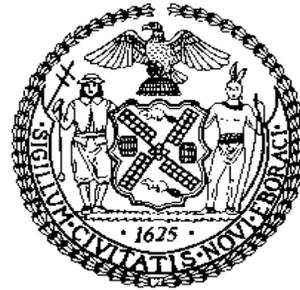




Overview – First Quarter 2016



THE CITY OF NEW YORK
OFFICE OF THE COMPTROLLER

June 15, 2016

Market Returns: Q1-2016

Asset Class	Index	First Quarter 2016	Fourth Quarter 2015	Three Year	Five Year	Expected*
Equities - U.S.	Russell 3000	0.97%	6.27%	11.15%	11.01%	7.83%
Equities - Developed Intl	MSCI EAFE	-3.01%	4.71%	2.23%	2.29%	8.94%
Equities - Emerging Intl	MSCI EMF	5.71%	0.66%	-4.50%	-4.13%	11.00%
Debt - US Government	NYC Treas/Agency +5	5.55%	-1.29%	3.66%	6.41%	2.82%
Debt - Investment Grade	NYC IG Credit	3.85%	-0.44%	2.85%	4.89%	3.42%
Debt - High Yield	Citigroup BB & B	3.04%	-1.70%	1.71%	4.83%	6.08%

*Average of consultant long-term arithmetic expected returns, as of 2016

Source: State Street



Market Returns: Q1-2016

Asset Class	Index	Q1 - 1st Half (1/1/16-2/11/16)	Q1 - 2nd Half (2/12/16-3/31/16)
Equities - U.S.	Russell 3000	-11.29%	13.82%
Equities - Developed Intl	MSCI EAFE	-12.78%	11.21%
Equities - Emerging Intl	MSCI EMF	-10.15%	17.65%
Debt - US Government	NYC Treas/Agency +5	6.63%	-1.01%
Debt - Investment Grade	NYC IG Credit	0.80%	3.04%
Debt - High Yield	Citigroup BB & B	-5.25%	8.74%

Source: State Street



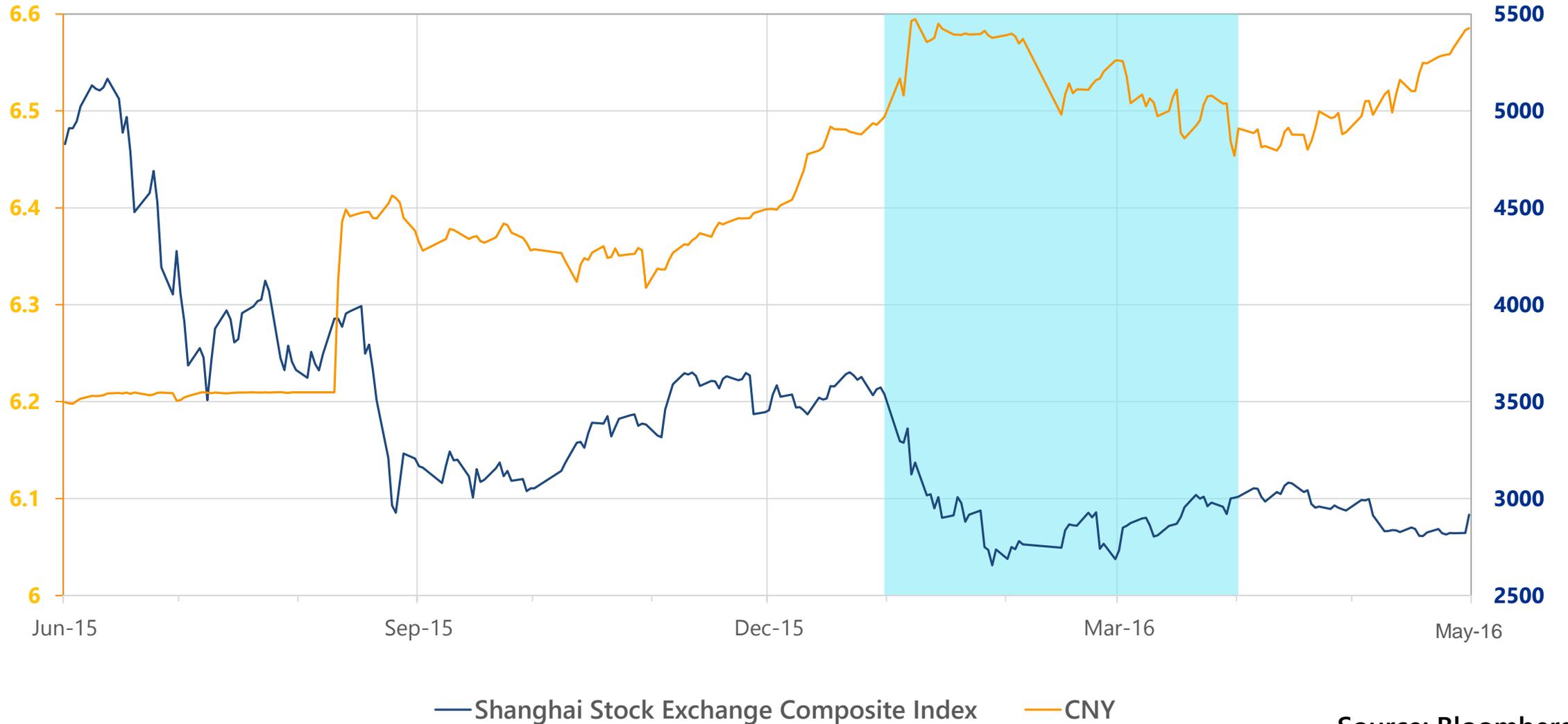
A Tale of Two Quarters

1st Half Q1 (1/1 to 2/11)

- China economic and FX concerns
- US recession fears and profit margin concerns
- Lack of confidence in central banks

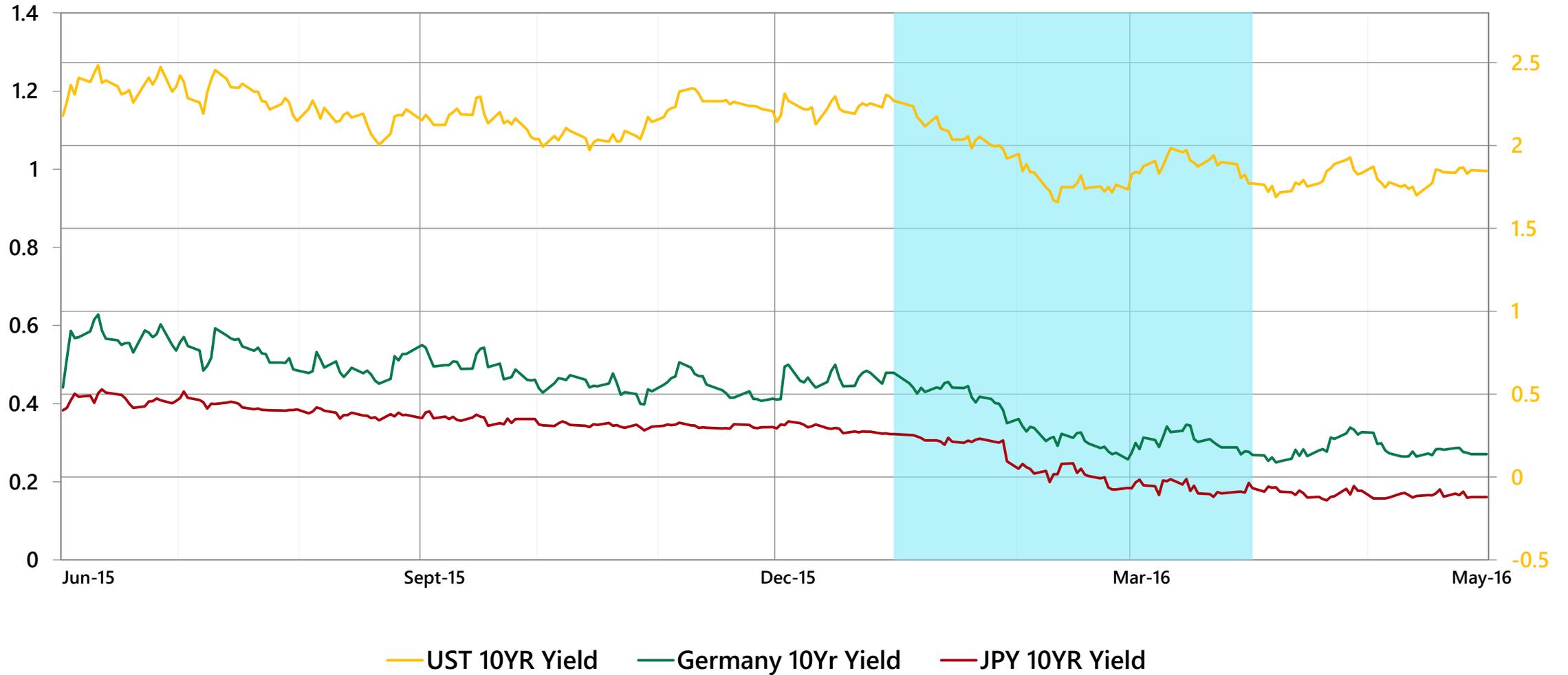


Shanghai Stock Exchange Composite Index, CNY Currency



Source: Bloomberg

Global Yield Decline



Source: Bloomberg

Excerpts from Key Central Bank Meetings and Speeches

Losing Confidence:

"The Committee is closely monitoring global economic and financial developments and is assessing their implications for the labor market and inflation, and for the balance of risks to the outlook"

- FOMC Meeting, Press Release Date: January 27, 2016

"Quantitative and Qualitative Monetary Easing with a Negative Interest Rate"

-Bank of Japan meeting, Press Release Date: January 29, 2016

Source: Board of Governors of the Federal Reserves System, Bank of Japan Meeting



Excerpts from Key Central Bank Meetings and Speeches

Regaining Confidence:

"Increased volatility in global financial markets have exacerbated concerns about the outlook for growth"

- Janet Yellen testimony at Monetary Policy Testimony, Press Release Date: February 10, 2016

"ECB is ready to do its part" .. and.. If factors entail downward risks to price stability, we will not hesitate to act.

-Mario Draghi speech, Press Release Date : February 15, 2016

"We will refrain from the competitive devaluation..." and.. "We will carefully calibrate and clearly communicate our macroeconomic and structural policy actions to reduce policy uncertainty..." "

-Joint Communiqué from G20 Meeting in Shanghai Press Release Date : February 27, 2016

Source: Board of Governors of the Federal Reserves System, Mario Draghi Speech, G20 Meeting Shanghai.



