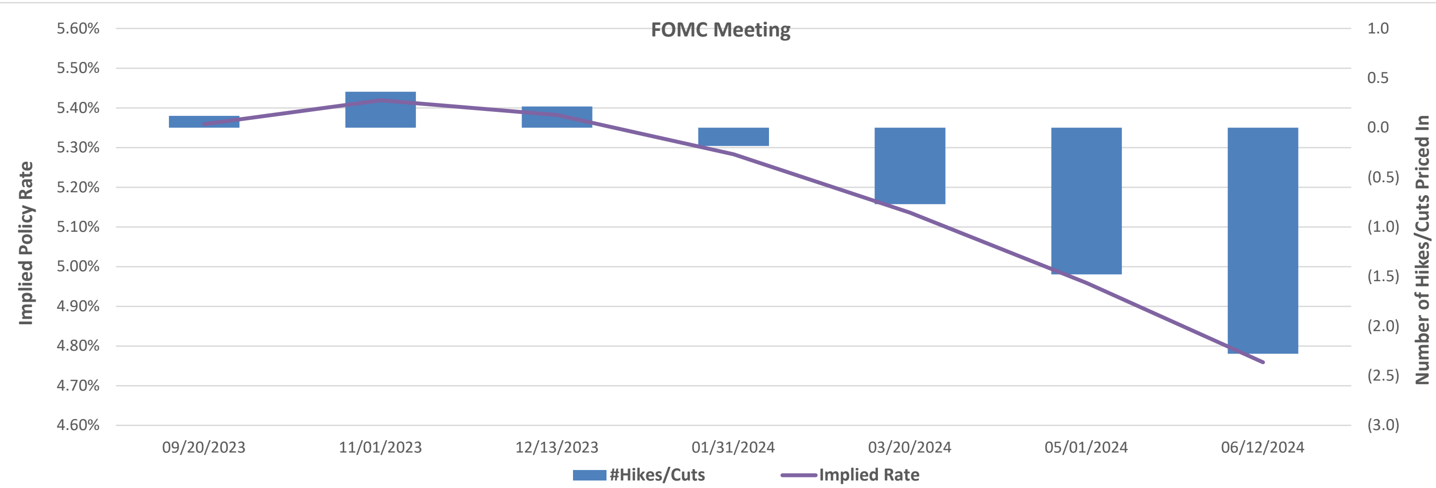
Forecasts

Monday, August 7, 2023

1) Fed Funds Future Implied Probability

	FOMC Meeting					
Current Implied Probability	**09/20/2023**	**11/01/2023**	**12/13/2023**	**01/31/2024**	**03/20/2024**	**05/01/2024**
% Hike / -% Cut (at the above meeting):	12.0%	24.3%	-14.9%	-39.8%	-58.6%	-70.7%
Implied Rate Change:	0.03%	0.09%	0.05%	-0.05%	-0.19%	-0.37%
Implied Rate:	*5.36%*	*5.42%*	*5.38%*	*5.28%*	*5.14%*	*4.96%*

