
**GENERATING INCOME IN
FIXED INCOME PORTFOLIOS
USING OPTIONS ON
U.S. TREASURIES**

NASDAQ OMX[®]

DISCLOSURE

For the sake of simplicity, the examples that follow do not take into consideration commissions and other transaction fees, tax considerations, or margin requirements, which are factors that may significantly affect the economic consequences of a given strategy. An investor should review transaction costs, margin requirements and tax considerations with a broker and tax advisor before entering into any options strategy.

Options involve risk and are not suitable for everyone. Prior to buying or selling an option, a person must receive a copy of *Characteristics and Risks of Standardized Options*. Copies may be obtained from your broker, one of the exchanges or The Options Clearing Corporation, One North Wacker Drive, Suite 500, Chicago, IL 60606 or call 1-888-OPTIONS or visit **www.888options.com**.

Any strategies discussed, including examples using actual securities and price data, are strictly for illustrative and education purposes and are not to be construed as an endorsement, recommendation or solicitation to buy or sell securities. Supporting documentation will be supplied upon written request.

NASDAQ and BNY Mellon have a developmental and revenue sharing agreement for the products discussed herein.

INTRODUCING OPTIONS ON THE “ON-THE-RUN” (OTR) BENCHMARK U.S. TREASURY SECURITIES

- ▶ Trading started on February 19, 2013.
- ▶ Easy to understand, Easy to trade, Easy to manage.
 - + Matches existing equity option contract pricing conventions.
 - + One contract represents \$10,000 face value.
- ▶ Tradable in any Options approved brokerage account.
 - + Treasury options overlay U.S. Dept. of Treasury’s quarterly issued 10-year notes and 30-year bonds (Feb, May, Aug and November cycle).
 - + NASDAQ OMX PHLX plans to expand its offering to additional OTR Treasury Issues (2, 3, 5, 7 year maturities).
- ▶ Markets, Penny Pricing, Options Leverage & Risk Management
 - + Options Specialists and Market Makers provide continuous two-sided quotes.

TREASURY NOTE AND BOND OPTIONS

- Clear at The Options Clearing Corp (OCC)
- European Style Exercise
- Settle like Equity Options
- + The Math:
 - + \$100 multiplier for Premium
 - + Example: Bid: 2.10 - Offer 2.14
 - + Premium = 2.14 x \$100 = \$214.00 per contract

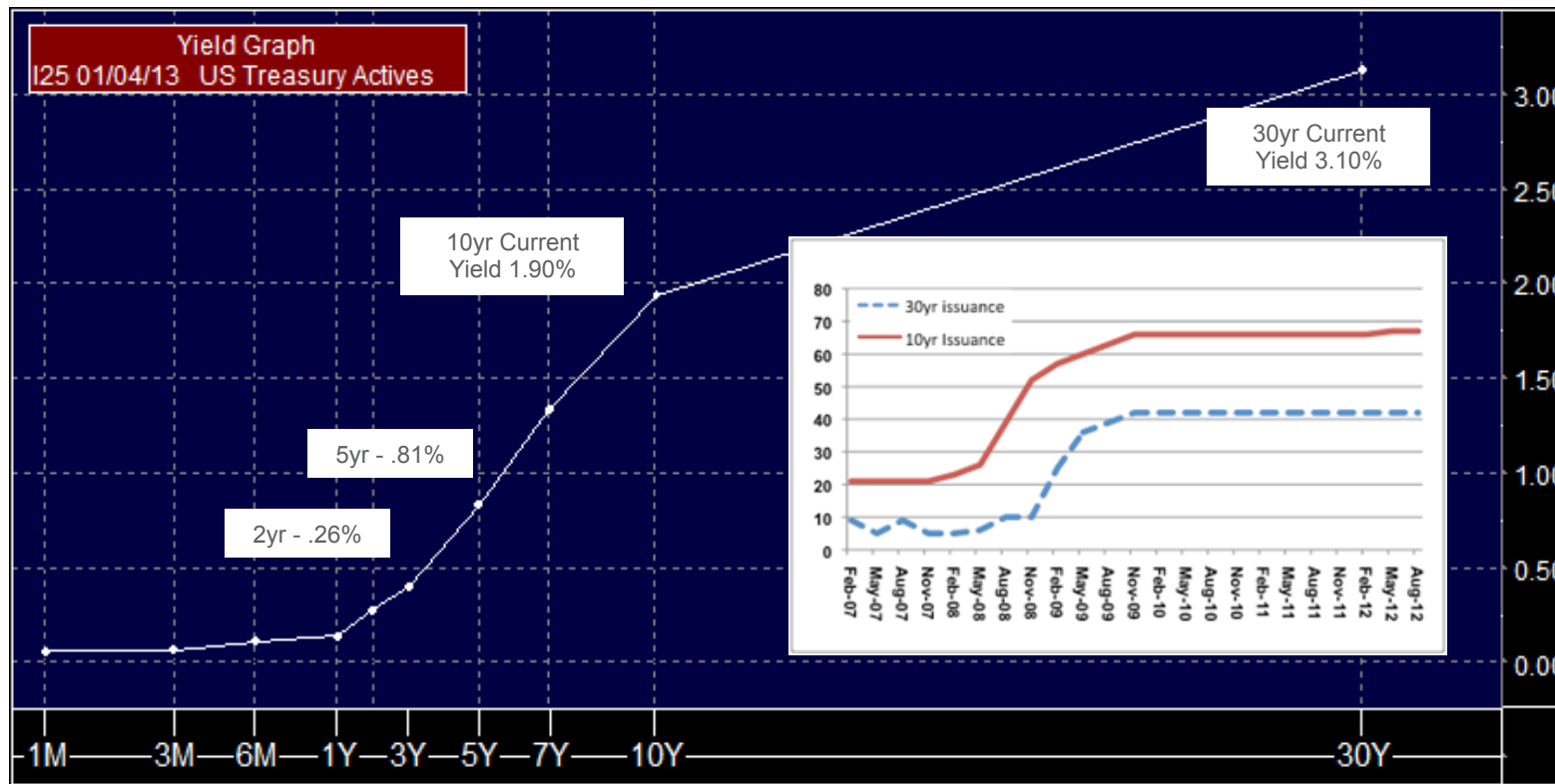
+ **Strike prices**
100.00 (spot) = 100.00

