

Federal Home Loan Bank of Boston Webinar

# Successfully Managing the Bond Portfolio in a Low-Rate, Overly Liquid Market

Presented by:

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April 3, 2013

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# The Problem We Face

## The Classic Banker's Trap

1. Too Much Liquidity
2. Sparse Loan Demand
3. Too little yield available
4. The curve is steep and extending duration looks dangerous, but...
5. ...sitting in funds looks worse

# What Do You Require of Your Portfolio?

The Primary Purpose of the Bond Portfolio Is:

1. Liquidity...holding pen for loan growth
2. Income...a critical NIM driver
3. Collateral vs. public funds

# How are Interest Rates Faring?

Bond Yields are:

1. Low, but trading at “new normal” levels. Get used to it.
2. Headed higher when QE and non normal measures from the Fed cease.

# Can You Put a Date On It?

Bond Yields will be:

1. 300bps+ higher by Jan 2015 (2yrs)
2. 300bps+ higher by Jan 2016 (3yrs)
3. 300bps+ higher by Jan 2017 (4yrs)
4. Ups and downs but roughly the same by Jan 2016

# When Will Unemployment Reach 6.50%

The current unemployment rate is 7.7%. Over the past two years, monthly job creation has averaged 150K. When will the jobless rate decline to 6.50%?

1. Sometime before Jan 2014
2. Sometime before Jan 2015
3. Sometime before Jan 2016
4. Sometime after Jan 2016

# Which Product Performed the Best in 2012?

Who Won Last Year? (highest return)

1. 1-3yr Agencies
2. 1-3yr WAL MBS
3. 1-3yr Corps (rated A or better)
4. 1-3yr General Obligation Muni Bonds (rated A or better)

# Which Products Performed the Best in 2012?

Who Won Last Year? (*Answer Key*)

1. 1-3yr General Obligation Muni Bonds (rated A or better)
2. 1-3yr Corps (rated A or better)
3. 1-3yr WAL MBS
4. 1-3yr Agencies

# And Treasuries won HUGE in 2011

2011 TOP PERFORMING ETFs		
TICKER	FUND	% Gain
ZROZ	Pimco 25+ Yr Zero Cpn USTs	51.90%
EDV	Vanguard Extended Duration USTs	48.74%
DTYL	iPath USTs 10yr Bull ETN	44.38%
DLBL	iPath USTs Long Bull ETN	41.99%
TLT	iShares Barclays 20+yr USTs	27.47%
TLO	SPDR Barclays Long Term Govt Bond	25.13%
VGLT	Vanguard Long Term Govt Bond	23.75%
LTPZ	Pimco 15+ Yr US TIPs	20.16%
IHE	iShares Dow Jones US Pharm	19.26%
BNO	United States Brent Oil	19.02%

source: Index Universe

# Why Did This Happen?

## High Grade Bonds Fared Well Because

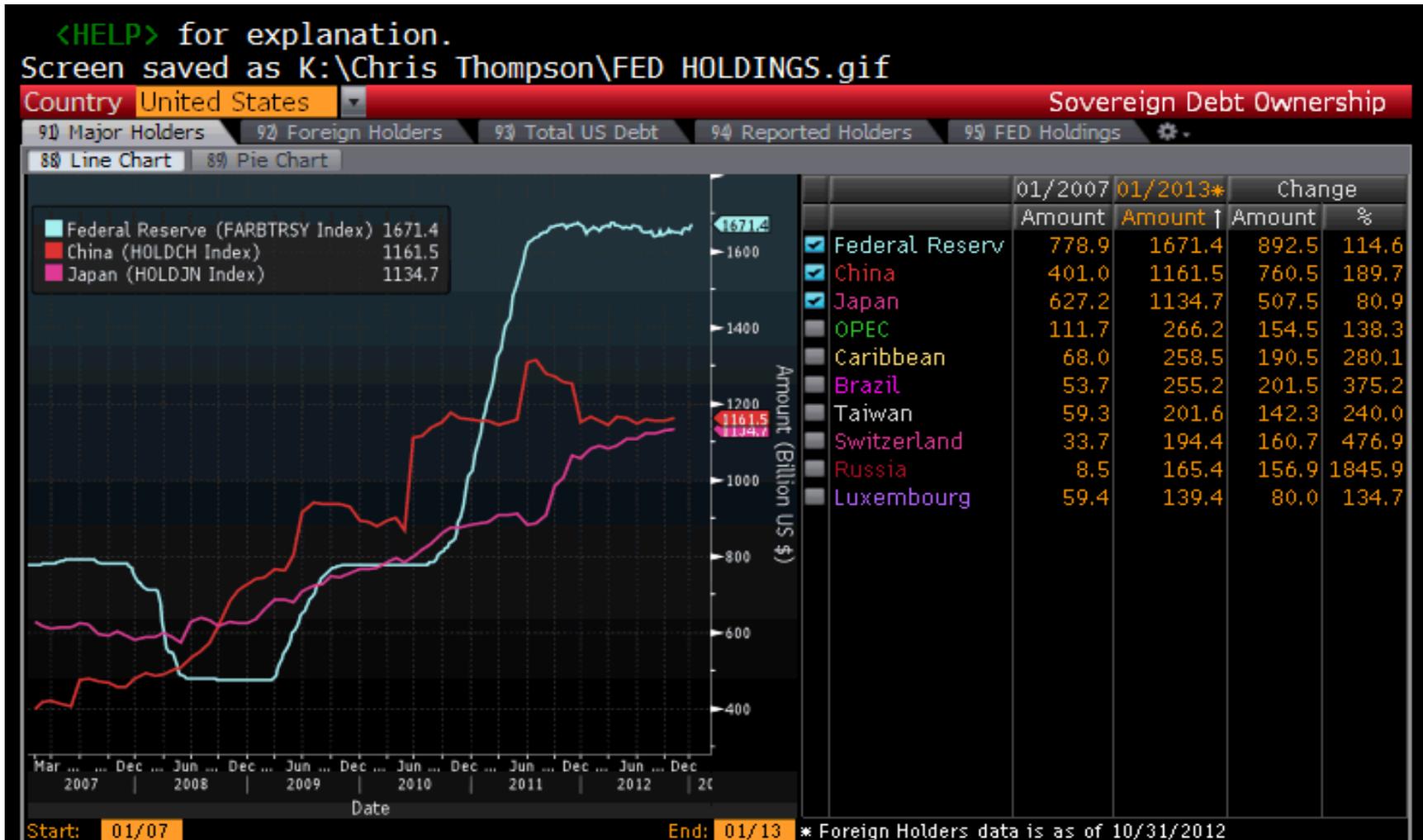
- ✓ Interest Rates Trended (mostly) lower
  - ✓ The Fed is buying massive sums
    - *“Don’t Fight the Fed”*

# Treasury Rates in 2012

I25 US Treasury Actives Curve				I25 US Treasury Actives Curve			I25 (Change)	
01/11/13				01/03/12			01/11/13-01/03/12	
Tenor	Description	Mid Price	Mid Yield	Description	Mid Price	Mid Yield	Price	Yield
1M	B 0 02/07/13 Govt	0.043	0.043	B 0 01/26/12 Govt	0.003	0.003	0.040	0.041
3M	B 0 04/11/13 Govt	0.067	0.068	B 0 03/29/12 Govt	0.010	0.010	0.057	0.058
6M	B 0 07/11/13 Govt	0.098	0.099	B 0 06/28/12 Govt	0.053	0.053	0.045	0.046
1Y	B 0 01/09/14 Govt	0.133	0.134	B 0 12/13/12 Govt	0.103	0.104	0.030	0.030
2Y	T 0 <sup>1</sup> / <sub>8</sub> 12/31/14 Gov	99-24 <sup>1</sup> / <sub>4</sub>	0.251	T 0 <sup>1</sup> / <sub>8</sub> 12/31/13 Gov	99-23 <sup>3</sup> / <sub>4</sub>	0.257	0.016	-0.006
3Y	T 0 <sup>3</sup> / <sub>8</sub> 01/15/16 Gov	100-00	0.376	T 0 <sup>1</sup> / <sub>4</sub> 12/15/14 Gov	99-19	0.390	0.406	-0.014
5Y	T 0 <sup>3</sup> / <sub>4</sub> 12/31/17 Gov	99-27+	0.780	T 0 <sup>7</sup> / <sub>8</sub> 12/31/16 Gov	99-31+	0.879	-0.125	-0.099
7Y	T 1 <sup>1</sup> / <sub>8</sub> 12/31/19 Gov	99-00 <sup>3</sup> / <sub>4</sub>	1.272	T 1 <sup>3</sup> / <sub>8</sub> 12/31/18 Gov	99-24 <sup>3</sup> / <sub>4</sub>	1.409	-0.750	-0.137
10Y	T 1 <sup>5</sup> / <sub>8</sub> 11/15/22 Gov	97-26 <sup>1</sup> / <sub>4</sub>	1.869	T 2 11/15/21 Govt	100-14 <sup>3</sup> / <sub>4</sub>	1.948	-2.641	-0.080
30Y	T 2 <sup>3</sup> / <sub>4</sub> 11/15/42 Gov	94-05 <sup>3</sup> / <sub>4</sub>	3.048	T 3 <sup>1</sup> / <sub>8</sub> 11/15/41 Gov	102-25 <sup>3</sup> / <sub>4</sub>	2.982	-8.625	0.066



# “Who Loves Ya Baby?” – The Fed!



# Where is the Fed Buying the Most?

<HELP> for explanation.

