

Investments Through Time: The Evolution of Investment Products and How They are Sold

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Structured Product and ETP Developments Have Made Regulators' Jobs More Difficult

- Equity-linked notes in the late 1980s and early 1990s were issued by operating companies in financial distress. These mandatory convertible securities, branded PERCS, PRIDES, DECS, ACES, PEPS etc., provided rating agency equity capital and preserved deductibility of interest payments.
- Early equity-linked notes were also used by corporations and wealthy investors to “monetize” highly appreciated stock positions, shedding risk and deferring taxes.
- Structured products evolved as underwriters began issuing their own notes with payoffs set by other companies’ stocks prices – ELKS, SPARQS, YACHTS, YEELDS and STEEPENERS for example.
- Structures have become more complex and the linked assets include esoteric and proprietary indexes. Also, the different incentives of underwriters today serving as underwriter and issuer may lead to more complex, less valuable structured products.
- These changes make reasonable basis and client specific suitability analysis and regulatory oversight much more difficult.

Autocallable Structured Products on Crude Oil

Pricing supplement no. 1282

To prospectus dated November 7, 2014,
 prospectus supplement dated November 7, 2014,
 product supplement no. 2a-1 dated November 7, 2014 and
 underlying supplement no. 1a-1 dated November 7, 2014

Registration Statement

No. 333-199966
Dated September 23,
2015
Rule 424(b)(2)

JPMORGAN CHASE & CO.

Structured Investments **\$2,477,000**
Auto Callable Contingent Interest Notes Linked to the S&P GSCI™ Crude Oil Index Excess
Return due September 27, 2018

General

- The notes are designed for investors who seek a Contingent Interest Payment if, on any of the Review Dates, the closing level of the Index on that Review Date is greater than or equal to 70% of the Initial Index Level, which we refer to as the Interest Barrier. Under these circumstances, investors will receive, in addition to the Contingent Interest Payment with respect to that Review Date, any previously unpaid Contingent Interest Payments for prior Review Dates. Investors should be willing to forgo fixed interest payments, in exchange for the opportunity to receive Contingent Interest Payments.
- Investors in the notes should be willing to accept the risk of losing some or all of their principal if a Trigger Event (as defined below) has occurred and the risk that no Contingent Interest Payment may be made with respect to some or all Review Dates.
- The notes will be automatically called if the closing level of the Index on any Review Date (other than the first and final Review Dates) is greater than or equal to the Initial Index Level. The earliest date on which an automatic call may be initiated is March 23, 2016.
- The notes are unsecured and unsubordinated obligations of JPMorgan Chase & Co. **Any payment on the notes is subject to the credit risk of JPMorgan Chase & Co.**
- Minimum denominations of \$1,000 and integral multiples thereof

Key Terms

Index: The S&P GSCI™ Crude Oil Index Excess Return (Bloomberg ticker: SPGCCLP)

Contingent Interest Payments: If the notes have not been automatically called and the closing level of the Index on any Review Date is greater than or equal to the Interest Barrier, you will receive on the applicable Interest Payment Date, for each \$1,000 principal amount note, a Contingent Interest Payment equal to \$26.50 (equivalent to an interest rate of 10.60% per annum, payable at a rate of 2.65% per quarter), *plus* any previously unpaid Contingent Interest Payments for any prior Review Dates.
If the Contingent Interest Payment is not paid on any Interest Payment Date, that unpaid Contingent Interest Payment will be paid on a later Interest Payment Date if the closing level of the Index on that Review Date is greater than or equal to the Interest Barrier. You will not receive any unpaid Contingent Interest Payments if the

and 3x Leveraged and Inverse ETNs on Crude Oil

PRICING SUPPLEMENT No. VLS ETN-3/A24[†]
To the Prospectus Supplement dated May 4, 2015 and
Prospectus dated May 4, 2015

Filed Pursuant to Rule 424(b)(2)
Registration Statement Nos. 333-202913 and 333-180300-03
September 10, 2015



Issued by Credit Suisse AG

\$75,000,000,000[±] VelocityShares[™] 3x Long Crude Oil ETN linked to the S&P GSCI[®] Crude Oil Index ER due February 9, 2032^{*}

\$32,000,000,000[±] VelocityShares[™] 3x Long Natural Gas ETN linked to the S&P GSCI[®] Natural Gas Index ER due February 9, 2032^{*}

\$1,000,000,000[±] VelocityShares[™] 3x Inverse Crude Oil ETN linked to the S&P GSCI[®] Crude Oil Index ER due February 9, 2032^{*}

\$16,000,000,000[±] VelocityShares[™] 3x Inverse Natural Gas ETN linked to the S&P GSCI[®] Natural Gas Index ER due February 9, 2032^{*}

ETNs	Leverage Amount	ETN Type	Exchange Ticker	Indicative Value Ticker	CUSIP	ISIN
3x Long Crude Oil ETNs	3	“Leveraged Long”	UWTI	UWTI.IV	22542D399	US22542D3998
3x Long Natural Gas ETNs	3	“Leveraged Long”	UGAZ	UGAZ.IV	22542D381	US22542D3816
3x Inverse Crude Oil ETNs	-3	“Leveraged Inverse”	DWTI	DWTI.IV	22542D548	US22542D5480
3x Inverse Natural Gas ETNs	-3	“Leveraged Inverse”	DGAZ	DGAZ.IV	22542D530	US22542D5308

We are offering four separate series of exchange traded notes (collectively, the “ETNs”), the VelocityShares[™] 3x Long Crude Oil ETN linked to the S&P GSCI[®] Crude Oil Index ER due February 9, 2032 (the “**3x Long Crude Oil ETNs**”), the VelocityShares[™] 3x Long Natural Gas ETN linked to the S&P GSCI[®] Natural Gas Index ER due February 9, 2032 (the “**3x Long Natural Gas ETNs**”) and collectively with the 3x Long Crude Oil ETNs, the “**Leveraged Long ETNs**”), the VelocityShares[™] 3x Inverse Crude Oil ETN linked to the S&P GSCI[®] Crude Oil Index ER due February 9, 2032 (the “**3x Inverse Crude Oil ETNs**”) and the VelocityShares[™] 3x Inverse Natural Gas ETN linked to the S&P GSCI[®] Natural Gas Index ER due February 9, 2032 (the “**3x Inverse Natural Gas ETNs**”) and collectively with the 3x Inverse Crude Oil ETNs, the “**Leveraged Inverse ETNs**”).

We have listed each series of the ETNs on the NYSE Arca under the exchange ticker symbols as set forth in the table above. As long an active secondary market in the ETNs exists, we expect that investors will purchase and sell the ETNs primarily in this secondary market. We have no obligation to maintain any listing on NYSE Arca or any other exchange or quotation system.

The ETNs are intended to be daily trading tools for sophisticated investors to manage daily trading risks. They are designed to achieve their stated investment objectives on a daily basis, but their performance over different periods of time can differ significantly from their stated daily objectives. The ETNs are riskier than securities that have intermediate or long-term investment objectives, and may not be suitable for investors who plan to hold them for a period other than one day. Accordingly, the ETNs should be purchased only by knowledgeable investors who understand the potential consequences of investing in the applicable Index (as defined below) and of seeking daily compounding leveraged long or leveraged inverse investment results, as applicable. Investors should actively and frequently monitor their investments in the ETNs, even intra-day. It is possible that you will suffer significant losses in the ETNs even if the long-term performance of the applicable Index is positive, in the case of the Leveraged Long ETNs, or negative, in the case of the Leveraged Inverse ETNs.

JP Morgan Links Structured Product Payoffs to its Proprietary Volatility Index

Pricing supplement no. 2413

*To prospectus dated November 14, 2011,
prospectus supplement dated November 14, 2011,
product supplement no. 30-I dated March 5, 2012 and
underlying supplement no. 20-I dated November 29, 2013*

Registration Statement No. 333-177923

**Dated April 25, 2014
Rule 424(b)(2)**

JPMORGAN CHASE & Co.

**Structured
Investments**

\$737,000

**Return Notes Linked to the J.P. Morgan Strategic Volatility Index due
July 31, 2015**

General

- The notes are designed for investors who seek exposure to the J.P. Morgan Strategic Volatility Index. Investors should be willing to forgo interest payments and, if, between the Inception Date and the relevant Valuation Date, the level of the Index (which reflects the deductions described below) decreases or, in the case of an early repurchase, does not increase sufficiently to offset the 0.50% Repurchase Fee, be willing to lose some or all of their principal. **Any payment on the notes is subject to the credit risk of JPMorgan Chase & Co.**

Structured CDs Are Also Linked to Proprietary Indexes

JPMorganChase

JPMorgan Chase Bank, National Association
\$2,475,000

Certificates of Deposit Linked to the JPMorgan ETF Efficiente 5 Index due December 31, 2020

General

- Certificates of deposit (the “CDs”) issued by JPMorgan Chase Bank, National Association (“JPMorgan Chase Bank”) maturing December 31, 2020*.
- The CDs are designed for investors who seek exposure to any appreciation of the JPMorgan ETF Efficiente 5 Index over the term of the CDs. Investors should be willing to forgo interest and dividend payments, while seeking full repayment of principal at maturity.
- The CDs are insured only within the limits and to the extent described in this disclosure supplement and in the accompanying disclosure statement. See “Selected Risk Considerations — Limitations on FDIC Insurance” in this disclosure supplement. Any payment on the CDs in excess of FDIC insurance limits is subject to the credit risk of JPMorgan Chase Bank.
- Investing in the CDs is not equivalent to investing in a conventional CD or directly in the JPMorgan ETF Efficiente 5 Index or any of its Basket Constituents.
- Minimum denominations of \$10,000 (and then in additional increments of \$1,000).
- The CDs priced on December 20, 2013 (the “Pricing Date”) and are expected to settle on or about December 30, 2013.