half-point increments

}	100.50
	100.00
	99.50
	99.00

UNDERLYING ON-THE-RUN BENCHMARK TREASURY YIELD CURVE

Maturity	Current Issue	Issue Price	Current Price
10 Year	2.00 2/15/23	99.54	100.452
30 Year	3.125 2/15/43	98.59	99.125



Graph was created in Bloomberg.

TENTATIVE TREASURY OPTION CONTRACT LISTINGS FOR 2013

Underlying US 10yr & 30yr ISSUE DATE	Contract Symbol		Options Contracts FIRST TRADING DATE	Options Contracts EXPIRATION DATE	Days to EXPIRY
	10-Year	30-Year			
Friday, February 15, 2013	TENFB	THIFB	Tuesday, February 19, 2013	Saturday, March 16, 2013	24
			Tuesday, February 19, 2013	Saturday, April 20, 2013	59
			Tuesday, February 19, 2013	Saturday, May 18, 2013	87
Wednesday, May 15, 2013	TENMY	THIMY	Monday, May 20, 2013	Saturday, June 22, 2013	32
			Monday, May 20, 2013	Saturday, July 20, 2013	60
			Monday, May 20, 2013	Saturday, August 17, 2013	88
Thursday, August 15, 2013	TENAG	THIAG	Monday, August 19, 2013	Saturday, September 21, 2013	32
			Monday, August 19, 2013	Saturday, October 19, 2013	60
			Monday, August 19, 2013	Saturday, November 16, 2013	88
Friday, November 15, 2013	TENNV	THINV	Monday, November 18, 2013	Saturday, December 21, 2013	32
			Monday, November 18, 2013	Saturday, January 18, 2014	60
			Monday, November 18, 2013	Saturday, February 22, 2014	95

Critical Dates:

- **First Trading Date** – Business day following last contract expiration date of previous quarterly option chain.
- **Expiration Date** – Saturday following the third Friday of the month in which the contract expires.

SHORT-TERM FUNDAMENTALS SUPPORT A STABLE RATE ENVIRONMENT

Continuous 10-yr note prices w/Fed Funds overlay



Graph was created in Bloomberg.

GENERATING INCOME APPLYING A MANAGED COVERED CALL STRATEGY

▶ Fundamentals

- + Write (sell) a call against Treasury holdings.
- + 1 call for the equivalent of \$10,000 face value of underlying Treasury.
- + Call premium received (assigned or not).

▶ Expectations

- + Investor looking for prices to remain in a trading range during the life of the contract sold.
- + Boost overall returns in a fixed income portfolio while providing a measure of downside protection.

▶ Managing Expiration

- + Upon assignment the specific On-the-Run Treasury security MUST be delivered at the strike price.
- + The secondary market for Treasury securities is liquid facilitating a switch out of existing holdings into the OTR security if necessary.
- + If the investors preference is to maintain current holdings and avoid assignment, simply close out the option position prior to expiry.