Screen saved as K:\Chris Thompson\FED HOLDINGS.gif



# So What's Smart/Safe in 2013?

The Bonds on the Fed's List is a Good Start

- Portfolios profited in 2012 with HIGH GRADE, BORING bonds. Perfect for a bank portfolio.
  - No surprises
  - broad trading audience
  - “shallow water” safety characteristics
  - Due diligence is no chore
- More profitable than you think and they fit well with economic scenario you just described
  - Roll down the curve
  - Pay attention as you go

# Asset Allocation = Duration/Convexity

Even if you pick the “wrong” products

- You can still win if you get the duration (price action) and convexity (optionality) parts right
- *If you think rates will be low for 24-36+ months*
  - Buy bullets (duration for price action / positive convexity)
  - Call protected par priced agencies and current coupon MBS
  - Munis and Hybrid Agency ARMs
- *If you think rates are low and moving up*
  - Buy shorter bullets (short duration / roll down the curve liquidity)
  - Cushions, shorter callables w/o call protection and premium MBS
  - Munis and Hybrid Agency ARMs
- *If you're unsure...do some of all and be half right (not all wrong)*

# Agency Bullets: A Known Quantity

- Match Duration to your Rate Conviction and Buy It
  - Treasury or Agency
  - Identifiable Liquidity
  - Perfect Knowledge of future Cashflow
  - Perfect Knowledge of future Pricing ( @ given spread / yield / date)
  - “But I hate the yield!”
    - Beats cash
    - 5yr earned 2.25% TR in '12 (0.875% book yield)

2yr			
31)	T0 <sup>1</sup> / <sub>8</sub> D14	99-24 <sup>1</sup> / <sub>4</sub> / 99-24+	0.249 - 0.245
32)	FNMA 0 <sup>7</sup> / <sub>8</sub> 814	1.25 / 0.25	0.262 - 0.248
33)	FHLMC0 <sup>3</sup> / <sub>4</sub> N14	3.50 / 2.25	0.284 - 0.268
34)	FHLB 0 <sup>1</sup> / <sub>4</sub> 115	4.50 / 3.50	0.294 - 0.280
35)	FNMA 0 <sup>1</sup> / <sub>2</sub> 515	9.25 / 8.25	0.342 - 0.328
3yr			
36)	T0 <sup>3</sup> / <sub>8</sub> 116	100-00 <sup>1</sup> / <sub>4</sub> / 100-00+	0.372 - 0.370
37)	FHLMC1 <sup>3</sup> / <sub>4</sub> 915	2.00 / 0.50	0.392 - 0.375
38)	FNMA 0 <sup>1</sup> / <sub>2</sub> 915	2.25 / 1.00	0.395 - 0.380
39)	FHLB 0 <sup>1</sup> / <sub>2</sub> N15	2.25 / 0.75	0.395 - 0.377
40)	FNMA 0 <sup>3</sup> / <sub>8</sub> D15	4.50 / 3.00	0.417 - 0.400
5yr			
41)	T0 <sup>3</sup> / <sub>4</sub> D17	99-29 <sup>3</sup> / <sub>4</sub> / 99-30	0.764 - 0.763
42)	FHLB 1 617	-3.00 / -4.25	0.733 - 0.719
43)	FNMA 0 <sup>7</sup> / <sub>8</sub> D17	12.50 / 11.50	0.888 - 0.876
44)	FHLMC0 <sup>3</sup> / <sub>4</sub> 118	15.25 / 14.25	0.915 - 0.904
45)	FNMA 0 <sup>7</sup> / <sub>8</sub> 218	16.50 / 15.50	0.928 - 0.916

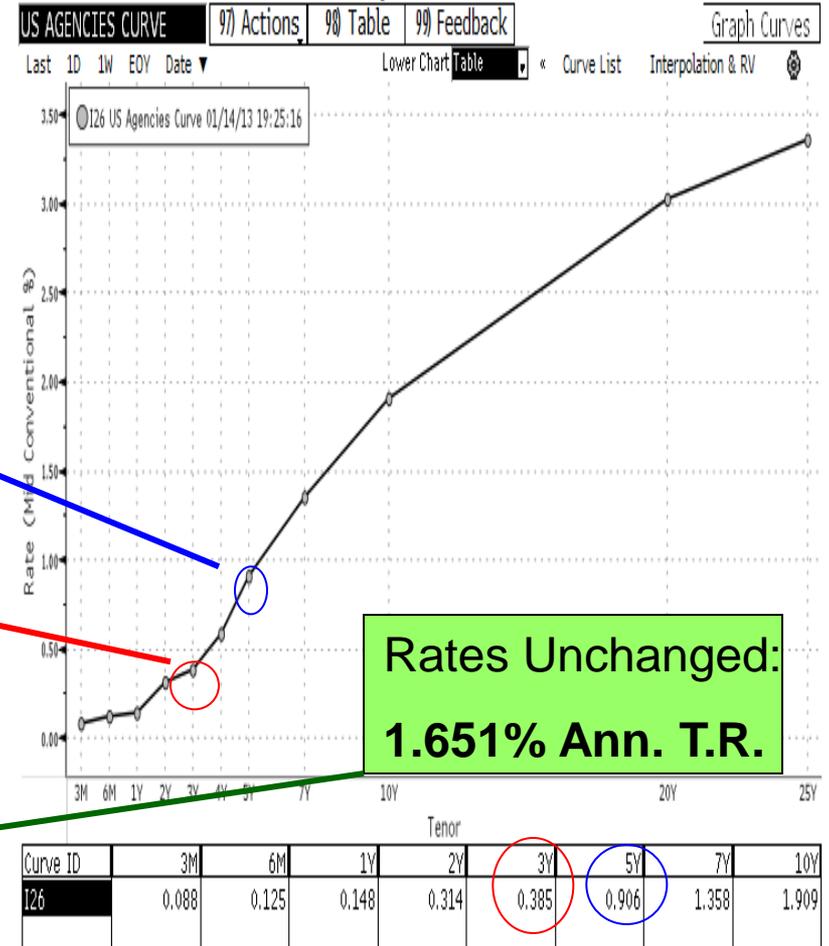
# Bullets: 5yr USTN Total Return 2012

5yr Treasury 2012		
Par Value	\$	10,000,000
Start Date		1/2/2012
Coupon		0.875%
Mkt Price		100.000
Premium		0.000
Discount		0.000
Yield		0.875%
End Date		12/31/2012
Mkt Price		101.380
Yield		0.525%
<b>Cashflow:</b>		
Coupon	0.875%	\$ 87,500
Premium Am.	0.00	-
Discount Acr.	0.00	-
Mkt Gain / (Loss)	1.380	\$ 138,000
<b>Total Return</b>	<b>2.255%</b>	<b>\$ 225,500</b>

# Bullets: A Steep Curve is Your Friend

5yr Agency, as of Jan 2013	
Par Value	\$ 10,000,000
Start Date	1/15/2013
Coupon	0.750%
Mkt Price	99.238
Premium	0.000
Discount	0.000
Yield	0.906%
End Date	1/15/2015
Mkt Price	101.039
Book Price	99.541
Yield	0.400%
<b>Cashflow:</b>	
Coupon	0.750% \$ 150,000
Premium Am.	0.00 -
Discount Acr.	0.30 30,258
Mkt Gain / (Loss)	1.498 \$ 149,842
<b>Ann Total Return</b>	<b>1.651%</b>
<b>Hold Period Rtrn</b>	<b>3.301% \$ 330,100</b>

