



UNIVERSITY  
OF  
CALIFORNIA

---

# Working Capital Investment Performance for Periods ending June 30, 2015

---

Office of the Chief Investment Officer  
September 9, 2015

# Contents

---

Market Update

---

Total-Return Investment Pool (TRIP)

---

Short-Term Investment Pool (STIP)

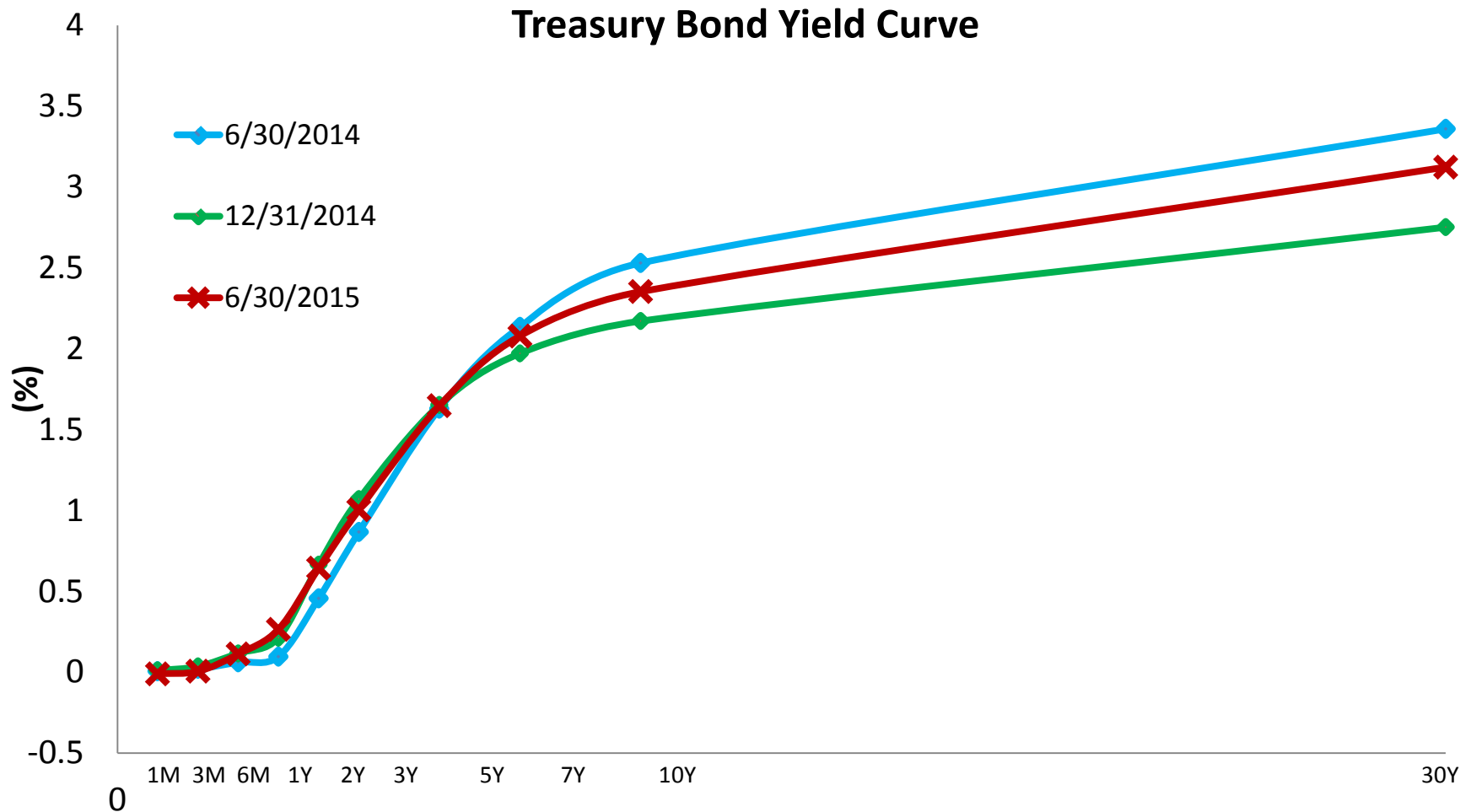
---

Asset Class Summary

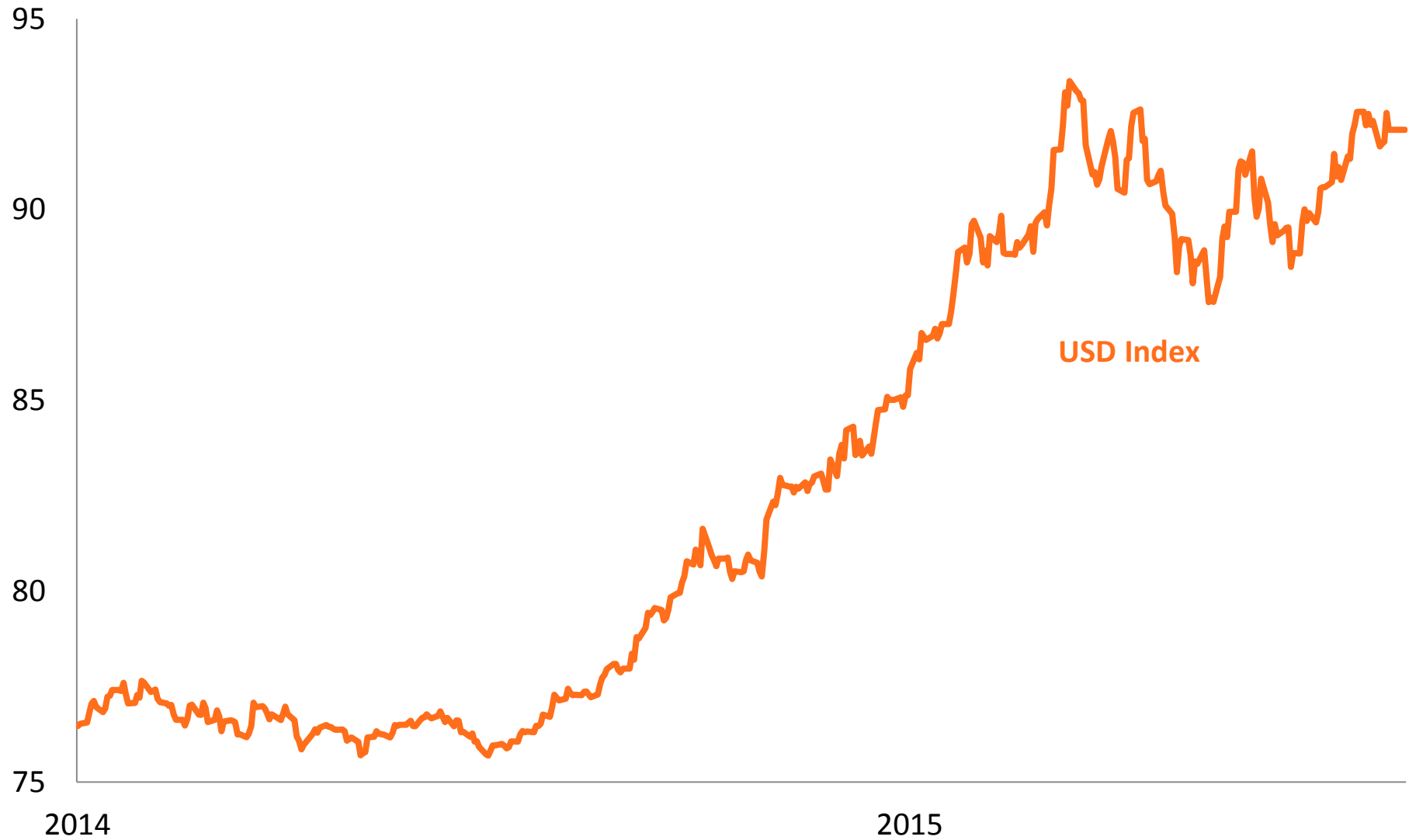
---

# Market Update

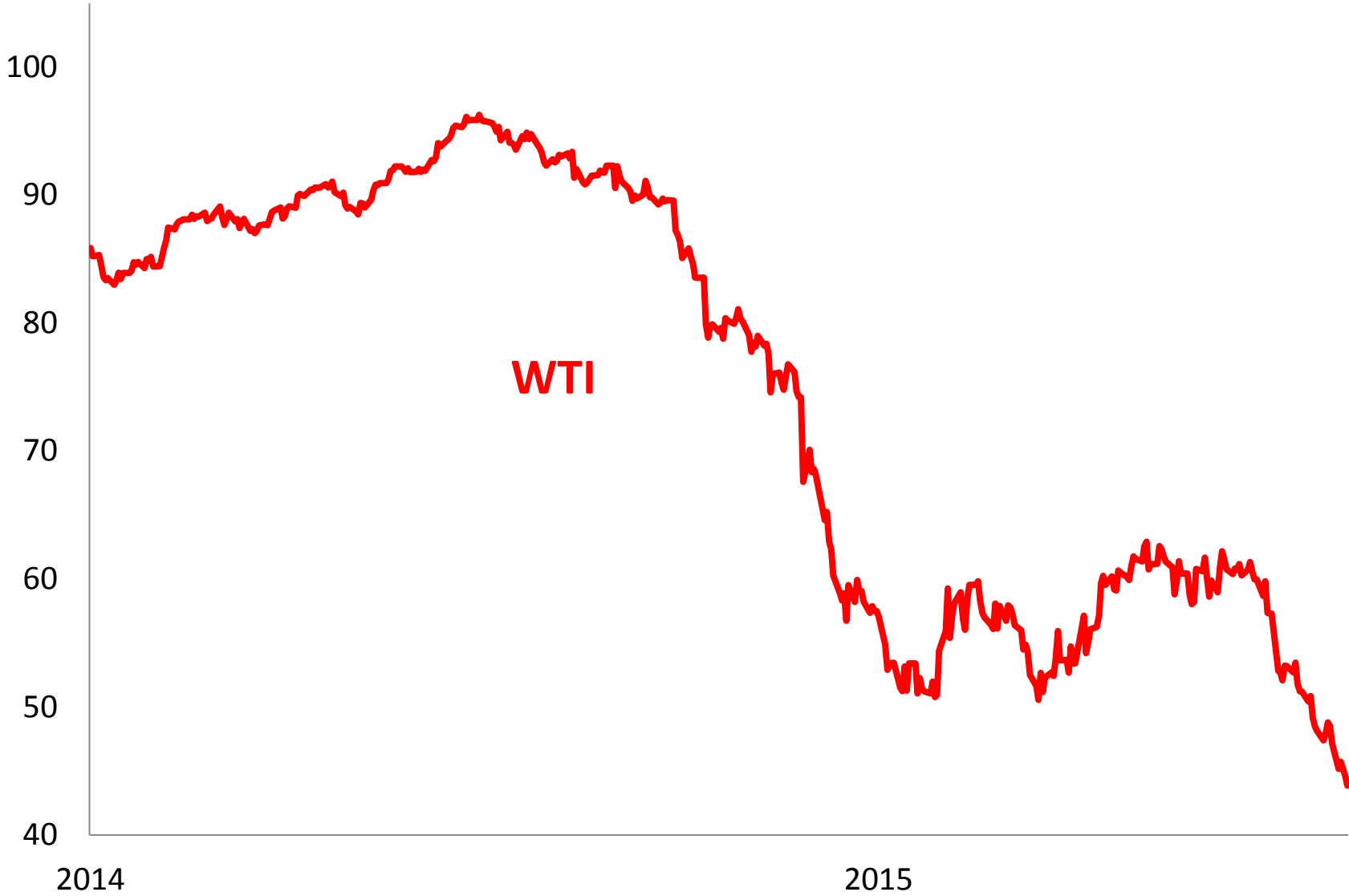
# Yield Curve



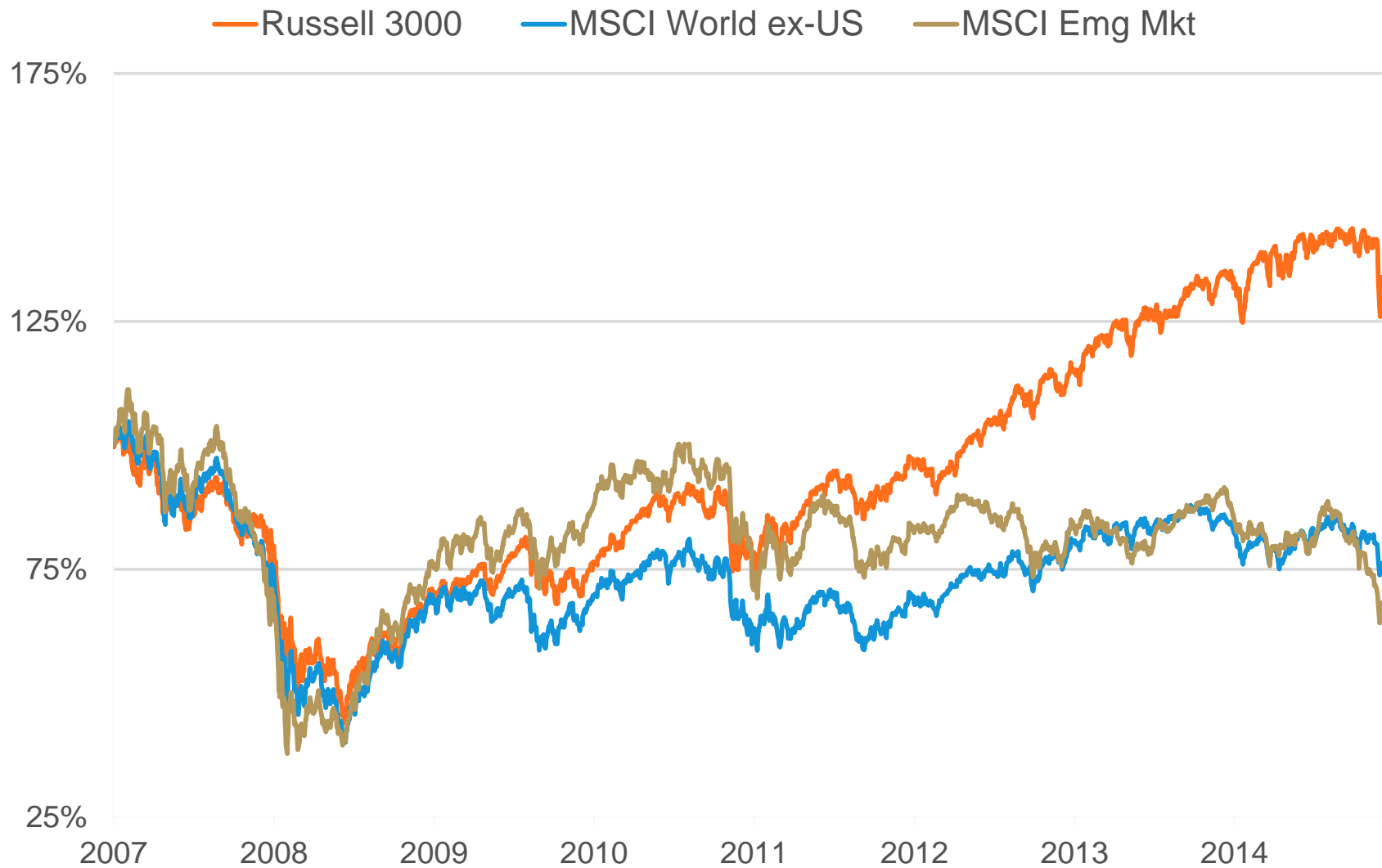
# US Dollar



# Oil Prices

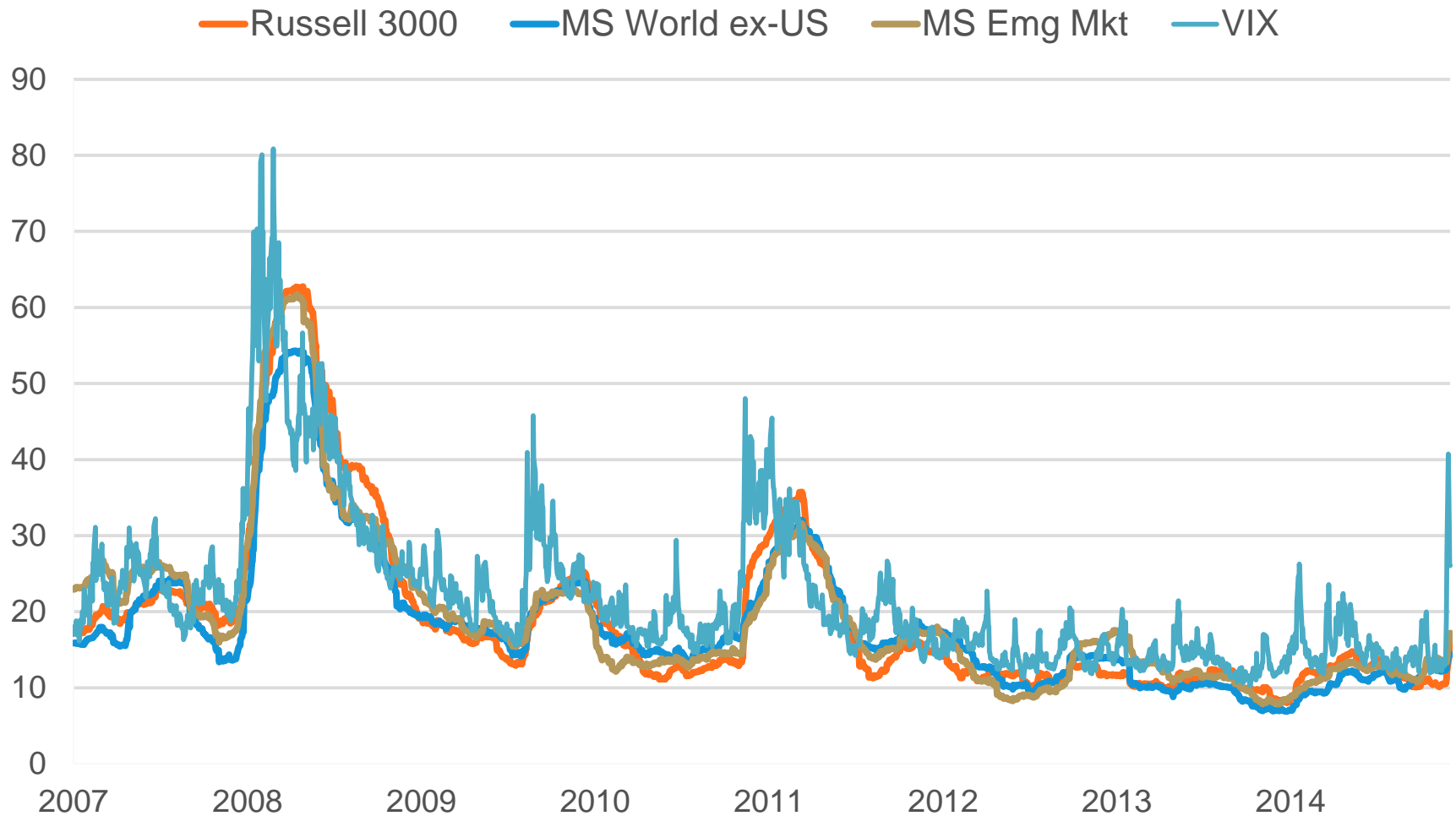


# Equity Index Performance



# Equity Volatility

## Market Volatility

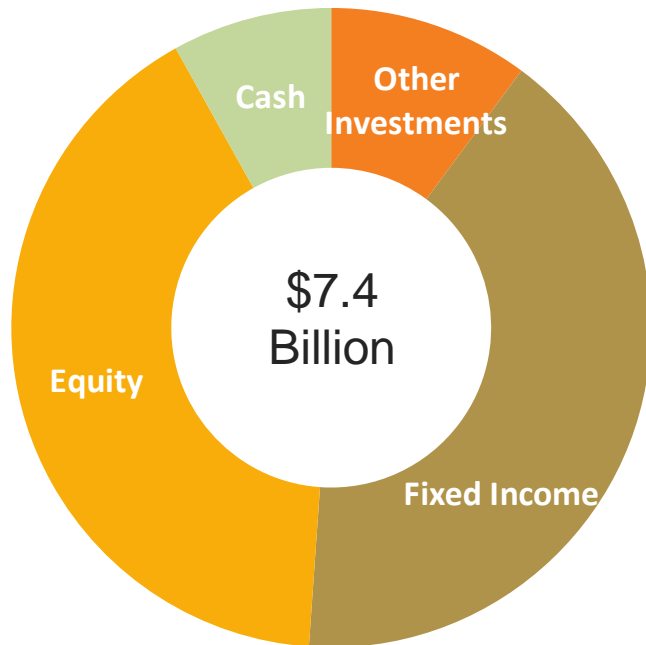




# TOTAL-RETURN INVESTMENT POOL

# Total-Return Investment Pool (TRIP)

Total-Return Investment Pool  
Asset Allocation



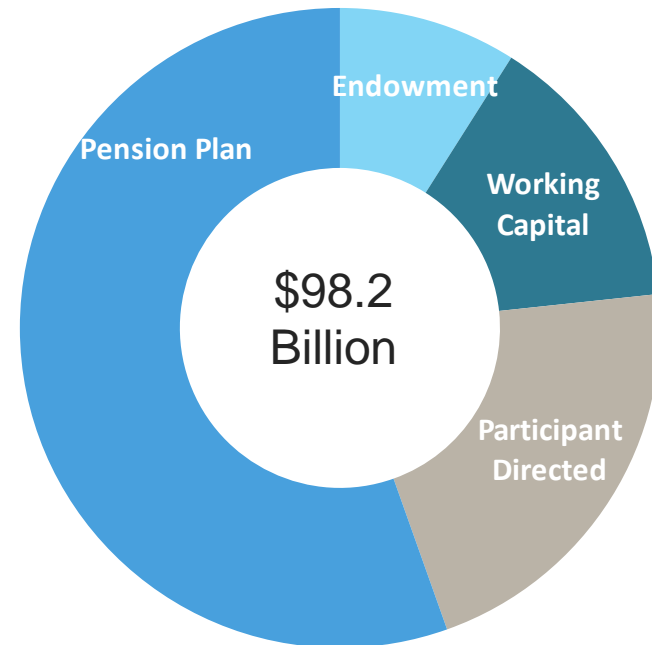
● **Equity: 41%**  
\$3.0B

● **Fixed Income: 41%**  
\$3.0B

● **Other Investments: 10%**  
\$0.8B

● **Cash: 8%**  
\$0.6B

Entity



● **Pension Plan: 56%**  
\$55.0B

● **Endowment: 9%**  
\$8.9B

● **Participant Directed: 21%**  
\$20.1B

● **Working Capital: 14%**  
\$14.2B

# Total-Return Investment Pool (TRIP)

## Investment Highlights

---

Assets Under Management  
June 30, 2014

---

**\$7.6 billion**

---

Market Gains

---

**\$0.1 billion**

---

Value Added

---

**\$0.1 billion**

---

Cash Inflow

---

**\$0.1 billion**

---

Cash Outflow