Excerpts from Key Central Bank Meetings and Speeches

Regaining Confidence (continued):

"...Balance of risks to my growth and inflation outlook may be starting to tilt slightly to the downside"

- Bill Dudley, speech following G20 meetings, Press Release Date: March 1, 2016

"Risk of CNY currency devaluation has been "greatly, greatly reduced"

-Jack Lew, speech following G20 meetings, Press Release Date : March 1, 2016

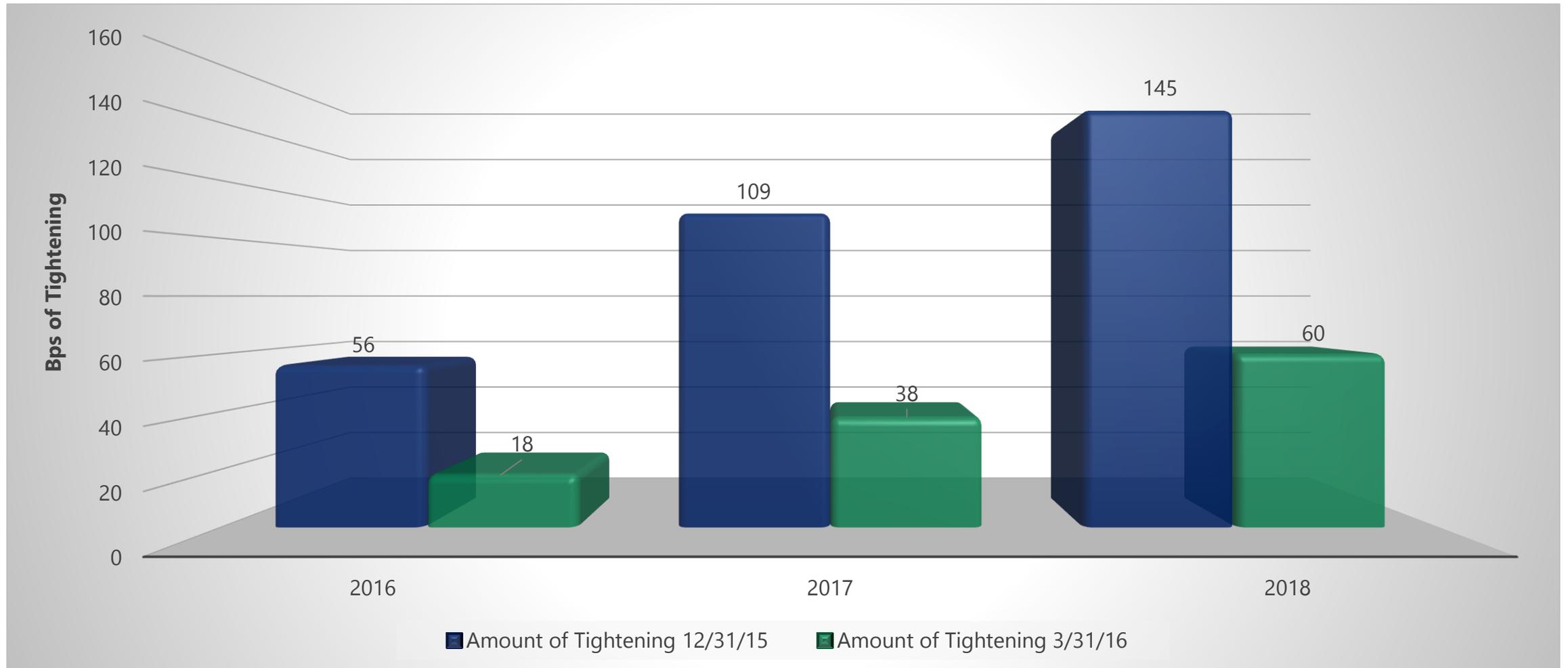
ECB announced significant monetary policy easing, including... 1) Rate cut from -30bp to -40bp 2) Increased monthly purchases from Euro 60B/Month to Euro 80B/month 3) Broadened asset purchases to include non-financial corporate bonds 4) Launched a new series of four long term refinancing operations, with a maturity of four years, with fixed interest rate of -40bp

-ECB meeting, Press Release Date: March 10, 2016

Source: Board of Governors of the Federal Reserves System, Bill Dudley G20 Meeting, ECB Meeting.



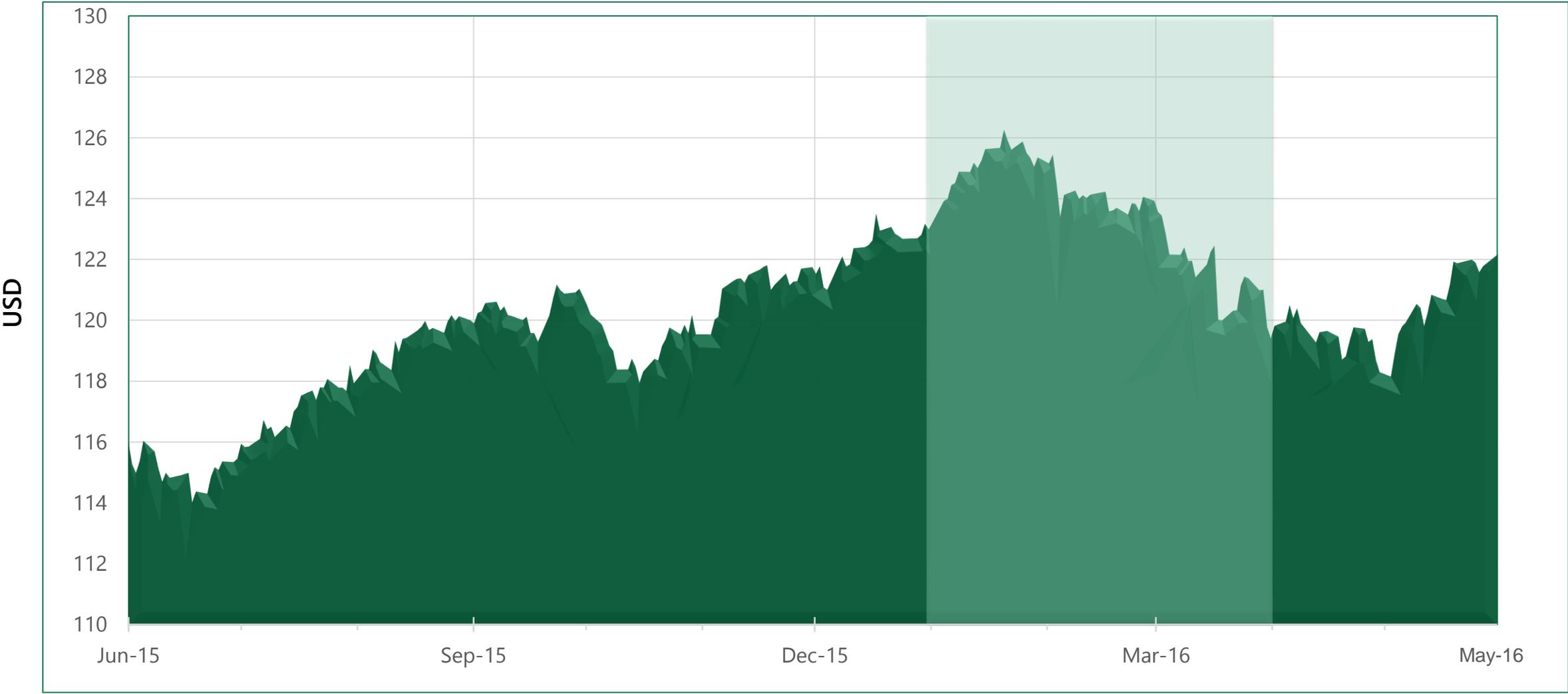
Market Based Expectations Fed Rate Hikes



Source: Bloomberg

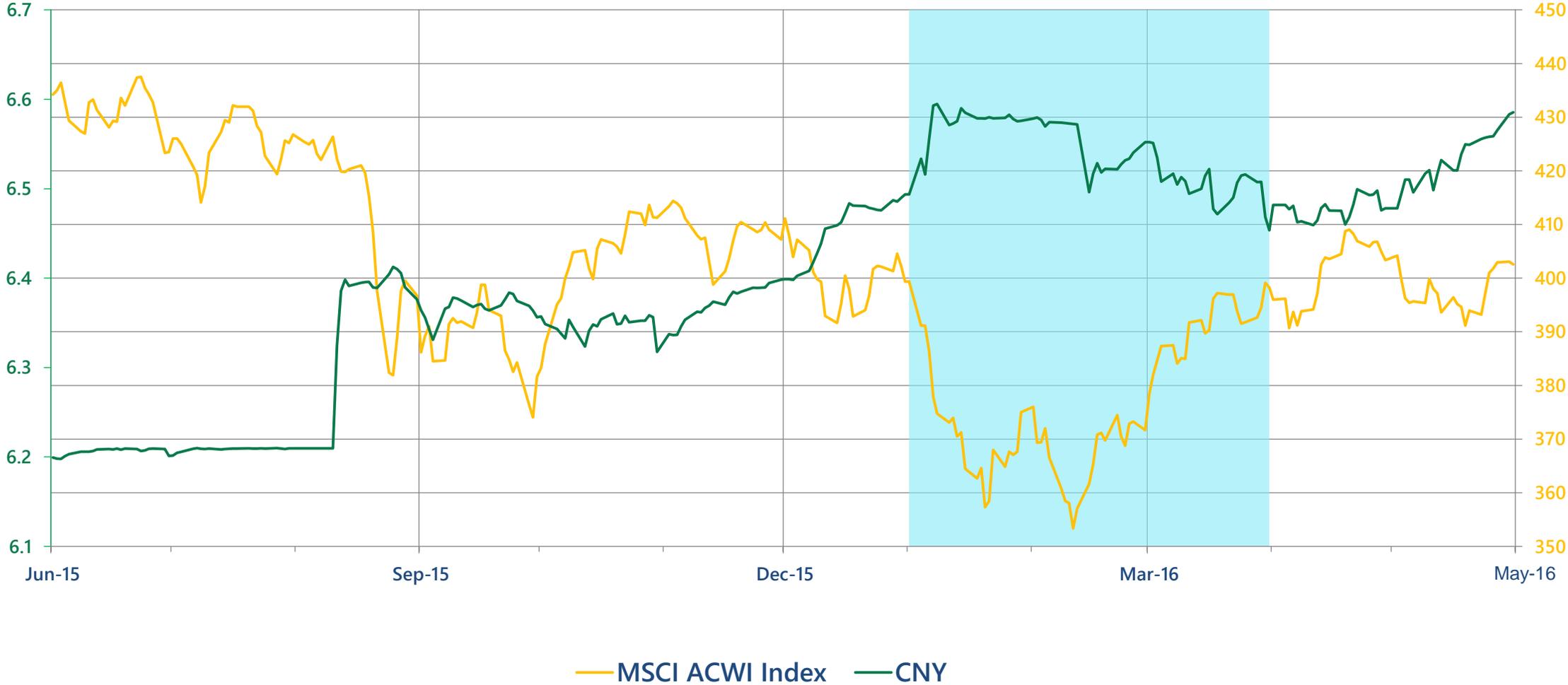


US Trade Weighted Dollar



Source: Bloomberg

MSCI AC World Index, Chinese Yuan



Source: Bloomberg

MSCI AC World Index, Chinese Yuan 1st Quarter 2016



Source: Bloomberg



Brexit

Vote on June 23, remain or leave "Should the United Kingdom remain a member of the European Union or leave the European Union?"