Reference Curve Selected: US Treasury Actives Curve

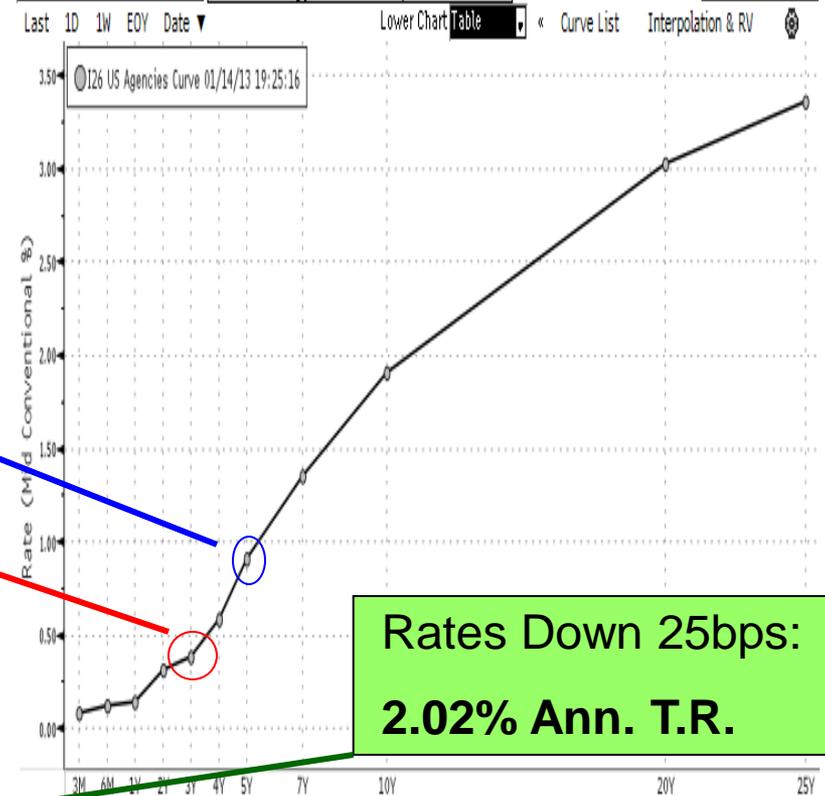


# Bullets: A Steep Curve is Your Friend

5yr Agency, as of Jan 2013	
Par Value	\$ 10,000,000
Start Date	1/15/2013
Coupon	0.750%
Mkt Price	99.238
Premium	0.000
Discount	0.000
Yield	0.906%
End Date	1/15/2015
Mkt Price	101.790
Book Price	99.541
Yield	0.150% <b>DN 25bps</b>
<b>Cashflow:</b>	
Coupon	0.750% \$ 150,000
Premium Am.	0.00 -
Discount Acr.	0.30 30,258
Mkt Gain / (Loss)	2.249 \$ 224,942
Ann Total Return	2.026%
Hold Period Rtrn	4.052% \$ 405,200

Reference Curve Selected: US Treasury Actives Curve

US AGENCIES CURVE 97) Actions 90) Table 99) Feedback Graph Curves



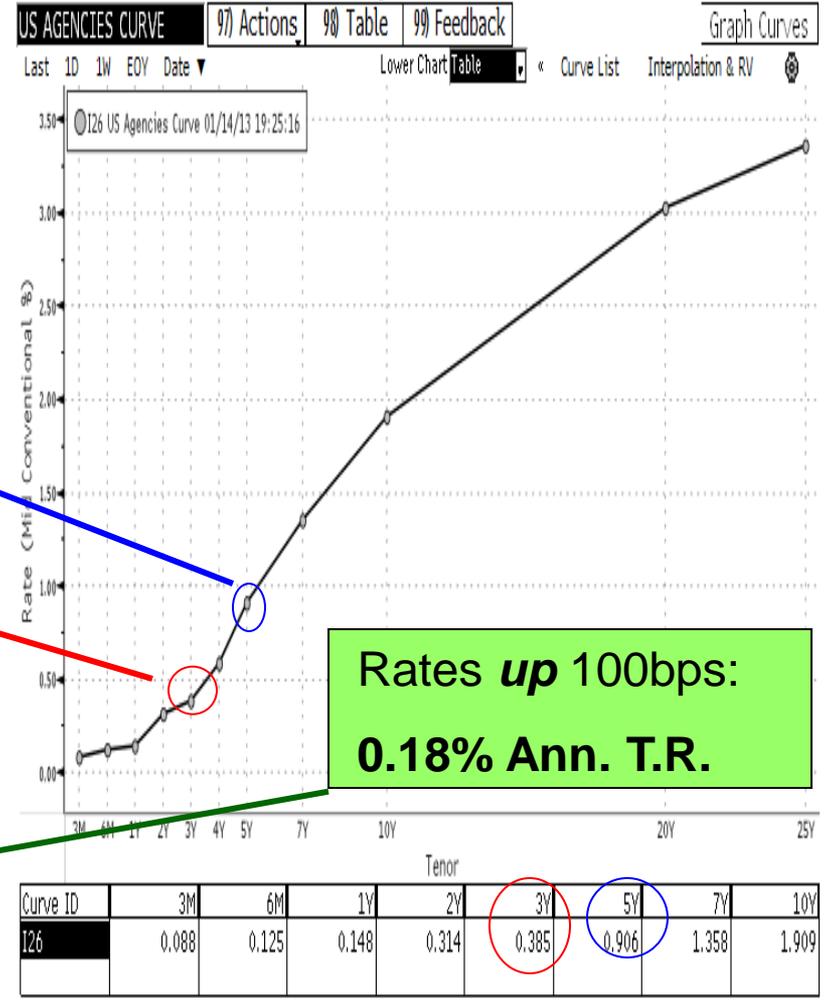
Curve ID	3M	6M	1Y	2Y	3Y	5Y	7Y	10Y
126	0.088	0.125	0.148	0.314	0.385	0.906	1.358	1.909

# Bullets: A Steep Curve is Your Friend

**5yr Agency, as of Jan 2013**

Par Value	\$ 10,000,000
Start Date	1/15/2013
Coupon	0.750%
Mkt Price	99.238
Premium	0.000
Discount	0.000
Yield	0.906%
End Date	1/15/2015
Mkt Price	98.102
Book Price	99.541
Yield	1.400% <b>UP 100bps</b>
<b>Cashflow:</b>	
Coupon	0.750% \$ 150,000
Premium Am.	0.00 -
Discount Acr.	0.30 30,258
Mkt Gain / (Loss)	-1.439 \$ (143,858)
Ann Total Return	0.182%
Hold Period Rtrn	0.364% \$ 36,400

Reference Curve Selected: US Treasury Actives Curve

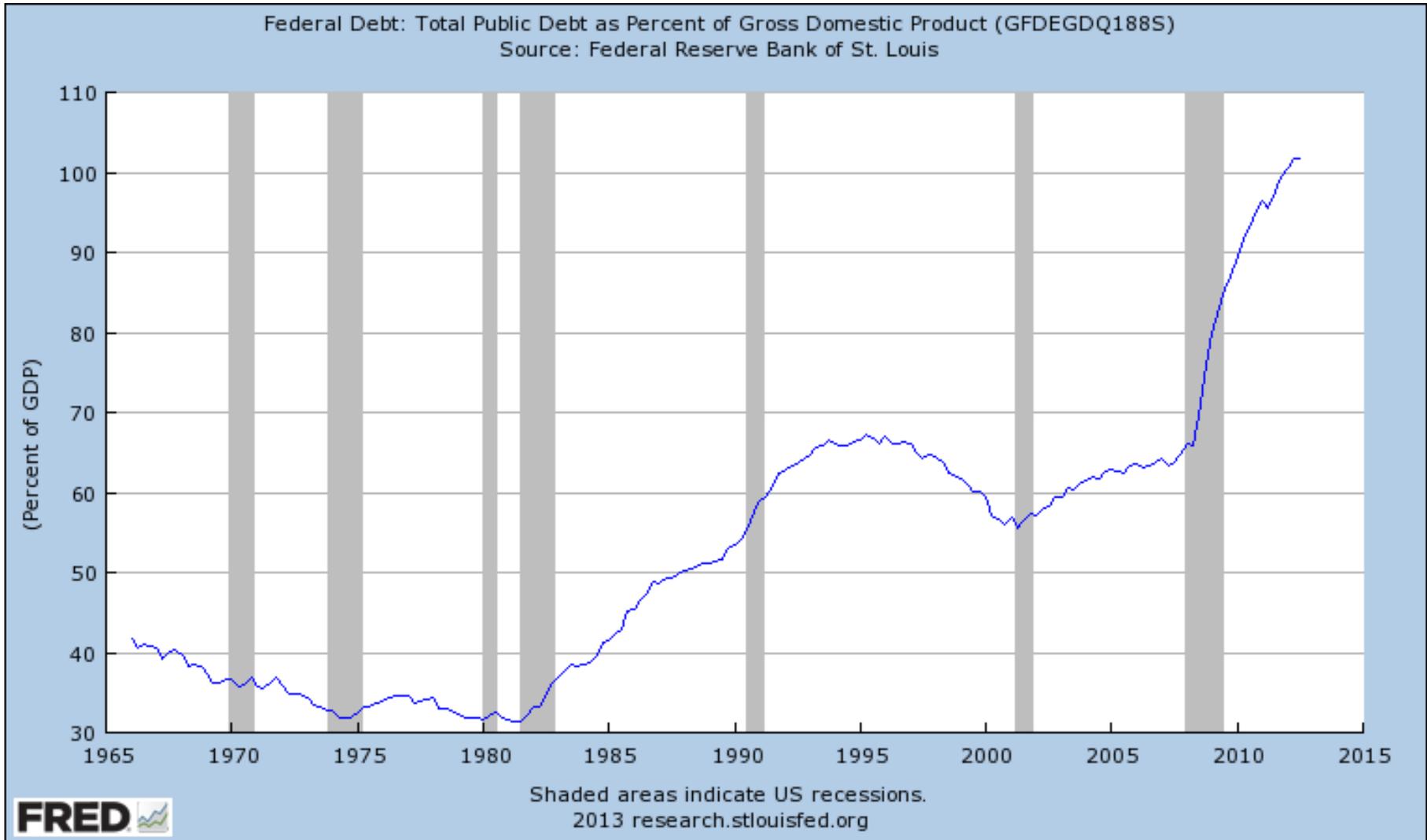


# Buying Bullets & Rolling Down the Curve

## It's Difficult Not to Appreciate The Virtue of Simplicity

- WYSIWYG
- New Due Diligence Standards
  - “*I laugh in your General Direction*”
- Coupled with a specific interest rate conviction
  - Easy to find your match
- Liquidity in a rising and higher rate environment
  - The most liquid in your portfolio (watchout low cpn MBS and Step Coupons)
- You'll rarely have to “explain yourself” to the BOD or regulators

