

Strategic Opportunities in the Bond Portfolio

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- **Knowns & Unknowns: Navigating the Difficult Terrain Ahead**
- **Balance Sheet Trends NY/NJ Banks**
- **The Bond Portfolio in the Current Environment**
- **Key Investment Sectors: Risks, Rewards, and Relative Value**

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Knowns & Unknowns: Navigating the Difficult Terrain Ahead

Economist Jokes

Ronald Reagan used to say that if trivial pursuit were designed by economists, it would have 100 questions and 3,000 answers.

Why was astrology invented? So economics would seem like an accurate science.

Economic forecasters assume everything, except responsibility.

Section Overview

- The Federal Reserve - Monetary Policy
- The Yield Curve - Potential Inversion
- The Market - Observations from the Past

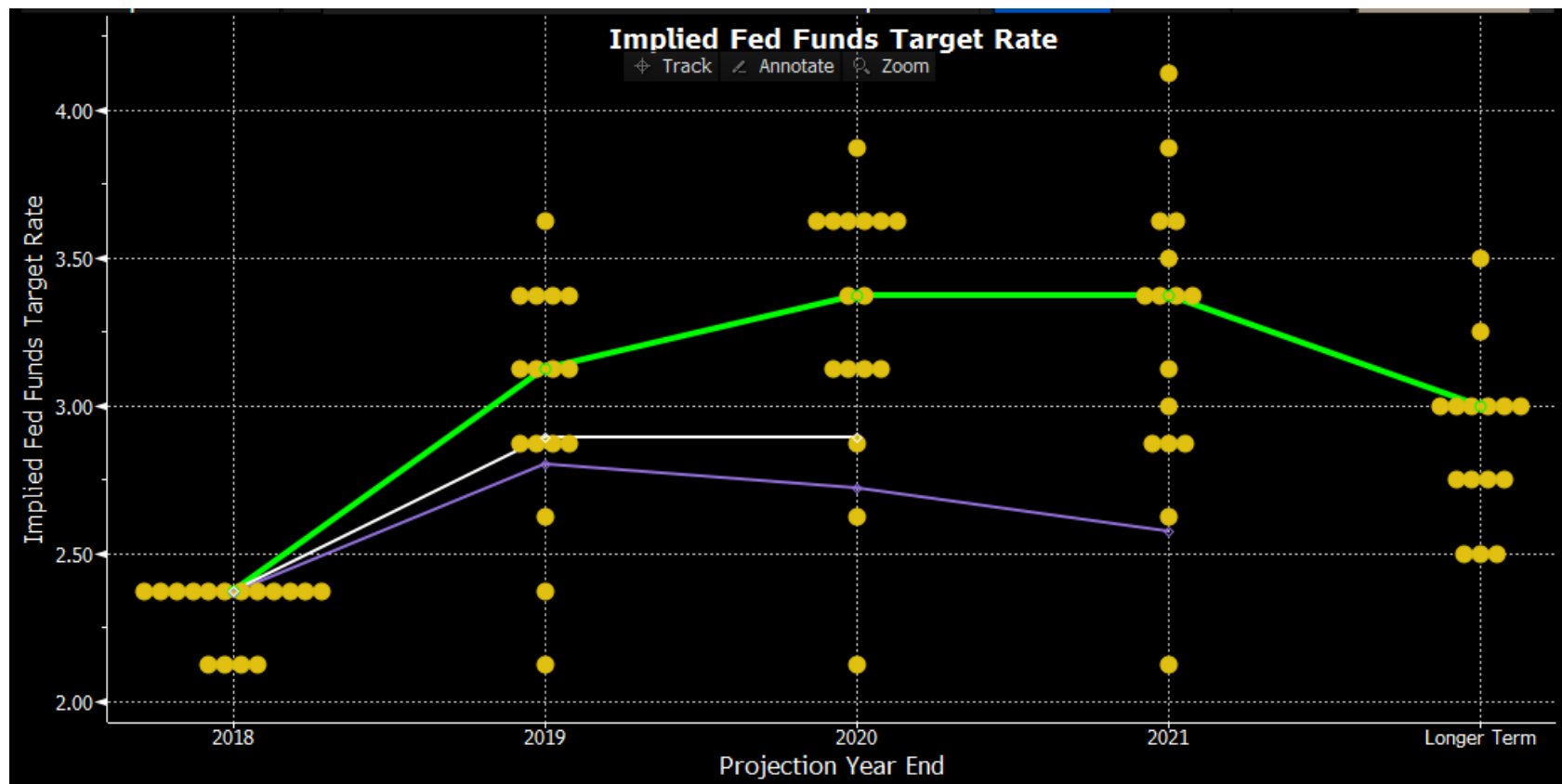
“There are known knowns. These are things we know that we know. There are known unknowns. That is to say, there are things that we know we don’t know. But there are also unknown unknowns. There are things we don’t know we don’t know.”

- Donald Rumsfeld, Former Secretary of State

The Federal Reserve

What We Know:

- Fed has increased the target rate eight times to its current range of 2.00-2.25%
 - Target range was 0-0.25% from December 2008 to December 2015
- Fed remains hawkish, projecting one more hike in 2018 and three hikes in 2019
 - The last hike is like the last kiss in a relationship; you rarely think it's the last one while it's happening



The Federal Reserve

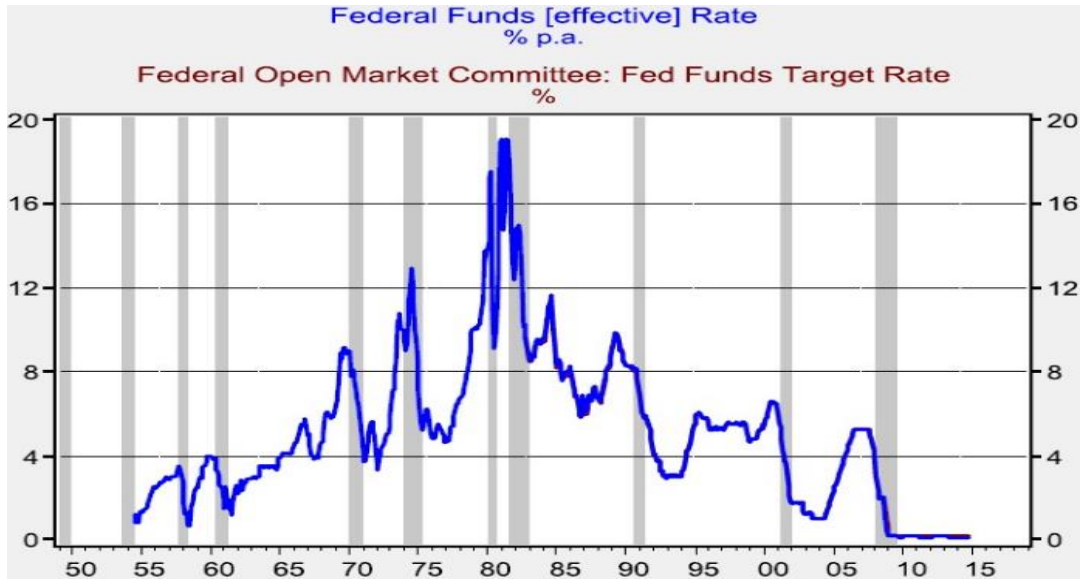
Difference of Opinion:

- Market considerably more dovish than the Fed
 - Current implied probabilities shows 80% probability for a December hike and two hikes next year

Current Implied Probabilities				3) Add/Remove Rates					
Dates	<input checked="" type="radio"/> Meeting	<input type="radio"/> Calculation		Calculated 10/22/2018					
Meeting	Hike Prob	Cut Prob		2-2.25	2.25-2.5	2.5-2.75	2.75-3	3-3.25	3
11/08/2018	6.1%	0.0%	93.9%	6.1%	0.0%	0.0%	0.0%	0.0%	
12/19/2018	79.6%	0.0%	20.4%	74.8%	4.8%	0.0%	0.0%	0.0%	
01/30/2019	80.9%	0.0%	19.1%	71.5%	9.0%	0.3%	0.0%	0.0%	
03/20/2019	93.8%	0.0%	6.2%	36.0%	51.4%	6.2%	0.2%	0.2%	
05/01/2019	94.4%	0.0%	5.6%	33.5%	50.1%	10.0%	0.7%	0.7%	
06/19/2019	97.3%	0.0%	2.7%	18.8%	41.4%	31.2%	5.6%	5.6%	
07/31/2019	97.5%	0.0%	2.5%	17.7%	39.8%	31.9%	7.4%	7.4%	
09/18/2019	98.3%	0.0%	1.7%	12.7%	32.6%	34.5%	15.4%	15.4%	
10/30/2019	98.4%	0.0%	1.6%	12.1%	31.5%	34.4%	16.4%	16.4%	

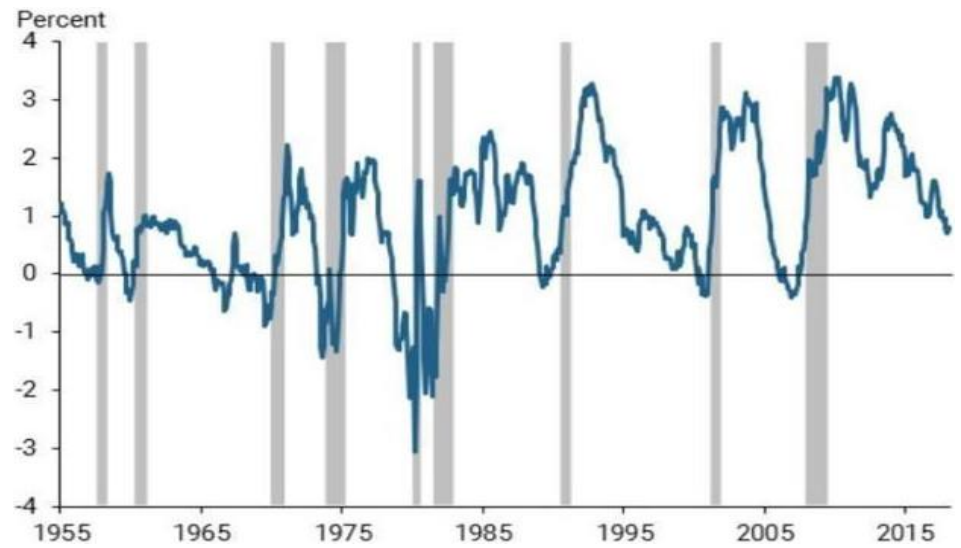


The Fed and Curve Inversion



- Fed tightening has an extremely high correlation to subsequent recessions
- Since 1950, Fed has embarked on thirteen hiking cycles
 - Ten of those cycles resulted in recessions

- Curve inversion widely considered a harbinger of recession, for good reason
 - Predicted all nine US recessions since 1955 - who wants bet against that track record?

