Structured Products
Research Report

Report Prepared On: 01/10/13

Structured Product Details

Name	Yield Optimization Securities with Contingent Protection linked to SPDR S&P 500 ETF Trust
Issue Size	$4.88 million
Issue Price	$86.62
Term	6 Months
Annualized Coupon	11.15%
Pricing Date	April 16, 2009
Issue Date	April 21, 2009
Valuation Date	October 15, 2009
Maturity Date	October 21, 2009
Issuer	UBS
CDS Rate	197.32 bps
Swap Rate	1.63%
Reference Asset	SPDR S&P 500 ETF Trust's stock
Initial Level	$86.62
Trigger Price	$64.97
Conversion Price	$86.62
Dividend Rate	3.25%
Implied Volatility	34.59%
Delta[1]	0.35
Fair Price at Issue	$85.30
Realized Return	11.59%
CUSIP	90265G527
SEC Link	www.sec.gov/Archives/edgar/data/1114446/000139340109000286/c146539_690344-424b2.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 Securities with Contingent Protection linked to SPDR S&P 500 ETF Trust

Description

UBS issued $4.88 million of Yield Optimization Securities with Contingent Protection linked to SPDR S&P 500 ETF Trust on April 21, 2009 at $86.62 per note.

These notes are UBS-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.

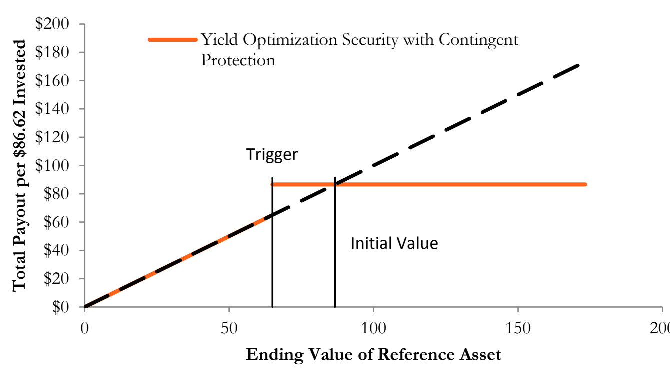
These 6-month notes pay monthly coupons at an annualized rate of 11.15%. In addition to the quarterly coupons, on October 21, 2009 investors will receive the market value of one share of SPDR S&P 500 ETF Trust's stock if on October 15, 2009 SPDR S&P 500 ETF Trust's stock closes below $64.97 (75% of SPDR S&P 500 ETF Trust's stock price on April 16, 2009). Otherwise, investors will receive the $86.62 face value per note.

Valuation

This UBS single observation reverse convertible linked to SPDR S&P 500 ETF Trust's stock can be valued as a combination of a note from UBS and a short European out-of-the-money cash-or-nothing put option, and a short European out-of-the-money put option on SPDR S&P 500 ETF Trust's stock. For reasonable valuation inputs this note was worth $85.30 per $86.62 when it was issued on April 21, 2009 because investors were effectively being paid only $3.23 for giving UBS options which were worth $4.55.

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 SPDR S&P 500 ETF Trust's stock price (horizontal axis). For comparison, the dashed line shows the payoff if you invested in SPDR S&P 500 ETF Trust's stock directly.

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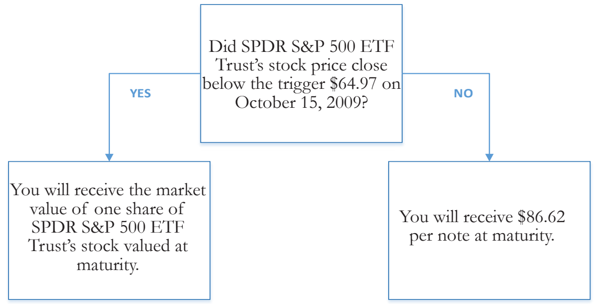
Principal Payback Table

SPDR S&P 500 ETF Trust's Stock	Note Payoff
$0.00	$0.00
$8.66	$8.66
$17.32	$17.32
$25.99	$25.99
$34.65	$34.65
$43.31	$43.31
$51.97	$51.97
$60.63	$60.63
$69.30	$86.62
$77.96	$86.62
$86.62	**$86.62**
$95.28	$86.62
$103.94	$86.62
$112.61	$86.62
$121.27	$86.62
$129.93	$86.62

Maturity Payoff Diagram



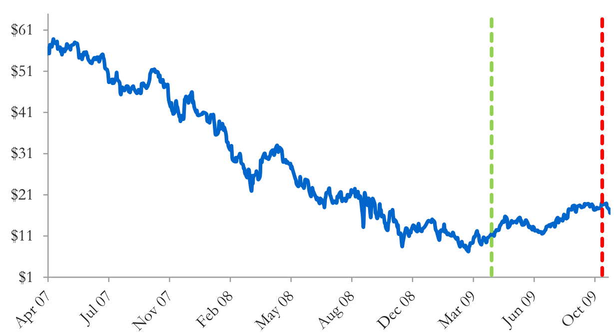
The contingent payoffs of this Yield Optimization Security with Contingent Protection.

