



# **Local Agency Investment Fund Conference**

**October 25, 2016**

**Sacramento, California**

**Bill Dowell, Director of Investments**

**Jeff Wurm, Treasury Manager**

# A Quick Look Back, While Driving Forward



**JOHN CHIANG  
TREASURER  
STATE OF CALIFORNIA**

**Investment Division Selected Investment Data  
Analysis of the Pooled Money Investment Account Portfolio  
(DOLLARS IN THOUSANDS)**

**September 30, 2016**

| <u>TYPE OF SECURITY</u>        | <u>AMOUNT (\$)</u> | <u>PERCENT OF<br/>PORTFOLIO</u> | <u>DIFFERENCE IN PERCENT<br/>OF PORTFOLIO FROM<br/>PRIOR MONTH</u> |
|--------------------------------|--------------------|---------------------------------|--|
| <b>Government</b>              |                    |                                 |  |
| Bills                          | 11,401,506         | 16.70                           | +0.57  |
| Bonds                          | 0                  | 0.00                            | 0  |
| Notes                          | 20,045,573         | 29.36                           | +0.19  |
| Strips                         | <u>0</u>           | <u>0.00</u>                     | <u>0</u>   |
| <b>Total Government</b>        | <u>31,447,079</u>  | <u>46.06</u>                    | <u>+0.76</u>   |
| <b>Agency Debentures</b>       | 1,695,782          | 2.48                            | -0.49  |
| <b>Certificates of Deposit</b> | 13,000,028         | 19.04                           | -1.07  |
| <b>Bank Notes</b>              | 800,000            | 1.17                            | +0.02  |
| <b>Repurchases</b>             | 0                  | 0.00                            | 0  |
| <b>Agency Discount Notes</b>   | 7,676,506          | 11.24                           | +0.38  |
| <b>Time Deposits</b>           | 5,222,440          | 7.65                            | +0.16  |
| <b>GNMAs</b>                   | 0                  | 0.00                            | 0  |
| <b>Commercial Paper</b>        | 7,333,219          | 10.74                           | +0.22  |
| <b>FHLMC/Remics</b>            | 54,197             | 0.08                            | 0  |
| <b>Corporate Bonds</b>         | 0                  | 0.00                            | 0  |
| <b>AB 55 Loans</b>             | 556,410            | 0.81                            | +0.01  |
| <b>GF Loans</b>                | 247,100            | 0.36                            | +0.36  |
| <b>Other</b>                   | 249,997            | 0.37                            | -0.35  |
| <b>Reversed Repurchases</b>    | <u>0</u>           | <u>0.00</u>                     | <u>0</u>   |
| <b>Total (All Types)</b>       | <u>68,282,758</u>  | <u>100.00</u>                   |  |

