

NORTH CAROLINA
DEPARTMENT OF STATE TREASURER



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INVESTMENT MANAGEMENT DIVISION

Investment Grade Fixed Income Review

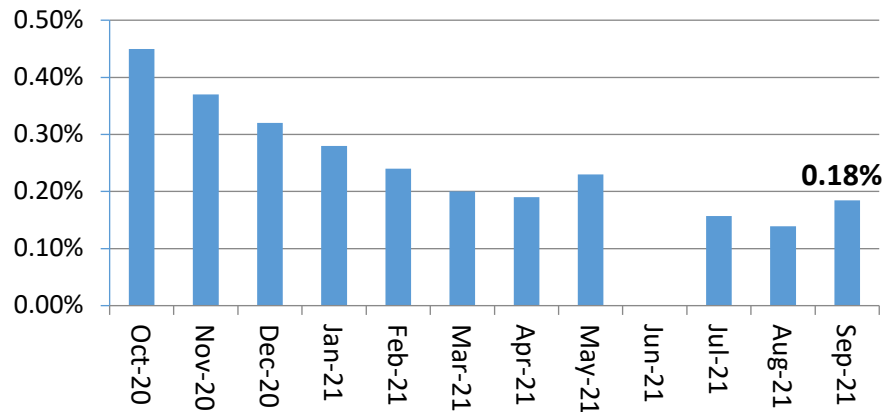
November 17, 2021



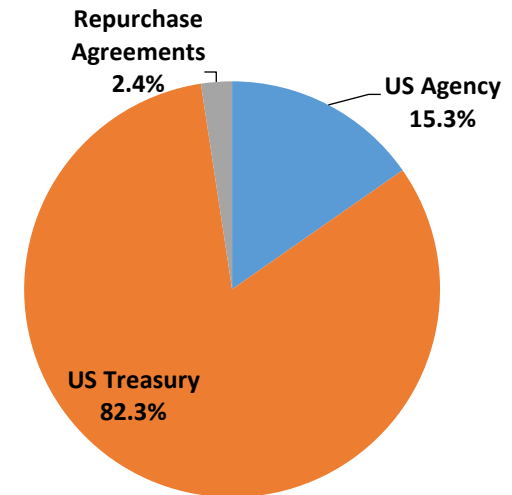
North Carolina Short Term Portfolio (STIF)

