

First Quarter 2013

Quarterly Interest Rate Review

A Global Trading Summary of Interest Rate Markets

- » Highlights
- » Volume
- » Credit Spreads
- » Deliveries
- » Cash Market Penetration
- » Foreign Holdings of Treasury Securities
- » Historical Volatility

Also including Interest Rate Futures Liquidity Report



Delivering Innovations

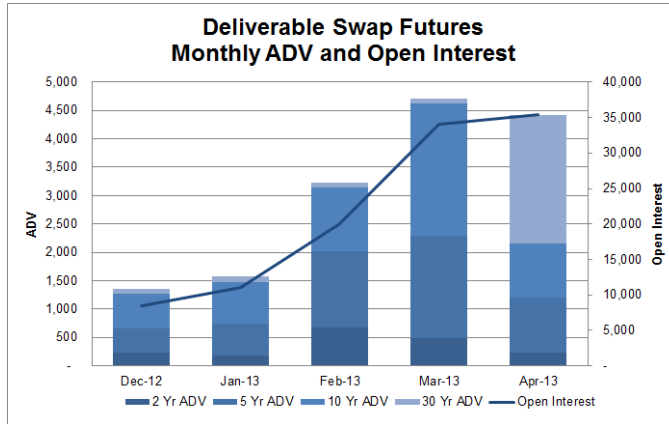
- Portfolio Margining of Cleared IRS vs. Futures **Savings up to 90%**
- Real-Time OTC Clearing
- **NEW** Deliverable Interest Rate Swap Futures

cmegroup.com/cleardotc

Update on Interest Rate Products

Deliverable Interest Rate Swap Futures Month-End O.I. and Volume Trends

- Open interest has increased every month since the December 2012 launch (**35,900+** as of April month-end)
- **More than 290,000** contracts have traded since launch (through May 3, 2013)



Key Benefits

- Standardized futures contracts offer capital-efficient access to swap rate exposure
- Significant savings through risk offsets with Eurodollar, Treasury futures and options
- Automatic netting of positions
- Flexibility to roll positions or take delivery of a CME Cleared Interest Rate Swap
- No surcharges for ex-pit trades, blocks and EFPs

[Learn more at cmegroup.com/dsf](http://cmegroup.com/dsf)

The 5 Yr and 10 Yr DSFs are now available on the CFTC Commitments of Traders Report.

Implied Pricing of Treasury Futures vs. DSF Spreads Added to CME Globex on May 6.

[Learn more at cmegroup.com/ics](http://cmegroup.com/ics)

Liquidity in Long-dated Eurodollar, Mid-Curve Options Draws Increased Trading

A growing number of participants are capitalizing on the increased liquidity in deferred months to hedge risk further out on the yield curve and conduct curve-steepening plays, as these products represent capital-efficient, standardized alternatives to swaptions for managing rate exposure.

- **Record 221,000+** long-dated Green quarterly Eurodollar options (April 19); **1 million+** in OI
- 5-Year "Purple" Mid-Curve options have traded **over 53,000 contracts** since March 11 launch (**46,000+** in OI)
- Q1 2013 Eurodollar Mid-Curve options ADV at **327,000 contracts**; **6.2 million+** in quarter-end OI

[Learn more at cmegroup.com/iroptionsvolume](http://cmegroup.com/iroptionsvolume)

Weekly Treasury Options Surpass 10,000,000th Contract Traded April 29

- Over **10,000,000 (\$1 Trillion notional)** WTO contracts have traded since 2011 launch
- Offer valuable tools to manage short-term risk related to high-impact economic events

[Learn more at cmegroup.com/wto](http://cmegroup.com/wto)

Growing Liquidity in Back Months, Calendar Spreads for Treasuries

A match algorithm change to 10-Year Treasury futures (implemented in January) has resulted in greater liquidity for calendar spreads and deferred quarterly months, with futures spreads as narrow as a ¼ of 32nd, and deferred-month options trading at 2-3 64ths wide.

This creates more trading opportunities and provides greater flexibility to portfolio managers and swaption dealers for managing risk over longer time periods.

[Learn more about Treasury offerings at cmegroup.com/interestrates](http://cmegroup.com/interestrates)

HIGHLIGHTS

First Quarter 2013 Volume and Open Interest

- Average Daily Volume (ADV) for U.S. Treasury futures was 2,878,423 contracts per day for the first quarter of 2013, an increase of 22% from the first quarter of 2012.
 - Open interest for U.S. Treasury futures was 5,959,426 contracts at the end of the first quarter of 2013, an increase of 25% from the first quarter of 2012.
 - Average Daily Volume (ADV) for Eurodollar futures was 1,841,318 contracts per day for the first quarter of 2013, a decrease of 10% from the first quarter of 2012.
 - Open interest for Eurodollar futures was 9,086,935 contracts per day for the first quarter of 2013, an increase of 9% from the first quarter of 2012.
 - Average Daily Volume (ADV) for U.S. Treasury options was 511,732 contracts per day for the first quarter of 2013, an increase of 42% from the first quarter of 2012.
 - Average Daily Volume (ADV) for Eurodollar options was 400,038 contracts per day for the first quarter of 2013.
 - Weekly U.S. Treasury options have produced average daily volume of 27,397 contracts per day for the first quarter of 2013, an increase of 48% from the first quarter of 2012.
 - 53.6% of all Treasury Options traded were traded on Globex in the first quarter of 2013.
 - Average Daily Volume (ADV) for 5-Yr T-Note options was 95,218 contracts per day for the first quarter of 2013, an increase of 110% from the first quarter of 2012.
 - Average Daily Volume (ADV) for the Mid-Curve options was 327,000 per day for the first quarter of 2013 with open interest over 6.2 Million.
 - In their first month of trading, 5 Year "Purple" Mid-Curves have traded over 53,000 and have open interest of over 46,000.
 - Ultra T- Bond futures posted first quarter 2013 ADV of 84,830 contracts and open interest of 371,801 at the end of the first quarter of 2013.
 - Deliverable Interest Rate Swap futures, launched on 3 Dec 2012, produced cumulative volume of more than 1 million contracts (\$105 billion in notional terms) and open interest of 34,085 during the first quarter of 2013.
-

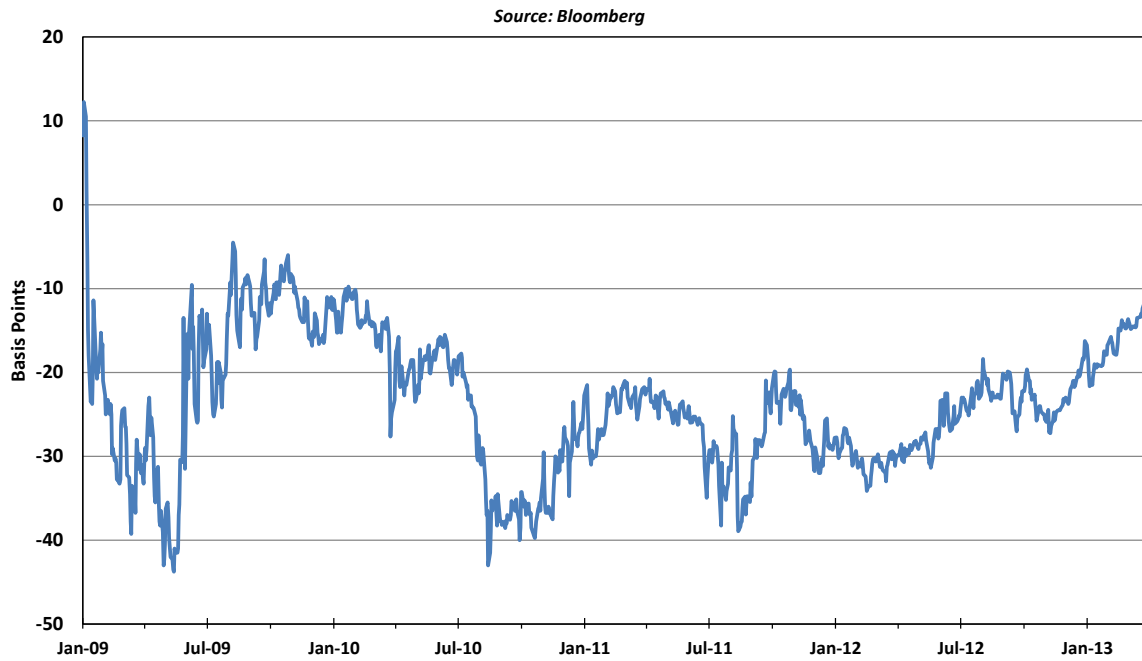
CME Group

CME Group's FedWatch and Duration Tools are now mobile-friendly!

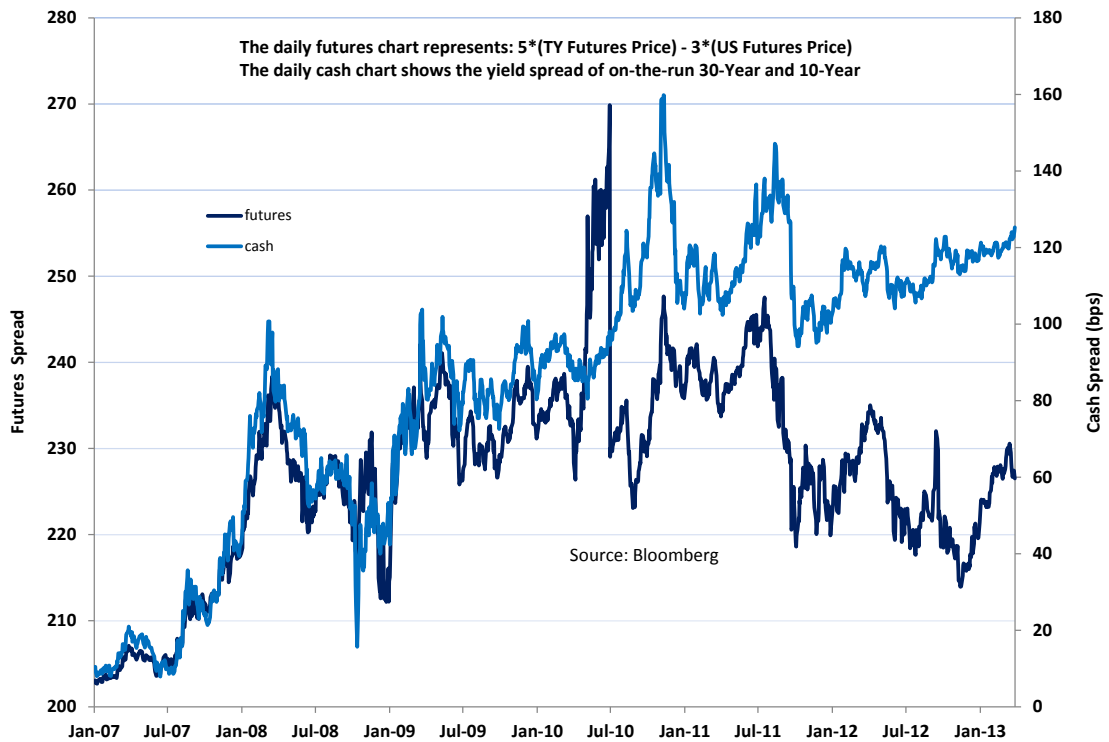
[View all Interest Rate tools »](#)



