

CPIM

CENTER FOR PUBLIC INVESTMENT MANAGEMENT



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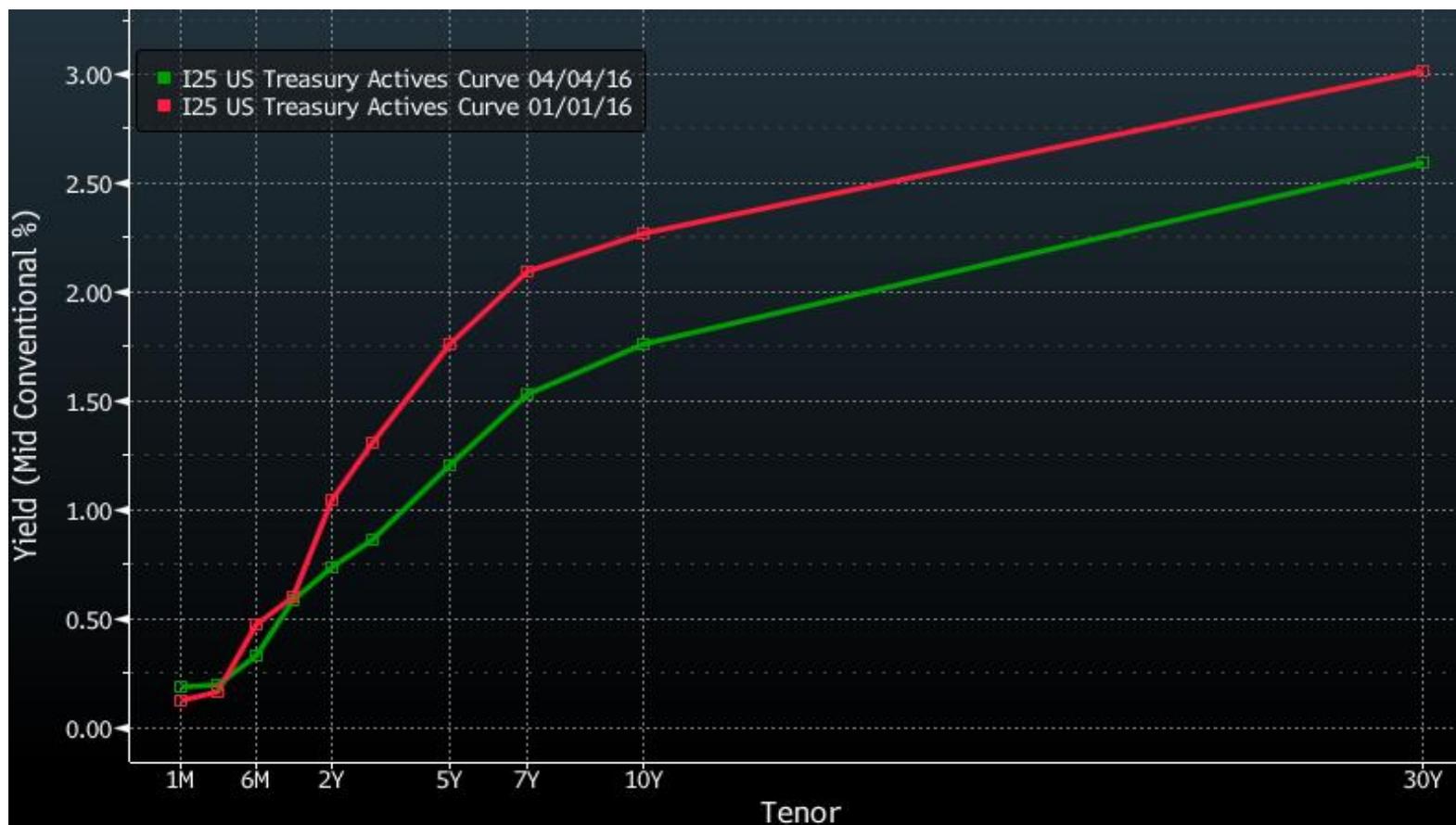
JOSH MANDEL

