

NORTH CAROLINA
DEPARTMENT OF STATE TREASURER



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INVESTMENT MANAGEMENT DIVISION

Investment Grade Fixed Income Review

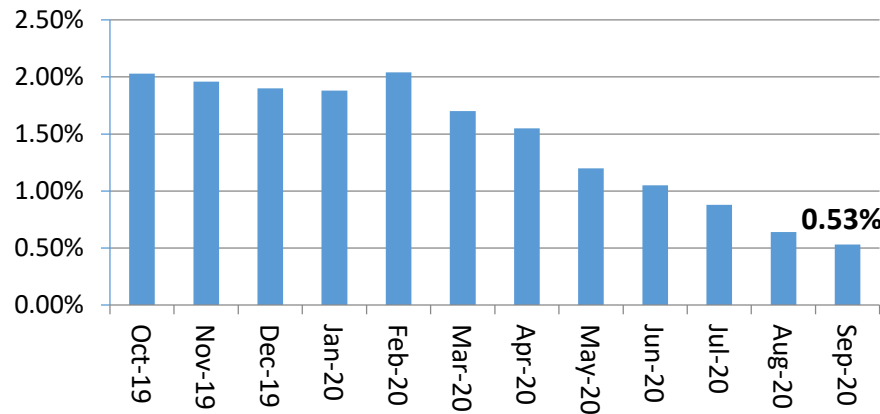
November 18, 2020



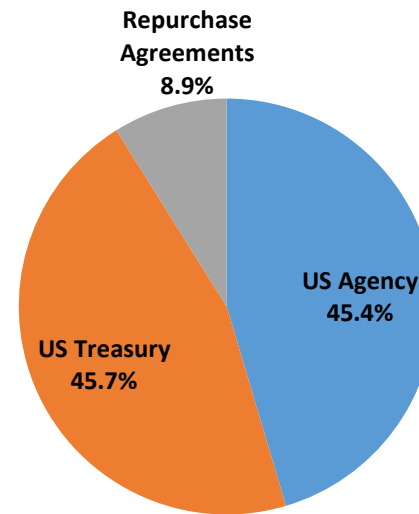
North Carolina Short Term Portfolio (STIF)