# Pooled Money Investment Account Historical Portfolio Structure

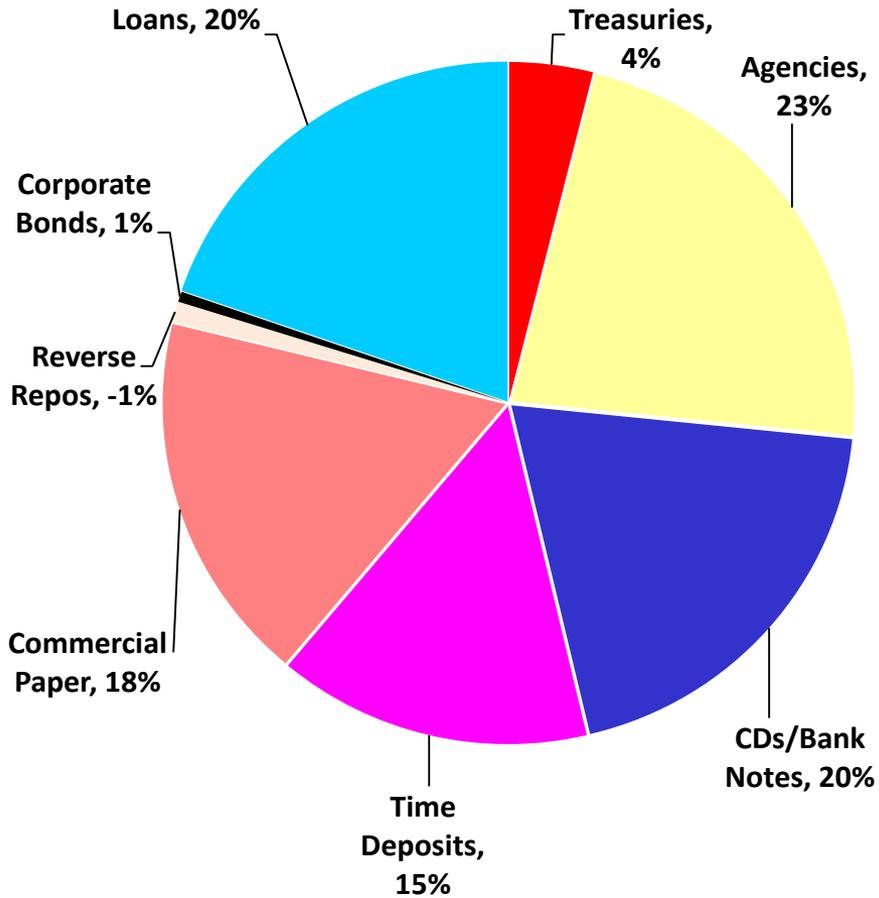
## PERCENTAGE DISTRIBUTION

| Type of Security    | September 30, 2007 | September 30, 2016 | 9-Year Average |
|---------------------|--------------------|--------------------|----------------|
| Treasuries          | 4%                 | 46%                | 41%            |
| Agencies            | 23%                | 14%                | 14%            |
| CDs/Bank Notes      | 20%                | 20%                | 15%            |
| Time Deposits       | 15%                | 8%                 | 9%             |
| Commercial Paper    | 18%                | 11%                | 9%             |
| Reverse Repurchases | -1%                | 0%                 | 0%             |
| Corporate Bonds     | 1%                 | 0%                 | 0%             |
| Loans               | 20%                | 1%                 | 11%            |
| Other               | 0%                 | 0%                 | 1%             |
| <b>TOTAL</b>        | <b>100%</b>        | <b>100%</b>        | <b>100%</b>    |