30-Year Swap Spread Treasury Bond Yield minus 30-Year Interest Rate Swap Yield

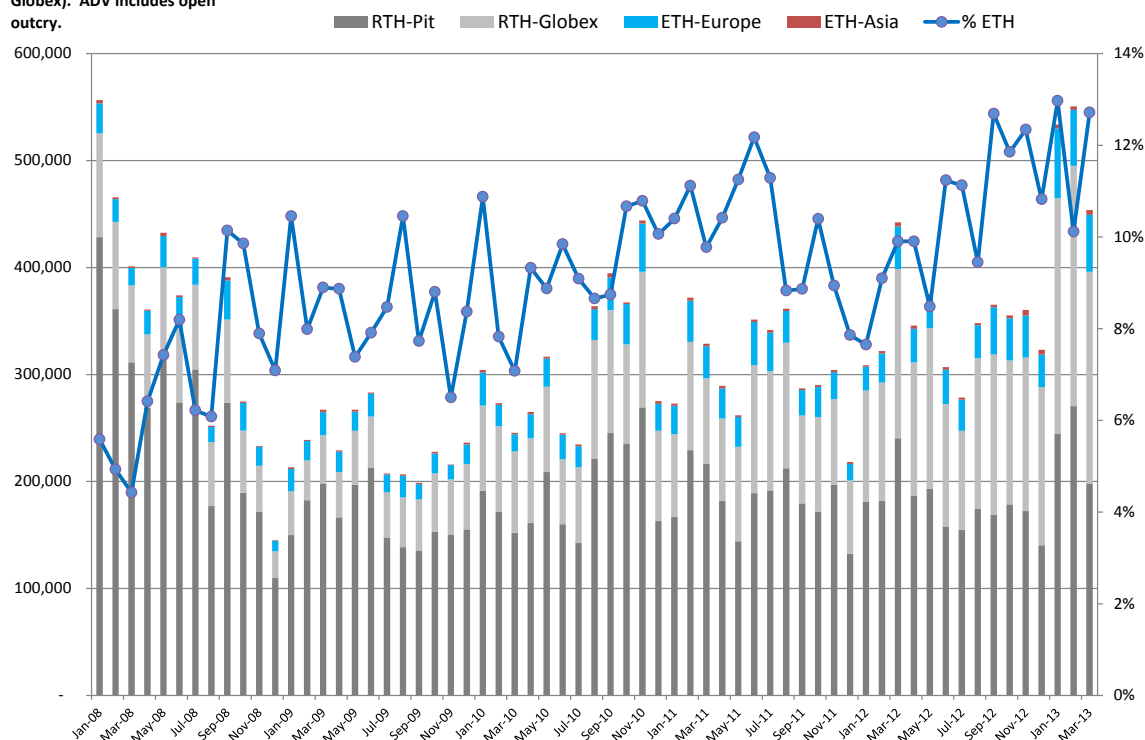


Trading The NOB



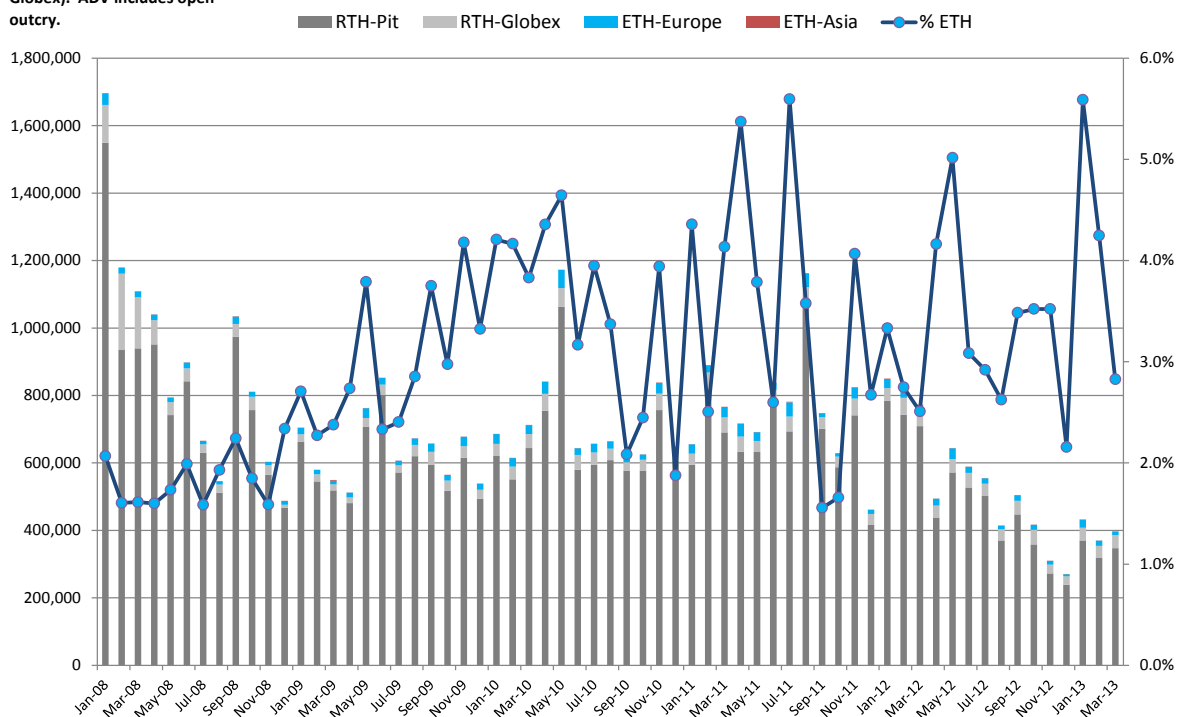
Percent of total average daily volume (ADV) executed in extended trading hours (CME Globex). ADV includes open outcry.

U.S. Treasury Options CME Globex and Pit ADV by Time Zone

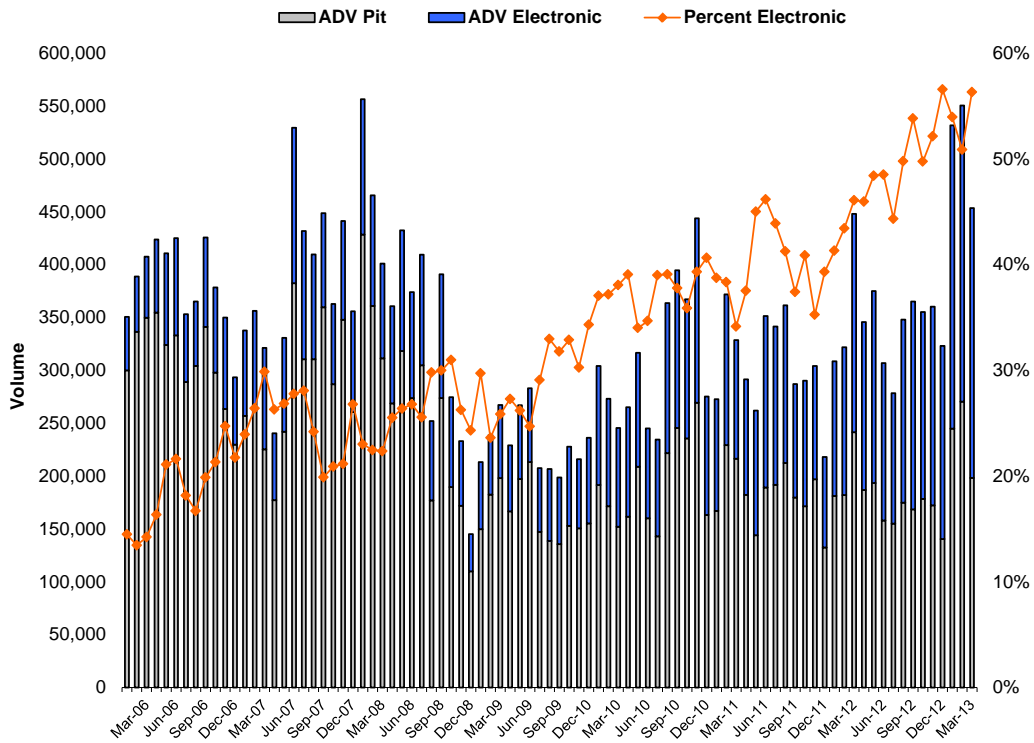


Percent of total average daily volume (ADV) executed in extended trading hours (CME Globex). ADV includes open outcry.

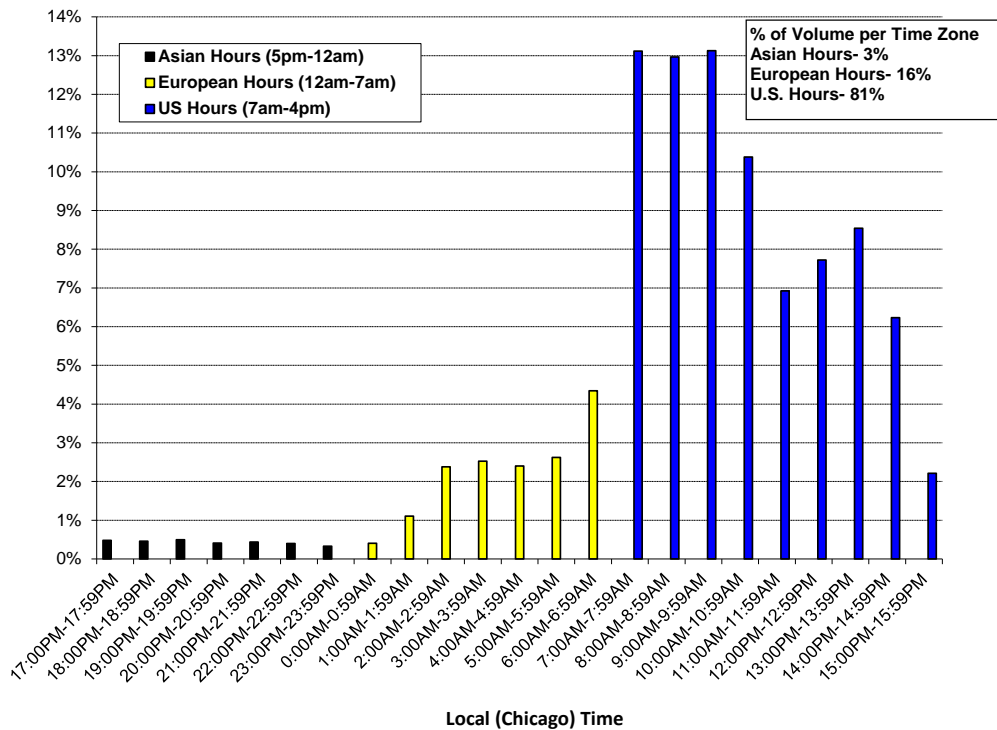
Eurodollar Options CME Globex and Pit ADV by Time Zone



U.S. Treasury Options - Monthly Average Daily Volume

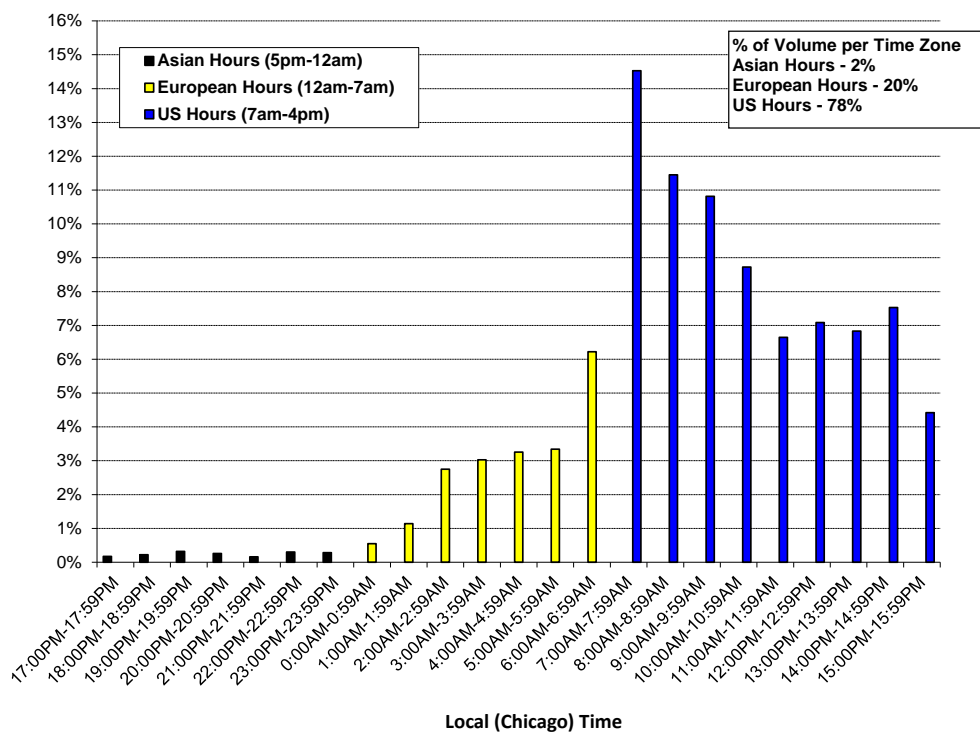


Treasury Futures: Hourly Distribution of Electronic Volume (Hourly Volume as % Share of Volume, January 1 - March 31, 2013)



Treasury Options: Hourly Distribution of Electronic Volume

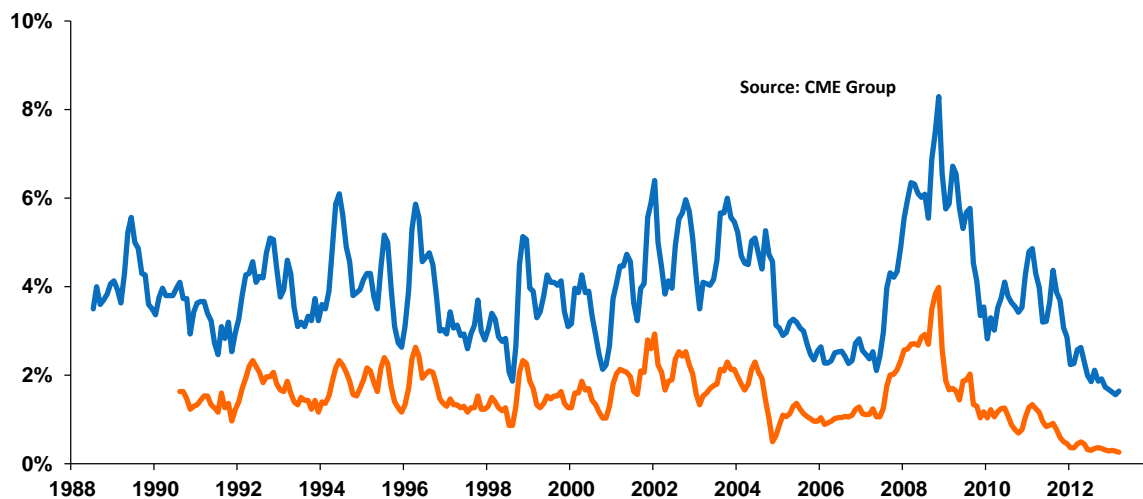
(Hourly Volume as % Share of Volume, January 1 - March 31, 2013)



2-Year and 5-Year U.S. Treasury Note Futures

Monthly Historical Volatility
(3-Month Moving Average)