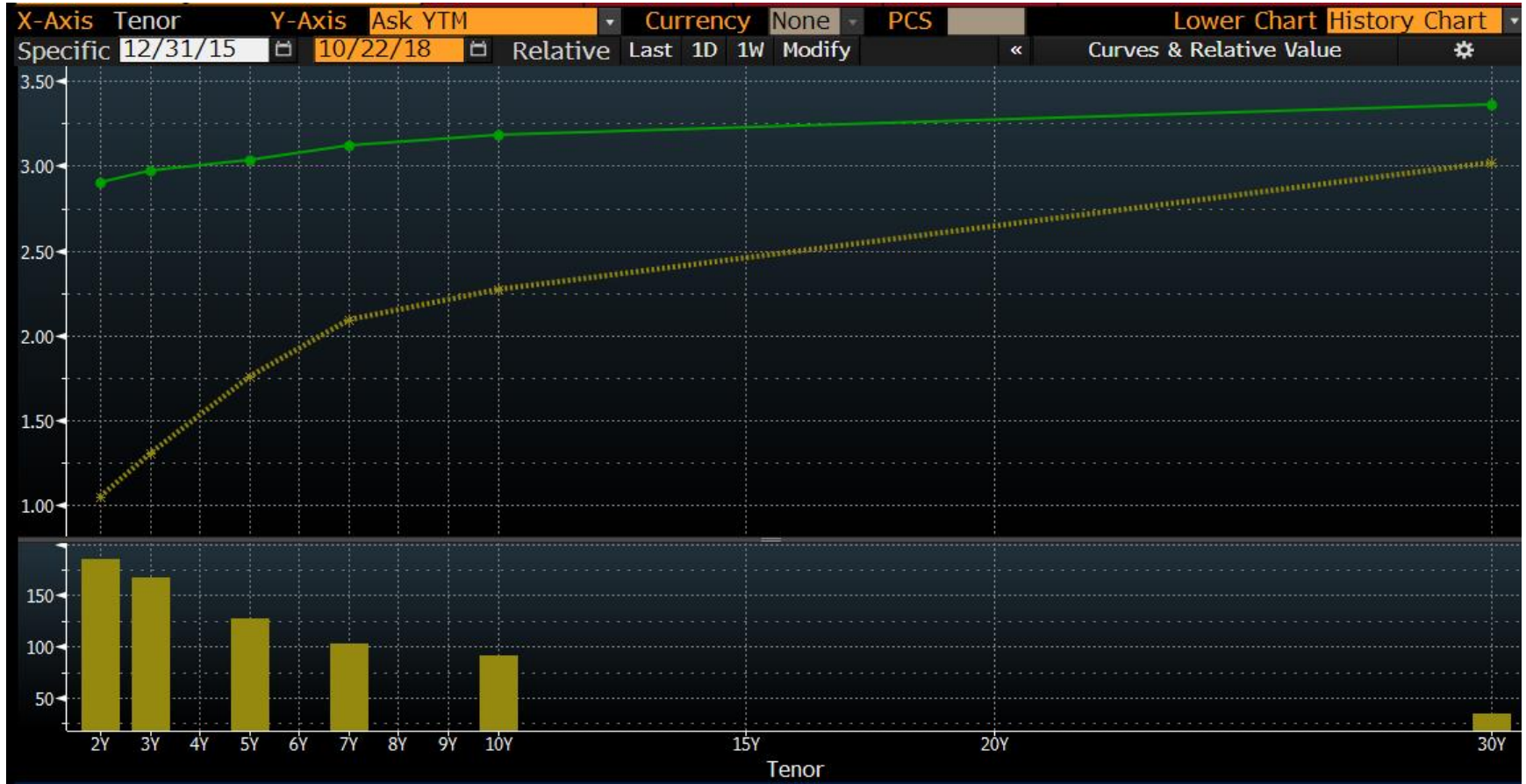


Source: Bloomberg, Federal Reserve Bank of Atlanta; Business Insider

The Yield Curve

What We Know:

- Since first hike this cycle in December 2015:
 - 2-year higher by 185 bps, 5-year higher by 128 bps, 10-year higher by 91 bps, 30-year higher by 35 bps



Source: Bloomberg



The Yield Curve

Flat to Inverted?:

- The yield curve is flat, very flat, but it is not yet inverted
 - Current spread between 2-year and 10-year yield just 28 basis points



The Yield Curve

Wiggle Room?:

- According to Larry Kudlow, Director of US National Economic Council, we're looking at the wrong curve
 - Should focus on the difference between the 3-month bill and the 10-year note



Source: Bloomberg

The Market

Observations from the Past:

Lag between inversion and recession:

2-10 Year Yield Curve Inverts	Recession Starts	Months from Inversion to Recession
August 1978	January 1980	17
September 1980	July 1981	10
December 1988	July 1990	19
February 2000	March 2001	13
December 2005	December 2007	24
	Average	17

Averages from last three curve inversion periods:

- With 2s/10s spread at just 23bps, we are historically less than six months from inversion
- Yields rose in the months leading up to inversion and fell immediately once the curve inverted

Tenor	From 6 Months Prior to Inversion
2-year	+82 basis points
3-year	+73 basis points
5-year	+62 basis points
10-year	+44 basis points
30-year	+24 basis points

Tenor	12 Months After Inversion
2-year	-132 basis points
3-year	-127 basis points
5-year	-120 basis points
10-year	-98 basis points
30-year	-12 basis points

Source: Bloomberg, Federal Reserve



The Yield Curve

Different this Time?

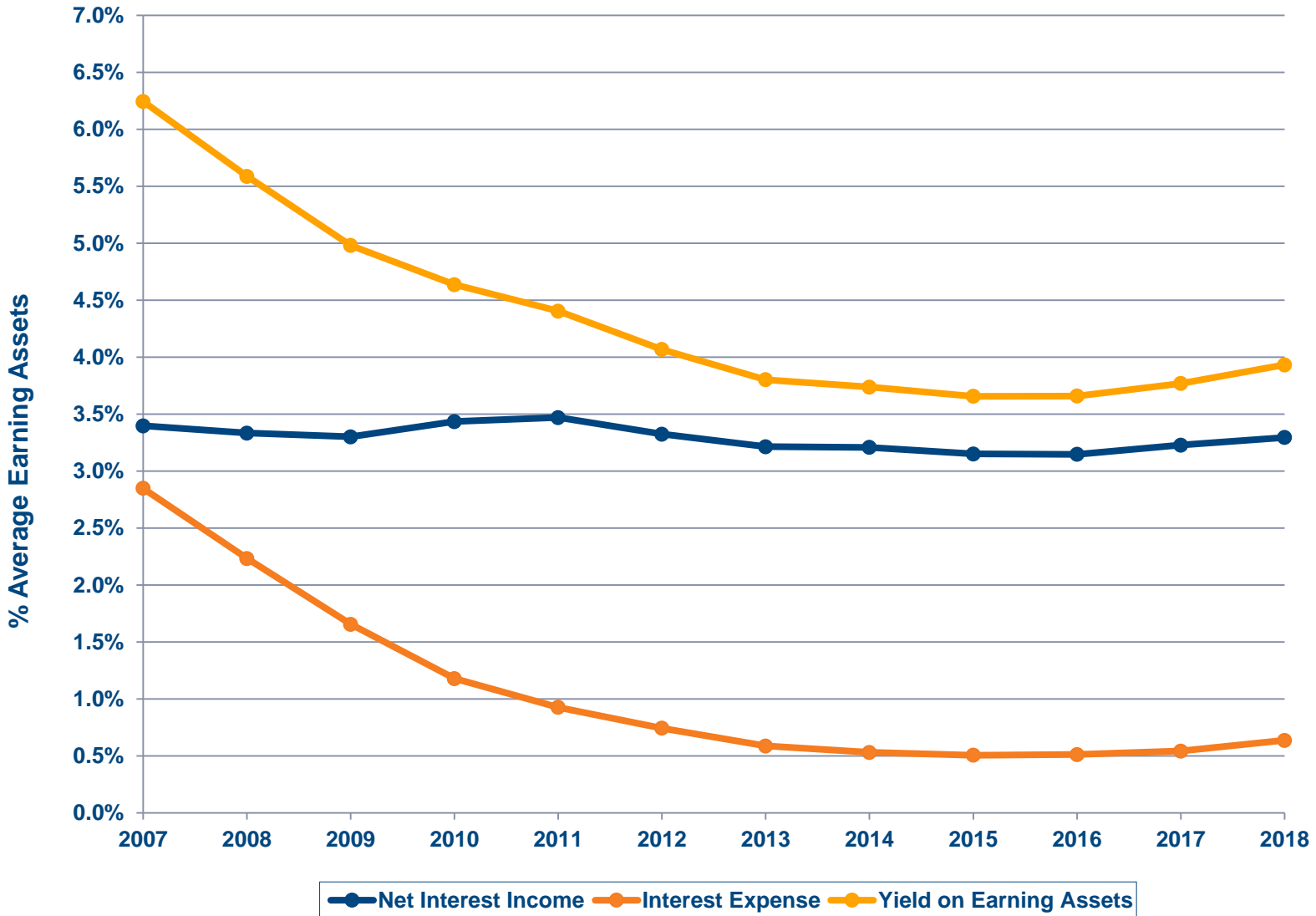
The four most dangerous words in investing are “This time it’s different.” - Sir John Templeton