- Polls Vs. Betting Markets
- Implications



Total NYC Pension Fund Performance: 3/31/16

(SSB **N, F** p.17; **T, P** p.18; **B** p.21)

NYC Pension System	Portfolio Std Dev - 1 yr	First Quarter	Three Year*	Five Year*
BERS	10.2%	1.3%	6.6%	6.8%
TRS	9.0%	2.1%	6.3%	6.9%
POLICE	8.5%	1.7%	6.8%	6.9%
FIRE	8.2%	1.7%	6.6%	6.7%
NYCERS	8.2%	2.2%	6.4%	6.8%
Median Fund - TUCS		1.1%	6.7%	6.9%

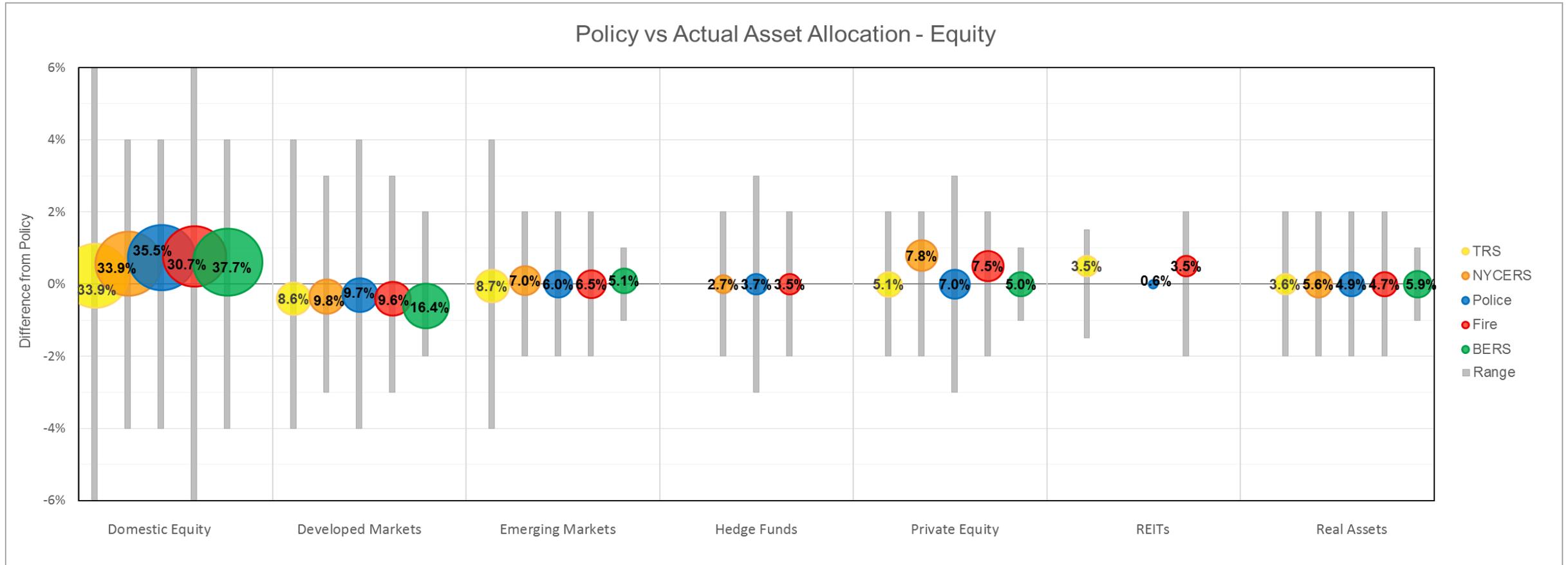
* Gross of fees in public asset classes

Source: State Street



Asset Allocation First Quarter 2016 - Equity

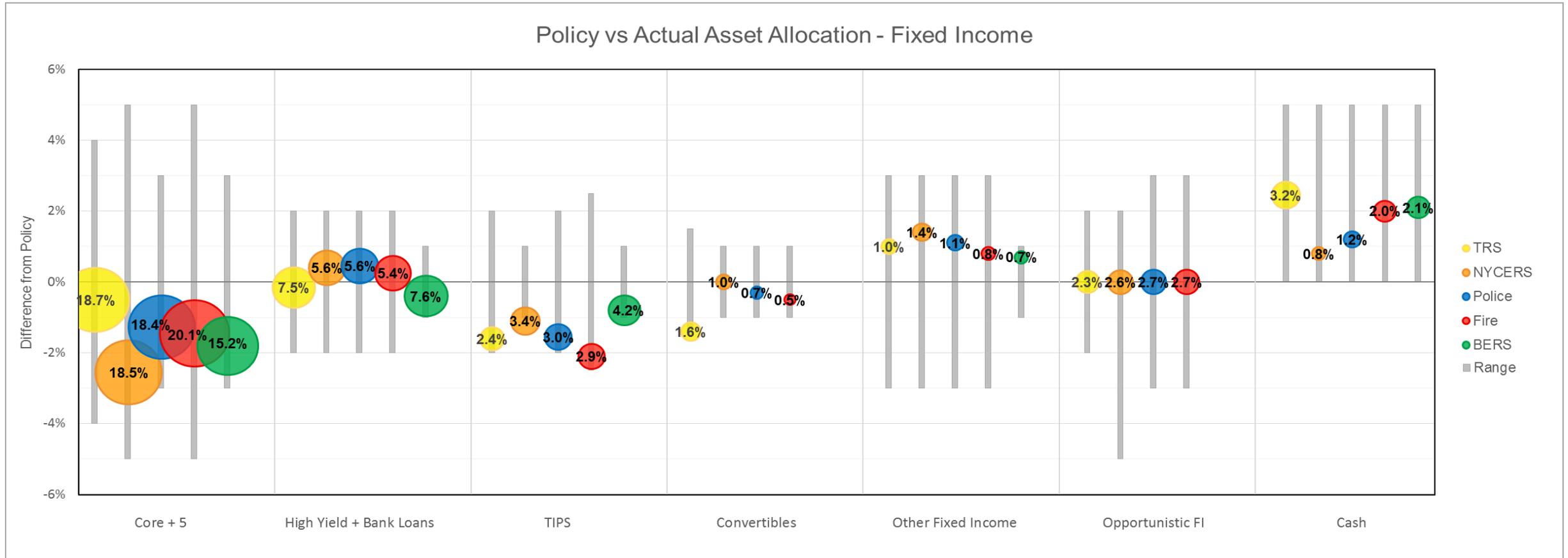
Relative Mix to Adjusted New Policy Weights (SSB F, N p.8; P, T p.9; B p.12)



Source: State Street

Asset Allocation First Quarter 2016 - Fixed Income

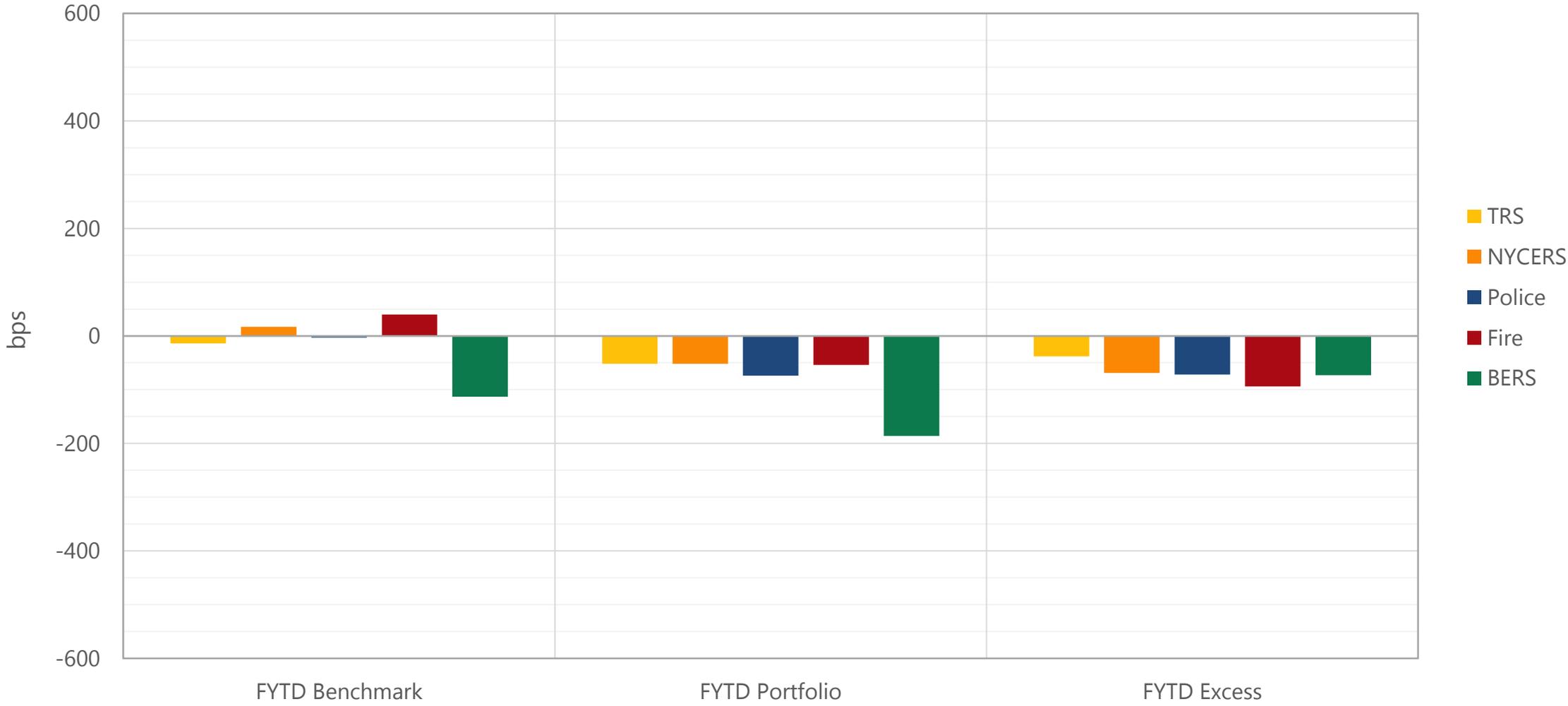
Relative Mix to Adjusted New Policy Weights (SSB **F**, **N** p.8; **P**, **T** p.9; **B** p.12)