---

**(\$0.5 billion)**

---

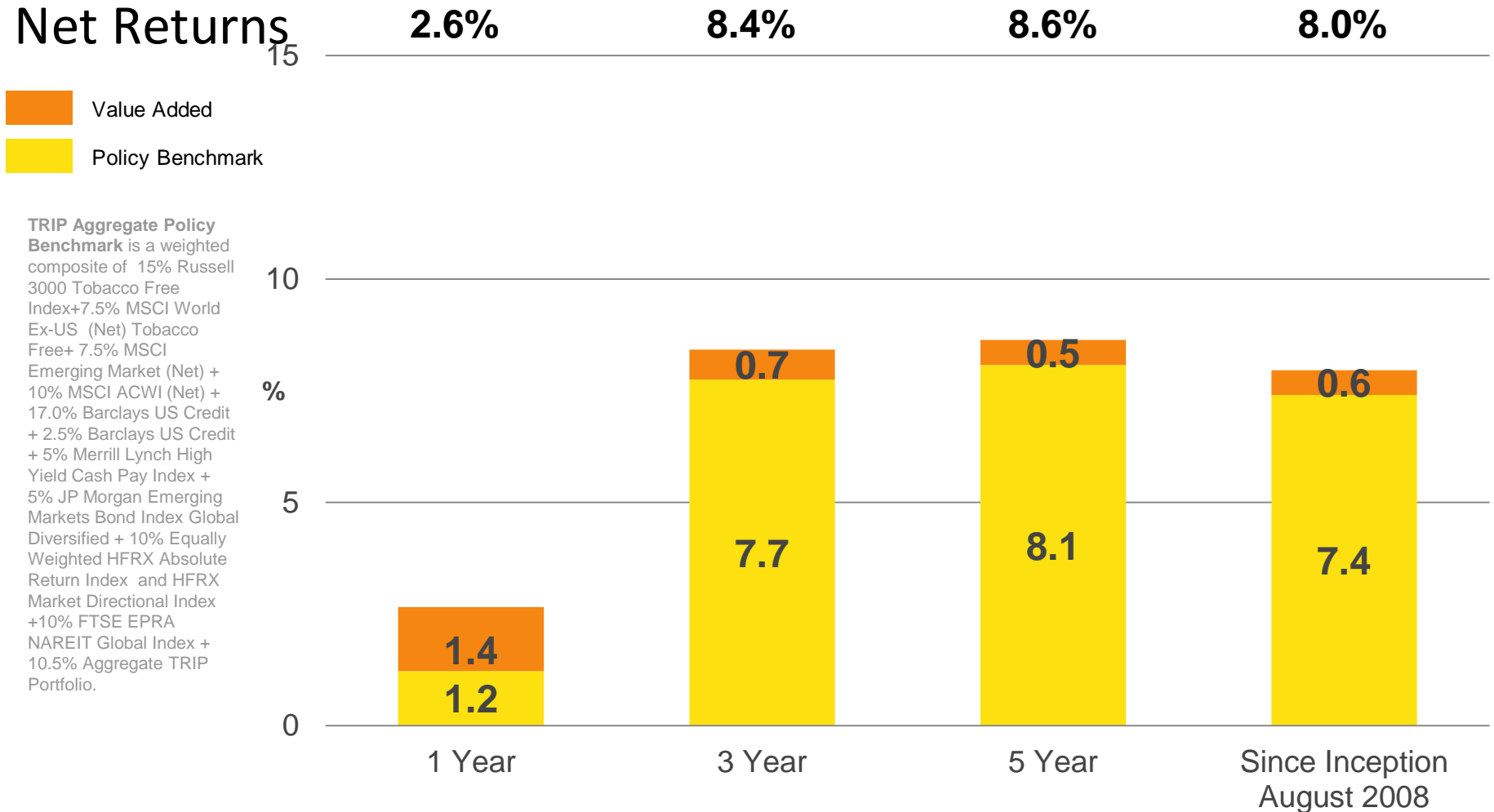
Assets Under Management  
June 30, 2015

**\$7.4 billion**

# Total-Return Investment Pool (TRIP)

## Performance

### Net Returns



**TRIP Aggregate Policy Benchmark** is a weighted composite of 15% Russell 3000 Tobacco Free Index+7.5% MSCI World Ex-US (Net) Tobacco Free+ 7.5% MSCI Emerging Market (Net) + 10% MSCI ACWI (Net) + 17.0% Barclays US Credit + 2.5% Barclays US Credit + 5% Merrill Lynch High Yield Cash Pay Index + 5% JP Morgan Emerging Markets Bond Index Global Diversified + 10% Equally Weighted HFRX Absolute Return Index and HFRX Market Directional Index +10% FTSE EPRA NAREIT Global Index + 10.5% Aggregate TRIP Portfolio.

# Total-Return Investment Pool (TRIP)

## Fiscal Year Net Performance

### Net Returns

2.6%

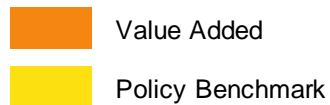
14.6%

8.3%

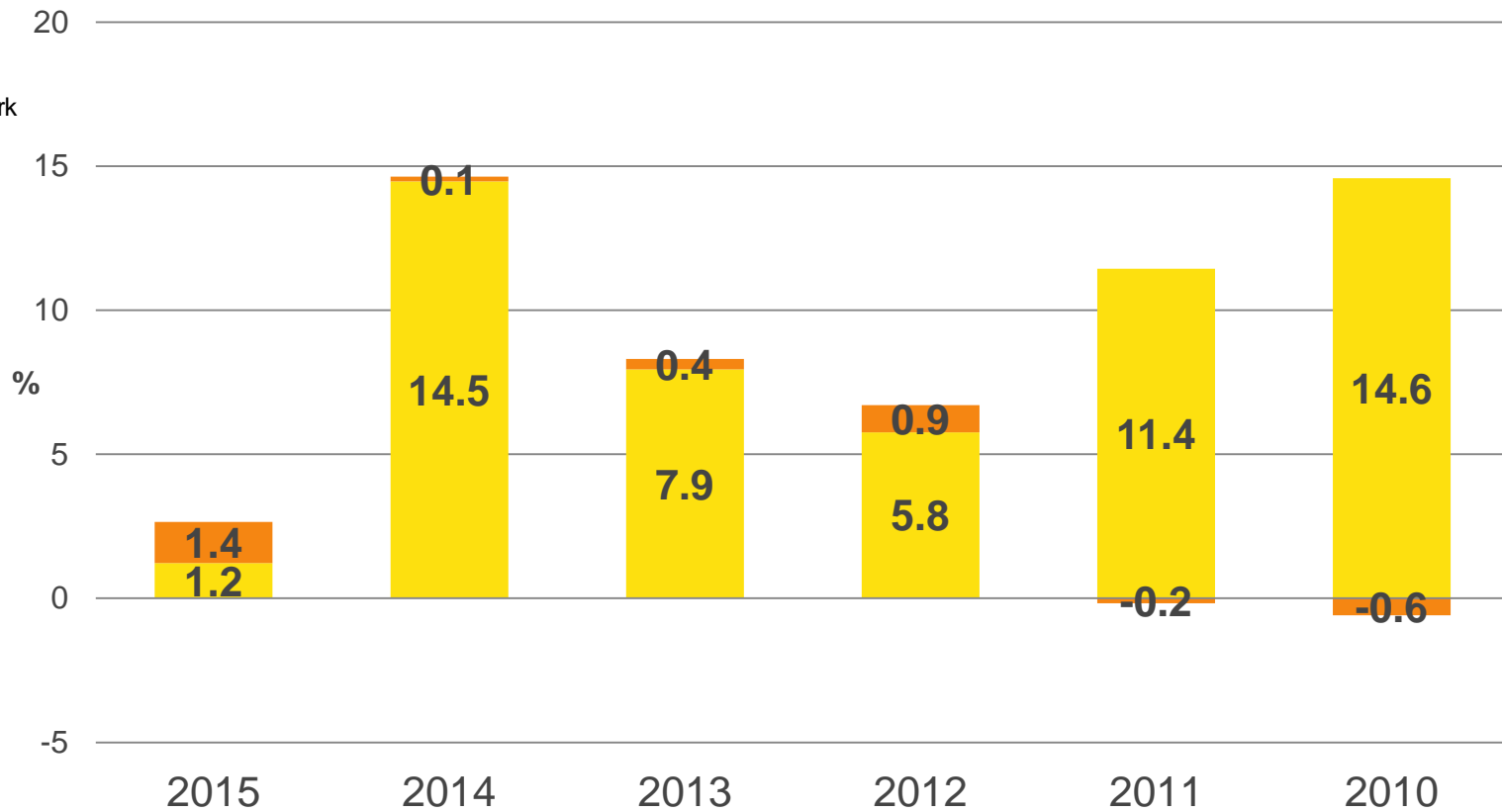
6.7%

11.2%

14.0%



TRIP Aggregate Policy Benchmark is a weighted composite of 15% Russell 3000 Tobacco Free Index+7.5% MSCI World Ex-US (Net) Tobacco Free+ 7.5% MSCI Emerging Market (Net) + 10% MSCI ACWI (Net) + 17.0% Barclays US Credit + 2.5% Barclays US Credit + 5% Merrill Lynch High Yield Cash Pay Index + 5% JP Morgan Emerging Markets Bond Index Global Diversified + 10% Equally Weighted HFRX Absolute Return Index and HFRX Market Directional Index +10% FTSE EPRA NAREIT Global Index + 10.5% Aggregate TRIP Portfolio.