Some big unknowns to consider:

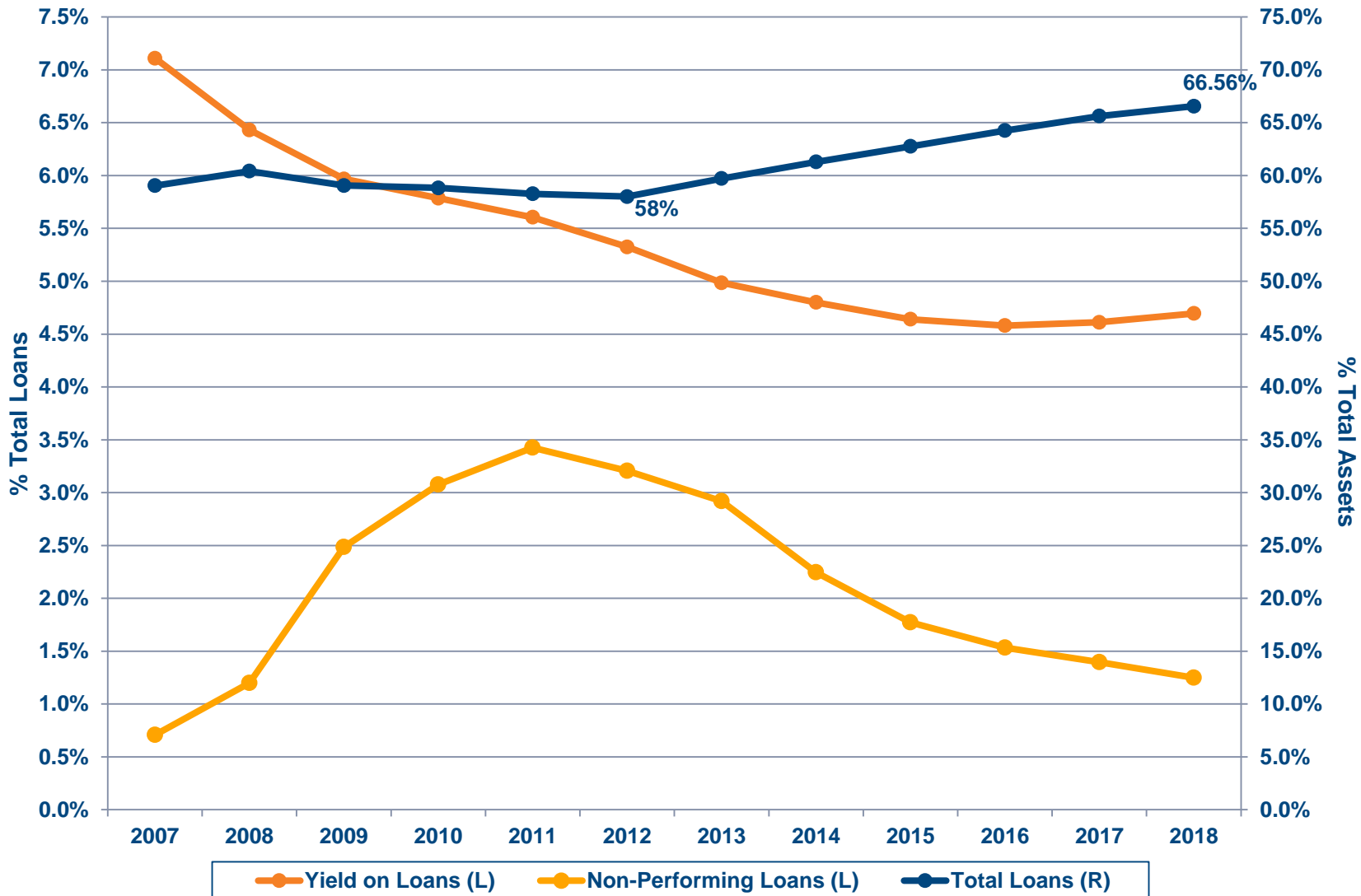
- Trump - nature, attack of Fed, etc.
- Trade/Tariffs- specifically with China
- Mid-term elections - possible that this will all be obsolete in a few weeks
- Geopolitical/Economic Struggles Across Globe