TREASURER OF OHIO

# General Session and Market Update

# Interest Rate Environment

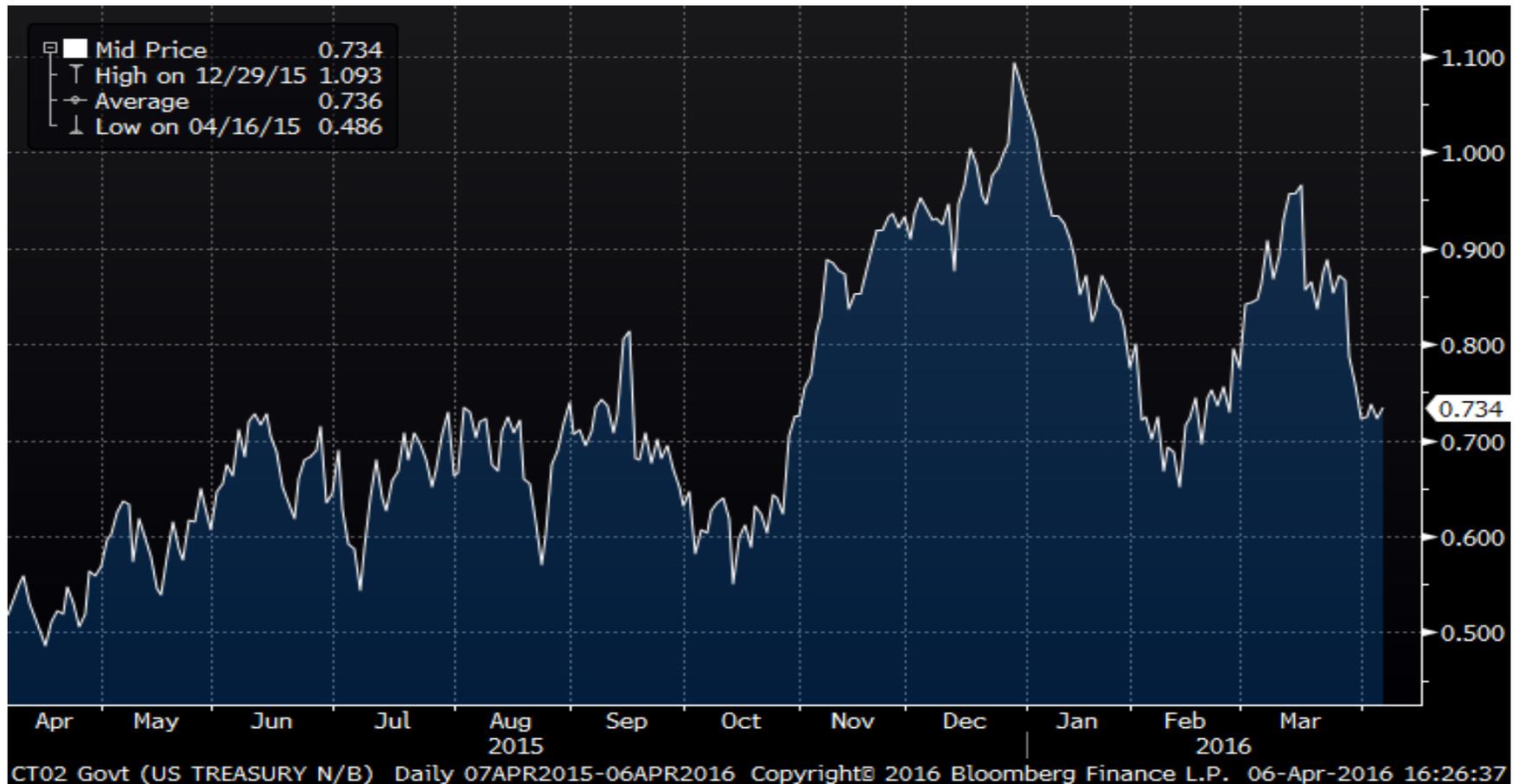