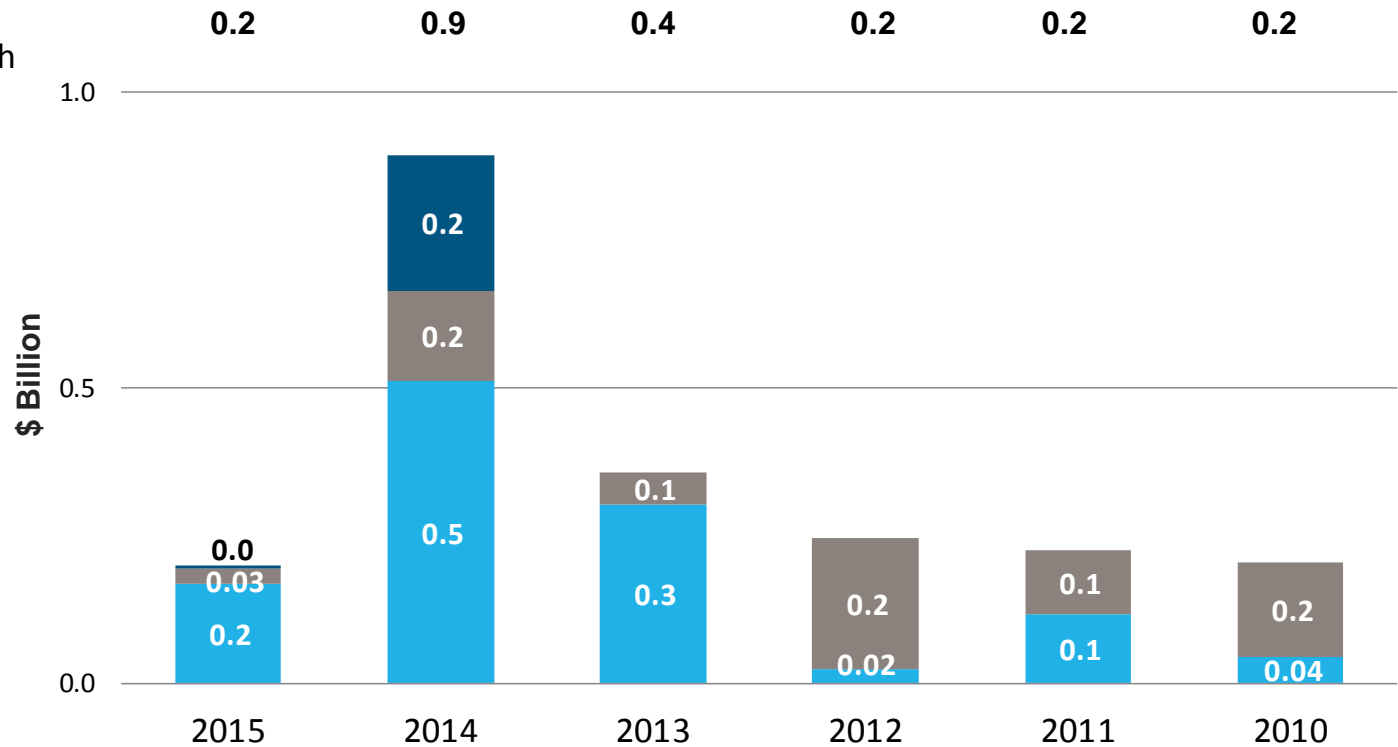


# Total-Return Investment Pool (TRIP)

Fiscal Year Dollar Value Added (\$ Billion)

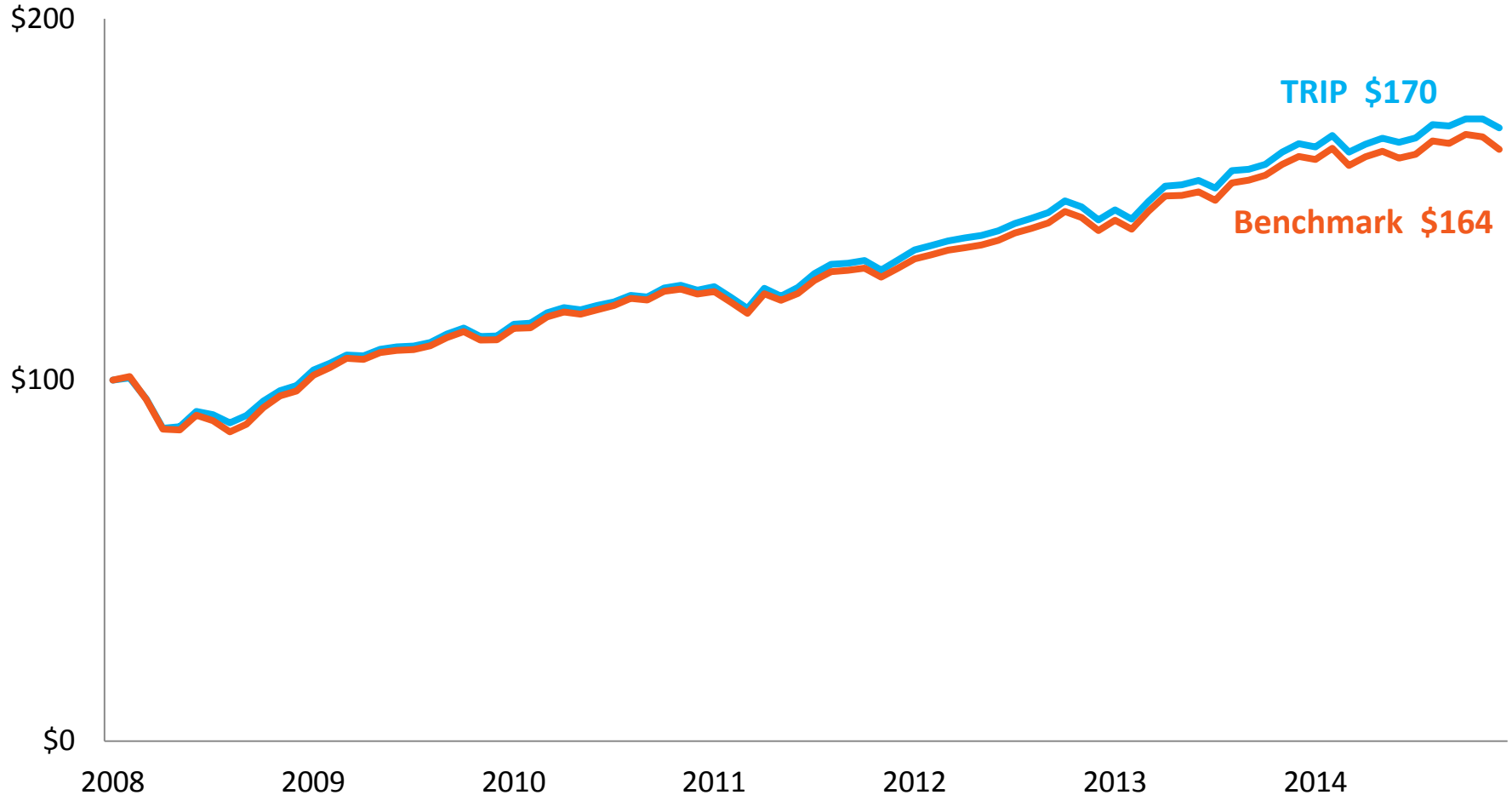
- Other Investments
- Fixed Income & Cash
- Equity

Added \$1.9 Billion over the past 5 years



# Total-Return Investment Pool (TRIP)

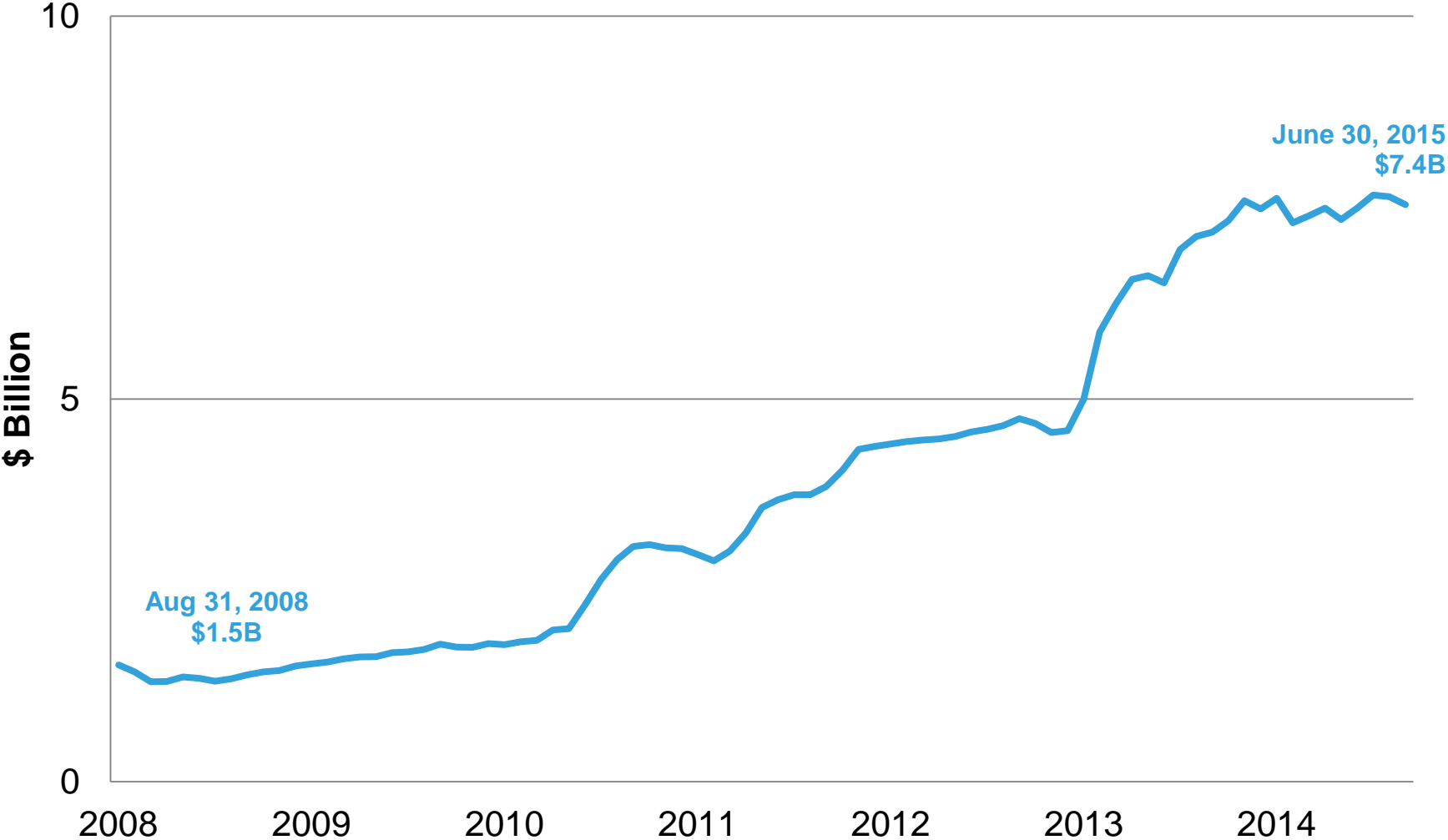
## Growth of a Dollar



TRIP Aggregate Policy Benchmark is a weighted composite of 15% Russell 3000 Tobacco Free Index+7.5% MSCI World Ex-US (Net) Tobacco Free+ 7.5% MSCI Emerging Market (Net) + 10% MSCI ACWI (Net) + 17.0% Barclays US Credit + 2.5% Barclays US Credit + 5% Merrill Lynch High Yield Cash Pay Index + 5% JP Morgan Emerging Markets Bond Index Global Diversified + 10% Equally Weighted HFRX Absolute Return Index and HFRX Market Directional Index +10% FTSE EPRA NAREIT Global Index + 10.5% Aggregate TRIP Portfolio. As of March 31, 2015.