Balance Sheet Trends: NY/NJ Banks

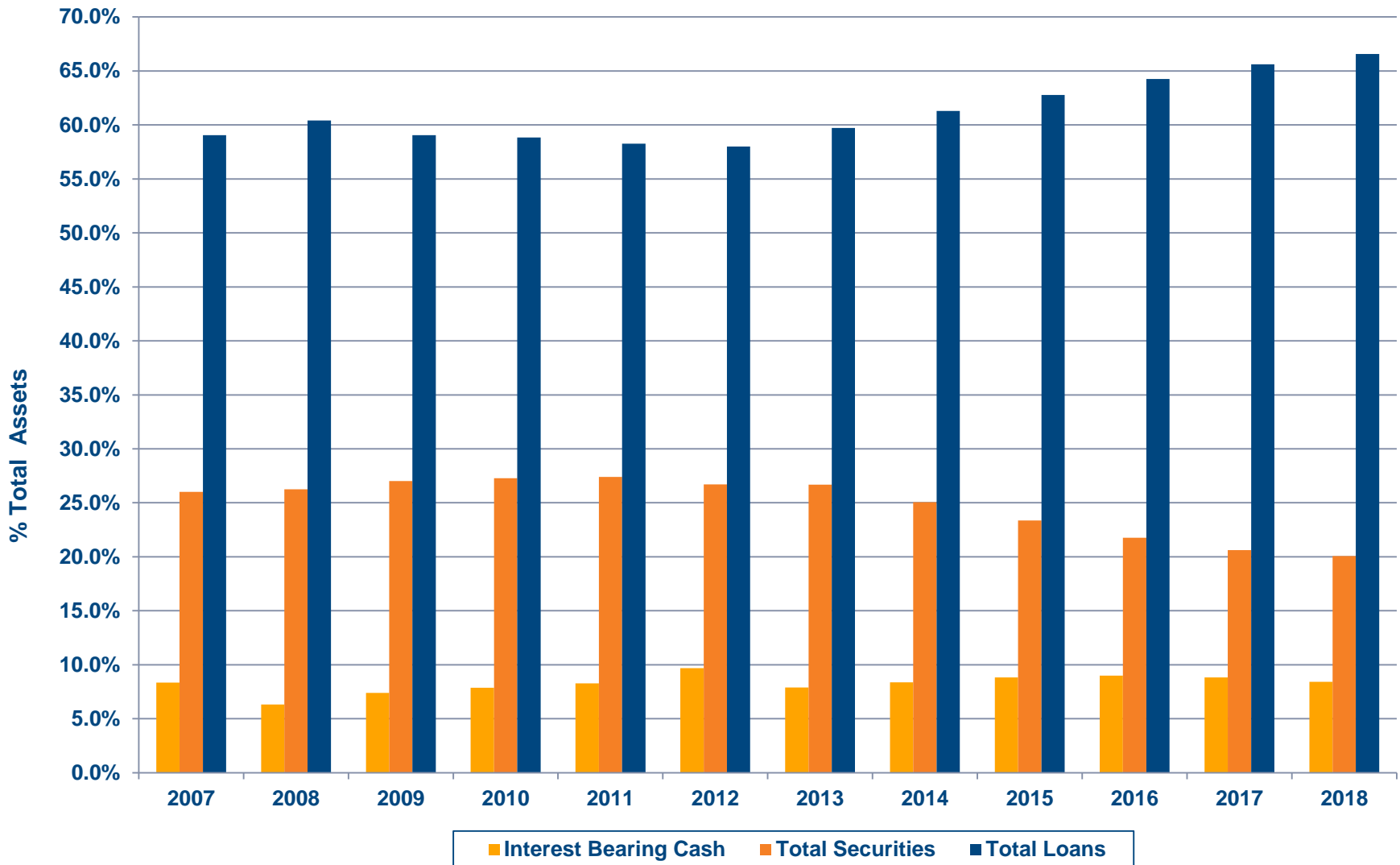
NY/NJ Bank Profitability Trends



NY/NJ Bank Loan Trends

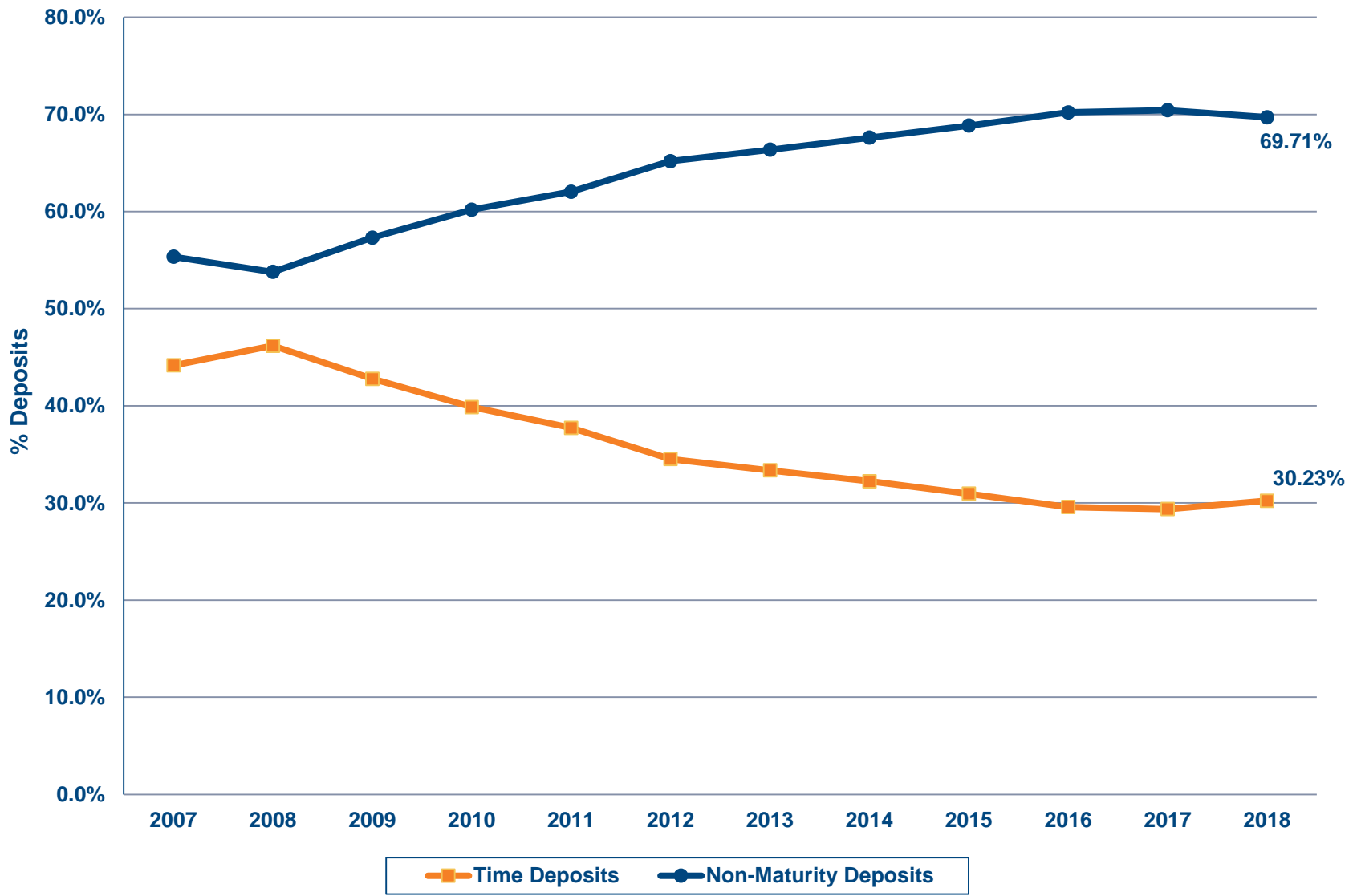


NY/NJ Bank Earning Asset Composition



Source: SNL
17 www.suntrustrh.com

NY/NJ Bank Funding Composition



Loan Betas Lagging Deposit Betas

- Deposit costs at community banks rose at a quicker pace than loan yields in Q2
- According to recent SNL article, community banks have seen their deposits reprice more quickly than loans - many have also reported higher concentrations of CDs in their funding bases
- Fed rate hikes have increased loan yields, but increases haven't kept up with deposit costs. Trend will likely hold as the marketplace for quality loans is extremely competitive
- Combined with a flatter yield curve, this trend does not have good implications for bank margins in 2019

Key Takeaways

- NIM improvement has been largely attributable to earning asset composition change
- NIM expansion in rising rates dependent on controlling cost of funds
 - Beta assumptions critical to projected performance
- Monitor Liquidity
 - Tight liquidity could lead to utilization of higher cost funding sources
- Use wholesale balance sheet to minimize IRR exposure and manage liquidity AND improve margins

The Bond Portfolio in the Current Environment

Section Overview

- Bond portfolio as a balance sheet lever
- Practical tips for navigating the current market environment
- Key takeaways

Bond portfolio as a balance sheet lever

Remember the portfolio is used for more than just earnings - also for liquidity, interest rate risk, and capital management

- It is easy to get wrapped up in the portfolio as solely an earnings driver
- Bond portfolio is the asset side wholesale balance sheet - it is the key lever in repositioning

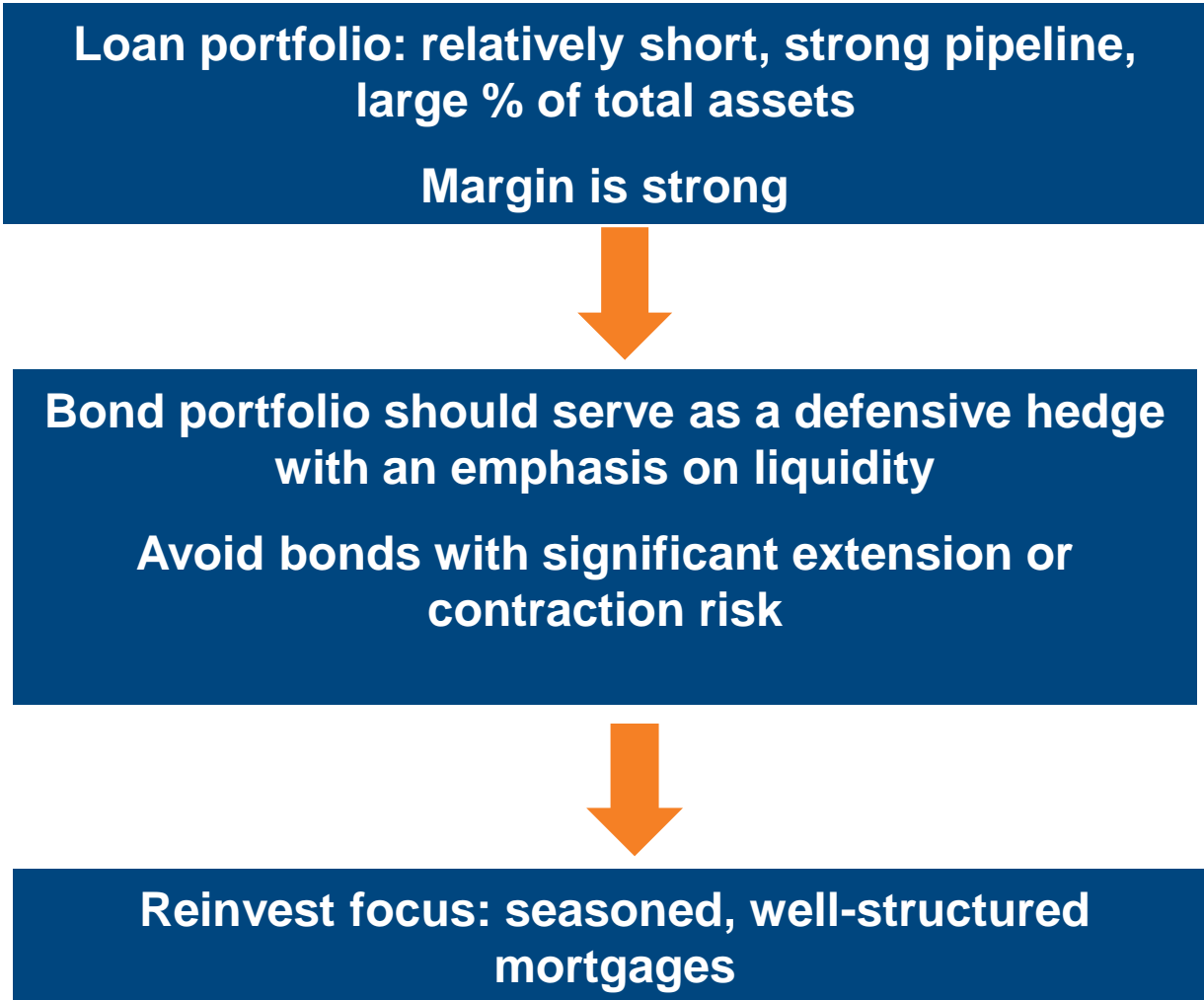
Your portfolio mix should complement and balance the rest of the balance sheet

What determines short and long term investment mix?

- Composition of loan portfolio
- Loan pipeline/liquidity needs
- Ability to take on duration
- Overall risk profile and balance sheet position

Bond portfolio as a balance sheet lever

Example 1:



Bond portfolio as a balance sheet lever

Example 2:

**Loan portfolio: weak demand; low % total assets
Bond portfolio is KEY driver of earnings/ margin performance**



Bond portfolio should aim to take advantage of both rising short term rates and lock in higher long rates



Reinvest focus: blended exposure – short MBS that can be reinvested at higher rates or floating rate bonds combined with relatively longer yield anchor (think DUS, munis, etc.)

Bond portfolio as a balance sheet lever

Example 3:

**Funding base: Higher cost/ more volatile
Loan portfolio: fixed rate (at least over near term)**



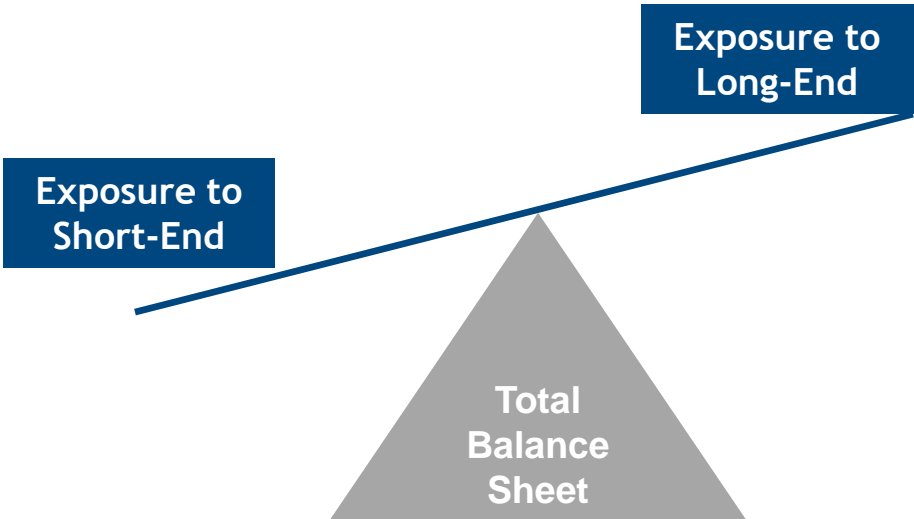
**Need earning assets in the bond portfolio to offset
the floating rate exposure of cost funds –
especially as the curve inverts**



**Reinvest focus: floating rate and short cash flowing
securities**

Why we like the idea of the barbell:

- With curve inversion likely - don't see value in the belly
- Barbell doesn't have to mean long municipals and floaters - it is a balancing act between short duration cash flow that can take advantage of front-end rates and long-term rates to lock in "high" yields
- More so than just adding duration - add positive convexity - or less negative convexity



The goal is to use the portfolio to adjust the exposures of the total balance sheet to your optimal position

Practical tips for navigating the current market environment

Avoid market timing:

- Follow what we know we know - reinvest using market knowledge combined with institutional needs/objectives
- This is not the time to take on a trader mentality

Take a long term perspective - position your portfolio to perform well in all rate environments

- Aim for the portfolio to always meet key objectives regardless of rate environment...because we don't have a crystal ball
- Goal is for strategic balance sheet immunization
- Neutral doesn't mean passive - strategically positioned




Practical tips for navigating the current market environment

Seek out call protection and positive convexity where you can find it - especially if it is cheap

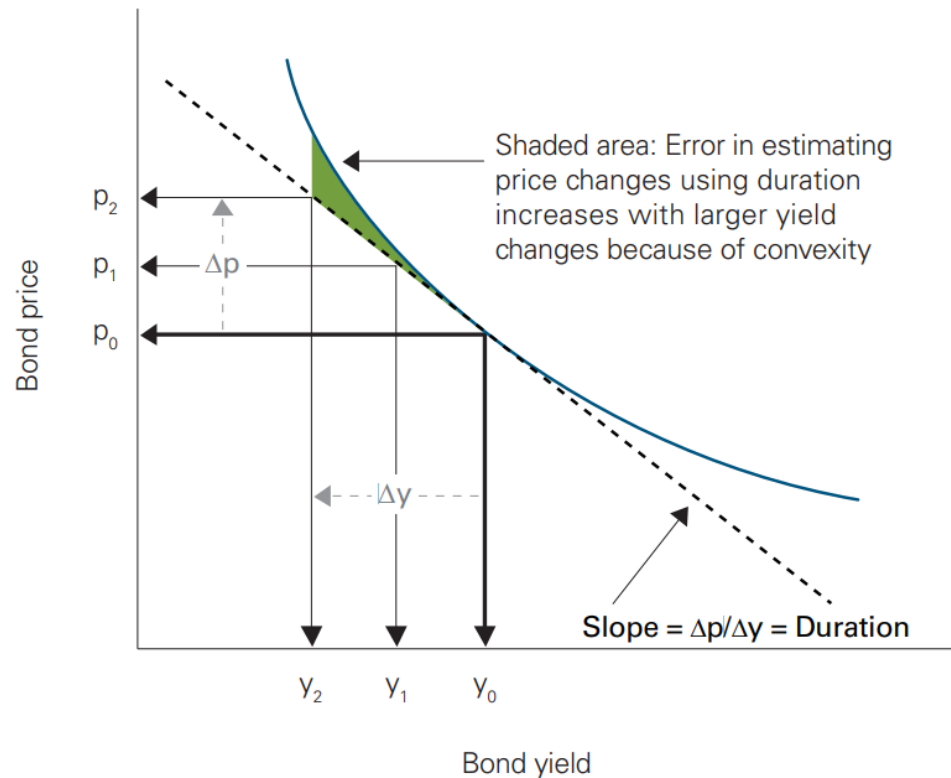
- If you wait to position for inversion/falling rates until after it occurs - it will cost more
- When preparing for falling rates doesn't seem 100% necessary - probably the right time to be doing

Stability and predictability of cash flows is KEY.

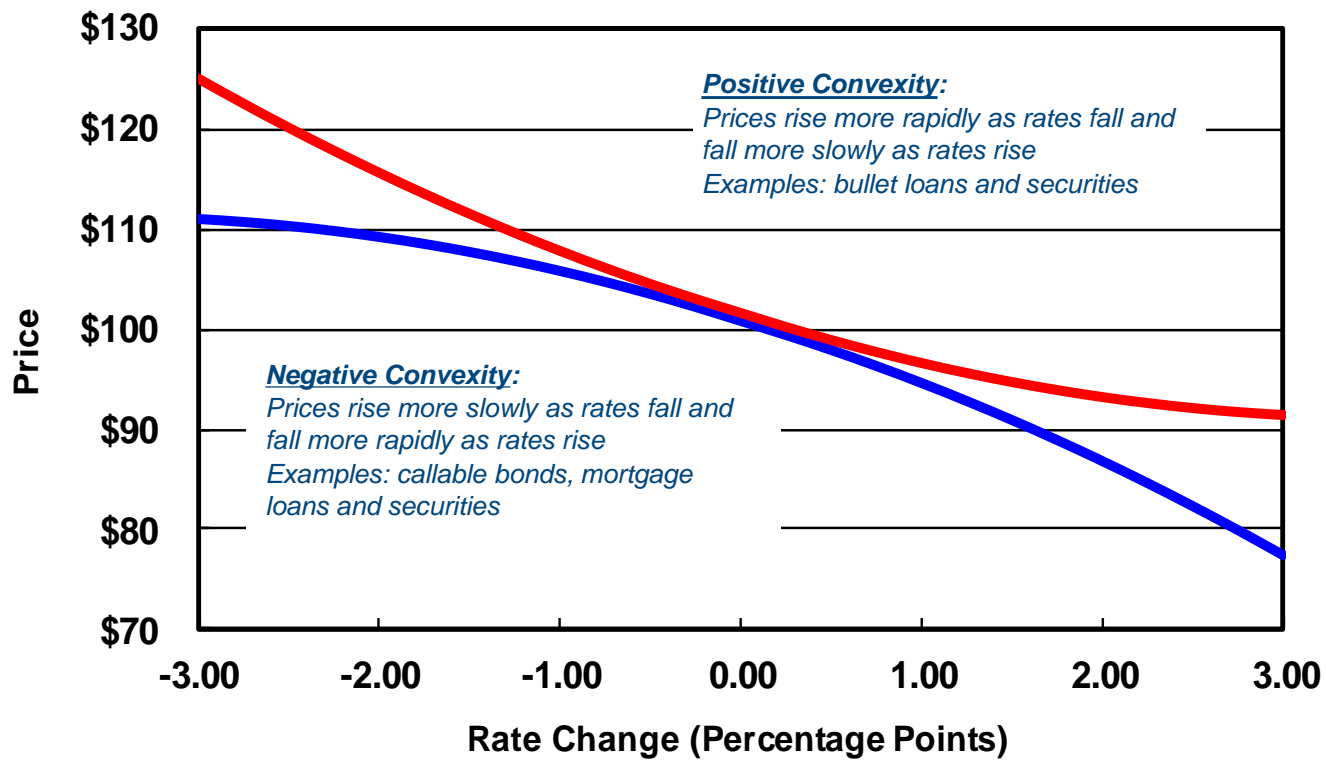
CASH FLOW = 

Importance of Convexity:

- Duration assumes a linear relationship between price and yield changes in bonds
- However, for larger interest rate moves, the relationship between the change in rates and the change in bond prices is asymmetric



Practical tips for navigating the current market environment



Why do we care?

- Lots of depositories have margin/value exposure to falling rates
- When rates fall embedded options on negatively convex loans and bonds shorten their life and diminish value

Need positive convexity and don't want a portfolio that is 100% bullet agencies?

Consider the following options that have less negative convexity/provide more call protection and structure:

- Agency CMBS** - yield maintenance and other forms of call protection can result in positive convexity
- Deeply Discounted Callable Agencies** - far out of the money coupons can result in positive convexity
- Call-Protected Collateral** - loan balance, geography, LTV and third-party origination can result in better convexity
- Super-Seasoned Collateral** - burnout can result in better convexity
- VADMs and PACs** - solid structure can result in better convexity
- Callable Munis** - longer lockouts can result in better convexity

Key Investment Sectors: Risks, Rewards, and Relative Value

Key Investment Sectors: SBA Floaters

SBA Floaters:

Risks:

- Existing portfolios generally exposed to faster prepayment speeds and a slower Fed
- Falling rates

Rewards:

- A faster than expected Fed generally good for current and new holders
- Faster prepayment speeds returns cash flow when other sectors are extending
- 0% risk weighted/100% government guaranteed
- Uncapped

Relative Value:

- Largely focus on new issue discounted pools
- Mix in alpha pools when available
- This sector offers the best relative value on the short-end

Key Investment Sectors: SBA Floaters

Strategy SBA Floaters

- Focus on new issue, discounted pools
- Add alpha pools when available

<u>Description</u>	<u>CUSIP</u>	<u>Orig. Face</u>	<u>Par Value</u>	<u>Coupon</u>	<u>Maturity</u>	<u>BkYld</u> <u>TEY (%)</u>	<u>Book</u> <u>Price</u>	<u>Book</u> <u>Value</u>	<u>WAL</u>	<u>Mod</u> <u>Dur</u>	<u>Settle</u> <u>Date</u>	<u>Mtg</u> <u>Speed</u>	<u>Bps per</u> <u>Point</u>
SBA510238	83164MLT4	1,000,000	995,069	2.700	5/25/2043	2.790	99.250	987,606	5.29	0.27	10/25/2018	14 CPR	
SBA521845	83165AHW7	2,200,000	488,093	5.539	1/25/2024	3.307	103.500	505,176	2.02	0.33	10/25/2018	20 CPR	15
SBA522136	83165ASZ8	250,000	125,449	5.988	5/25/2027	3.457	105.625	132,505	2.75	0.35	10/25/2018	20 CPR	12
SBA509490	83164LRK9	1,057,058	278,787	6.075	12/25/2021	3.215	103.000	287,151	1.40	0.32	10/25/2018	20 CPR	14
SBA522173	83165AT61	1,000,000	390,420	6.509	10/25/2023	3.533	104.625	408,477	1.96	0.33	10/25/2018	20 CPR	16
Total Purchases		5,507,058	2,277,817	4.555	5/24/2032	3.124	101.892	2,320,915	3.36	0.30			

Current 3yr Fixed Offering Yields:

- Treasury: 2.97%
- Agency: 2.97%
- 10yr MBS: 3.17%
- 3yr CMO: 3.48%

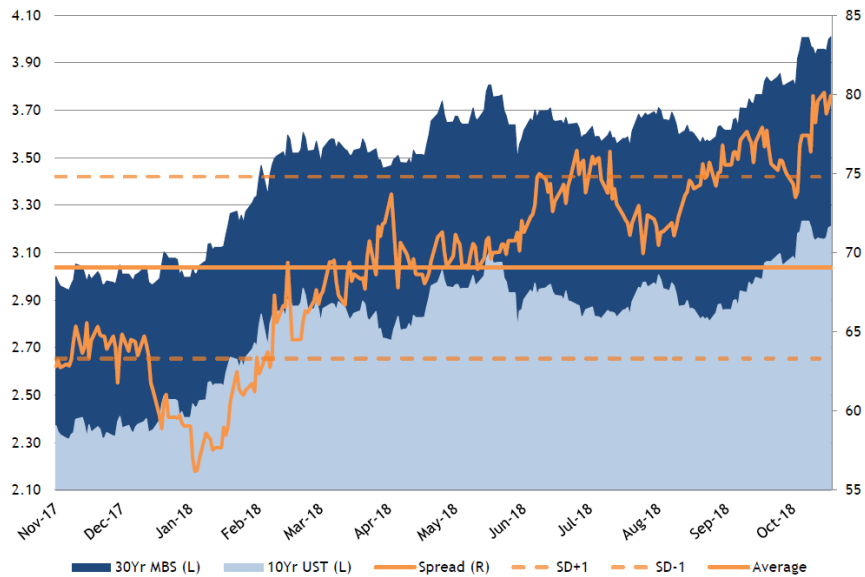
Key Investment Sector: Mortgages

Spreads

30-year spreads are at their twelve month wides due to the end of quantitative easing and extension in the mortgage space. Spreads aren't as wide in shorter-term mortgages given the preference for short duration.