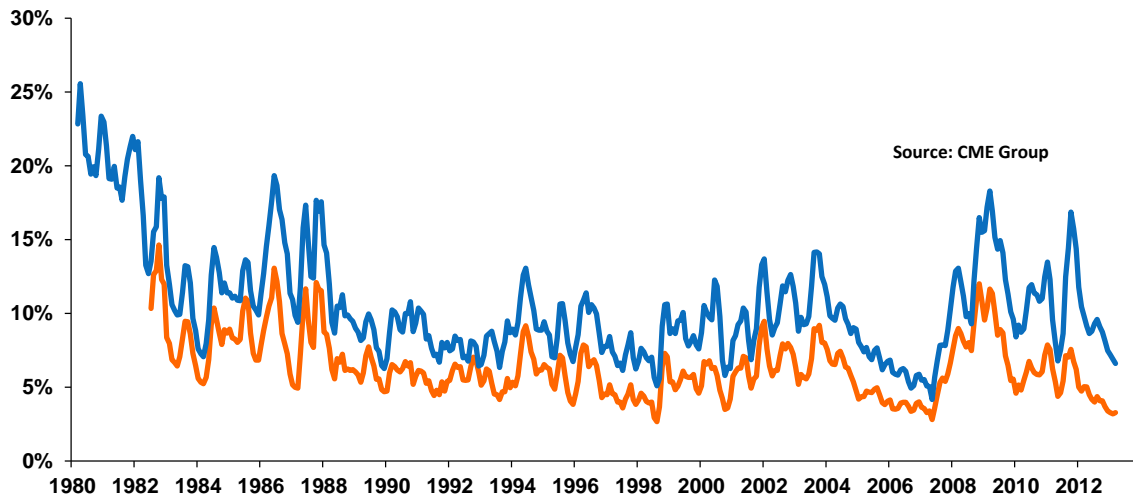
— 2-Year — 5-Year



10-Year Note and Classic T-Bond U.S. Treasury Futures

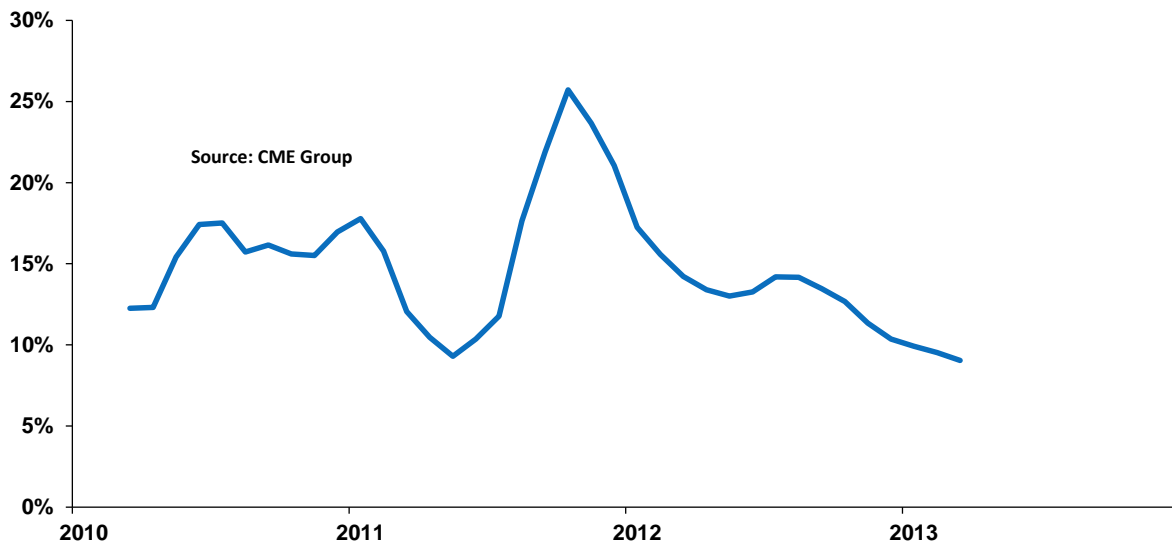
Monthly Historical Volatility
(3-Month Moving Average)

— 10-Year — Classic T-Bond



Ultra Bond U.S. Treasury Futures

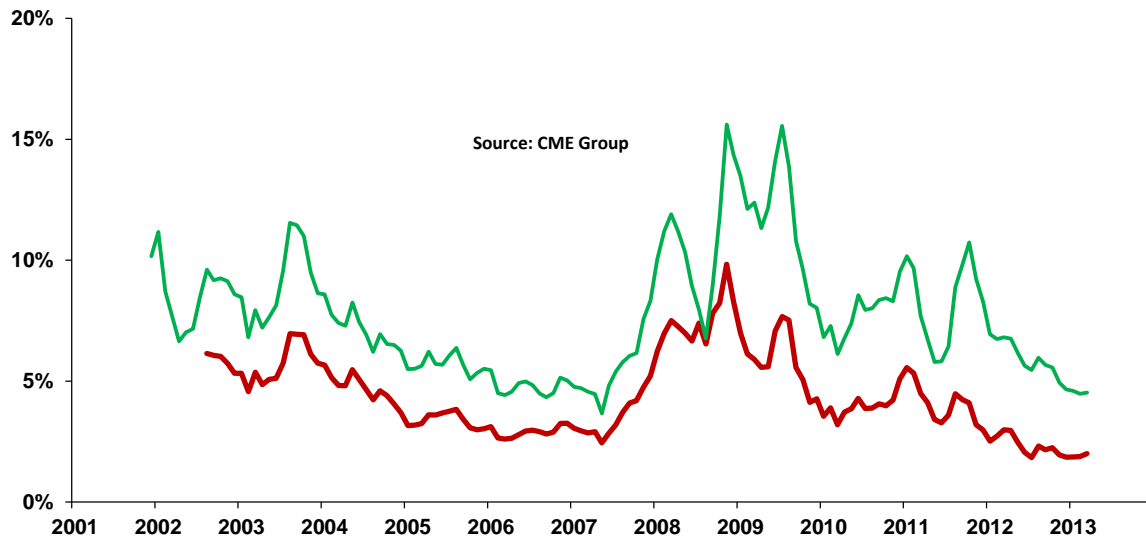
Monthly Historical Volatility
(3-Month Moving Average)



5-Year and 10-Year U.S. Interest Rate Swap Futures

Monthly Historical Volatility
(3-Month Moving Average)

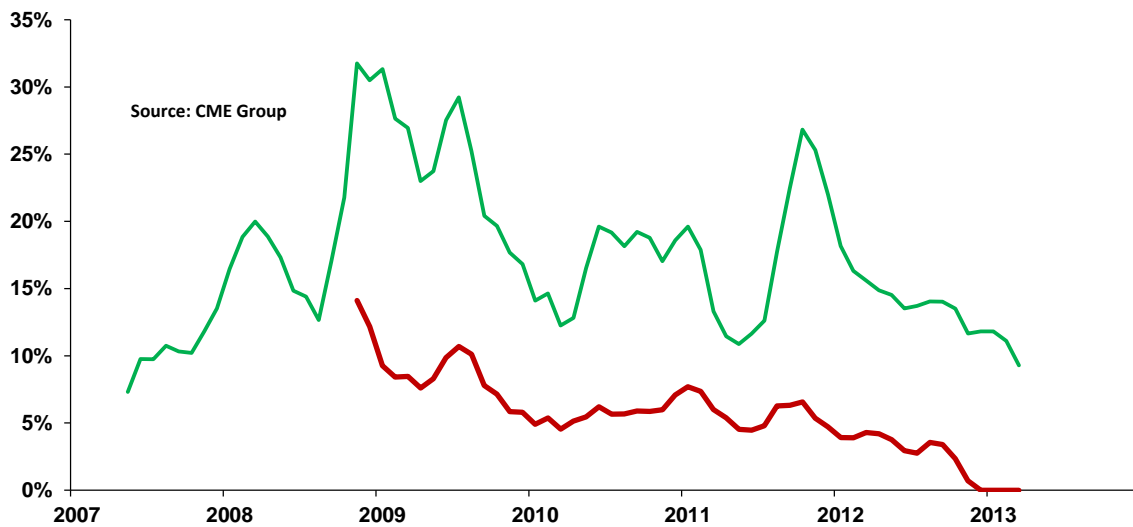
— 5-Year — 10-Year



7-Year and 30-Year U.S. Interest Rate Swap Futures

Monthly Historical Volatility
(3-Month Moving Average)

