

**Structured Product Details** 

Name Buffered Accelerated Securities linked to iShares U.S. Real Estate

 Pricing Date
 May 22, 2014

 Issue Date
 May 28, 2014

 Valuation Date
 May 24, 2017

 Maturity Date
 May 30, 2017

 Issuer
 HSBC

 CDS Rate
 31.57 bps

 Swap Rate
 0.90%

Reference Asset

Initial Level
Dividend Rate
Implied Volatility
Delta¹

Shares U.S. Real Estate
ETF's stock
\$70.56
\$3.58%
14.15%
16.65

0.65

Fair Price at Issue \$935.55

CUSIP 40433BBB3 SEC Link www.sec.gov/Archives/edgar/ data/83246/000114420414033732/ v379745\_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.

# Buffered Accelerated Securities linked to iShares U.S. Real Estate ETF

# Description

Report Prepared On: 11/19/14

HSBC issued \$1.39 million of Buffered Accelerated Securities linked to iShares U.S. Real Estate ETF on May 28, 2014 at \$1,000 per note.

These notes are HSBC-branded PLUS securities that do not pay periodic coupons, but instead pay a single amount at maturity depending on iShares U.S. Real Estate ETF's stock price at maturity.

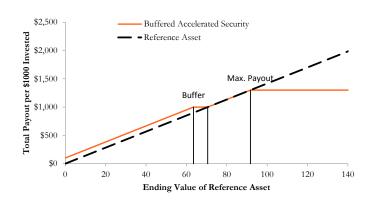
If iShares U.S. Real Estate ETF's stock price on May 24, 2017 is higher than \$70.56, but lower than \$91.73, the notes pay a return equal to the percentage increase in iShares U.S. Real Estate ETF's stock. If on May 24, 2017 iShares U.S. Real Estate ETF's stock price is above the \$91.73, the notes pay the maximum payout of \$1,300.00. If on May 24, 2017 iShares U.S. Real Estate ETF's stock price is below \$70.56, investors receive the face value per note reduced by the percentage decline in the reference asset. The notes will pay nothing at maturity if the reference asset declines to zero.

## **Valuation**

This note can be valued as a combination of a note from HSBC, a short at-the-money put option, one long at-the-money call option, and one short out-of-the-money call option. The short at-the-money put option exposes investors to any decline in iShares U.S. Real Estate ETF's stock. The one short out-of-the-money call option has the strike price of \$91.73, and limits the maximum return of the notes beyond the cap level. For reasonable valuation inputs this note was worth \$935.55 when it was issued on May 28, 2014 because the value of the options investors gave HSBC plus the interest investors would have received on HSBC's straight debt was worth \$64.45 more than the call options investors received from HSBC.

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



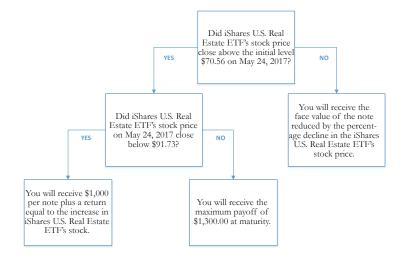
The payoff diagram shows the final payoff of this note given iShares U.S. Real Estate ETF's stock price (borizontal axis). For comparison, the dashed line shows the payoff if you invested in iShares U.S. Real Estate ETF's stock directly.

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### Principal Payback Table

iShares U.S. Real Estate ETF's Stock	Note Payoff
\$0.00	\$100.00
\$7.06	\$200.00
\$14.11	\$300.00
\$21.17	\$400.00
\$28.22	\$500.00
\$35.28	\$600.00
\$42.34	\$700.00
\$49.39	\$800.00
\$56.45	\$900.00
\$63.50	\$1,000.00
\$70.56	\$1,000.00
\$77.62	\$1,100.00
\$84.67	\$1,200.00
\$91.73	\$1,300.00
\$98.78	\$1,300.00
\$105.84	\$1,300.00

## Maturity Payoff Diagram

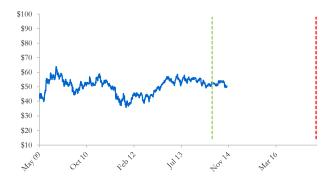


The contingent payoffs of this Buffered Accelerated Security.