# Total-Return Investment Pool (TRIP)

## Asset Growth





# Total-Return Investment Pool (TRIP)

## Allocation Shifts

- Equity
- Fixed Income
- Other Investments
- Cash

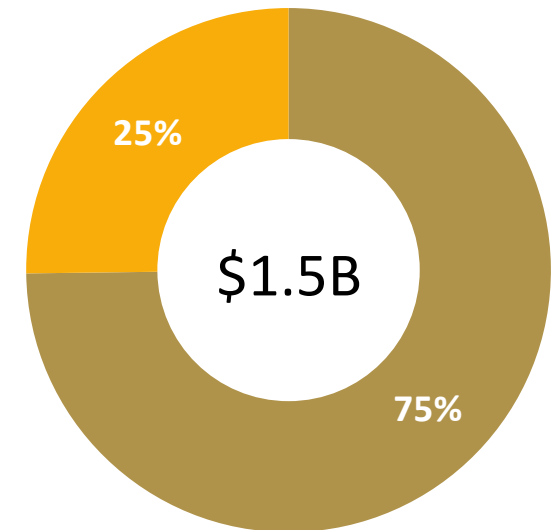
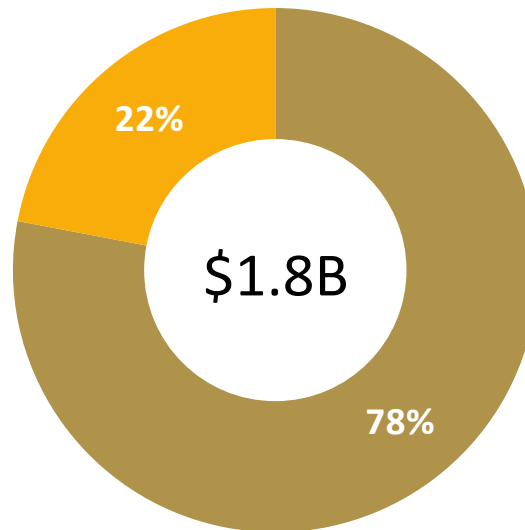
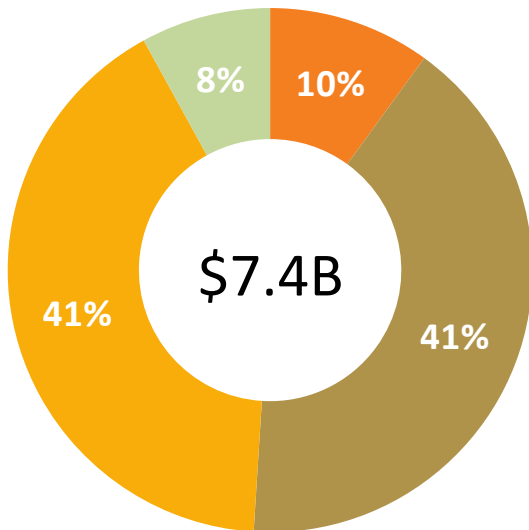
### 5 Years Ago

### Inception

June 30, 2015

June 30, 2010

August 30, 2008



# Total-Return Investment Pool (TRIP)

## Asset Allocation

	Market Value in \$ Billions	Percentage	Current Policy	Over or Underweight Relative to Policy
<b>Equity</b>	3.0	40.5	50.0%	(9.5%)
<b>Fixed Income</b>	3.0	40.5	29.5%	+11.0%
<b>Other Investments</b>	0.8	10.8	20.5%	(9.7%)
<b>Cash</b>	0.6	8.2	0.0%	+8.2%
<b>Total</b>	<b>\$7.4 Billion</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>

# Total-Return Investment Pool (TRIP)

## Asset Allocation

	Market Value in \$ Billions	Percentage	Over/Underweight Relative to Policy	Quarter End Changes since March 31, 2015	Fiscal Year End Changes since June 30, 2014
<b>Equity</b>					
U.S.	1.0	13.5	(1.5)	(2.2)	(1.9)
Non-U.S. Developed	0.5	6.8	(0.7)	(0.1)	(0.7)
Emerging Markets	0.5	6.8	(0.7)	+0.2	(0.9)
Opportunistic	0.8	10.7	+0.7	(0.2)	+0.9
Public Real Estate	0.2	2.7	(7.3)	(7.5)	(7.4)
<b>Total</b>	<b>3.0</b>	<b>40.5%</b>	<b>(9.5%)</b>	<b>(9.8%)</b>	<b>(10.0%)</b>
<b>Fixed Income</b>					
Core	2.3	31.1	+11.6	+11.2	+11.3
High Yield	0.3	4.0	(1.0)	(0.9)	(0.8)
Emerging Markets	0.4	5.4	+0.4	+0.4	+0.4
<b>Total</b>	<b>3.0</b>	<b>40.5%</b>	<b>+11.0%</b>	<b>+10.7%</b>	<b>+10.9%</b>
<b>Other Investments</b>					
Absolute Return	0.8	10.8	+0.8	+0.1	+0.7
Cross Asset Class	0.0	0.0	(10.5)	(2.5)	(9.3)
<b>Total</b>	<b>0.8</b>	<b>10.8%</b>	<b>(9.7%)</b>	<b>(2.4%)</b>	<b>(8.6%)</b>
Cash	0.6	8.2%	+8.2%	+1.5%	+7.7%
<b>Total</b>	<b>7.4</b>	<b>100.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>

# Total-Return Investment Pool (TRIP)

## Investment Performance

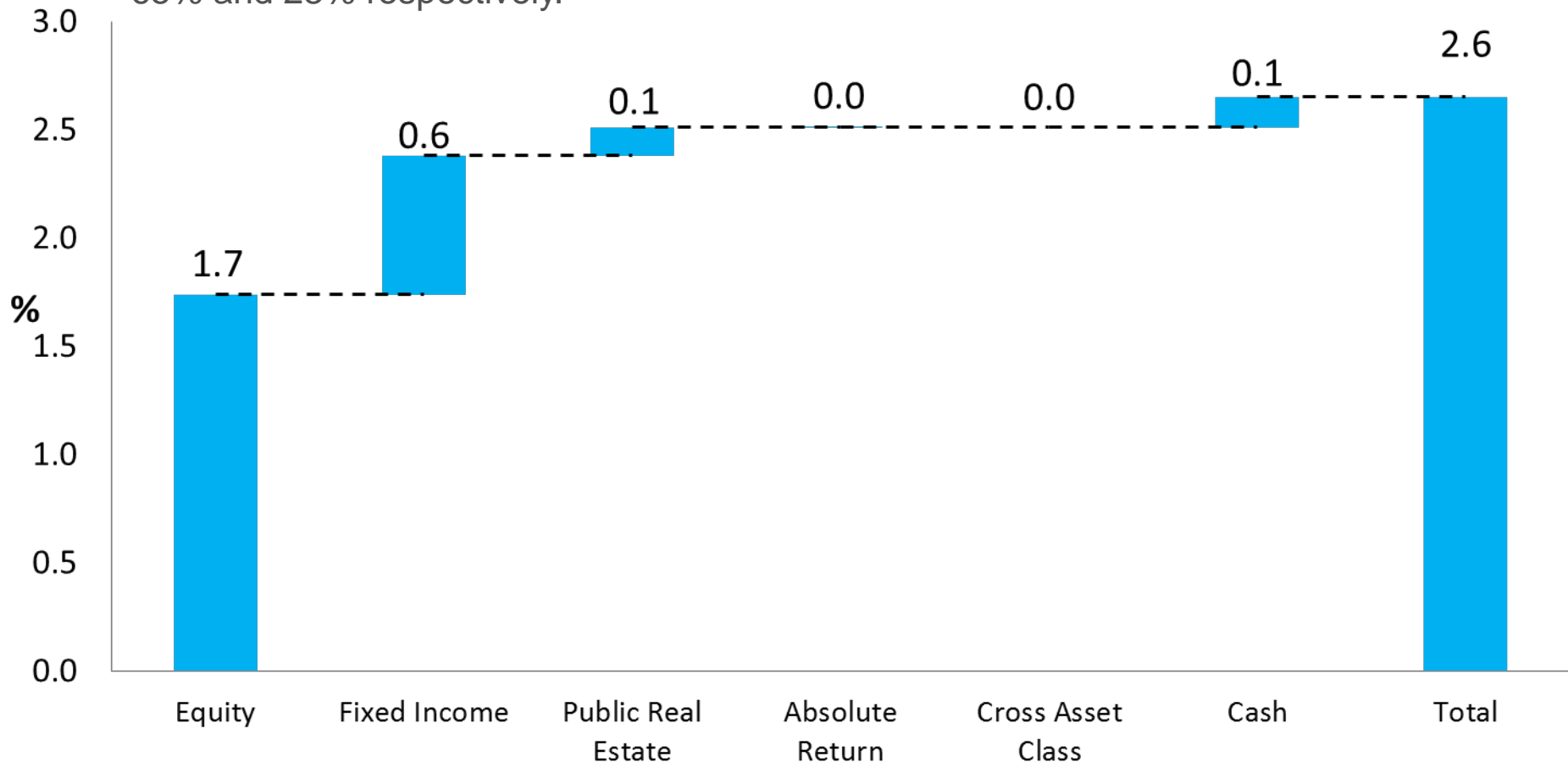
	Market Value in Billions(\$)	% Allocation	3 Month	6 Month	1 Year	3 Year	5 Year	Since Incept
<b>UC Total-Return</b>	\$ 7.4	100.0%	(0.3)	2.4	2.6	8.4	8.6	8.0
<b>UC Total-Return Policy Benchmark</b>			(1.0)	1.5	1.2	7.7	8.1	7.4
<b>Equity</b>	\$ 3.0	40.5%	0.9	4.3	4.1	15.2	13.9	7.4
U.S.	\$ 1.0	13.5%	0.2	1.8	7.2	17.7	17.8	10.3
Non-U.S. Developed	\$ 0.5	6.8%	0.6	4.6	(4.9)	12.7	8.3	3.8
Emerging Markets	\$ 0.5	6.8%	0.5	2.6	(5.4)	-	-	-
Opportunistic	\$ 0.8	10.7%	2.7	8.5	11.6	-	-	-
Public Real Estate	\$ 0.2	2.7%	(2.9)	0.9	4.7	8.6	-	-
<b>Fixed Income</b>	\$ 3.0	40.5%	(1.7)	0.4	1.3	3.5	5.4	6.8
Core	\$ 2.3	31.1%	(2.2)	(0.2)	1.4	3.0	5.0	6.5
High Yield	\$ 0.3	4.0%	0.1	2.9	1.4	6.2	8.2	8.9
Emerging Markets	\$ 0.4	5.4%	(0.7)	1.2	0.4	-	-	-
<b>Other Investments</b>	\$ 0.8	10.8%	(1.1)	0.6	0.0	-	-	-
Absolute Return	\$ 0.8	10.8%	(1.1)	0.6	0.0	-	-	-
<b>Cash</b>	\$ 0.6	8.2%	0.0	0.1	1.5	-	-	-

TRIP Aggregate Policy Benchmark is a weighted composite of 15% Russell 3000 Tobacco Free Index+7.5% MSCI World Ex-US (Net) Tobacco Free+ 7.5% MSCI Emerging Market (Net) + 10% MSCI ACWI (Net) + 17.0% Barclays US Credit + 2.5% Barclays US Credit + 5% Merrill Lynch High Yield Cash Pay Index + 5% JP Morgan Emerging Markets Bond Index Global Diversified + 10% Equally Weighted HFRX Absolute Return Index and HFRX Market Directional Index +10% FTSE EPRA NAREIT Global Index + 10.5% Aggregate TRIP Portfolio. Numbers may not add due to rounding.

# Total-Return Investment Pool (TRIP)

## Total Return Contributions (12 Months)

Contribution to total return measures how each strategy impacted return. All strategies positively contributed to performance with Equities and Fixed Income contributing to 65% and 23% respectively.



# Total-Return Investment Pool (TRIP)

## Active Return Attribution (12 Months)

	Weight	Active Weight	1 Year Active Return	Allocation Attribution	Selection Attribution	Total Attribution	Allocation Attribution (%)	+ Selection Attribution (%)	= Total Attribution (%)
<b>Equity</b>									
U.S.	15.4	+0.4	(0.1)	+0.0	(0.0)	+0.0	+3.0	(0.9)	+2.2
Non-U.S. Developed	7.1	(0.4)	+0.5	+0.0	+0.0	+0.1	+1.5	+2.8	+4.3
Emerging Markets	7.0	(0.5)	(0.3)	+0.1	(0.0)	+0.0	+5.4	(1.8)	+3.6
Opportunistic	10.8	+0.8	+10.9	+0.1	+1.0	+1.1	+8.0	+75.2	+83.2
Real Estate - Public	9.0	(1.0)	+3.7	+0.0	+0.4	+0.4	+0.0	+26.3	+26.3
<b>Total</b>	<b>49.3%</b>	<b>(0.7%)</b>	<b>+1.1%</b>	<b>+0.2%</b>	<b>+1.4%</b>	<b>+1.6%</b>	<b>+17.9%</b>	<b>+101.6%</b>	<b>+119.5%</b>
<b>Fixed Income</b>									
Core	21.5	+2.0	+0.3	+0.0	+0.0	+0.0	+0.0	+2.9	+2.9
High Yield	4.9	(0.1)	+0.8	+0.0	+0.0	+0.0	+0.0	+3.0	+3.0
Emerging Markets	5.1	+0.1	(0.1)	(0.0)	(0.1)	(0.1)	(0.2)	(4.1)	(4.3)
<b>Total</b>	<b>31.5%</b>	<b>+2.0%</b>	<b>(0.3%)</b>	<b>(0.0%)</b>	<b>+0.0%</b>	<b>+0.0%</b>	<b>(0.2%)</b>	<b>+1.8%</b>	<b>+1.6%</b>
<b>Other Investments</b>									
Absolute Return	10.4	+0.4	(2.3)	+0.1	(0.4)	(0.3)	+4.2	(26.0)	(21.7)
Cross Asset Class	4.9	(5.6)	(0.1)	(0.0)	(0.0)	(0.0)	(2.9)	(0.3)	(3.1)
<b>Total</b>	<b>15.3%</b>	<b>(5.2%)</b>	<b>(0.2%)</b>	<b>+0.0%</b>	<b>(0.4%)</b>	<b>(0.3%)</b>	<b>+1.4%</b>	<b>(26.2%)</b>	<b>(24.9%)</b>
Cash	3.9%	+3.9%	+1.0%	+0.1%	+0.0%	+0.1%	+3.7%	+0.0%	+3.7%
<b>TOTAL</b>	<b>100%</b>	<b>0.0%</b>	<b>+1.4%</b>	<b>+0.3%</b>	<b>+1.0%</b>	<b>+1.4%</b>	<b>+22.8%</b>	<b>+77.2%</b>	<b>+100.0%</b>

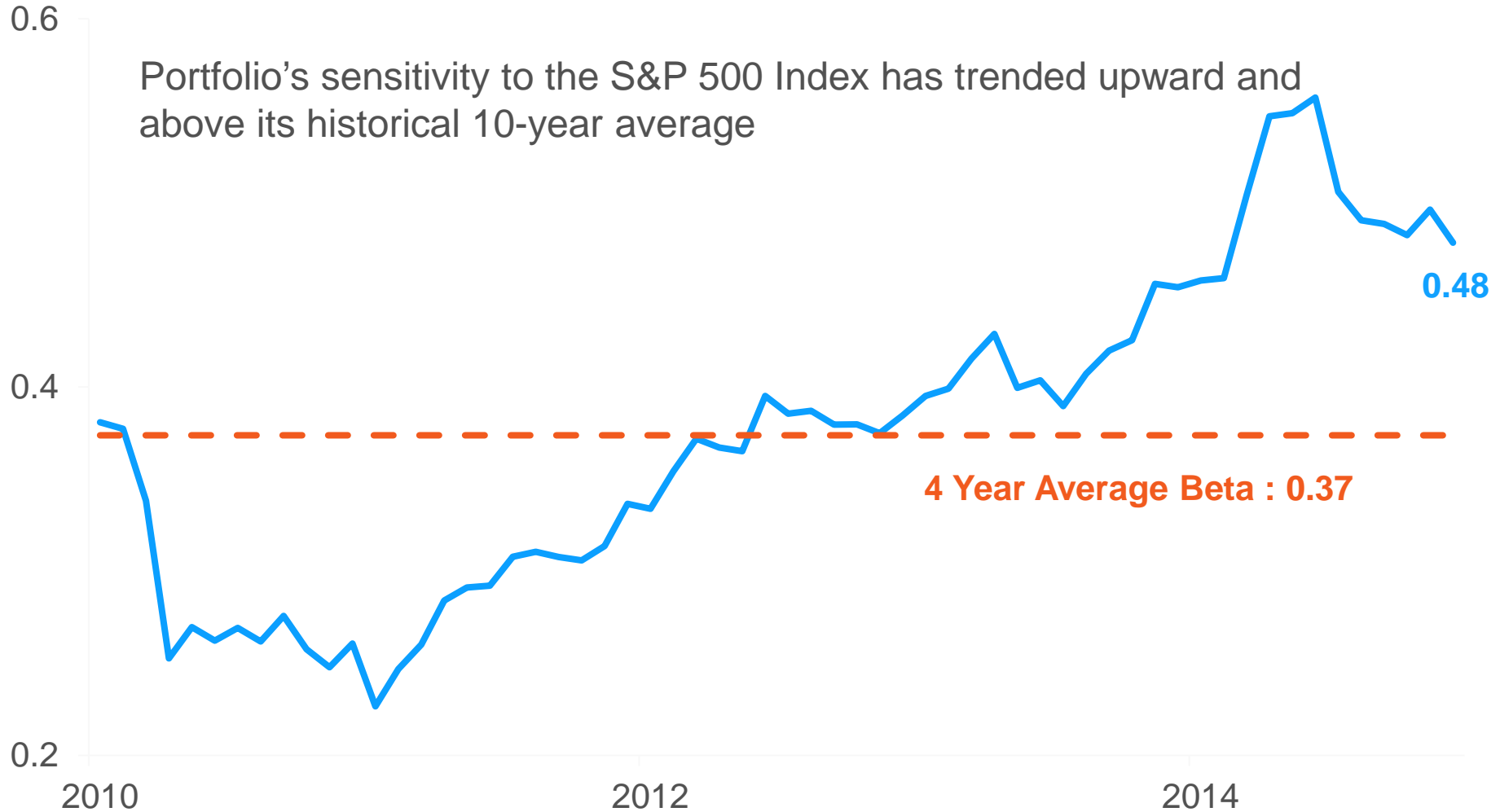
Active Return attribution describes the relative contribution of each asset class to the total plan. Allocation measures how decisions to under or overweight specific asset classes affect the overall plan. Selection measures how the asset classes' relative performance benefit or hurt the overall plan. Selection drove outperformance within Opportunistic Equity and Public Real Estate.