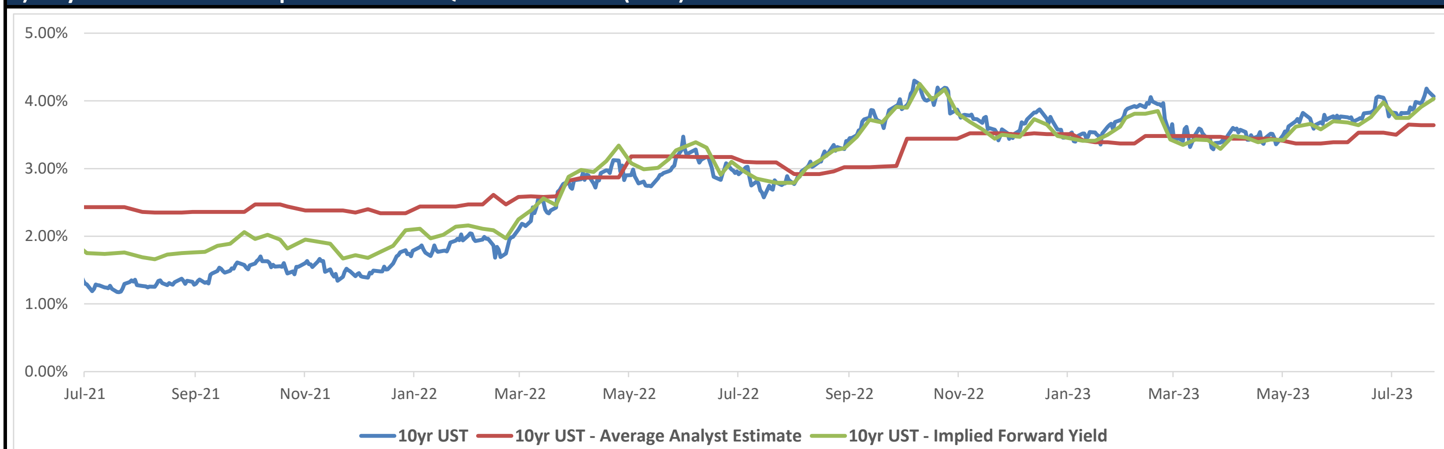
2) Implied Overnight Rate & Number of Hikes/Cuts



3) Bond Yield Forecast - Analyst Estimates

10yr Treasury	**Q3 23**	**Q4 23**	**Q1 24**	**Q2 24**	**Q3 24**	**Q4 24**
Weighted Average	3.75%	3.64%	3.54%	3.48%	3.45%	3.42%
Median Forecast	3.78%	3.60%	3.52%	3.41%	3.37%	3.35%
Average Forecast	3.76%	3.65%	3.55%	3.47%	3.45%	3.42%
High Forecast	4.13%	4.50%	5.00%	5.00%	5.00%	4.75%
Low Forecast	3.00%	2.90%	2.85%	2.75%	2.63%	2.50%
Responses	50	53	50	50	44	43
July Survey Median	3.78%	3.67%	3.52%	3.41%	3.37%	3.35%
June Survey Median	3.64%	3.53%	3.50%	3.35%	3.30%	3.25%
Change in Medians	0.14%	0.14%	0.02%	0.06%	0.07%	0.10%

4) 10yr UST Estimate & Implied Forward - Q4 2023 Estimate (as of)