Source: State Street

FY Return – Total Portfolio

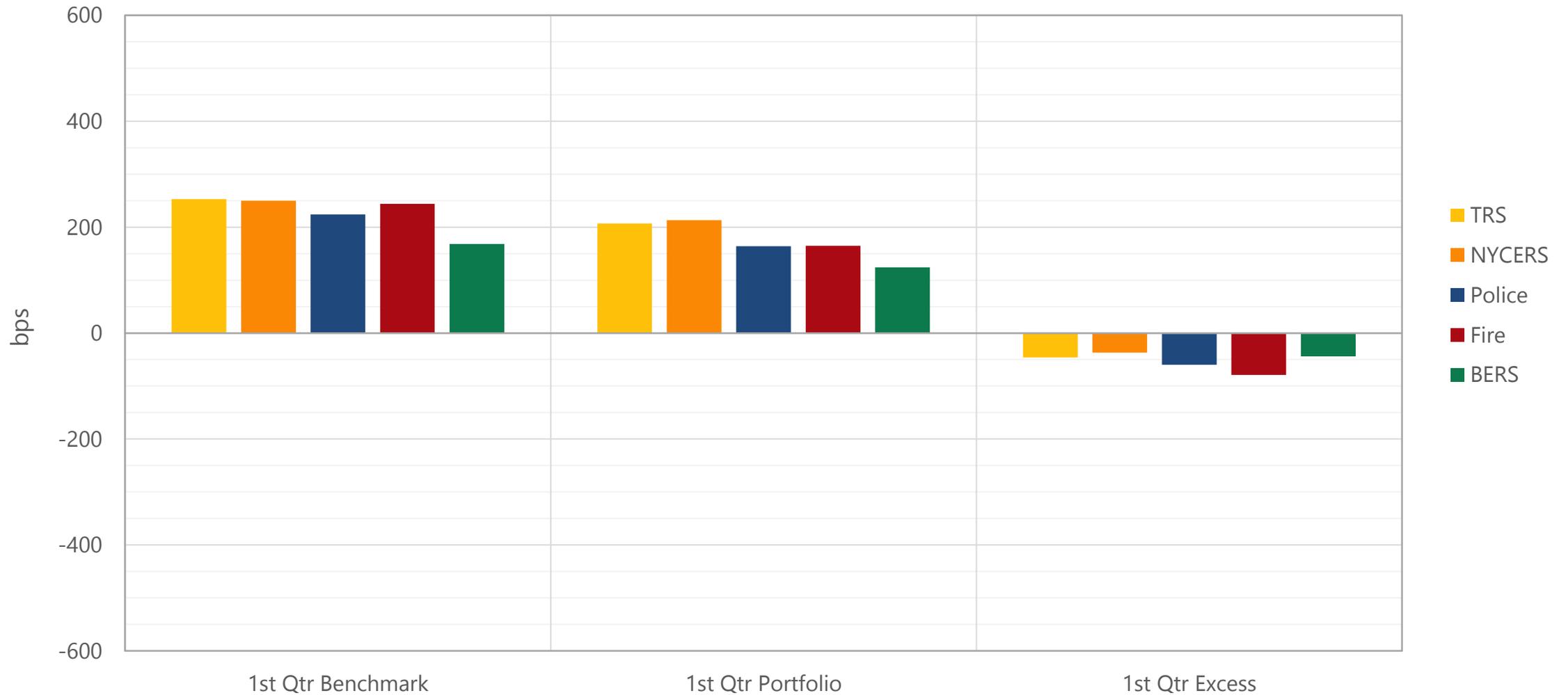
FISCAL YEAR TO DATE First Quarter 2016 (SSB **F, N** p.23; **T, P** p.24; **B** p.27)



Source: State Street

Return – Total Portfolio

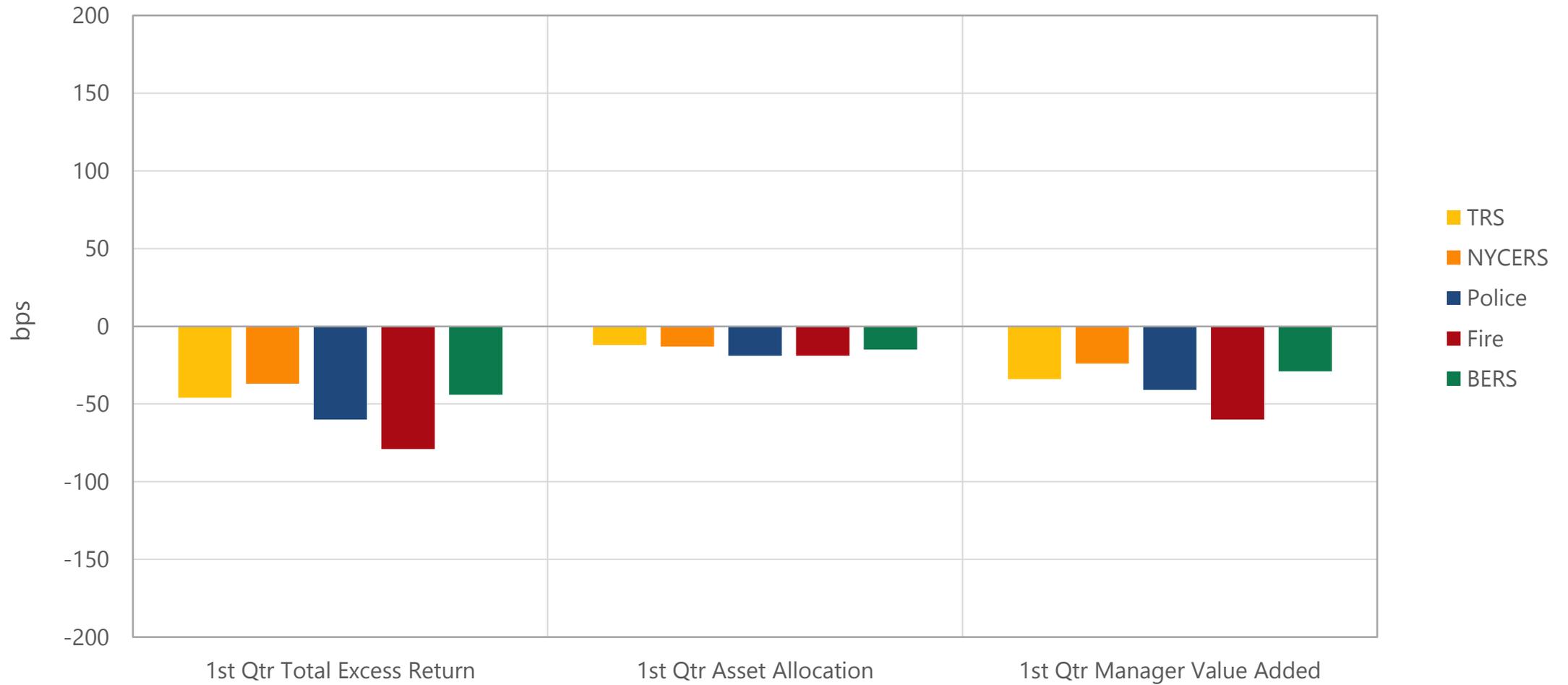
First Quarter CY2016 (SSB F, N p.23; T, P p.24; B p.27)



Source: State Street

Excess Return – Total Portfolio

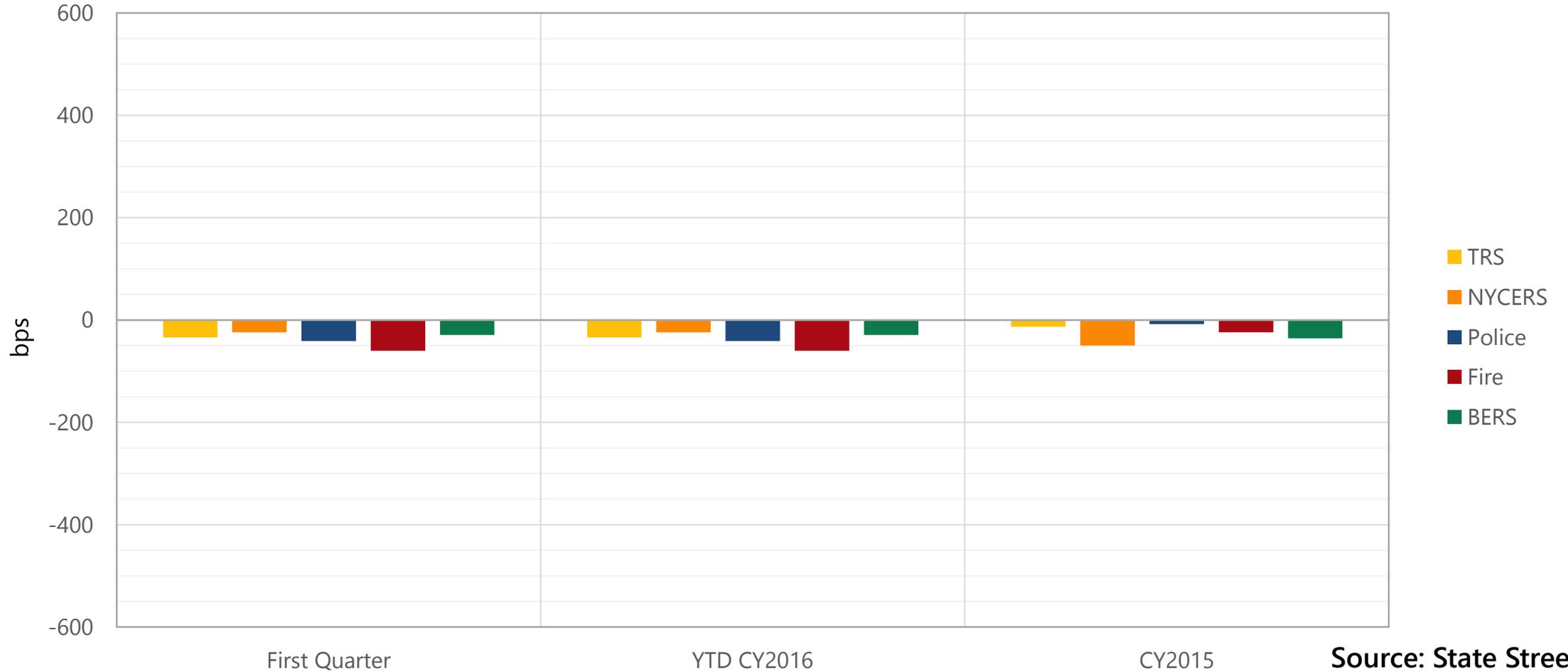
First Quarter CY 2016 Basis Points of Excess Return (SSB **N**, **F** p.10; **P**, **T** p.11; **B** p.14)



Source: State Street

Manager Value Added- Total Portfolio

Basis Points of Excess Return (SSB N, F p.13; P, T p.14; B p.17)