September 30, 2021

Historical Annualized Net Cash Return



STIF Allocation

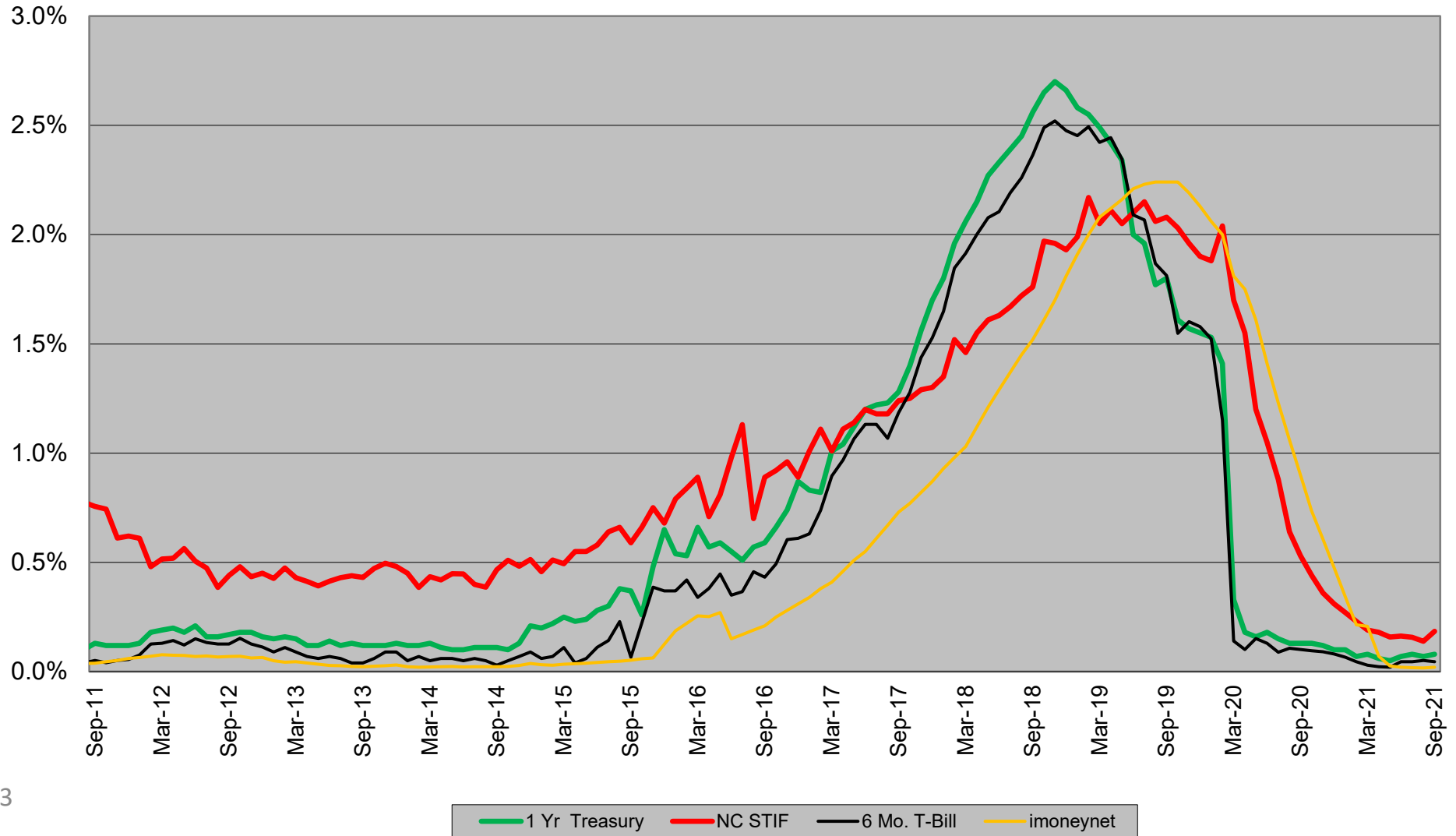


Portfolio Characteristics	Month ending 9/30/21
Current Annualized Net Cash Return	.18%
Effective Duration	.84
Average Maturity (Yrs)	1.0