YTD the Yield Curve has Flattened



Source: Bloomberg as of 4/6/16

# 2-Year T-Note

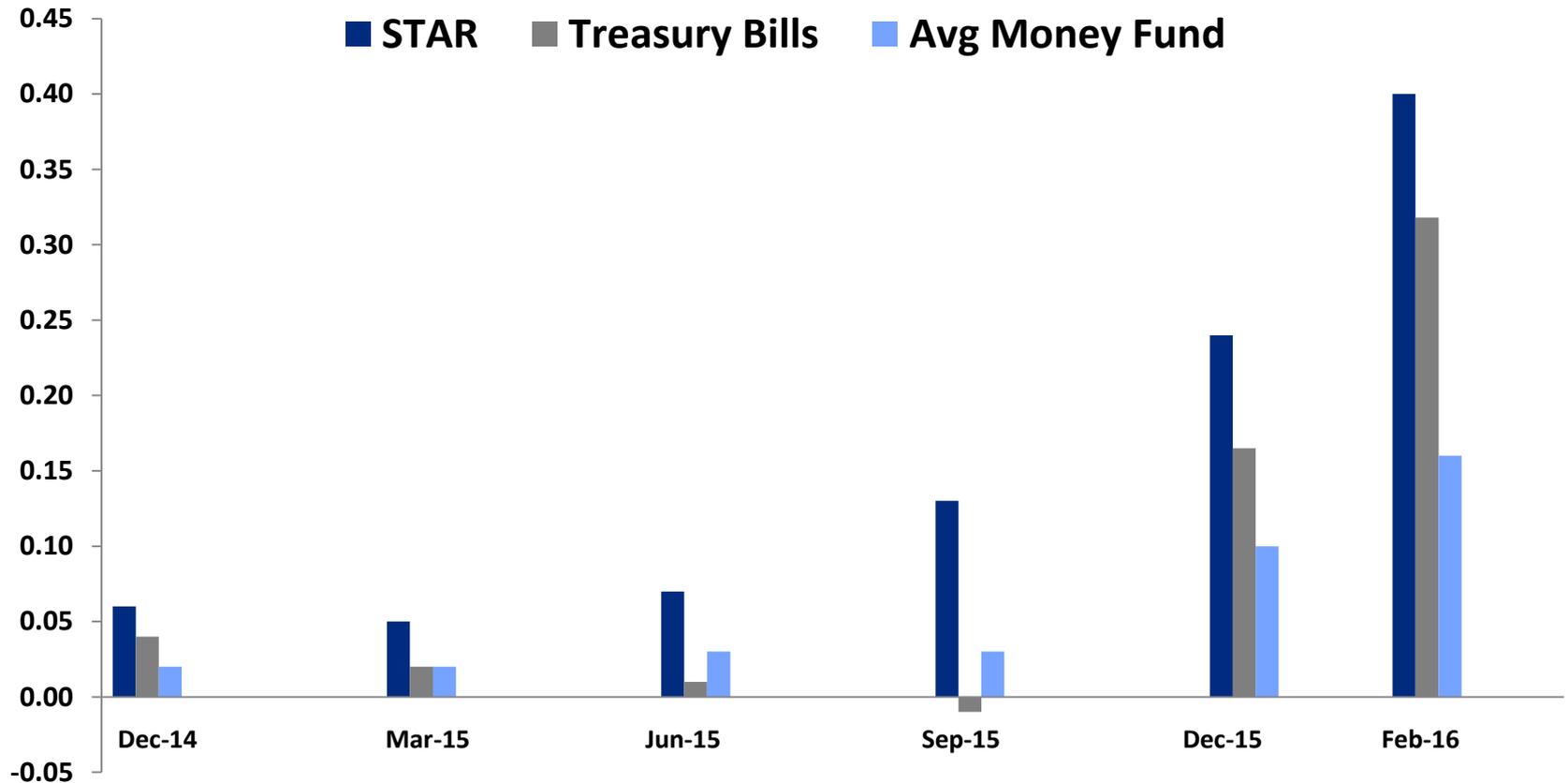
## What does it tell us?