September 30, 2020

Historical Annualized Net Cash Return



STIF Allocation

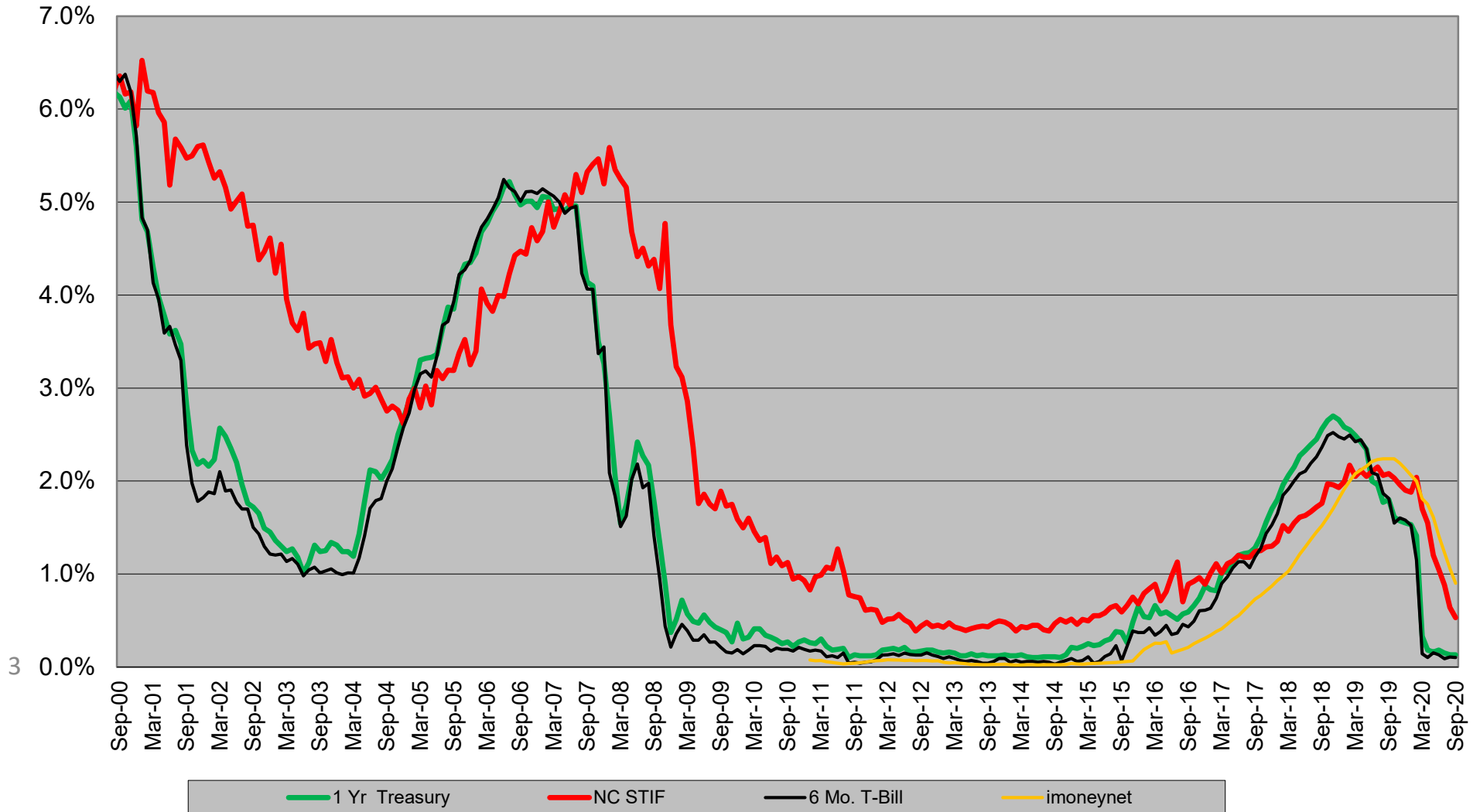


Portfolio Characteristics	Month ending 9/30/20
Current Annualized Net Cash Return	.53%
Effective Duration	.67
Average Maturity (Yrs)	1.3
Average Credit Rating (Moody's)	AAA
Average Price	100.23
Average Coupon	.76%



Short Term Portfolio (STIF) Rate History

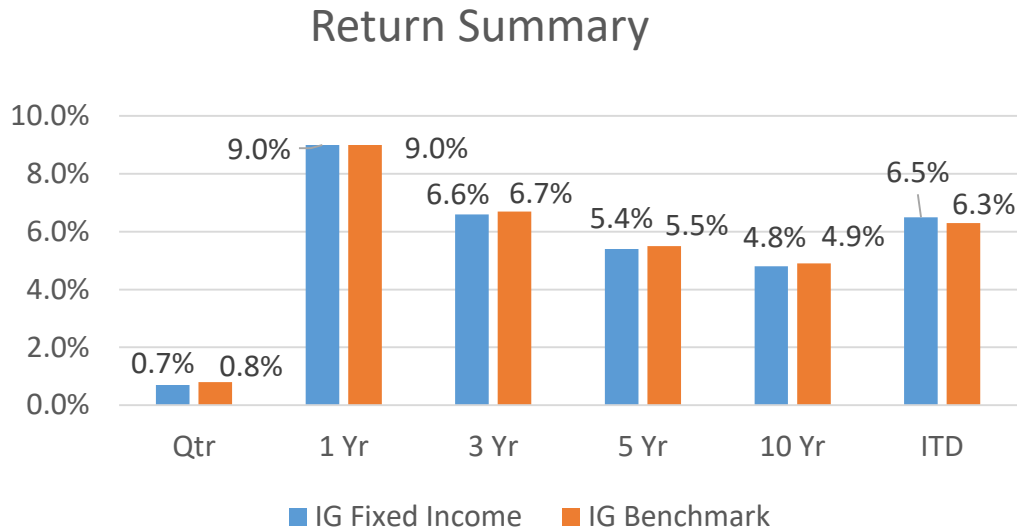
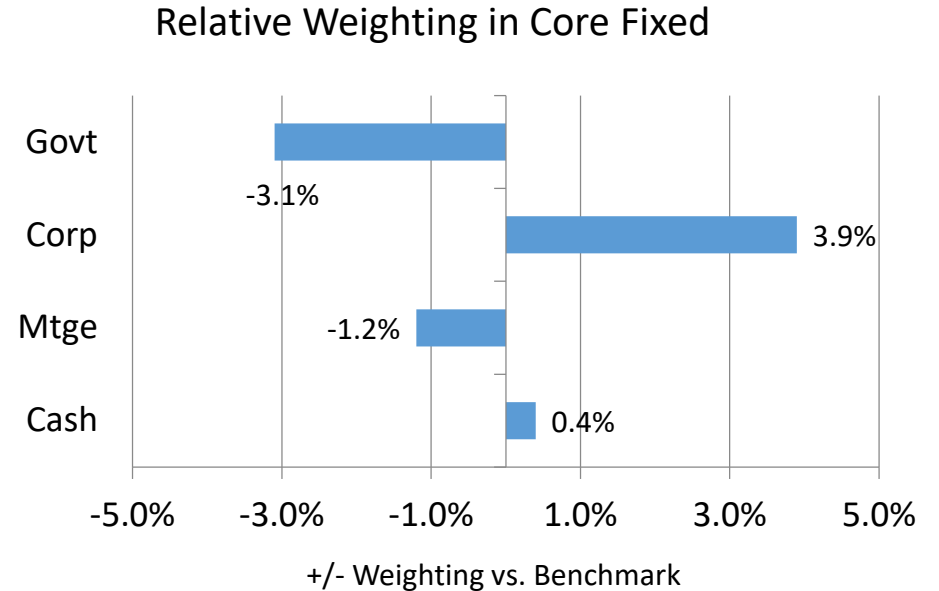
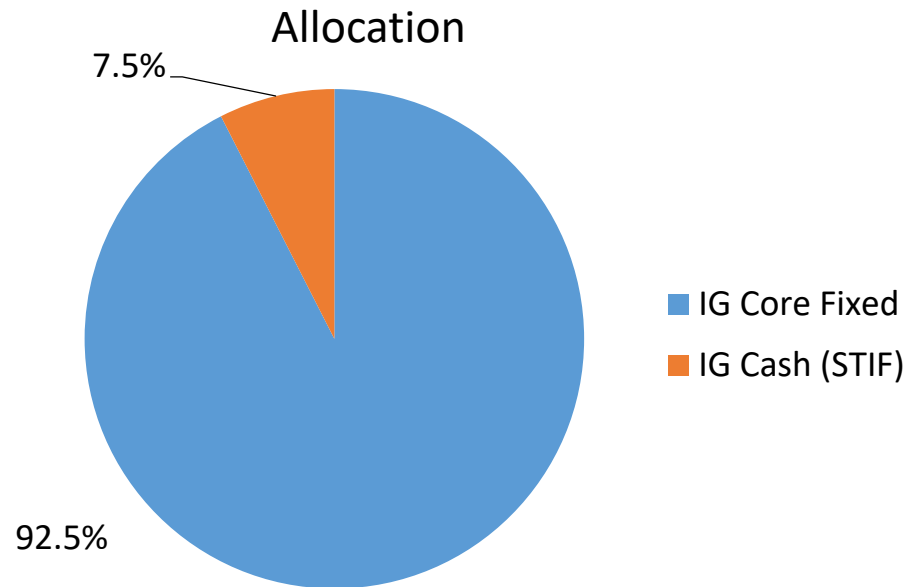
\$35.0 Billion AUM as of 9/30/20