# PMIA Composition

09/30/07

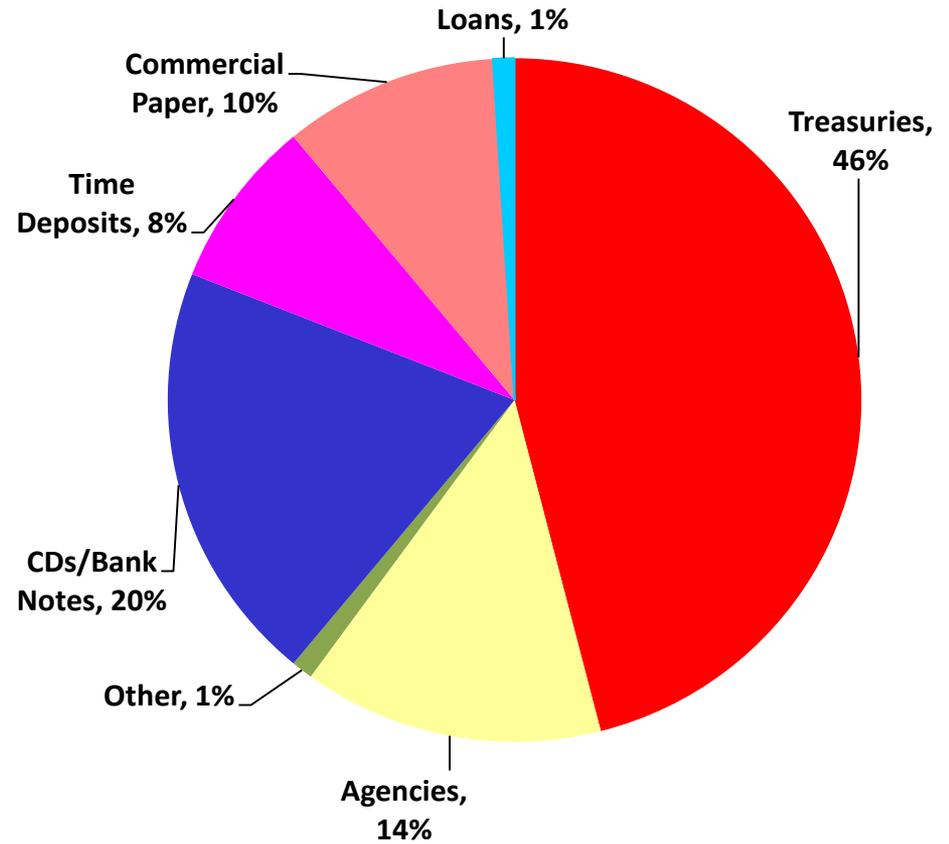
\$61.2 Billion



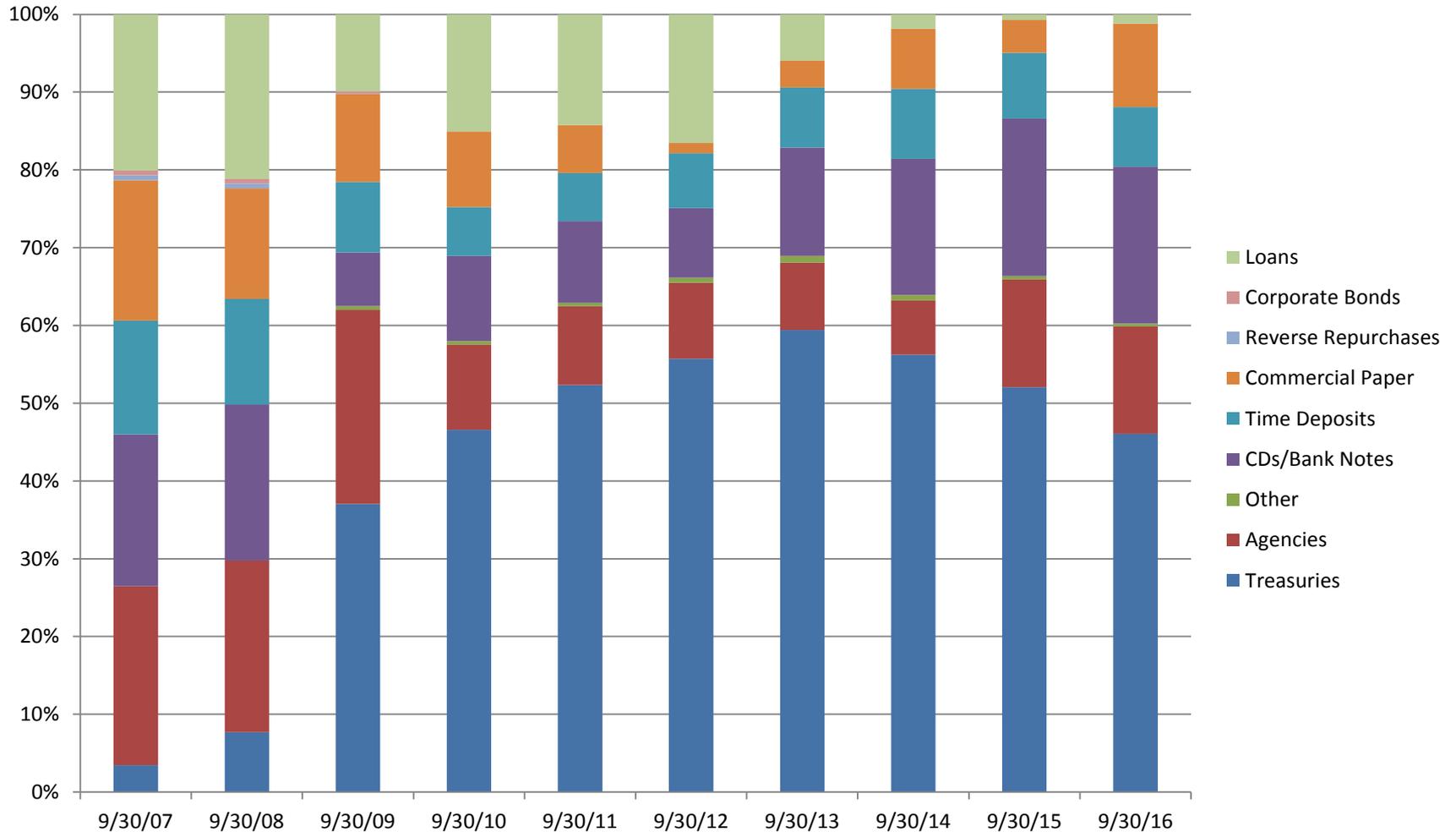
# PMIA Composition

09/30/16

\$68.2 Billion

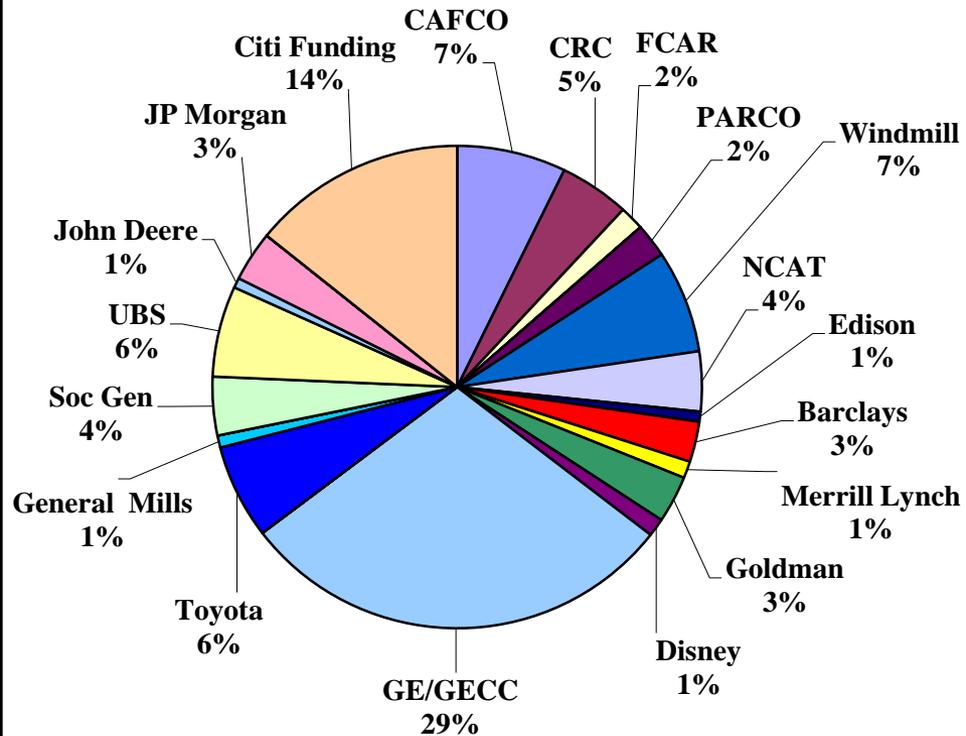