Average Credit Rating (Moody's)	AAA
Average Price	100.09
Average Coupon	.39%



Short Term Portfolio (STIF) Rate History

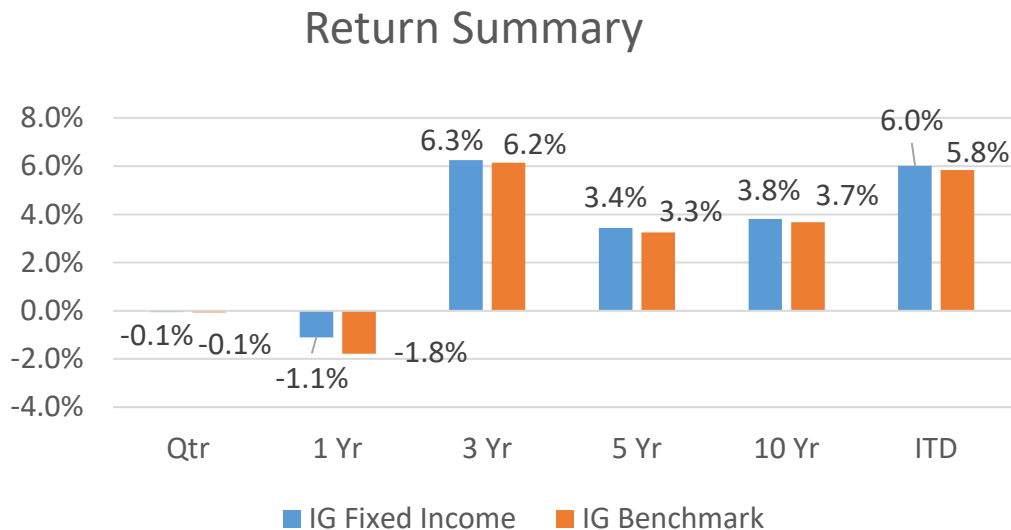
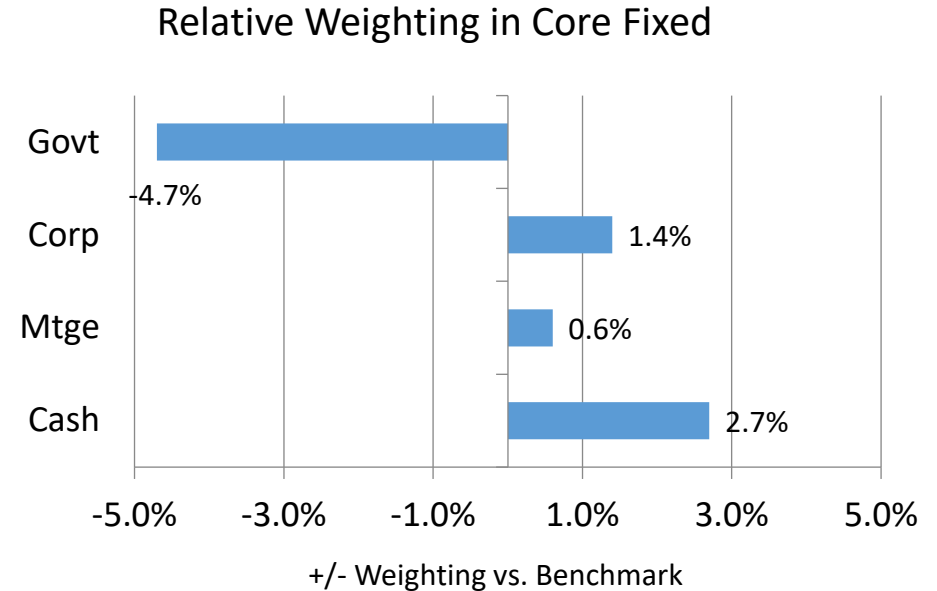
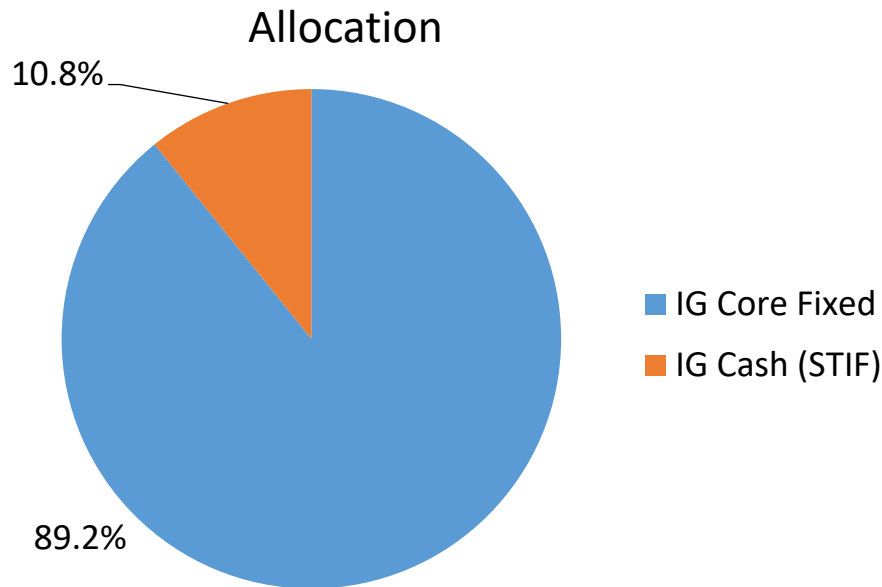
\$47 Billion AUM as of 9/30/21