# **Analysis**

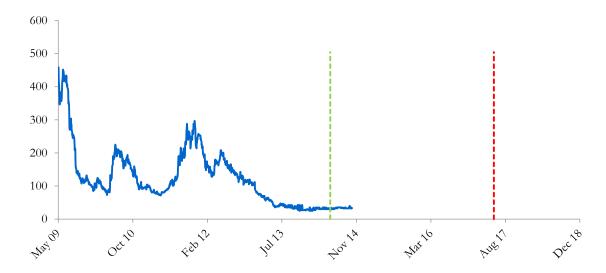
This Buffered Accelerated Security pays investors the increase in iShares U.S. Real Estate ETF's stock capped at 30.00%, but if iShares U.S. Real Estate ETF's stock declines over the term of the note, investors will suffer losses equal to the percentage decline in iShares U.S. Real Estate ETF's stock. In addition, investors bear the credit risk of HSBC. Investors purchasing this Buffered Accelerated Security effectively sell at-the-money put and out-of-the-money call options to HSBC, buy at-the-money call options, and a zero-coupon note from HSBC. This Buffered Accelerated Security is fairly priced if and only if the market value of the options investors received from HSBC equals the market value of the options investors gave HSBC plus the interest investors would have received on HSBC's straight debt.

## **HSBC's Stock Price**



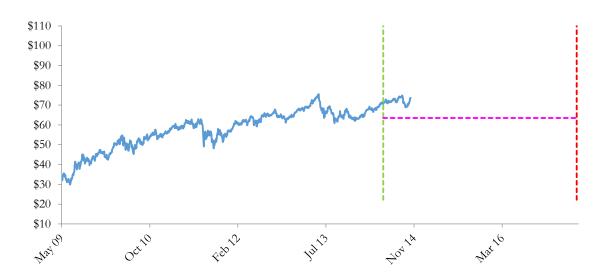
The graph above shows the adjusted closing price of the issuer HSBC for the past several years. The stock price of the issuer is an indication of the financial strength of HSBC. The adjusted price shown above incorporates any stock split, reverse stock split, etc.

## 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 Buffered Accelerated Security. Fluctuations in HSBC's CDS rate impact the market value of the notes in the secondary market.

## iShares U.S. Real Estate ETF's Stock Price

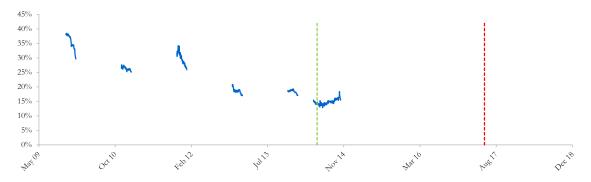


The graph above shows the historical levels of iShares U.S. Real Estate ETF's stock for the past several years. The final payoff of this note is determined by iShares U.S. Real Estate ETF's stock price correspond to a greater uncertainty in the final payout of this Buffered Accelerated Security.

## Realized Payoff

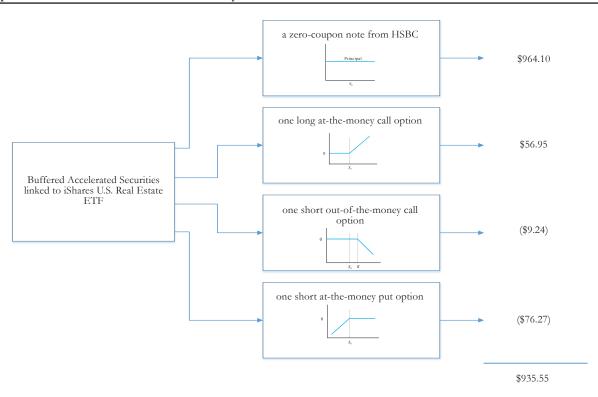
This product will mature on May 30, 2017.

## Reference Asset iShares U.S. Real Estate ETF's Stock's Implied Volatility



The annualized implied volatility of iShares U.S. Real Estate ETF's stock on May 22, 2014 was 14.15%, meaning that options contracts on iShares U.S. Real Estate ETF's stock were trading at prices that reflect an expected annual volatility of 14.15%. The higher the implied volatility, the larger the expected fluctuations of iShares U.S. Real Estate ETF's stock price and of the Note's market value during the life of the Notes.

#### Decomposition of this Buffered Accelerated 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 Accelerated Security.

- Delta measures the sensitivity of the price of the note to the iShares U.S. Real Estate ETF's stock price on May 22, 2014.
   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.
   Fair price evaluation is based on the Black-Scholes model of the iShares U.S. Real Estate ETF's stock on May 22, 2014.
   Calculated payout at maturity is only an approximation, and may differ from actual payouts at maturity.
   Our evaluation does not include any transaction fees, broker commissions, or liquidity discounts on the notes.