# Pooled Money Investment Account Historical Portfolio Structure

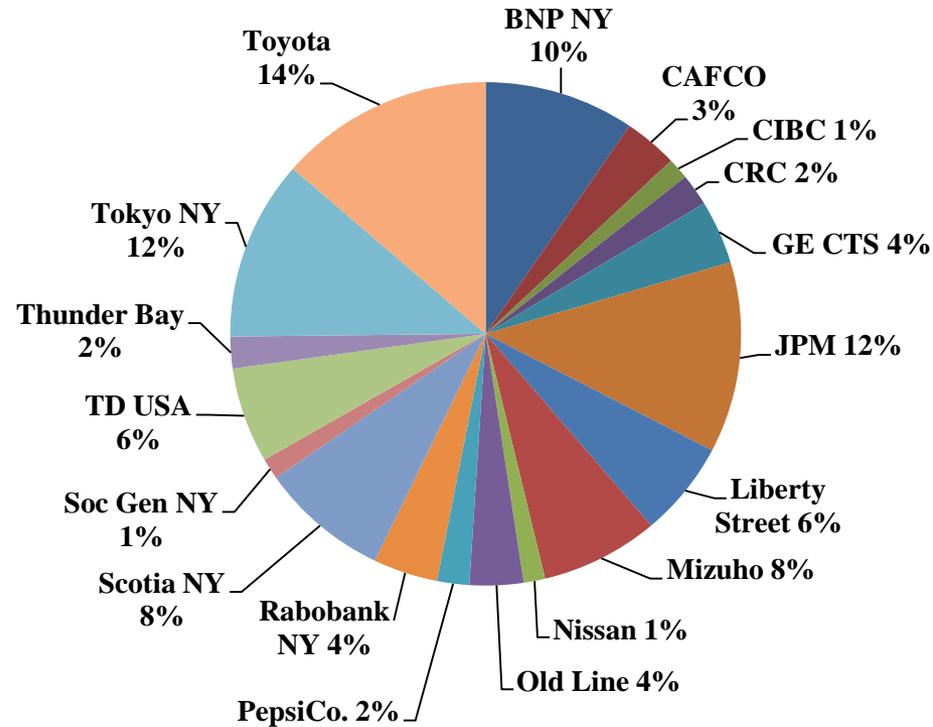


# PMIA Commercial Paper Holdings

**9/30/07**  
**\$11.3 Billion**



**9/30/16**  
**\$7.35 Billion**



# Treasury Maturity Schedule

As of 9/30/16

(\$ in millions)