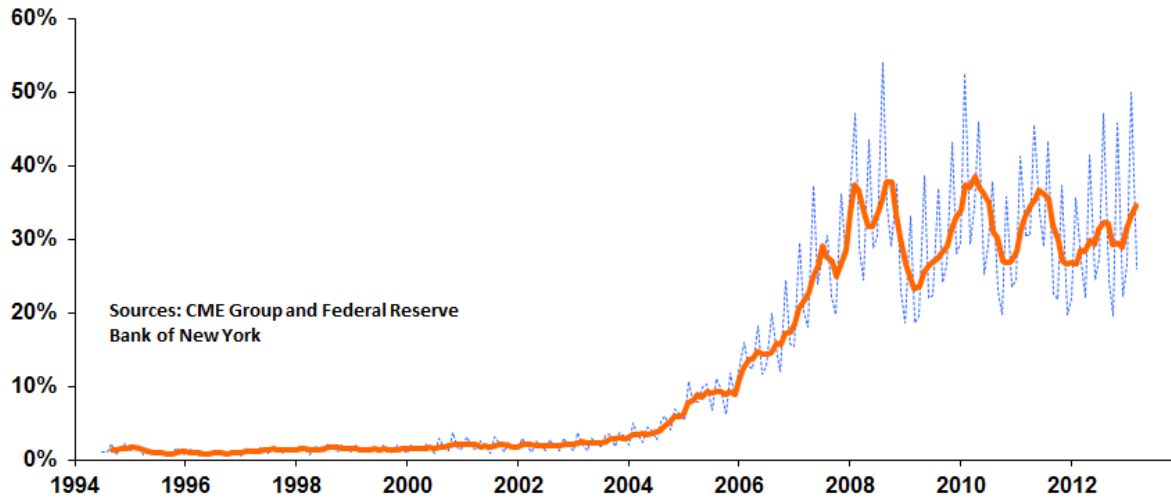
— 7-Year — 30-Year



2-Year U.S. Treasury Note Futures Cash Market Penetration

Notional Futures ADV as % of Notional Cash ADV

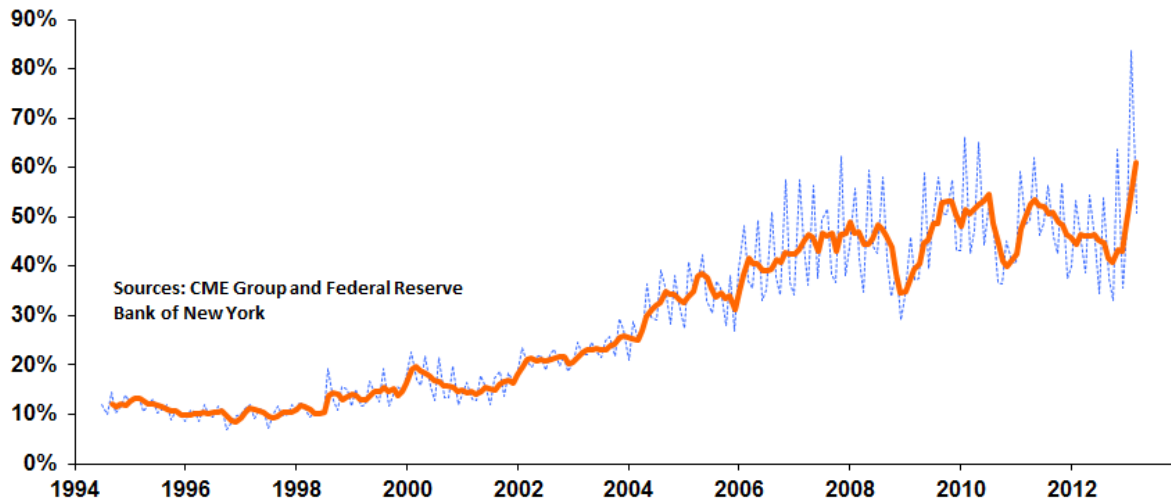
Spot On 3-Month Rolling Average



5-Year U.S. Treasury Note Futures Cash Market Penetration

Notional Futures ADV as % of Notional Cash ADV

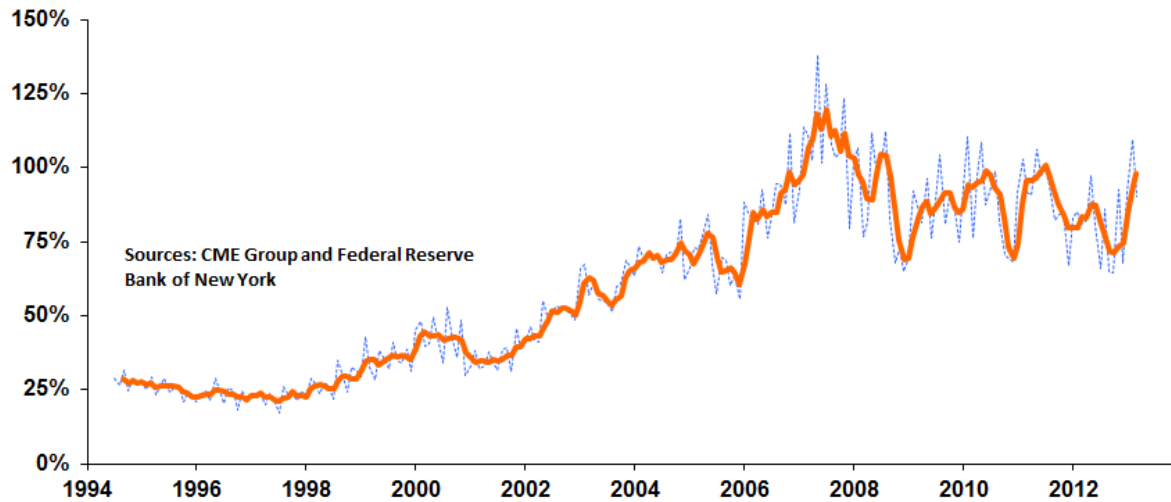
Spot On 3-Month Rolling Average



10-Year U.S. Treasury Note Futures Cash Market Penetration

Notional Futures ADV as % of Notional Cash ADV

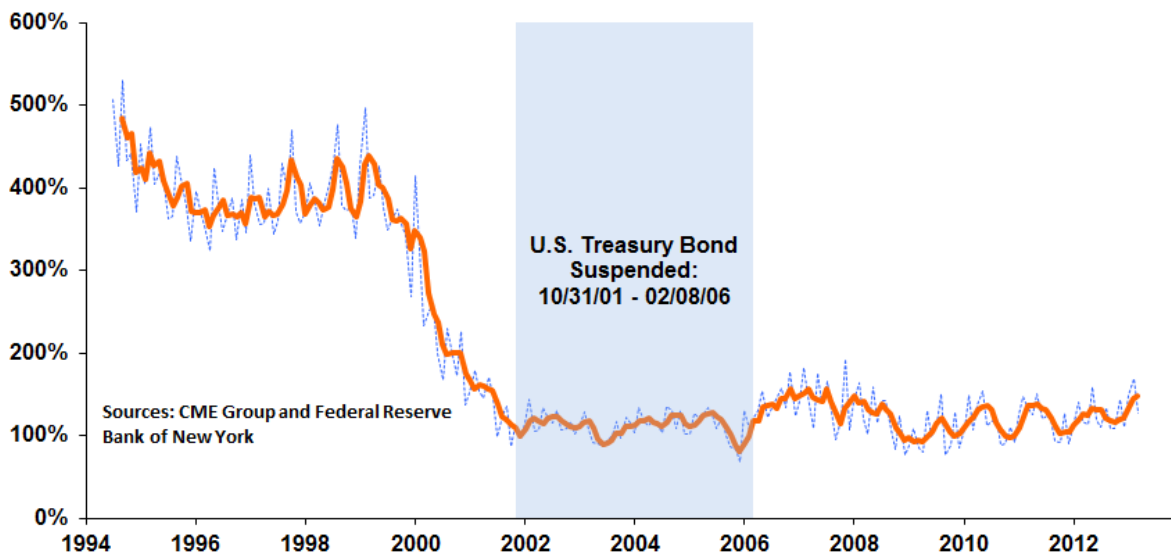
Spot On 3-Month Rolling Average



U.S. Treasury and Ultra U.S. Treasury Bond Futures Cash Market Penetration

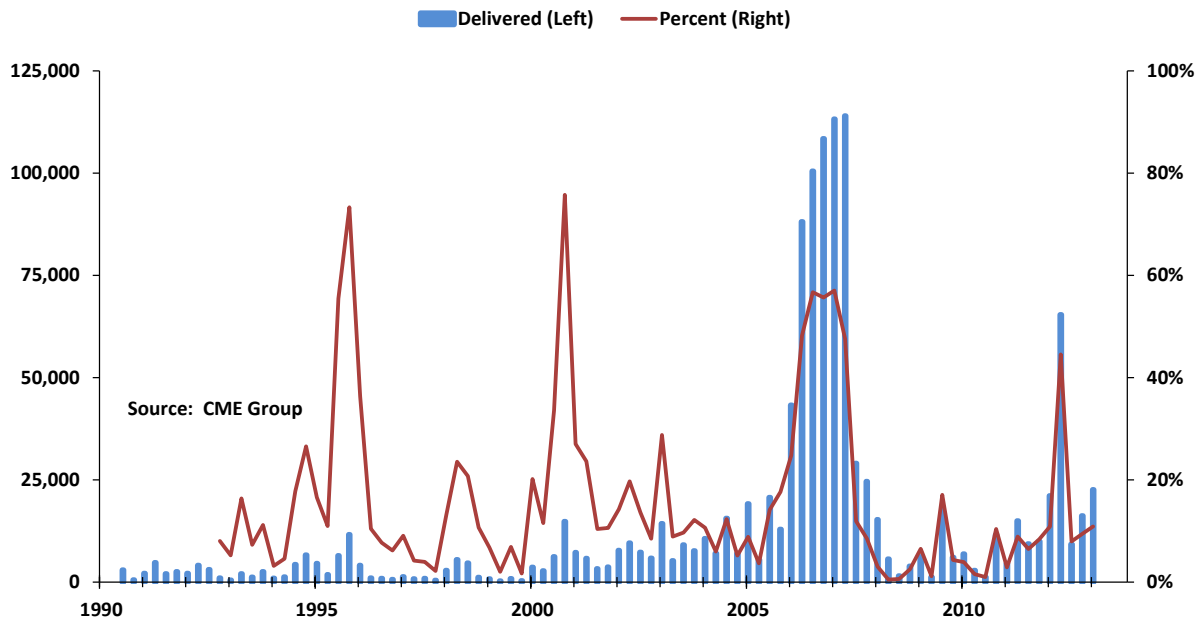
Notional Futures ADV as % of Notional Cash ADV

Spot On 3-Month Rolling Average



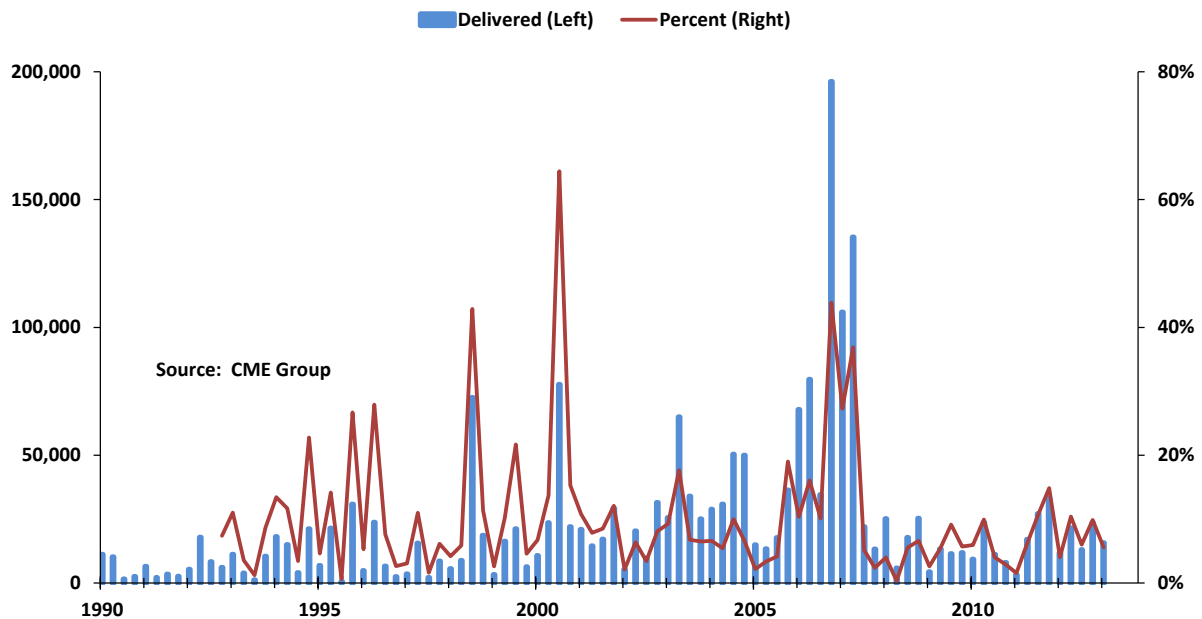
2-Year U.S. Treasury Note Futures

Delivered Contracts and as Percent of Open Interest
of Expiring Contract on First Position Day



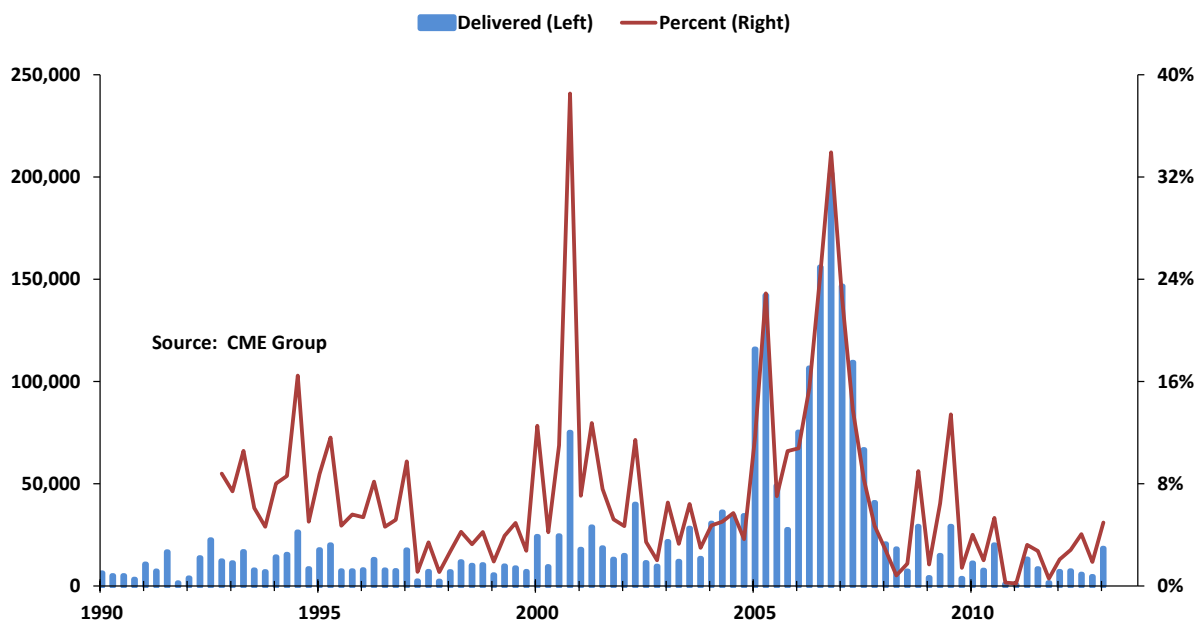
5-Year U.S. Treasury Note Futures

Delivered Contracts and as Percent of Open Interest
of Expiring Contract on First Position Day



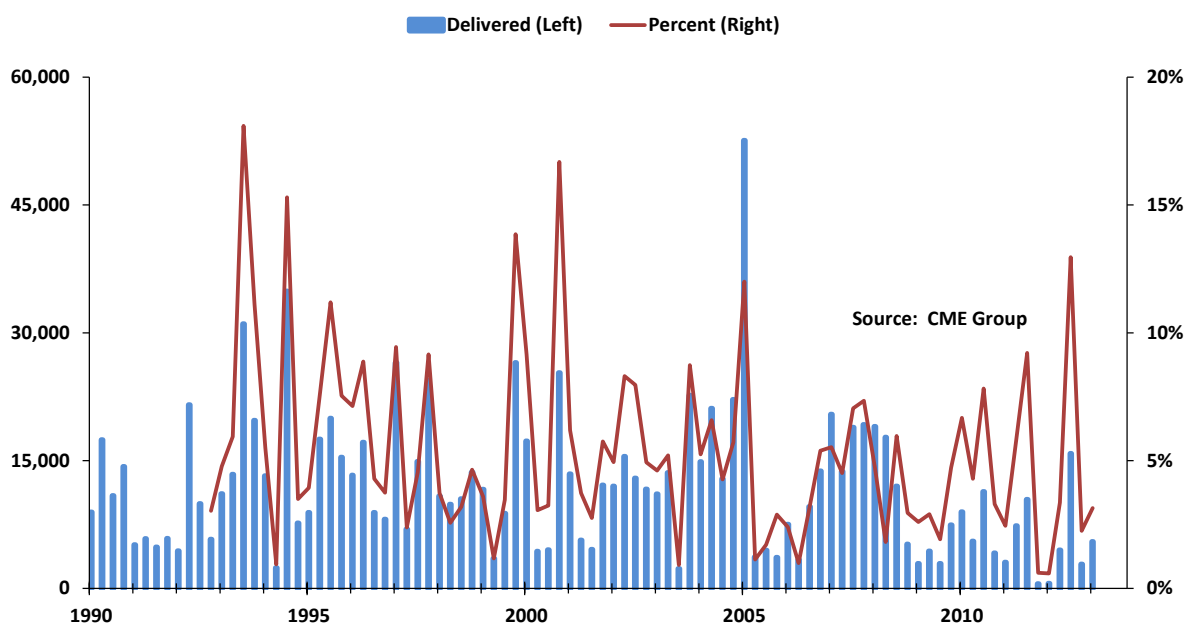
10-Year U.S. Treasury Note Futures

Delivered Contracts and as Percent of Open Interest
of Expiring Contract on First Position Day



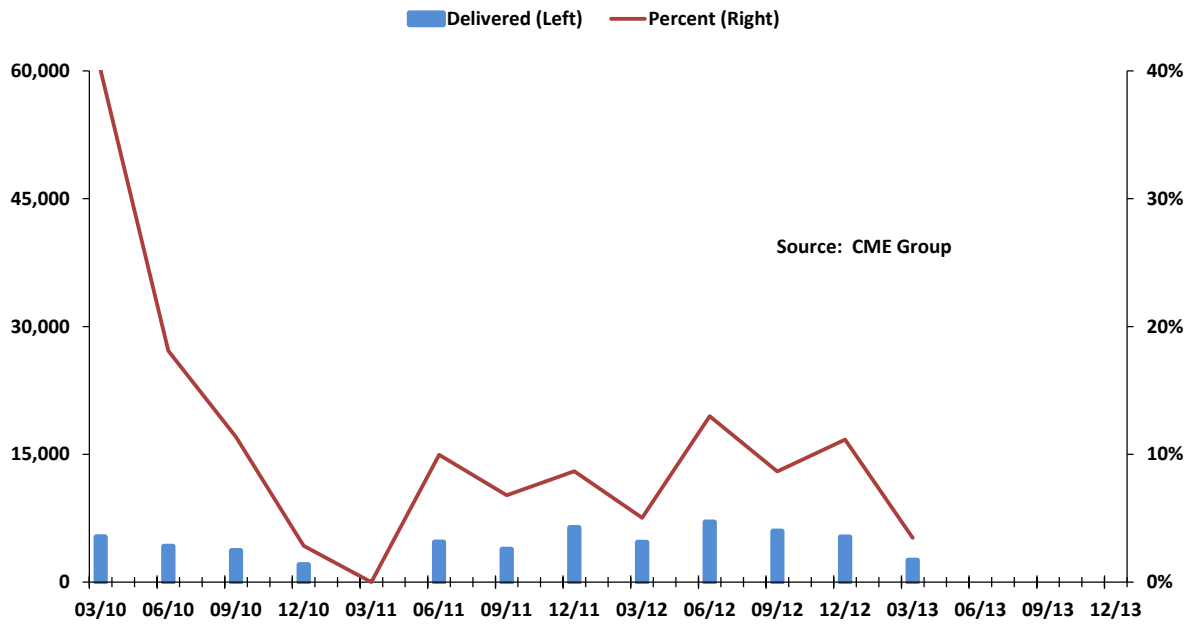
Classic U.S. Treasury Bond Futures

Delivered Contracts and as Percent of Open Interest
of Expiring Contract on First Position Day