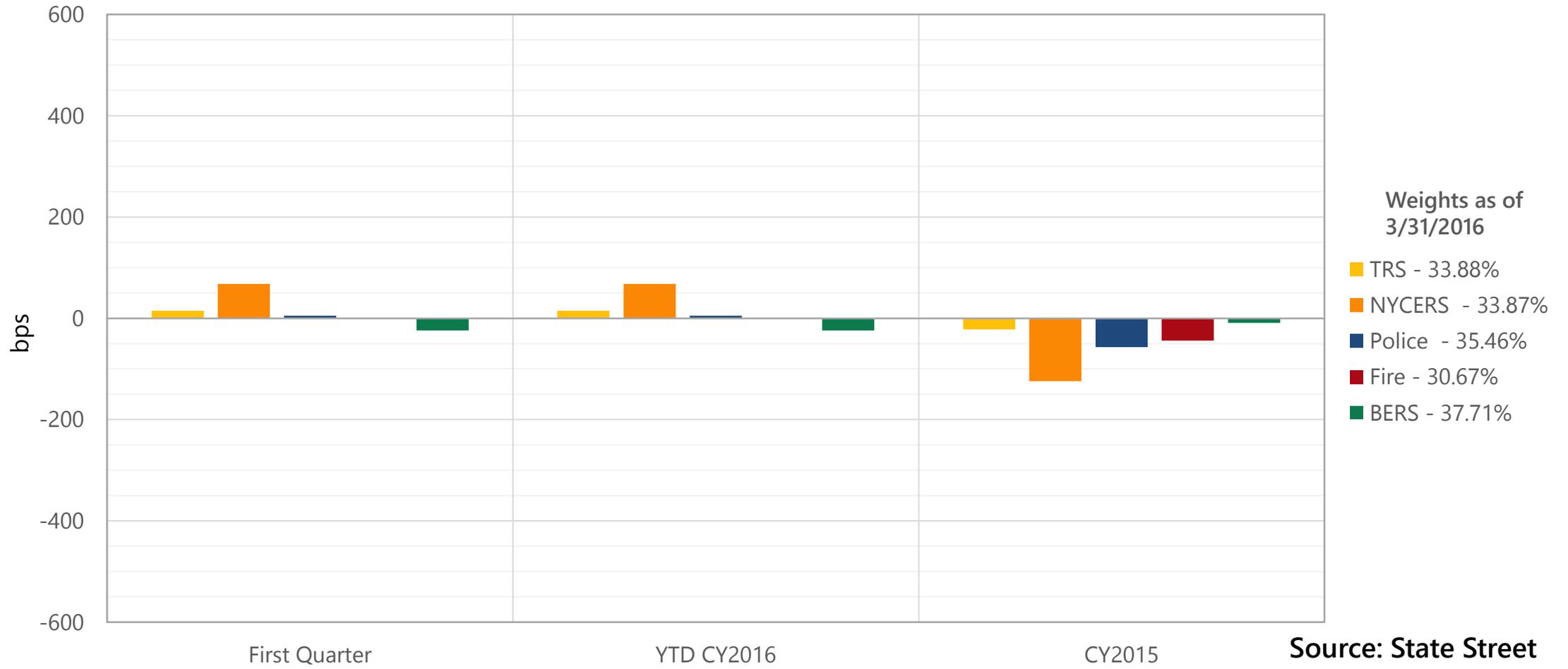


Source: State Street



Value Added – U.S. Equities

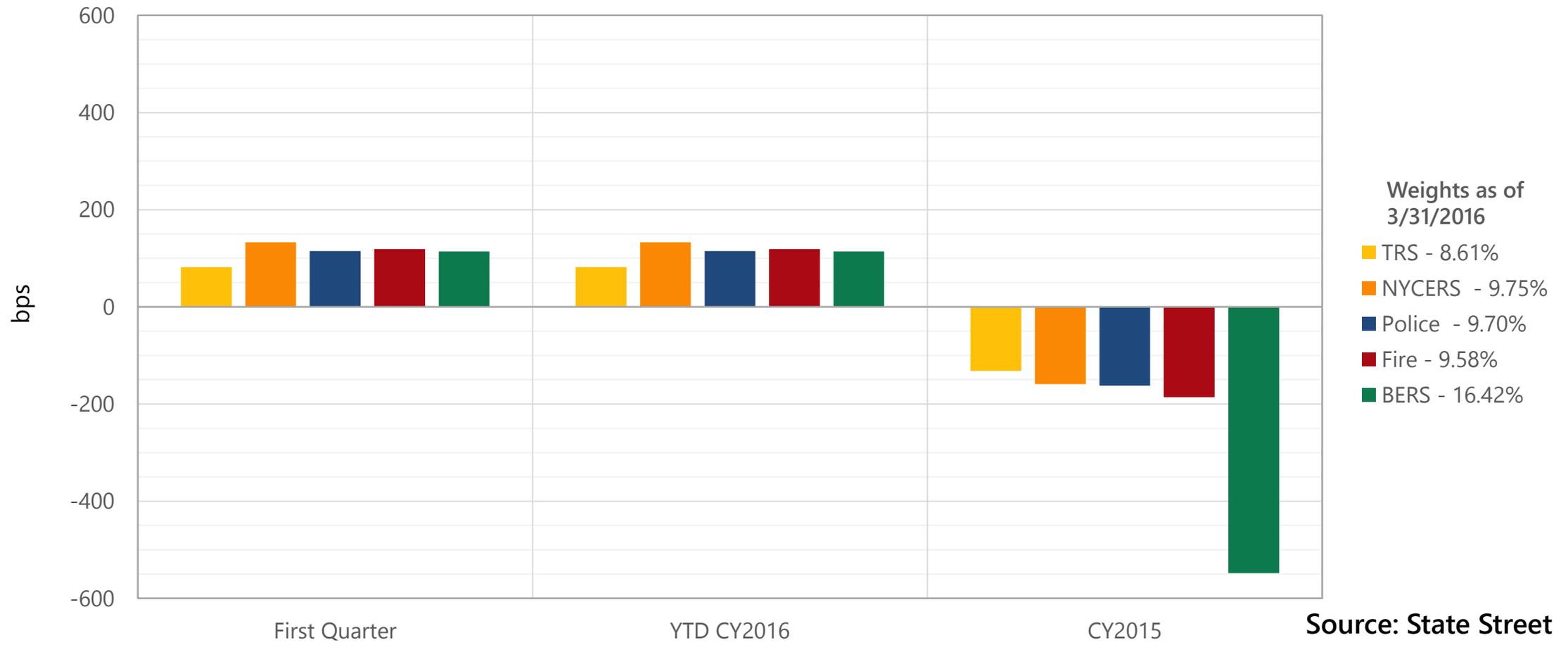
Basis Points of Excess Return (SSB **F, N** p.23; **T, P** p.24; **B** p.27)



Source: State Street

Value Added - Developed Equities

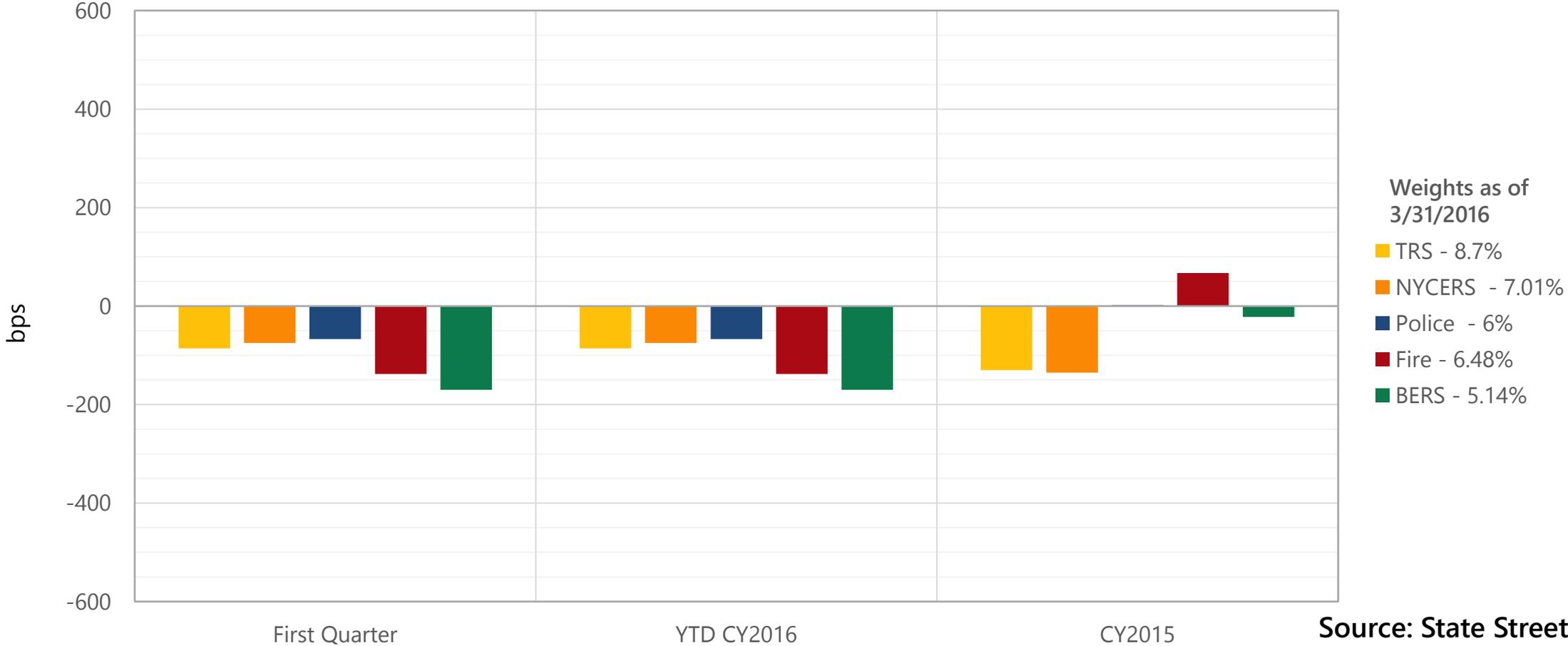
Basis Points of Excess Return (SSB **F, N** p.25 **T, P** p.26 **B** p.29)



Source: State Street

Value Added - Emerging Equities

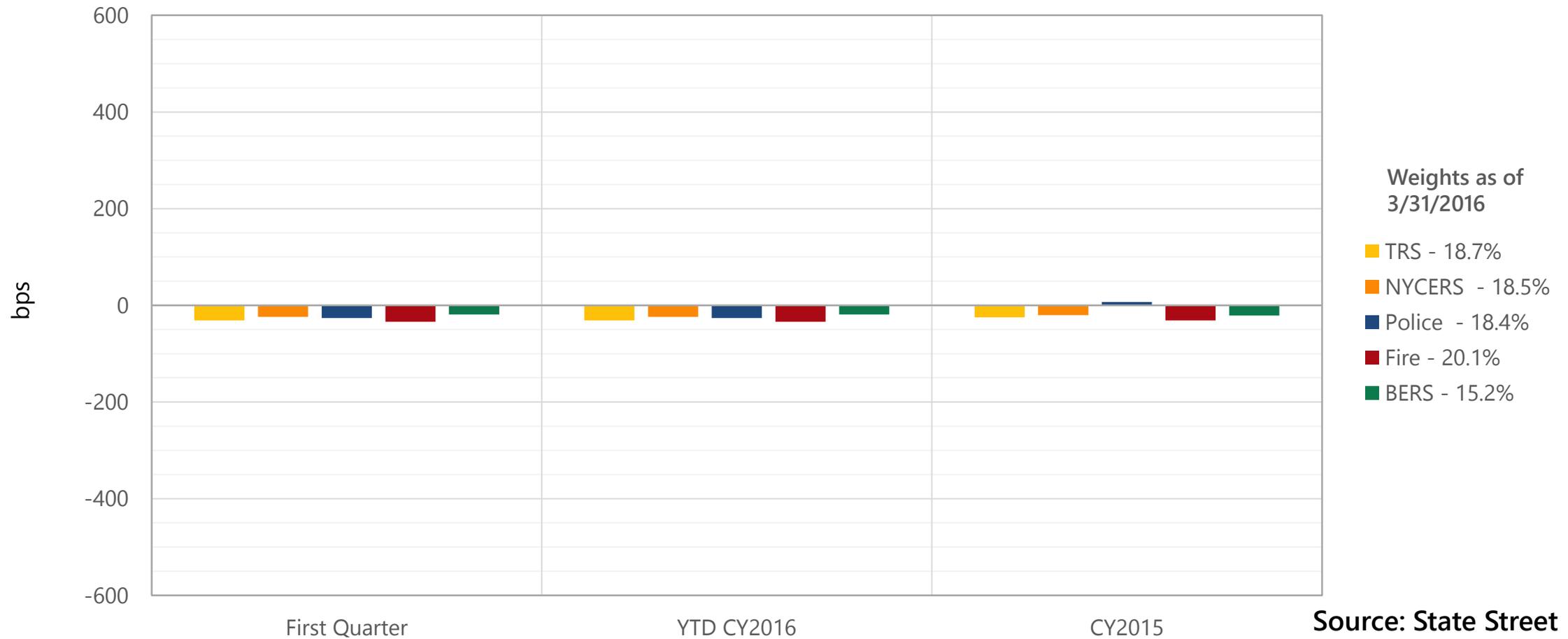
Basis Points of Excess Return (SSB **F**, **N** p.26 **P**, **T** p.27 **B** p.29)