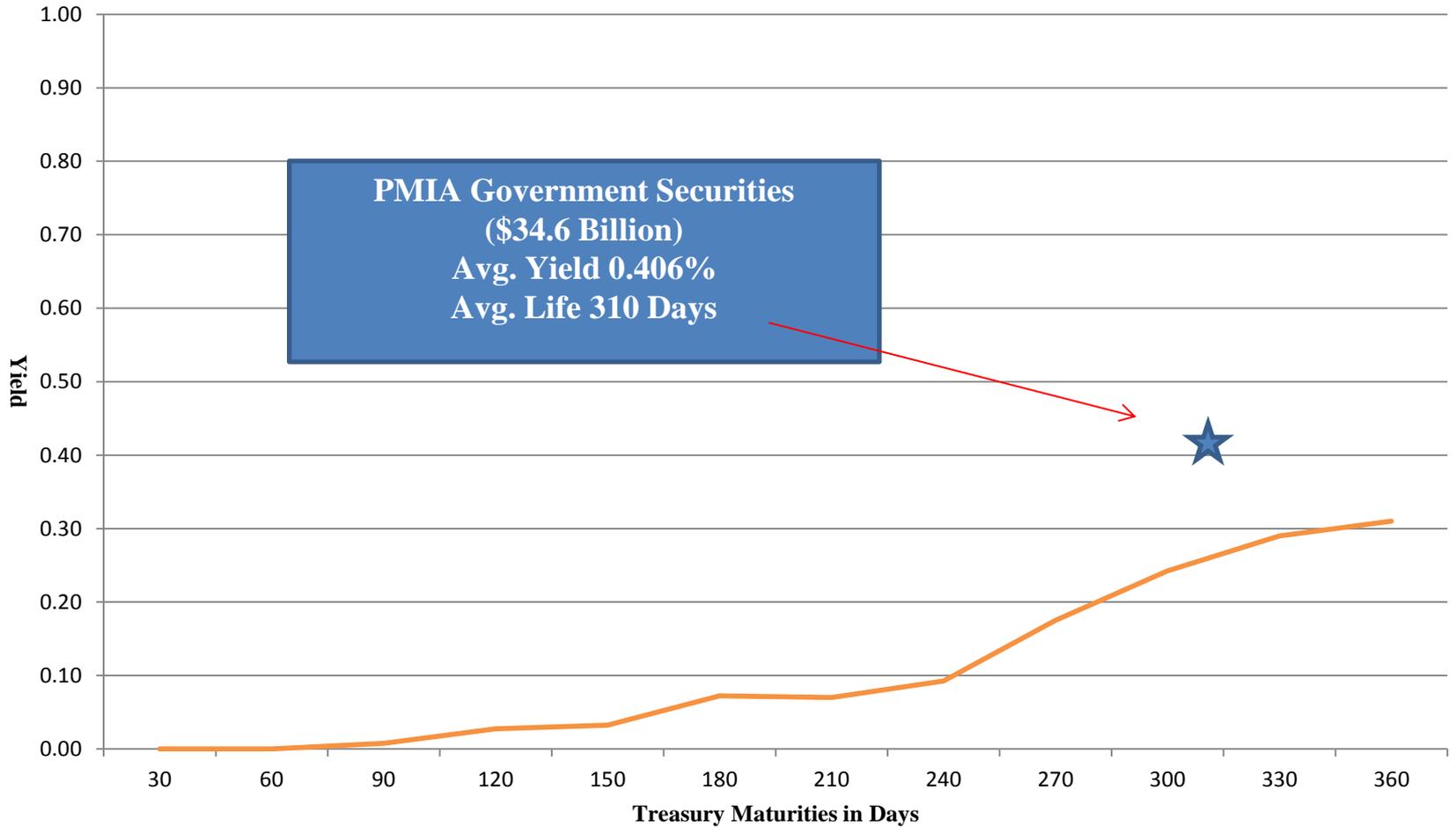
|       | Oct-16  | Nov-16  | Dec-16  | Jan-17  | Feb-17  | Mar-17  | Apr-17  | May-17  | Jun-17  | Jul-17  | Aug-17  | Sep-17  |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1     |         |         | \$1,400 |         |         |         |         |         |         |         |         |         |
| 2     |         |         |         |         | \$750   | \$400   |         |         |         |         |         |         |
| 3     |         |         |         |         |         |         |         |         |         |         |         |         |
| 4     |         |         |         |         |         |         |         |         |         |         |         |         |
| 5     |         |         |         | \$550   |         |         |         |         |         |         |         |         |
| 6     |         |         |         |         |         |         |         |         |         |         |         |         |
| 7     |         |         |         |         |         |         |         |         |         |         |         |         |
| 8     |         |         | \$500   |         |         |         |         |         |         |         |         |         |
| 9     |         |         |         |         |         |         |         |         |         |         |         |         |
| 10    |         | \$400   |         |         |         |         |         |         |         |         |         |         |
| 11    |         |         |         |         |         |         |         |         |         |         |         |         |
| 12    |         |         |         |         |         |         |         |         |         |         |         |         |
| 13    | \$900   |         |         |         |         |         |         |         |         |         |         |         |
| 14    |         |         |         |         |         |         |         |         |         |         |         | \$700   |
| 15    |         | \$350   | \$400   |         | \$450   |         |         |         | \$750   |         |         |         |
| 16    |         |         |         |         |         |         |         |         |         |         |         |         |
| 17    |         |         |         |         |         |         |         |         |         |         | \$500   |         |
| 18    |         |         |         |         |         |         |         |         |         |         |         |         |
| 19    |         |         |         |         |         |         |         |         |         |         |         |         |
| 20    |         |         |         |         |         |         |         |         |         | \$500   |         |         |
| 21    |         |         |         |         |         |         |         |         |         |         |         |         |
| 22    |         |         |         |         |         |         |         |         | \$700   |         |         |         |
| 23    |         |         |         |         |         | \$400   |         |         |         |         |         |         |
| 24    |         |         |         |         |         |         |         |         |         |         |         |         |
| 25    |         |         |         |         |         |         |         | \$500   |         |         |         |         |
| 26    |         |         |         |         |         |         |         |         |         |         |         |         |
| 27    | \$1,050 |         |         |         |         |         | \$650   |         |         |         |         |         |
| 28    |         |         |         |         | \$3,000 |         |         |         |         |         |         |         |
| 29    |         |         |         |         |         |         |         |         |         |         |         |         |
| 30    |         | \$1,200 |         |         |         | \$1,550 | \$1,300 |         | \$1,800 |         |         | \$1,000 |
| 31    | \$800   |         | \$300   | \$500   |         |         |         | \$600   |         | \$800   | \$800   |         |
| Total | \$2,750 | \$1,950 | \$2,600 | \$1,050 | \$4,200 | \$2,350 | \$1,950 | \$1,100 | \$3,250 | \$1,300 | \$1,300 | \$1,700 |

T-Bills \$11.45 bil.