# Total-Return Investment Pool (TRIP) Benchmark

Asset Class	Benchmark Component	Target
<b>Total Public Equity</b>		<b>50.00%</b>
U.S. Equity	Russell 3000 Tobacco Free Index	15.00%
Developed Equity	MSCI World ex-U.S. (net dividends) Tobacco Free	7.50%
Emerging Market Equity	MSCI Emerging Market (net dividends)	7.50%
Opportunistic Equity	MSCI All Country World Index (net dividends)	10.00%
Public Real Estate	FTSE EPRA NAREIT Global Index	10.00%
<b>Total Fixed Income</b>		<b>29.50%</b>
U.S. Core Fixed Income	Barclays Aggregate Credit Index + Government Index	19.50%
High Yield Debt	Merrill Lynch High Yield Cash Pay BB/B A Index	5.00%
Emerging Market Debt	JP Morgan Emerging Markets Bond Index Global Diversified	5.00%
<b>Total Other Investments</b>		<b>20.50%</b>
Absolute Return	50% HFRX Absolute Return Index + 50% HFRX Market Directional Index	10.00%
Cross-Asset Class Strategy	Aggregate TRIP Policy Benchmark	10.50%

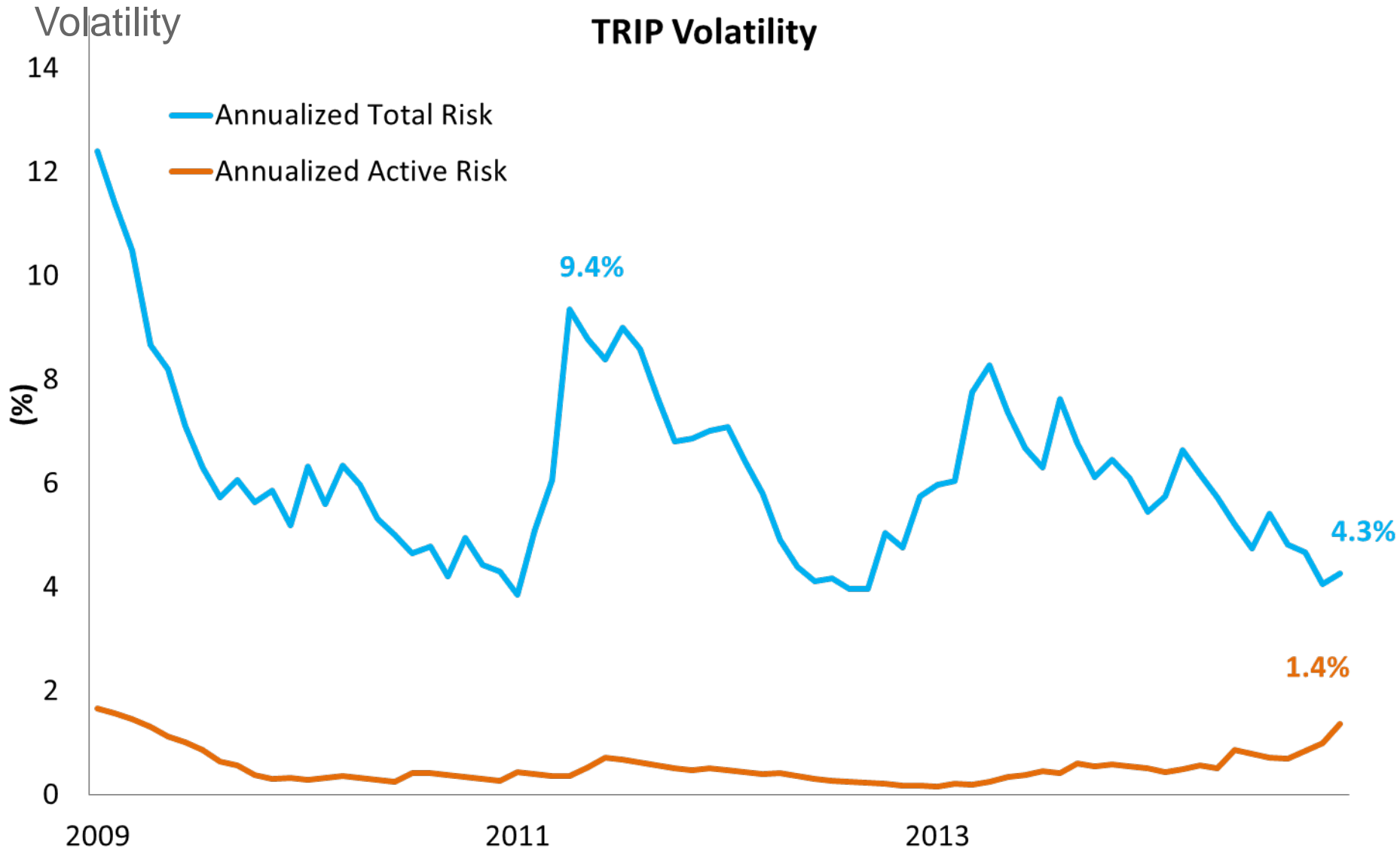
# Total-Return Investment Pool (TRIP)

Beta (S&P 500)





# Total-Return Investment Pool (TRIP)



# SHORT-TERM INVESTMENT POOL

# Short-Term Investment Pool (STIP)

## Investment Highlights

---

Assets Under Management  
June 30, 2014

---

**\$7.1 billion**

---

Market Gains

---

**\$3.0 million**

---

Value Added

---

**\$80.0 million**

---

Cash Inflow

---

**\$1.4 billion**

---

Cash Outflow

---

**(\$1.8 billion)**

---

Assets Under Management  
March 31, 2015

**\$6.8 billion**

# Short-Term Investment Pool (STIP)

## Performance

### Net Returns

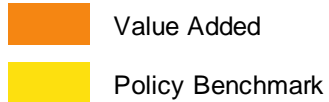
1.4%

1.7%

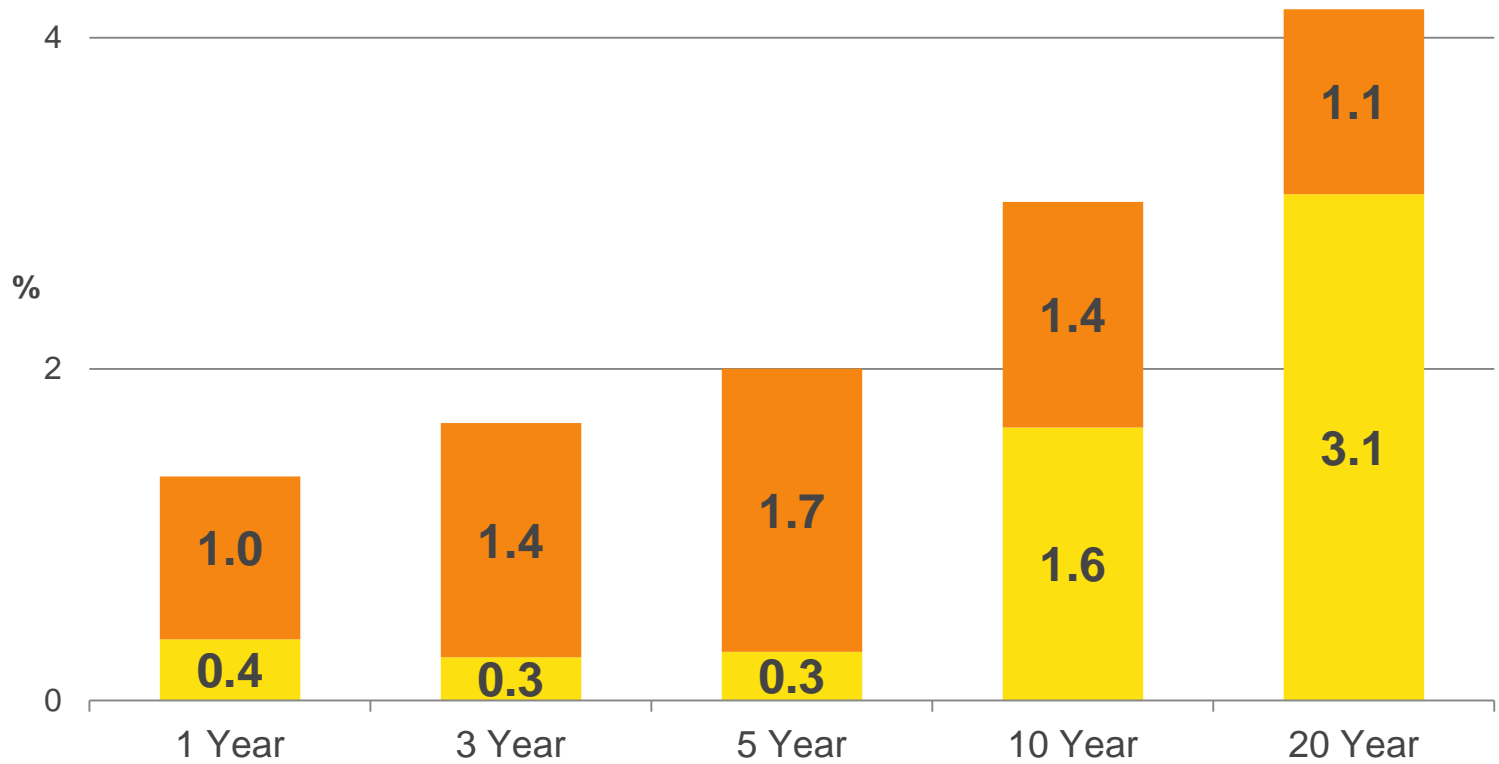
2.0%

3.0%

4.2%





STIP Policy Benchmark is weighted composite of Two Year US Treasury Note and 30 Days US Treasury Bills. Weights will be actual average weights of bond and cash equivalent components of the pool. Rebalanced monthly.

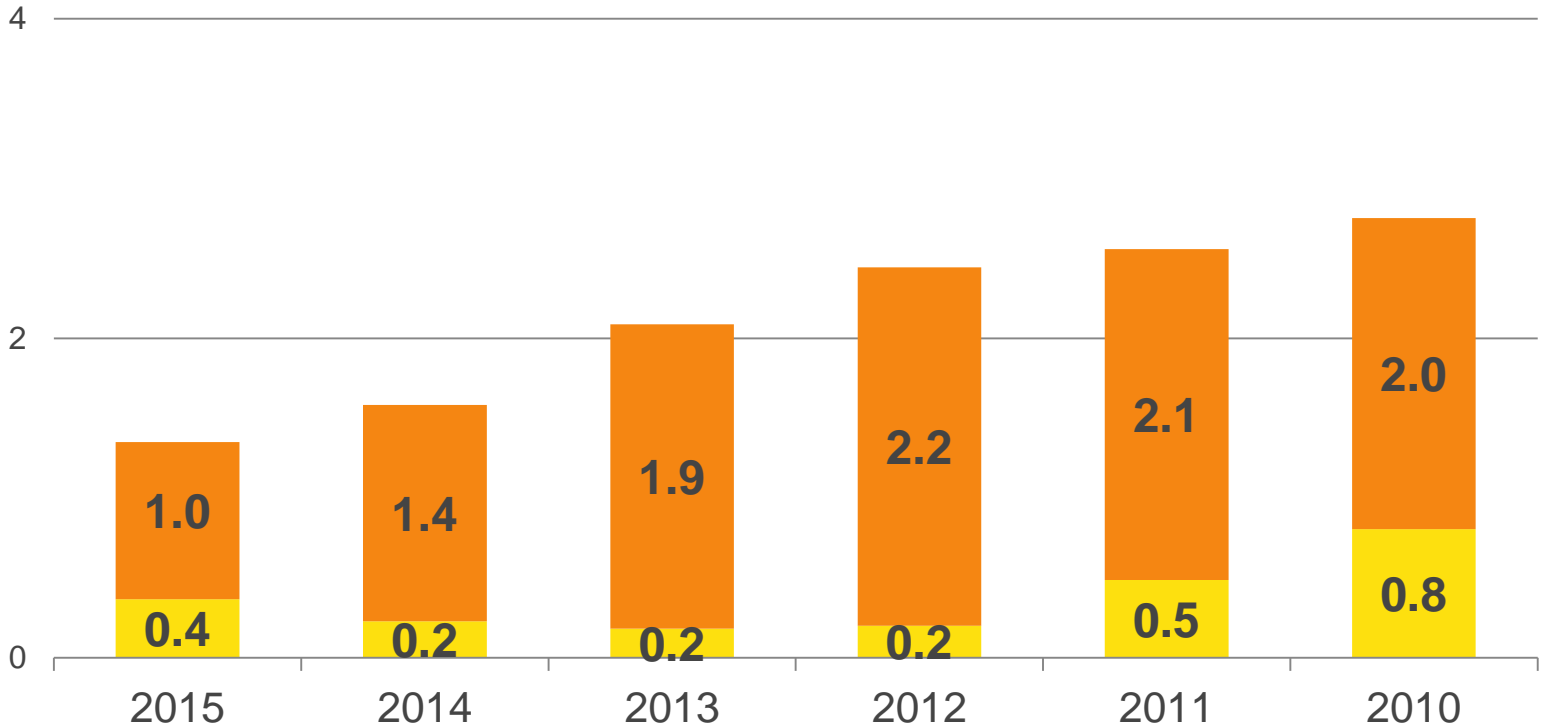


# Short-Term Investment Pool (STIP)

Performance – Fiscal Year

**Net Returns**    **1.4%**            **1.6%**            **2.1%**            **2.4%**            **2.6%**            **2.8%**

 Value Added  
 Policy Benchmark



STIP Policy Benchmark is weighted composite of Two Year US Treasury Note and 30 Days US Treasury Bills. Weights will be actual average weights of bond and cash equivalent components of the pool. Rebalanced monthly.