Structured Products

In the Beginning

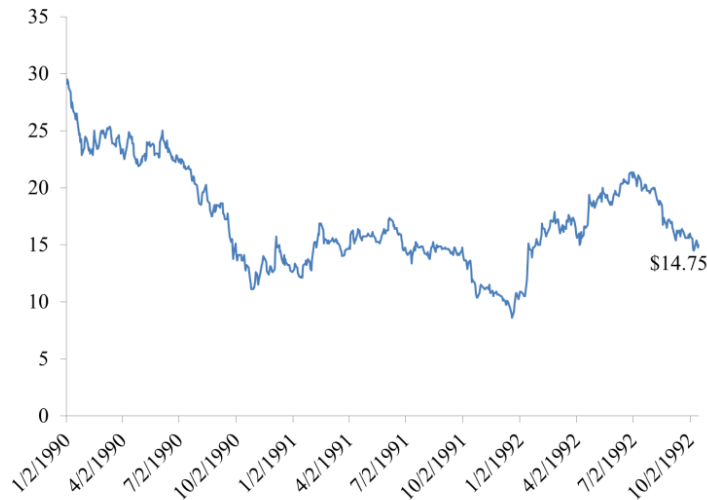
Issuers Issued, Underwriters Underwrote

Citicorp's 8.25%, 3-Year PERCS, October 15, 1992

Citicorp's 1992 \$1 billion Preferred Equity Redemption Cumulative Stock (PERCS) is an early structured product.

This 3-year mandatory convertible paid an 8.25% annual dividend quarterly.

It was issued at a time when Citicorp was in financial difficulty. Citicorp's stock price had declined from over \$30 to under \$15 in the prior two years.



THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

PRICE \$14 3/4 A DEPOSITARY SHARE

	Price to Public(1)	Underwriting Discounts and Commissions(2)	Proceeds to Citicorp(1)(3)
Per Depositary Share	\$14.750	\$.369	\$14.381
Total(4)	\$1,003,000,000	\$26,092,000	\$977,908,000

- (1) Plus a proportionate amount of the accrued dividends on the PERCS, if any, from the date of issue.
- (2) Citicorp has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act of 1933. See "Underwriters."
- (3) Before deducting expenses payable by Citicorp estimated at \$700,000.
- (4) Citicorp has granted the Underwriters an option, exercisable within 30 days from the date hereof, to purchase up to an aggregate of 10,200,000 additional Depositary Shares at the Price to Public, less Underwriting Discounts and Commissions, for the purpose of covering over-allotments, if any. If the Underwriters exercise such option in full, the total Price to Public, Underwriting Discounts and Commissions and Proceeds to Citicorp will be \$1,153,450,000, \$28,855,800 and \$1,124,594,200. See "Underwriters."

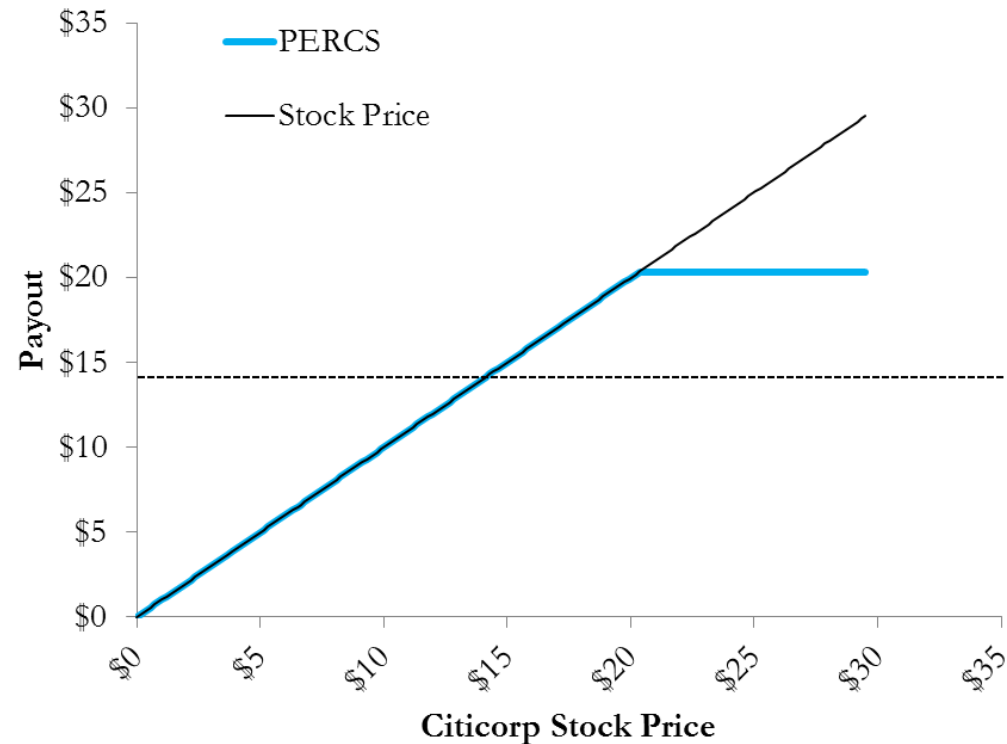
The Depositary Shares are offered subject to prior sale, when, as and if accepted by the Underwriters named herein, and subject to approval of certain legal matters by Sullivan & Cromwell, counsel for the Underwriters. It is expected that delivery of the Depositary Receipts evidencing the Depositary Shares will be made on or about October 22, 1992 at the office of Morgan Stanley & Co. Incorporated, New York, New York, against payment therefor in New York funds.

MORGAN STANLEY & CO.
Incorporated

October 15, 1992

Citicorp's 8.25%, 3-Year PERCS, October 15, 1992

- At maturity, Citicorp paid the lesser of
 - 1) the value of a share of 1 share of Citicorp stock
 - and
 - 2) \$20.28.
- Citicorp had suspended its dividend but was expected to begin paying \$1 per share annual dividend.
- PERQS paid \$0.30425 dividend quarterly.
- Setting aside the PERCS' dividend and the expected Citicorp dividend, this payoff similar to owning Citicorp (at \$14.75) and selling a 3-year call option with a \$20.28 strike price.



Times Mirror's \$39.25 PEPS Linked to Netscape, March 13, 1996

Times Mirror issued PEPS (Premium Equity Participating Securities) linked to the price of Netscape.

Times Mirror had acquired pre-IPO Netscape shares and seen their value skyrocket and start to fall back to earth.

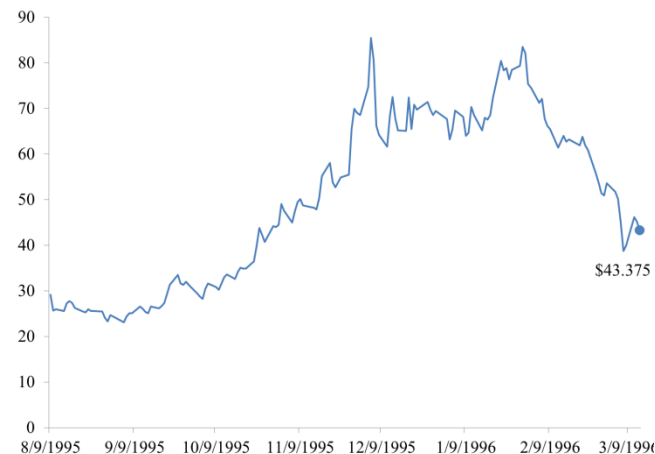
The PEPS allowed Times Mirror to sell its Netscape stock without triggering capital gains taxes and deduct interest payments.

This filing is made pursuant to Rule 424(b)(2) under the Securities Act of 1933 in connection with Registration No. 33-62165

PROSPECTUS SUPPLEMENT
 (To Prospectus dated February 28, 1996)

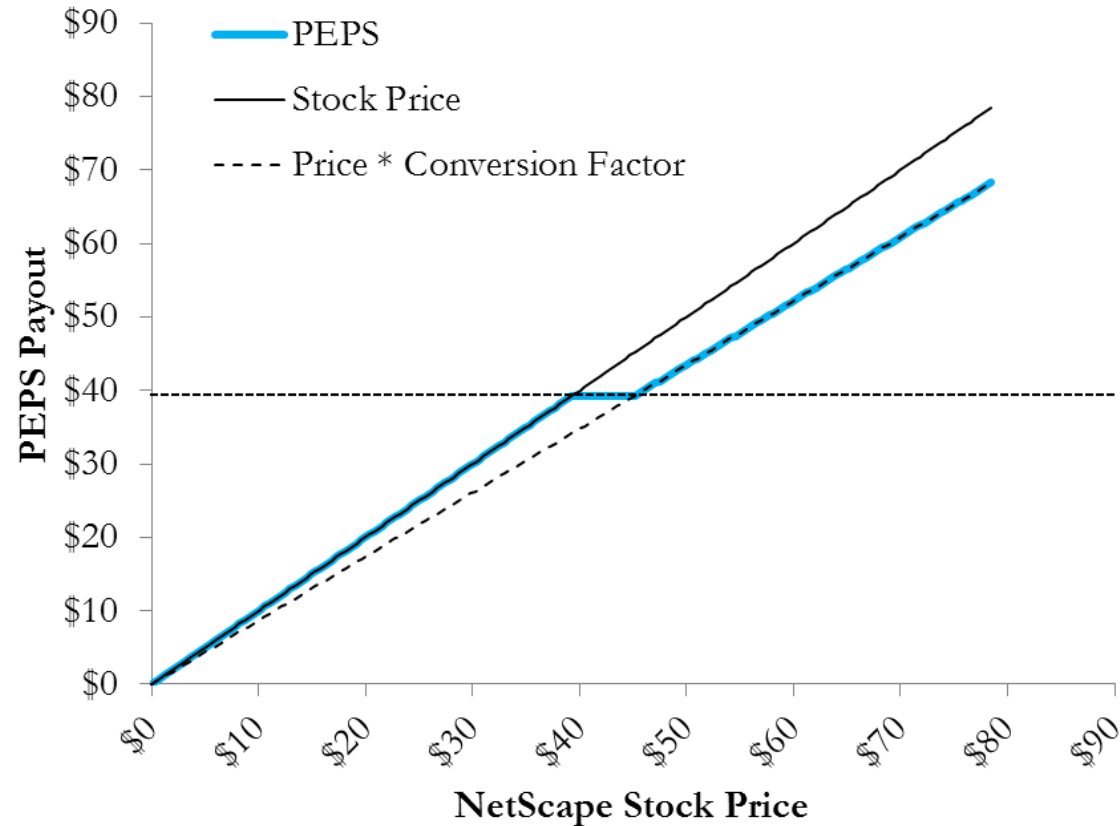
1,305,000 PEPS SM
 Premium Equity Participating Securities
 The Times Mirror Company
 4 1/4% PEPS DUE MARCH 15, 2001

Amount Payable at Maturity Determined by Reference to the per Share Price of Common Stock of Netscape Communications Corporation



Times Mirror's \$39.25 PEPS Linked to Netscape, March 13, 1996

- Times Mirror paid 4 ¼% interest.
- At maturity, Times Mirror paid
 - 1) the value of a share of 1 share of Netscape stock if < \$39.25,
 - or
 - 2) \$39.25 plus 87% of any excess above \$45.14.
- Times Mirror deferred taxes for 5 years, shed the downside risk in Netscape, kept the first 15% upside, and 15% of any further gains.



