



F E D E R A L R E S E R V E

Command the Curve: Treasury Futures and Options for the Active Trader June 26, 2018

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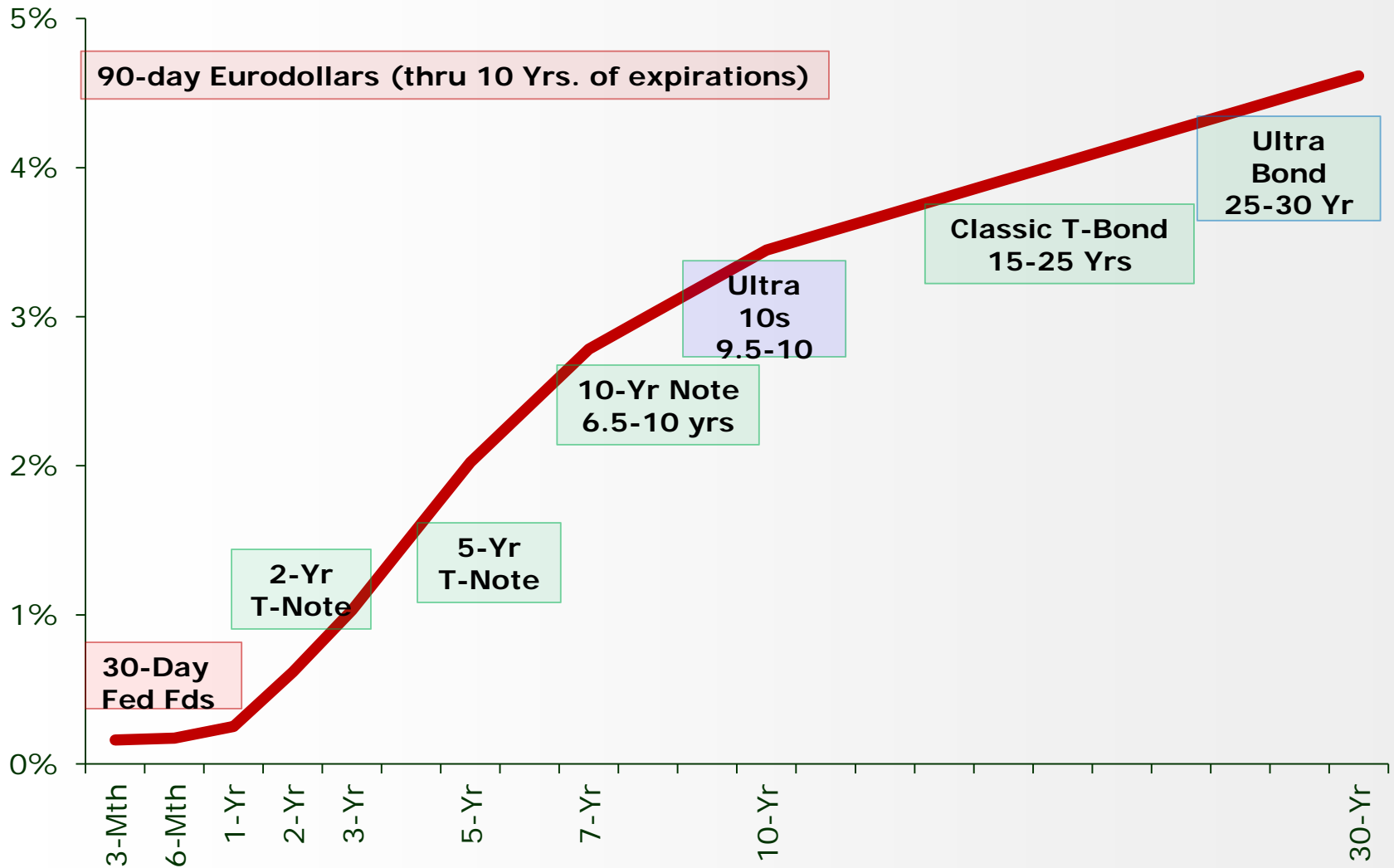
Market Development

Historical developments ...

- **Birth of Financial Futures**
 - Currency futures invented when Bretton Woods broke down in 1972
 - 1st interest rate futures (CBOT GNMA CDRs) in 1975 ... followed by T-bond futures (1977), T-bill futures (1977), Eurodollar futures (1981), etc.
 - Stock index futures introduced in 1982
- **Fed Chairman Volcker and the fight against inflation**
 - Restricted money supply growth, resulted in interest rate volatility
 - Impetus shifted from commodity to financial futures
 - OTC derivatives including interest rate swaps (IRS) on parallel path with futures
 - Options on futures introduced in 1982
- **Market trends enhanced interest in derivatives**
 - Basle Accord of 1988 created demand for government securities
 - **“Black Swan Events” e.g. Credit incidents, subprime mortgage crisis, LTCM, dot-com bubble.... Demonstrated superior liquidity and price discovery of exchange traded derivatives**

Market Development

Interest Rate Products Blanket the Yield Curve



Why Treasury futures over Treasury ETFs

- 1 Execution costs
- 2 Liquidity in Treasuries is unsurpassed
- 3 Capital efficiencies
- 4 Trading 6 days a week, nearly 24 hrs a day
- 5 Strategic reasons
- 6 Pure direct play on “markets” and asset classes
- 7 Clearing house margining system forces active risk management
- 8 Many active traders participate in the futures markets, including large money managers and pension plan sponsors
- 9 Tax considerations