# Short-Term Investment Pool (STIP)

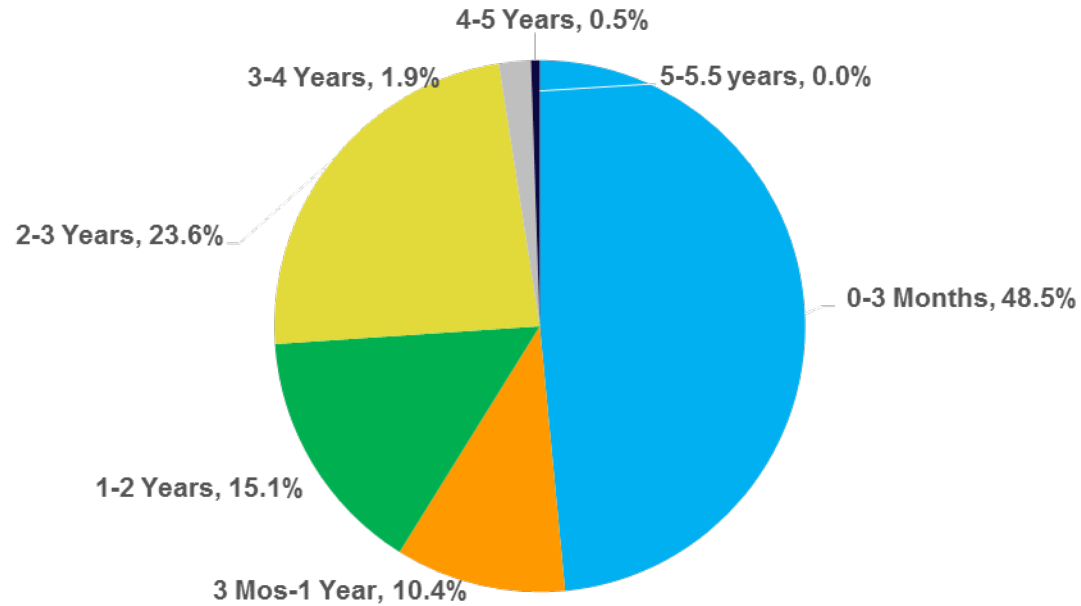
## Asset Allocation

<u>Asset Allocation</u>	<u>Market Value</u>	<u>Portfolio %</u>
<b>Corporates</b>	\$3.0	47.8%
<b>Commercial Paper</b>	\$3.0	38.4%
<b>Governments</b>	\$0.8	13.8%
<b>Total</b>	<b>\$6.8 Billion</b>	<b>100.0%</b>

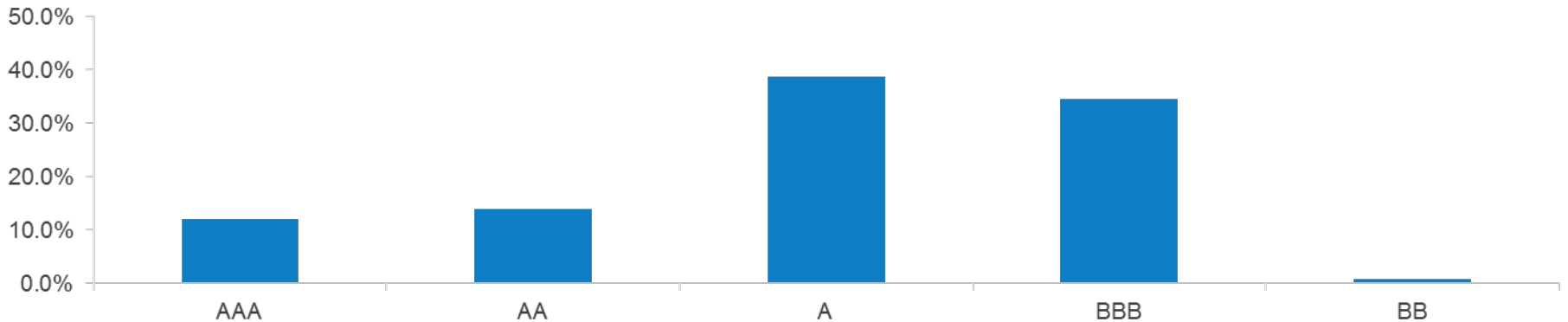
# Short-Term Investment Pool (STIP)

## Maturity Profile and Rating Distributions

### Maturity Profile



### Ratings Distribution



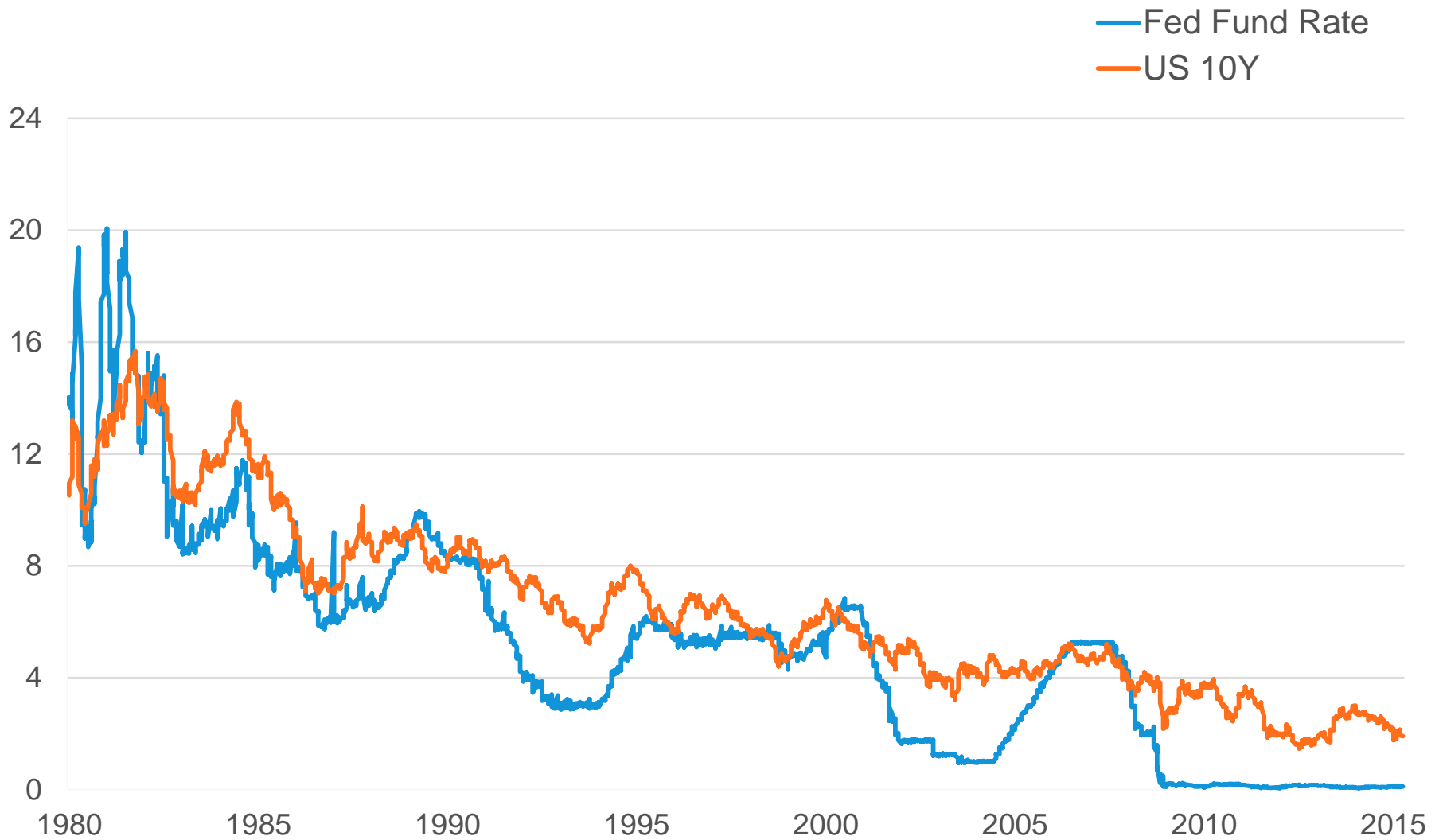
# Short-Term Investment Pool (STIP) Benchmark

Asset Class	Benchmark Component	Target
Short-Term Fixed Income	Weighted Average of Income Return on a Constant Maturity Two-Year U.S. Treasury Note and the Return on U.S. 30-Day Treasury Bills	Actual weights of bond and cash equivalent components

---



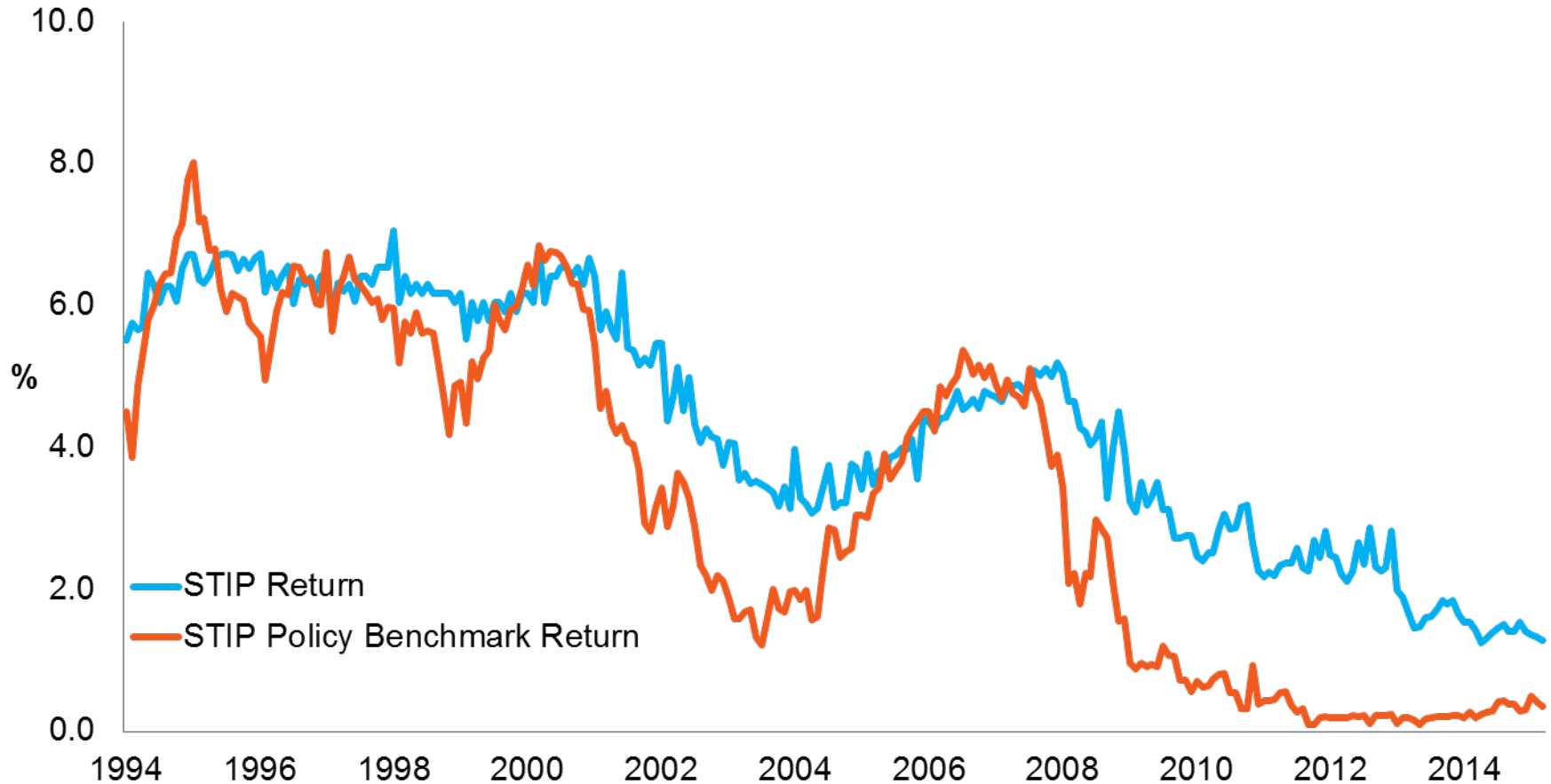
# Decades of Declining Rates



# Short-Term Investment Pool (STIP)

## Historical Performance

### Annualized Net Return

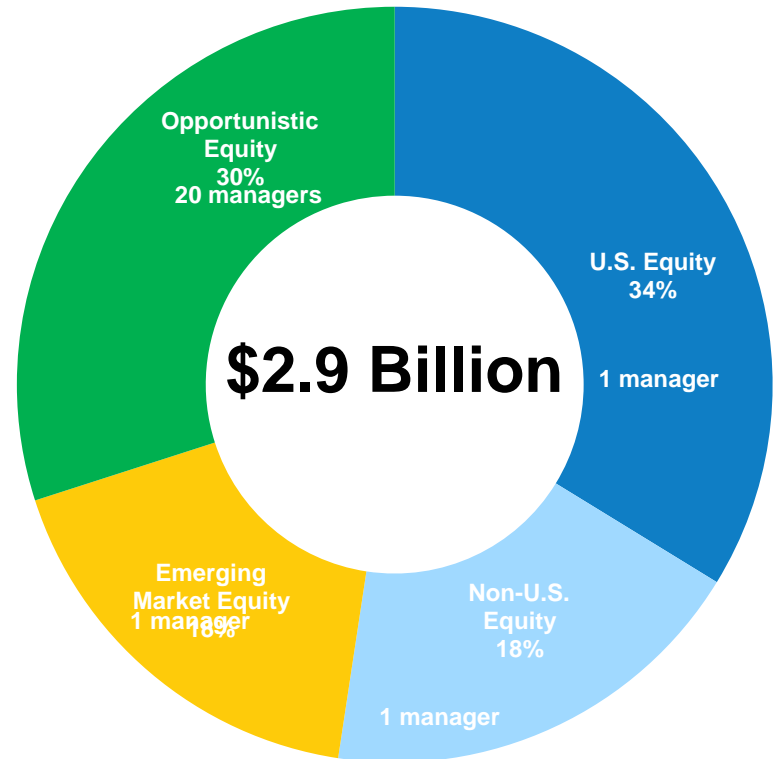


# Asset Class Summary

# Public Equity

Program inception 2008

Active / Passive ~25% / ~75%



# Public Equity

## TRIP

As of June 30,2015	Market Value (\$ Million)	% Allocation	Annualized Performance(%)				
			1 Year	3 Year	5 Year	Since Inception	10 Year
<b>Public Equity</b>	<b>2,860</b>	<b>100%</b>	<b>3.8</b>	<b>16.3</b>	<b>13.9</b>	<b>7.4</b>	<b>-</b>
U.S.	965	34%	7.2	17.7	17.8	10.3	-
<i>Russell 3000 Tobacco Free Index</i>			7.3	17.9	17.7	10.1	-
<i>Value Added</i>			-0.1	-0.1	0.1	0.2	-
Non-U.S. Developed	533	19%	-4.9	12.7	8.3	3.8	-
<i>MSCI World ex-U.S.</i>			-5.3	12.5	8.2	3.6	-
<i>Value Added</i>			0.5	0.2	0.1	0.2	-
Emerging Markets	505	18%	-5.4	-	-	-	-
<i>MSCI Emerging Market</i>			-5.1	-	-	-	-
<i>Value Added</i>			-0.3	-	-	-	-
Opportunistic	857	30%	11.6	-	-	-	-
<i>MSCI All Country World Index</i>			0.7	-	-	-	-
<i>Value Added</i>			10.9	-	-	-	-

