

Report Prepared On: 08/26/14

## Structured Product Details

**Name** PLUS linked to Vanguard FTSE Emerging Markets

**Issue Size** \$8.98 million  
**Issue Price** \$10  
**Term** 13 Months  
**Annualized Coupon** 0.00%

**Pricing Date** August 30, 2013  
**Issue Date** September 5, 2013  
**Valuation Date** October 1, 2014  
**Maturity Date** October 6, 2014

**Issuer** Barclays  
**CDS Rate** 37.12 bps  
**Swap Rate** 0.66%

**Reference Asset** Vanguard FTSE Emerging Markets's stock  
**Initial Level** \$37.72  
**Dividend Rate** 4.00%  
**Implied Volatility** 24.26%  
**Delta<sup>1</sup>** 0.8

**Fair Price at Issue** \$9.42

**CUSIP** 06742D424  
**SEC Link** [www.sec.gov/Archives/edgar/data/312070/000093041313004505/c74974\\_424b2.htm](http://www.sec.gov/Archives/edgar/data/312070/000093041313004505/c74974_424b2.htm)

## PLUS linked to Vanguard FTSE Emerging Markets

### Description

Barclays issued \$8.98 million of PLUS linked to Vanguard FTSE Emerging Markets on September 5, 2013 at \$10 per note.

These notes are Barclays-branded PLUS securities that do not pay periodic coupons, but instead pay a single amount at maturity depending on Vanguard FTSE Emerging Markets's stock price at maturity.

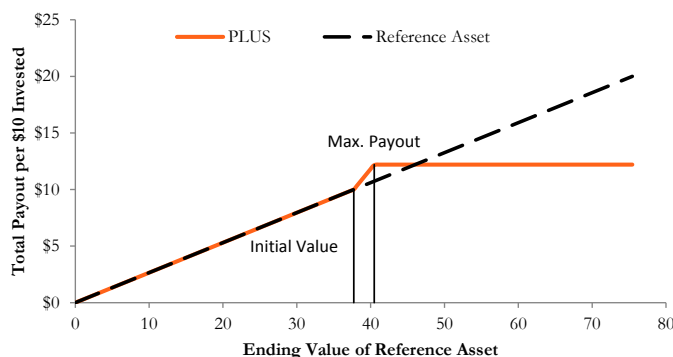
If Vanguard FTSE Emerging Markets's stock price on October 1, 2014 is higher than \$37.72, but lower than \$40.49, the notes pay a return equal to the percentage increase in Vanguard FTSE Emerging Markets's stock multiplied by 3.0. If on October 1, 2014 Vanguard FTSE Emerging Markets's stock price is above the \$40.49, the notes pay the maximum payout of \$12.20. If on October 1, 2014 Vanguard FTSE Emerging Markets's stock price is below \$37.72, 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 Barclays, a short at-the-money put option, three long at-the-money call options, and three short out-of-the-money call options. The short at-the-money put option exposes investors to any decline in Vanguard FTSE Emerging Markets's stock. The three short out-of-the-money call options has the strike price of \$40.49, and limits the maximum return of the notes beyond the cap level. For reasonable valuation inputs this note was worth \$9.42 when it was issued on September 5, 2013 because the value of the options investors gave Barclays plus the interest investors would have received on Barclays's straight debt was worth \$0.58 more than the call options investors received from Barclays.

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 Vanguard FTSE Emerging Markets's stock price (horizontal axis). For comparison, the dashed line shows the payoff if you invested in Vanguard FTSE Emerging Markets's stock directly.*

## Related Research

### Research Papers:

[www.slcg.com/research.php](http://www.slcg.com/research.php)

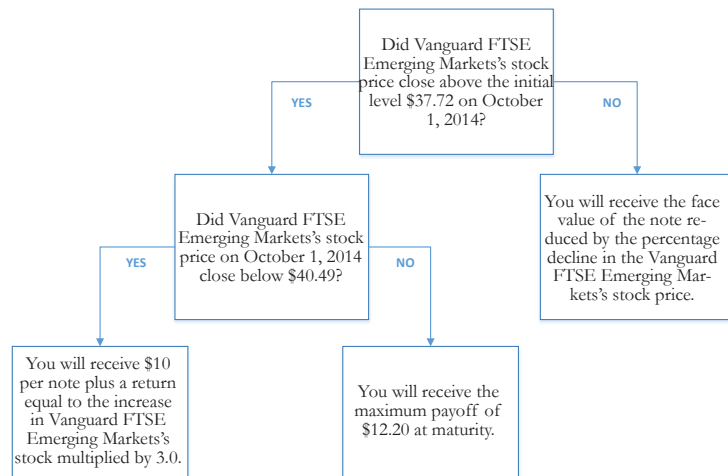
- "Are Structured Products Suitable for Retail Investors?" December 2006.
- "Structured Products in the Aftermath of Lehman Brothers," November 2009.
- "What TiVo and JP Morgan Teach Us about Reverse Convertibles," June 2010.