Market Development

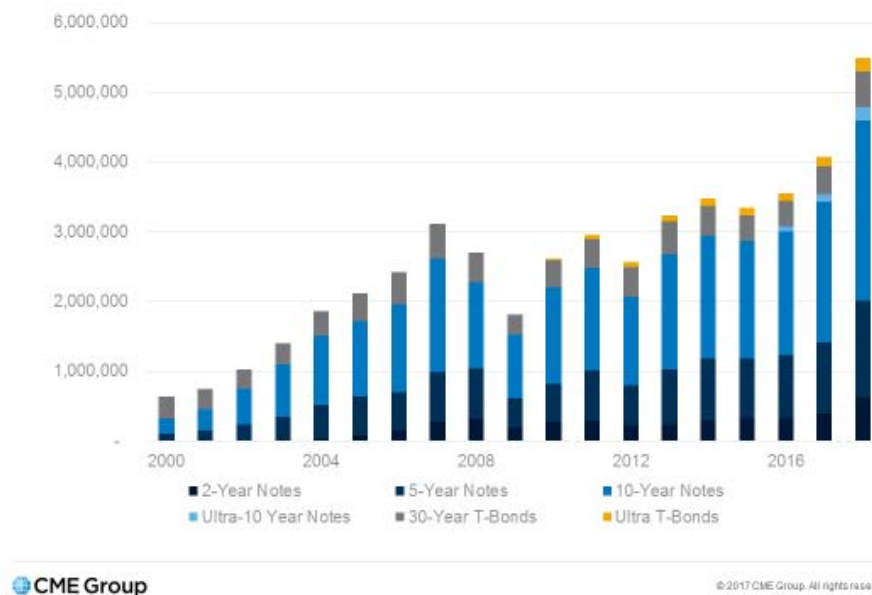
Treasury futures ...

- Generally calls for delivery of \$100,000 face value*
- Treasury futures ADV in 2018 of 4.50 million contracts equals more than \$450 billion notional per day
- Options on treasury futures 960,000 ADV or \$100 billion notional
- Are among the most liquid futures contracts in the world