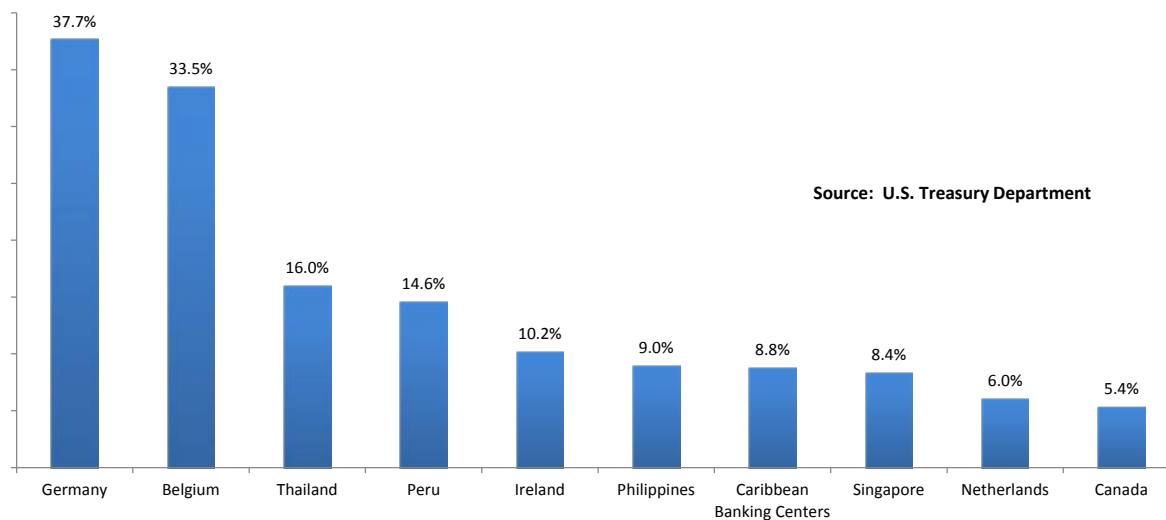


Ultra U.S. Treasury Bond Futures

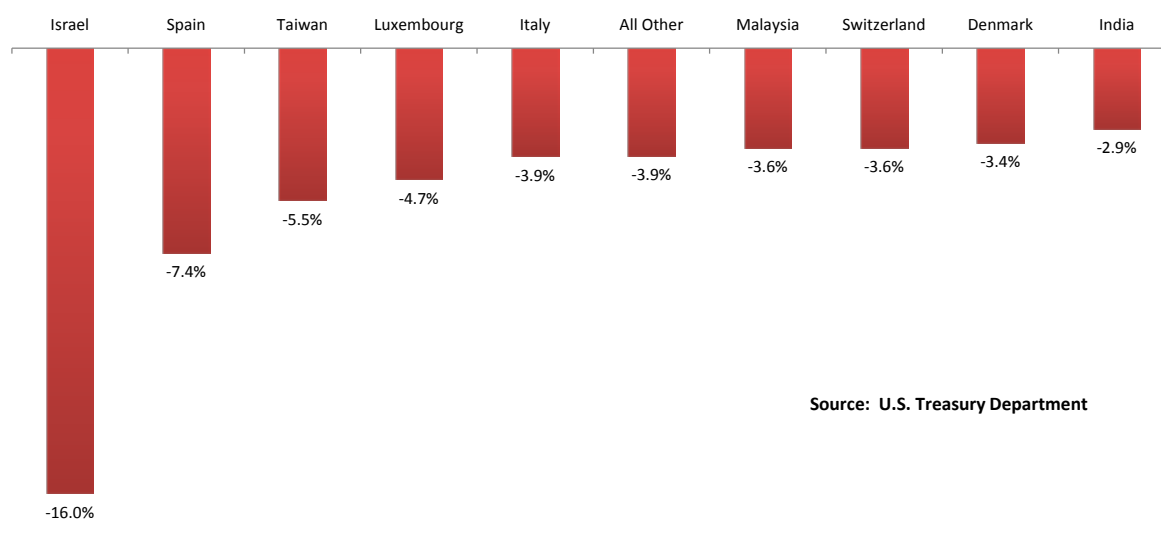
Delivered Contracts and as Percent of Open Interest
of Expiring Contract on First Position Day



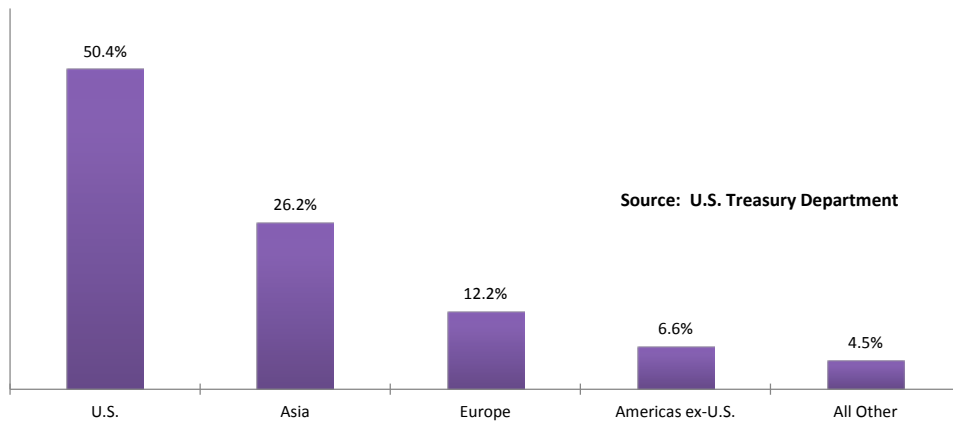
Largest Quarter-over-Quarter Increases (Percent) in Foreign Holdings of U.S. Treasury Securities February 2013



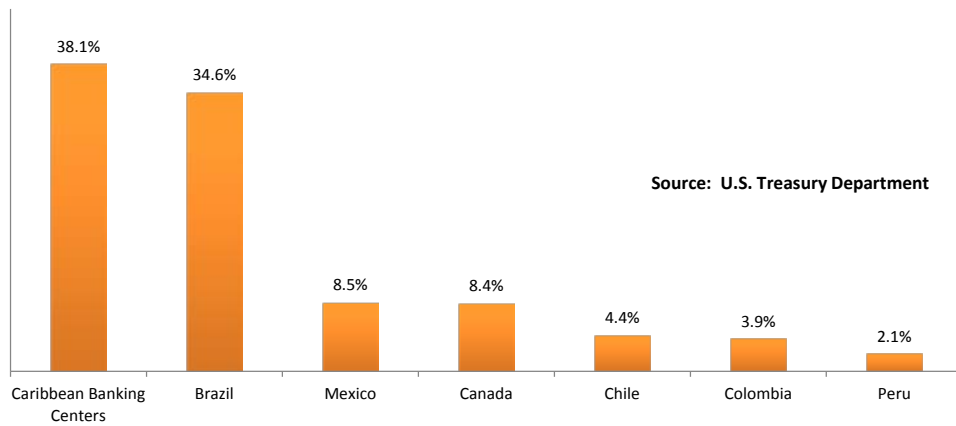
Largest Quarter-over-Quarter Decreases (Percent) in Foreign Holdings of U.S. Treasury Securities February 2013



Regional Holdings of U.S. Treasury Securities (Percent) February 2013



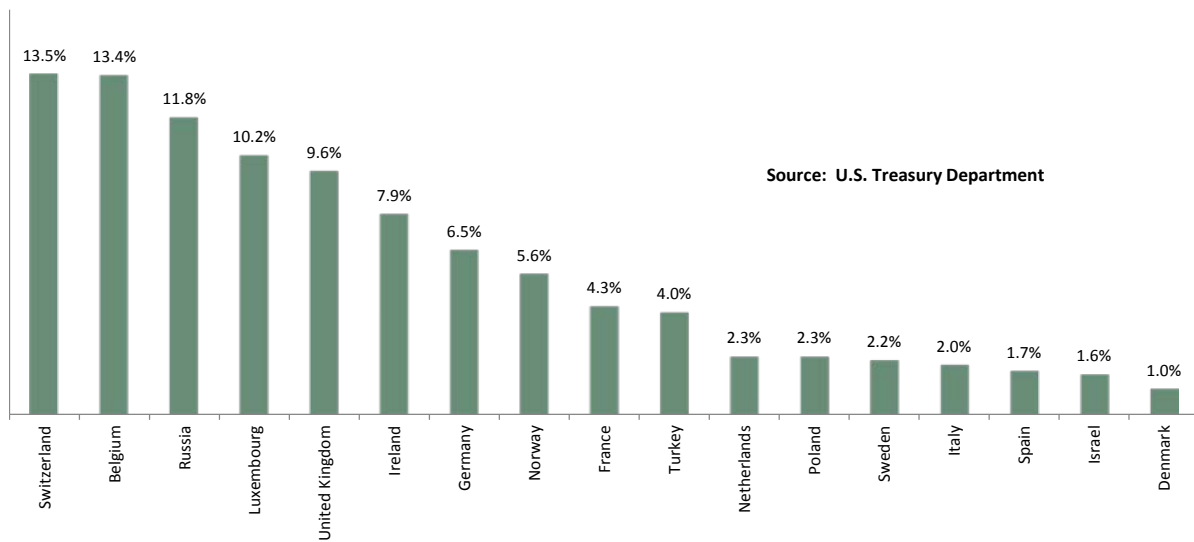
Americas ex-U.S. Holdings of U.S. Treasury Securities (Percent) February 2013