Source: Bloomberg as of 4/6/16

# Yield Comparison

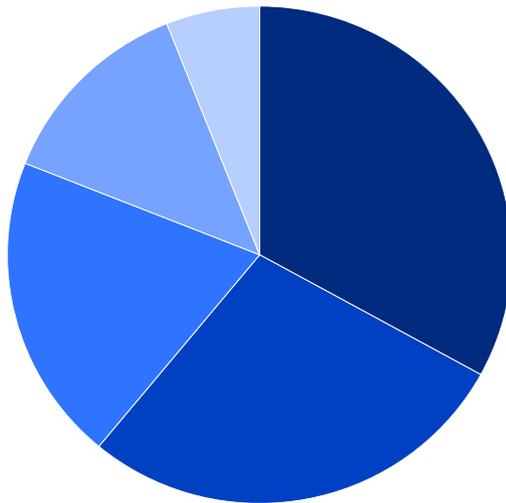
## STAR Ohio vs. Treasury vs. Avg Money Fund



# Over \$5 billion in Deposits

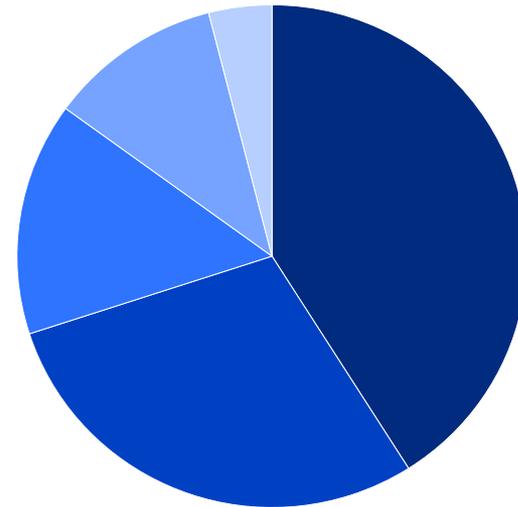
## Composition

11/30/2014



- Commercial Paper - 33%
- Gov't Bond - 28%
- Repo - 20%
- Cash - 13%
- Corporate Bond - 6%