*2yr contract notional =\$200,000

CME Group Treasury ADVs, Futures and Options

January 2000 – May 2018

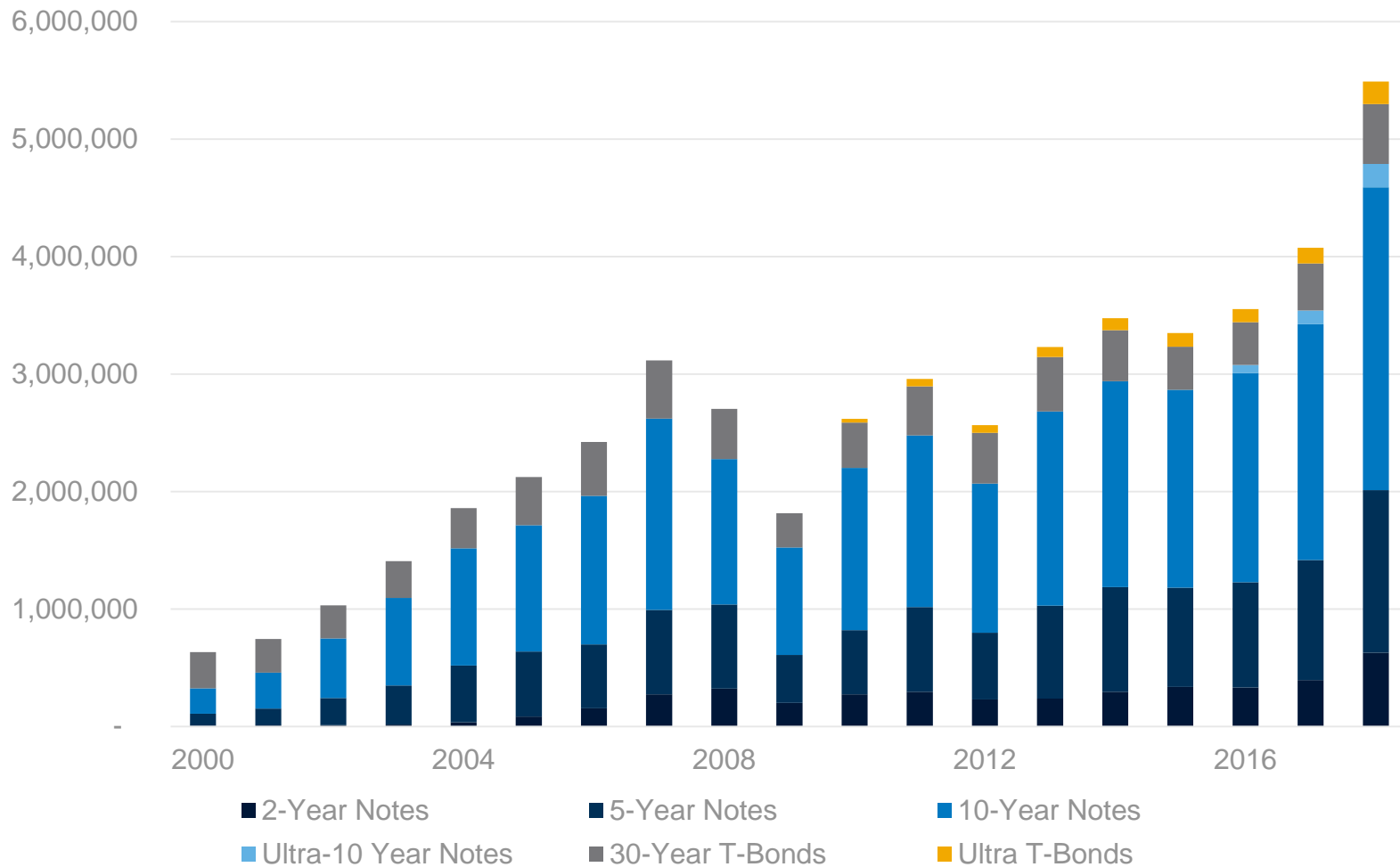


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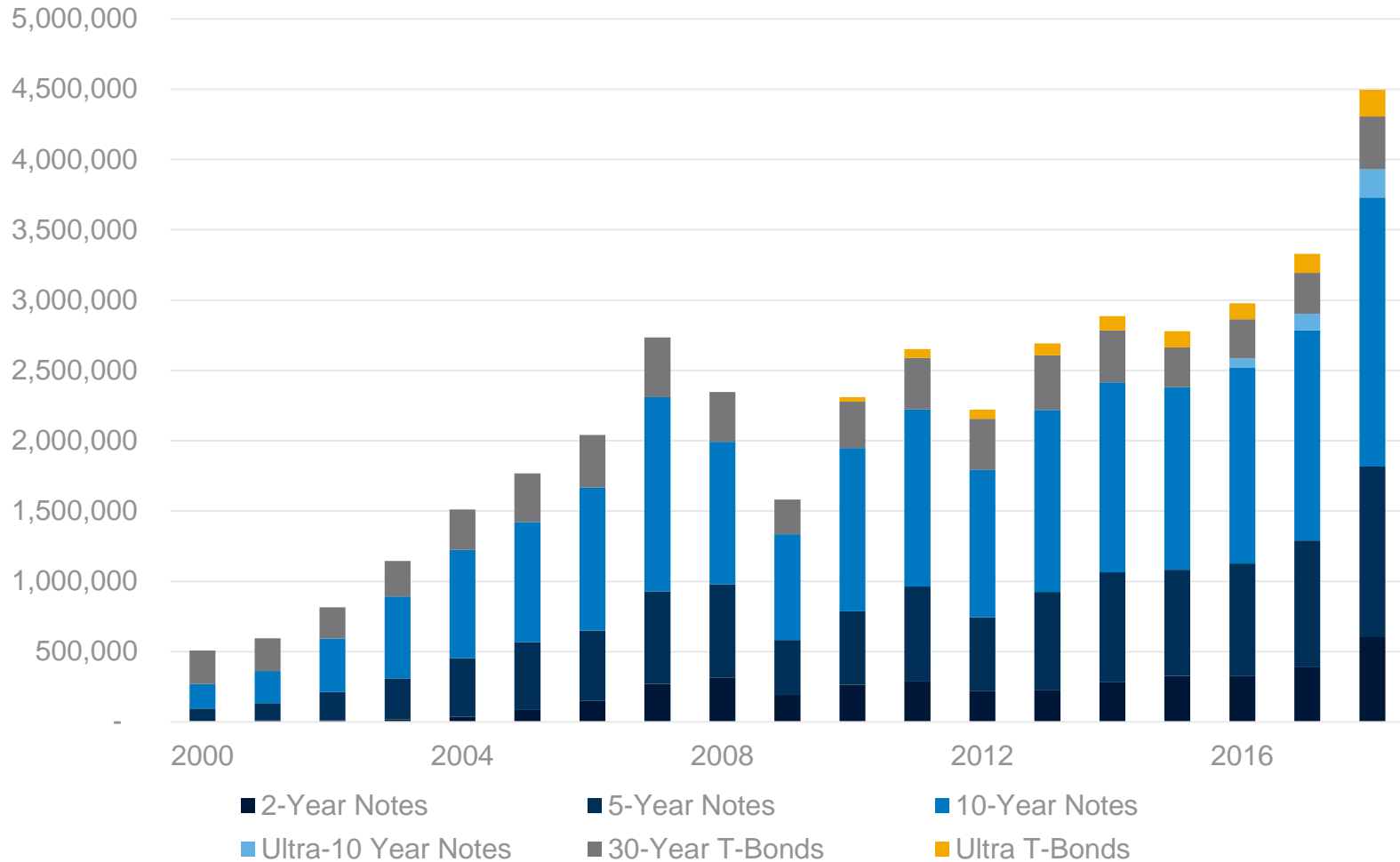
CME Group Treasury ADVs, Futures and Options