# Because Someday This Picture Will Matter



# Agency Callables: Nominal Yield

## Callable Agencies Have Value (& detractors)

- If you seek “additional yield” – spread to bullets
- If you have a specific conviction on rates (premium “cushion” callables, or discounts)
- If you haven’t got a specific conviction on rates but seek “a port in the low yield storm”
  - Not suggested by us as the preferred manner to buy/own but beats cash (maximum current nominal yield)
- Easy to acquire and judiciously analyze
- Many styles, find one which fits your conviction best

# A Reasonable Structure for Your Outlook

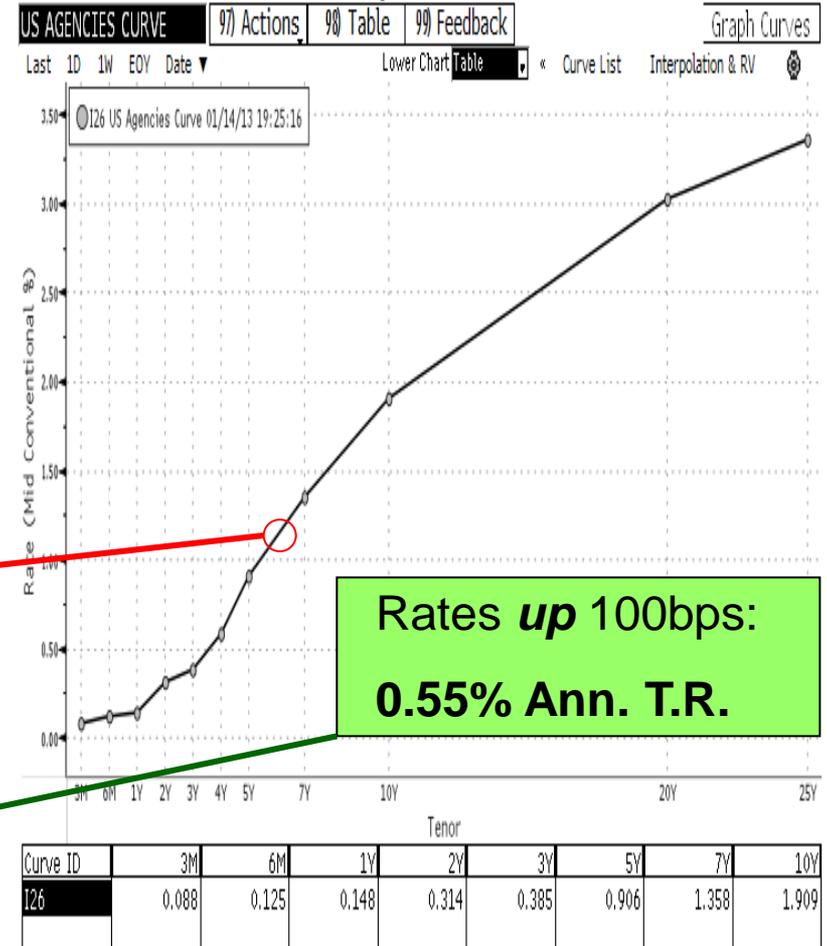
FNMA 2% 4-2020/2014 1x only 101.318

- 0.96% YTC / 1.80% YTM
- 2% 6yr bullet if NOT called in April 2014
- Today, a 6yr bullet yields 1.10%. So rates could rise nearly 90bps and this is *still* called – defensive.
- This morphs into a bullet...WYSIWYG
  - Remember that part about keeping it simple?

# 1x Call: A Reasonable Profile

7yr/1yr 1x Call, as of Jan 2013	
Par Value	\$ 10,000,000
Start Date	1/15/2013
Coupon	2.000%
Mkt Price	101.318
Premium	0.000
Discount	0.000
Yield to Call	0.969%
End Date	4/30/2014
Mkt Price	99.439
Book Price	100.000
Yield	2.100% UP 100bps
<b>Cashflow:</b>	
Coupon	2.000% \$ 260,000
Premium Am.	-1.32 \$ (131,800)
Discount Acr.	0.00 -
Mkt Gain / (Loss)	-0.561 \$ (56,100)
Ann Total Return	0.555%
Hold Period Rtm	0.721% \$ 72,100

Reference Curve Selected: US Treasury Actives Curve



# Mortgage Backed Securities & CMOs

Just like Callable Bonds...they come with Pros & Cons

- If you seek “additional yield” – spread to bullets
- If you have a specific conviction on rates
  - **Premium:** cushion / seasoned coupons (higher coupons), expecting HIGHER RATES and INCREASED CASHFLOW
    - **CAUTION: NEGATIVE YIELDS AND SHORTER THAN ANTICIPATED WTD AVG LIVES ARE POSSIBLE**
  - **Par / Discount:** lowest coupons, expecting LOWER RATES and DECREASED CASHFLOW
    - **CAUTION: EXTENSION RISK AND EXCESSIVE PRICE DEPRECIATION POSSIBLE**
- Unlike agency debentures (bullets or callables) you will never know cashflows in advance – we try to guess well.
- We rely on modeling: Accuracy? Relevance at current rates?

# The Road to Hades...

## ...is paved with Premium MBS/CMOs

It all sounded right:

- You wanted maximize reasonable yield (income)
- You wanted asset quality (agency only – no private labels)
- You thought rates weren't headed up real soon, but you still wanted to avoid extension and excessive price risk
  
- This means buying premium MBS, right?

# Here's What One Manager Was Sold

66 FNR 2012-133 PB 6.5% 4/25/42 ADV: <PAGE>  
 <GO> 3136AAB61 CMU:SC,EXCH,PAC(11) [No Band 12/12] NO Notes 88 <Go>

65 FNMJCK 4 N 4.44% (344)12 re-SECUR JAN13

JAN 1mo 2241P 60.40	11/30/12: 60,706,443	next pay 2/25/13 (monthly)	30/360 Cashflows
'13 3mo 2273 57.1	1/25/13: 59,695,854	rcd date 1/31/13 (24 Delay)	created 1/12/13
6mo 2634 55.7	factor 0.983352850000	accrual 1/ 1/13- 1/31/13	1stProj 1/25/13
12mo -			Collat: 10 Pools
Life 2273 61.8			

1/18/13 B.Median

	+300bp <sup>106</sup>	+200bp <sup>121</sup>	+100bp <sup>154</sup>	0bp <sup>455</sup>	-100bp <sup>953</sup>	-200bp <sup>1014</sup>	-300bp <sup>1077</sup>
Vary PRICE	106 PSA	121 PSA	154 PSA	455 PSA	953 PSA	1014 PSA	1077 PSA
111.492	4.693	4.583	4.334	2.970	-.158	-.570	-1.002
AvgLife	8.41	7.78	6.63	3.67	1.79	1.67	1.57
Mod Dur	6.20	5.86	5.22	3.27	1.75	1.65	1.55
DATEWindow	2/13-12/25/41	2/13-12/25/41	2/13-12/25/41	2/13-12/25/41	2/13-2/25/34	2/13-4/25/32	2/13-8/25/30
Spread	+316/AL	+319/AL	+319/AL	+248/AL	-39/AL	-79/AL	-121/AL

NON-CALLABLE JAN13DEC12NOV12 2241 2377 2114p 60.4 63.1 46.0c

Treasury Curve - BGN 19:15 +  
 6mo -1- -2- -3- -5- -7- -10- -30- +  
 0.11 0.14 0.25 0.36 0.74 1.23 1.82 3.01

Format# 1-YT

## Features:

- Structured Collateral CMO (CMO of CMOs)
- 6.50% cpn
- 4.44% Wtd Loan Rate to Borrower with 30yr Am
- Constructed with pools of Jumbo loans issued in '11/'12, avg loan balance is \$565k top balance \$785k
- 77% of loans from CA
- 111.492 Dollar Price

## What's the Attraction?

- ❑ 2.97% yield in base case seems nice, and with only a 3.67yr Avg Life
- ❑ If rates rise this extends, but the 6.50% helps mitigate price decline

But it's making a requirement of the market: Don't speed up, Negative Yields!