Underwriters as Issuers

Create Significant Additional Conflicts of Interest

Lehman Brothers' 5% YEELDS Linked to Cisco Systems, March 3, 1998

Lehman's 1998 \$1 million Yield Enhanced Equity Linked Debt Security (YEELDS) is an early example of a structured product being issued by a brokerage firm linked to the stock of another company.

This 3-year product paid an 5% annual interest quarterly.

Lehman Brothers had the option to settle in cash or in stock.

Filed Pursuant to Rule 424(B) (5)
Registration No. 033-53651

PROSPECTUS SUPPLEMENT
(To Prospectus dated February 17, 1998)

1,000,000 YEELDS-SM-
LEHMAN BROTHERS HOLDINGS INC.

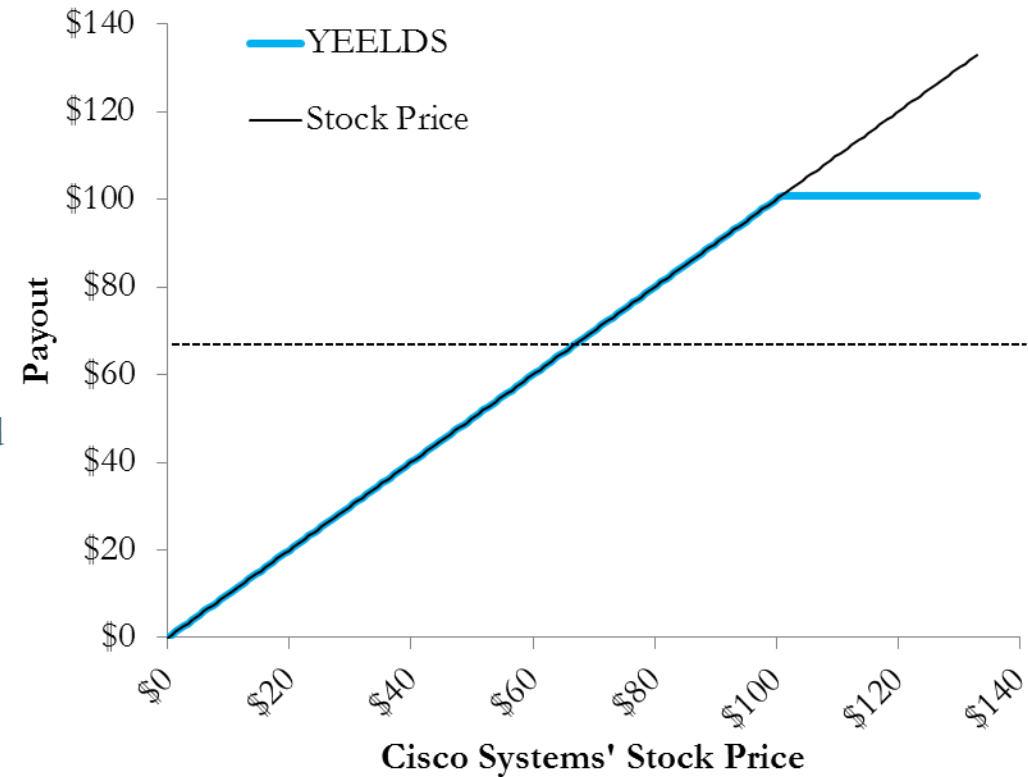
5% Cisco Systems Yield Enhanced Equity Linked Debt Securities Due 2001
(ISSUE PRICE AND PRINCIPAL AMOUNT BASED ON THE PRICE OF CISCO SYSTEMS, INC.
COMMON STOCK)

The 5% Cisco Systems Yield Enhanced Equity Linked Debt Securities Due 2001 (a "YEELD" or a "Security", and in the aggregate, the "YEELDS" or the "Securities") of Lehman Brothers Holdings Inc. ("Holdings") are being offered at an issue price (the "Issue Price") of \$66.50. The YEELDS will mature on February 26, 2001, subject to extension upon the occurrence of certain Non-Trading Days. The YEELDS are to be issued as a series of Debt Securities under the Senior Indenture described in the accompanying Prospectus and will constitute "Senior Debt" of Holdings as described in the accompanying Prospectus. The YEELDS may not be redeemed prior to maturity and are not subject to any sinking fund.

The principal amount of each YEELD payable at maturity (the "Principal Amount") will equal the lesser of (A) 151.5% of the Issue Price (the "Cap") and (B) (i) if Holdings elects the Cash Settlement Option (as defined below), the average of the Closing Prices on the ten Trading Days immediately prior to the maturity date (the "Ten Day Average Closing Price") of the common stock (the "Cisco Common Stock") of Cisco Systems, Inc. ("Cisco") or (ii) if Holdings elects the Stock Settlement Option (as defined below), the Closing Price of the Cisco Common Stock on the date of maturity. As a result, the Principal Amount will not under any circumstances exceed \$100.7475. At maturity, the Principal Amount will be paid by Holdings either in cash (the "Cash Settlement Option") or in shares of Cisco Common Stock based upon the Principal Amount (the "Stock Settlement Option"), at Holdings' sole option. Holdings will, by written notice

Lehman Brothers' 5% YEELDS Linked to Cisco Systems, March 3, 1998

- At maturity, Lehman paid the lesser of
 - 1) the value of a share of 1 share of Cisco Systems' stock (or the stock itself at Lehman's option)
 and
 - 2) \$100.75.
- YEELDS paid \$0.83 dividend quarterly.
- Setting aside the YEELDS' dividend and the expected Cisco Systems' dividend, this payoff similar to owning Cisco Systems (at \$66.50) and selling a 3-year call option with a \$100.75 strike price.
- Looks a lot like the Citicorp PERC on slides 8 and 9.



Lehman Brothers \$1,000 Notes linked to Cendant, February 16, 2001

Filed Pursuant To Rule 424(b)2
Registration No. 033-53651

PROSPECTUS SUPPLEMENT
(TO PROSPECTUS DATED FEBRUARY 17, 1998)

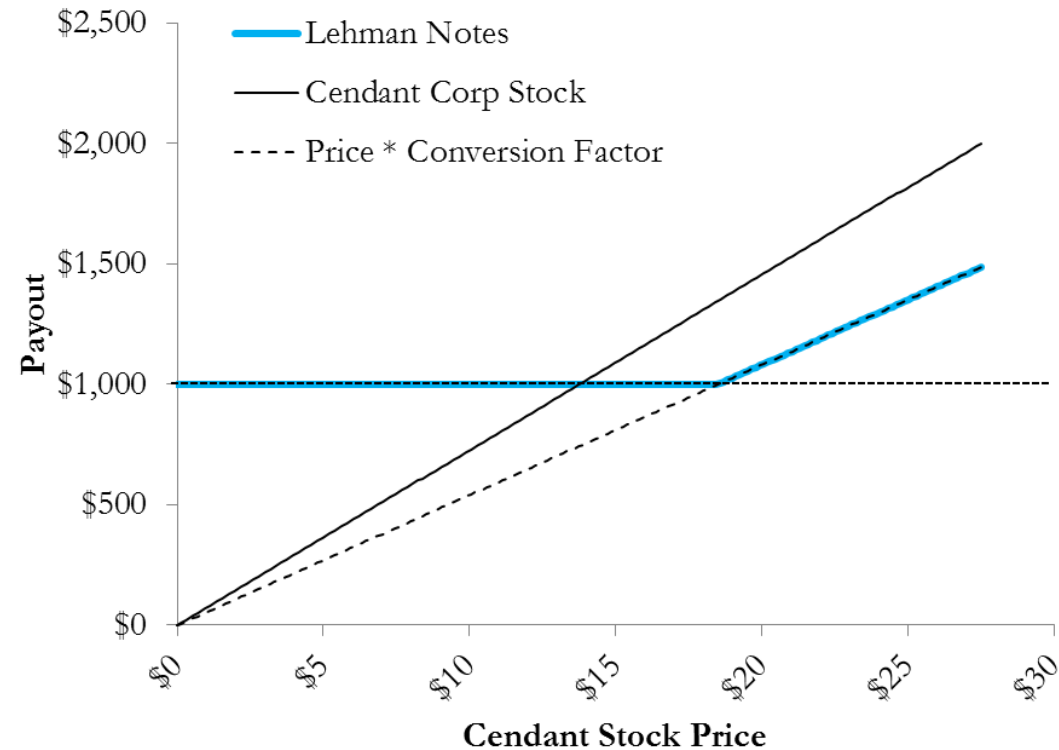
\$15,560,000
LEHMAN BROTHERS HOLDINGS INC.
NOTES DUE FEBRUARY 27, 2006
PERFORMANCE LINKED TO CENDANT CORPORATION (CD) COMMON STOCK

GENERAL

- Senior unsecured debt securities of Lehman Brothers Holdings.
- Performance linked to the common stock of Cendant Corporation. Cendant is not involved in this offering and has no obligation with respect to the notes.
- Denominations: \$1,000 and whole multiples of \$1,000.
- Stated maturity date: February 27, 2006, subject to postponement if a market disruption event occurs.

Lehman Brothers \$1,000 Notes linked to Cendant, February 16, 2001

- Lehman Brothers issued 5-year, 0.25% (annual, paid semi-annually).
- At maturity, Lehman Brother paid the accrued interest and the greater of 1) \$1,000 and 2) \$1,000 plus 74% of any excess above 134.6% of the initial Cendant stock price.
- This was an early “principal protected note”, or PPN.