January 2000 – May 2018



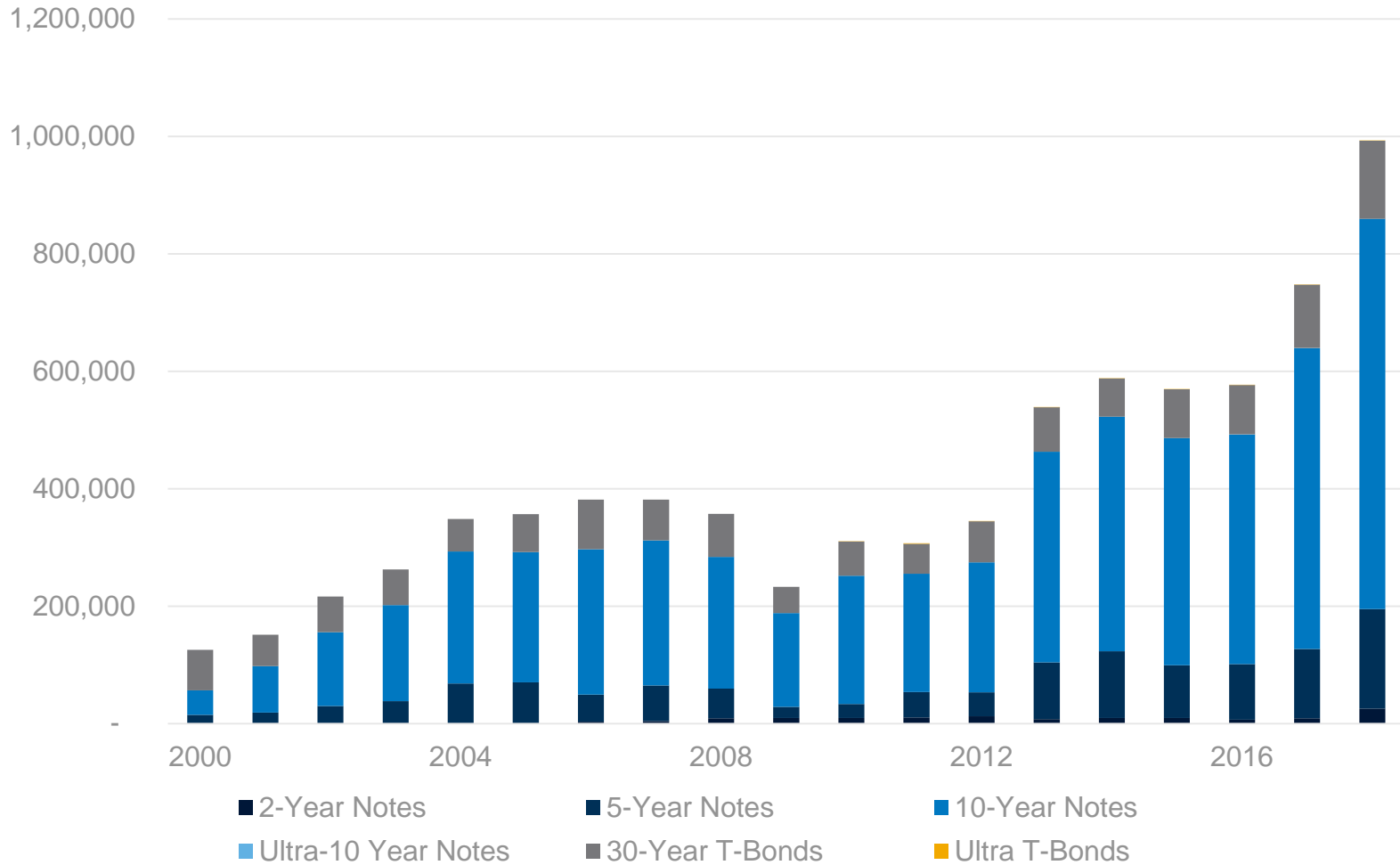
CME Group Treasury ADVs, Futures

January 2000 – May 2018



CME Group Treasury ADVs, Options

January 2000 – May 2018



May 29, 2018—A Watershed Event in CME Group's Treasury Complex

CME Group's suite of interest rate futures and options reached an overall daily volume record of 39.6 million contracts on May 29, surpassing the previous record of 26.6 million contracts set on Nov. 9, 2016. Other May 29 interest rate futures records included:

- More than 24 million Treasury futures contracts traded, surpassing the previous record of 14.5 million contracts set on Feb. 26, 2018
- **8,954,840 10-Year treasury note futures contracts, surpassing the previous record of 5,767,483 set May 24, 2018**
- 7,629,587 5-Year treasury note futures contracts, surpassing the previous record of 4,416,373 set Feb. 26, 2018
- 4,020,553 2-Year treasury note futures contracts, surpassing the previous record of 2,589,074 set Feb. 26, 201
- 1,188,577 Fed Fund futures contracts, surpassing the previous record of 972,657 set May 24, 2018
- 1,091,752 Ultra 10-Year futures contracts, surpassing the previous record of 645,090 set Nov. 27, 2017

Treasury Futures Fundamentals

	2-Year T-Note Futures	5-Year T-Note Futures	10-Year T-Note Futures	Ultra 10-Year T-Note Futures	Classic T-Bond Futures	Ultra T-Bond Futures
Contract Size	\$200,000 value	\$100,000 face-value				
Delivery Grade	Notes with original maturity no greater than 5-1/4 years and remaining maturity of 1 3/4 to 2.0 years	Notes with original maturity no greater than 5-1/4 years and remaining maturity of at least 4 years, 2 months	Notes with original maturity no greater than 10 yrs and remaining maturity of at least 6-1/2 years	Notes with original maturity no greater than 10 yrs and remaining maturity of at least 9 years, 5 months	Bonds with remaining maturity of at least 15 years, but no more than 25 yrs	Bonds with remaining maturity of at least 25 yrs but no more than 30 yrs
Invoice Price	Invoice price = settlement price x conversion factor (CF) + accrued interest Where CF = hypothetical price to yield 6%					
Price Quote	1/4 th of 1/32 nd (\$15.625)	1/4 th of 1/32 nd (\$7.8125)	1/2 of 1/32 nd (\$15.625)		1/32 nd (\$31.25)	
Last Trading Day	Last business day of quarterly contract month.		7 business days preceding last business day of quarterly contract month.			
Symbols GLOBEX Bloomberg	ZT TU	ZF FV	ZN TY	TN UXY	ZB US	UL WN
Performance bond margin	\$460	\$640	\$1,000	\$1,350	\$2,300	\$3,300

Treasury Futures Fundamentals

Quoting Treasuries ...

- U.S. Treasuries quoted in percent of par (100)
- Quoted in increments of $1/32^{\text{nd}}$ of 1% of par ... or to $1/2$ of $1/32^{\text{nd}}$ ($1/64^{\text{th}}$) ... or even to $1/4$ of $1/32^{\text{nd}}$ ($1/128^{\text{th}}$)

Cash Market Quote	Means	Decimal Equivalent	Futures Market Quote
118-20	118-20/32 ^{nds}	118.625% of par	118-20
118-202	118-20/32 ^{nds} + $1/4$ of 1/32	118.6328125% of par	118-202
118-20+	118-20/32 ^{nds} + $1/2$ of 1/32	118.640625% of par	118-205
118-206	118-20/32 ^{nds} + $3/4$ of 1/32	118.6484375% of par	118-207

U.S. Treasury Bond Contract Settlement

Month	Open	High	Low	Last	Change	Settle	Estimated Volume	Prior Day Open Interest
JUN 18	145'11	145'15	144'09	144'27B	-1'06	144'26	26,151	37,943
SEP 18	144'17	144'19	143'14	143'31	-1'06	143'30	345,442	814,887
DEC 18	-	-	144'00A	144'00A	-1'06	143'07	0	6
Total							371,593	852,836

Last Updated: Friday, 01 Jun 2018 03:02 PM [? About This Report](#)

10-Year Treasury Note Contract Settlement

Month	Open	High	Low	Last	Change	Settle	Estimated Volume	Prior Day Open Interest
JUN 18	120'175	120'180B	119'290	120'060B	-'180	120'055	108,738	153,321
SEP 18	120'080	120'080	119'190	119'275	-'190	119'270	1,976,122	3,516,939
DEC 18	-	-	-	-	-'190	119'230	0	4
Total							2,084,860	3,670,264

Last Updated: Friday, 01 Jun 2018 03:02 PM

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Expiration Calendar U.S. Treasury Bond and U.S Treasury Note