- Difference between historical analyst estimates of the Q4 2023 10yr UST yield vs. the Q4 2023 Implied Forward Yield, with the actual 10yr UST yield for reference. The difference shows the gap in analyst sentiment vs. where one could actually transact on a forward contract.

*- **Average Analyst Estimate:** An average of a number of Wall Street economist projections as surveyed by Bloomberg*

*- **Implied Forward Yield:** Prices at which a contract for future delivery or payment can be concluded today*

Forward Curves

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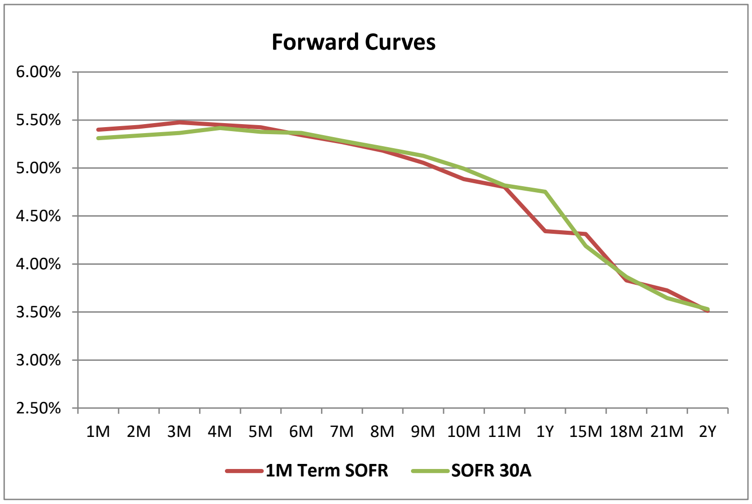
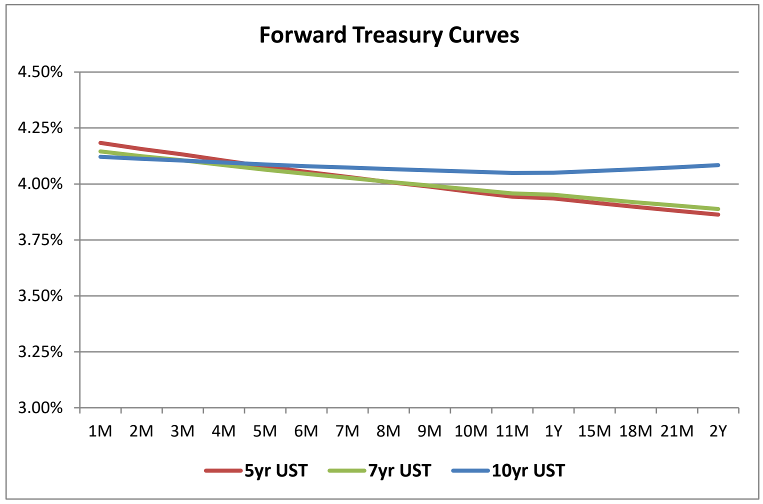
5) Forward Curve - Graphs