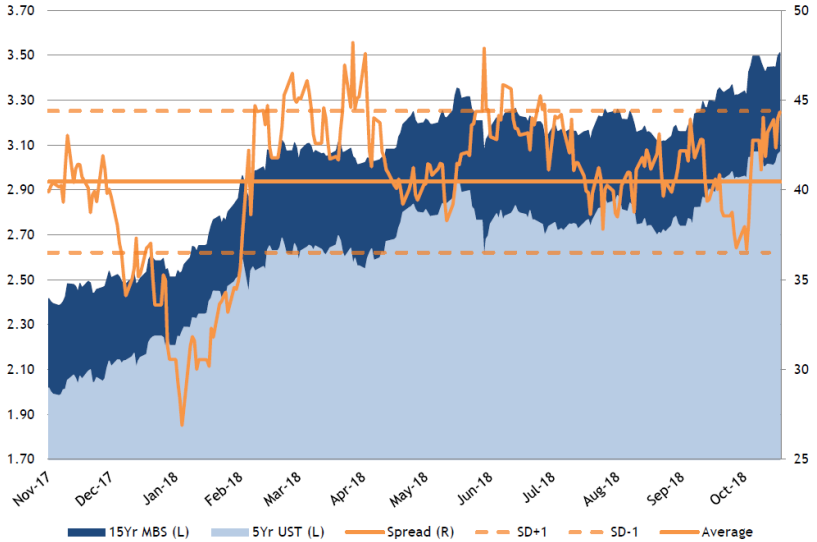
Statistic	Bps
12M Avg.	69.06
Min	60.58
Max	80.13
St. Dev	5.74
Recent	79.92
StDev Away	1.89

30-Year FNMA MBS



15-Year FNMA MBS

Statistic	Bps
12M Avg.	40.46
Min	31.79
Max	48.20
St. Dev	3.95
Recent	44.35
StDev Away	0.99



Key Investment Sector: Mortgages

Risks, Rewards, and Relative Value

Risks:

- Spread risk in 30yr MBS as the Fed ends mortgage buying
- Negative convexity/risk to falling rates

Rewards:

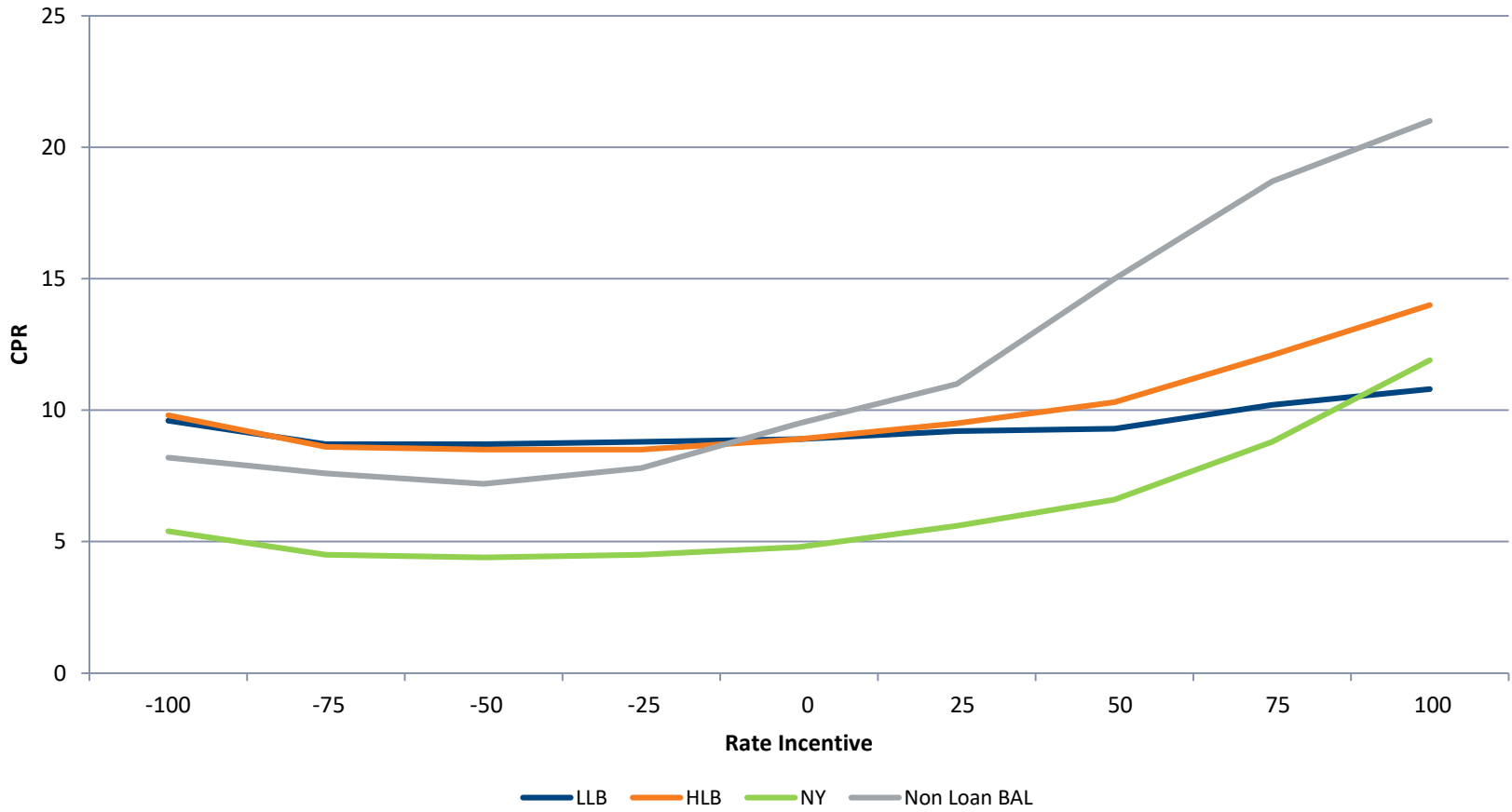
- Mortgage market remains a robust liquidity option
- Monthly cash flows provide liquidity and the ability to reinvest at higher rates
- Cheap source of call protection

Relative Value:

- CMOs - provide spread pick up over traditional MBS
- Specifically I like “story bonds”: loan balance, 100% NY, high LTV, etc. Provide call protection, structure, relatively less negative convexity