Asia Holdings of U.S. Treasury Securities (Percent) February 2013

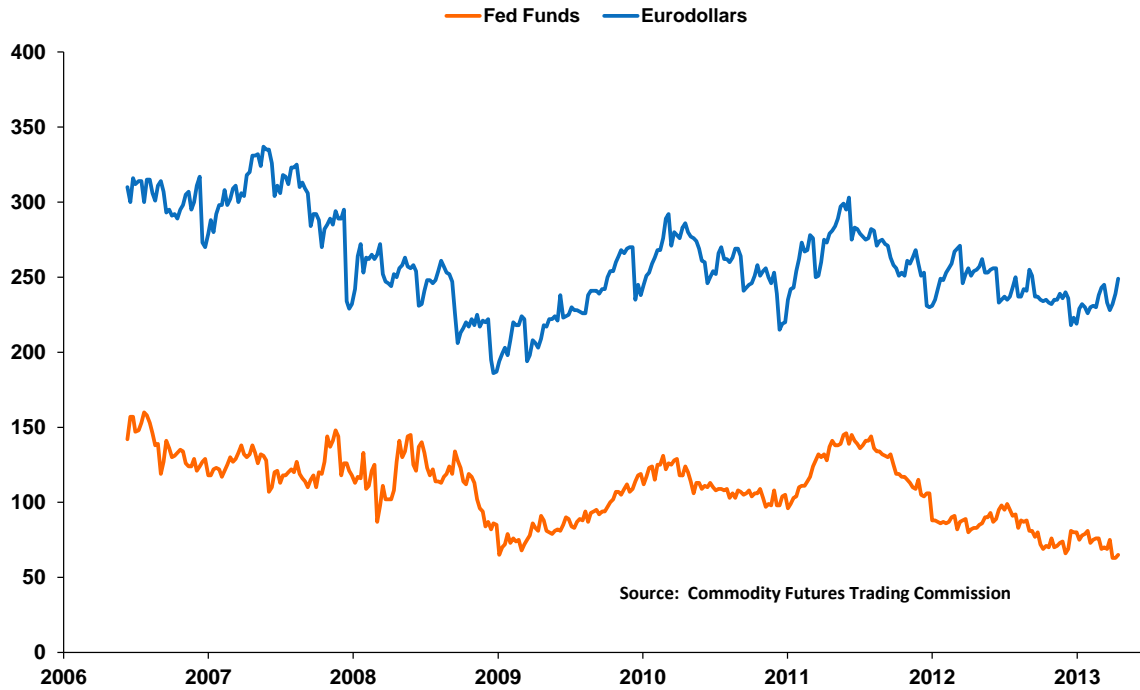


Europe Holdings of U.S. Treasury Securities (Percent) February 2013



Fed Funds and Eurodollar Futures

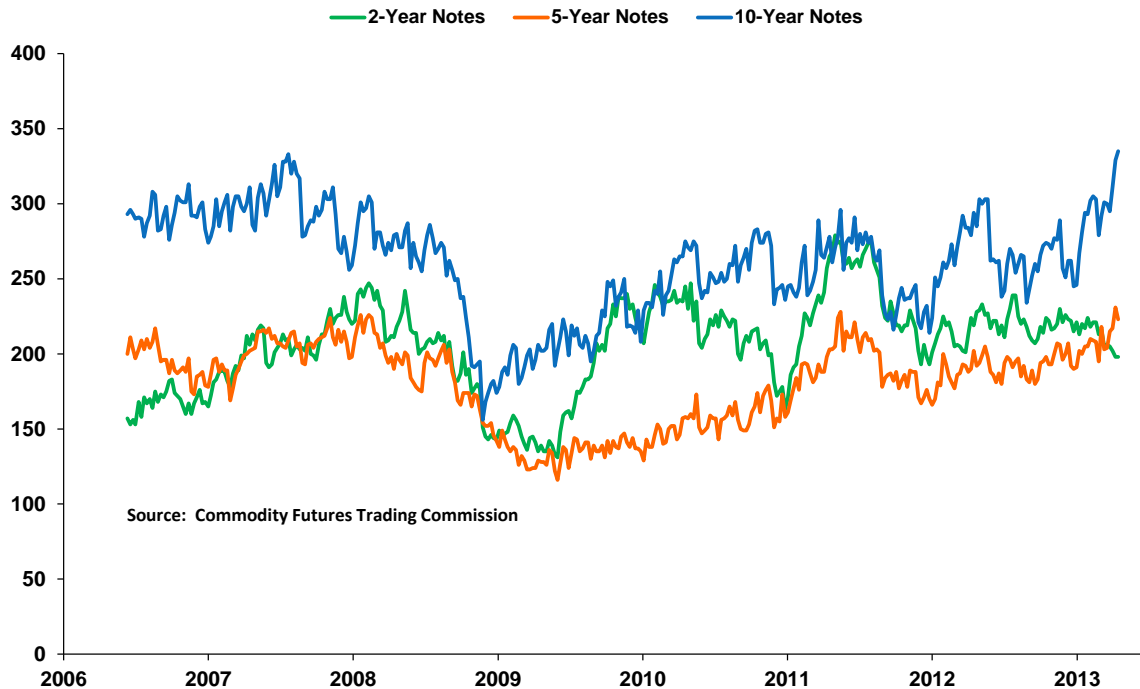
Number of Large Open Interest Holders*



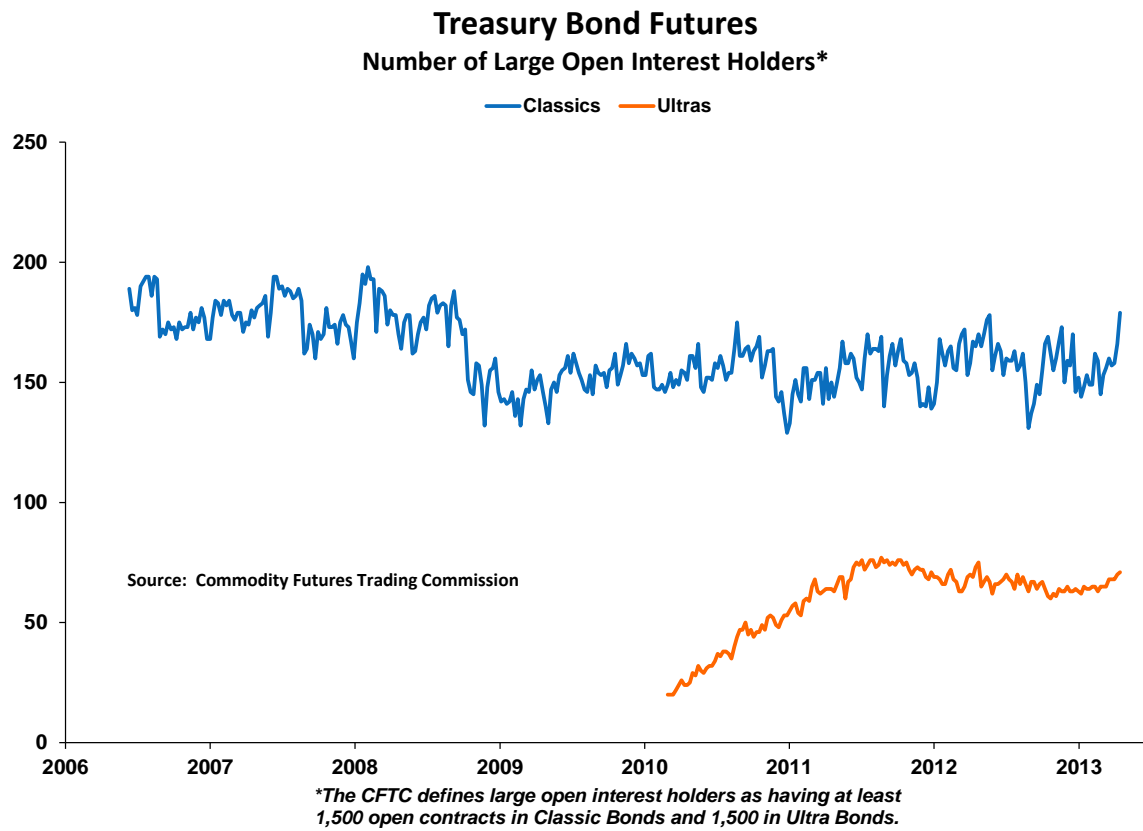
*The CFTC defines large open interest holders as having at least 600 open contracts in Fed Funds and 3,000 in Eurodollars.

Treasury Note Futures

Number of Large Open Interest Holders*



*The CFTC defines large open interest holders as having at least 1,000 open contracts in 2-Year Notes; 2,000 in 5-Year Notes; and 2,000 in 10-Year Notes.

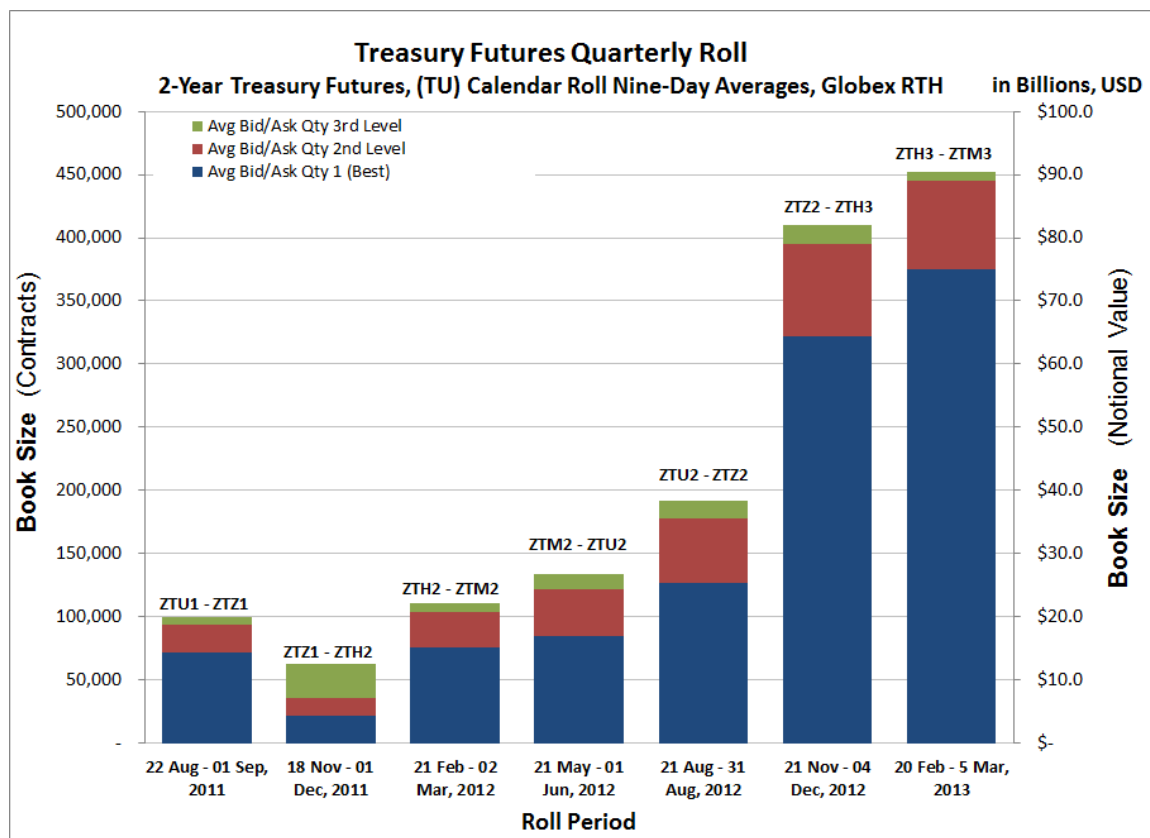
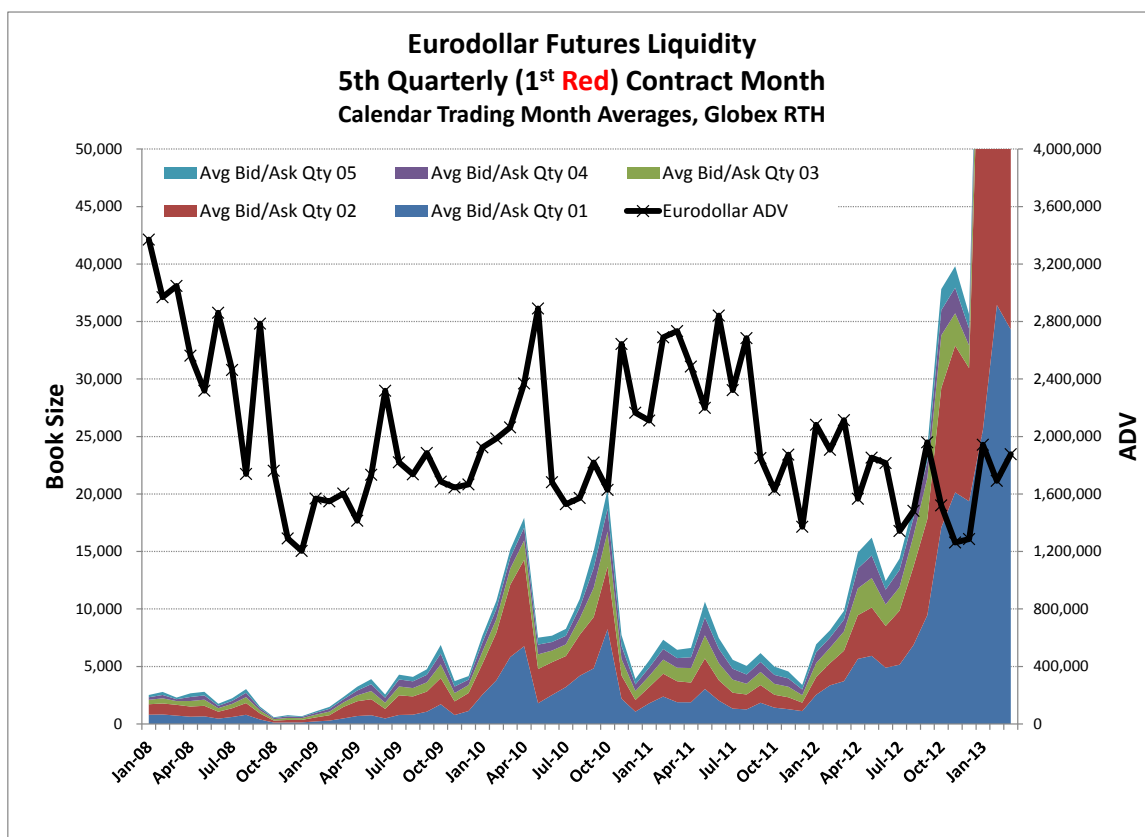