Investment Grade Fixed Income Profile

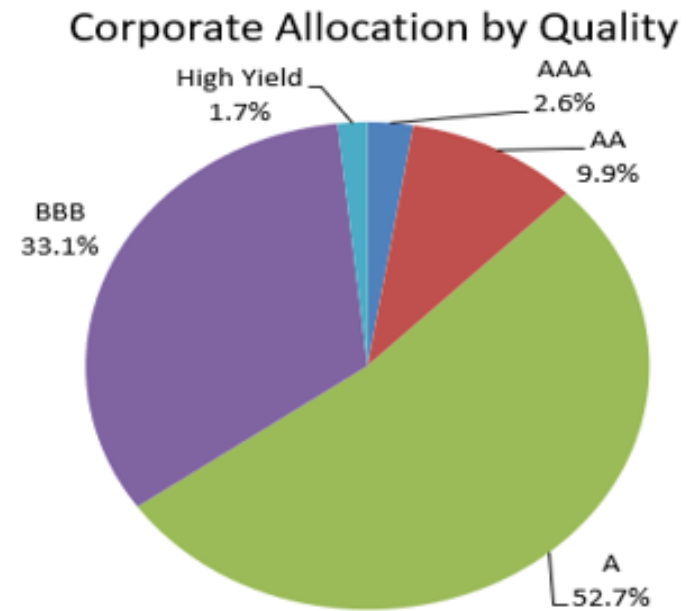
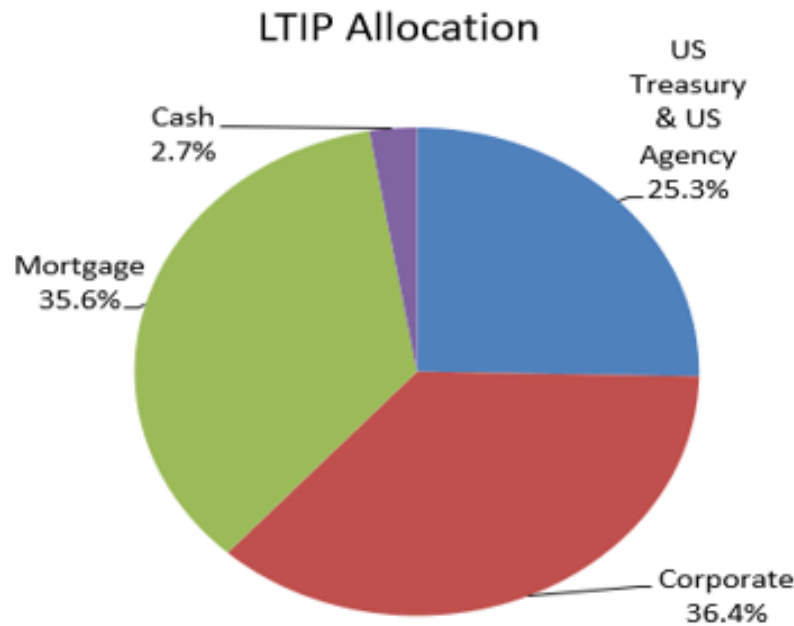
As of September 30, 2021



- Investment Grade Fixed Income has outperformed in all measured time periods
- The portfolio's 70bp outperformance over the last year was driven by our short relative duration to the benchmark