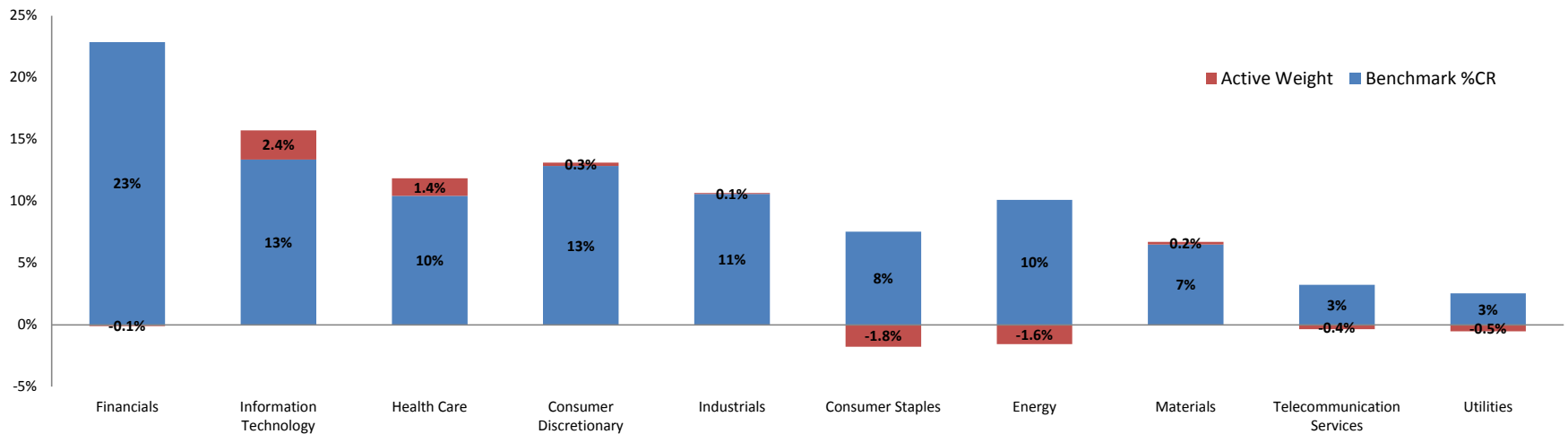
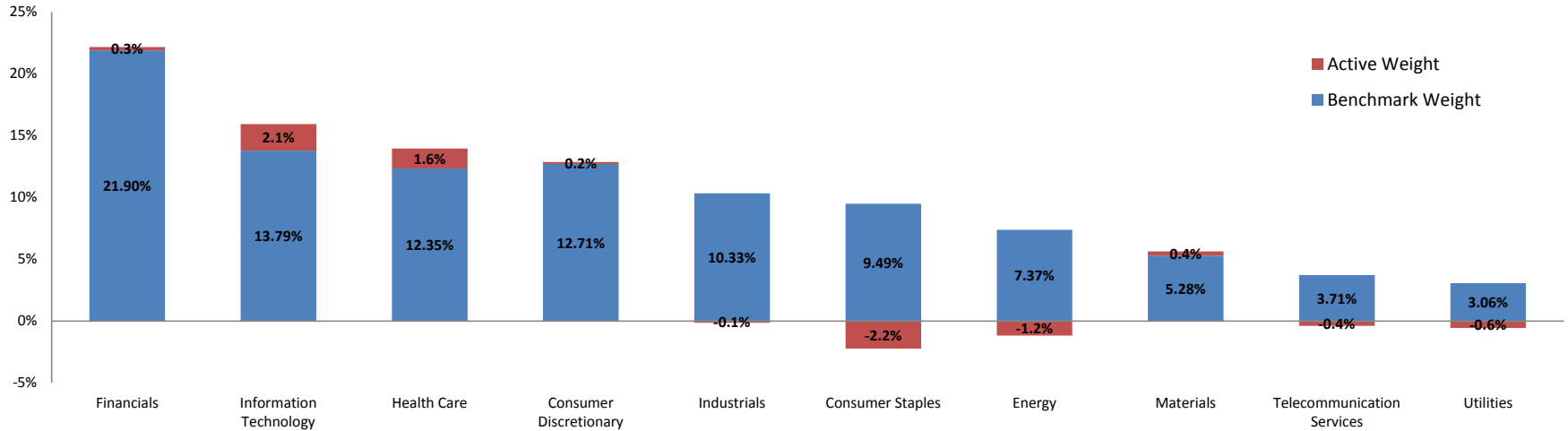
Total Portfolio was incepted in August 2008.  
Numbers may not add due to rounding.

# TRIP Public Equity

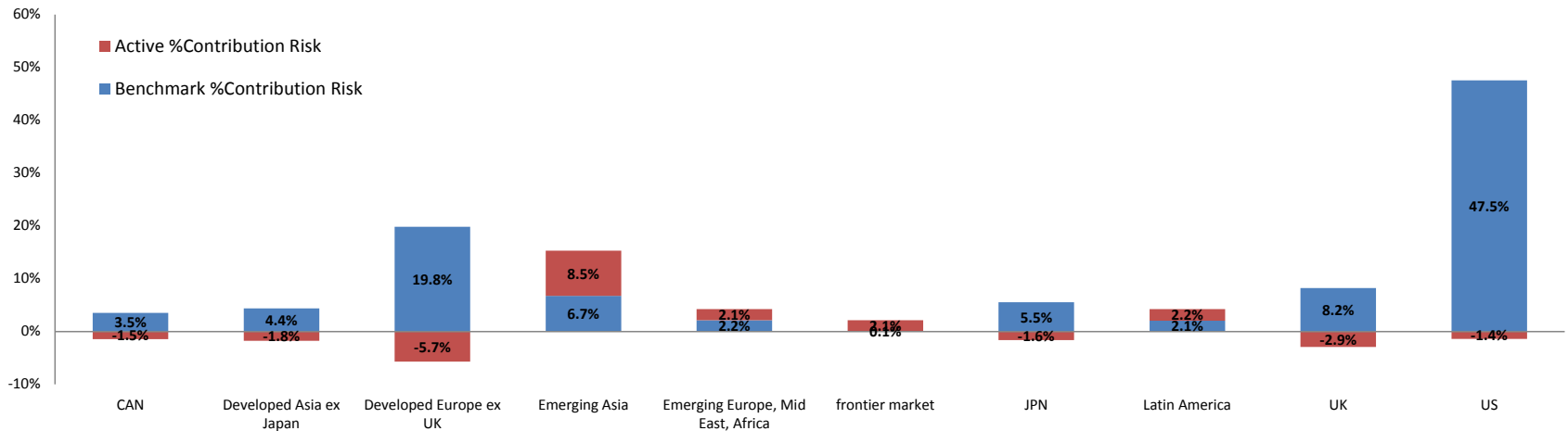
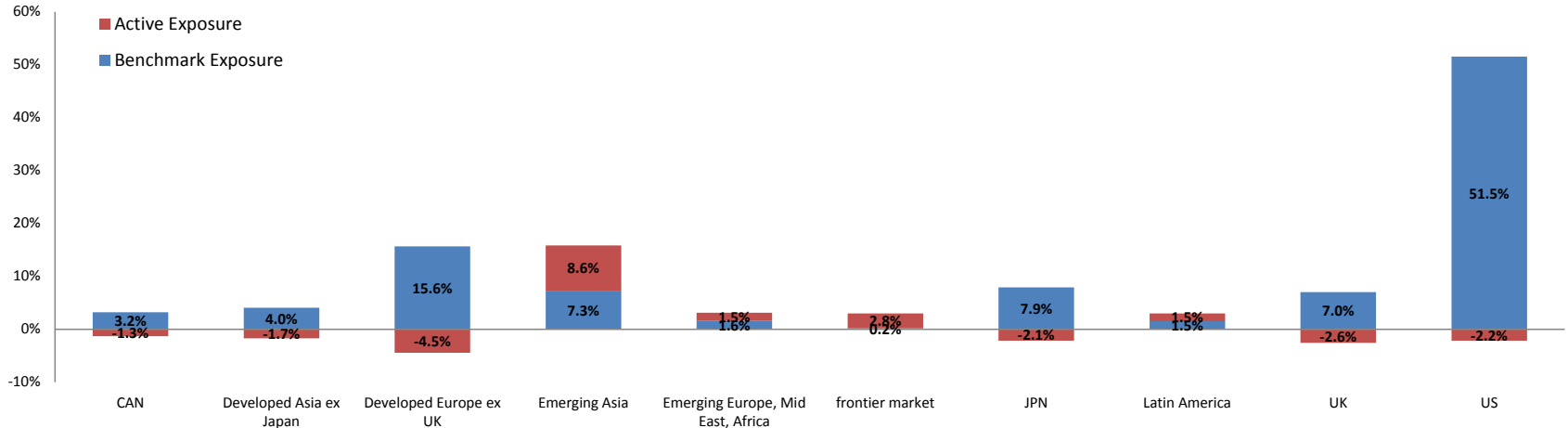
TRIP June 30, 2015	Dividend Yield	Dividend per Share	EPS	Price/ Book Value	P/CE	Price/Earnings	Price/Sales	Payout Ratio	ROE
Total Public Equity	2.16%	1.46	4.98	2.12	11.32	19.22	1.34	41.48%	19.64%
US Equity	1.91%	1.34	4.08	2.73	12.46	21.22	1.63	46.11%	24.27%
Non-US Equity	3.01%	2.22	4.22	1.71	9.47	17.97	1.07	59.17%	15.85%
EM Equity	2.60%	1.11	6.91	1.62	8.72	14.45	1.05	36.34%	16.21%
Opportunistic Equity	1.56%	1.27	5.49	2.37	14.10	23.19	1.52	23.33%	18.44%

MSCI ACWI	2.47%	1.71	4.52	2.14	10.79	18.51	1.36	54.22%	22.06%
S&P 500	2.10%	1.54	4.51	2.83	12.24	19.73	1.76	56.13%	27.06%
MSCI EM	2.59%	1.12	6.64	1.55	8.43	14.19	1.02	36.97%	16.21%
MSCI ACWI ex U.S.	2.93%	1.94	4.67	1.69	9.27	16.93	1.07	54.17%	16.31%

# TRIP Public Equity – Sector Exposure



# TRIP Public Equity – Regional Exposure

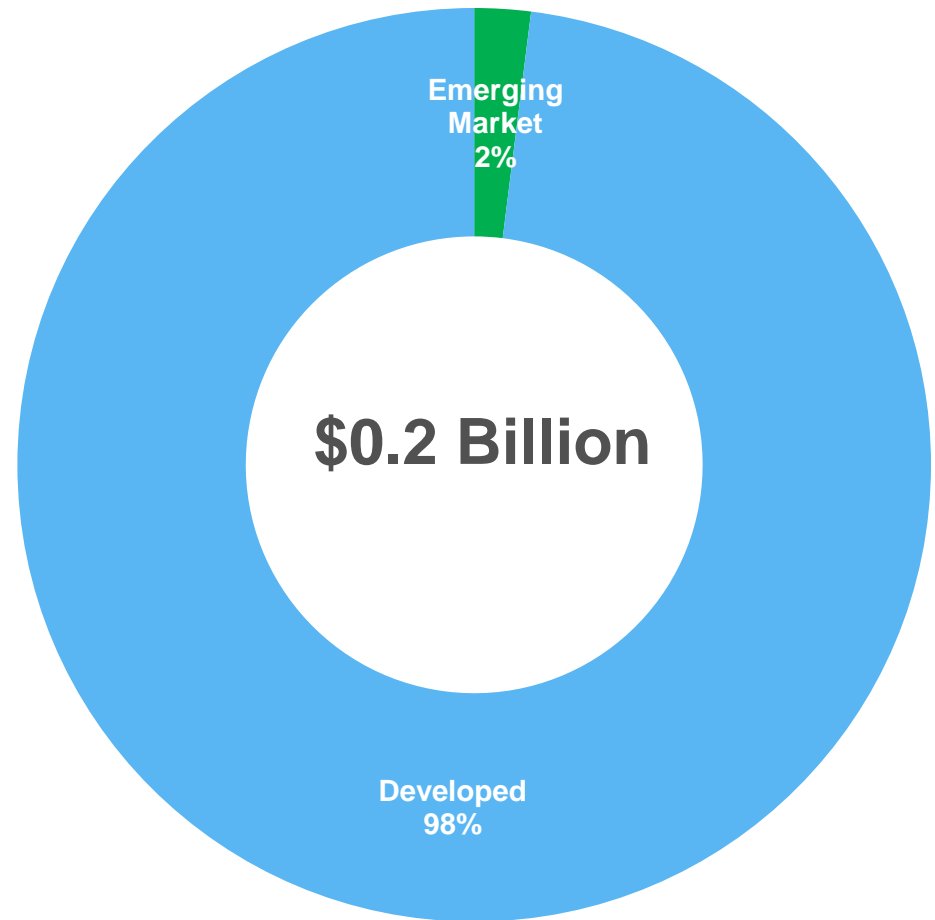




# Public Real Estate

Program inception January 2011

External managers 3



# Public Real Estate

TRIP As of June 30, 2015	Market Value (\$ Million)	% Allocation	Annualized Performance (%)		
			1 Year	3 Year	Since Inception
<b>Public Real Estate</b>	<b>170</b>	<b>100%</b>	<b>4.7</b>	<b>8.6</b>	<b>10.4</b>
<i>FTSE EPRA NAREIT Global</i>			<i>1.0</i>	<i>7.5</i>	<i>12.2</i>
<i>Value Added</i>			<i>3.7</i>	<i>0.0</i>	<i>-1.8</i>
Developed	3	2%	6.7	-	-
Emerging Market	158	93%	5.5	-	-

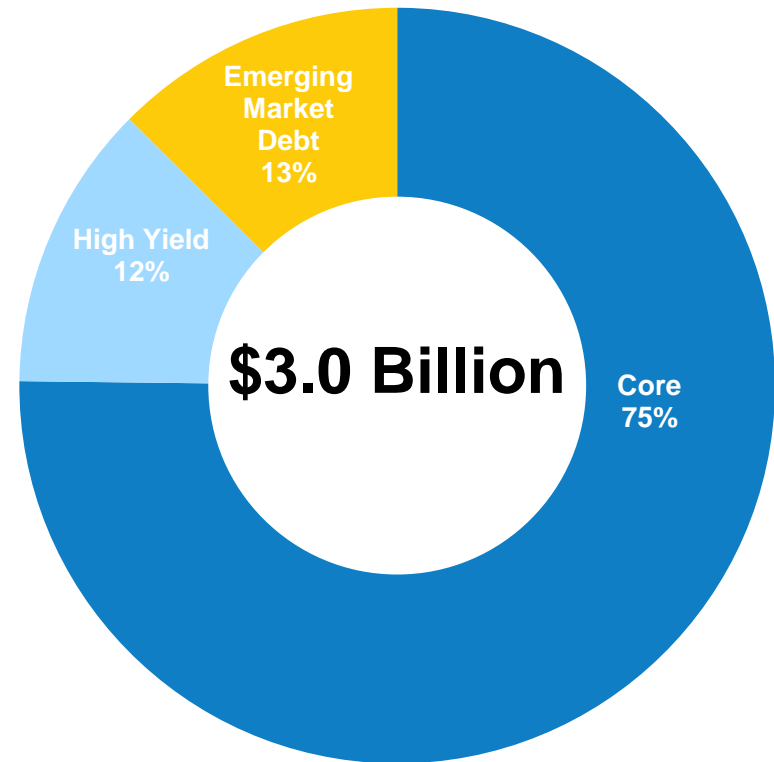
Total portfolio Inception Date: January 2011;  
 Global Strategy, inceptioned in January 2011, has been redeemed.  
 Developed and Emerging Market strategies were inceptioned in August 2013.  
 Numbers may not add due to rounding.