US T-bond

Contract Month	Product Code	First Trade Last Trade	Settlement	First Holding Last Holding	First Position Last Position	First Notice Last Notice	First Delivery Last Delivery
Jun 2018	17M18	21 Sep 2017 20 Jun 2018	20 Jun 2018	25 May 2018 27 Jun 2018	30 May 2018 27 Jun 2018	31 May 2018 28 Jun 2018	01 Jun 2018 29 Jun 2018
Sep 2018	17U18	20 Dec 2017 19 Sep 2018	19 Sep 2018	28 Aug 2018 26 Sep 2018	30 Aug 2018 26 Sep 2018	31 Aug 2018 27 Sep 2018	04 Sep 2018 28 Sep 2018
Dec 2018	17Z18	21 Mar 2018 19 Dec 2018	19 Dec 2018	27 Nov 2018 27 Dec 2018	29 Nov 2018 27 Dec 2018	30 Nov 2018 28 Dec 2018	03 Dec 2018 31 Dec 2018

US 10yr T-note

Contract Month	Product Code	First Trade Last Trade	Settlement	First Holding Last Holding	First Position Last Position	First Notice Last Notice	First Delivery Last Delivery
Jun 2018	21M18	21 Sep 2017 20 Jun 2018	20 Jun 2018	25 May 2018 27 Jun 2018	30 May 2018 27 Jun 2018	31 May 2018 28 Jun 2018	01 Jun 2018 29 Jun 2018
Sep 2018	21U18	20 Dec 2017 19 Sep 2018	19 Sep 2018	28 Aug 2018 26 Sep 2018	30 Aug 2018 26 Sep 2018	31 Aug 2018 27 Sep 2018	04 Sep 2018 28 Sep 2018
Dec 2018	21Z18	21 Mar 2018 19 Dec 2018	19 Dec 2018	27 Nov 2018 27 Dec 2018	29 Nov 2018 27 Dec 2018	30 Nov 2018 28 Dec 2018	03 Dec 2018 31 Dec 2018

US 2yr T-note

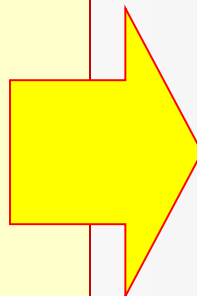
Contract Month	Product Code	First Trade Last Trade	Settlement	First Holding Last Holding	First Position Last Position	First Notice Last Notice	First Delivery Last Delivery
Jun 2018	26M18	02 Oct 2017 29 Jun 2018	29 Jun 2018	25 May 2018 02 Jul 2018	30 May 2018 02 Jul 2018	31 May 2018 03 Jul 2018	01 Jun 2018 05 Jul 2018
Sep 2018	26U18	02 Jan 2018 28 Sep 2018	28 Sep 2018	28 Aug 2018 01 Oct 2018	30 Aug 2018 01 Oct 2018	31 Aug 2018 02 Oct 2018	04 Sep 2018 03 Oct 2018
Dec 2018	26Z18	02 Apr 2018 31 Dec 2018	31 Dec 2018	27 Nov 2018 02 Jan 2019	29 Nov 2018 02 Jan 2019	30 Nov 2018 03 Jan 2019	03 Dec 2018 04 Jan 2019

Market Development

Multiple uses and users of Treasury futures ...

Users

- Commercial & investment banks
- Hedge funds and Commodity Trading Advisors (CTAs)
- Proprietary traders
- Asset managers
- **Active traders**
- Regional banks
- Central banks and sovereign wealth funds



Uses

- **Price & hedge** Treasury and other long- and medium-term note exposures, *i.e.*, adjust duration of fixed income portfolios
- Trade shape of yield curve
- Basis trading or **arbitrage**
- **Outright interest rate speculation**

- When used for risk management ... it's not a “zero-sum game”

Tick Sizes in Treasuries: Very different than E-mini SP 500 and Crude Oil (or anything else for that matter)

Futures Product	Minimum Tick	Value of minimum Tick
U.S. Treasury Bond	1/32 nd	\$31.25
10-Year Treasury Note	1/2 of 1/32 nd	\$15.625
5-Year Treasury Note	1/4 of 1/32 nd	\$7.8125
2-Year Treasury Note	1/4 of 1/32 nd	\$15.625*

*Tick value of 2-Year T-note is higher because 2 year contract is 200,000 in face value while other Treasury futures are 100,000 notional value

The Short end vs. the Long end—May 29 Illustration

Risk/Reward Along the Treasury Curve

Futures	Net change	Net change in dollars per contract
Ultra Bond	3-16	\$3,500.00
U.S. Treasury Bond	2-18	\$2,562.50
10-Yr Treasury Note	1-130	\$1,406.25
5-Yr Treasury Note	0-307	\$960.94
2-Yr Treasury Note	0-130	\$406.25 x 2 = \$912.50*

REMEMBER:

30 yr bond futures trade in increments of $1/32^{\text{nd}}$




10 yr note futures trade in increments of $1/2$ of $1/32^{\text{nd}}$

2/5 yr note futures trade in increments of $1/4$ of $1/32^{\text{nd}}$

&

*The two year note contract is \$200,000 in notional all others \$100,000

Trading the 10-Year Treasury Note future

Month	Options	Charts	Last	Change	Prior Settle	Open	High	Low	Volume	Updated
JUN 2018	OPT		119'260	-0'115	120'055	120'040	120'050	119'260	61,584	14:33:52 CT 04 Jun 2018
SEP 2018	OPT		119'150	-0'120	119'270	119'250	119'270	119'150	1,169,911	14:33:55 CT 04 Jun 2018
DEC 2018	OPT		119'120	-0'110	119'230	119'120	119'120	119'120	1	14:01:07 CT 04 Jun 2018

Q: If a trader bought the settlement price in the September 10 yr note futures
As indicated above, How much has he profited or lost as of June 4th at
2:33 in the afternoon ?

A: The Sept 10 yr note contract is down 12/32nds or 24 “ticks”.
Each 1/32nd is worth \$31.25 (each half 32nd or “tick” is \$15.625)
12 x \$31.25 = \$375 or
24 ticks x \$15.625 = \$375

Trader loses \$375 per contract since he is long.