# Ooops...Same Bond @ Same Time

**Bloomberg** **FNR 2012-133 PB** **6.5%** **4/25/42** ADU: <PAGE>  
 <GO> 3136AAB61 **CMU:SC,EXCH,PAC(11)** [No Band 12/12] NO Notes 88 <Go>  
 <GO> FNMJCK 4 N **4.44%** (344) 12 re-SECUR JAN13

JAN 1mo 2241P 60.40	11/30/12: 60,706,443	next pay 2/25/13 (monthly)	30/360 Cashflows
'13 3mo 2273 57.1	1/25/13: 59,695,854	rcd date 1/31/13 (24 Delay)	created 1/12/13
6mo 2634 55.7	factor 0.983352850000	accrual 1/ 1/13- 1/31/13	1stProj 1/25/13
12mo - -			Collat: 10 Pools
Life 2273 61.8			

**1/18/13** 30/360 DSCNTNG **YIELD TABLE**

	60.0	57.0	55.0	61.0			
Vary PRICE	<b>60.0</b> CPR	<b>57.0</b> CPR	<b>55.0</b> CPR	<b>61.0</b> CPR	PSA	PSA	PSA
CLASS: ReRemic information is available on CL RE.							
	<b>111.492</b>	-2.788	-2.156	-1.755	-3.008		
AvgLife	1.24	1.34	1.41	1.21			
Mod Dur	1.29	1.38	1.44	1.26			
DATEWindow	2/13- 3/25/32	2/13- 9/25/33	2/13- 9/25/34	2/13- 10/25/31			
Spread	<b>-295/Al</b>	<b>-233/Al</b>	<b>-194/Al</b>	<b>-317/Al</b>			

NON-CALLABLE JAN13DEC12NOV12 2241 2377 2114p 60.4 63.1 46.0c

Treasury Curve - BGN 19:48 +  
 6mo -1- -2- -3- -5- -7- -10- -30- +  
 0.11 0.14 0.24 0.36 0.74 1.23 1.82 3.01

Format# 1-YT

## A Different View:

- Looking at this bond using ACTUAL recent prepay experience as opposed to Wall Street Median Prepay Estimate
- Good intentions, but not properly vetted for proper performance

## What happened?

- If this prepay pace continues, the excessive premium paid will be more than the cumulative coupon paid...**negative yield!**
- The “safety” of a the 6.5% coupon has been counteracted. This bond married a large coupon with fast paying collateral. A deadly mix from the start.

# A Better Idea: The Direct Collateral

66 <GO> 3138EGZZ0		FNAL0759		4.5% 9/ 1/41		ADU: <PAGE>	
65 FNCL 4.5 N		4.931 (330)21		MBS:FNCL		LOANS: 2,541	
9/ 1/11: 257,521,254		next pay 3/25/13 (monthly)		CA TX OH OTHR		11.0 7.5 6.8 74.6	
1/ 1/13: 216,050,497		rcd date 2/28/13 (24 Delay)		2011 2010 2009 OTHR		91 9.2 0.0 0.0	
factor 0.838961810000		accrual 2/ 1/13- 2/28/13					
<b>YIELD TABLE</b>							
B. Median:		-300bp112		+200bp139		+100bp205	
112 PSA		139 PSA		205 PSA		0bp375	
111-6		3.001		2.847		2.447	
		1.299		-1.098		-2.137	
		-2.146					
AvgLife		9.30		8.24		6.33	
Mod Dur		7.37		6.72		5.46	
DATEWindow		3/13- 7/25/40		3/13- 7/25/40		3/13- 7/25/40	
Spread		+130/AL		+136/AL		+138/AL	
		+80/AL		-134/AL		-235/AL	
		-235/AL					
JAN13DEC12 NOV		OCT SEP AUG		JUL JUN MAY		APR MAR FEB12	
438 240 489		307 620 516		446 357 314		572 370 224p	
18.4 9.6 18.6		11.1 21.1 16.5		13.4 10.0 8.2		13.7 8.1 4.5c	
6mo		-1- -2- -3- -5- -7- -10- -30-		Treasury Curve - BGN 9:01 +			
0.10 0.13 0.24 0.36 0.74 1.22 1.81 3.00							

## Features:

- Plain Vanilla MBS
- 4.50% cpn
- 4.93% Wtd Loan Rate to Borrower with 30yr Am
- Constructed with pools of conventional loans issued mostly in '11, avg loan balance is \$85k
- 11% of loans from CA
- 111.1875 Dollar Price

## What's the Attraction?

- ❑ 1.299% yield in base case looks reasonable with 3.75yr Avg Life
- ❑ If rates rise this extends, 4.50% coupon helps...for a while

Still making a requirement of the market: Don't speed up, Negative Yields!

# This Prepay History is Less Threatening

66 <GO> 3138EGZZ0		FNAL0759		4.5% 9/ 1/41		ADU: <PAGE>	
MBS:FNCL		4.931 (330)21		LOANS: 2,541		B.Median 99 <Go>	
65 FNCL 4 5 N		MAC(WAM)WALA JAN13					
JAN 1mo	438P	18.4	9/ 1/11: 257,521,254	next pay	3/25/13 (monthly)	CA	TX OH OTHR
'13 3mo	391	15.6	1/ 1/13: 216,050,497	rcd date	2/28/13 (24 Delay)	11.0	7.5 6.8 74.6
6mo	431	16.0	factor 0.838961810000	accrual	2/ 1/13- 2/28/13	2011	2010 2009 OTHR
12mo	414	12.9				91	9.2 0.0 0.0
Life	488	10.9					
<b>YIELD TABLE</b>							
Historical:		1 mo 18.4	3 mo 15.6	6 mo 16.0	12 mo 12.9	Life 10.9	
Vary		18.4 CPR	15.6 CPR	16.0 CPR	12.9 CPR	10.9 CPR	
PRICE		1	32				
111-6		1.738	2.063	2.017	2.363	2.576	
AvgLife		4.45	5.16	5.05	6.04	6.85	
Mod Dur		4.11	4.63	4.55	5.26	5.81	
DATEWindow		3/13- 7/25/40	3/13- 7/25/40	3/13- 7/25/40	3/13- 7/25/40	3/13- 7/25/40	
Spread		+110/AL	+127/AL	+126/AL	+136/AL	+138/AL	
JAN13DEC12 NOV OCT SEP AUG JUL JUN MAY APR MAR FEB12						Treasury Curve - BGN 20:08 +	
438 240 489 307 620 516 446 357 314 572 370 224p						6mo -1- -2- -3- -5- -7- -10- -30-	
18.4 9.6 18.6 11.1 21.1 16.5 13.4 10.0 8.2 13.7 8.1 4.5c						0.11 0.14 0.24 0.36 0.74 1.23 1.82 3.01	
Format# 1-YT							

## Historical Prepays:

- Looking at this bond using ACTUAL recent prepay experience as opposed to Wall Street Median Prepay Estimate
- Still much price risk when rates rise, but reasonable income at current pace

# Agency Hybrid ARMs: The “Anti” MBS

## A FIXED then FLOAT Agency MBS Product

- Fixed Coupon for a Fixed Period (3yrs, 5yrs, 7yrs, 10yrs)
- Resets at Margin + Index @ first reset date, annually after
  - Attractive periodic and lifetime caps (5-2-5 & 2-2-6 constructs)
- Tend to **PAY FASTER** as **RATES RISE**
  - ✓ This isn't likely with any other fixed rate MBS product
  - ✓ This is precisely what you want to happen
- Morphs into 1/1 structure
- Amortize premium to first reset date
- Caution: As with all MBS products, excessive premiums may diminish returns in a fast prepay environment