# Fixed Income

Program inception 2008

Internally managed 100%

Actively managed 100%



# Fixed Income

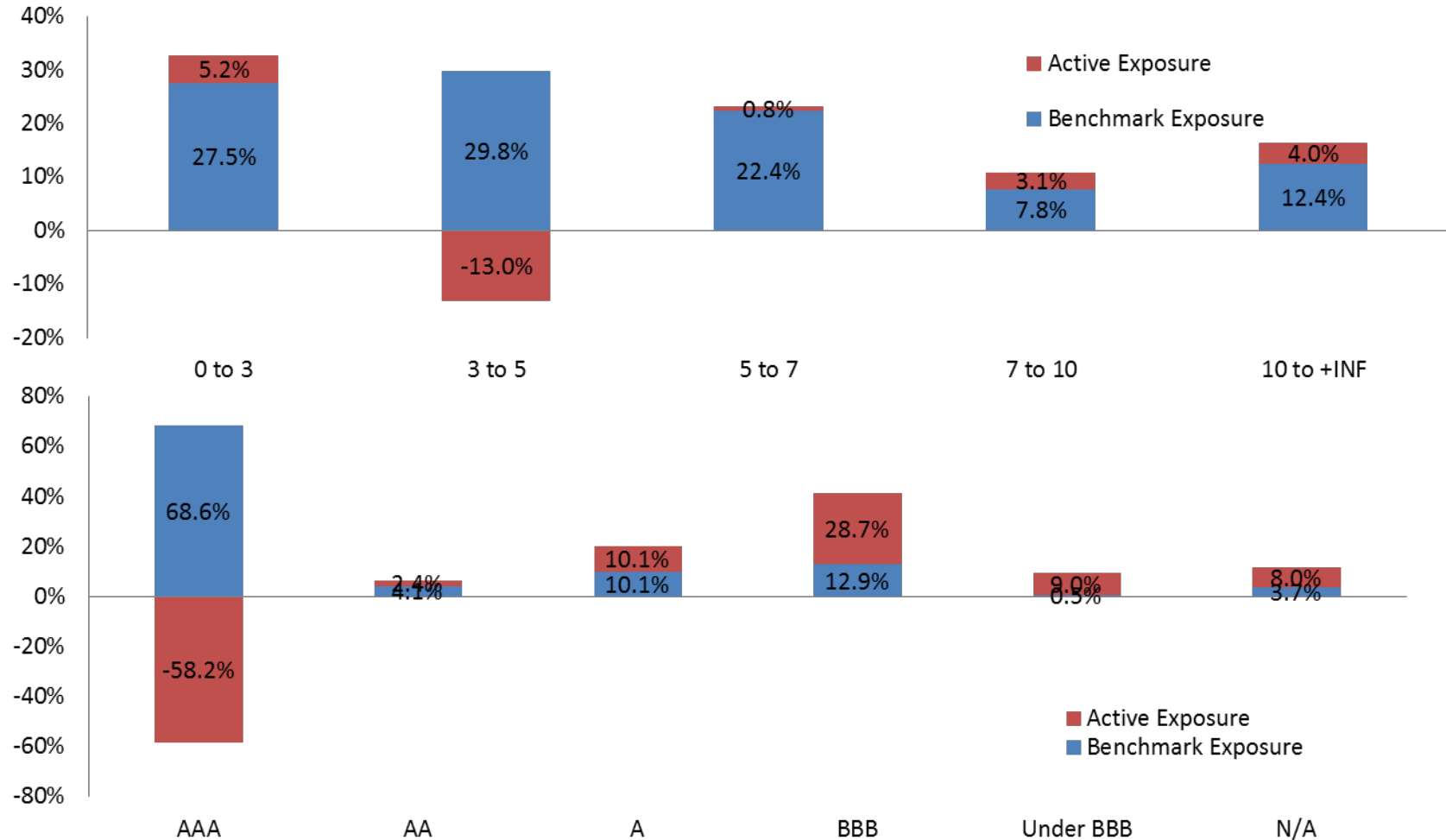
## TRIP

As of June 30,2015	Market Value (\$ Million)	% Allocation	Annualized Performance(%)			
			1 Year	3 Year	5 Year	Since Inception
<b>Fixed Income</b>	<b>3,043</b>	<b>100%</b>	<b>1.3</b>	<b>3.5</b>	<b>5.4</b>	<b>6.8</b>
Core	2,288	75%	1.4	3.0	5.0	6.5
<i>Barclays U.S. Aggregate Bond Index</i>						
<i>+Government Index</i>			1.1	2.7	4.5	6.5
<i>Value Added</i>			0.3	0.3	0.5	0.0
High Yield	373	12%	1.4	6.2	8.2	8.9
<i>Merrill Lynch High Yield Cash Pay BB/B</i>			0.6	6.7	8.4	9.6
<i>Value Added</i>			0.8	-0.6	-0.2	-0.7
Emerging Markets Debt	382	13%	0.4	-	-	-
<i>JP Morgan Emerging Markets Bond</i>			0.5	-	-	-
<i>Value Added</i>			-0.1	-	-	-

Total Portfolio was incepted in August 2008.  
Numbers may not add due to rounding.

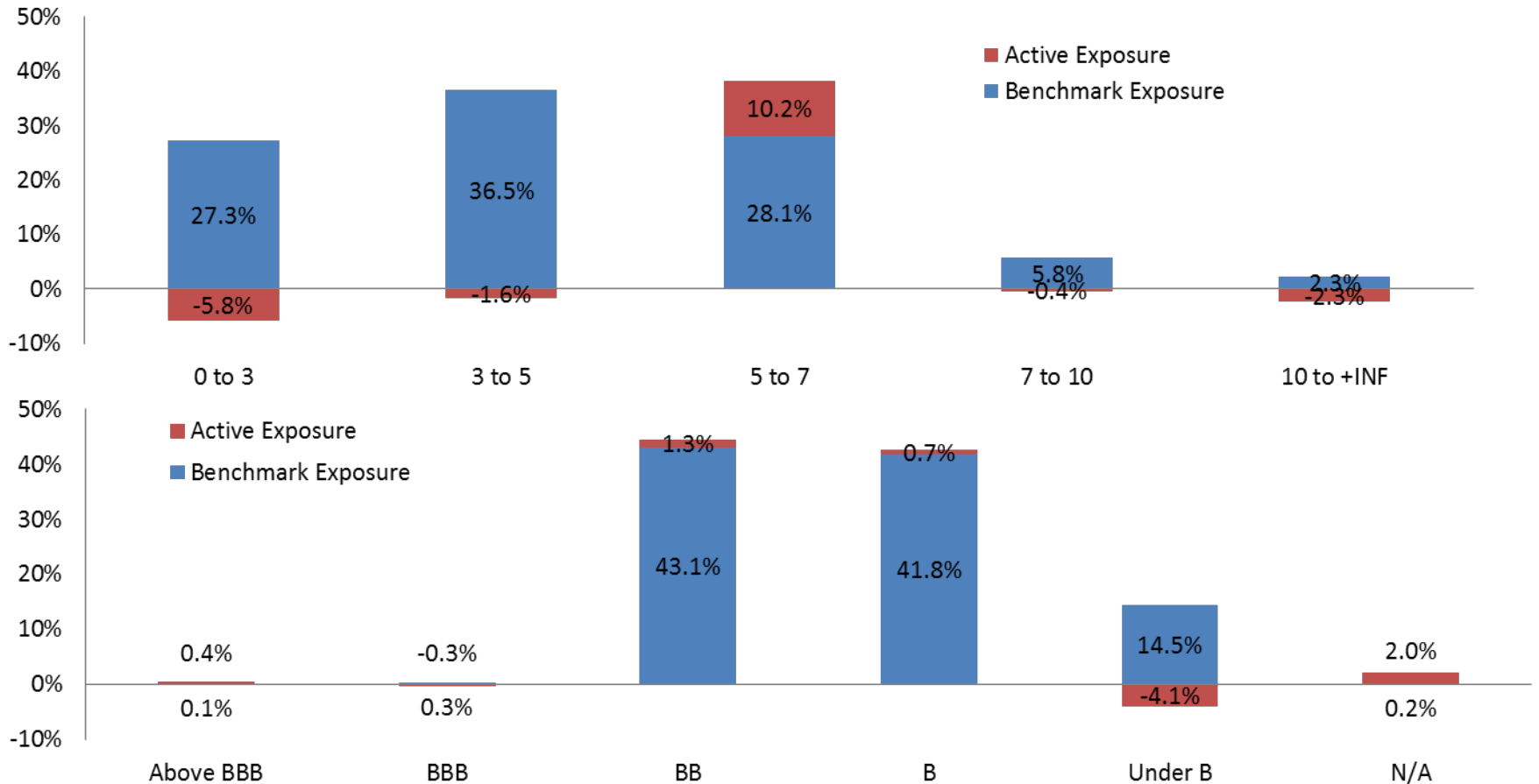
# TRIP Core Fixed Income

TRIP-Core	TRIP-Core	Barclays Aggregate	Excess
Effective Duration	5.84	5.52	0.32
Average Quality	A/BBB	AA/A	



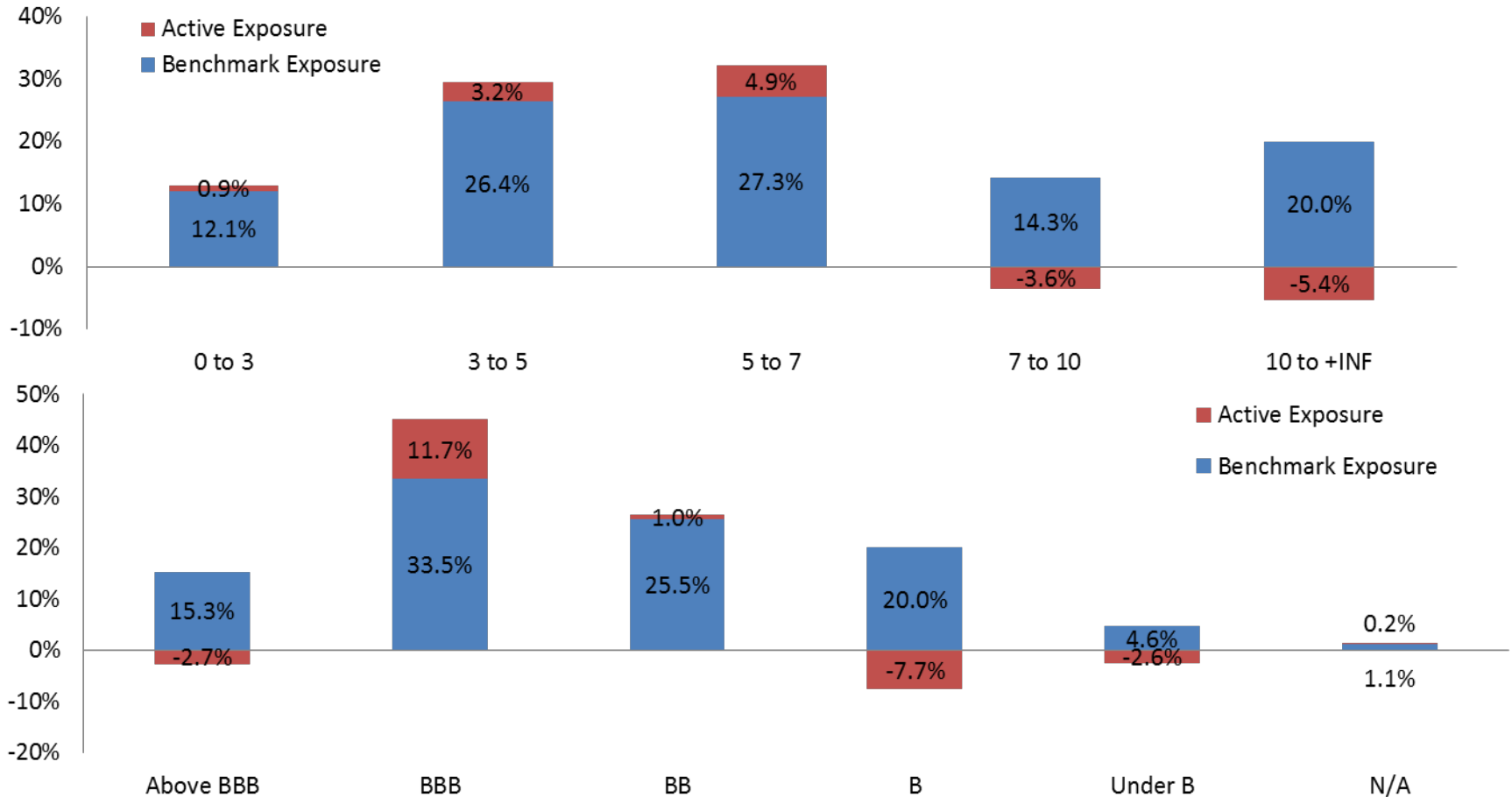
# TRIP High Yield

TRIP-High Yield	TRIP - High Yield	Merrill Lynch High Yield	Excess
Effective Duration	4.37	4.3	0.07
Average Quality	BB/B	BB/B	



# TRIP Emerging Market Debt

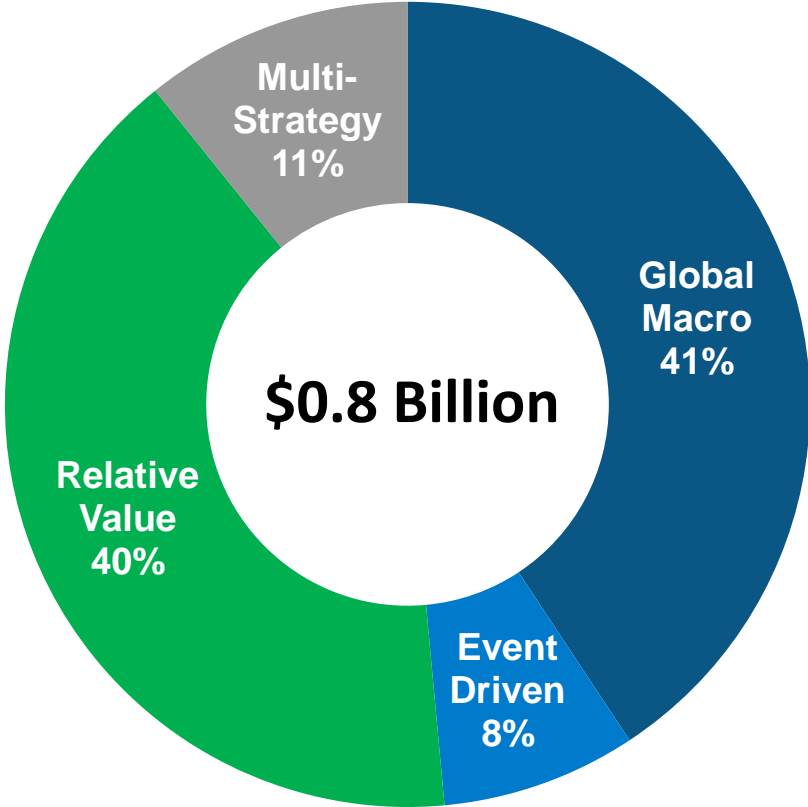
TRIP-Emerging Market Debt	TRIP - EM Debt	JP Morgan EM Bond	Excess
Effective Duration	6.02	6.64	-0.62
Average Quality	BBB/BB	BBB/BB	



# Absolute Return

Program inception August 2013

External managers 6





# Absolute Return

TRIP	Annualized Performance			
As of June 30, 2015	Market Value (\$ Million)	% Allocation	1 Year	Since Inception
<b>Absolute Return</b>	<b>821</b>	<b>100%</b>	<b>0.0</b>	<b>4.0</b>
<i>50% HRFX Absolute Return + 50% HRFX Market Directional</i>			2.3	6.0
<i>Value Add</i>			-2.3	-2.0
Global Macro	334	41%	19.7	12.8
Event Driven	64	8%	4.8	9.2
Relative Value	334	41%	-2.8	0.6
Multi-Strategy	88	11%	-	-

Inception Date: August 2013; Multi-Strategy was incepted in July 2014.  
Numbers may not add due to rounding.