Core Fixed Income Long Term Portfolio (LTIP) September 30, 2021

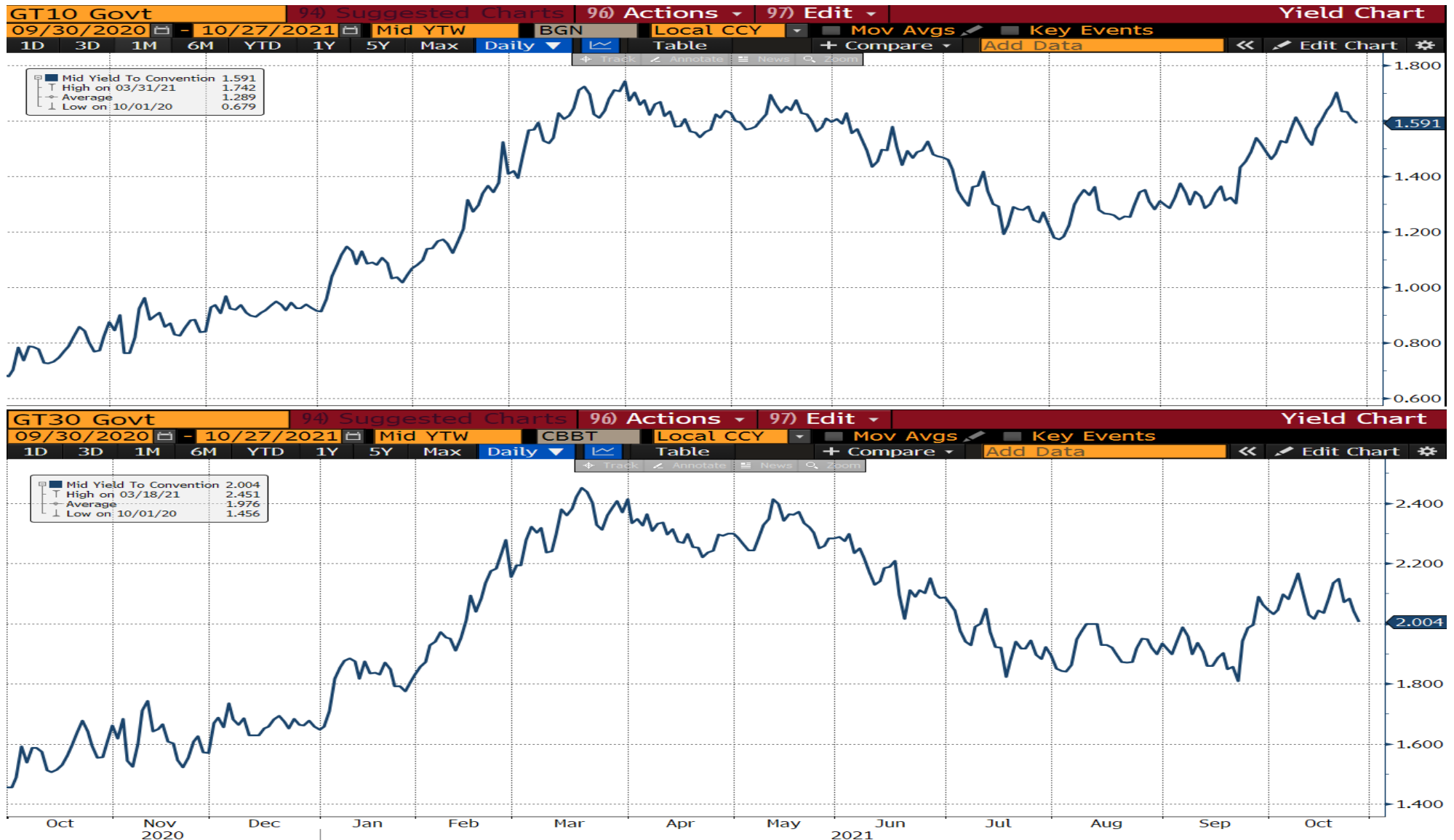


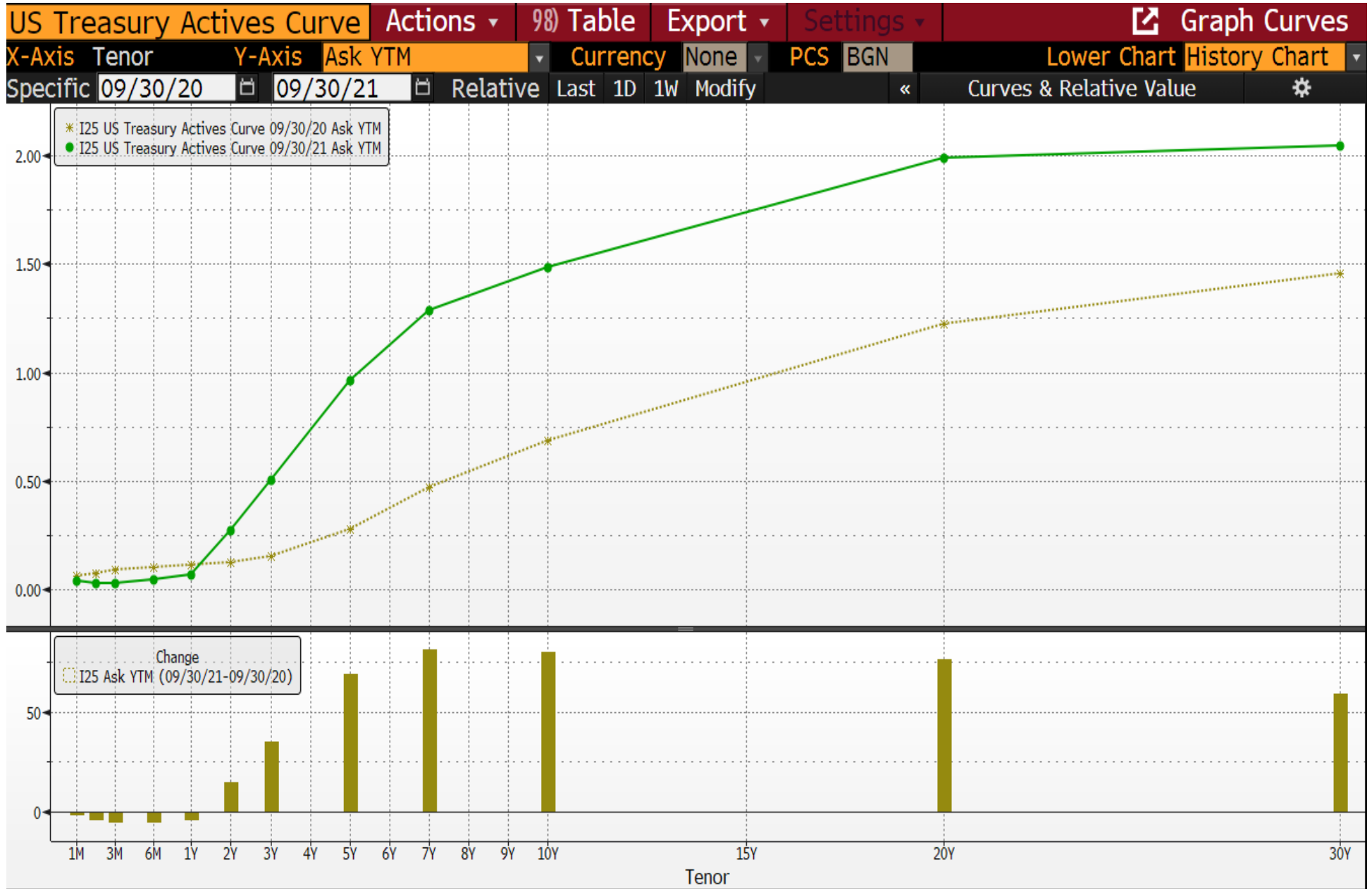
Portfolio Characteristics (ex cash)	As of 9/30/21
Yield to Maturity	1.8%
Duration	7.4
Average Maturity (Yrs)	10.0
Average Credit Rating	AA
Average Coupon	3.6%

