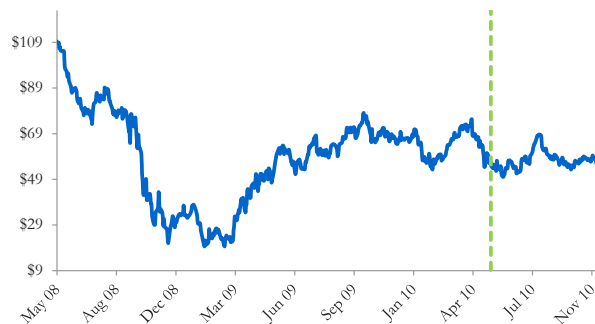
The graph above shows the adjusted closing price of the issuer Deutsche Bank for the past several years. The stock price of the issuer is an indication of the financial strength of Deutsche Bank. The adjusted price shown above incorporates any stock split, reverse stock split, etc.

Deutsche Bank's CDS Rate
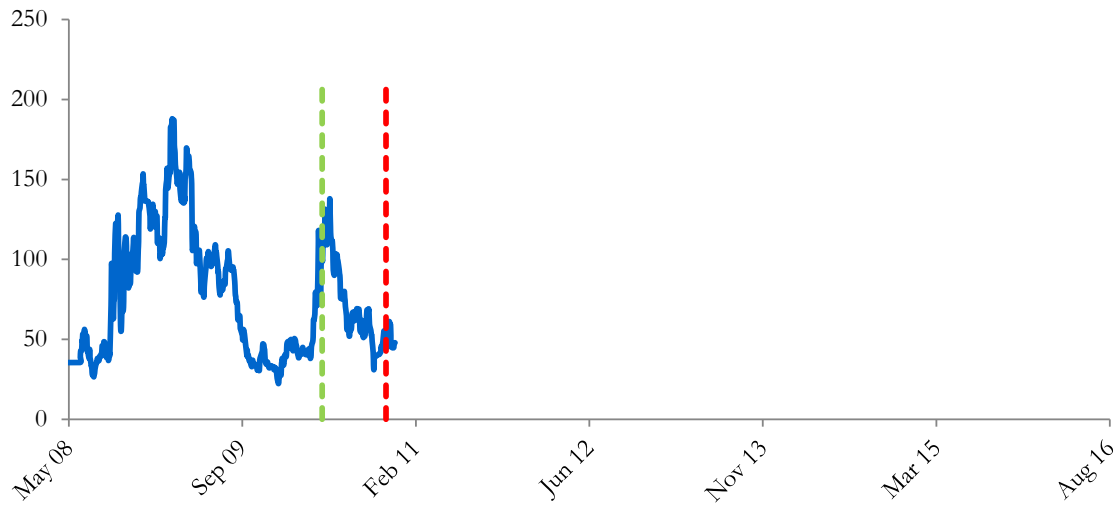
Credit default swap (CDS) rates are the market price that investors require to bear credit risk of an issuer such as Deutsche Bank. CDS rates are usually given in basis points (bps). One basis point equals 0.01%. Higher CDS rates reflect higher perceived credit risk, higher required yields, and therefore 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.