Lehman Brothers \$1,000 RANGERS, March 8, 2001

Filed Pursuant to Rule 424(b) (2)
 Registration No. 033-53651

- Lehman Brothers issued 1-year, Risk Adjusting Equity Range Securities (“RANGERS”) notes with zero coupon.
- This was an early reverse convertible.

PROSPECTUS SUPPLEMENT
 (To prospectus dated February 17, 1998)

\$20,000,000
 LEHMAN BROTHERS HOLDINGS INC.
 NASDAQ-100 INDEX-REGISTERED TRADEMARK- RANGERS(SM)
 Risk Adjusting Equity Range Securities(SM) Notes Due March 20, 2002

GENERAL:

- Senior unsecured debt securities of Lehman Brothers Holdings.
- Performance linked to the Nasdaq-100 Index, as calculated by the Nasdaq Stock Market, Inc.
- ...
- ...

PAYMENTS:

- No interest or other payments prior to maturity.
- On the stated maturity date, Lehman Brothers Holdings will pay to you, per \$1,000 note, the lesser of:
 - (1) \$1,140; and
 - (2) the alternative redemption amount.

The alternative redemption amount per \$1,000 note is equal to \$140 plus the product of:

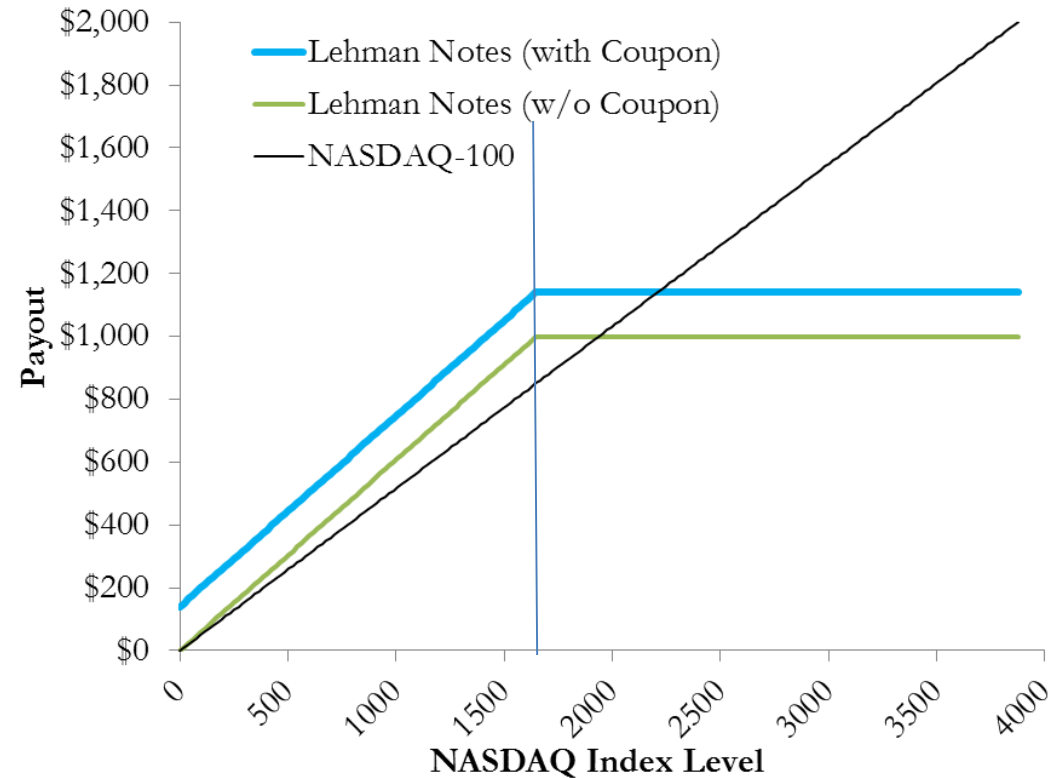
- (1) \$1,000; and
- (2) the closing index level of the Nasdaq-100 Index on the valuation date, divided by 1647.43.

1647.43 represents 85% of 1938.15, which is the closing level of the Nasdaq-100 Index on March 8, 2001.

As a result, you will only receive per \$1,000 note the maximum amount of \$1,140, if the closing index level of the Nasdaq-100 Index on the valuation date is at least 1647.43. If the closing index level of the Nasdaq-100 Index on that date is less than 1647.43, you will receive less than \$1,140 per \$1,000 note; you may receive as little as \$140 per \$1,000 note.

Lehman Brothers \$1,000 RANGERS, March 8, 2001

- At maturity, Lehman Brother paid \$140 plus the lesser of
 - \$1,000 or
 - \$1,000 times the ratio of final NASDAQ-100 index level to 85% of the 1,938.15 initial level.
- \$140 looks like accumulated coupons paid in arrears at maturity but is largely option premium for granting LB short, 15% out-of-the-money put options on the NASDAQ.




Credit Suisse's Capped and Leveraged Dual Directional, 2012

- Dual Directional structured products have been issued in the US since late 2011.
- They evolved from absolute return barrier notes (ARBNs), which were common before 2010.

424B2 1 dp32342_424b2-u696.htm FORM 424B2
Pricing Supplement No. U696
To the Underlying Supplement dated March 23, 2012,
Product Supplement No. U-1 dated March 23, 2012,
Prospectus Supplement dated March 23, 2012 and
Prospectus dated March 23, 2012

Filed Pursuant to Rule 424(b)(2)
Registration Statement No. 333-180300-03
August 16, 2012

Financial Products



CREDIT SUISSE
\$1,000,000
Absolute Return Barrier Securities due February 23, 2015
Linked to the Performance of the S&P 500® Index

General

- The securities are designed for investors who seek a leveraged and capped return at maturity linked to the performance of the S&P 500® Index. Investors should be willing to forgo interest and dividend payments and, if the Final Level is less than the Initial Level and a Knock-In Event has occurred, be willing to lose some or all of their investment. If the Final Level is less than the Initial Level and a Knock-In Event has not occurred, at maturity, investors will be entitled to receive the principal amount of their securities multiplied by the sum of one plus the absolute value of the depreciation percentage of the Underlying from the Initial Level to the Final Level. If the Final Level is greater than or equal to the Initial Level, at maturity investors will be entitled to receive the principal amount of their securities and will have the opportunity to participate in the appreciation of the Underlying, subject to the Maximum Upside Return of 26.25%. Any payment on the securities is subject to our ability to pay our obligations as they become due.
- Senior unsecured obligations of Credit Suisse AG, acting through its Nassau Branch, maturing February 23, 2015.¹
- Minimum purchase of \$1,000. Minimum denominations of \$1,000 and integral multiples of \$1,000 in excess thereof.
- The securities priced on August 16, 2012 (the "Trade Date") and are expected to settle on August 21, 2012 (the "Settlement Date"). Delivery of the securities in book-entry form only will be made through The Depository Trust Company.

Key Terms

Issuer: Credit Suisse AG ("Credit Suisse"), acting through its Nassau Branch
Underlying: The Underlying is identified in the table below, together with its Bloomberg ticker symbol, Initial Level and Knock-In Level:

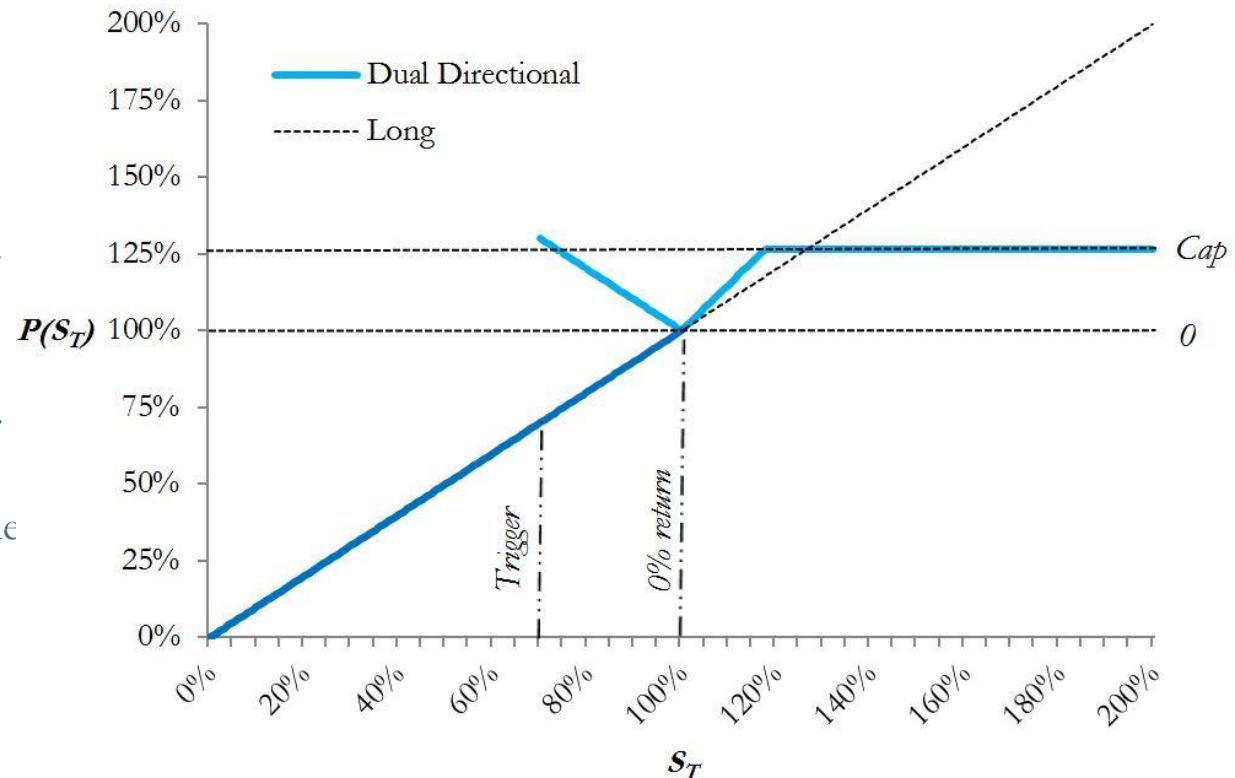
Underlying	Ticker	Initial Level	Knock-In Level
S&P 500® Index ("SPX")	SPX	1415.51	990.857

Redemption Amount: At maturity, you will be entitled to receive a Redemption Amount that will depend on the performance of the Underlying and whether a Knock-In Event has occurred, determined as follows:

- If the Final Level is greater than or equal to the Initial Level, you will be entitled to receive a Redemption Amount in cash that will equal the principal amount of the securities you hold multiplied by the sum of 1 plus the product of:
(Upside Participation Rate × Underlying Return); subject to the Maximum Upside Return
- If the Final Level is less than the Initial Level, and:
 - if a Knock-In Event has not occurred, you will be entitled to receive a Redemption Amount in cash that will equal the principal amount of the securities you hold multiplied by the sum of 1 plus the **absolute value** of the Underlying Return.
 - if a Knock-In Event has occurred, you will be entitled to receive a Redemption Amount in cash that will equal the principal amount of the securities you hold multiplied by the sum of 1 plus the Underlying Return. **In this case, the Redemption Amount will be less than the principal amount of your securities, and may be zero. You could lose your entire investment.**

Capped and Leveraged Dual Directional Structures Are Amongst Most Complex

- At maturity, the investor receives 1.5 times the gain, capped at 26%.
- If the index is below the initial value but was always above the trigger, the investor receives as a gain the absolute value of the decline in the index.
- If index is ever below the trigger (70% of initial), the investor suffers losses equal to any decline in the index.



