Structured Products Research Report

Report Prepared On: 12/14/12

Reverse Convertible Notes linked to Joy Global, Inc.

Description

HSBC issued $2.28 million of Reverse Convertible Notes linked to Joy Global, Inc. on January 24, 2007 at $1,000 per note.

These notes are HSBC-branded reverse convertibles. Reverse convertibles pay periodic interest coupons and at maturity convert into shares of the reference security if the price of the reference stock at the notes' maturity is below its price when the notes were issued and had closed below a specified "trigger" during the term of the notes.

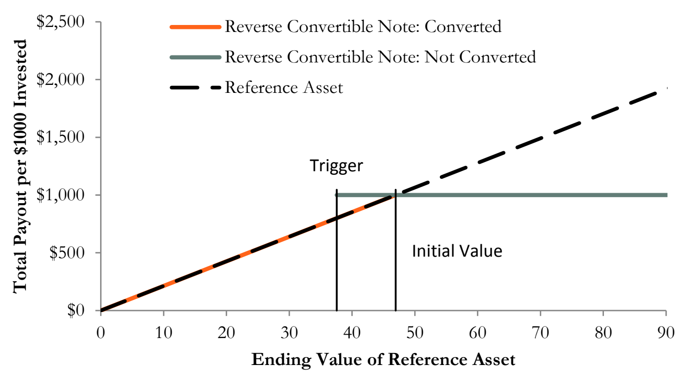
These 3-month notes pay monthly coupons at an annualized rate of 18.25%. In addition to the quarterly coupons, at maturity on April 24, 2007 investors will receive the market value of 21.30 shares of Joy Global, Inc.'s stock if on April 19, 2007 Joy Global, Inc.'s stock price closes below $46.95 (Joy Global, Inc.'s stock price on January 19, 2007) and had ever closed at or below $37.56 during the term of the notes. Otherwise, investors will receive the $1,000 face value per note.

Valuation

This HSBC reverse convertible linked to Joy Global, Inc.'s stock can be valued as a combination of a note from HSBC and a short down-and-in, at-the-money put option on Joy Global, Inc.'s stock. For reasonable valuation inputs this note was worth $970.88 per $1,000 when it was issued on January 24, 2007 because investors were effectively being paid only $31.54 for giving HSBC an option which was worth $60.66.

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

Structured Product Details

Name	Reverse Convertible Notes linked to Joy Global, Inc.
Issue Size	$2.28 million
Issue Price	$1,000
Term	3 Months
Annualized Coupon	18.25%
Pricing Date	January 19, 2007
Issue Date	January 24, 2007
Valuation Date	April 19, 2007
Maturity Date	April 24, 2007
Issuer	HSBC
CDS Rate	13.66 bps
Swap Rate	5.29%
Reference Asset	Joy Global, Inc.'s stock
Initial Level	$46.95
Trigger Price	$37.56
Conversion Price	$46.95
Dividend Rate	1.03%
Implied Volatility	42.06%
Delta[1]	0.44
Fair Price at Issue	$970.88
Realized Return	19.83%
CUSIP	40428HGX4
SEC Link	www.sec.gov/Archives/edgar/data/83246/000119312507010061/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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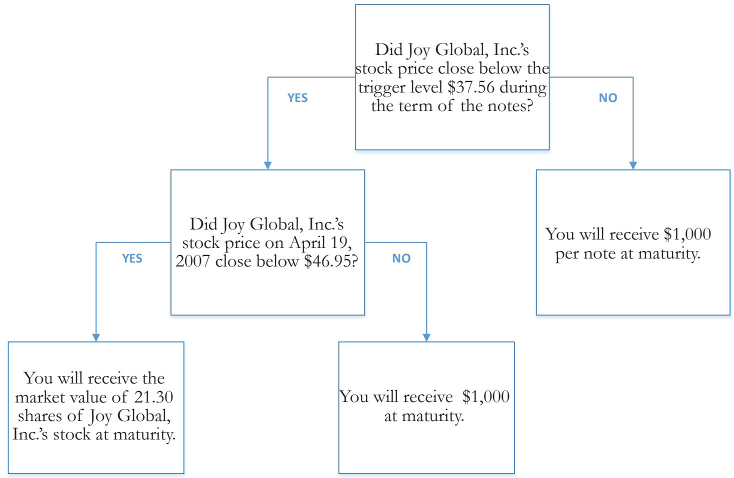
Principal Payback Table