# 5/1 Adjustable Rate Mortgage (2011 issue)

3128UGPU5 Mtge YA

ADJUSTABLE RATE MTGE FH1B8184		PAGE 1 OF 30
<b>MORTGAGE DATA</b>		
CURRENT NET COUPON	3.008	
ORIG. WAM 30 : 0	REM WAM 28 : 4	
PREPAY TO NEXT RESET	16.20	CPR
LAST PAYMENT RESET	5/ 1/12	
NEXT PYMNT RESET (actual)	5/ 1/16	
NEXT RATE RESET (actual)	5/ 1/16	
NEGATIVE AMORTIZATION LIMIT		
SERVICING FEE	37.6	BPS
NET RESET MARGIN	186.4	BPS
RESETS:PAYMENT 12mos	INTEREST 12mos	
FIRST RESET CAP: UP 5.00	DOWN 5.00	
NET CAP: LIFE 8.008	AT RESET 2	
NET FLR: LIFE	AT RESET 2	
PMT CAP: LIFE	AT RESET	
PMT FLR: LIFE	AT RESET	
STATED (ACTUAL) DELAY DAYS	74 (44)	
<b>PROJECTIONS</b>		
NEXT RESET TO MTY:(S)ingle, (M)ultiple or (X)Frwd-model(ARM curr sec ONLY): S		
ASSUME LIBOR12M cashflows	0.814	
Discount Index	0.814	0.814
ASSUMED CPR ( PRE- )	16.20	
# OF PERIODS ( RESET)	25	
Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2013 Bloomberg Finance L.P. SN 795139 CST GMT-6:00 G601-1839-3 15-Jan-2013 20:26:42		

YIELD ANALYSIS	
SETTLE (23 DAYS ACC INT 0.192)	1/24/13
PRICE 105-24	105-24
Resets:Weighted Avg Actual	
YIELD (bond-eq)	1.530 1.529
YIELD (monthly)	1.525 1.524
BEEM (bp)	72 71
DISCOUNT MARGIN (bp)	71 71
INDEX DURATION	2.48 2.46
SPRD DUR(same cflows)	4.54 4.54
WAL	4.93 4.93

TOTAL RETURN	
IF prc=100	on 5/ 1/16
Tot Ret to next reset =0.83 %	
(1177 days CBE YIELD 30/360)	
Accreted price will be 104.88	

- ✓ Agency MBS: FreddieMac Hybrid ARM (2011 issuance)
- ✓ RBC Classification: 20%
- ✓ Coupon: 3.008%, Adjustable @ 1yr LIBOR + 1.87% annually
- ✓ Next Reset: May 2016, 8.008% life cap, 5% periodic cap @ next reset; 2%
- ✓ Maturity: 30yr amortization, 4.93yr weighted avg. life
- ✓ Principal: Paid monthly with accrued interest

# Other Reasonable MBS Structures

## MBS Pools You Should Favor:

- Plain Vanilla 15yr and 10yr MBS pools are “shallow water” bonds which will demonstrate comparatively less price decline in a rising rate environment.
- We like the cashflow characteristics
- The same rules apply
  - Be careful with premiums
  - Study them well to better understand each pool
    - Loan size / Borrower’s Avg Loan Rate / Geographic density / Loan to Value / # of loans in pool / third party origination / recent actual prepay speeds / cash out refi / owner occupied or vacation
- Simple is GREAT! Liquidity and Easy Due Diligence

# “Slow Pay” 3% FNMA 15yr Pool (2011 issuance)

## What it is and Why We Like It

- Plain vanilla FNMA 3% 15yr MBS pool
- 106-14+ dollar price / March 14 settle
- 1.65% to 1.75% nominal yields at recent speeds
- Large pool (\$253M) with low average balance (\$119k)
- SLOW PAYER! – since 2011 issuance, never posted a month over 11 CPR (only one month in double digits). So contraction is not so much a problem.

		FNAJ7715					3% 12/ 1/26		ADV: <PAGE>			
		3138E0SD2		MBS:FNCI		LOANS: 2,115		B.Median 99 <Go>				
FNCI 3 N		3.346(162)14					WAC<WAM>WALA FEB13					
FEB 1mo	294P	8.20	12/ 1/11:	288,764,866	next pay	4/25/13 (monthly )		TX	PA	GA	OTHR	
13 3mo	317	8.2	2/ 1/13:	253,784,650	rcd date	3/31/13 (24 Delay)		8.8	6.2	6.2	78.9	
6mo	328	7.6	factor	0.878862630000	accrual	3/ 1/13- 3/31/13		2011				
12mo	346	5.9						100				
Life	354	5.4										
<b>3/14/13</b>												
<b>YIELD TABLE</b>												
Historical:		1 mo	3 mo	6 mo	12 mo	Life						
PRICE		8.2	8.2	7.6	5.9	5.4	CPR	CPR	CPR	CPR	CPR	
106-14+		1.618	1.618	1.649	1.735	1.760						
AvgLife		5.10	5.10	5.22	5.61	5.73						
Mod Dur		4.70	4.70	4.81	5.12	5.22						
DATEWindow		4/13- 8/25/26	4/13- 8/25/26	4/13- 8/25/26	4/13- 8/25/26	4/13- 8/25/26						
Spread I		+83/AL	+83/AL	+83/AL	+82/AL	+82/AL						
FEB13		JAN	DEC12	NOV	OCT	SEP	AUG	JUL	JUN	MAY	APR	MAR12
294		407	244	409	263	351	311	359	359	521	372	479P
8.2		10.6	5.9	9.0	5.3	6.3	5.0	5.0	4.3	5.2	3.0	2.9C
		Treasury Curve - BGN 15:10 +										
		6mo	-1-	-2-	-3-	-5-	-7-	-10-	-30-			
		0.11	0.15	0.23	0.34	0.76	1.25	1.88	3.09			

# Municipal Bonds

“The rumors of my death have been greatly exaggerated” Mark Twain

- Plain vanilla, high quality munis are safe and sound and have miniscule default rates (sorry Meredith!)
- General Obligation and Essential Purpose Revenue
- Rated, or not – value is there (insurance is secondary)
- TEYs exceed taxable agency counterparts
- BQ Designation:
  - Moved from <\$10mm to <\$30mm **now back to <\$10mm**
  - Non BQs allowable to 2% of assets if original '09/'10 issuance
- Dodd-Frank 939a / OCC matrix
  - The source of much consternation: misunderstood and attracting vendors like watermelon attracts flies on the summer picnic table

# The OCC Matrix

Key Factors	Municipal Government			
	Corporate Bonds	General Obligations	Revenue Bonds	Structured Securities
Confirm spread to U.S. Treasuries is consistent with bonds of similar credit quality	X	X	X	X
Confirm risk of default is low and consistent with bonds of similar credit quality	X	X	X	X
Confirm capacity to pay and assess operating and financial performance levels and trends through internal credit analysis and/or other third party analytics, as appropriate for the particular security	X	X	X	X
Evaluate the soundness of a municipal's budgetary position and stability of its tax revenues Consider debt profile and level of unfunded liabilities, diversity of revenue sources, taxing authority, and management experience		X		
Understand local demographics/economics. Consider unemployment data, local employers, income indices, and home values		X	X	
Assess the source and strength of revenue structure for municipal authorities. Consider obligor's financial condition and reserve levels; annual debt service and debt coverage ratio, credit enhancement, legal covenants, and nature of project			X	
Understand the class or tranche and its relative position in the securitization structure				X
Assess the position in the cash flow waterfall				X
Understand loss allocation rules, specific definition of default, the potential				X
Impact of performance and market value triggers, and support provided by credit and/or liquidity enhancements				X
Evaluate and understand the quality of the underwriting of the underlying collateral as well as any risk concentrations				X
Determine whether current underwriting is consistent with the original underwriting underlying the historical performance of the collateral and consider the affect of any changes				X
Assess the structural subordination and determine if adequate given current underwriting standards				X
Analyze and understand the impact of collateral deterioration on tranche performance and potential credit losses under adverse economic conditions				X

Source: The Office of the Comptroller of the Currency

- If you own General Obligation and/or “Essential Purpose” Revenue bonds, the standard is **NOT** onerous. Key ratios have been reasonably accessible via public documents
- **The Task:** To define “investment grade” and document the metrics we cite (hint: see financials for relevant figures).

# ALL Data is SOURCED Through Public Docs

## Municipal Issuer ScoreCard

### DESCRIPTIVE INFO.

Cusip:   
 Issuer: MCKINNEY TX  
 State: TX  
 Issue Date: 5/1/2010  
 Coupon: 4.000%  
 Maturity: 8/15/2024  
 Call Date: 2/15/2020  
 Call Px: 100  
 Next Par Call Dt: 2/15/2020  
 Credit Enhancement: NONE  
 Type: GENERAL OBLIGATION LTD  
 Bank Qualified: YES - SAFE HARBOR  
 Tax Free / Taxable: FEDERAL TAX EXEMPT  
 Moody Rating: Aa1 (Apr, 2010)  
 Underlying: Aa1  
 S & P Rating: AA+ (Apr, 2010)  
 Fitch Rating: Not Rated  
 Watch: None  
 Outlook: Stable

As of: 1/11/2013



The City of McKinney, the county seat of Collin County, is located 30 miles north of downtown Dallas on U.S. Highway 75 and 51 miles northeast of Fort Worth. The City of McKinney has a diverse economy with a balanced employment mix in manufacturing, wholesale trade, retail trade, services, government, education and construction.