Analysis

This single observation reverse convertible's 11.15% coupon rate is higher than the yield UBS paid on its straight debt but, in addition to UBS's credit risk, investors bear the risk that they will receive shares of SPDR S&P 500 ETF Trust's stock when those shares are worth substantially less than the face value of the note at maturity.

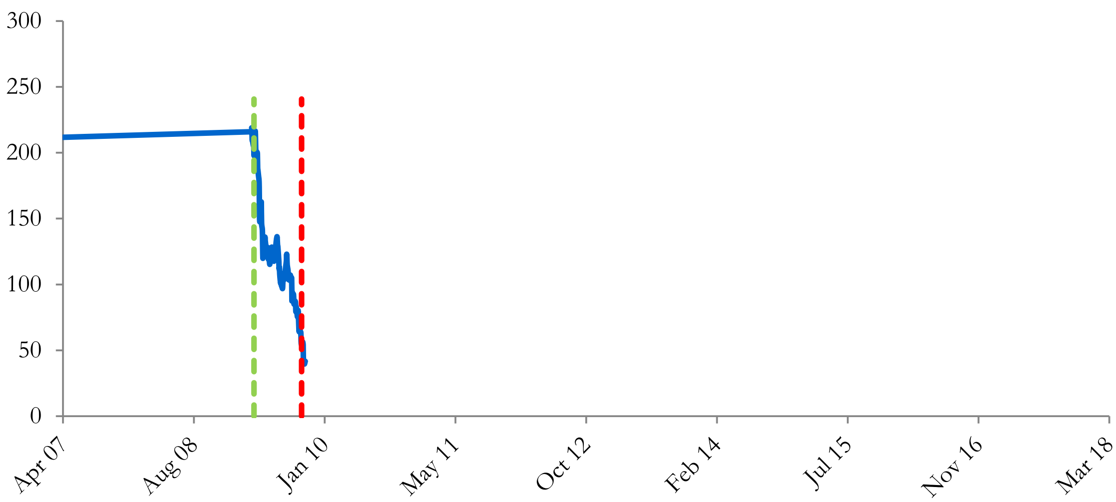
Investors purchasing these reverse convertibles effectively sell put options to UBS and post the note's issue price as collateral to secure satisfaction of the investors' obligations under the option contracts. UBS pays investors a "coupon" that is part payment for the put options and part interest on 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 UBS's straight debt equals the value of the put option investors are giving to UBS. 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 UBS was suitable for the investor.

UBS's Stock Price



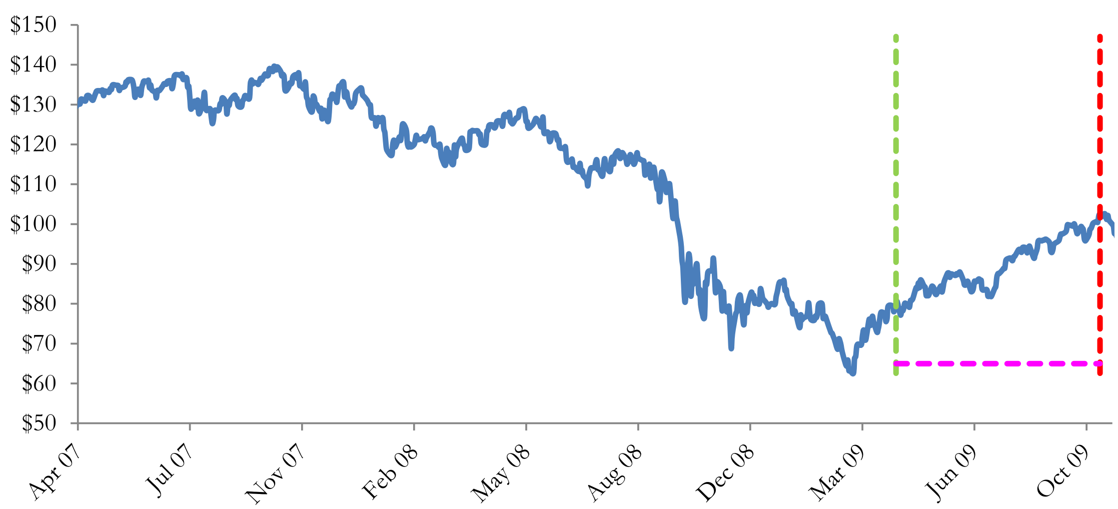
The graph above shows the adjusted closing price of the issuer UBS for the past several years. The stock price of the issuer is an indication of the financial strength of UBS. The adjusted price shown above incorporates any stock split, reverse stock split, etc.