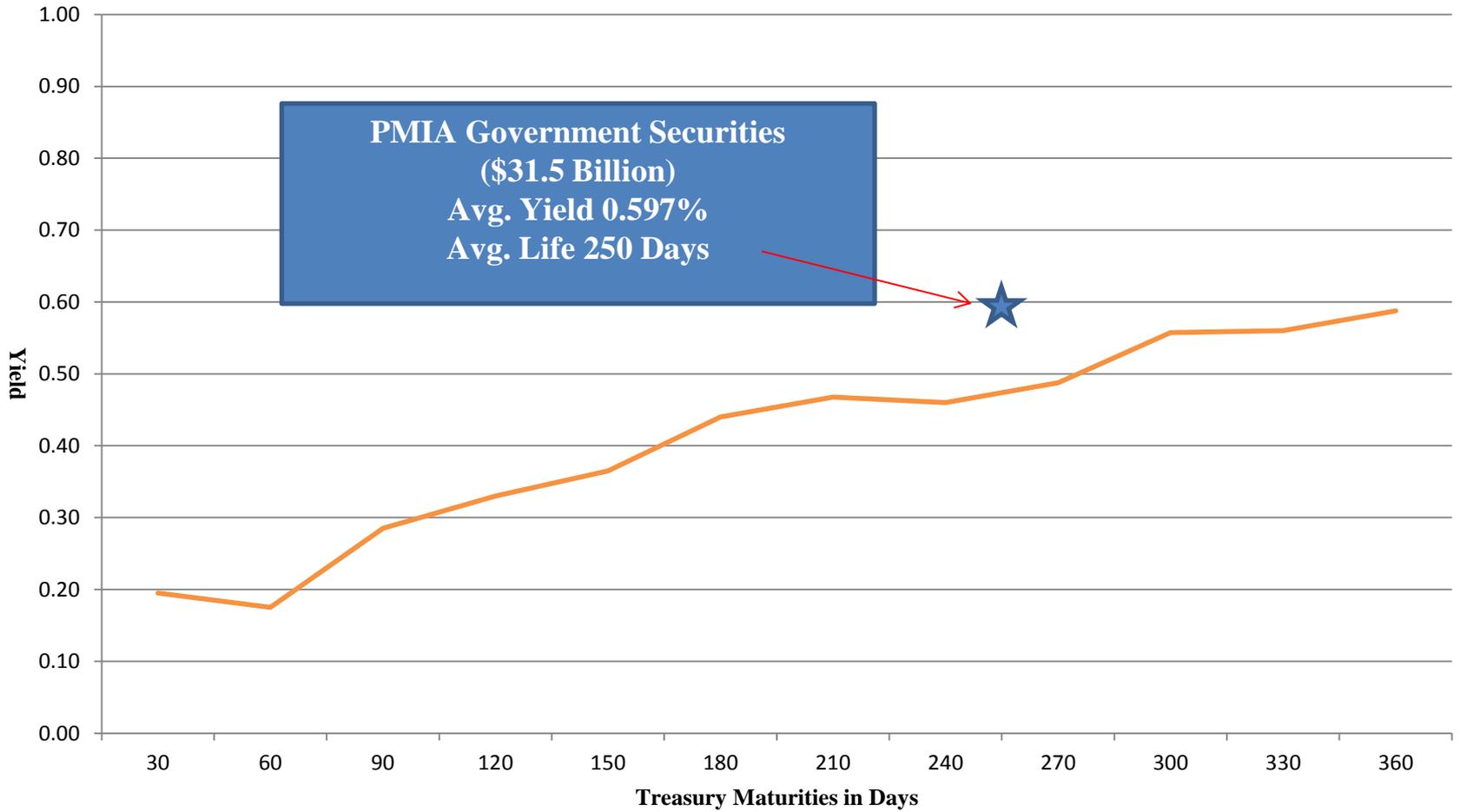
T-Notes \$14.05 bil.