Investment Grade Fixed Income Profile

As of September 30, 2020



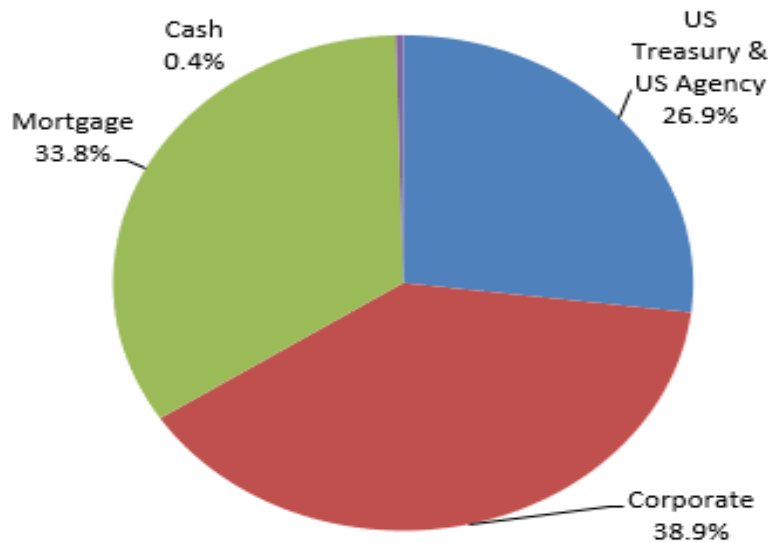
- During the corporate spread widening in the spring, 5% of the IG cash allocation was used opportunistically
- The portfolio should have underperformed on a relative basis due to our short relative duration and a steep drop in UST yields, but performance and allocation to the corporate book offset that impact



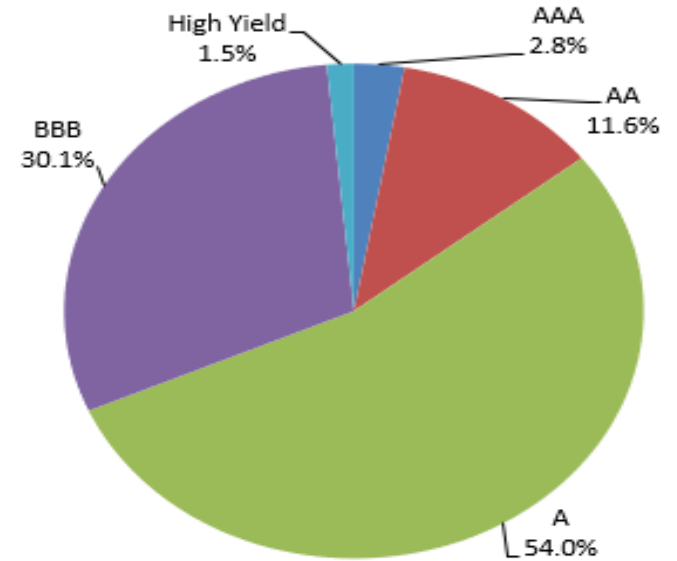
Core Fixed Income Long Term Portfolio (LTIP)