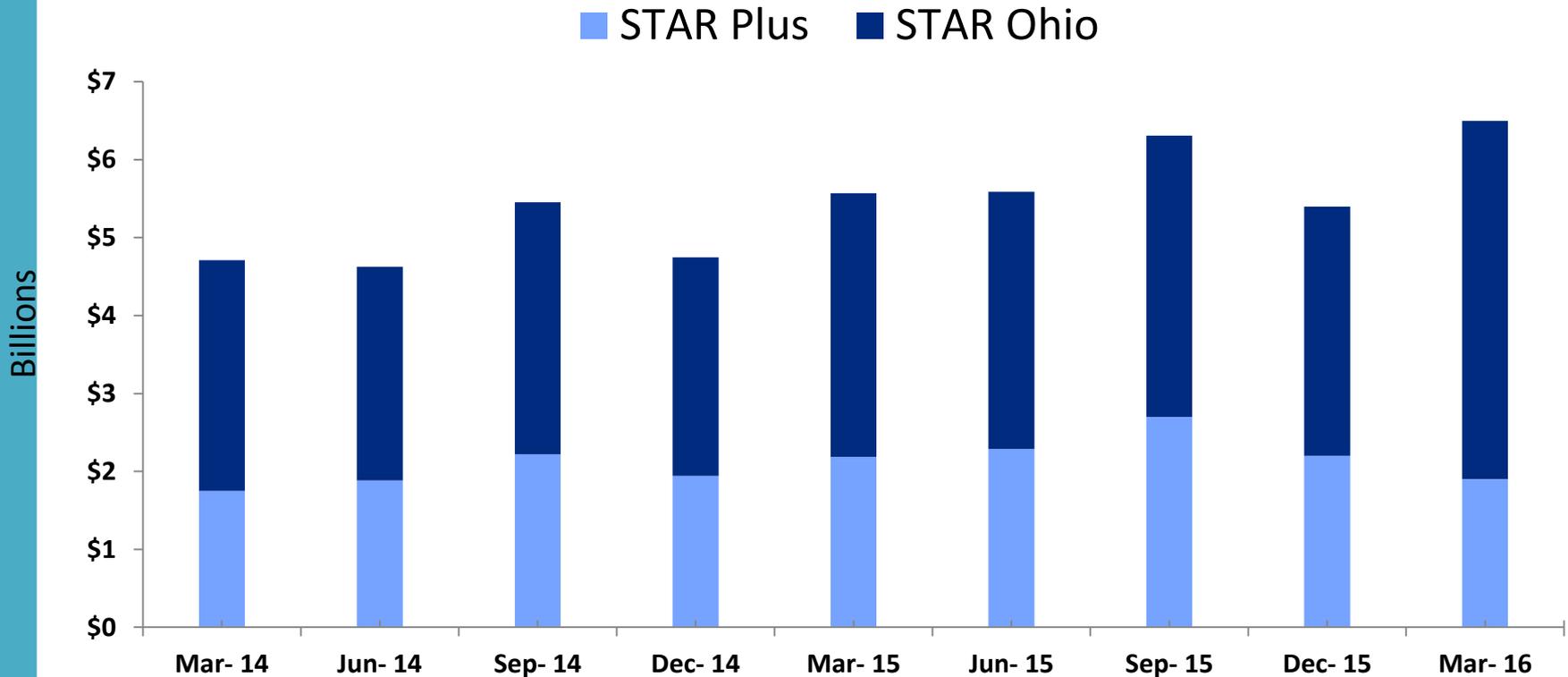
2/29/2016



- Cash - 41%
- Commercial Paper - 29%
- Gov't Bond - 15%
- Corporate Bond - 11%
- Repo - 4%