Spreading Treasury futures—2-Yr note vs. 10-Yr note



Spreading Treasury futures: Ratios

IMPLIED TREASURY & MAC SWAP SPREADS--BASED ON SEPTEMBER 2018 FUTURES CONTRACTS				
Spread Name	Futures Contract Legs	Price Ratio*	Leg Quantity Ratio*	External Name*
TYT	2-Year T- Note vs. 3-Year T-Note	1.6667**	5:3	TYT 05-03 U8**
TFY	2-Year T- Note vs. 5-Year T-Note	2.0000**	1:1	TFY 01-01 U8**
TUF	2-Year T- Note vs. 5-Year T-Note	2.5000**	5:4	TUF 05-04 U8**
TAF	2-Year T- Note vs. 5-Year T-Note	3.0000**	3:2	TAF 03-02 U8**
TUT	2-Year T-Note vs. 10-Year T-Note	4.0000**	2:1	TUT 02-01 U8**
TUX	2-Year T- Note vs. Ultra 10-Year T-Note	6.0000**	3:1	TUX 03-01 U8**
TUB	2-Year T-Note vs. T-Bond	10.0000**	5:1	TUB 05-01 U8**
TUL	2-Year T-Note vs. Ultra T-Bond	14.0000**	7:1	TUL 07-01 U8**
TOF	3-Year T- Note vs. 5-Year T-Note	1.6000**	4:5	TOF 04-05 U8**
TUN	3-Year T-Note vs. 10-Year T-Note	2.5000**	5:4	TUN 05-04 U8**
TYX	3-Year T- Note vs. Ultra 10-Year T-Note	4.0000**	2:1	TYX 02-01 U8**
TOB	3-Year T-Note vs. T-Bond	6.0000**	3:1	TOB 03-01 U8**
TOU	3-Year T-Note vs. Ultra T-Bond	10.0000**	5:1	TOU 05-01 U8**
FIT	5-Year T-Note vs. 10-Year T-Note	1.6667	5:3	FIT 05-03 U8
FYN	5-Year T-Note vs. 10-Year T-Note	1.0000	1:1	FYN 01-01 U8
FYT	5-Year T-Note vs. 10-Year T-Note	1.5000	3:2	FYT 03-02 U8
FIX	5-Year T- Note vs. Ultra 10-Year T-Note	2.5000	5:2	FIX 05-02 U8
FOB	5-Year T-Note vs. T-Bond	4.0000	4:1	FOB 04-01 U8
FOL	5-Year T-Note vs. Ultra T-Bond	6.0000	6:1	FOL 06-01 U8
NON	10-Year T-Note vs. Ultra 10-Year T-Note	1.0000	1:1	NON 01-01 U8
TEX	10-Year T-Note vs. Ultra 10-Year T-Note	1.5000	3:2	TEX 03-02 U8
NBY	10-Year T-Note vs. T-Bond	1.0000	1:1	NBY 01-01 U8
NOB	10-Year T-Note vs. T-Bond	2.5000	5:2	NOB 05-02 U8
NOL	10-Year T-Note vs. Ultra T-Bond	4.0000	4:1	NOL 04-01 U8
NCB	Ultra 10-Year T-Note vs. T-Bond	1.6667	5:3	NCB 05-03 U8
NUB	Ultra 10-Year T-Note vs. Ultra T-Bond	2.5000	5:2	NUB 05-02 U8
BOB	T-Bond vs. Ultra T-Bond	1.5000	3:2	BOB 03-02 U8
BUB	T-Bond vs. Ultra T-Bond	1.0000	1:1	BUB 01-01 U8
FNU	5-Year MAC Swap vs. 10-Year MAC Swap	2.0000	2:1	FNU 02-01 U8

*Leg quantity and price ratios are subject to change. Highlighted ratios are unchanged from prior quarterly expiration. **Price ratios of spreads involving 2-Year and 3-Year T-Notes are doubled to account for larger notional size (\$200K) in the price changes of the spreads. However, the ratio of the TYT is not doubled because the contracts have the same notional size.

Spreading Treasury futures—2-Yr note vs. 10-Yr note

Margin Requirement/Margin Credits

A trader believes that the yield curve (from the 2yr to 10 yr frame) is going to flatten from its current 47 basis points to near zero. To play this opportunity, he decides to short 2-yr T-note futures and go long 10-yr T-note futures.

But he needs to know what the accepted ratio is on the spread and the margin?

Short 2 contracts of the 2 yr Treasury note contract (Sep..TUU18)
Long 1 contract of the 10 yr Treasury note contract (TYU18)

Margin Calculation:

Margin on Short 2 TUU18	$\$460 \times 2$	= \$ 920
Margin on Long 1 TYU18	$\$1,000$	= \$1,000
Total margin		= \$1,920
Margin credit		= $\$1,920 \times (1-.70)$
		= \$ 576
		=a substantial margin savings

Treasury Bond Futures vs. iShares 20 yr Treasury Trust (TLT)

	T-Bond futures	iShares 20 yr Treasury Bd Fund
Where Traded:	CME Group	Various exchanges
Ticker symbol:	US	TLT
Underlying	Cash 30-yr T-bond*	US T-bonds portfolio
Minimum tick	½ of 1/32 nd (\$15.63)	.01
Notional or Dollar value	\$ 100,000	\$126 a share
Ave. Daily volume**	386,000 contracts	10.6 million shares
Ave. Daily \$volume	\$ 38.6 billion	\$ 1.33billion
Margin	2% percent (\$2,150)	50% Reg T margin FRBNY
Transaction costs	1 basis pt	1 basis pt
Management fee	n/a	.15 annually
24 hour trading	nearly 24 hours	??
Options	yes	yes
Tax Treatment	section 1256 (60/40)	no 60/40, LTCG applies
Number of ETF shares to		1,300
Equal 1 futures		

* The T-bond contract typically tracks the CTD long bond. In addition, several cash bonds can be delivered into the contract at delivery