- ### Due Diligence Worksheets are Constructed from this Data
- The worksheets are “pretty” and useful muni bond file components
  - Many vendors have crowded the scene and wish to **sell you** this data for varied fees and convince you that they’re the best source for this information
  - Investors can assemble this same data, **entirely free**, from source documents.
  - You can also build alert groups based on single CUSIPs or by 6 digit “base CUSIPs” for specific ISSUER surveillance.

### RATIOS

	Guideline	w/in Guideline
Assessed Value: 108,468,882,649		
Actual Value: 11,985,115,495		
Direct Debt: 214,803,546		
Overlapping Debt: 643,209,578		
Direct per Capita: 1,646	<= 5,000	YES
Direct to Assess: 0.20%	<= 30.00%	YES
Direct to Actual: 1.79%	<= 10.00%	YES
D & O Debt: 858,013,124		
D & O to Assess: 0.791%	<= 50.00%	YES
D & O to Actual: 7.159%	<= 15.00%	YES
D & O per Capita: 6,575	<= 10,000	YES

### FINANCIAL TRENDS

	9/30/2011	9/30/2010	9/30/2009	9/30/2008	9/30/2007
Ttl Gen. Fund Rev.	86,833,300	84,451,500	83,522,900	82,368,600	74,487,900
Ttl Oper. Exp.	86,490,300	88,390,200	88,458,300	84,922,800	74,891,000
Net Chg in Fund Bal.	342,900	(3,938,800)	(4,935,300)	(2,554,200)	(403,200)
Total Other Fin. Src.	1,954,900	1,724,900	2,368,600	1,601,000	926,700
End Gen. Fund Bal.	41,966,200	39,502,600	41,716,500	44,283,200	45,236,300
Population:	130,492	131,117	122,803	120,978	115,198
Unemployment:	6.40%	7.10%	7.20%	N/A	N/A
Tax Collections:	N/A	100.000%	101.960%	99.990%	100.420%
Top 10 to Tot Assess:	4.720%	4.760%	4.840%	N/A	N/A
State Rev / Tot Rev:	N/A	N/A	N/A	N/A	N/A

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The screenshot shows the homepage of the EMMA (Electronic Municipal Market Access) website. The header includes the MSRB logo and the text "EMMA® - Electronic Municipal Market Access The Official Source for Municipal Disclosures and Market Data". A navigation bar contains links for "About EMMA", "Search", "529 Plans", "Market Activity", "Education Center", and "EMMA Dataport". A "Quick Search" box is on the right. The main content area features several sections: "Search Securities" with a play button icon, "Sign Up for MyEMMA" with a play button icon, "Discover Trade Prices" with a play button icon, and "New Feature MyEMMA" which is circled in red. Below this are three columns: "EMMA EDUCATION CENTER", "MARKET ACTIVITY", and "DOCUMENT SUBMISSION", each with a list of links. A "Read all news on EMMA" link is also visible.

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Now I'm logged in and can search for filing documents of *individual* CUSIPs or *group* CUSIPs



## Security Details

CITY OF MCKINNEY, TEXAS (COLLIN COUNTY) TAX AND LIMITED PLEDGE WATERWORKS AND SEWER SYSTEM  
REVENUE CERTIFICATES OF OBLIGATION SERIES 2010 (TX)  
MC KINNEY TEX WTRWKS & SWR SYS CTFS OBLIG (TX)\*  
CUSIP: 581646T22 \*

Dated Date: 05/01/2010  
Maturity Date: 08/15/2024  
Interest Rate: 4 %  
Principal Amount At Issuance: \$645,000  
Initial Offering Price: 101.447

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Be advised that these are large files that can take several minutes to download, depending on your connection speed and the level of traffic on EMMA. You should preview the cover, if available, before downloading to ensure that this is the correct document. [Click to view; right click to save]

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Official Statement posted 04/28/2010 (1.5 MB)

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## Security Details

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Official Statement Continuing Disclosure Trade Activity Ratings

### FINANCIAL INFORMATION & DOCUMENTS

**Most Recent**

Appendix B as of 03/09/2012	posted 03/23/2012 (11.4 MB)	<a href="#">details</a>
Appendix A as of 03/09/2012	posted 03/23/2012 (1.4 MB)	<a href="#">details</a>
Appendix B as of 03/09/2012	posted 03/23/2012 (24 KB)	<a href="#">details</a>
Appendix A as of 03/09/2012	posted 03/23/2012 (40 KB)	<a href="#">details</a>

Annual Financial Information and Operating Data

2010 Audit for the year ended 09/30/2010 Document3	posted 03/31/2011 (41 KB)	<a href="#">details</a>
2010 Audit for the year ended 09/30/2010 Document4	posted 03/31/2011 (28 KB)	<a href="#">details</a>
2010 Audit for the year ended 09/30/2010 Document1	posted 03/31/2011 (1.4 MB)	<a href="#">details</a>
2010 Audit for the year ended 09/30/2010 Document2	posted 03/31/2011 (4.4 MB)	<a href="#">details</a>

Audited Financial Statements or CAFR

**What is continuing disclosure?**  
Continuing disclosures, including advance refunding documents, provide important information about a security after initial issuance.  
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**Links to former NRMSIRs**  
For continuing disclosure documents produced prior to July 1, 2009, contact one of the following organizations:  
→ Bloomberg L.P.  
→ DPC Data  
→ Interactive Data Pricing and Reference Data  
→ Standard & Poor's

## Continued Monitoring Due Diligence Documents:

- ✓ New official statements
- ✓ New Financial Statements
  - Post 7/1/2009
  - Recent audits
  - Recent budgets
  - Appendices
- ✓ Event Notices
  - call notices
  - Refundings
- ✓ Ratings Data

Click “manage alerts” and create a group

## STEP 1: GROUP NAME Collapse ▲

## STEP 2: EDIT SECURITIES Collapse ▲

By listing your securities below, you will receive an email alert when disclosure documents are posted on EMMA.

**INSTRUCTIONS:** Manually enter or cut-and-paste the CUSIP-9/ CUSIP-6 for each security for which you would like to receive an email alert and click the 'Upload' button. A distinct list of securities for which you will receive an alert is displayed. If you would like to unsubscribe securities from alerts, select the securities and click the 'Remove Securities' link.

### Enter Securities

**INSTRUCTIONS** Enter CUSIP-9s for securities. You may also enter CUSIP-6s for all associated CUSIP-9s.

- 00344N
- 018095
- 018105
- 018106
- 021537
- 022357
- 022429
- 022591
- 035707
- 039471
- 070321
- 072724
- 074509
- 074527
- 076465
- 078275

### Listing of alert request securities

## STEP 3: MANAGE EVENTS Collapse ▲

Select the events below for which you would like to receive email alerts.

- Trade Alert - Select to receive an end-of-day email indicating that a security traded. new
- Primary Market Documents - Select to be alerted when official statements and other primary market documents are posted.
- Continuing Disclosure Documents - Select to be alerted when continuing disclosure documents are posted. The EMMA Education center provides a [list of documents](#) that relate to each subcategory below.
- Event Notices Only
- Financial Information and Documents Only

### GROUP Monitoring

### Due Diligence Assistance:

- ✓ Input the 6 digit base CUSIPs (which identify the issuer)
- ✓ And select the events you'd like to be made aware of

# Bank Qualified vs Bank Eligible

The 2% Exemption in 2009's American Recovery Act

## **Bank Qualified Tax Exempt Muni Bonds**

- BQ issuers float <\$10mm (Qualified Small Issuer)
- Receive preferable tax treatment per '86 TEFRA
  - NBQ bonds suffer punitive tax treatment

## **Bank Eligible Tax Exempt Muni Bonds**

- Also referred to as “safe harbor” munis
- Affords the less punitive tax treatment to NBQ “new money” bonds issued in 2009/2010
- Limited to no more than 2% of assets

# Bank Eligible: Do the Math...

Aaa Brookfield WI USD GO/UT 4% 4-1-21/19 116.172 1.25% ytc / 1.84%ytm

## BQ TEFRA Penalty Calculation

- Cost of Funds x 20% TEFRA disallowance x Tax Bracket
- 1% x 20% x 39.6%
- .000792 = 0.08% = TEFRA penalty
- Subtract TEFRA penalty from Tax Free Yields, then solve for Taxable Equivalent Yield (TEY)

## TEY Calculation

- Municipal Yield – TEFRA penalty / (1 – Tax Bracket)
- YTC:  $(1.25\% - 0.08\%) / (1 - .396) = 1.93\% \text{ TEY}$
- YTM:  $(1.84\% - 0.08\%) / (1 - .396) = 2.91\% \text{ TEY}$
- 4% Coupon @ 100:  $(4.00\% - 0.08\%) / (1 - .396) = 6.49\% \text{ TEY}$

# Same bond W/O BQ Treatment:

Aaa Brookfield WI USD GO/UT 4% 4-1-21/19 116.172 1.25% ytc / 1.84%ytm

## NBQ TEFRA Penalty Calculation

- Cost of Funds x 100% TEFRA disallowance x Tax Bracket
- 1% x 100% x 39.6%
- .00396 = **0.396%** = TEFRA penalty
- Subtract TEFRA penalty from Tax Free Yields, then solve for Taxable Equivalent Yield (TEY)