# Program Assets

\$1.16 Billion Added in 18 months

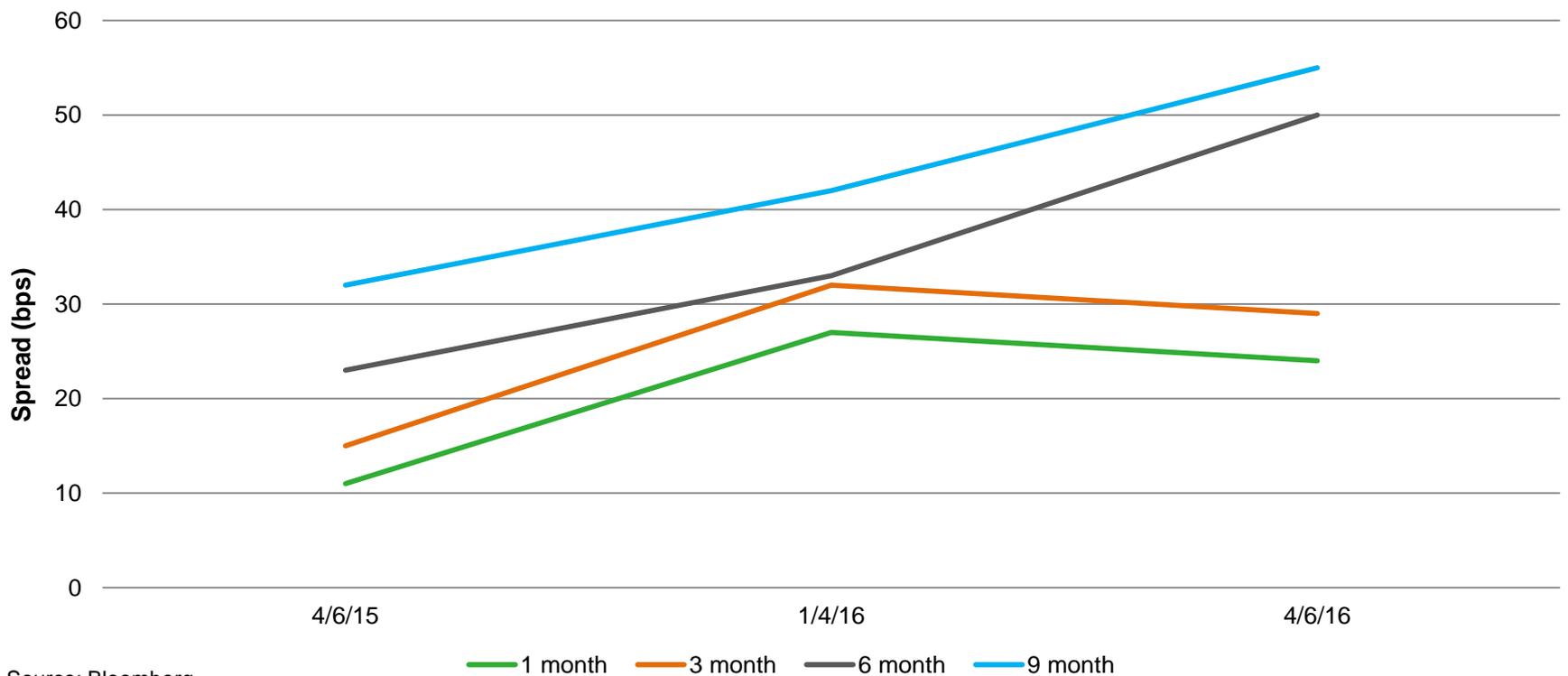


Data as of 2/29/2016

# Money Market Spreads

## Commercial Paper vs. Agency Discount Notes

- Market requiring greater premium for risk assets
- Demand shifting to the front end of the curve due to regulations



Source: Bloomberg

# Driving Forces Behind Fed Policy

## **U.S. economy is betting on the consumer**

- The labor market is nearing full employment
- Personal earnings and consumption growth holding up
- GDP growing at a moderate pace

## **Global economy has the attention of the Fed**

- Weakness in China and other emerging markets creating headwinds
- Global volatility remains elevated
- ECB and BOJ continue to expand accommodative monetary policy