Autocallable Structured Products are Reverse Convertibles With Even More Unfathomable Contingencies



Structured Products Research Report

Report Prepared On: 01/10/13

Structured Product Details

Name	Phoenix Autocallable Optimization Securities with Contingent Protection linked to Amazon.com, Inc.
Issue Size	\$2.45 million
Issue Price	\$10
Term	12 Months
Annualized Coupon	15.40%
Pricing Date	December 6, 2010
Issue Date	December 9, 2010
Valuation Date	December 7, 2011
Maturity Date	December 13, 2011
Issuer	UBS
CDS Rate	45.77 bps
Swap Rate	0.78%
Reference Asset	Amazon.com, Inc.'s stock
Initial Level	\$178.05
Dividend Rate	0.00%
Implied Volatility	37.49%
Fair Price at Issue	\$9.76

Phoenix Autocallable Optimization Securities with Contingent Protection linked to Amazon.com, Inc.

Description

UBS issued \$2.45 million of Phoenix Autocallable Optimization Securities with Contingent Protection linked to Amazon.com, Inc. on December 9, 2010 at \$10 per note.

These 12-month notes are UBS-branded reverse convertible notes. On the quarterly coupon observation date, if the notes are not called back, they pay either quarterly coupon at an annualized rate of 15.40% if Amazon.com, Inc.'s stock price closes above the coupon barrier \$133.54, or no coupon if the stock price closes below the barrier. The first coupon observation date is March 7, 2011. This autocallable notes will be called back if the reference stock price on any quarterly call observation date after March 7, 2011 exceeds the initial stock price \$178.05. In this case, investors receive the principal plus any unpaid coupons. At maturity, the notes convert into shares of the reference security—0.06 share of Amazon.com, Inc.'s stock in this case—if the market value of the reference stock at the note's maturity is below the trigger price \$133.54 (75% of the reference asset on December 6, 2010). Otherwise, investors will receive the \$10 face value.

Valuation

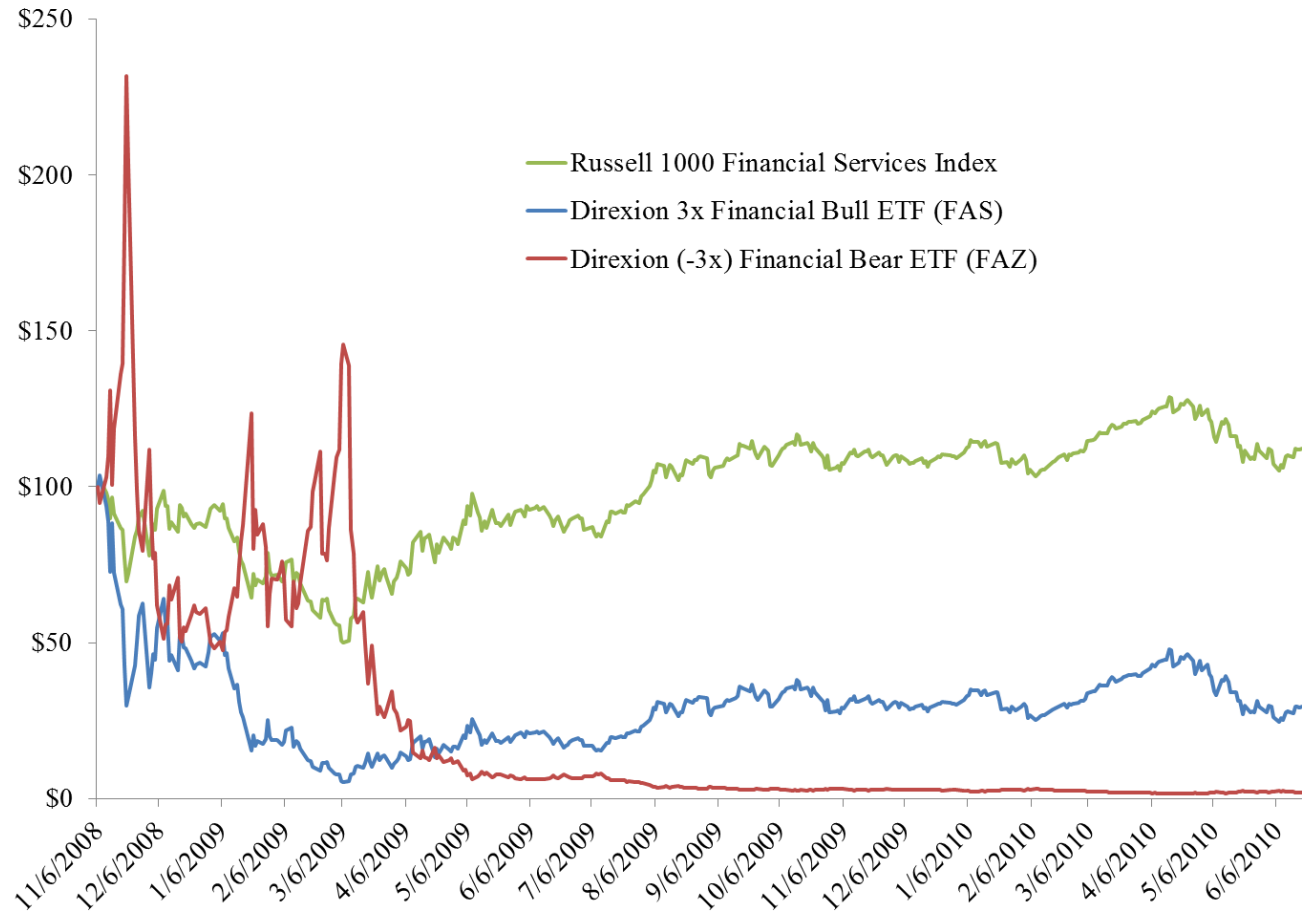
This note can be viewed as a combination of a zero-coupon note from UBS, a series of contingent coupon payments, and a short put option on the reference asset. For reasonable valuation inputs this note was worth \$9.76 per \$10 face value when it was issued on December 9, 2010, including \$9.93 for the present value of the zero-coupon note, (\$0.82) for the short put options, and \$0.65 for the present value of all future contingent coupon payments.

Exchange Traded Funds & Exchange Traded Notes

Leveraged & Inverse ETFs

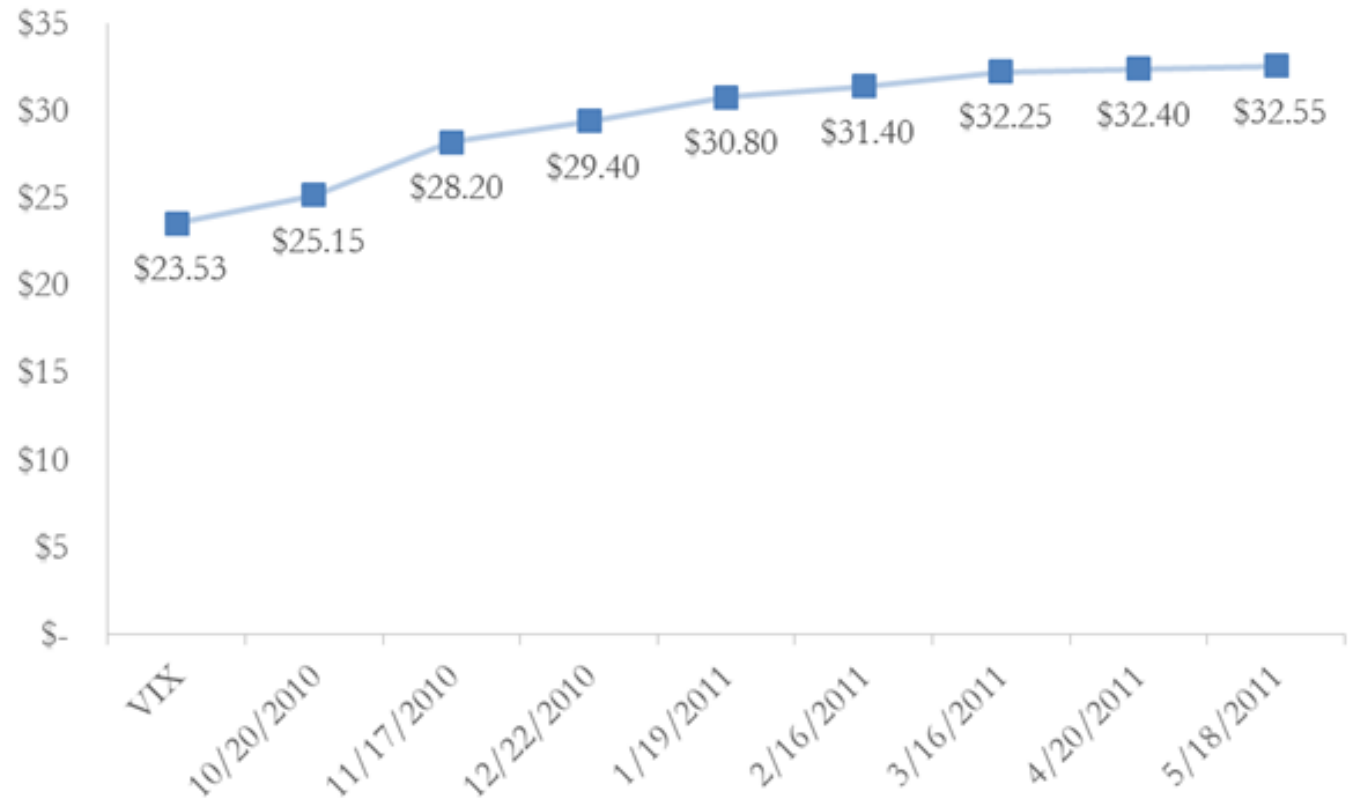
- Leveraged ETFs return, on a daily basis, a multiple of the return to a particular index.
 - If an index increases by 2%, a 2X levered ETF will increase by 4%.
- Inverse ETFs return, on a daily basis, the opposite return of the index.
 - If an index increases by 2%, an inverse ETF will decrease -2%.
- Inverse Leveraged ETFs return, on a daily basis, a *multiple* of the *opposite* return of the index
 - If an index increases by 2%, a 2X levered ETF will return -4%.
- Importantly, these products are designed to deliver these returns on a daily basis, not over longer terms. They do NOT deliver their stated objectives for longer than one day.