Source: State Street

Value Added – Core 5+ Fixed Income

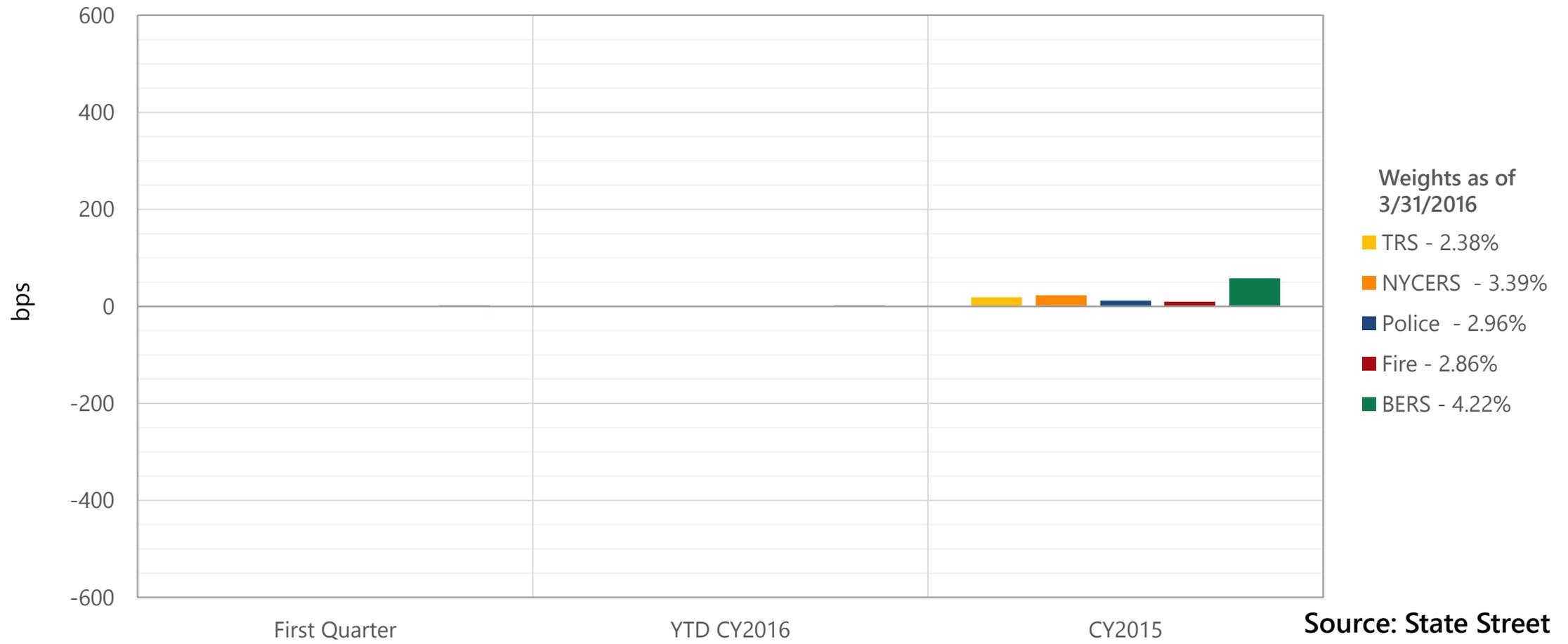
Basis Points of Excess Return (SSB **T, N, F** p.29; **P** p.30; **B** p.31)



Source: State Street

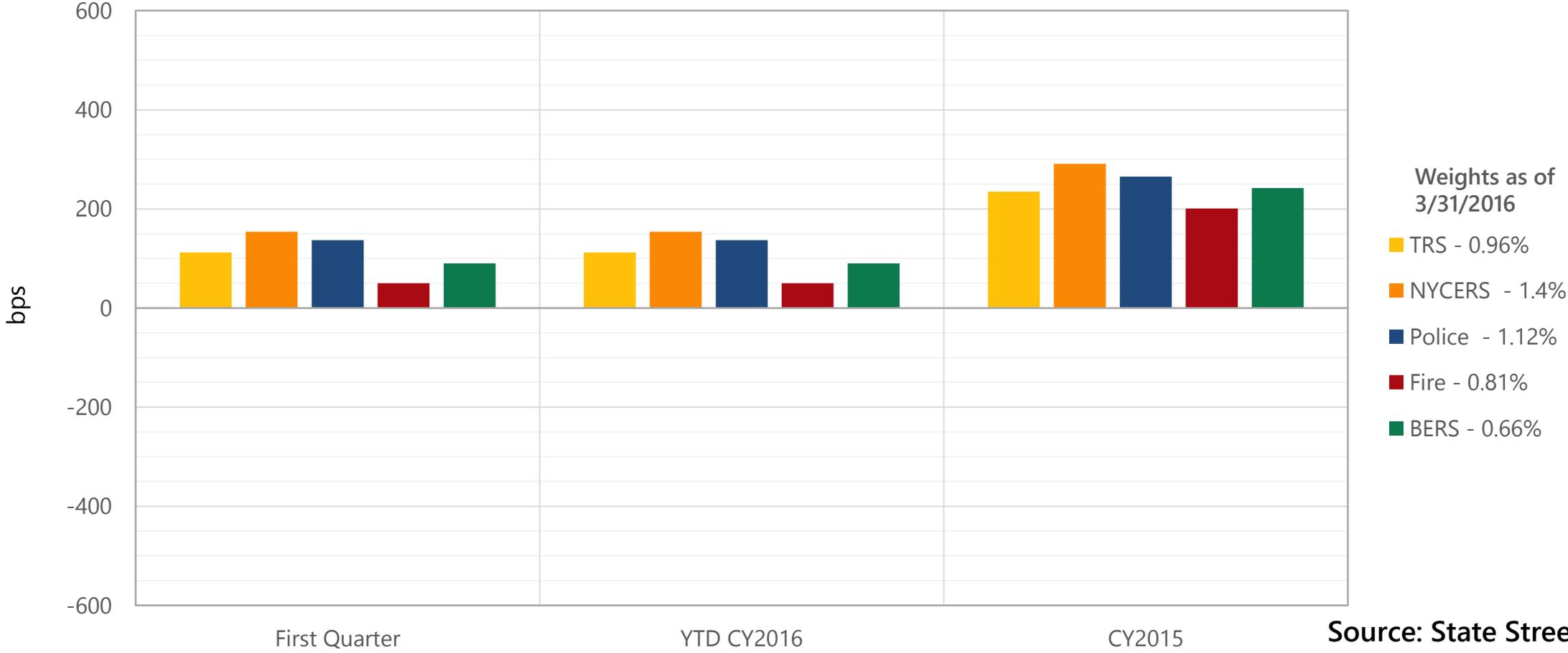
Value Added - TIPS

Basis Points of Excess Return (SSB **T, N, F** p.29; **P** p.30; **B** p.31)



Value Added – Economically Targeted Investments

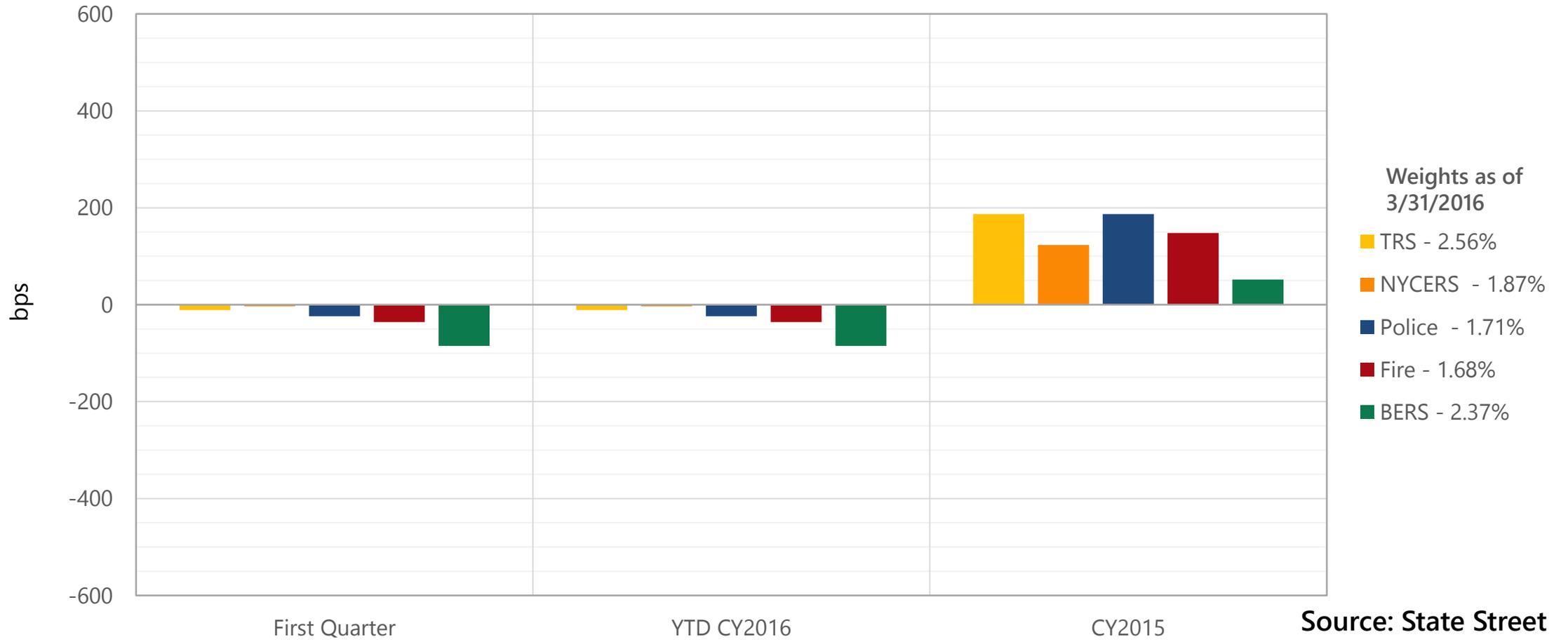
Basis Points of Excess Return (SSB T, N, F p.30; P, B p.31)