Call Protected Stories

S Curves by Collateral Story



Source: CPR/CDR, 30yr FNMA Collateral
38 www.suntrustrh.com

Mortgages

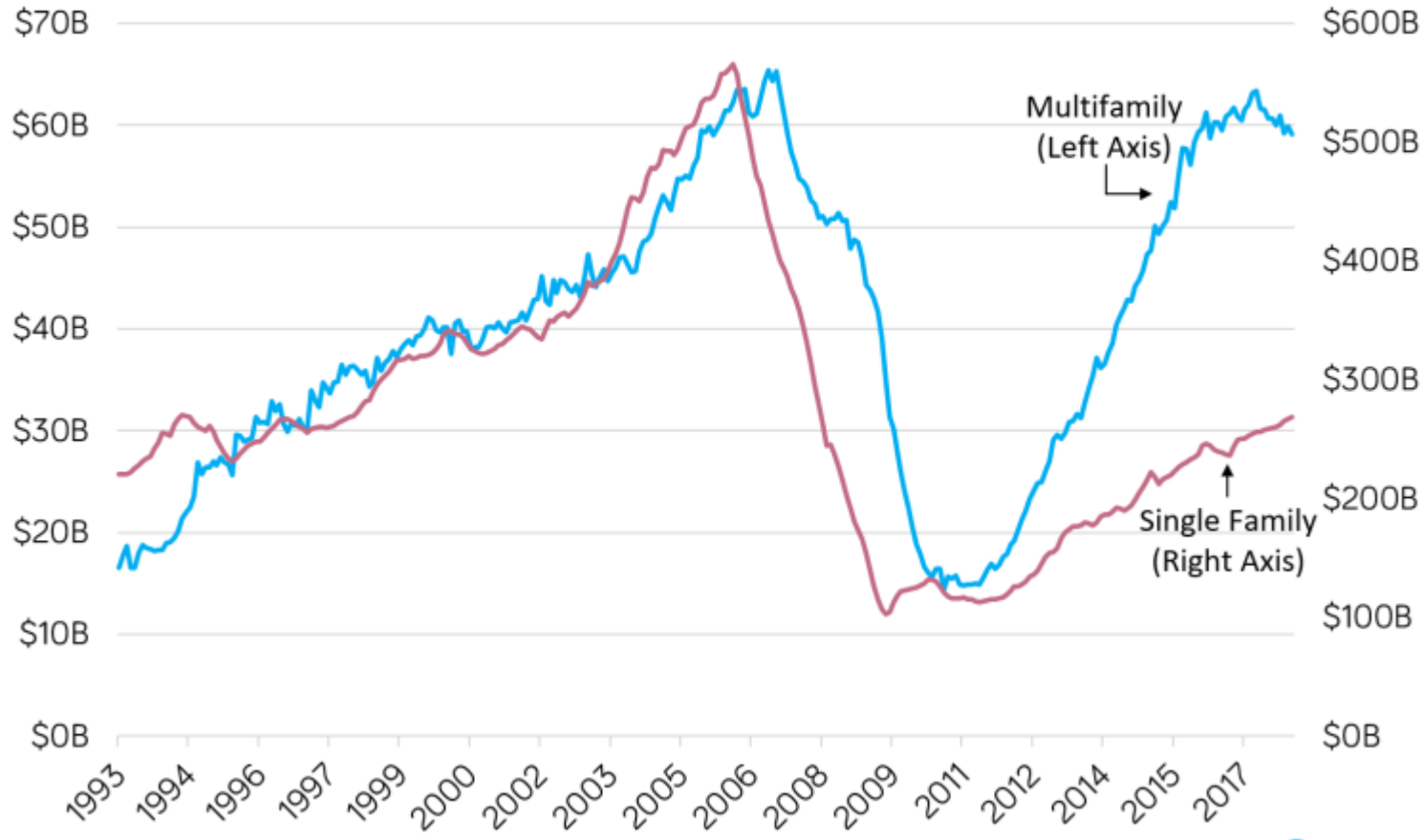
Call Protected Stories: MPAY screen

Latest Historical BVAL
 TBA Price Source **CBBT** 10/19/2018 NY 4PM

TBA Bid Price (CBBT)	30Yr 3	30Yr 3.5	30Yr 4	30Yr 4.5
FNMA TBA	94-17	97-09+	99-30	102-09
FGLMC TBA	94-17	97-10	99-30+	102-10
BVAL Non Standard Payups				
Low Loan Balance (85K)	0-16	0-18+	0-25+	1-17+
Medium Loan Balance (110K)	0-10+	0-14+	0-23	1-10
High Loan Balance (150K)	0-08	0-09+	0-19+	1-03
Super High Loan Balance (175K)	0-07	0-06+	0-14+	0-25+
100% New York	0-01	0-01+	0-11+	1-01
MHA LTV 80-90%	0-01	0-00	0-03	0-03
MHA LTV 90-95%	0-00	0-01	0-02	0-07+
MHA LTV 95-100%	0-01	0-00+	0-05	0-13+
MHA LTV 100-105%	0-03+	0-01	0-13	0-22

Multifamily spending near pre-recession peak as single family lags

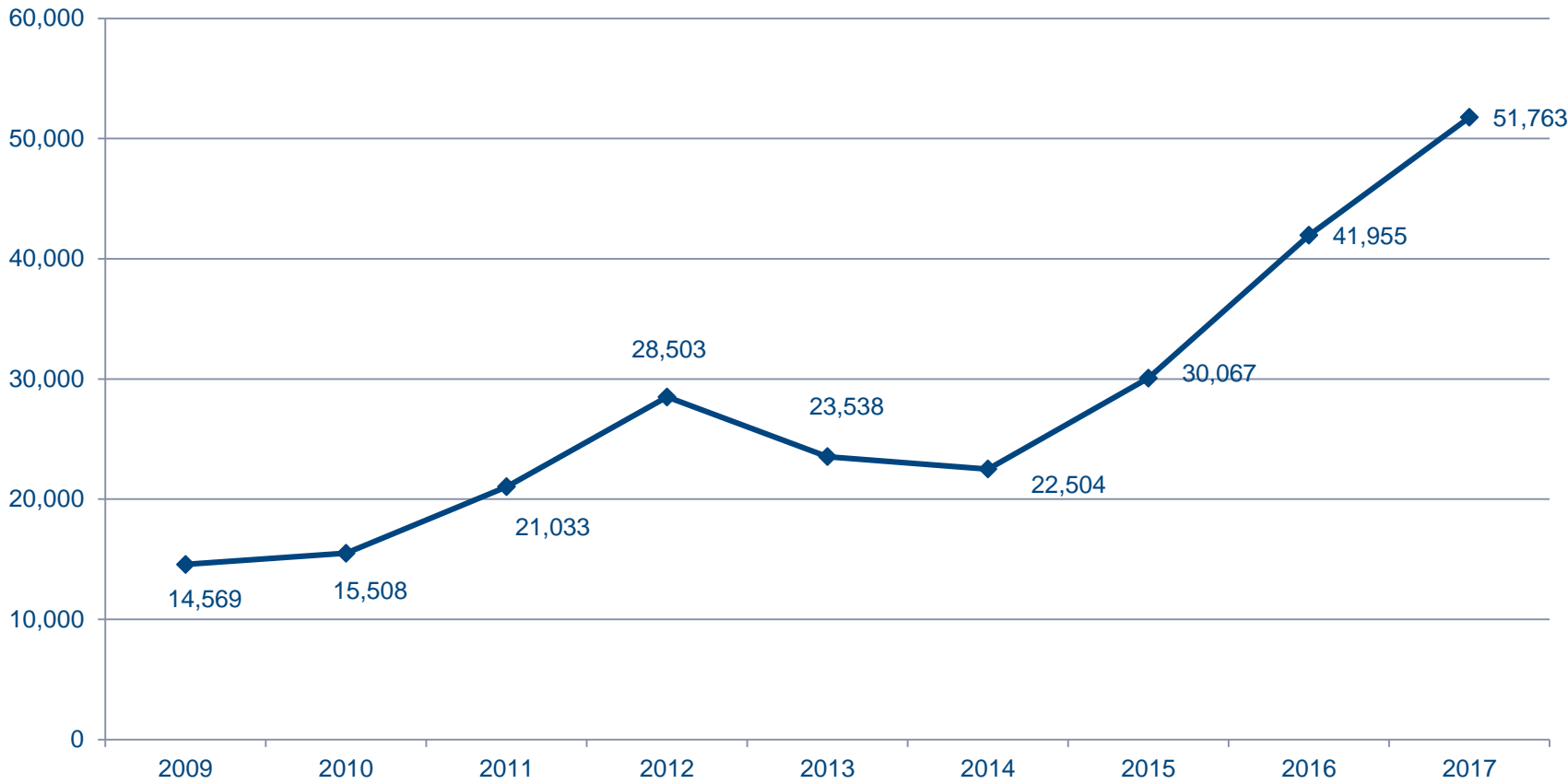
Real spending on new residential construction



- Millennials are now the largest generation in labor force
- Millennials are more likely to rent multifamily house than older generations

FNMA DUS Issuance

DUS Issuance



Key Investment Sectors: CMBS

Multi-Family

Risks:

- Potential overheating in the sector
- Delinquencies moving modestly higher

Rewards:

- Outstanding source of call protection and structure
- Positive convexity/potential for price appreciation to falling rates

Relative Value:

- General value versus bullet agencies
- Spreads tight on short-end; can find more value further out the curve
- Better spread in wider yield maintenance end dates to maturity

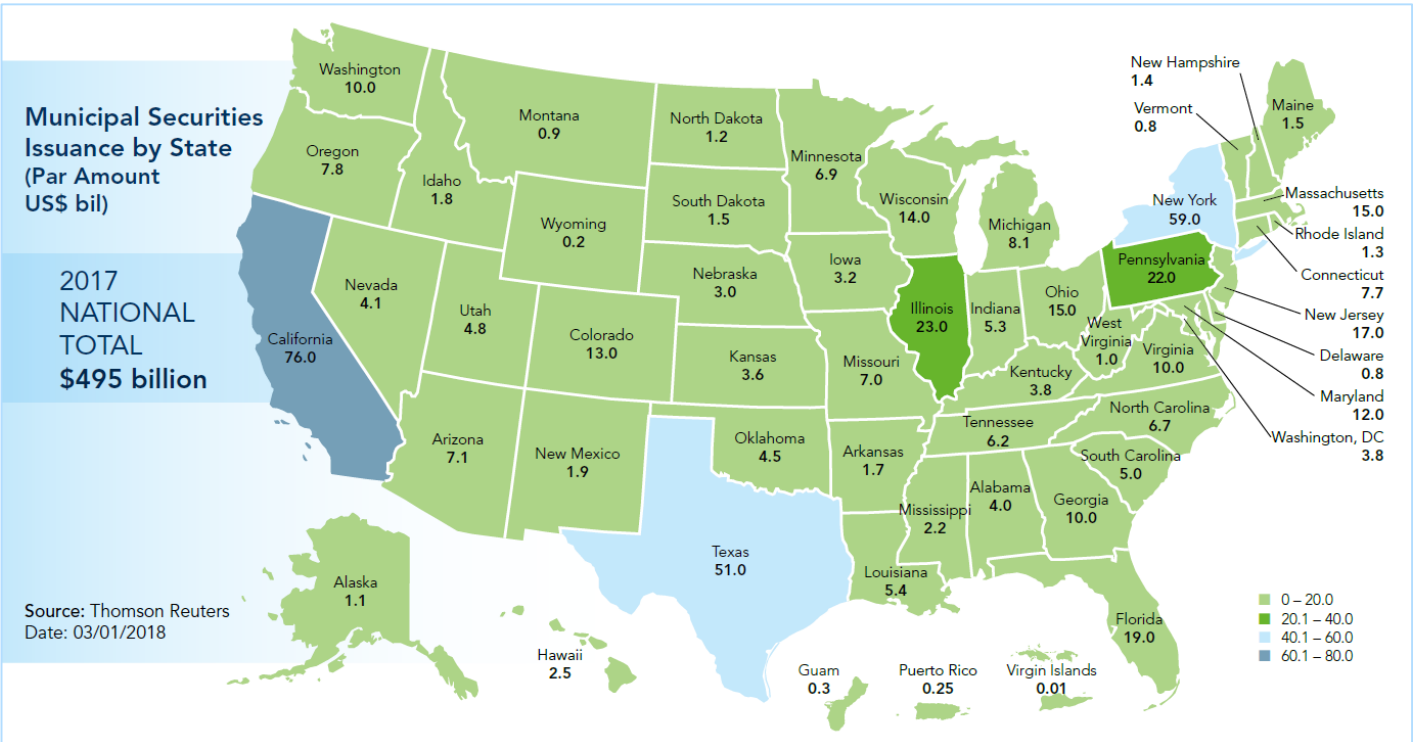
DUS Strategy

Description	CUSIP	Orig. Face	Par Value	Coupon	Maturity	BkYld TEY (%)	Book Price	Book Value	WAL	Eff Dur	Eff Conv	Price Vol +300	Settle Date	Mtg Speed
DUS 4.5yr/5yr	3138L42J1	1,000,000	914,016	3.460	9/1/2023	3.305	100.751	920,878	4.65	4.22	0.215	-11.74%	10/25/2018	0 CPY
DUS 5yr/7yr	31377U4M2	1,000,000	1,000,000	3.480	9/1/2025	3.611	99.452	994,518	6.79	5.94	0.411	-16.07%	10/25/2018	0 CPY
DUS 7yr/10yr	31377U6R9	1,000,000	1,000,000	3.630	8/1/2028	3.907	98.212	982,124	9.64	7.96	0.750	-20.79%	10/25/2018	0 CPY
Total Purchases		3,000,000	2,914,016	3.525	1/15/2026	3.614	99.434	2,897,520	7.07	6.08	0.46	-16.29%	10/25/2018	