Leveraged and Inverse ETFs Both Lose



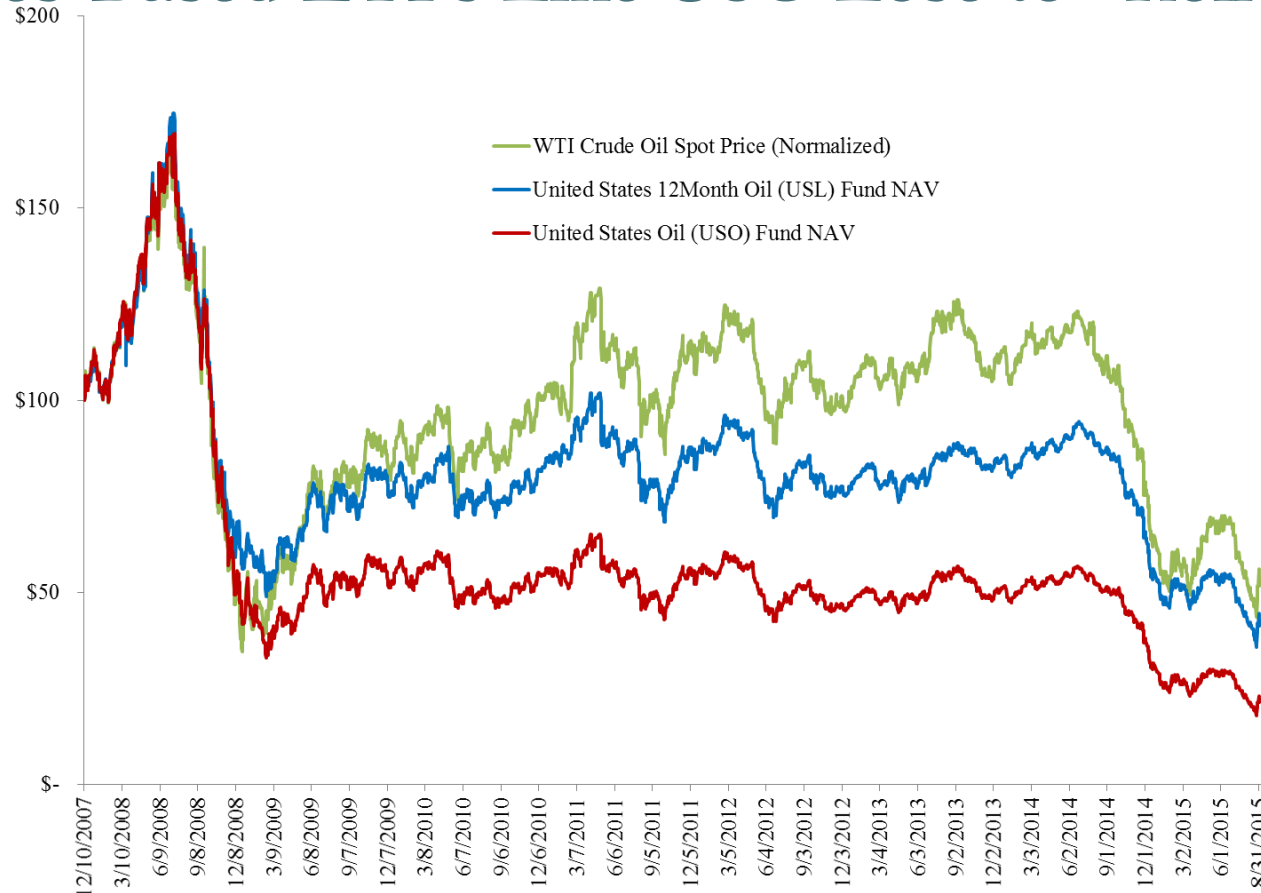
Between November 16, 2008 and November 16, 2009 the Russell 1000 Financial Services Index was up 11.2%. The +3 FAS was down 68% and the -3 FAS was down 97%. Leveraged and inverse ETFs suffer large losses if underlying is volatile because of daily rebalancing.

Upward Sloping Futures Term Structures Cause Losses



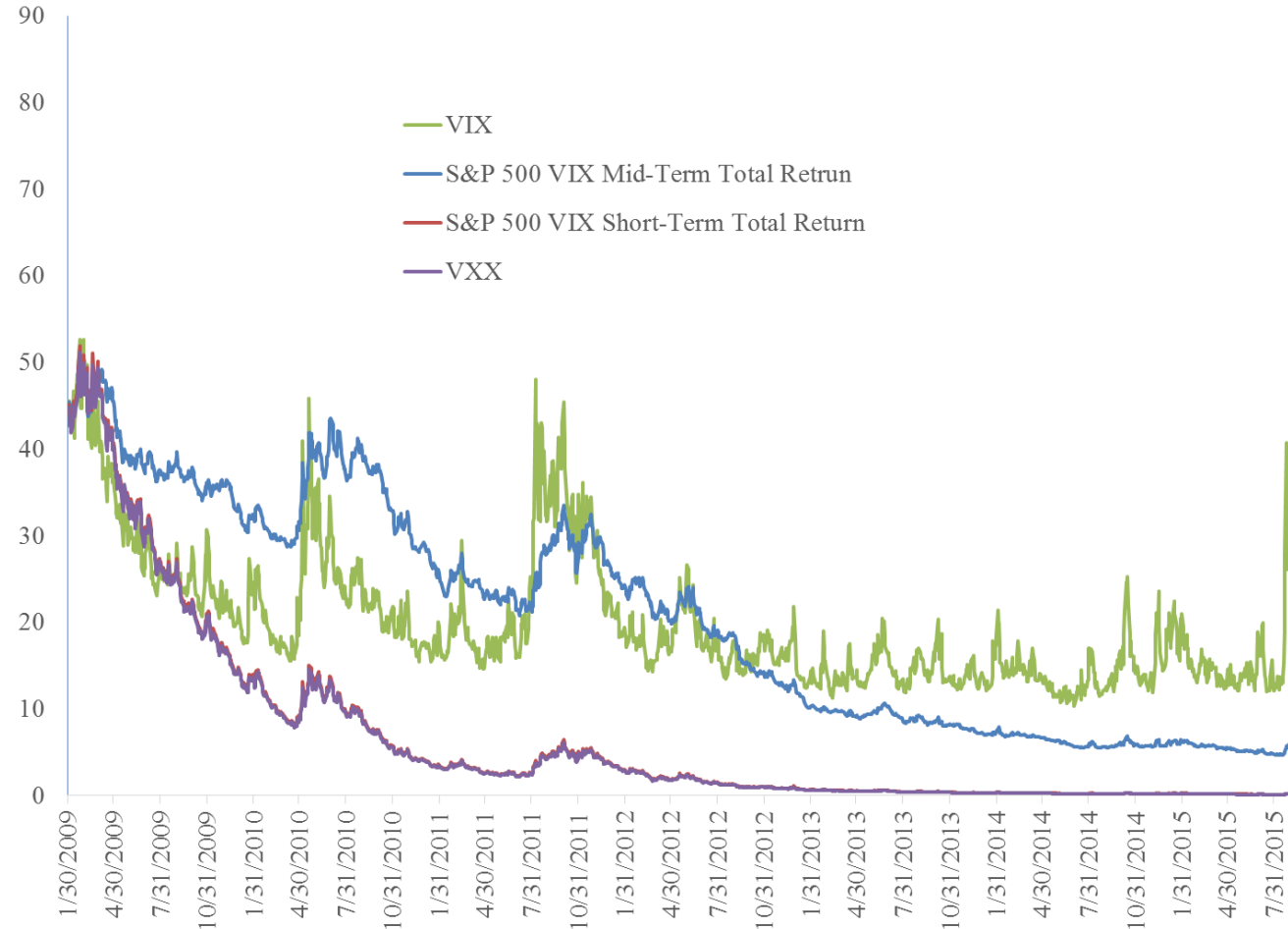
VIX and VIX Future Prices on October 4, 2010

Futures-Based ETFs Like USO Lose to “Roll Yield”