September 30, 2020

LTIP Allocation



Corporate Allocation by Quality



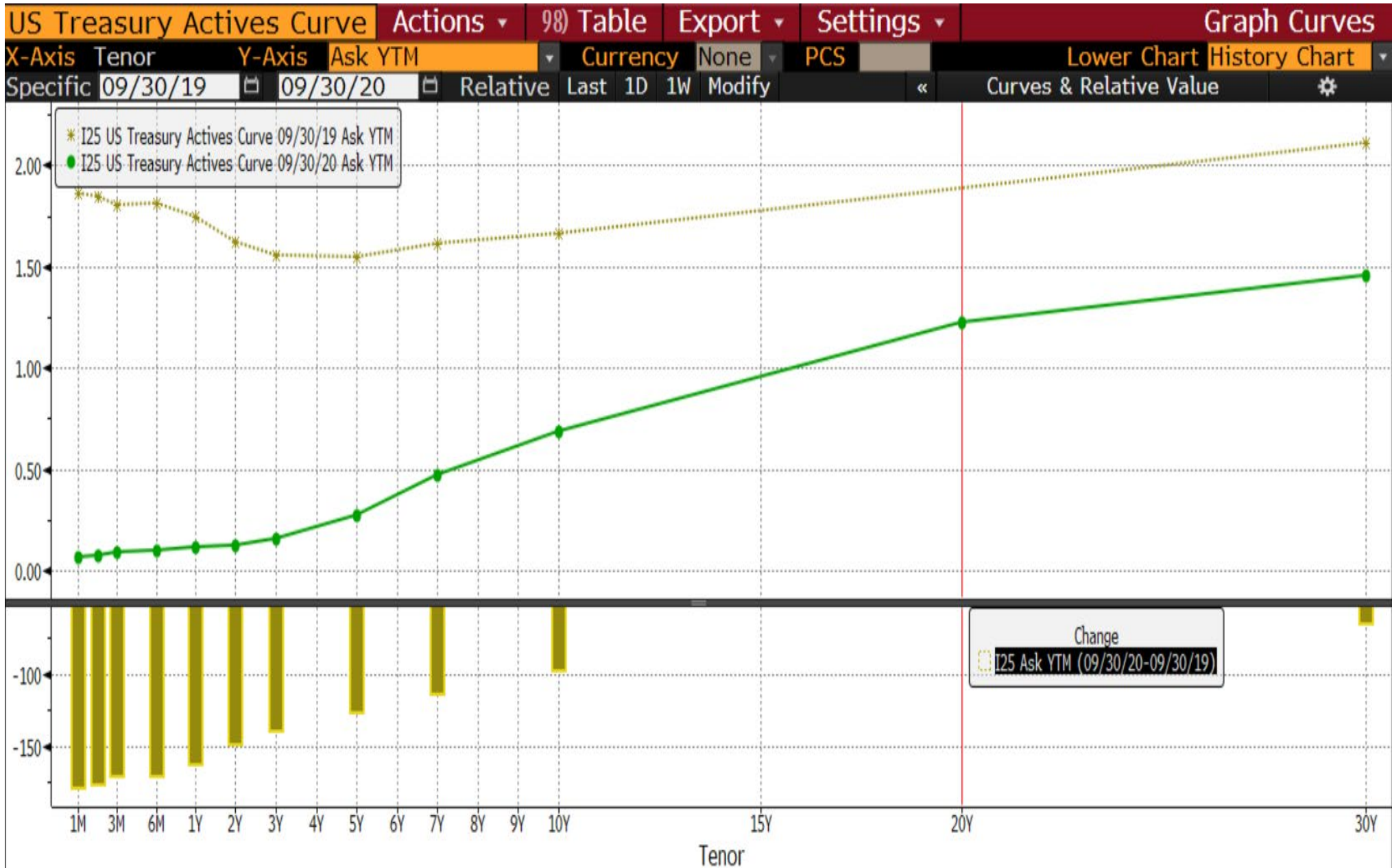
Portfolio Characteristics (ex cash)	As of 9/30/20
Yield to Maturity	1.61%
Duration	7.7
Average Maturity (Yrs)	10.6
Average Credit Rating	AA
Average Coupon	3.81%