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## Principal Payback Table

Vanguard FTSE Emerging Markets's Stock	Note Payoff
\$0.00	\$0.00
\$3.77	\$1.00
\$7.54	\$2.00
\$11.32	\$3.00
\$15.09	\$4.00
\$18.86	\$5.00
\$22.63	\$6.00
\$26.40	\$7.00
\$30.18	\$8.00
\$33.95	\$9.00
<b>\$37.72</b>	<b>\$10.00</b>
\$41.49	\$12.20
\$45.26	\$12.20
\$49.04	\$12.20
\$52.81	\$12.20
\$56.58	\$12.20

## Maturity Payoff Diagram

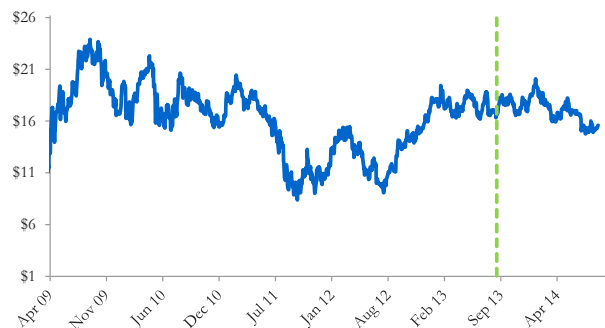


*The contingent payoffs of this PLUS.*

## Analysis

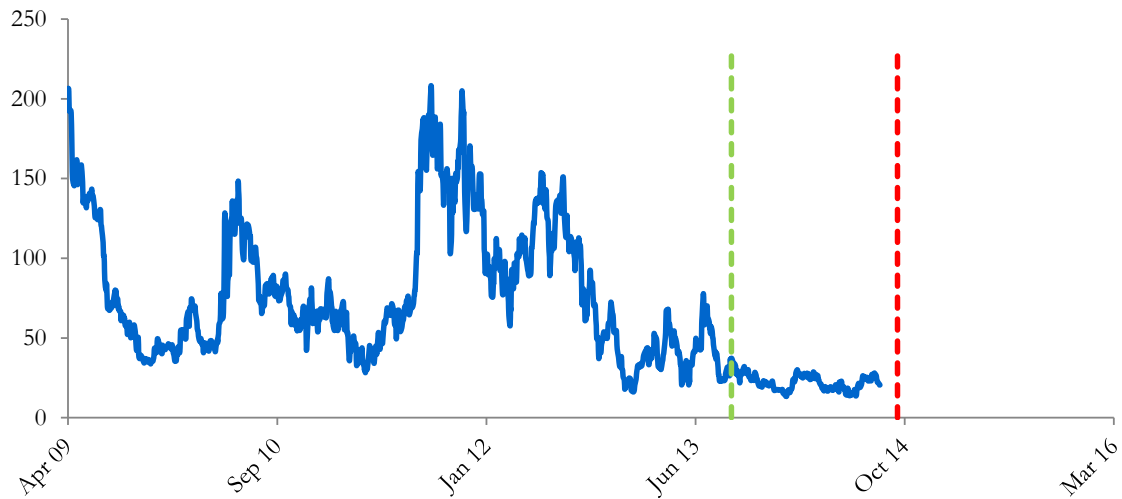
This PLUS pays investors the increase in Vanguard FTSE Emerging Markets's stock multiplied by 3.0 capped at 22.00%, but if Vanguard FTSE Emerging Markets's stock declines over the term of the note, investors will suffer losses equal to the percentage decline in Vanguard FTSE Emerging Markets's stock. In addition, investors bear the credit risk of Barclays. Investors purchasing this PLUS effectively sell at-the-money put and out-of-the-money call options to Barclays, buy at-the-money call options, and a zero-coupon note from Barclays. This PLUS is fairly priced if and only if the market value of the options investors received from Barclays equals the market value of the options investors gave Barclays plus the interest investors would have received on Barclays's straight debt.