* BOAML Custom Fixed Income Benchmark



10 year and 30 Year UST Yield History

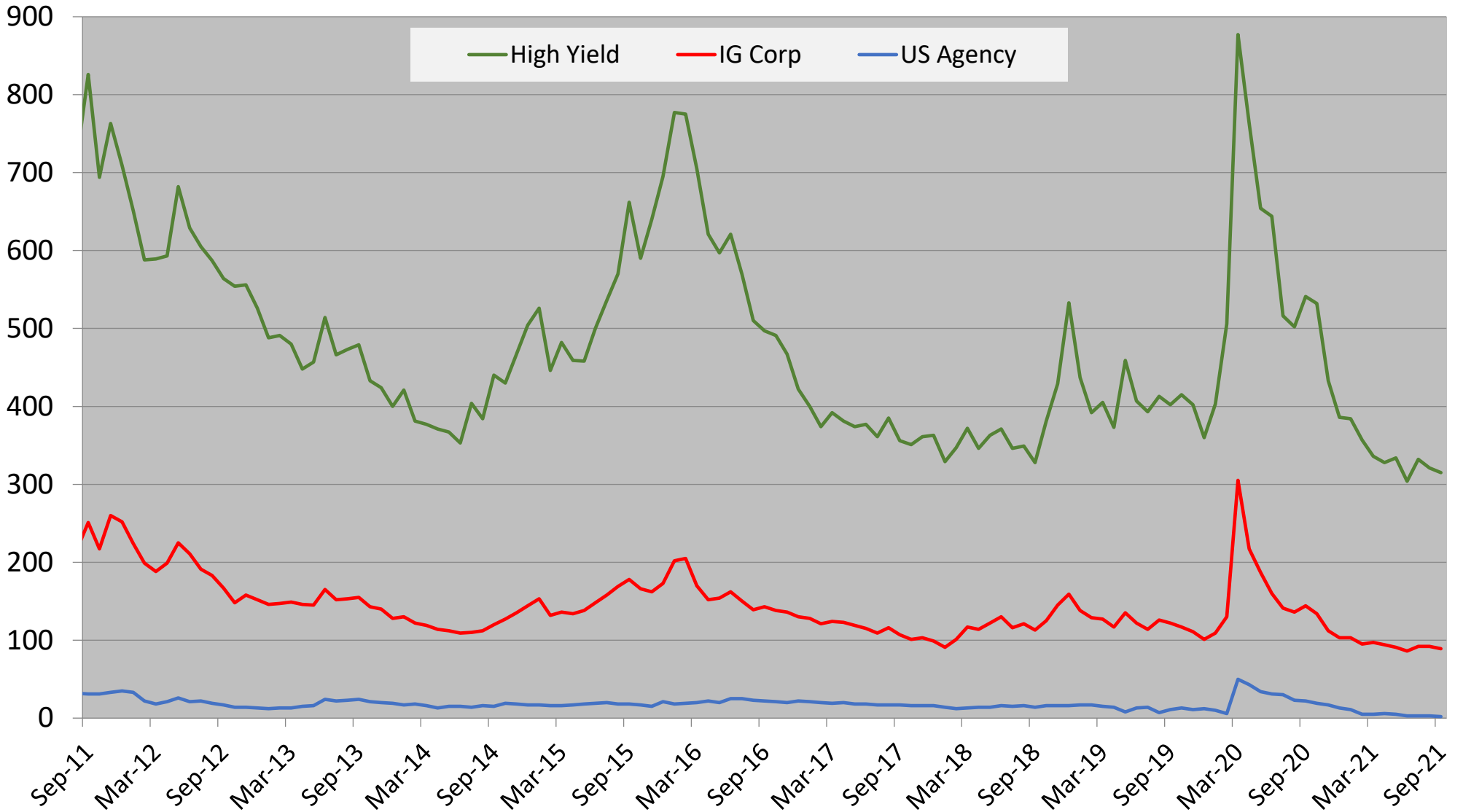




Source: Bloomberg



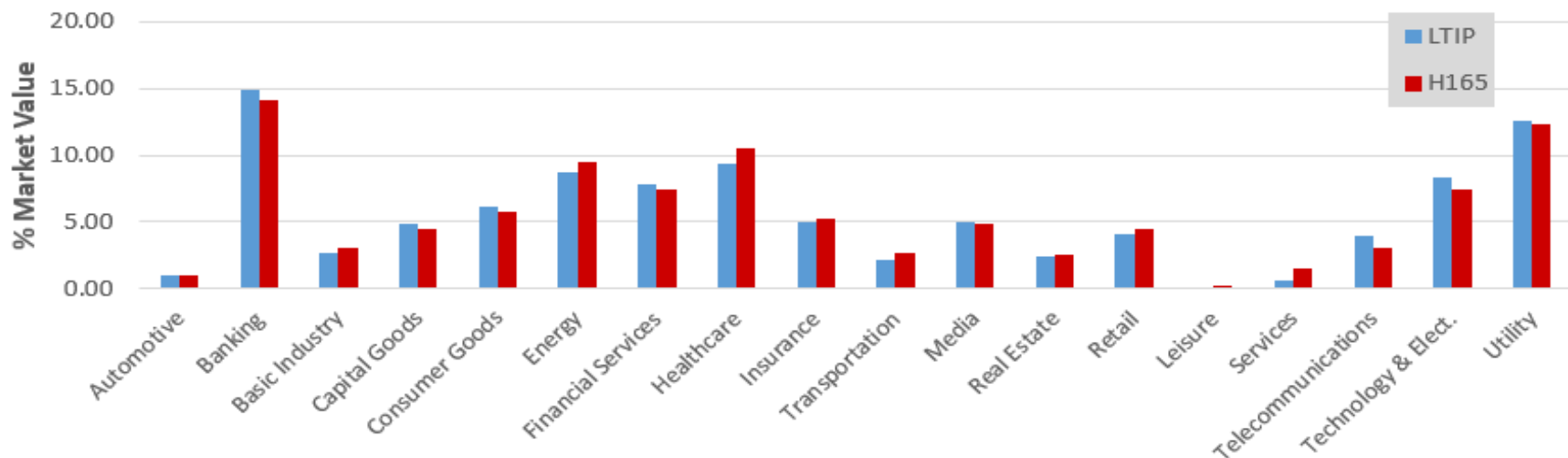
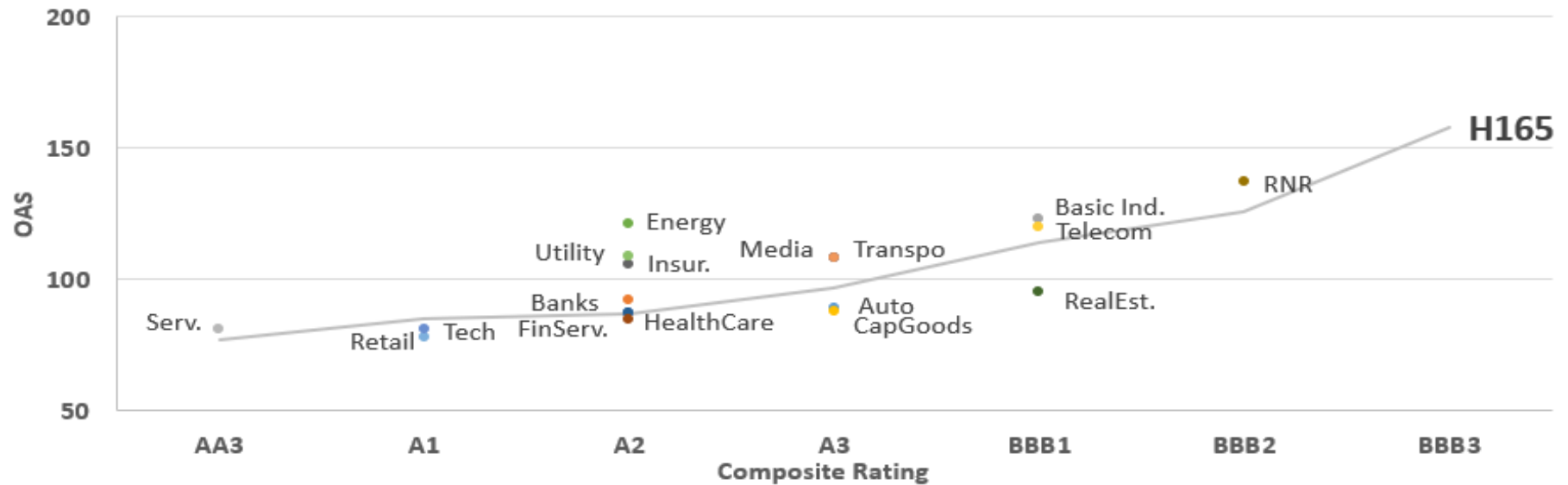
Spread History Credit Markets