U.S. 10-YEAR NOTE COVERED CALL EXAMPLE

► Theoretical return assumptions

- + Position is initiated on the business day following the third Friday of the issuance month.
- + Underlying security is the current OTR 10-yr note.
- + Short call position establish on next highest strike price above 10-yr spot price.
- + Short call position is rolled forward on last trading day of each contract.
- + Option position closed out on last month of each quarter with new Short Call position initiated on the next business day on the new OTR 10-yr.

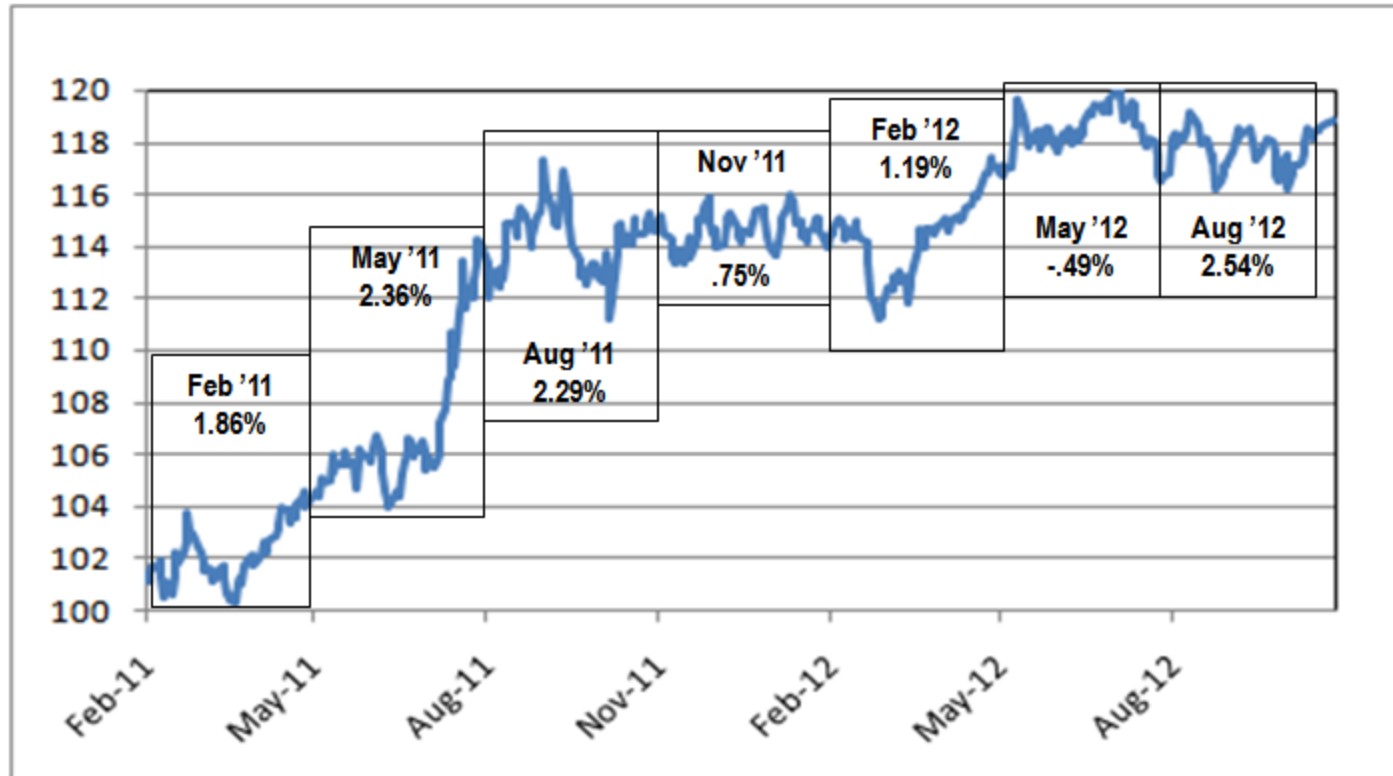
► Volatility inputs:

- + Log returns of daily 10-yr closing prices.
- + 30-day standard deviation of Log returns annualized.