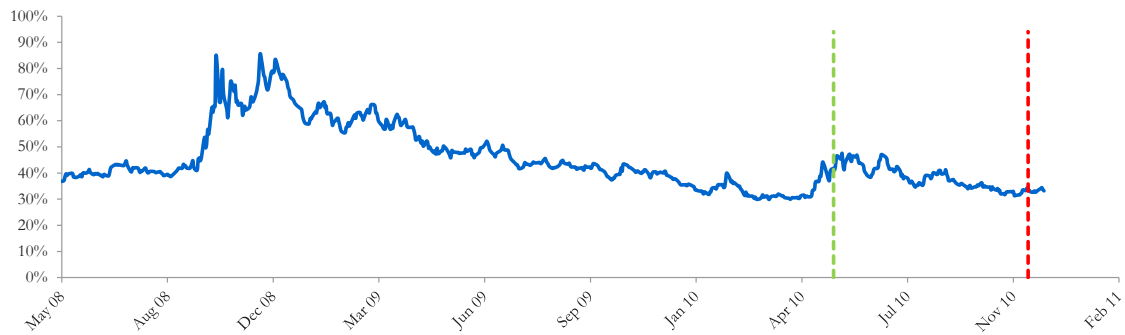## Schlumberger, Ltd.'s Stock Price
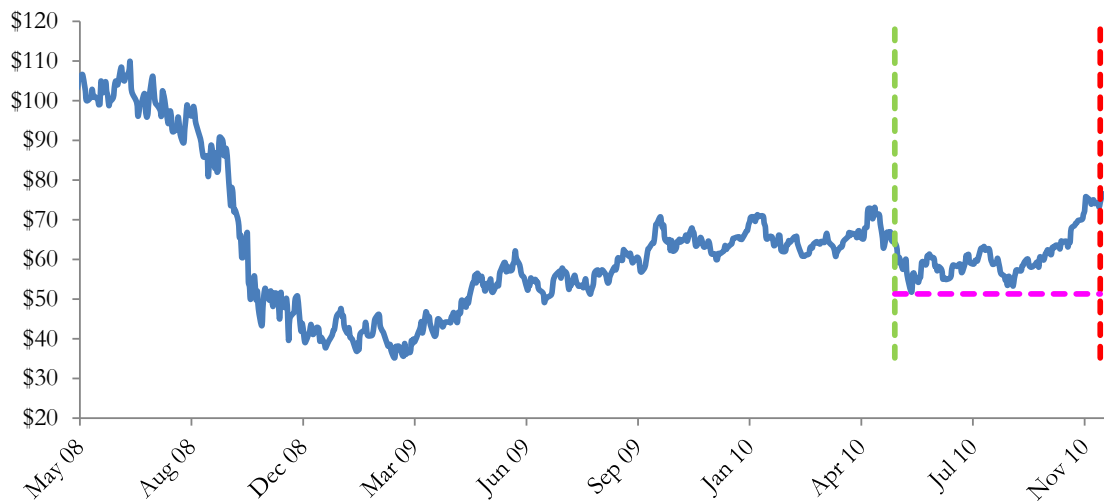
The graph above shows the historical levels of Schlumberger, Ltd.'s stock for the past several years. The final payoff of this note is determined by Schlumberger, Ltd.'s stock price at maturity. Higher fluctuations in Schlumberger, Ltd.'s stock price correspond to a greater uncertainty in the final payout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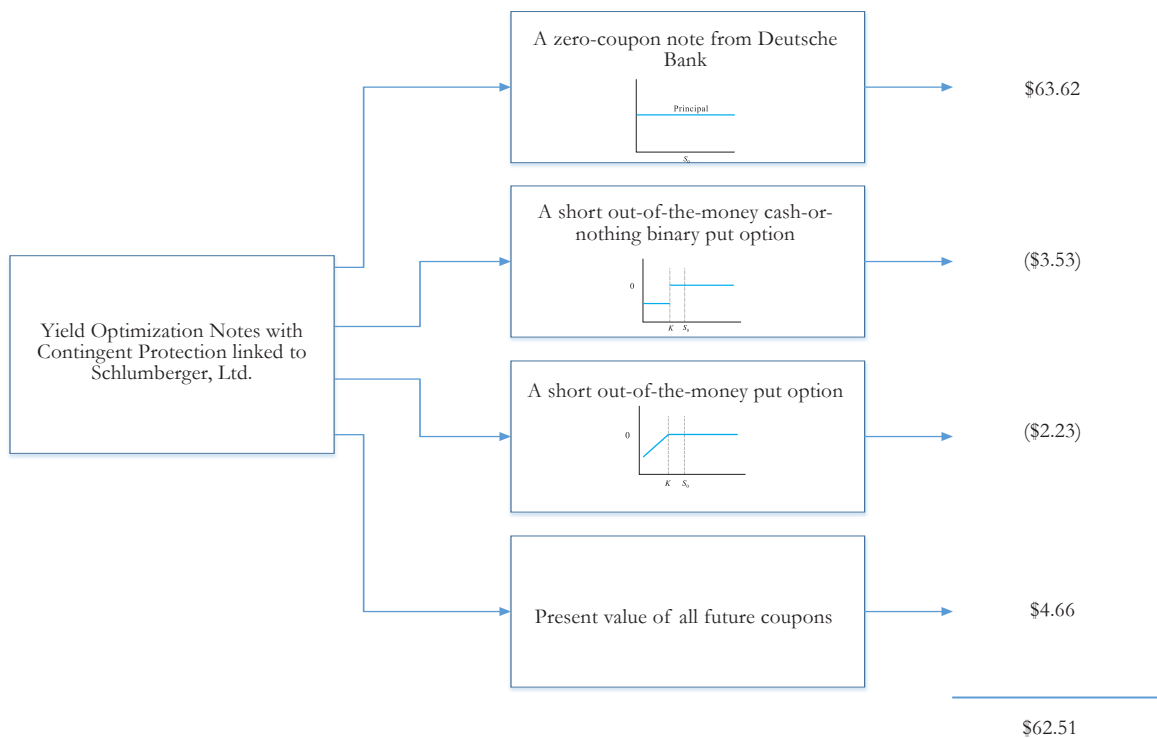
Realized Payoff

This note matured on November 22, 2010 and investors received $64.15 per note.

Reference Asset Schlumberger, Ltd.'s Stock's Implied Volatility

The annualized implied volatility of Schlumberger, Ltd.'s stock on May 17, 2010 was 41.77%, meaning that options contracts on Schlumberger, Ltd.'s stock were trading at prices that reflect an expected annual volatility of 41.77%. The higher the implied volatility, the larger the expected fluctuations of Schlumberger, Ltd.'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

A zero-coupon note from Deutsche Bank — $63.62

A short out-of-the-money cash-or-nothing binary put option — ($3.53)

A short out-of-the-money put option — ($2.23)

Present value of all future coupons — $4.66

$62.51

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 Schlumberger, Ltd.'s stock price on May 17, 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 Schlumberger, Ltd.'s stock on May 17, 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.