**Total \$25.50 bil.**

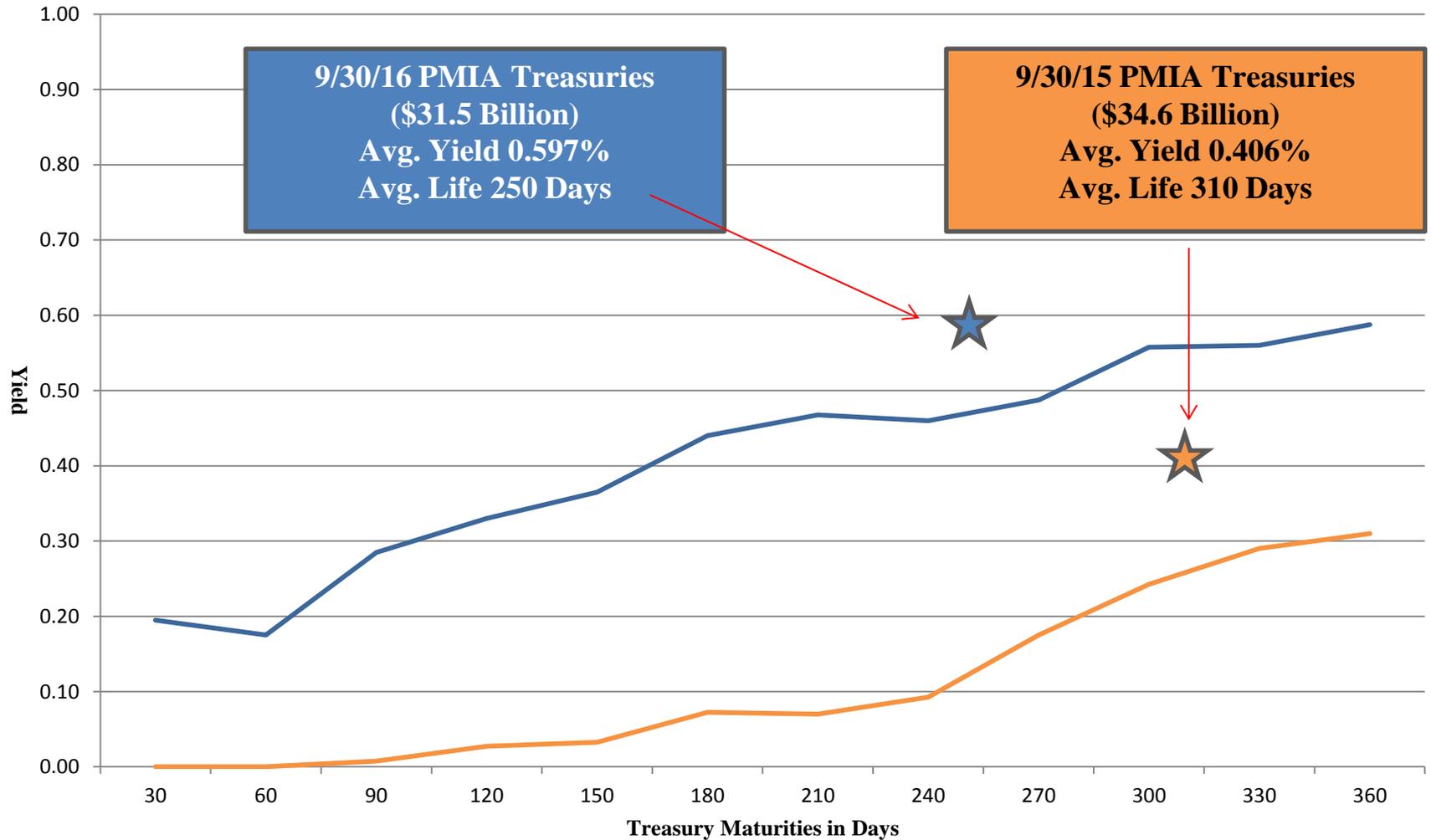
# Treasury Portfolio Duration Risk 9/30/15



# Treasury Portfolio Duration Risk 9/30/16



# Treasury Portfolio Duration Risk



# PMIA Maturity Schedule

9/30/16

## PAR VALUES MATURING BY DATE AND TYPE

### Maturities in Millions of Dollars

| ITEM      | 1 day<br>to<br>30 days | 31 days<br>to<br>60 days | 61 days<br>to<br>90 days | 91 days<br>to<br>120 days | 121 days<br>to<br>150 days | 151 days<br>to<br>180 days | 181 days<br>to<br>210 days | 211 days<br>to<br>270 days | 271 days<br>to<br>1 year | 1 year<br>to<br>2 years | 2 years<br>to<br>3 years | 3 years<br>to<br>4 years | 4 years<br>to<br>5 year/out |
|-----------|------------------------|--------------------------|--------------------------|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------------------------|-------------------------|--------------------------|--------------------------|-----------------------------|
| TREASURY  | \$ 1,950               | \$ 1,550                 | \$ 3,500                 | \$ 850                    | \$ 1,700                   | \$ 3,800                   | \$ 2,200                   | \$ 3,850                   | \$ 6,100                 | \$ 6,000                |                          |                          |                             |
| REPO      |                        |                          |                          |                           |                            |                            |                            |                            |                          |                         |                          |                          |                             |
| TDs       | \$ 1,633               | \$ 1,141                 | \$ 1,413                 | \$ 607                    | \$ 338                     | \$ 91                      |                            |                            |                          |                         |                          |                          |                             |
| AGENCY    | \$ 2,521               | \$ 450                   | \$ 600                   | \$ 800                    | \$ 800                     | \$ 1,200                   | \$ 1,750                   | \$ 600                     | \$ 200                   | \$ 527                  | \$ 1,306                 |                          |                             |
| CP        | \$ 2,950               | \$ 1,700                 | \$ 1,850                 |                           | \$ 450                     | \$ 200                     | \$ 200                     |                            |                          |                         |                          |                          |                             |
| CDs + BNs | \$ 4,950               | \$ 3,100                 | \$ 1,450                 | \$ 1,500                  | \$ 700                     | \$ 700                     | \$ 700                     | \$ 400                     | \$ 300                   |                         |                          |                          |                             |
| CORP BND  |                        |                          |                          |                           |                            |                            |                            |                            |                          |                         |                          |                          |                             |
| TOTAL     | \$ 68,627              | \$ 14,004                | \$ 7,941                 | \$ 8,813                  | \$ 3,757                   | \$ 3,988                   | \$ 5,991                   | \$ 4,850                   | \$ 4,850                 | \$ 6,600                | \$ 6,527                 | \$ 1,306                 | \$ -                        |
| PERCENT   | 20.4%                  | 11.6%                    | 12.8%                    | 5.5%                      | 5.8%                       | 8.7%                       | 7.1%                       | 7.1%                       | 9.6%                     | 9.5%                    | 1.9%                     | 0.0%                     | 0.0%                        |



## Traditional “Barbell” Strategy



“Barbell” Strategy-  
Emphasizing Liquidity & Flexibility

# Federal Reserve - FOMC



November 2<sup>nd</sup> or December 14<sup>th</sup> or 2017 or *beyond*?