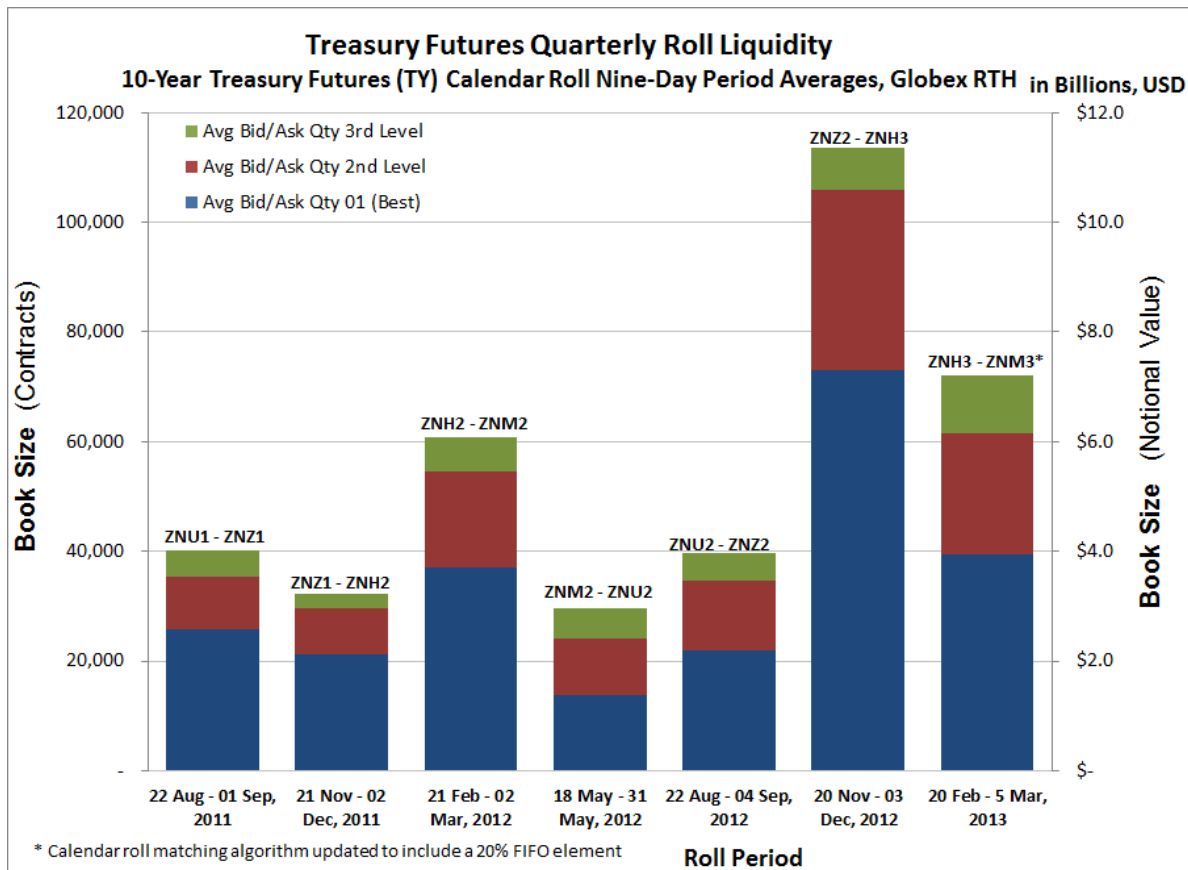
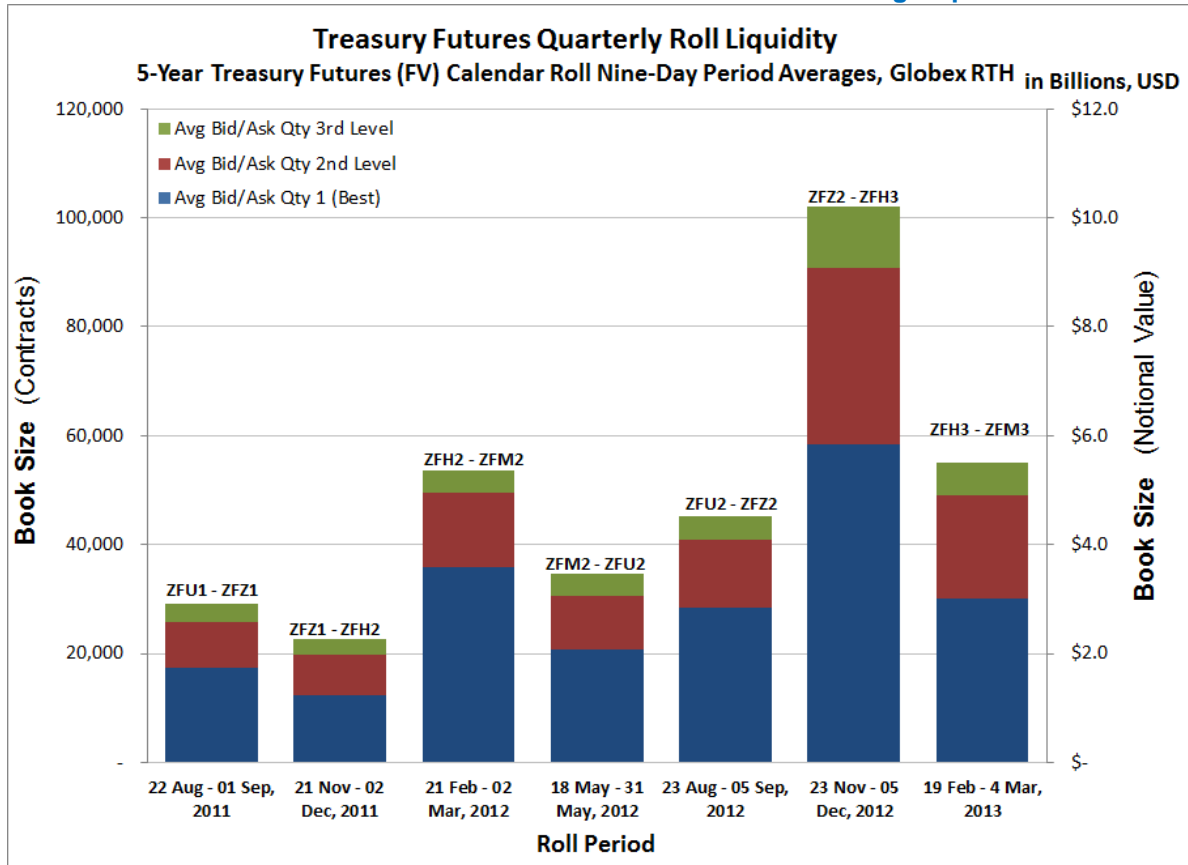
INTEREST RATE LIQUIDITY MONITOR

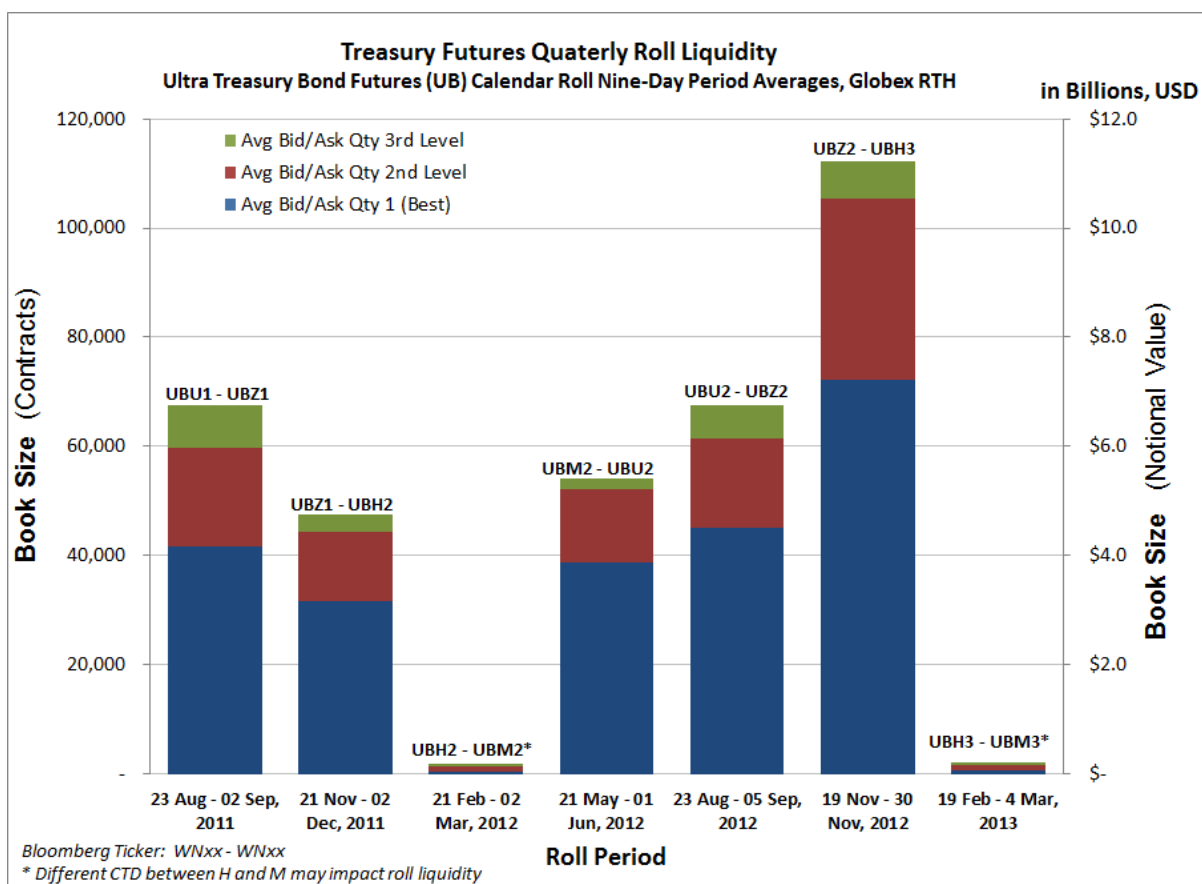
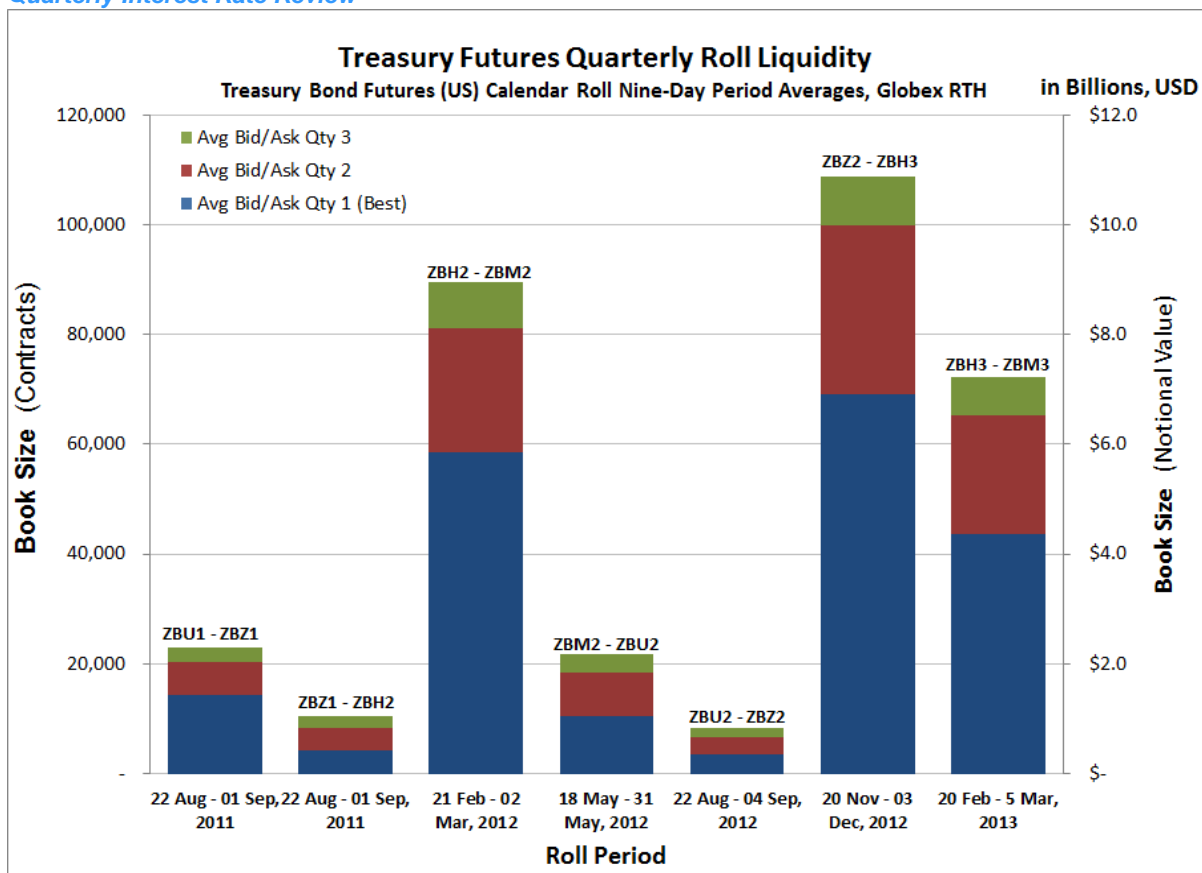
Q1 2013 Highlights

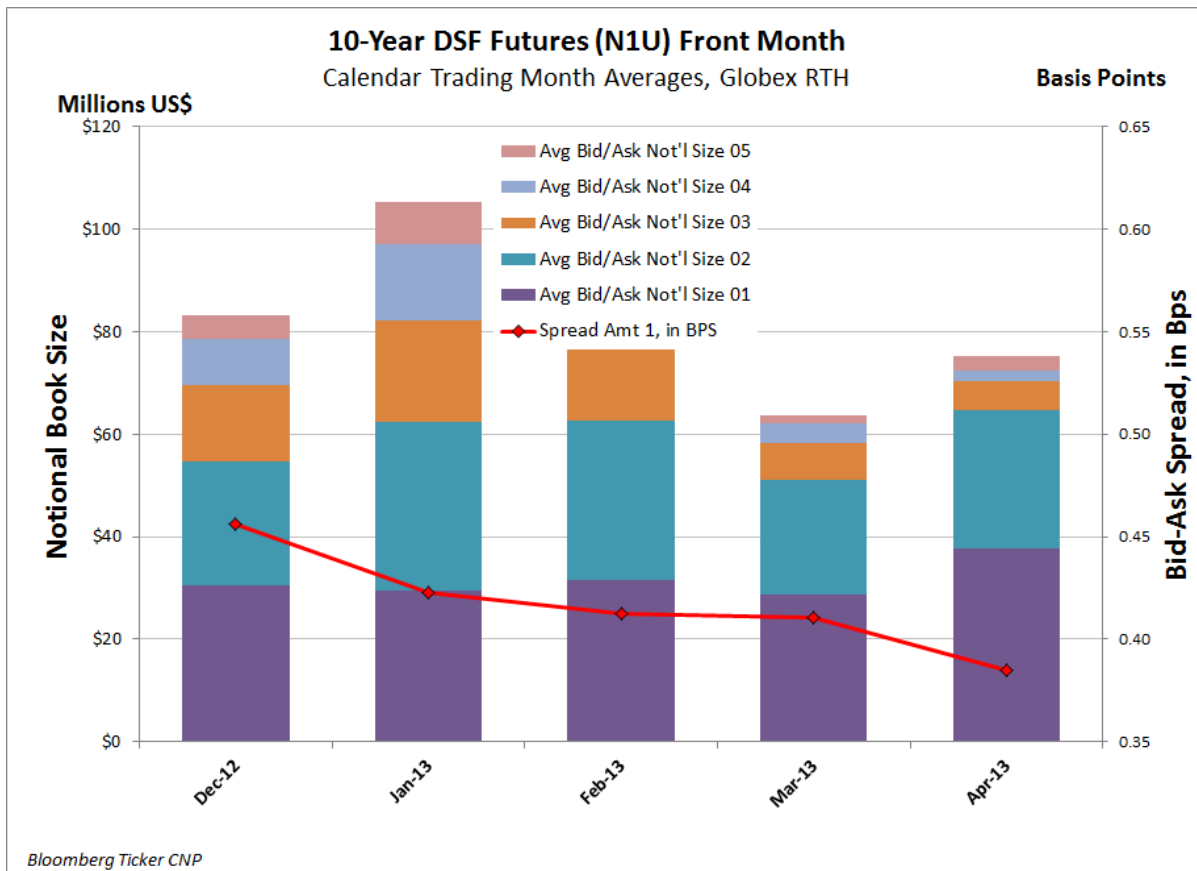
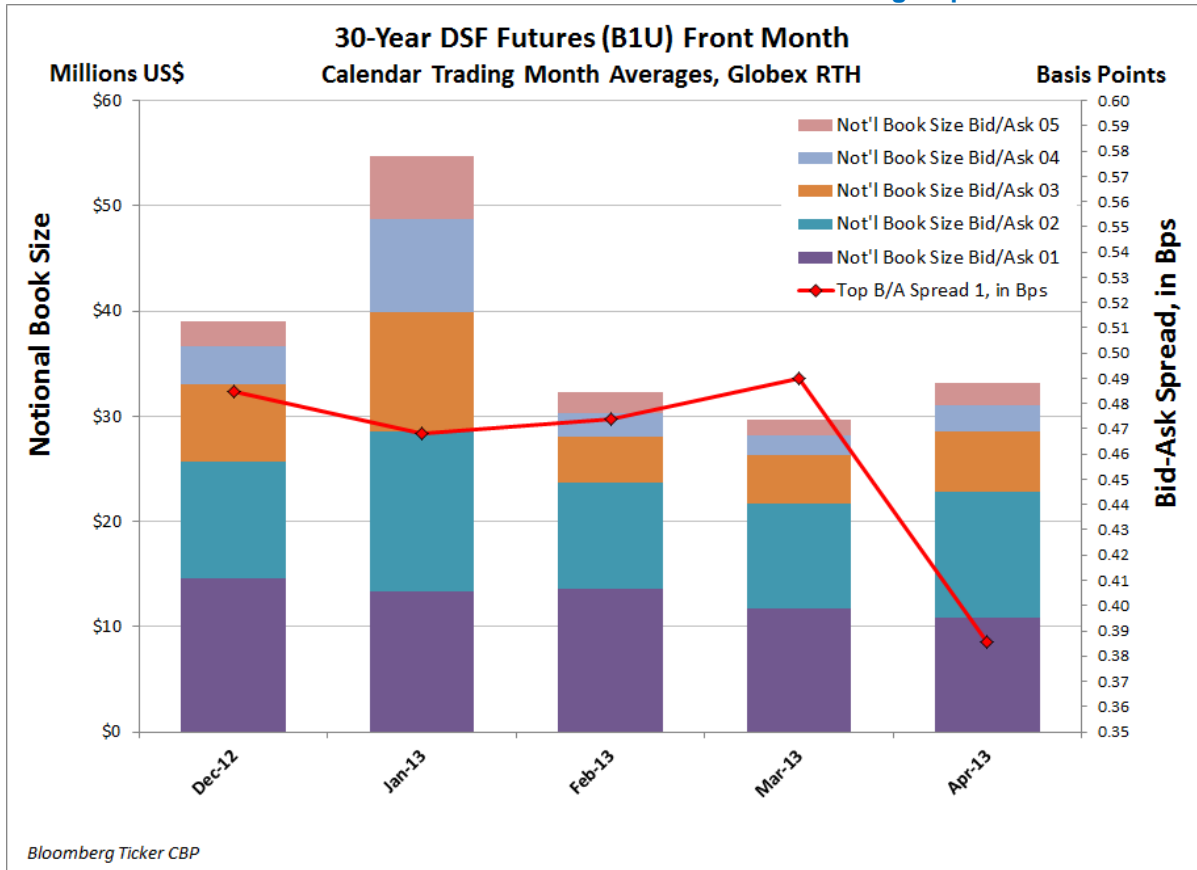
How Liquidity is Calculated