Nov-11 Refunding	Coupon	Maturity	Issue Date	First Coupon Date	Total Days Accrued	Call Sale Trade Date	10yr Price at beginning of holding period	10yr Price at end of holding period			
	2.000	11/15/2021	11/15/2011	05/15/2012	182	11/21/11	100.41	100.28			
Call Sale Settlement Date	10yr price on Trade Date	Strike Price Sold	Option Contract Expiration	10yr price at contract expiration	# of Days Held	Historical Vol	Theoretical Black-Scholes Premium	Accrued Interest	Long 10-yr P&L	Short Call P&L	Absolute Return (87 Days)
11/22/11	100.41	100.5	12/17/11	101.38	25	6.12%	0.53	0.1374		-0.8750	
		101.5	1/20/12	99.78	34	6.16%	0.63	0.1868			
		100	2/17/12	100.28	28	5.00%	0.39	0.1538		-0.2800	
					87		1.55	0.4780	-0.1250	-1.1550	0.7480

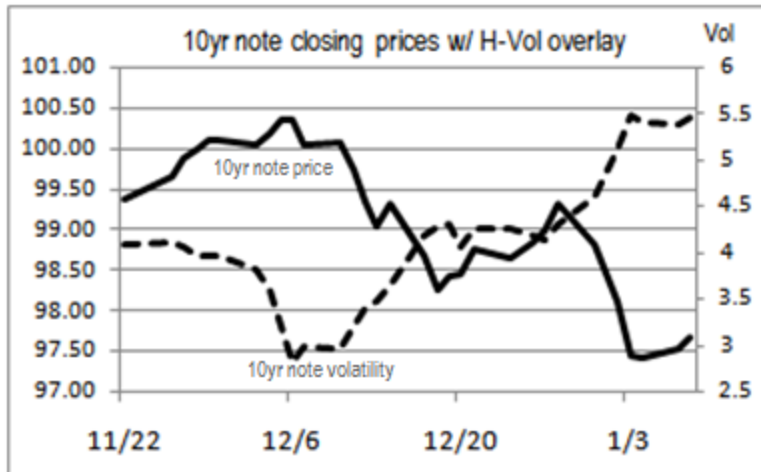
Covered Call strategy more than doubled buy/hold return of underlying security .75 vs .35 for period.

10-YR COVERED CALL ANNUALIZED TOTAL RETURNS FOR THE PAST 7 QUARTERS



- Managed strategy rolling short call position on last trading day each month.
- New short call established on first trading day of subsequent new issue option listing.
- Total return for the period (611 days) = 10.49% (6.25% annualized).
- Past history is not representative of future results.

COVERED CALL OPTION TRADE EXAMPLE



Trade Initiated - 1/2/13
 Settlement - 1/3/13
 Option Expiration - 01/19/13 (16 days)

10yr Price - 98.09 Vol = 5.11%

Strike Price	Greeks	Put Option
98.5	Theoretical Price	0.23
	Delta	0.3297
	Gamma	0.3449
	Theta	-0.0121
	Vega	0.0743
	Rho	0.0141



SUMMARY:

U.S. TREASURY NOTE AND BOND OPTIONS

Allow investors to hedge interest rate risk with precision.

Benefits include:

- + **Certainty** – Expires on a specific day and settles vs. specific CUSIP.
- + **Exercise Style** – A European style options may be exercised only on the last business day prior to expiration.
- + **Liquidity** – Specialists and competing Market Makers will provide continuous bids and offers throughout the trading day with dissemination to all market participants.
- + Resides in a **securities brokerage account**.
- + **Mitigate counterparty credit risk** – Products issued and transaction settlement effectively guaranteed by The Options Clearing Corp (OCC).

FOR MORE INFORMATION

Visit: www.nasdaqomxtrader.com/treasuries

Call: +1 215 496 5550

Email: OptionListings@nasdaqomx.com

NASDAQ OMX[®]

DISCLOSURE

For the sake of simplicity, the examples that follow do not take into consideration commissions and other transaction fees, tax considerations, or margin requirements, which are factors that may significantly affect the economic consequences of a given strategy. An investor should review transaction costs, margin requirements and tax considerations with a broker and tax advisor before entering into any options strategy.

Options involve risk and are not suitable for everyone. Prior to buying or selling an option, a person must receive a copy of *Characteristics and Risks of Standardized Options*. Copies may be obtained from your broker, one of the exchanges or The Options Clearing Corporation, One North Wacker Drive, Suite 500, Chicago, IL 60606 or call 1-888-OPTIONS or visit www.888options.com.

Any strategies discussed, including examples using actual securities and price data, are strictly for illustrative and education purposes and are not to be construed as an endorsement, recommendation or solicitation to buy or sell securities. Supporting documentation will be supplied upon written request.

NASDAQ and BNY Mellon have a developmental and revenue sharing agreement for the products discussed herein.