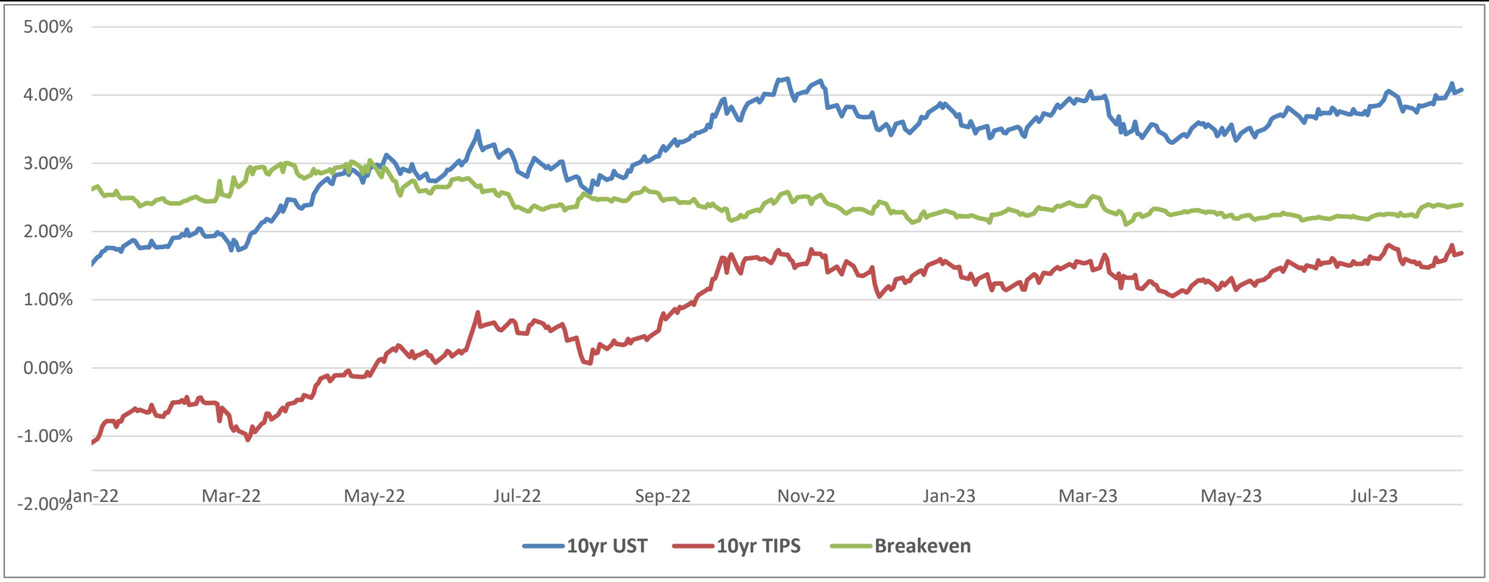


6) Forward Curves - Data

			US Treasuries			Swap Curve (SOFR)	
	1M Term SOFR	SOFR 30A	5 Year	7 Year	10 Year	7 Year	10 Year
Current	5.316%	5.156%	4.158%	4.125%	4.078%	3.835%	3.788%
Forward Tenor							
1M	5.398%	5.312%	4.184%	4.145%	4.121%	3.808%	3.768%
2M	5.429%	5.337%	4.156%	4.124%	4.113%	3.784%	3.752%
3M	5.475%	5.365%	4.131%	4.105%	4.104%	3.759%	3.735%
4M	5.449%	5.417%	4.105%	4.084%	4.096%	3.732%	3.716%
5M	5.425%	5.377%	4.078%	4.064%	4.087%	3.708%	3.700%
6M	5.343%	5.365%	4.054%	4.045%	4.080%	3.682%	3.683%
7M	5.270%	5.283%	4.031%	4.027%	4.073%	3.658%	3.666%
8M	5.183%	5.207%	4.008%	4.009%	4.067%	3.635%	3.652%
9M	5.055%	5.126%	3.987%	3.993%	4.061%	3.614%	3.637%
10M	4.885%	4.993%	3.965%	3.975%	4.055%	3.593%	3.623%
11M	4.802%	4.818%	3.943%	3.958%	4.049%	3.576%	3.612%
1Y	4.343%	4.753%	3.935%	3.952%	4.051%	3.559%	3.601%
15M	4.312%	4.187%	3.916%	3.934%	4.058%	3.530%	3.583%
18M	3.830%	3.867%	3.898%	3.918%	4.066%	3.502%	3.566%
21M	3.725%	3.645%	3.880%	3.903%	4.075%	3.497%	3.566%
2Y	3.512%	3.530%	3.863%	3.888%	4.084%	3.492%	3.566%
3Y	3.365%	3.329%	3.889%	3.935%	4.184%	3.526%	3.603%
4Y	3.396%	3.320%	3.943%	4.095%	4.302%	3.589%	3.654%
5Y	3.478%	3.416%	4.034%	4.421%	4.421%	3.646%	3.700%