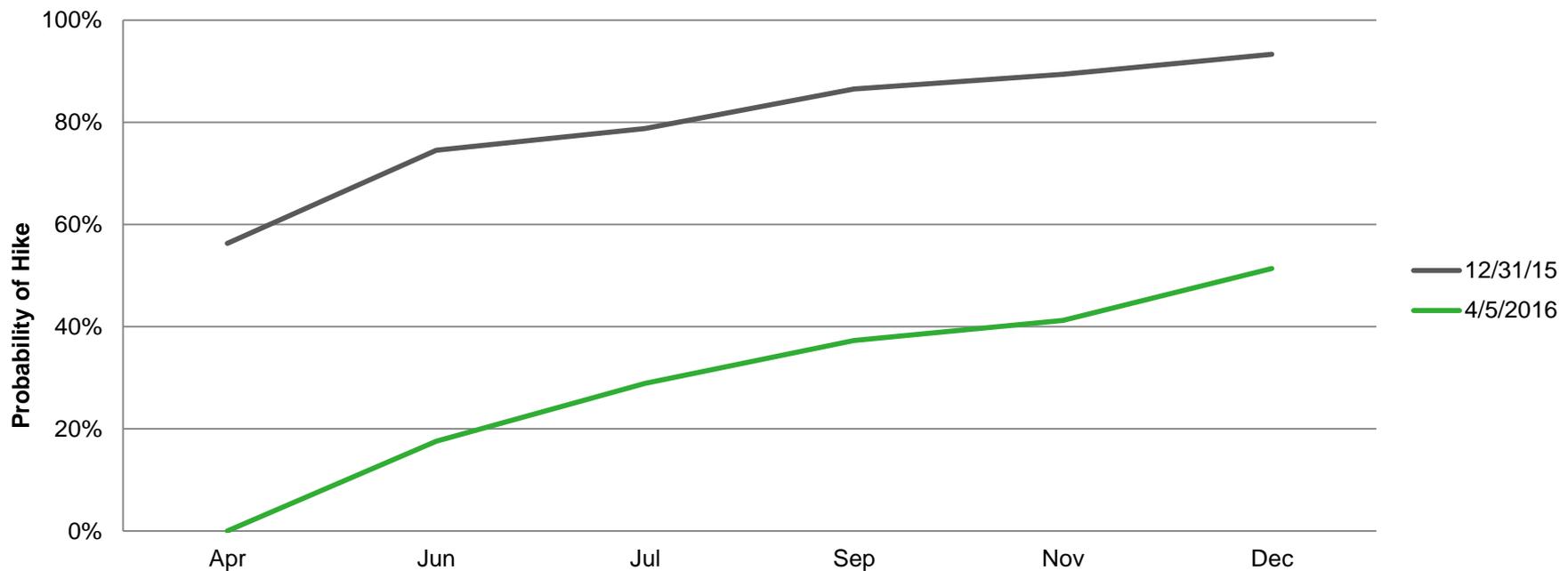
## **Fed guidance has shifted**

- Decision to raise rates will be data dependent
- Focus on global economy as well as domestic economic targets
- Guidance suggests 2 rate hikes in '16 – Fed futures suggests 1

# Fed Funds

## Implied Probability of Rate Hike

- The Fed Funds implied probability of a rate rise in April is 0%.
- Probability of rate hike in 2016 has dropped to 50%.
- No rate change in 2016 is becoming more likely



Source: Bloomberg

# U.S. Economic Factors

## ○ Employment

- March unemployment rate at 5.0%
- Slight increase from previous month
- Participation rate has increased

## ○ Inflation

- October 2015 Core PCE was 1.3%
  - Continues to be below the FOMC threshold of 2%

## ○ Other

- Retail Sales figures have been mixed
- Manufacturing in U.S. is contracting

# U.S. Economic Data

- Upcoming economic data releases
  - 04/13 Retail Sales
  - 04/27 FOMC Rate Decision
  - 04/28 GDP Annualized QoQ
  - 04/29 PCE Core YoY

# Negative Interest Rate Policy

## Current Global Rates

- 5 central banks have implemented NIRP
- Motivation is to stimulate economic growth by increasing credit
- Effectiveness yet to be determined

	<u>2 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>7 Year</u>	<u>10 Year</u>	<u>15 Year</u>	<u>30 Year</u>
<b>US</b>	0.74%	0.87%	1.21%	1.52%	1.77%		2.60%
<b>Canada</b>	0.53%	0.53%	0.68%	0.86%	1.20%		1.96%
<b>UK</b>	0.38%	0.53%	0.79%	1.14%	1.38%	1.92%	2.25%
<b>France</b>	-0.45%	-0.41%	-0.23%	0.02%	0.45%	0.90%	1.34%
<b>Germany</b>	-0.49%	-0.50%	-0.36%	-0.25%	0.12%	0.28%	0.76%
<b>Sweden</b>	-0.67%		-0.18%	0.10%	0.41%		
<b>Switzerland</b>	-0.99%	-1.01%	-0.84%	-0.67%	-0.39%	-0.17%	0.15%
<b>Japan</b>	-0.24%	-0.25%	-0.22%	-0.19%	-0.07%	0.10%	0.45%
<b>Australia</b>	1.85%	1.84%	2.03%	2.23%	2.43%	2.65%	

Source: Bloomberg

# Bank Regulations

## Basel III

- ⦿ Represents the most complete overhaul of U.S. bank capital standards since the U.S. adoption of Basel I in 1989.
- ⦿ Requires banks to meet increased capital ratio targets, risk weighted asset requirements, and liquidity standards (LCR, NSFR).

## Volcker

- ⦿ Part of Dodd Frank Act prohibiting banks from engaging in impermissible proprietary trading and covered fund purchases.
- ⦿ Eliminates the capacity for banks to engage in risky, proprietary trading funded by FDIC insured bank deposits.

## Money Market Reform

- ⦿ Institutional municipal and prime money market mutual funds moving to floating NAV and instituting redemption gates and fees to bolster liquidity.
- ⦿ Government money market funds will be investment vehicle of choice for operating funds.