Source: David Lerman, Director, Client Dev. And Sales-- Asset Managers

Data as of Q1 2018

CME 10-yr Treasury Note Futures vs. iShares 7-10 yr Treasury ETF

	10 yr T-note futures	iShares 7-10 yr Treasury Trust
Where Traded:	CME Group	Various exchanges
Ticker symbol:	TN	IEF
Underlying	CTD Cash 10-yr T-note	portfolio of US T-notes
Notional amt	100,000	n/a
Minimum tick	half of 1/32 nd (\$15.63)	.01
Notional or Dollar value	\$100,000	\$103 share
Ave. Daily volume	1,900,000 contracts	3.29 million shares
Ave. Daily \$volume	\$193 billion	\$.34 billion
Margin	0.90 percent (\$900)	50% Reg T margin FRBNY
Transaction costs	less than 1 basis pt	. 1 basis pt
Annual Management fee	zero	15 basis points
24 hour trading	nearly 24 hours	??
Options	yes	yes
Tax Treatment	section 1256 (60/40)	no 60/40, LTCG applies

Source: David Lerman, CME Broker Services, CME Group

Data as of Q1 2018

For the Active Retail Trader: Death & Taxes and Futures Profits—“It’s not what you make...”

Let’s compare two traders. One trader makes a short-term gain of \$10,000 trading Treasury Bond Futures. The other trader had a short-term gain of \$10,000 trading the Treasury Bond ETF (TLT). Assume 33% tax bracket.

TRADER A	TRADER B
Treasury Bond futures short-term profit	TLT ETF short-term profit
\$10,000	\$10,000
<p>Trader A taxed according to section 1256 of IRS code aka 60/40</p> <ul style="list-style-type: none"> • 60% of gain taxed at long term capital gains (15%). • 40% is taxed at ordinary income (33%). • His tax will be a blended rate of 21.2% and will give up \$2120.00 to the IRS 	<p>Trader B pays ordinary income on short term trade of 33% or \$3300.00</p>
<p>TRADER A KEEPS \$7,880 PER THOUSAND PROFIT....PAYS \$2,120.00</p>	<p>TRADER B KEEPS \$6,700 PER THOUSAND PROFIT....PAYS \$3,300.00</p>
<p>TRADER A KEEPS SUBSTANTIALLY MORE OF HIS PROFITS!</p>	

Hypothetical example, for illustrative purposes only. Not a recommendation.

Size of futures market vs. ETF market

Average Daily dollar volume of Primary Futures market vs. Corresponding ETF

Futures/ETF	Futures ADV in \$	ETF ADV in \$	Ratio
E-mini S&P 500/SPY	264 billion	32.6 billion	8.1X
E-mini S&P/All 7,000 ETFs globally	264 billion	95 billion	2.77X
10 year T-note futures/IEF	193 billion	.34 billion	567 X
Crude Oil futures/USO	81 billion	.26 billion	311 X
30 year T-bond futures/TLT	38 billion	1.33 billion	28.6X
Gold futures/GLD	50 billion	1.1 billion	45.5 X
Nasdaq 100 futures/QQQ	64 Billion	8.0 billion	8 X
Euro FX futures/ FXE	43 billion	.29 billion	148.3 X
Copper futures/3 Copper ETFs	10.7 billion	.01 billion	1070X

Options on 10-Yr Treasury Note Futures: Implied Volatility 3 years ending June, 14 2018