* BOAML Custom Fixed Income Benchmark



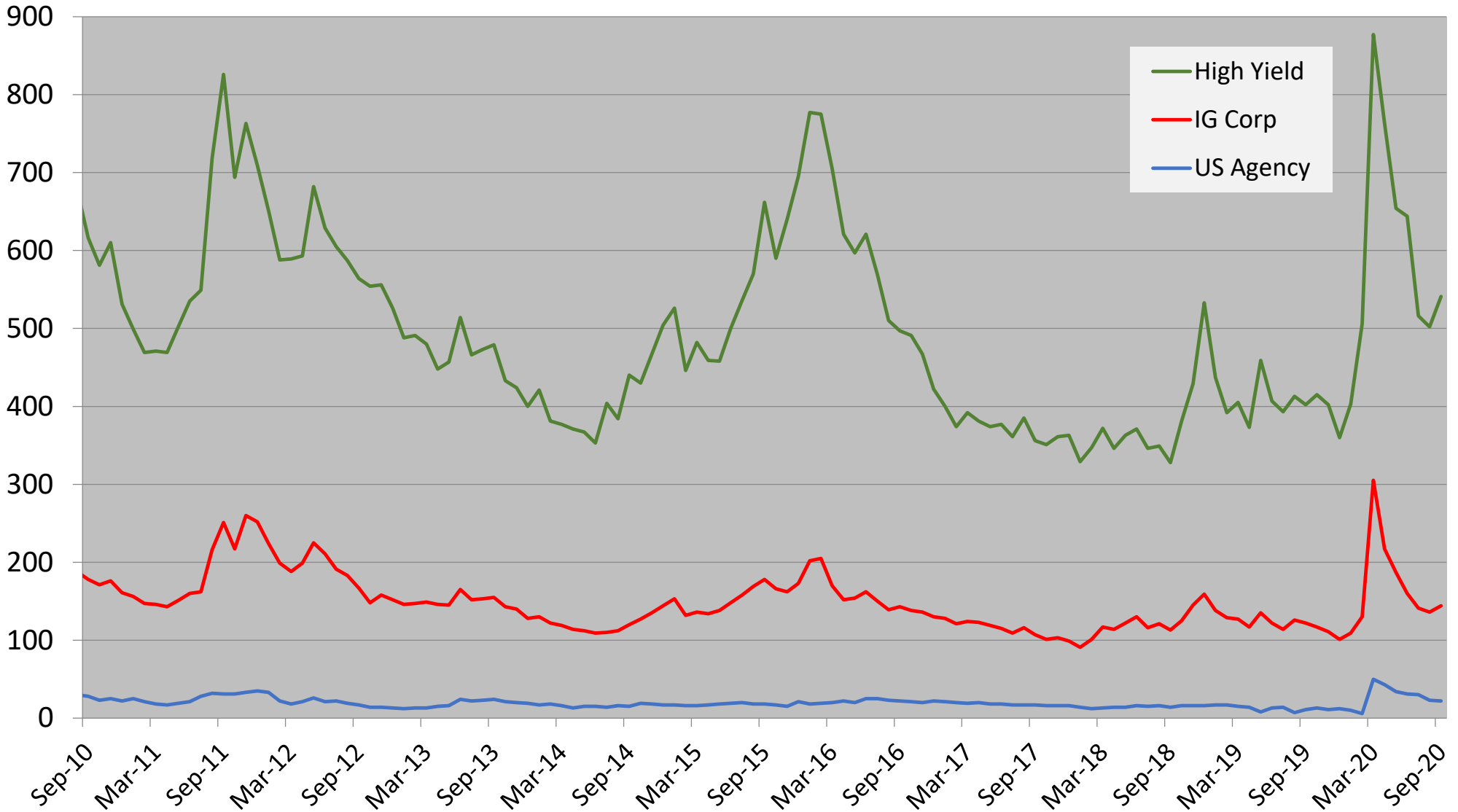
10 year and 30 Year UST Yield History







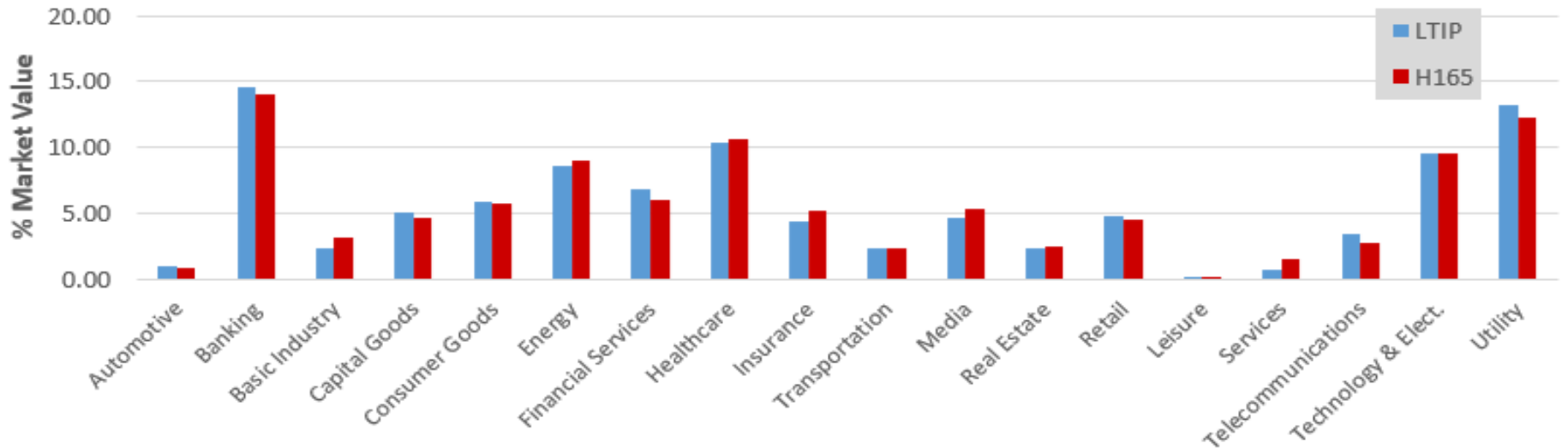
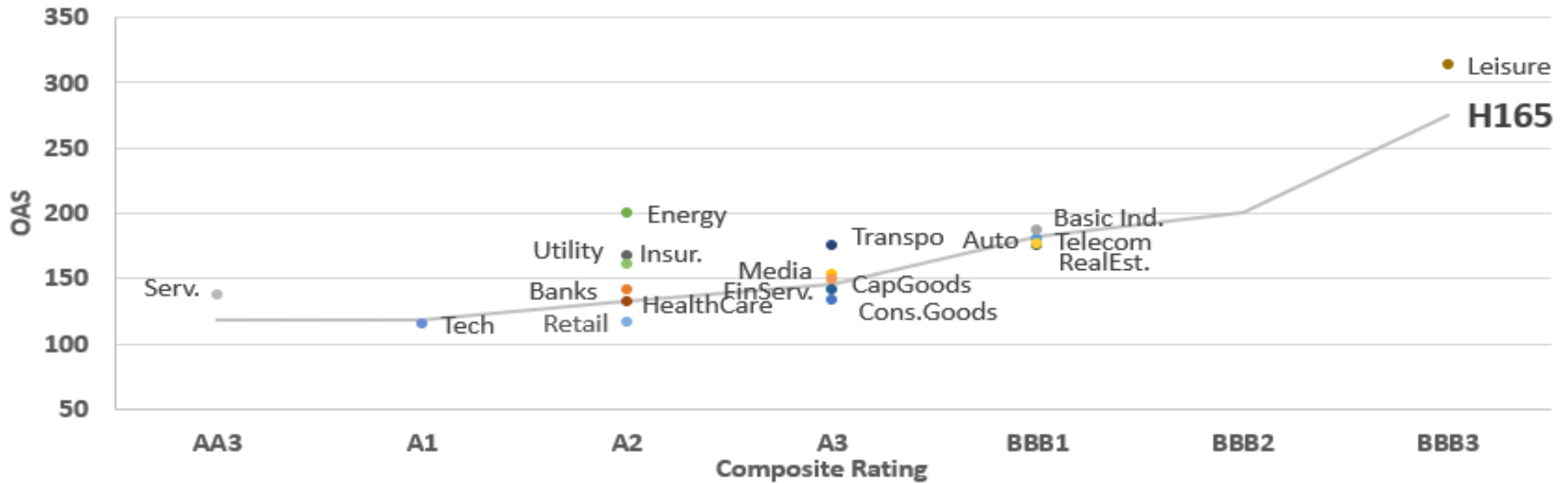
Spread History Credit Markets