Joy Global, Inc.'s Stock	Converted Note Payoff	Non-Converted Note Payoff
$0.00	$0.00	
$4.70	$100.00	
$9.39	$200.00	
$14.09	$300.00	
$18.78	$400.00	
$23.48	$500.00	
$28.17	$600.00	
$32.87	$700.00	
$37.56	$800.00	$1,000.00
$42.26	$900.00	$1,000.00
$46.95	**$1,000.00**	**$1,000.00**
$51.65	$1,000.00	$1,000.00
$56.34	$1,000.00	$1,000.00
$61.04	$1,000.00	$1,000.00
$65.73	$1,000.00	$1,000.00
$70.43	$1,000.00	$1,000.00

Maturity Payoff Diagram



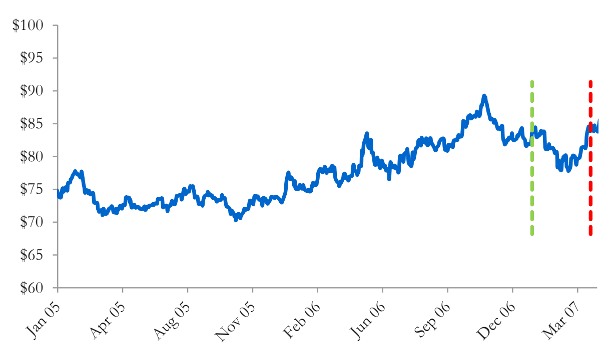
The contingent payoffs of this Reverse Convertible Note.

Analysis

This reverse convertible's 18.25% coupon rate is higher than the yield HSBC paid on its straight debt but, in addition to HSBC's credit risk, investors bear the risk that they will receive shares of Joy Global, Inc.'s stock when they are worth substantially less than the face value of the note at maturity.

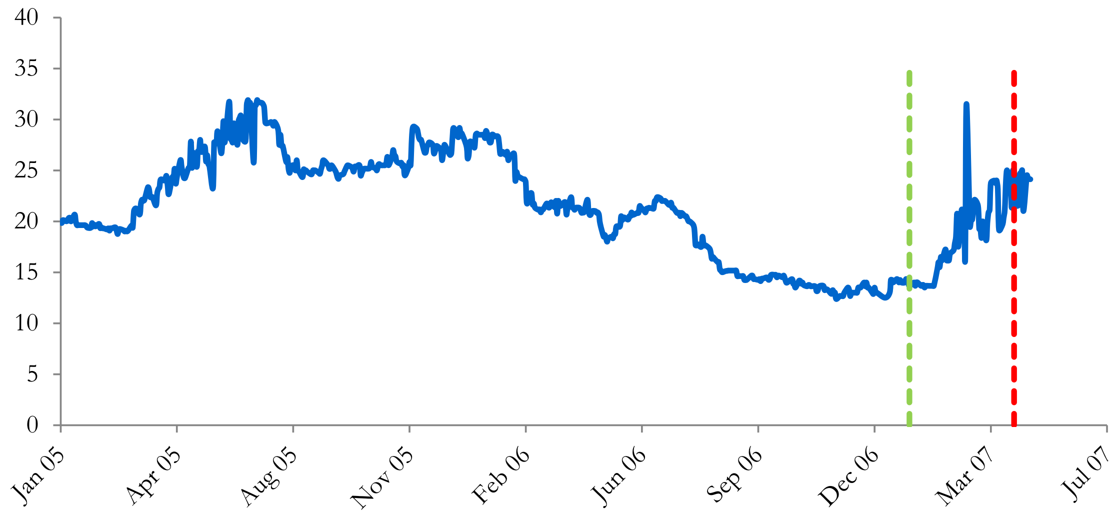
Investors purchasing reverse convertibles effectively sell put options to HSBC and post the note's issue price as collateral to secure satisfaction of the investors' obligations under the option contracts. HSBC pays investors a "coupon" that is part payment for the put options and part interest on the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