Corporate Relative Value and LTIP Allocation by Sector

As of 9/30/21





FOMC Projections

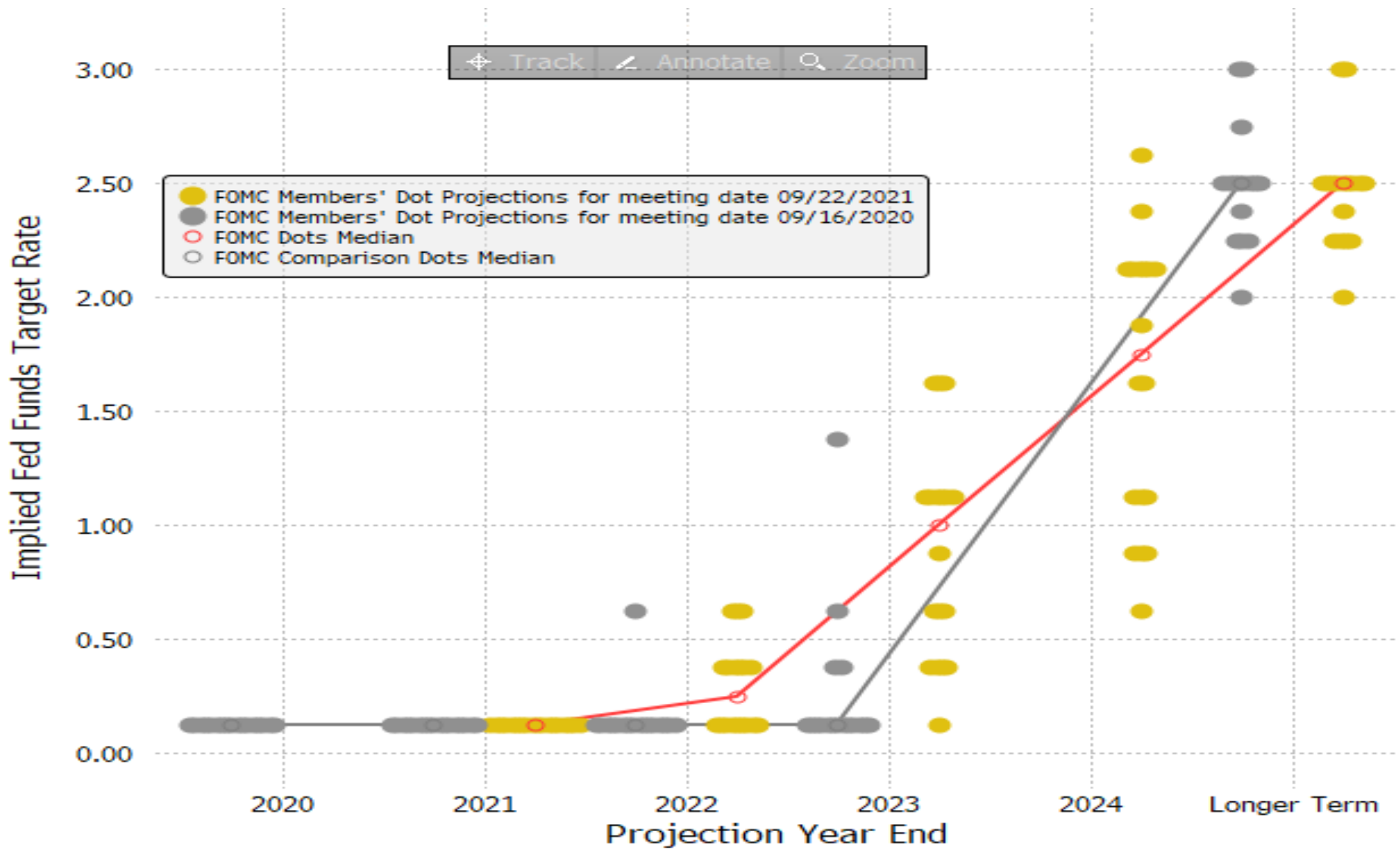
Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, under their individual assumptions of projected appropriate monetary policy, September 2021

Percent

Variable	Median ¹					Central Tendency ²					Range ³				
	2021	2022	2023	2024	Longer run	2021	2022	2023	2024	Longer run	2021	2022	2023	2024	Longer run
Change in real GDP	5.9	3.8	2.5	2.0	1.8	5.8-6.0	3.4-4.5	2.2-2.5	2.0-2.2	1.8-2.0	5.5-6.3	3.1-4.9	1.8-3.0	1.8-2.5	1.6-2.2
June projection	7.0	3.3	2.4		1.8	6.8-7.3	2.8-3.8	2.0-2.5		1.8-2.0	6.3-7.8	2.6-4.2	1.7-2.7		1.6-2.2
Unemployment rate	4.8	3.8	3.5	3.5	4.0	4.6-4.8	3.6-4.0	3.3-3.7	3.3-3.6	3.8-4.3	4.5-5.1	3.0-4.0	2.8-4.0	3.0-4.0	3.5-4.5
June projection	4.5	3.8	3.5		4.0	4.4-4.8	3.5-4.0	3.2-3.8		3.8-4.3	4.2-5.0	3.2-4.2	3.0-3.9		3.5-4.5
PCE inflation	4.2	2.2	2.2	2.1	2.0	4.0-4.3	2.0-2.5	2.0-2.3	2.0-2.2	2.0	3.4-4.4	1.7-3.0	1.9-2.4	2.0-2.3	2.0
June projection	3.4	2.1	2.2		2.0	3.1-3.5	1.9-2.3	2.0-2.2		2.0	3.0-3.9	1.6-2.5	1.9-2.3		2.0
Core PCE inflation ⁴	3.7	2.3	2.2	2.1		3.6-3.8	2.0-2.5	2.0-2.3	2.0-2.2		3.5-4.2	1.9-2.8	2.0-2.3	2.0-2.4	
June projection	3.0	2.1	2.1			2.9-3.1	1.9-2.3	2.0-2.2			2.7-3.3	1.7-2.5	2.0-2.3		
Memo: Projected appropriate policy path															
Federal funds rate	0.1	0.3	1.0	1.8	2.5	0.1	0.1-0.4	0.4-1.1	0.9-2.1	2.3-2.5	0.1	0.1-0.6	0.1-1.6	0.6-2.6	2.0-3.0
June projection	0.1	0.1	0.6		2.5	0.1	0.1-0.4	0.1-1.1		2.3-2.5	0.1	0.1-0.6	0.1-1.6		2.0-3.0