## Barclays's Stock Price



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

## Barclays's CDS Rate



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

## Vanguard FTSE Emerging Markets's Stock Price

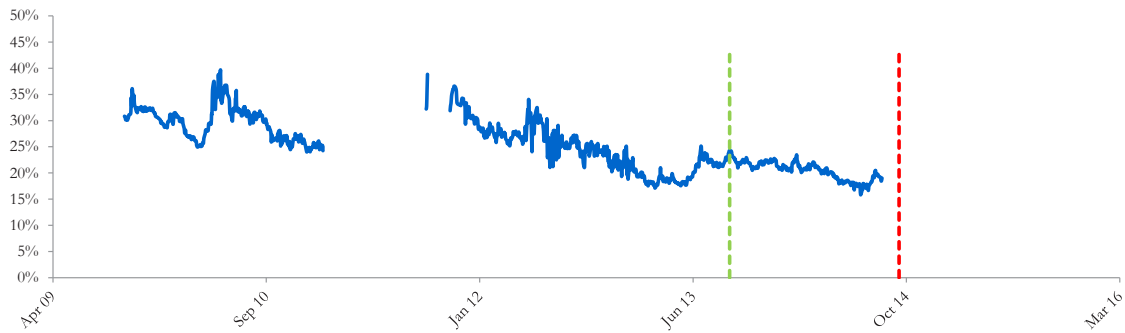


The graph above shows the historical levels of Vanguard FTSE Emerging Markets's stock for the past several years. The final payoff of this note is determined by Vanguard FTSE Emerging Markets's stock price at maturity. Higher fluctuations in Vanguard FTSE Emerging Markets's stock price correspond to a greater uncertainty in the final payout of this PLUS.

## Realized Payoff

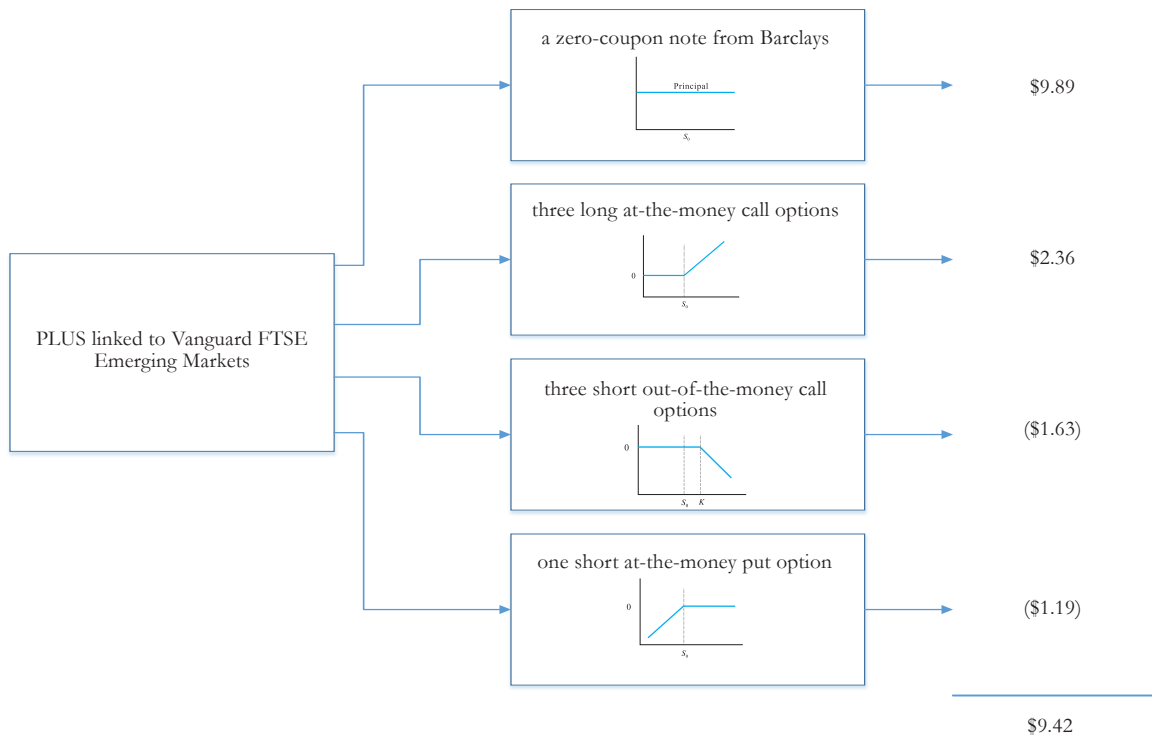
This product will mature on October 6, 2014.

## Reference Asset Vanguard FTSE Emerging Markets's Stock's Implied Volatility



The annualized implied volatility of Vanguard FTSE Emerging Markets's stock on August 30, 2013 was 24.26%, meaning that options contracts on Vanguard FTSE Emerging Markets's stock were trading at prices that reflect an expected annual volatility of 24.26%. The higher the implied volatility, the larger the expected fluctuations of Vanguard FTSE Emerging Markets's stock price and of the Note's marked value during the life of the Notes.

## Decomposition of this PLUS



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 PLUS.

1. Delta measures the sensitivity of the price of the note to the Vanguard FTSE Emerging Markets's stock price on August 30, 2013.
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 Vanguard FTSE Emerging Markets's stock on August 30, 2013.
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.