UBS's CDS Rate



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

SPDR S&P 500 ETF Trust's Stock Price

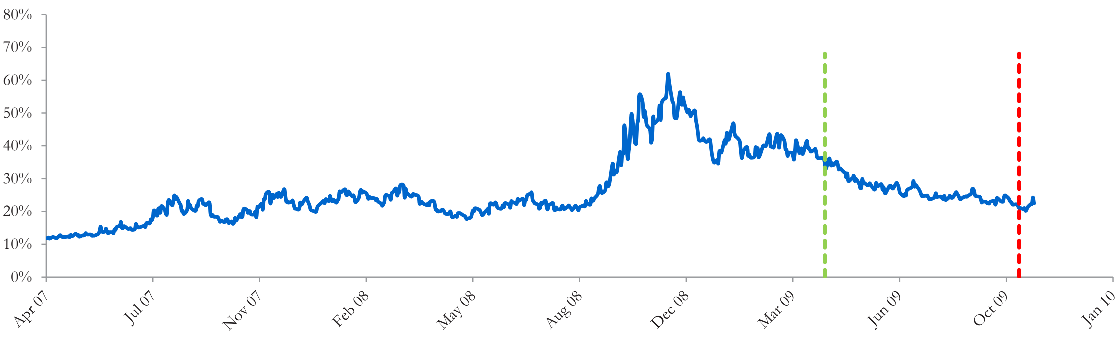


The graph above shows the historical levels of SPDR S&P 500 ETF Trust's stock for the past several years. The final payoff of this note is determined by SPDR S&P 500 ETF Trust's stock price at maturity. Higher fluctuations in SPDR S&P 500 ETF Trust's stock price correspond to a greater uncertainty in the final payout of this Yield Optimization Security with Contingent Protection.

Realized Payoff

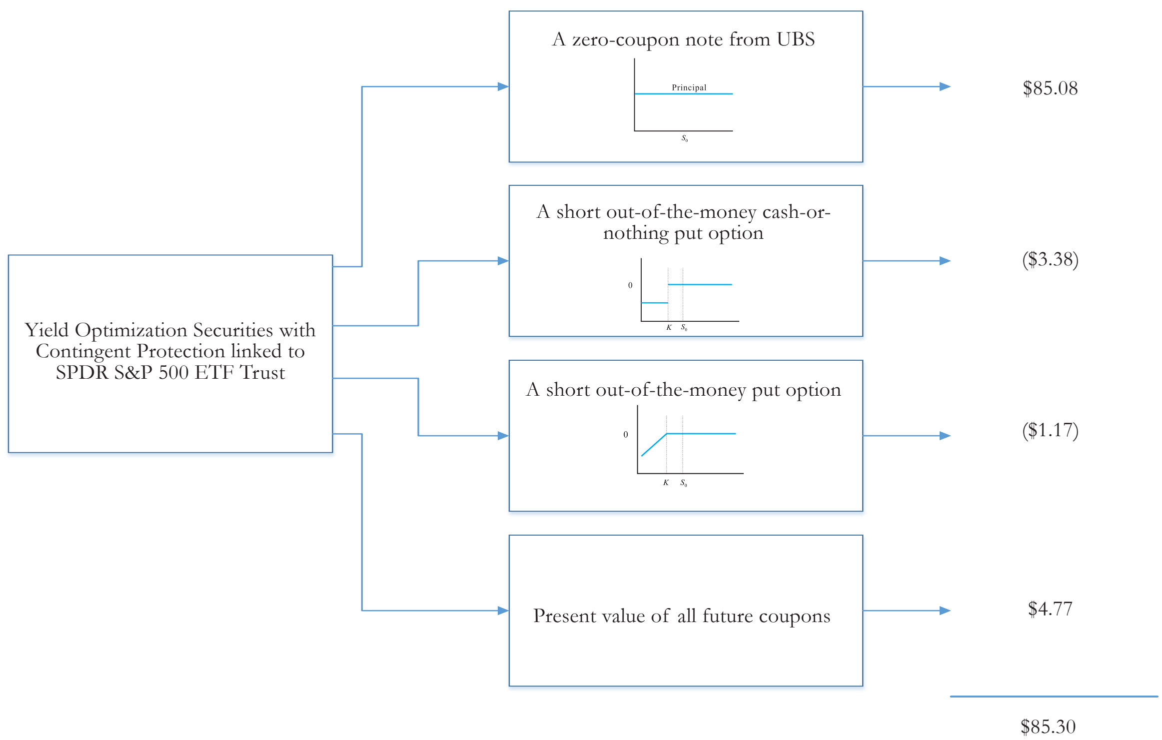
This note matured on October 21, 2009 and investors received $86.62 per note.

Reference Asset SPDR S&P 500 ETF Trust's Stock's Implied Volatility



The annualized implied volatility of SPDR S&P 500 ETF Trust's stock on April 16, 2009 was 34.59%, meaning that options contracts on SPDR S&P 500 ETF Trust's stock were trading at prices that reflect an expected annual volatility of 34.59%. The higher the implied volatility, the larger the expected fluctuations of SPDR S&P 500 ETF Trust's stock price and of the Note's market value during the life of the Notes.

Decomposition of this Yield Optimization Security 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 Security with Contingent Protection.

1. Delta measures the sensitivity of the price of the note to the SPDR S&P 500 ETF Trust's stock price on April 16, 2009.
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 SPDR S&P 500 ETF Trust's stock on April 16, 2009.
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.