HSBC's Stock Price



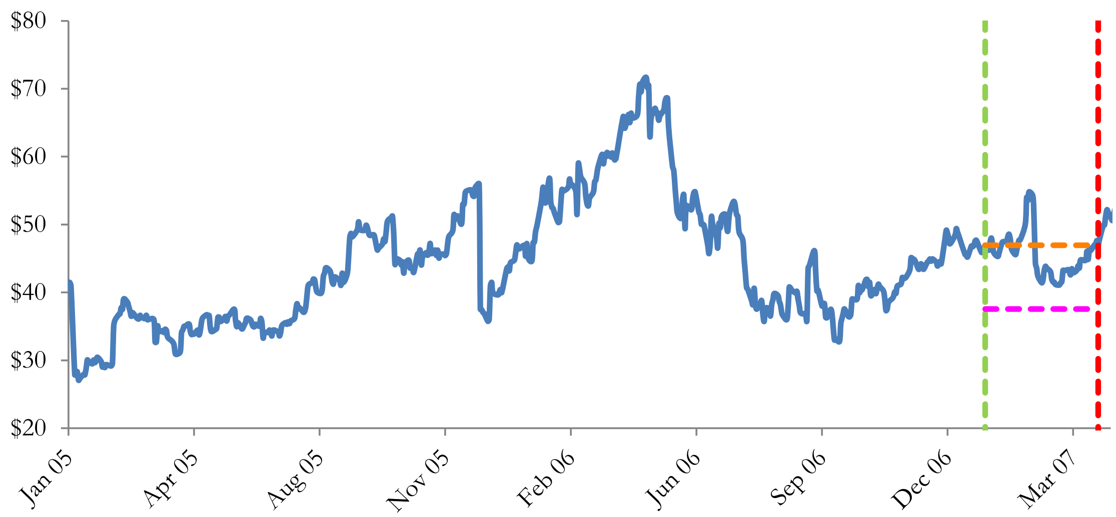
The graph above shows the adjusted closing price of the issuer HSBC for the past several years. The stock price of the issuer is an indication of the financial strength of HSBC. The adjusted price shown above incorporates any stock split, reverse stock split, etc.

HSBC's CDS Rate



Credit default swap (CDS) rates are the market price that investors require to bear credit risk of an issuer such as HSBC. 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 HSBC's debt, including outstanding Reverse Convertible Note. Fluctuations in HSBC's CDS rate impact the market value of the notes in the secondary market.

Joy Global, Inc.'s Stock Price

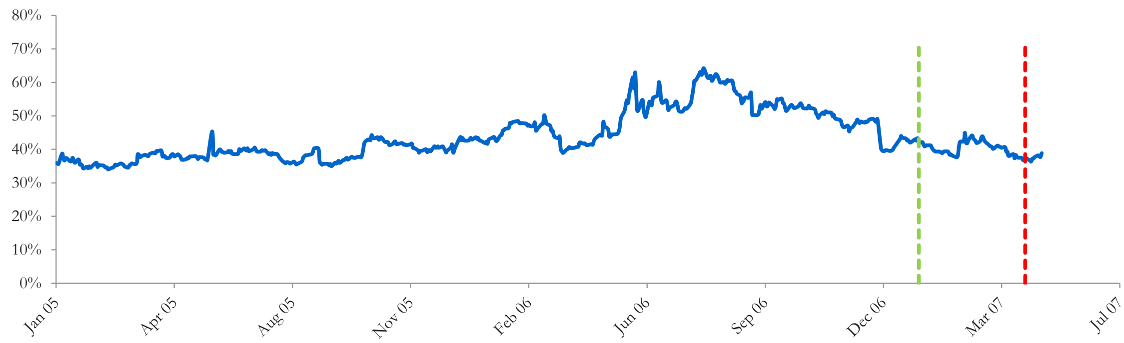


The graph above shows the historical levels of Joy Global, Inc.'s stock for the past several years. The final payoff of this note is determined by Joy Global, Inc.'s stock price at maturity. Higher fluctuations in Joy Global, Inc.'s stock price correspond to a greater uncertainty in the final payout of this Reverse Convertible Note.