# STATE TREASURER'S OFFICE **GREEN BOND** INVESTMENTS



| <b>Par<br/>(in Millions)</b> | <b>Description</b> | <b>Purchase<br/>Date</b> | <b>Maturity<br/>Date</b> | <b>Effective<br/>Yield</b> |
|------------------------------|--------------------|--------------------------|--------------------------|----------------------------|
| \$300                        | IBRD               | 4/24/2009                | 4/24/2012                | 0.654%                     |
| \$400                        | IBRD               | 12/15/2011               | 12/16/2013               | 0.510%                     |
| \$100                        | IBRD               | 8/22/2013                | 8/24/2015                | 0.390%                     |
| \$50                         | IFC                | 11/15/2013               | 11/15/2016               | 0.681%                     |
| \$250                        | IBRD               | 09/23/2014               | 09/23/2016               | 0.650%                     |
| \$200                        | IBRD               | 04/21/16                 | 10/01/2018               | 1.005%                     |

**\$1.3 Billion Green Bonds** purchased with an average yield of **0.650%**

# **Revisiting Effective Investment Management Tools to Enhance the PMIA's Performance**

- **Floating Rate Securities**
- **SBA Pools**
- **Agencies – Discount Notes & Bullets**
- **Repo Agreements**
- **Callables**
- **Corporates**

# Areas of Concern

- **Cyber Security – Internet Hacking**
- **Brexit and the U.S. General Election**
- **Worldwide Geopolitical Unrest**
- **European or Chinese Economic Slowdown**
- **Potential for Negative Interest Rates**
- **Bank Fines – Settlements, etc.**

# BREXIT

- **Orderly transition of power**
- **Hard Brexit or Soft Brexit or In-between?**
- **Early Spring Timeline**
  - London remains a world banking center
  - Long-term prospects for the UK are good
  - UK gilts still strong/safe investment



# U.S. General Election

November 8, 2016



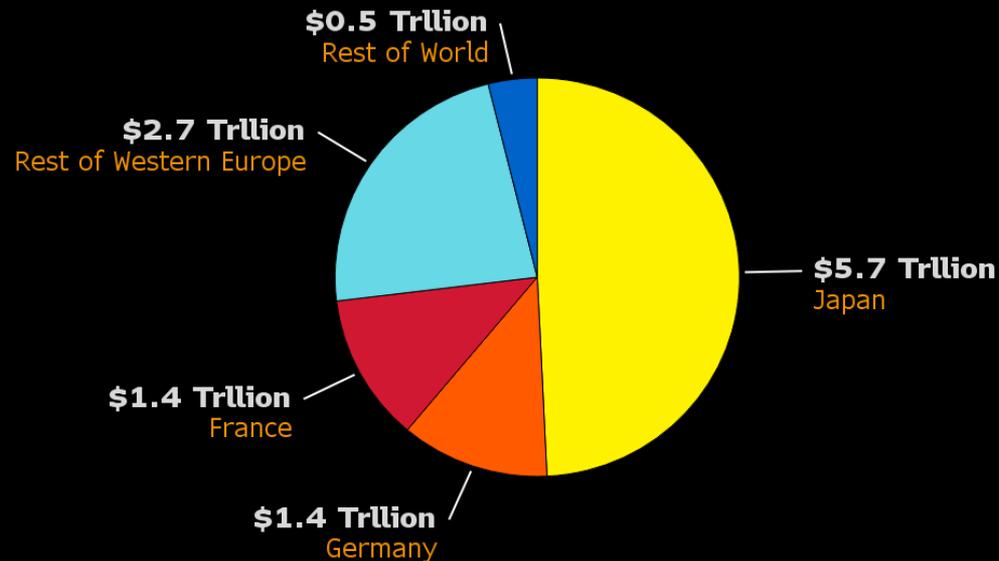


# Sources of Negative Interest Rates

As of September 30, 2016

## Where Does It All Come From?

Almost all negative-yielding debt comes from Japan and Europe\*



Source: Bloomberg

\*Includes all such bonds in the Bloomberg Barclays Global Aggregate Index; based on as-issued values converted to U.S. dollars

Bloomberg 

# The road back to a “Normal Interest Rate” Environment?



# Continuing Area of Concern:

Bank Fines – Settlements, etc.

**CEASE  
AND  
DESIST**



**Fraud**

# Reasons to be Optimistic

- **1% to 2% GDP**
- **Low Interest Rates for an Extended Period**
- **Stability in Real Estate Markets**
- **Business Investment Opportunities**
- **Long-term Infrastructure Commitments**
- **Improved Consumer Confidence**

# **Final Thoughts Going Forward**

- **Much Improved State Fiscal Situation**
- **Red Flags or other concerns in the future?**
- **No Intermediate Term Pool at this time**
- **Long and Winding Road....**



Normal  
Interest  
Rates



***Thank You!***

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