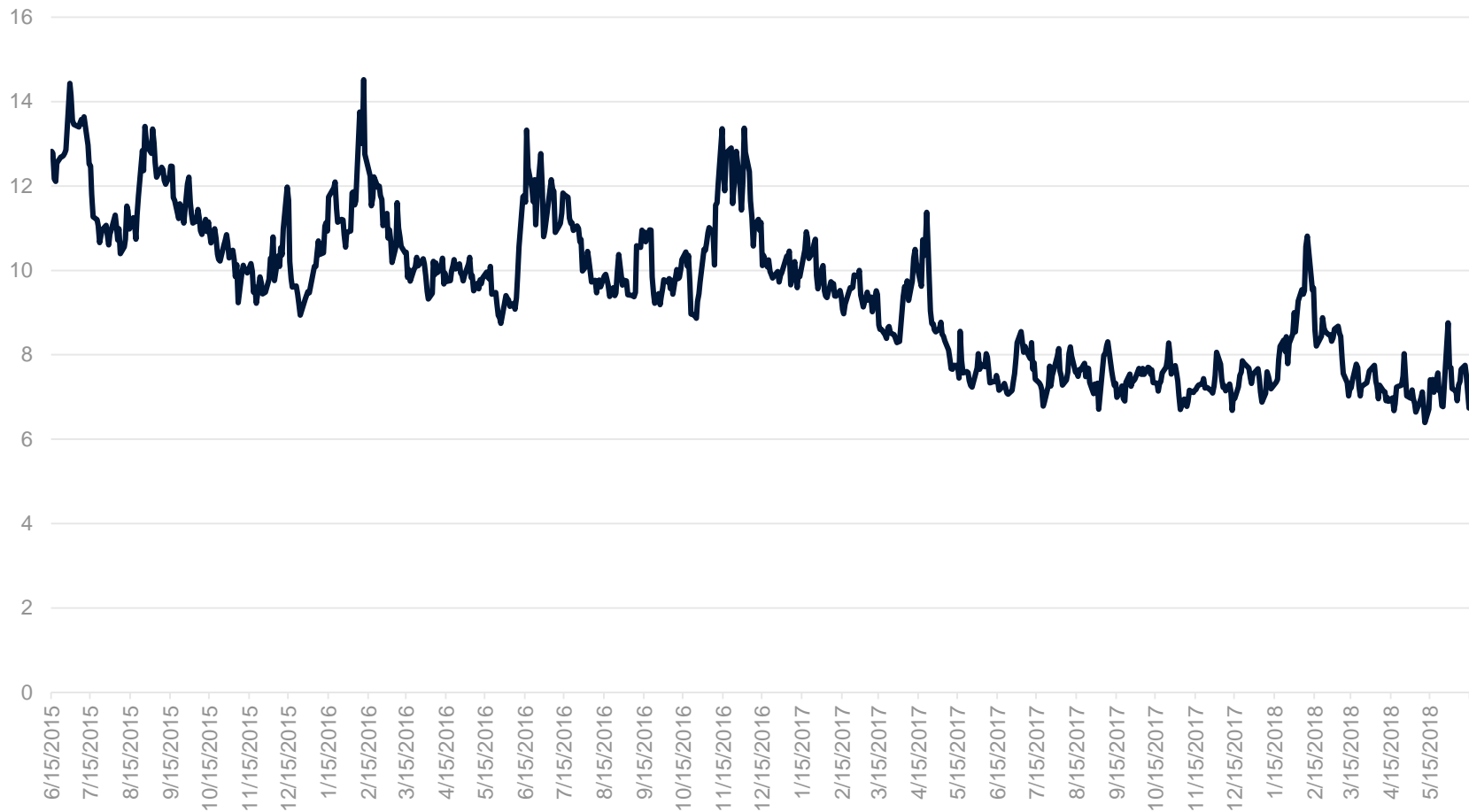
Source: QuikStrike/CME Group

Options on 10-Yr Treasury futures: Volatility Percentile Rankings.

Impact on Strategies—3 yrs ending June 14, 2018

Percentile Ranking	ATM Implied Vol Level	Est. ATM Straddle* in premium & dollar terms
High	7.12	1-47 (\$1,734)
90 th percentile	5.65	1-26 (\$1,406)
75 th percentile	5.09	1-17 (\$1,265)
50 th percentile	4.67	1-10 (\$1,156)
25 th percentile	4.02	1-00 (\$1,000)
10 th percentile	3.60	0-58 (\$906)
Low	3.15	0-51 (\$797)
<i>Current volatility as of 6/15/18</i>	<i>???</i>	
* ATM implied Volatility 120 straddle 23 days to expiry		

Options on Classic Treasury Bond futures: Implied Volatility 3 years ending June, 2018



Source: QuikStrike/CME Group

Options on Classic Bond futures: Volatility Percentile Rankings

Impact on Strategies—3 yrs ending June 14, 2018

Percentile Ranking	ATM Impl. Vol Level	Est. ATM Straddle* in premium (in 64ths)& dollar terms
High	14.52	4-15(\$4,234)
90 th percentile	11.87	3-34(\$3,531)
75 th percentile	10.76	3-13(\$3,203)
50 th percentile	9.59	2-54(\$2,844)
25 th percentile	7.65	2-18(\$2,281)
10 th percentile	7.23	2-09(\$2,140)
Low	6.39	1-57(\$1,890)
<i>Current volatility as of 6/15/18</i>	<i>???</i>	
* ATM implied Volatility (144 Straddle) 23 days to expiry		

Assessment of Market Risks

Measuring benchmark risk with breakeven analysis

- **Breakeven (B/E) rate analysis asks ... how far must rates rise before the price decline offsets 1 year of coupon income?**
- **May be estimated as yield divided by duration**
- ***E.g.*, Treasury return = 0 if rates rise 34 basis points**

Breakeven (B/E) Rate Analysis (Dec 2017)

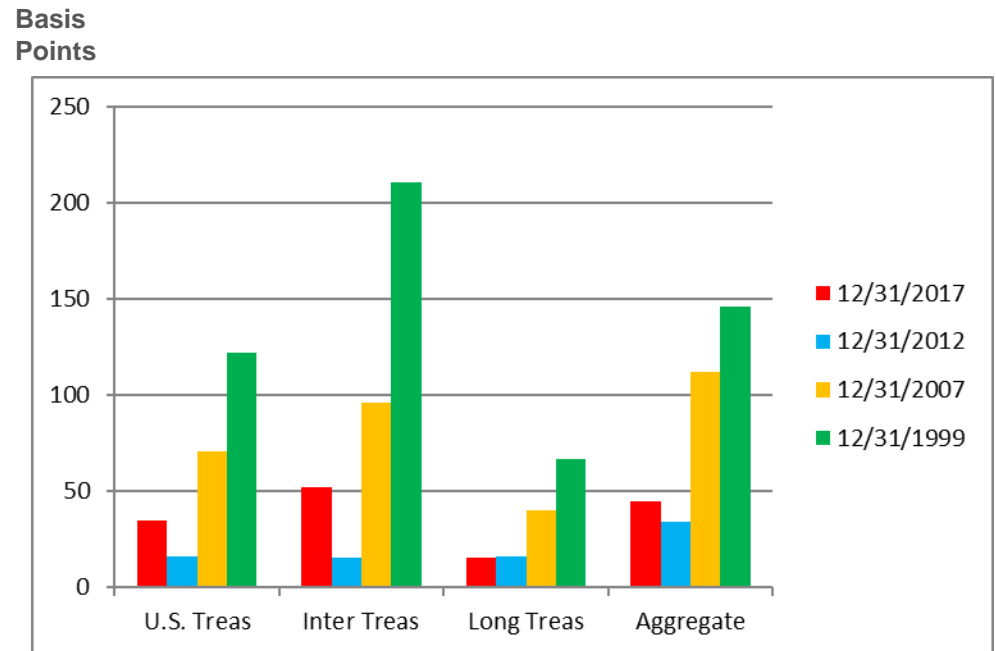
Barcap Index	Duration (Years)	Yield	B/E Rate Advance
U.S. Treasury	6.3	2.16%	34 bps
Inter. Treasury	3.9	2.05%	52 bps
Long Treasury	17.7	2.72%	15 bps
Aggregate	6.0	2.71%	45 bps

Source: Barclays Capital, Bloomberg

Assessment of Market Risks

Measuring benchmark risk with breakeven analysis

- **B/E Rate Advances near all-time historical lows ...**
- **Significant potential risk for Treasury investors as compared to other historical periods**



Addendum: Homework for the future-- The Treasury Delivery Process Timeline

“Anyone holding a position in an expiring Treasury futures contract during its delivery month must be prepared to fulfill the contractual obligation to deliver, or take delivery of, the underlying deliverable grade Treasury securities. For this reason delivery on the contract – or the prospect of it – is the chief determinant of prices at which Treasury futures trade.”

CME Group Publication, “The U.S. Treasury Futures Delivery Process”
December 2011

Disclaimer

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.

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