Realized Payoff

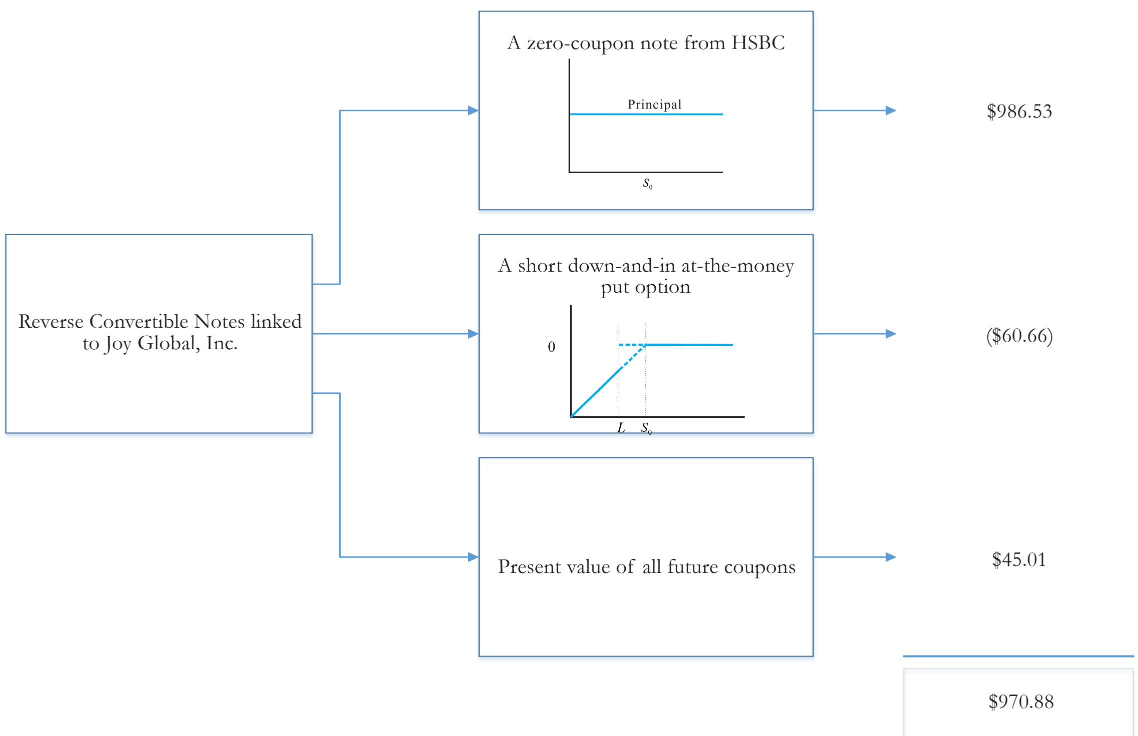
This note matured on April 24, 2007 and investors received $1,000.00 per note.

Reference Asset Joy Global, Inc.'s Stock's Implied Volatility



The annualized implied volatility of Joy Global, Inc.'s stock on January 19, 2007 was 42.06%, meaning that options contracts on Joy Global, Inc.'s stock were trading at prices that reflect an expected annual volatility of 42.06%. The higher the implied volatility, the larger the expected fluctuations of Joy Global, Inc.'s stock price and of the Note's market value during the life of the Notes.

Decomposition of this Reverse Convertible 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 Reverse Convertible Note.

1. Delta measures the sensitivity of the price of the note to the Joy Global, Inc.'s stock price on January 19, 2007.
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 Joy Global, Inc.'s stock on January 19, 2007.
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.