Corporate Relative Value and LTIP Allocation by Sector

As of 9/30/20





FOMC Projections

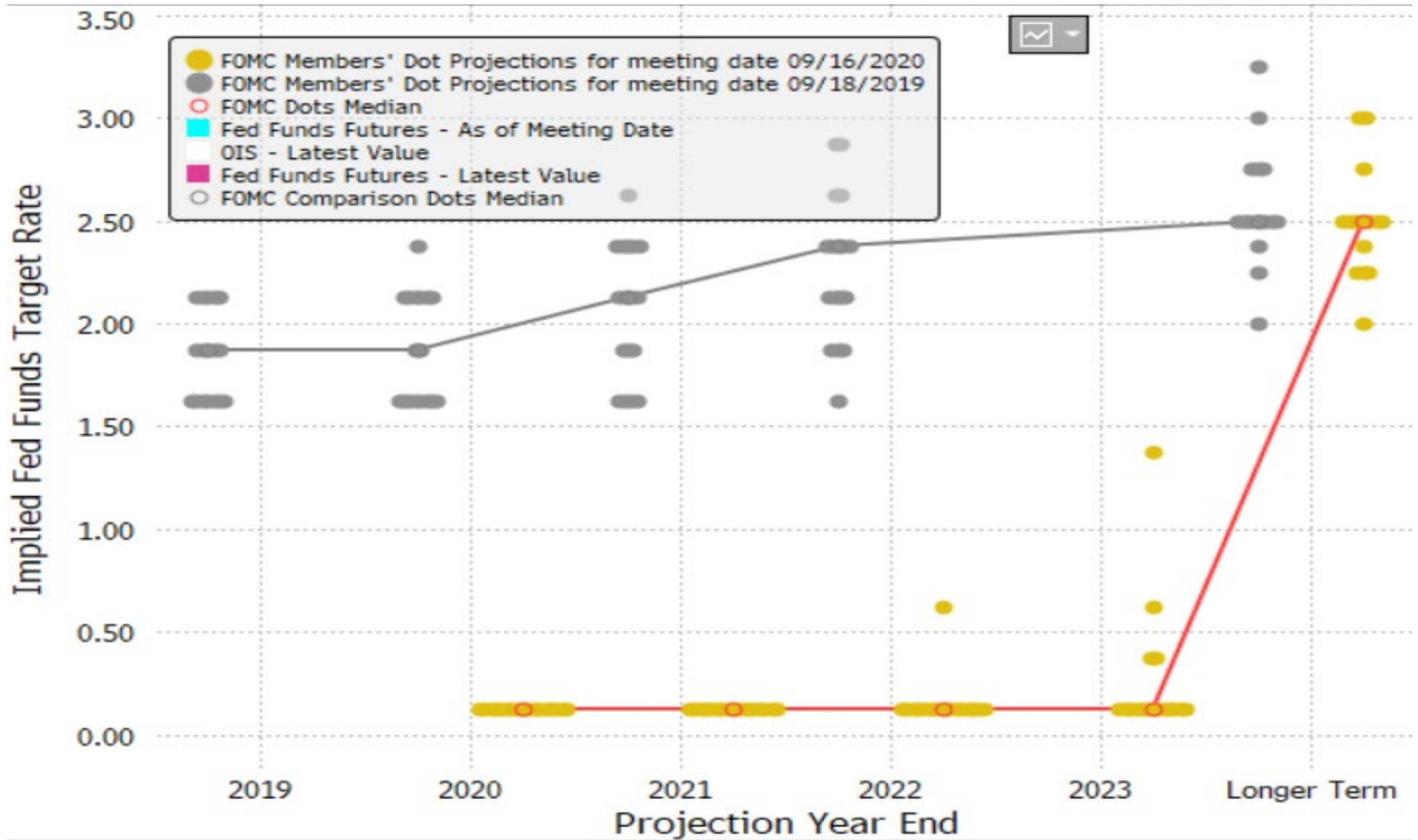
Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, under their individual assumptions of projected appropriate monetary policy, September 2020