## TEY Calculation

- Municipal Yield – TEFRA penalty / (1 – Tax Bracket)
- YTC:  $(1.25\% - 0.396\%) / (1 - .396) = \mathbf{1.41\% \text{ TEY } (-52\text{bps})}$
- YTM:  $(1.84\% - 0.396\%) / (1 - .396) = \mathbf{2.39\% \text{ TEY } (-52\text{bps})}$
- 4% Coupon @ 100:  $(4.00\% - 0.396\%) / (1 - .396) = \mathbf{5.96\% \text{ TEY}}$

# Bloomberg BQA Screen Makes it Simple!

<HELP> for explanation. dgp  
 TO MODEL BANK QUALIFIED UNDERWRITINGS USE BQC <Go>  
**Bank Qualified Calculator** PAGE 1 OF 2

ISSUER: ELME BOOK SD BLDG SILE: 31190 STATE: WI MD/S&P: NR/NR  
 COF: **1.00%** FED TAX: **39.60%** STATE TAX: **0.00%** TEFRA: **7.92** bps

YIELD CURVE # **345** Bank Qualified AAA  
 1yr 2yr 3yr 4yr 5yr 7yr 10yr 15yr 20yr 30yr  
 FMC Curve: 0.32 0.40 0.57 0.74 0.90 1.26 2.14 3.05 3.19 4.13

MATURITY	PAR/SIZE	COUPON	SCALE N		PERCENT TSY YLD	TRUE BQ TAXABLE EQUIVALENT YLDS	TAXABLE EQUIVALENT SPREADS			
			YIELD	INTERPOLATED TSY YLD.			WITH TEFRA	STATE + TEFRA	WITHOUT TEFRA	FMC WITH TEFRA
4/ 1/13	1035	2.750		0.083						
4/ 1/14	1510	2.750		0.162						
4/ 1/15	1560	2.750		0.311						
4/ 1/16	1605	3.000		0.452						
4/ 1/17	1655	3.000		0.644						
4/ 1/18	1715	3.125		0.931						
<b>4/ 1/19</b>	1785	4.000	<b>1.250</b>	1.162	107.53	<b>1.938</b>	<b>77.6</b>	77.6	90.7	53.5
4/ 1/20	1855	4.000		1.394						
<b>4/ 1/21</b>	1945	4.000	<b>1.840</b>	1.622	113.45	<b>2.915</b>	<b>129.3</b>	129.3	142.5	88.5
4/ 1/22	2035	4.000		1.849						
4/ 1/23	2130	4.000		2.063						
4/ 1/24	2235	4.125		2.192						
4/ 1/25	2345	4.375		2.321						

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 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2013 Bloomberg Finance L.P.  
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# Do You Need Tax Free Bonds?

1. YES
2. NO – but you might still consider them

# Muni Bonds: Maximizing T.E.Yield

Term	AAA (SECTOR 49)	AA (SECTOR 104)	A (SECTOR 159)	BAA1 (SECTOR 631)	AAA MUNICIPAL AS % OF CURRENT US GOVT.'S	
1 Yr 2014	0.20	0.34	0.80	0.97	<b>pre TEY calc, raw yields exceed USTN</b>	
2 Yr 2015	0.33	0.51	1.03	1.17		133.28
3 Yr 2016	0.48	0.71	1.29	1.36		109.68
4 Yr 2017	0.65	0.91	1.56	1.64		109.13
5 Yr 2018	0.84	1.10	1.83	1.86	103.83	
7 Yr 2020	1.28	1.51	2.29	2.33	90.94	
9 Yr 2022	1 <sup>3</sup> / <sub>4</sub>	2	2.78	2.82	91.90	
10 Yr 2023	1.99	2.26	2.90	3.02	94.75	
12 Yr 2025	2.43	2.70	3.24	3.41	95.95	
14 Yr 2027	2.76	3	3.44	3.69	<b>pre TEY calc, raw yields exceed USTN</b>	
15 Yr 2028	2.88	3.09	3.54	3.81		108.16
17 Yr 2030	2.99	3.19	3.76	4.01		114.07
19 Yr 2032	3.01	3.29	4.03	4.23		114.93
20 Yr 2033	3.03	3.37	4.20	4.37	111.62	
25 Yr 2038	3.10	3.95	4.73	4.90	105.56	
30 Yr 2043	3.12	4.01	4.83	4.93	103.13	
					101.00	
					97.47	

**STAY WITH TOP QUALITY ISSUERS / GOs & Essential Purpose Revs**

# Municipal Insurers: Weak Hands

## Insured Municipal Ratings

Insurer	Moody's	S&P	Fitch
1)ACA	Not Rated	NR	Not Rated
2)Ambac	WR	NR	WD
3)Assured Gty.	Aa3 (Neg Outlook)	AA- (Sta Outlook)	WD
4)BHAC	Aa1 (Sta Outlook)	AA+ (Neg Outlook)	Not Rated
5)CIFG	WR	NR	WD
6)FGIC	WR	NR	WD
7)AGM (f. FSA)	Aa3 (Neg Outlook)	AA- (Sta Outlook)	WD
8)NATL (f. MBIA)	Baa2 (Neg Outlook)	BBB (Dev Outlook)	Not Rated
9)Radian	Ba1 (Neg Watch)	B+ (Neg Outlook)	WD
10)XLCA (Syncora)	Ca (Dev Outlook)	NR	WD

What is the UNDERLYING credit?

# Measure and Monitor Your Holdings

- Rates have been low for an extended period
- When yields move back up, it will be fast (1994)
- Do you remember bond losses?
- Do you know which holdings will produce the greatest potential losses?
- Measure often....Do you have a measuring stick?
  - ✓ Portfolio Analytics Reports (PARs)
  - ✓ Find one and get to know it!

# Understand Your Price Profile

As of Jan 30 2013

Term	Maturity	Cusip	Security	Coupon	Price	Yield	BY DECEMBER 15 2013					
							+300bps	+200bps	+100bps	Flat	-25bps	-40bps
2	1/31/2015	912828UK4	USTN	0.2500	99.9688	0.2676	96.832	97.915	99.016	100.135	100.281	100.281
3	1/15/2016	912828UG3	USTN	0.3750	99.9219	0.4029	94.212	96.163	98.164	100.218	100.739	100.781
4	1/31/2017	912828SC5	USTN	0.8750	100.9375	0.6392	92.510	95.372	98.338	101.412	102.198	102.673
5	1/31/2018	912828UJ7	USTN	0.8750	100.0156	0.8726	89.419	93.065	96.880	100.873	101.901	102.523
7	12/31/2019	912828UF5	USTN	1.1250	98.4531	1.3613	84.072	89.037	94.328	99.970	101.498	102.331
10	11/15/2022	912828TY6	USTN	1.6250	96.7656	1.9911	77.185	83.678	90.738	98.563	100.621	101.879

As of Jan 30 2013

Term	Maturity	Cusip	Security	Coupon	Price	Yield	BY DECEMBER 15 2013					
							+300bps	+200bps	+100bps	Flat	-25bps	-40bps
2	1/31/2015	912828UK4	USTN	0.2500	99.9688	0.2676	-3.138%	-2.054%	-0.953%	0.166%	0.312%	0.312%
3	1/15/2016	912828UG3	USTN	0.3750	99.9219	0.4029	-5.714%	-3.762%	-1.759%	0.296%	0.818%	0.860%
4	1/31/2017	912828SC5	USTN	0.8750	100.9375	0.6392	-8.349%	-5.514%	-2.575%	0.470%	1.249%	1.719%
5	1/31/2018	912828UJ7	USTN	0.8750	100.0156	0.8726	-10.595%	-6.950%	-3.135%	0.857%	1.885%	2.507%
7	12/31/2019	912828UF5	USTN	1.1250	98.4531	1.3613	-14.607%	-9.564%	-4.190%	1.541%	3.093%	3.939%
10	11/15/2022	912828TY6	USTN	1.6250	96.7656	1.9911	-20.235%	-13.525%	-6.229%	1.857%	3.984%	5.284%

# Conclusions

- Markets are still trying to “find their way” and volatility should be expected...have a “safe/sane” and tradeable core portfolio
- Simple DOES NOT mean LOW YIELD...it generally means HIGH QUALITY and VALUE PROTECTION in difficult markets, so embrace simple!
- Know your exposure and get comfortable with the greatest risk:
  - Diminished Income (as rates stay put or move lower)
  - Diminished Value (as rates rise)
  - FAST paying MBS bonds...harvest gains / minimize losses
- Cash is a poor option and shouldn't be misunderstood as “safe,” because you can do better no matter your outlook
- Take strategic gains and buy non core products carefully

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