Source: State Street

Value Added – Bank Loans

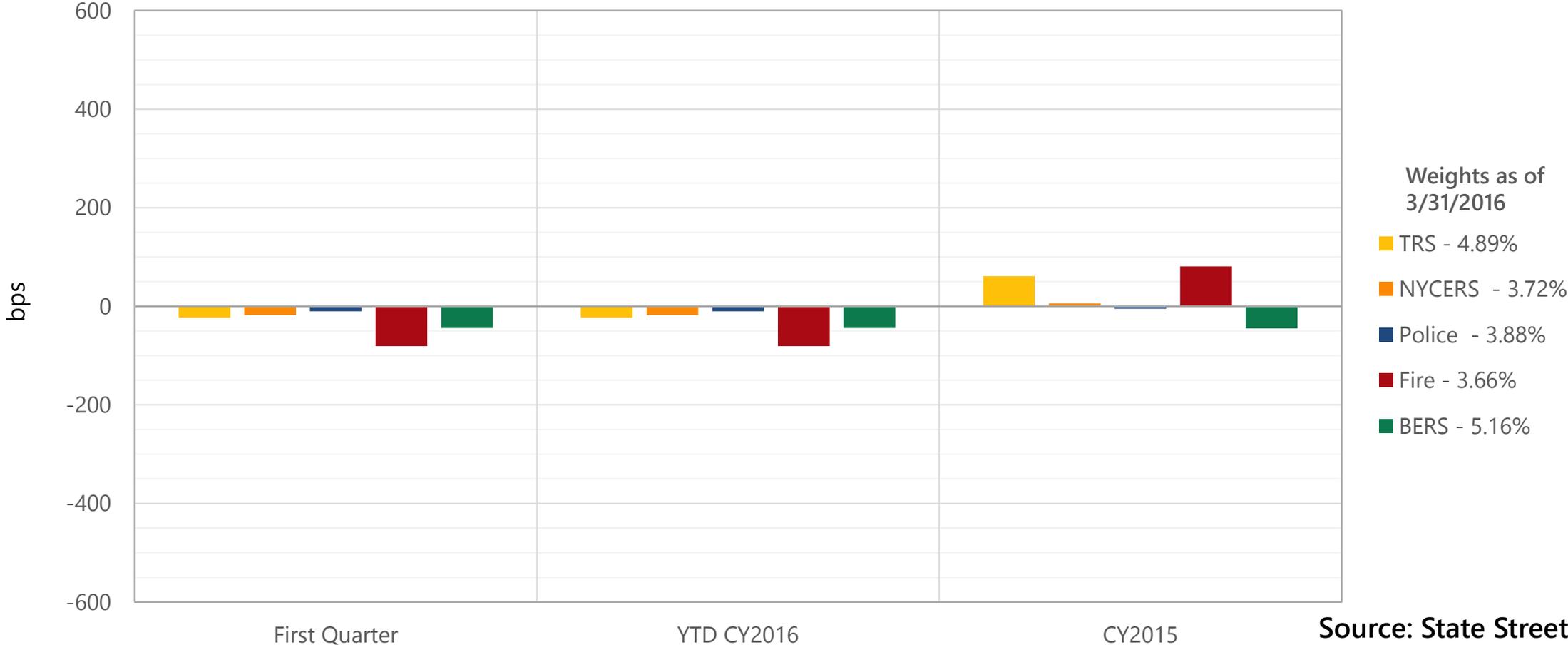
Basis Points of Excess Return (SSB T, N p.29; F p.30; P, B p.31)



Source: State Street

Value Added – Fixed Income – High Yield

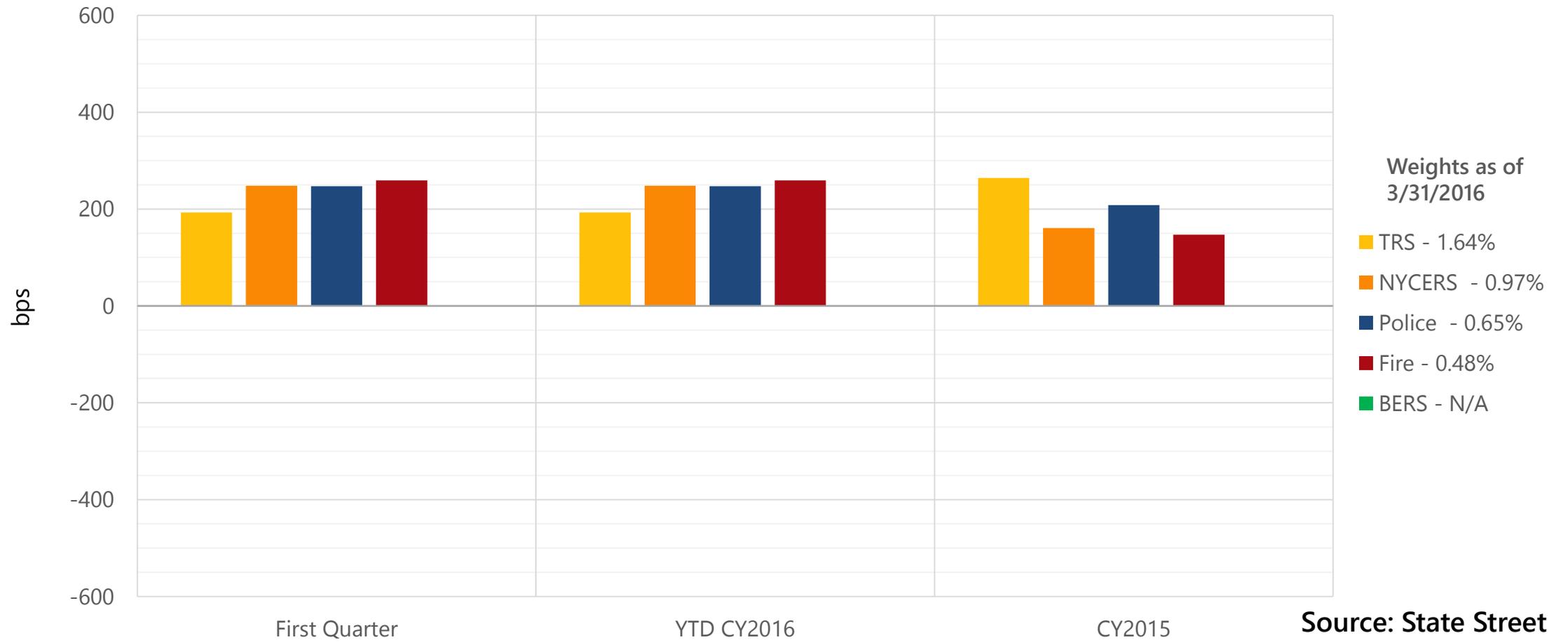
Basis Points of Excess Return (SSB **T, N, F** p.29; **P** p.30; **B** p.31)



Source: State Street

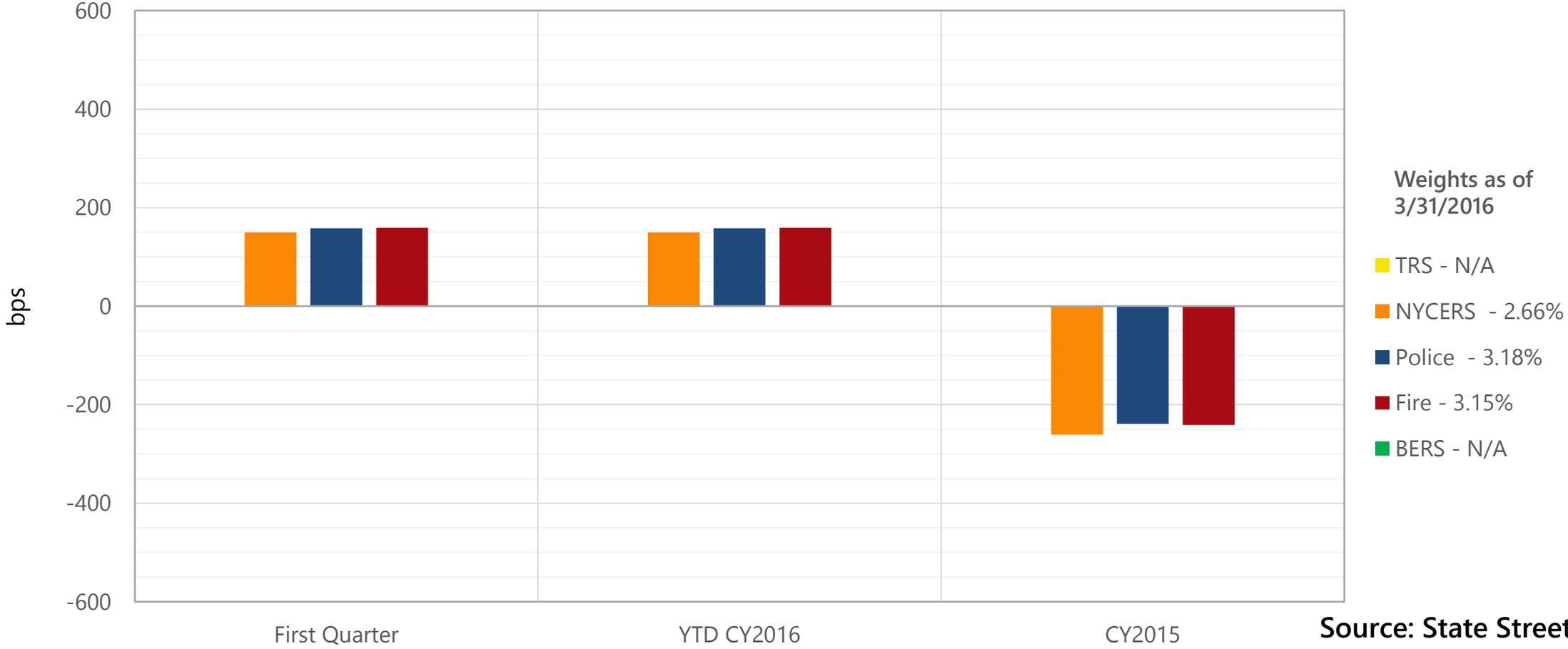
Value Added – Convertible Bonds

Basis Points of Excess Return (SSB T, N, F p.30; P p.31)



Value Added - Hedge Funds

Basis Points of Excess Return (SSB **N**, **F** p.27; **P** p.28)