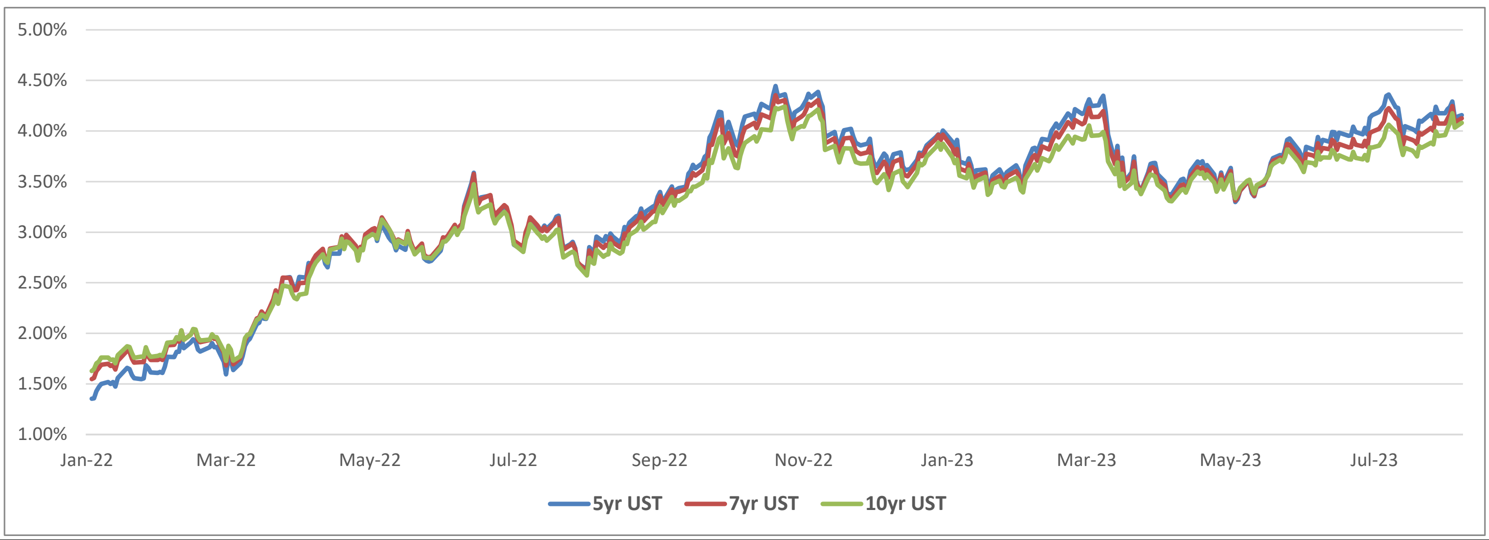
Source: Bloomberg

7) 10 Year TIPS & Breakeven (Implied Inflation)

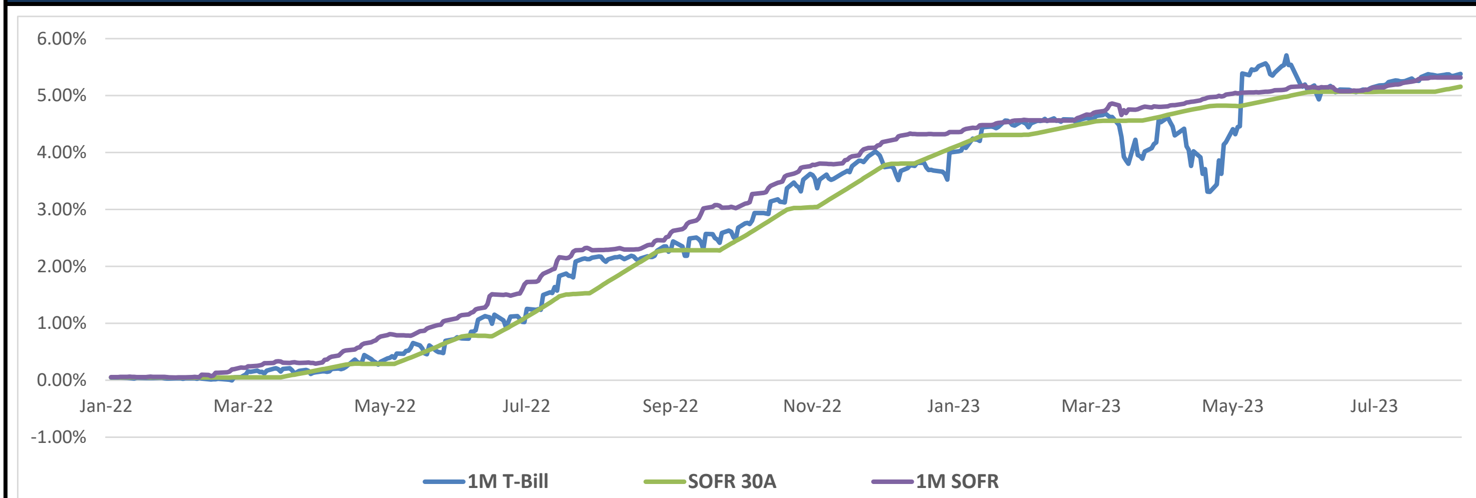


- ***TIPS*** *are US Treasuries that eliminate the effects of inflation on interest and principal payments, as measured by the Consumer Price Index (CPI). The "real" rate of return.*
- ***Breakeven*** *is 10-year expectation for the inflation rate among market participants (10yr UST yield less the 10yr TIPS yield).*