# What do these issues mean for STAR Ohio?

## STAR Ohio

- Yield is based on portfolio of underlying securities
- Yield of securities is largely based on economic factors and expectations for interest rates, as well as credit risk
- As securities mature, the rate at which they can be reinvested depends on economic conditions at that time
- Current securities include: US Treasuries, US Government Agencies, Commercial Paper, Corporate Bonds, Repurchase Agreements, and Money Market Funds

## STAR Plus

- Yield is based on underlying bucket of bank deposit account
- Yield of bank deposit accounts is based upon each bank's current desire for deposits
- As banks demand for deposits increase, the bank will increase the rate it pays in order to attract deposits
- As banks demand for deposits decreases, the bank will decrease the rate it pays in order to push deposits out of the bank
- Economic outlook has less effect on bank rates

# Prime Money Market Funds

## ○ What are they

- Traditional money market funds are a type of mutual fund developed in the 1970s as an option for investors to purchase a pool of securities that generally provided higher returns than interest-bearing bank accounts.
- Prime money market funds invests generally in floating/variable rate debt and commercial paper of corporations and securities of the US government and agencies.

## ○ Reform

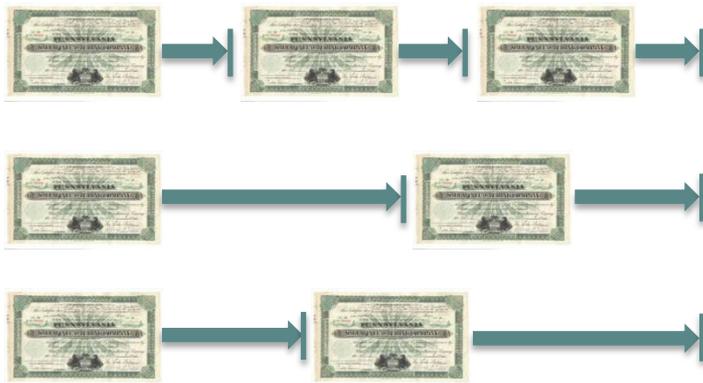
- New rules would require institutional prime and municipal money market funds to move from a stable \$1.00 price per share to a floating net asset value.
- Prime money market funds are required to comply with these elements by October 14, 2016.

# Bond Investment Strategies

## Ladder vs. Barbell

### **Ladder Strategy / Asset-Liability Match**

Staggered maturities of bonds in a portfolio and sets a schedule for reinvestment of proceeds

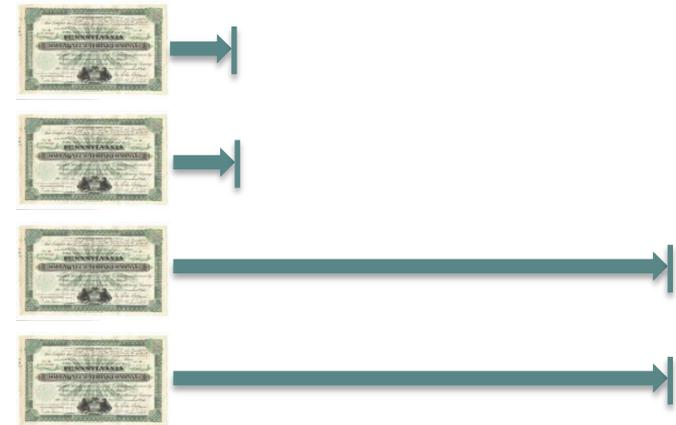


#### **Benefits:**

- Periodic maturities allow for more investing flexibility and control over liquidity
- Interest rate volatility reduced as portfolio is spread across maturities and coupons
- Proceeds from the maturing investment can be used for the scheduled draw, or reinvested in another investment

### **Barbell Strategy**

Utilizes only short-term investments and longer term bonds



#### **Benefits:**

- Longer-term bonds provide higher rates
- Shorter-term bonds provide liquidity
- Shorter-term bonds can offset impacts of a rising rate environment as the maturing bonds can be reinvested at higher rates