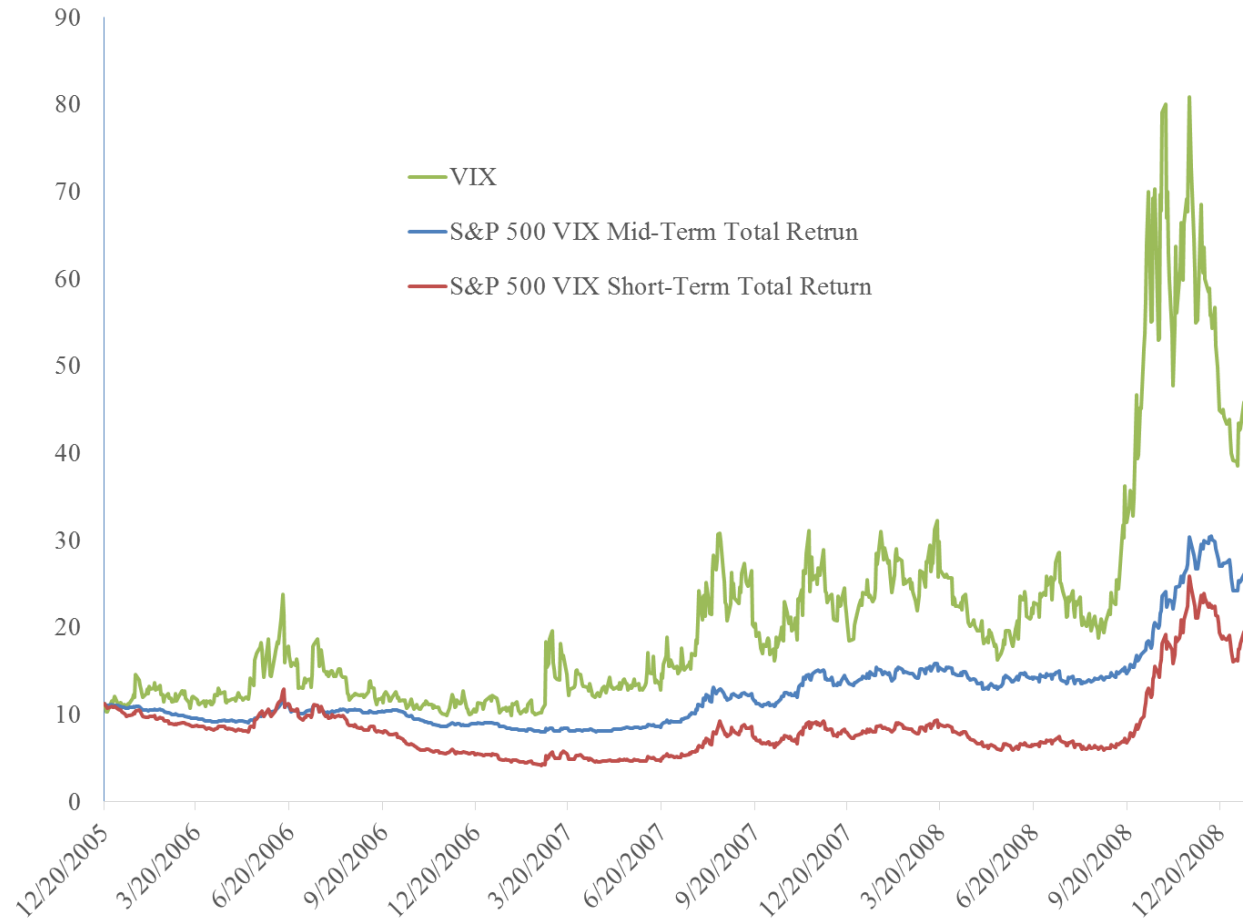
Futures-based ETFs maintain average term of futures contracts, purchasing futures contracts, holding for some time and selling. If the futures term structure is upward sloping and unchanging, the ETF loses value as a result of buying high and selling lower. This is especially true for commodities with high storage costs like oil. WTI Crude spot price was the same on December 10, 2007 and three years later on December 10, 2010. USO was down 46% over that period, USL which trades longer dated oil futures contracts was down only 18.0%

VXX, a Futures-Based ETN, Also Loses to “Roll Yield”



Futures-based ETFs maintain average term of futures contracts, purchasing futures contracts, holding for some time and selling. If the futures term structure is upward sloping and unchanging, the ETF loses value as a result of buying high and selling lower. This is especially

Losses Due to “Roll Yield” Apparent Before VXX IPO



Futures-based ETFs maintain average term of futures contracts, purchasing futures contracts, holding for some time and selling. If the futures term structure is upward sloping and unchanging, the ETF loses value as a result of buying high and selling lower. This is especially

SEC Requests Comments on ETFs and ETNs

D. Broker-Dealer Sales Practices and Investor Understanding and Use of ETPs

The Commission seeks comment on the use of ETPs by investors and the ways in which ETPs are recommended or sold to investors, particularly retail investors. In particular, the Commission seeks comment on the extent to which individual investors buy or sell ETPs with complex investment strategies based on the recommendation of a broker-dealer and the extent to which individual investors understand the nature and operation of such ETPs. The Commission also seeks comment on how broker-dealers meet their obligations to customers when recommending ETPs. ...

36. How effective are the suitability requirements applicable to brokerage accounts in addressing broker-dealer sales practices for ETPs in light of the breadth of available ETP options and the growing complexity of ETP investment strategies?

38. Do investors have access to sufficient information to understand ETPs, how ETP Securities trade, the costs associated with trading ETP Securities, and how their prices and valuations are determined, particularly as ETPs encompass increasingly complex benchmarks, asset classes, and investment strategies? ...

41. Do broker-dealer communications concerning ETPs provide enough information for a retail investor to evaluate the facts concerning ETPs? ...

43. Should broker-dealers have additional responsibility to make available or provide information to investors about the risks of investing in ETPs with complex strategies prior to making a recommendation or accepting a customer order for such securities? ...

Proprietary Indexes

Proprietary Indexes

1. Third-party indexes reflecting zero trading cost investments in broad diversified asset classes have served as benchmarks for 90 years and reference assets for 25 years (*e.g.*, S&P500, DJIA, NASDAQ, LB Bond). These indexes were/are conflict free.
2. Proprietary indexes might be developed to estimate returns to alternative asset classes (commodities, volatility, currencies, interest rates) or to save on licensing costs.
3. Some issuers link payments from ETNs and structured products they issue to proprietary indexes they create with phantom trading costs – huge conflict.
4. Plenty of examples that underwriters are succumbing to the opportunity to publish an index with the primary purpose of linking with their structured products or ETNs.
5. These structured products are much more difficult to value than structured products linked to a third-party index.
6. With structured products linked to proprietary volatility indexes and structured CDs the industry may have jumped the shark.

SEC Recently Questioned Proprietary Indexes

...
One significant development we have observed is the increasing use of complex or proprietary indices or non-security assets

The use of complex or proprietary indices in structured notes raises some interesting questions – what type of retail investor are these sold to and how can they understand the disclosure? We have seen many structured notes with payouts and indices that use highly complex formulas to determine how the index is valued, including fees and costs that are embedded into the index performance and therefore impact what an investor may realize on the notes – I’ve heard even learned counsel say that they find certain indices or notes hard to describe narratively and counsel thinks that the formula disclosure provides sufficient information about how investors will be paid on the notes.

I don’t know how many of you are mathematicians who may be able to figure out complex formulas but I can assure you that the retail investor is not – with that – I wonder how disclosure alone of such formulas could provide the retail investor, or even other “reasonable investors” the information they need to make informed investment decisions.

I also wonder how many brokers and advisors who sell these products to retail investors actually understand what they are selling; both how the notes will pay out and what the related risks are in these notes. ...

My office is concerned that for some complex indices or referenced assets or issuers there may be a lack of transparency about the index, asset or issuer at the time of issuance and on an ongoing basis. This raises the potential that there may not be full and fair disclosure to the investor about the structured product that they own or will be purchasing.

...Amy M. Starr, Chief, Office of Capital Market Trends, May 14, 2015 “Structured Products – Complexity and Disclosure – Do Retail Investors Really Understand What They Are Buying and What the Risks Are?”
<http://www.sec.gov/news/speech/speech-amy-starr-structured-products-.html>

JP Morgan's Proprietary Volatility Index

J.P.Morgan

J.P. Morgan Strategic Volatility Index

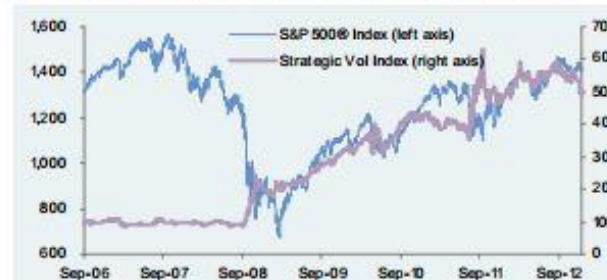
OVERVIEW

The J.P. Morgan Strategic Volatility Index (the "Index" or "Strategic Vol Index") provides long exposure to VIX futures at the 2-month point, and aims to offset and potentially profit from the "negative roll yield"¹ often associated with a long VIX futures position by activating a short position in VIX futures at the 1-month point during certain market conditions. The Index is rules-based, with daily levels published to Bloomberg under the ticker JPUSSTVL.

Brief Background on Volatility Investing

- “Maintains long exposure to the 2-month point on the VIX futures curve” similar to exchange-traded VXX or VXZ.
- “An opportunistic short position at the 1-month point on the VIX futures curve,” similar to XIV, “is activated during certain market scenarios.”

Hypothetical historical performance comparison: Strategic Vol Index and S&P 500® Index - Sep 2006 to Dec 2012



Source: J.P. Morgan. As of 12/31/12. PAST PERFORMANCE AND BACK-TESTED PERFORMANCE ARE NOT INDICATIVE OF FUTURE RESULTS. The Strategic Vol Index was launched on 7/30/2010; therefore any data shown for that index prior to that date is back-tested. The information in this chart is provided solely for reference.