Fed Dot Plot





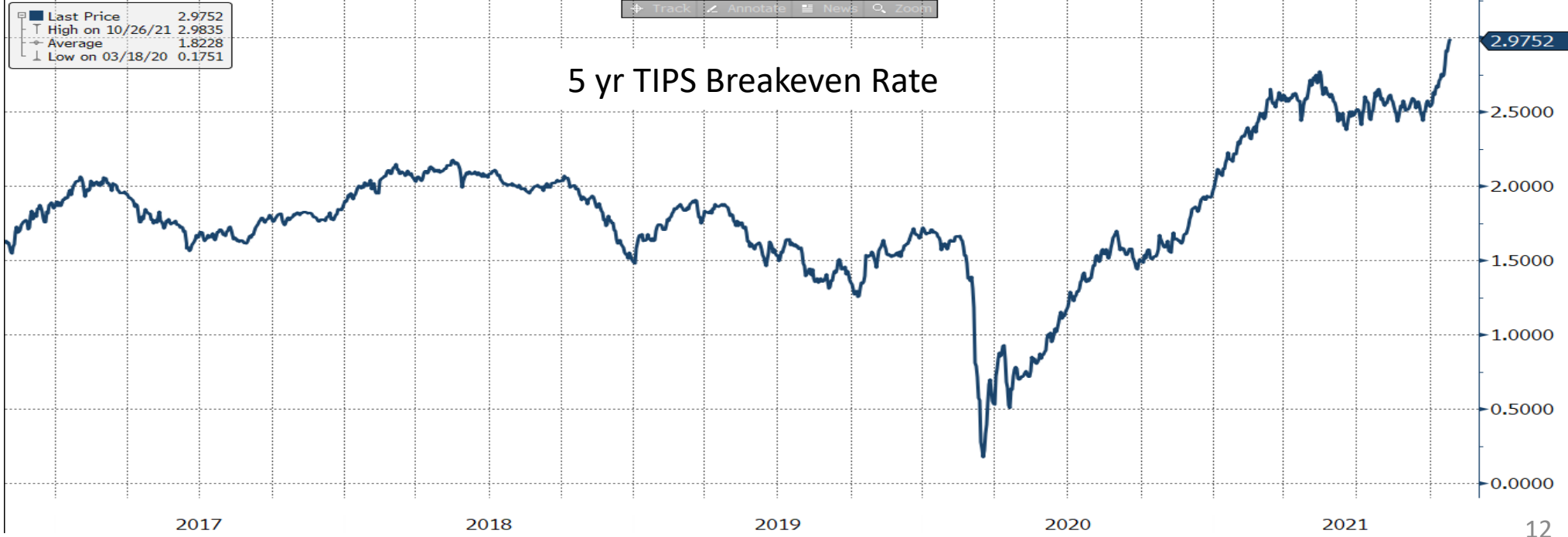
Modest Rate Increases Expected in the Near Term

Rate	Market Yld	Q4 21	Q1 22	Q2 22	Q3 22	Q4 22	Q1 23	Q2 23	Q3 23	Q4 23
United States										
US 30-Year	1.95	2.24	2.36	2.47	2.54	2.60	2.71	2.77	2.89	2.91
US 10-Year	1.54	1.68	1.80	1.90	1.98	2.05	2.19	2.26	2.38	2.47
US 5-Year	1.14	1.09	1.19	1.29	1.38	1.48	1.60	1.69	1.82	1.90
US 2-Year	0.50	0.38	0.47	0.56	0.67	0.81	0.98	1.12	1.29	1.41
US 3-Month Libor	0.14	0.18	0.21	0.26	0.33	0.43	0.67	0.80	0.97	1.08
Fed Funds Rate - Upper Bound	0.25	0.25	0.25	0.25	0.30	0.40	0.55	0.70	0.90	1.05
Fed Funds Rate - Lower Bound	0.00	0.00	0.01	0.02	0.05	0.15	0.31	0.46	0.64	0.80
2 Year - 10 Year Spread	1.04	1.30	1.33	1.34	1.31	1.25	1.21	1.14	1.08	1.06

USGGBE05 Index 94) Suggested Charts 96) Actions 97) Edit Yield Chart

10/27/2016 - 10/27/2021 Last Px Local CCY Mov Avgs Key Events

1D 3D 1M 6M YTD 1Y 5Y Max Daily Table + Compare Add Data Edit Chart





Fixed Income Return Expectations

1 Year Core Fixed Income Return Simulation (Parallel Shift) as of 9/30/21



Source: BondEdge®

- Expectations are for rates to rise modestly in 2022
- The TIPS markets shows slightly elevated inflation in the near term
- Return expectations over the next five years remain in the 1.5% - 3% range on a modest increase in rates.



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