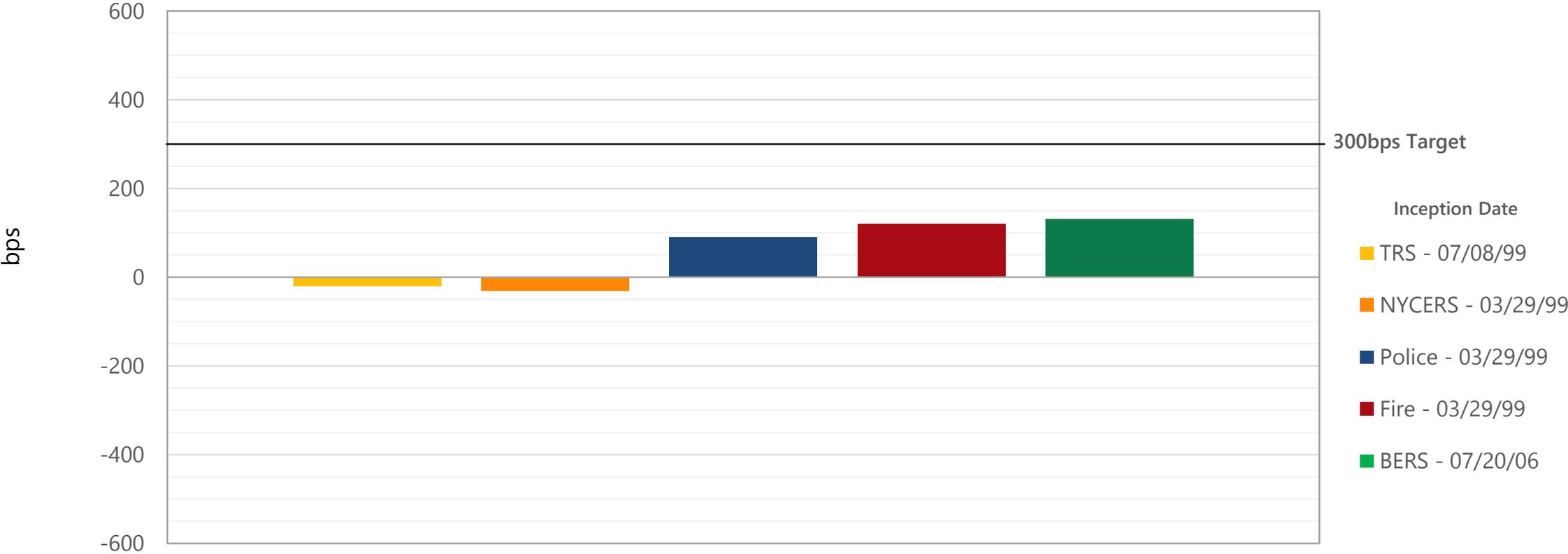


PRIVATE MARKET DATA



Value Added – Private Equity

Basis Points of Cumulative IRR above Public Market Equivalent

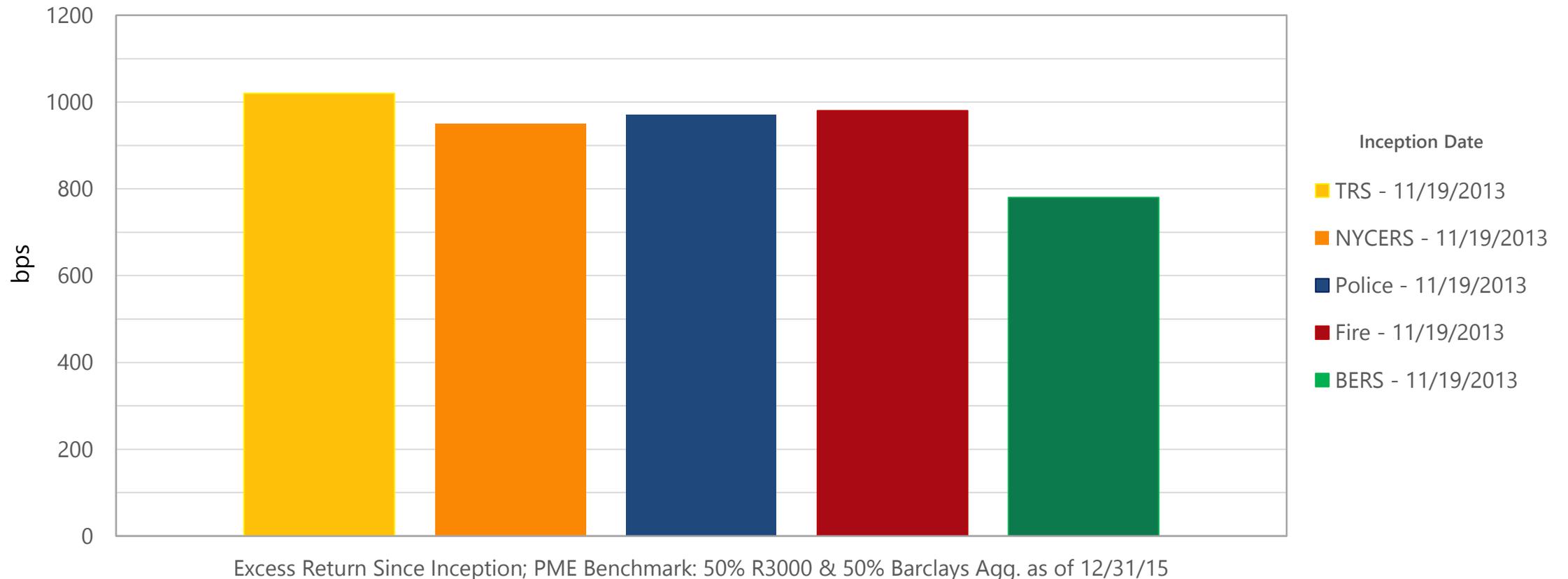


Excess Return Since Inception PME Benchmark: PME is the Russell 3000 Total Return Index as of 12/31/15

The PME Spread is the difference between the IRR and the PME Benchmark for each respective partnership.

Value Added - Infrastructure

Basis Points of Cumulative IRR above Public Market Equivalent

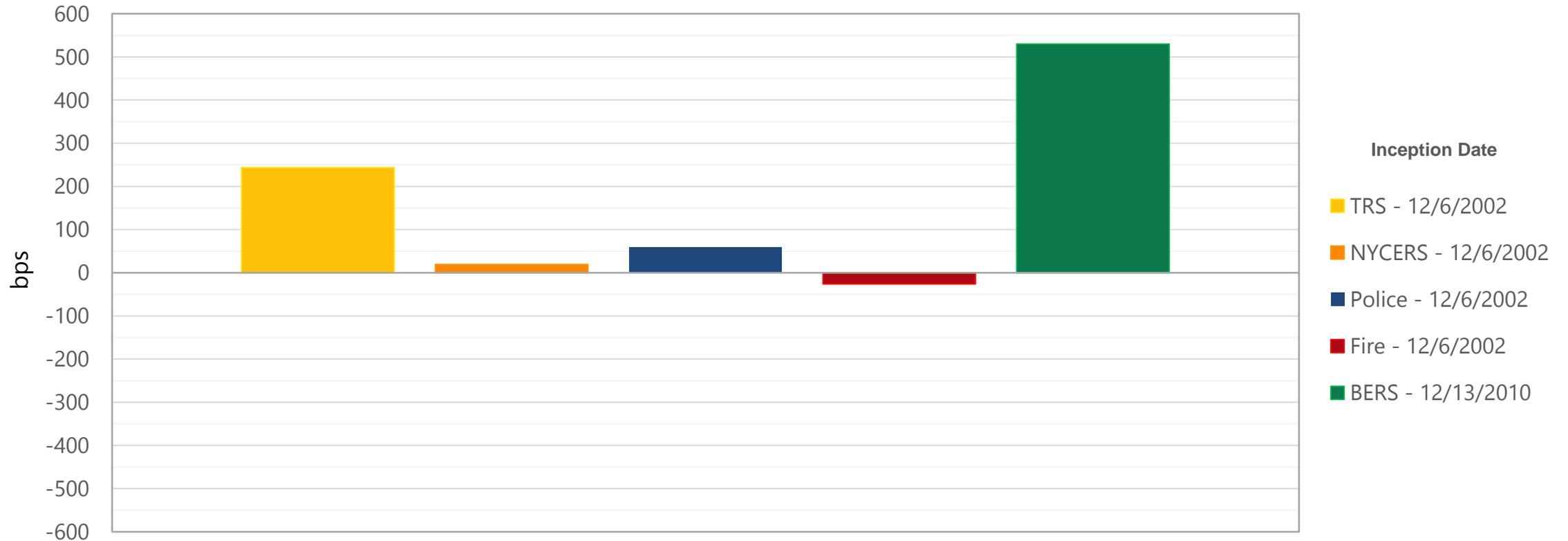


The PME Spread is the difference between the IRR and the PME Benchmark for each respective partnership.



Value Added – Private Real Estate

Basis Points of Cumulative IRR above Public Market Equivalent



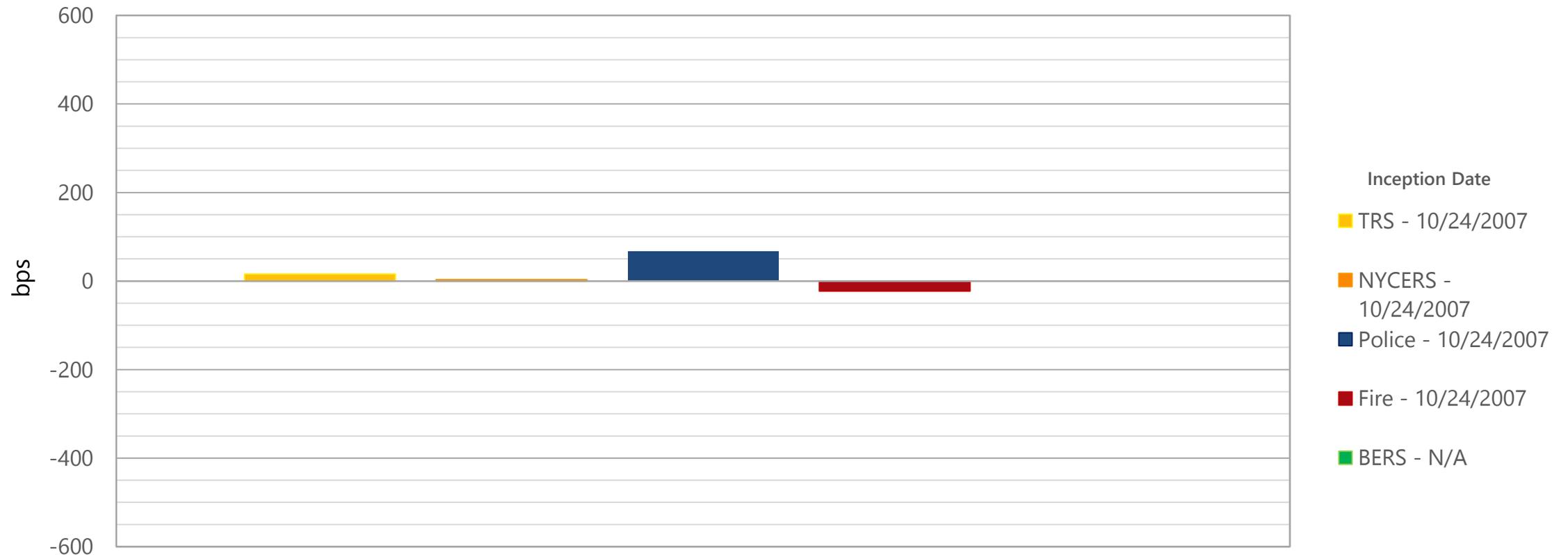
Excess Return Since Inception; PME Benchmark: 50% R3000 & 50% Barclays Agg. as of 12/31/15

The PME Spread is the difference between the IRR and the PME Benchmark for each respective partnership.



Value Added – Opportunistic Fixed Income (OFI)

Basis Points of Cumulative IRR above Public Market Equivalent



Excess Return Since Inception; PME Benchmark: JP Morgan Global High Yield as of 3/31/16

The PME Spread is the difference between the IRR and the PME Benchmark for each respective partnership.