JP Morgan's Strategic Volatility Index's Embedded Fee

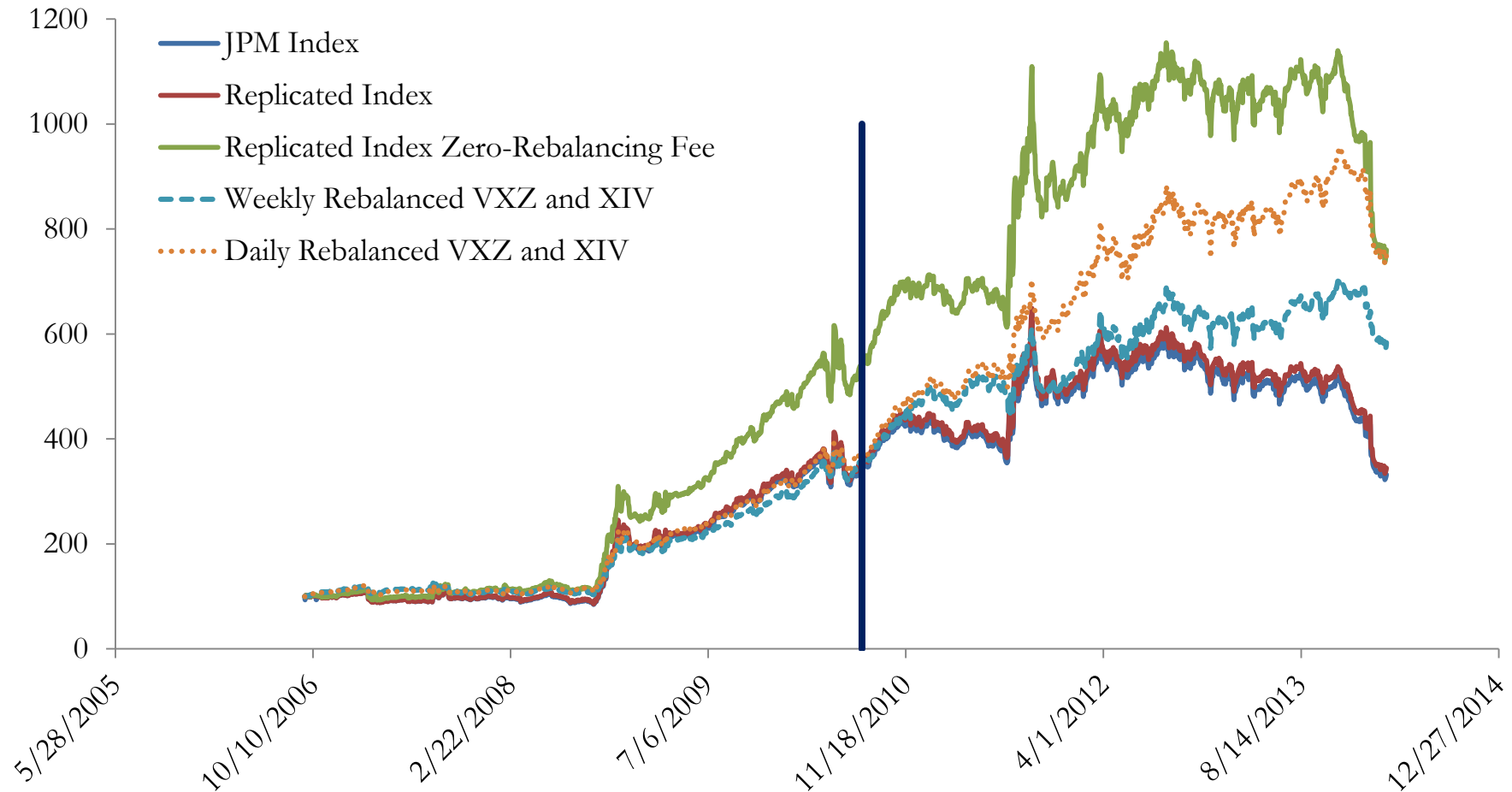
$$Index(t) = Index(t - 1) \times (1 + Return(t))$$

$$GrossReturn(t) = LongReturn(t) - ShortPos(t - 1) \times ShortReturn(t)$$

$$Return(t) = GrossReturn(t) - RebAdjAmount(t) - 0.75\% \Delta t$$

- Rebalancing adjustment amount:
 - “is intended to approximate the slippage costs...that would be experienced by a professional investor seeking to replicate the hypothetical portfolio contemplated by the Index at prices that approximate the official settlement prices...of the relevant VIX futures contracts.”
- Short return represents exposure very similar to XIV (short 1 month VIX futures), long return (long 2 month VIX futures) is similar to VXX (long 1 month VIX futures) or VXZ (long 4-7 month VIX futures).

JP Morgan's Strategic Volatility Index Embeds Unnecessary 7-17% Annualized Fee



P Presentation Downloads

Craig McCann's NASAA 2015 Presentation	Fiduciary Duties and Non-traded REITs
Download PDF	Download PDF

R Research

Securities-Based Lending	An Empirical Analysis of Non-Traded REITs	Ex-post Structured Product Returns: Index Methodology and Analysis	The Priority Senior Secured Income Fund
Download PDF	Download PDF	Download PDF	Download PDF



In the News

Financial Times, September 2, 2015. "Mortgage-backed securities..."

DOL Proposal, and Fiduciary Duty Standards in Canada, UK, and Australia

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DOUGLAS CUMMING

PROFESSOR AND ONTARIO RESEARCH CHAIR

YORK UNIVERSITY SCHULICH SCHOOL OF BUSINESS

DOL Proposed Fiduciary Rule

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- Require more retirement investment advisers to put their client's best interest first, by expanding the types of retirement investment advice covered by fiduciary protections.
- Carve outs
 - Carve out sales pitches to plan fiduciaries with financial expertise.
- Commits the firm and adviser to providing advice in the client's best interest.
- Warrants that the firm has adopted policies and procedures designed to mitigate conflicts of interest.
- Clearly and prominently discloses any conflicts of interest, like hidden fees often buried in the fine print or backdoor payments, that might prevent the adviser from providing advice in the client's best interest

Canada

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- **Common Law Fiduciary Duty When:**
 1. Vulnerability
 2. Trust
 3. Reliance
 4. Discretion
 5. Professional Rules or Codes of Conduct
 - More on slides 5 and 6
- **Statutory Duty for advisors or dealers in Alberta, Manitoba, Newfoundland and New Brunswick**
- **Broader statutory rule across Canada being debated**
 - Some worry it is a “proposed solution without a problem” – what is the market failure or harm that is not already covered off?
 - ✦ Possibly: enforcement is easier(?)
- **Issue of Mutual Fund Fees has taken center stage**
 - More next slide

Mutual
Fund
Flows

Possible effect 2:
Don't recommend selling
products with worse past performance

Possible effect 1:
recommend products regardless of past performance

Alpha
(Risk
Adjusted
Performance)

UK and Australia: Banned these commissions
That possibly create conflicts of interest

RE: TRANSPACIFIC SALES LTD. (OCA) AND THE EXTENT OF THE “KNOW YOUR CLIENT” AND “SUITABILITY” OBLIGATIONS

- In *Transpacific*, the plaintiff (Abrams) invested about \$300,000 in two private placements in private companies through the defendant broker Sprott Securities. He suffered a total loss in relation to these investments, and sued the broker. He succeeded, although the trial court (affirmed by the Court of Appeal) deducted 50% from his damages for his contributory negligence. Here are some of the pertinent points.
- Abrams, the plaintiff, was found to be “an intelligent and astute businessman”, had extensive experience in many different types of investments, had 10 different brokerage accounts, invested aggressively for short term gains in a variety of different types of investments, actively managed his account (instructing his broker what to buy and sell), monitored his investments very closely on a day-to-day basis, was “by no means dependent” on his broker in choosing investments, had twice weekly discussions with his registered representative, and had borrowed up to \$800,000 for purposes of investment.
- The account in question was *not* actively managed. The plaintiff made his own investment decisions. This included the decision to invest in the two investments under consideration (which were merely introduced to the plaintiff by the broker).
- On some of his KYC forms at the different brokerages at which he had accounts, he was listed as being “sophisticated”. On the KYC form at the defendant firm, he was listed as having “good” investment experience, but his broker at Sprott testified that she reserved the “sophisticated” category for professional institutional investors.
- The plaintiff signed a subscription agreement in respect of the two investments under litigation in which he:
 - Declared that he was able to bear the economic risk of the investments;
 - Declared that he was knowledgeable, sophisticated, and experienced in business and financial matters;
 - Declared that he was "capable of evaluating the merits and risks of the investments”;
 - Agreed that he intended that his representations and acknowledgements would be relied upon by Sprott; and
 - Acknowledged that he could lose all of his investment.
- Despite all of these factors, the defendant broker was found to have been negligent in failing to advise the plaintiff of the risks associated with the particular investments in question.

Know Your Client (KYC) and Suitability Obligations

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- **The Nature of the KYC Obligation**
 1. The Basic Duty: Ascertaining Financial Situation, Investment Knowledge, Investment Objectives, and Risk Tolerance
 2. KYC is a “Dialogue” Requiring the Dealer to Exercise Due Diligence
 3. KYC Includes a Duty to Inform and Explain
 4. KYC Requires Complete Account Documentation
 5. KYC Requires Periodic Updating of the Account Documentation
- **The Nature of the Suitability Obligation and its Corollary, the Know-Your-Product Obligation**

United Kingdom

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- June 2006 Retail Distribution Review
- Statutory Duty to act in Client's Best Interest
- “Qualified Best Interest Standard”
 - 2 Tiers of Advice
 - ✦ Independent Advice
 - ✦ Restricted Advice
 - Prohibition on embedded commissions
 - Professionalism
 - ✦ Code of ethics, degree/qualifications, 35 hours training / year, Statement of Professional Standing

European Union

45

- November 2007 Mifid (Markets in Financial Instruments Directive)
 - “Act Honestly, Fairly, and Professionally in Accordance with the Best Interests of Clients”
- October 2011 – Mifid 2 (account for new financial products, ways of trading)
- No embedded commissions
- Disclosure of independent advice
 - whether it is broad or on a restricted market, and ongoing with updates based on developments in the market

Australia

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- November 2009 Australian Parliamentary Joint Committee on Corporations and Financial Services
 - Recommended fiduciary standard
 - Following financial collapse of some institutions
- 2010 Australian Future of Financial Advice
 - Qualified Best Interest Standard
 - ✦ Prohibition on embedded commissions
 - ✦ Safe harbors to accommodate scaled advice
 - Scaling must be in the client's best interest
 - Reasonable investigation as to what is the best interests

Issues with Statutory Fiduciary Duty

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- Lowers the quality of advice?
- Worse advice for smaller investors?
 - No more cross-subsidization of advice?
- How to reconcile the prohibition on types of products sold for retirement accounts with innovation in financial products
- Irrelevant given common law developments?
 - What is the harm in practice that is not already accounted for at common law?
- Would “cold calls” trigger a fiduciary obligation?
 - Recall my 2nd 47slide
- Inconsistent obligations
 - Recommend products that your firm does not sell?!