Key Investment Sectors: Municipals

Municipal Market

- Market Size: \$3.9 trillion
- Approximately 1 million outstanding municipal securities
- \$11bn average in par trade daily
- Default rate of 0.18% for IG munis vs. 1.74% for corporate bonds
- Individuals make up ~42.5% of market, while banks comprise ~15.5%



Source: emma.msrb.org

Key Investment Sectors: Municipals

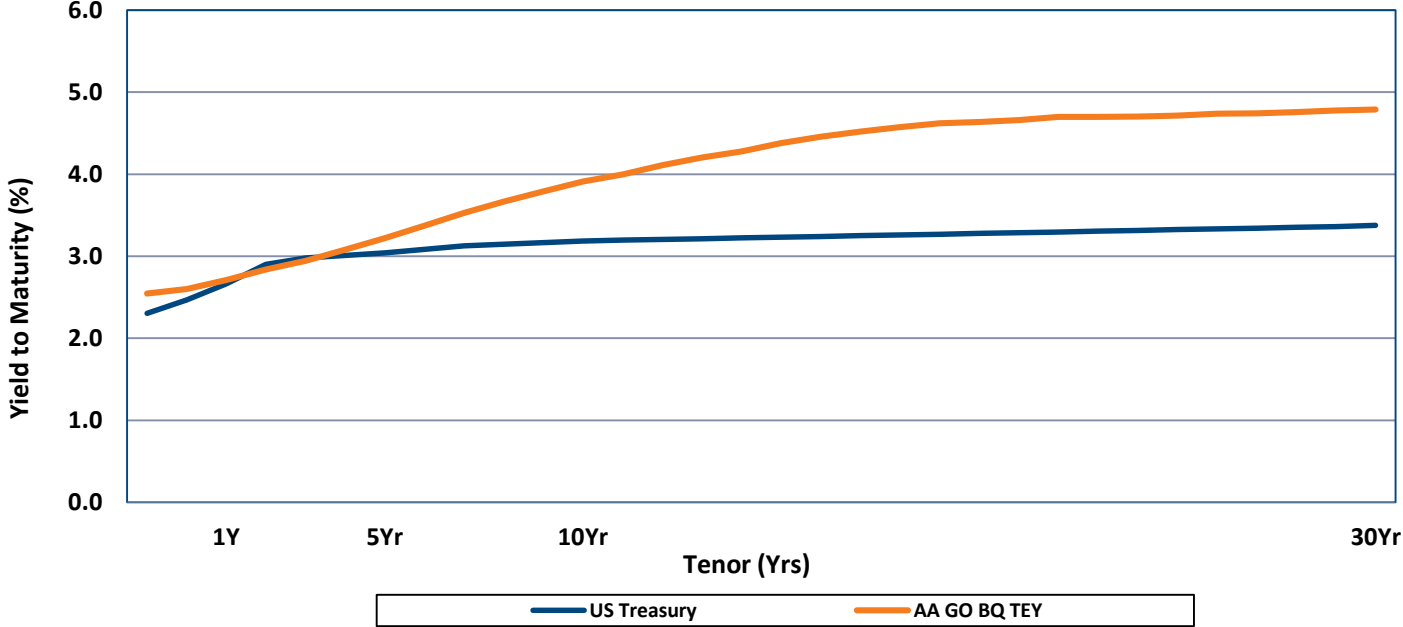
Pension Funding Ratios

Table I: State Ranking by Pension Funding Ratio

Table I: State Ranking by Pension Funding Ratio											
First Quartile			Second Quartile			Third Quartile			Fourth Quartile		
Rank	State	Funding Ratio	Rank	State	Funding Ratio	Rank	State	Funding Ratio	Rank	State	Funding Ratio
1	SD	100.08	13	ME	81.93	26	AL	70.85	39	NM	62.52
2	WI	99.98	14	WV	79.23	27	MD	68.56	40	MS	61.08
3	TN	96.23	15	GA	79.23	28	KS	67.12	41	MA	59.94
4	NY	94.51	16	FL	79.06	29	AK	66.62	42	PA	55.32
5	ID	91.27	17	OH	78.47	30	CA	66.53	43	HI	54.80
6	NC	90.67	18	OK	77.92	31	LA	65.56	44	RI	54.59
7	UT	90.31	19	MO	77.86	32	MI	65.14	45	SC	54.25
8	NE	90.18	20	VA	77.22	33	IN	65.04	46	CO	47.13
9	WA	89.60	21	AR	76.29	34	VT	64.26	47	CT	43.85
10	OR	83.12	22	TX	76.06	35	ND	63.78	48	IL	38.42
11	DE	82.80	23	WY	75.91	36	MN	63.34	49	NJ	35.79
12	IA	82.13	24	NV	74.45	37	AZ	62.73	50	KY	33.87
			25	MT	72.86	38	NH	62.58			

Key Investment Sectors: Municipals

AA TEY vs US TSY



US Treasury		
US Treasury	Rate	Spread
2 Year	2.90%	
10 Year	3.19%	0.29%
30 Year	3.38%	0.19%

AA GO BQ TEY		
GO AA BQ Muni	Rate	Spread
2 Year	2.84%	
10 Year	3.91%	1.07%
30 Year	4.79%	0.88%

Key Investment Sectors: Municipals

Risks, Rewards, and Relative Value

Risks:

- Uptick in defaults should a recession occur
- Unintended consequences of policy

Rewards:

- Terrific credit performance versus corporates
- Remains a cheap source of call protection
- Muni curve is relatively steep to Treasuries

Relative Value:

- Need to go further out the curve to find value
- BQs outperform GM as cost of funds increases due to TEFRA disallowance

Practical tips for navigating the current market environment

Focus on having a plan for redeployment of cash flow:

- What is your market outlook?
- How do you expect the balance sheet to change?
- What is a one key goal or objective for your bond portfolio?

CURRENT PORTFOLIO							ROLL-OFF					
Sector	Yield	Eff Dur	Eff Conv	Px Vol +300	Value	Mix	Yield	Eff Dur	Eff Conv	Px Vol +300	Value	Mix
MBS Fixed	2.31	4.08	-0.69	-13.28%	624,033,348	87.70%	2.26	3.96	-0.59	-12.75%	83,981,409	96.82%
Fixed CMO	0.00	0.00	0.00	0.00%	0	0.00%	0.00	0.00	0.00	0.00%	0	0.00%
CMBS	0.00	0.00	0.00	0.00%	0	0.00%	0.00	0.00	0.00	0.00%	0	0.00%
SBA Floaters	0.00	0.00	0.00	0.00%	0	0.00%	0.00	0.00	0.00	0.00%	0	0.00%
Taxfree Muni	3.20	4.96	-0.66	-13.87%	87,489,100	12.30%	3.19	0.85	-0.41	-3.35%	2,755,000	3.18%
Portfolio	2.42	4.19	-0.69	-13.35%	711,522,448	100.00%	2.29	3.86	-0.58	-12.45%	86,736,409	100.00%
REINVESTMENT							ENDING PORTFOLIO					
Sector	Yield	Eff Dur	Eff Conv	Px Vol +300	Value	Mix	Yield	Eff Dur	Eff Conv	Px Vol +300	Value	Mix
MBS Fixed	3.06	3.29	0.04	-9.50%	3,736,409	4.31%	2.32	4.10	-0.70	-13.34%	543,788,348	76.43%
Fixed CMO	3.69	3.56	-1.50	-14.37%	10,000,000	11.53%	3.69	3.56	-1.50	-14.37%	10,000,000	1.41%
CMBS	3.61	6.05	0.46	-16.29%	17,666,667	20.37%	3.61	6.05	0.46	-16.29%	17,666,667	2.48%
SBA Floaters	3.12	0.30	0.00	-1.00%	27,666,667	31.90%	3.12	0.30	0.00	-1.00%	27,666,667	3.89%
Taxfree Muni	3.77	9.99	0.22	-15.61%	27,666,666	31.90%	3.34	6.30	-0.45	-14.55%	112,400,766	15.80%
Portfolio	3.49	5.07	-0.01	-10.68%	86,736,409	100.00%	2.56	4.34	-0.62	-13.14%	711,522,448	100.00%

Key Takeaways

- No one knows where we are going - but based on history - curve is likely to invert and lower rates likely to follow
- Current balance sheet trends suggest potential for margin contraction as loan betas lag deposit betas
- Bond portfolio is a tool for managing parts of balance sheet out of our control
- Have a plan for strategically deploying \$\$ in the bond portfolio
- Avoid market timing - goal is for the portfolio to perform and meet goals regardless of rate environment
- Given uncertainty of market environment, we believe that convexity, stability, and cash flow - key to a well managed portfolio