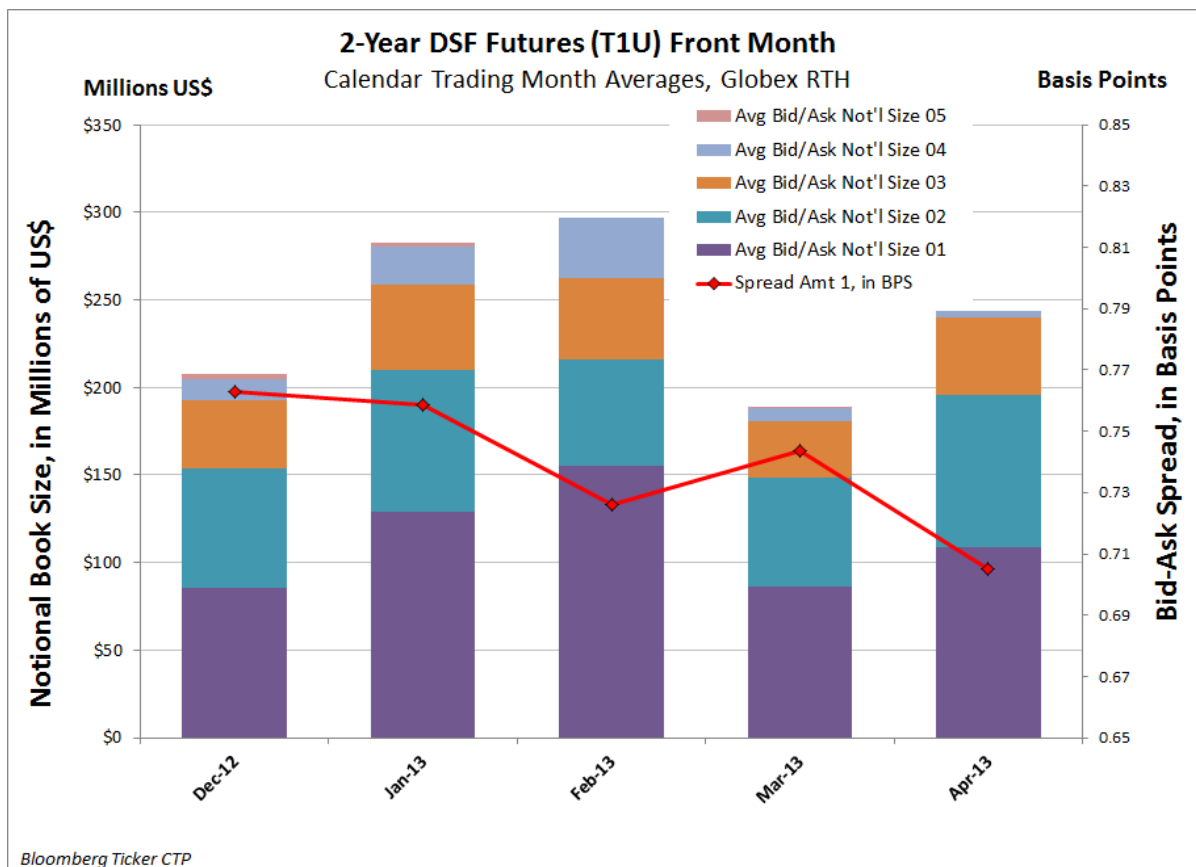
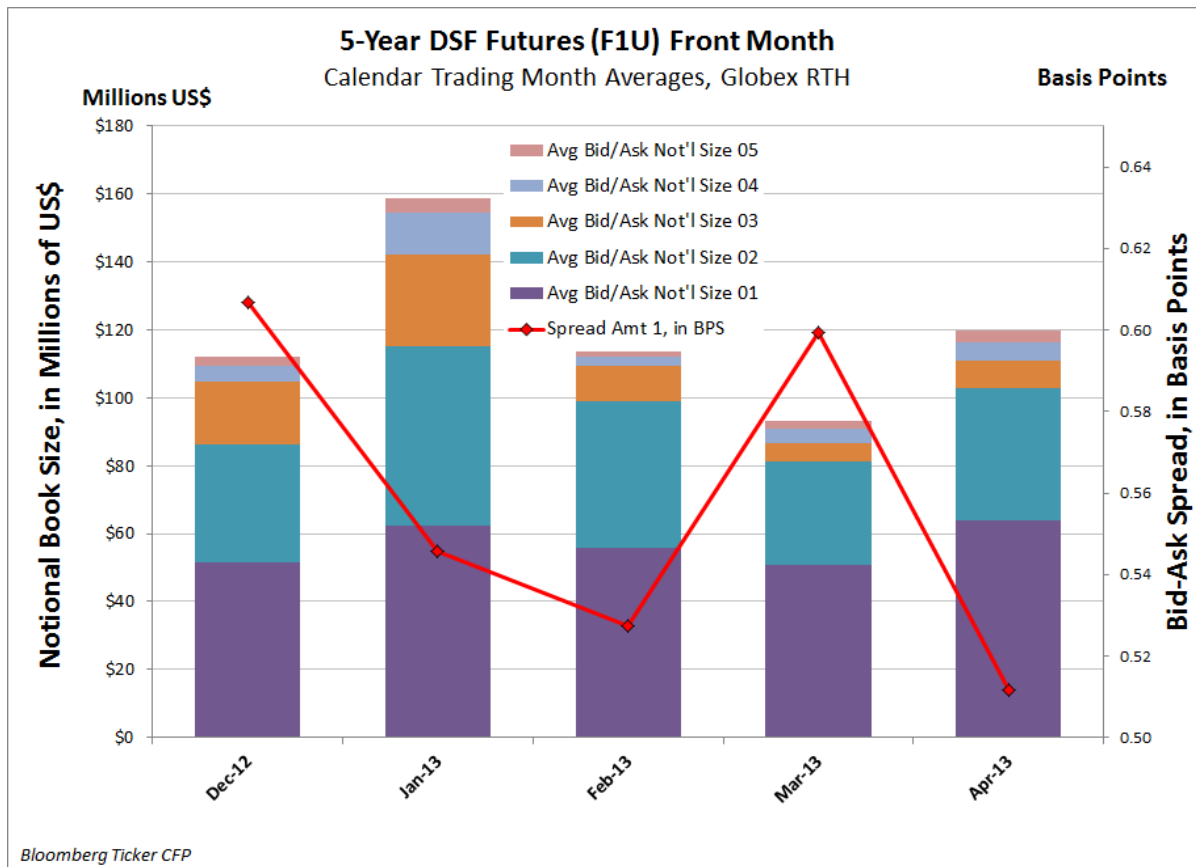
- Globex order book liquidity data are calculated utilizing time-weighted-average (TWA) Globex order book sizes at each generic price level (i.e. best bid/offer, 2nd best, 3rd best, 4th best, and 5th best).
- *Bid/Ask Qty 1* = the average Best Bid and Offer book sizes and are also referred to as the “Top of the Book”. *Bid/Ask Qty 2* = the average order book sizes at the 2nd-best bid and 2nd-best offer, and so on.
- The bid and offer sizes are averaged together, such that if the TWA Best bid size = 36 and the TWA Best offer size = 34, then the *Avg Bid/Ask Qty 1* would equal 35.
- The time-weighted-averages are derived from 7:00 am – 4:00 pm, Chicago time, unless otherwise noted.











CME Group Interest Rate Products

CME Group is the world's leading marketplace for trading short-, medium- and long-term interest rate derivative products. Spanning the entire U.S. dollar-denominated yield curve, our products include futures and options on the most widely followed U.S. interest rate benchmarks: Eurodollars, U.S. Treasury securities, 30-Day Fed Funds, and Interest Rate Swaps. In addition, we offer central counterparty clearing for OTC Interest Rate Swaps. The liquidity, transparency and security of CME Group interest rate markets provide customers around the world with safe, efficient means for managing interest rate risk. Backed by our central counterparty clearing model, we offer powerful solutions to address a wide variety of risk management needs.

For more information, please contact the Interest Rate Products Team:

In New York

Sean Tully, *Managing Director*
212 299 2340
sean.tully@cmegroup.com

In Chicago

Steve Dayon, *Executive Director*
312 466 4447
steven.dayon@cmegroup.com

Jonathan Kronstein, *Senior Director*
312 930 3472
jonathan.kronstein@cmegroup.com

Mike Kamradt, *Executive Director*
312 466 7473
mike.kamradt@cmegroup.com

Dave Reif, *Senior Director*
312 648 3839
david.reif@cmegroup.com

Jennifer Peve, *Executive Director*
(Interest Rates OTC)
312 466 7472
jennifer.peve@cmegroup.com

Matthew Gierke, *Director*
312 930 8543
matthew.gierke@cmegroup.com

In London

David Coombs, *Executive Director*
44 20 3379 3703
david.coombs@cmegroup.com

You may also reach us at: interestrates@cmegroup.com or 866 501 3646.



CME GROUP HEADQUARTERS

20 South Wacker Drive
Chicago, Illinois 60606
cmegroup.com

info@cmegroup.com
+1 800 331 3332
+1 312 930 1000

CME GROUP REGIONAL OFFICES

New York
+1 212 299 2000
Calgary
+1 403 444 6876
São Paulo
+55 11 2565 5999
Washington D.C.
+1 202 638 3838

London
+44 20 3379 3700
Hong Kong
+852 3101 7696
Seoul
+82 2 6336 6722

Singapore
+65 6593 5555
Houston
+1 713 658 9292
Tokyo
+81 3242 6232

Futures trading is not suitable for all investors, and involves the risk of loss. Futures are a leveraged investment, and because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for a futures position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles. And only a portion of those funds should be devoted to any one trade because they cannot expect to profit on every trade.

All references to options refer to options on futures.

CME Group is a trademark of CME Group, Inc. The Globe Logo, CME, Chicago Mercantile Exchange, and Globex are trademarks of Chicago Mercantile Exchange Inc. CBOT and the Chicago Board of Trade are trademarks of the Board of Trade of the City of Chicago. New York Mercantile Exchange and NYMEX are registered trademarks of the New York Mercantile Exchange, Inc. All other trademarks are the properties of their respective owners. The information within this brochure has been compiled by CME Group for general purposes only. CME Group assumes no responsibility for any errors or omissions. Additionally, all examples in this brochure are hypothetical situations, used for explanation purposes only, and should not be considered investment advice or the results of actual market experience. All matters pertaining to rules and specifications herein are made subject to and are superseded by official CME, CBOT, and NYMEX rules. Current rules should be consulted in all cases concerning contract specifications.