Percent

Variable	Median ¹					Central Tendency ²					Range ³				
	2020	2021	2022	2023	Longer run	2020	2021	2022	2023	Longer run	2020	2021	2022	2023	Longer run
Change in real GDP	-3.7	4.0	3.0	2.5	1.9	-4.0-3.0	3.6-4.7	2.5-3.3	2.4-3.0	1.7-2.0	-5.5-1.0	0.0-5.5	2.0-4.5	2.0-4.0	1.6-2.2
June projection	-6.5	5.0	3.5		1.8	-7.6-5.5	4.5-6.0	3.0-4.5		1.7-2.0	-10.0-4.2	-1.0-7.0	2.0-6.0		1.6-2.2
Unemployment rate	7.6	5.5	4.6	4.0	4.1	7.0-8.0	5.0-6.2	4.0-5.0	3.5-4.4	3.9-4.3	6.5-8.0	4.0-8.0	3.5-7.5	3.5-6.0	3.5-4.7
June projection	9.3	6.5	5.5		4.1	9.0-10.0	5.9-7.5	4.8-6.1		4.0-4.3	7.0-14.0	4.5-12.0	4.0-8.0		3.5-4.7
PCE inflation	1.2	1.7	1.8	2.0	2.0	1.1-1.3	1.6-1.9	1.7-1.9	1.9-2.0	2.0	1.0-1.5	1.3-2.4	1.5-2.2	1.7-2.1	2.0
June projection	0.8	1.6	1.7		2.0	0.6-1.0	1.4-1.7	1.6-1.8		2.0	0.5-1.2	1.1-2.0	1.4-2.2		2.0
Core PCE inflation ⁴	1.5	1.7	1.8	2.0		1.3-1.5	1.6-1.8	1.7-1.9	1.9-2.0		1.2-1.6	1.5-2.4	1.6-2.2	1.7-2.1	
June projection	1.0	1.5	1.7			0.9-1.1	1.4-1.7	1.6-1.8			0.7-1.3	1.2-2.0	1.2-2.2		
Memo: Projected appropriate policy path															
Federal funds rate	0.1	0.1	0.1	0.1	2.5	0.1	0.1	0.1	0.1-0.4	2.3-2.5	0.1	0.1	0.1-0.6	0.1-1.4	2.0-3.0
June projection	0.1	0.1	0.1		2.5	0.1	0.1	0.1		2.3-2.5	0.1	0.1	0.1-1.1		2.0-3.0



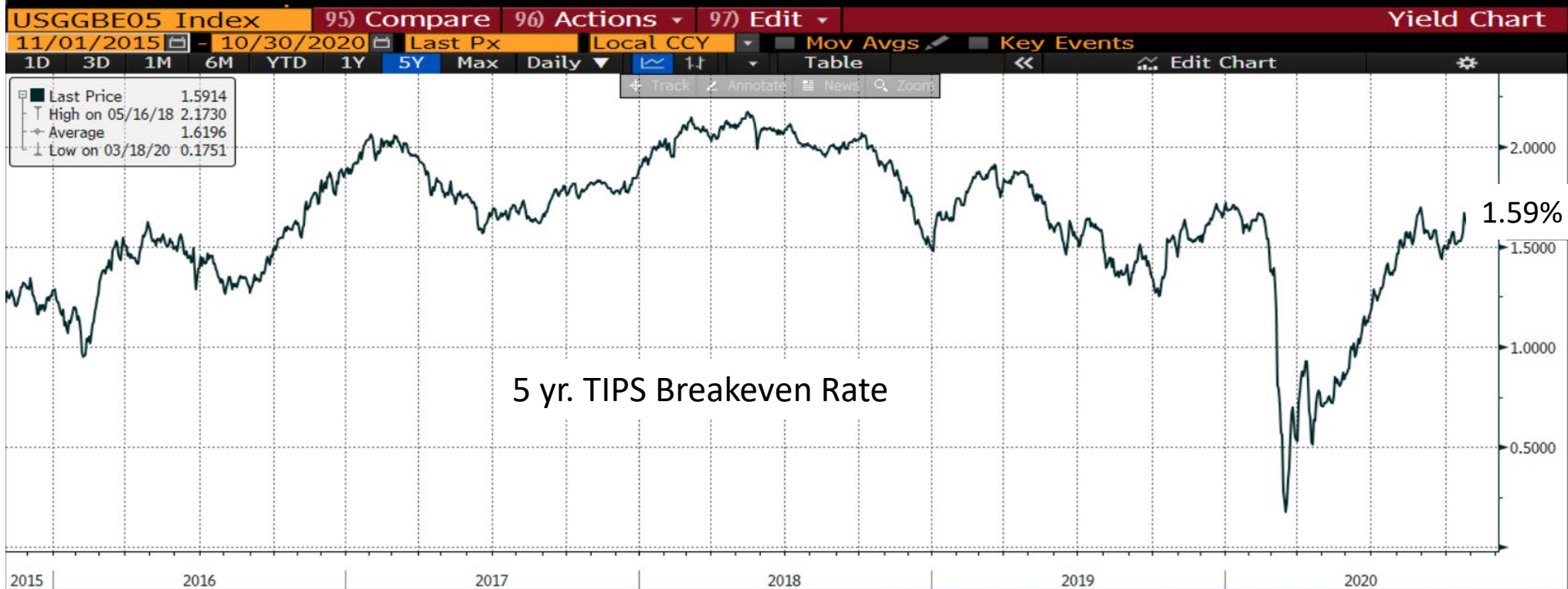
Fed Dot Plot





Modest Rate Increases Expected in the Near Term

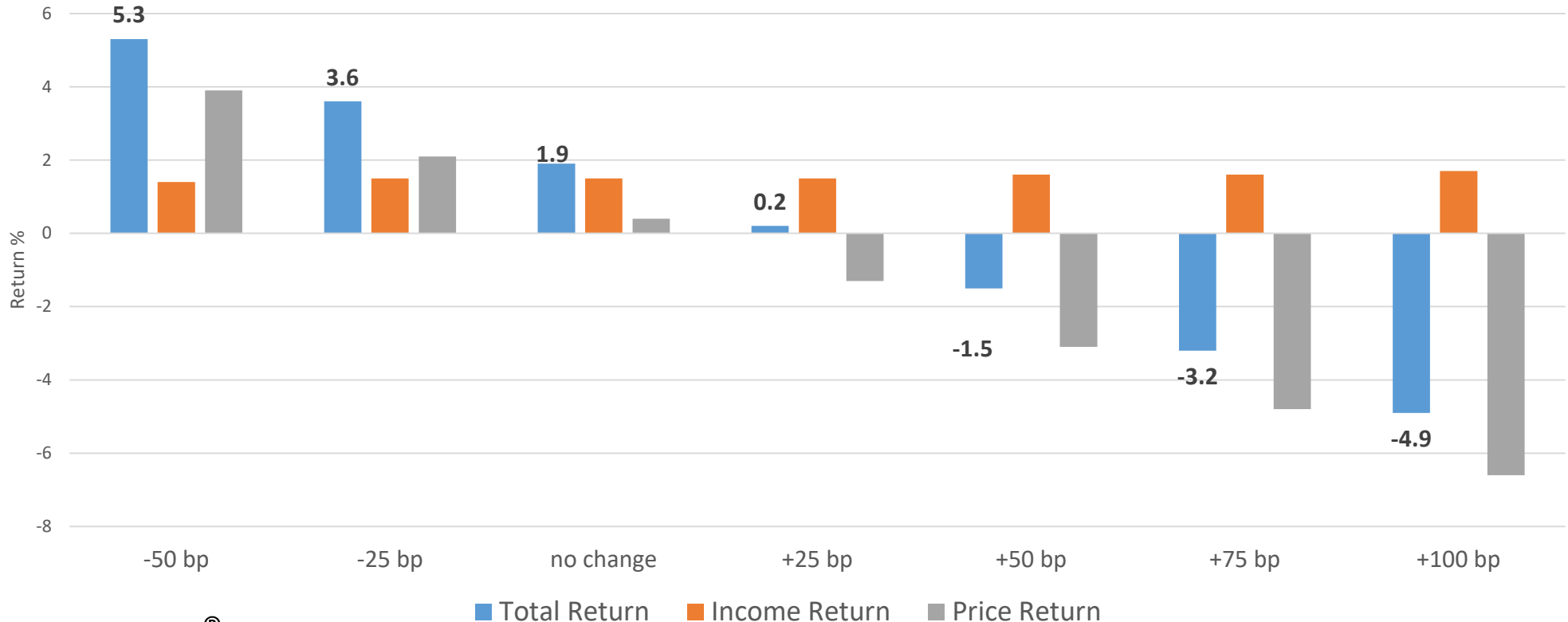
Rate	Market Yld	Q4 20	Q1 21	Q2 21	Q3 21	Q4 21	Q1 22	Q2 22	Q3 22	Q4 22
United States										
US 30-Year	1.66	1.54	1.63	1.72	1.81	1.89	2.01	2.10	2.19	2.25
US 10-Year	0.87	0.76	0.86	0.96	1.05	1.14	1.26	1.36	1.46	1.53
US 5-Year	0.38	0.38	0.46	0.52	0.60	0.68	0.79	0.88	0.98	1.04
US 2-Year	0.15	0.20	0.25	0.29	0.33	0.38	0.45	0.52	0.58	0.63
US 3-Month Libor	0.21	0.30	0.33	0.34	0.35	0.39	0.44	0.50	0.54	0.58
Fed Funds Rate - Upper Bound	0.25	0.25	0.25	0.25	0.25	0.30	0.30	0.35	0.35	0.35
Fed Funds Rate - Lower Bound	0.00	0.00	0.01	0.01	0.02	0.03	0.05	0.08	0.09	0.11
2 Year - 10 Year Spread	0.72	0.56	0.61	0.67	0.72	0.77	0.80	0.84	0.88	0.90





Fixed Income Return Expectations

1 Year Core Fixed Income Return Simulation (Parallel Shift) as of 9/30/20



Source: BondEdge[®]

- Expectations are for rates to rise modestly in 2021
- The TIPS markets shows no material inflation concerns in the near term
- Return expectations over the next five years have fallen to 1.5% - 3% on modest increase in rates.



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