8) US Treasuries



9) Short Term Interest Rates



Yield Curve

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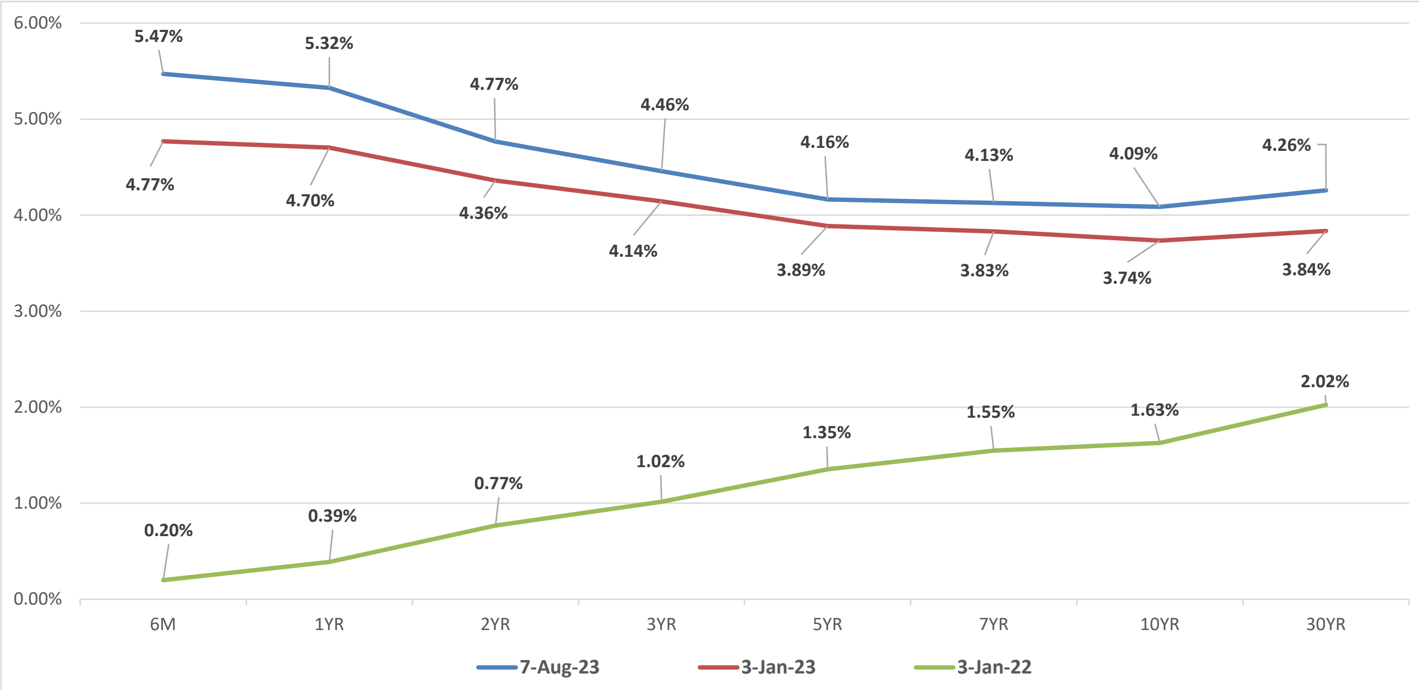
10) Yield Curve Slope, as of



11) US Treasury 2/10s & 5/30s Curve

Treasury Spread	7-Aug-23	3-Jan-23	YTD Change
2s/10s Spread	-0.68%	-0.63%	-0.05%
5s/30s Spread	0.09%	-0.05%	0.14%

** A negative figure is an inverted yield curve between the two US Treasury points. The higher the figure, the steeper the yield curve.*

Floating Rate Cap Costs

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12) SOFR Interest Rate Caps

% Multiplied by the Notional Amount to Calculate Cap Cost

	Cap Term				
Strike Rate	**1 Year**	**2 Year**	**3 Year**	**4 Year**	**5 Year**
1.00%	4.21%	7.12%	9.44%	11.58%	13.74%
1.50%	3.72%	6.20%	8.14%	9.91%	11.73%
2.00%	3.24%	5.31%	6.89%	8.32%	9.83%
2.50%	2.76%	4.45%	5.72%	6.85%	8.09%
3.00%	2.28%	3.63%	4.63%	5.51%	6.52%
3.50%	1.82%	2.86%	3.63%	4.31%	5.14%
4.00%	1.38%	2.16%	2.75%	3.26%	3.94%
4.50%	0.94%	1.41%	1.87%	2.37%	2.93%
5.00%	0.49%	0.79%	1.18%	1.56%	1.99%
5.50%	0.21%	0.40%	0.71%	1.02%	1.38%
6.00%	0.12%	0.24%	0.48%	0.73%	1.02%

1M Term SOFR: **5.32%**

** Indications are not live prices and are based on end-of-day rates from prior market close*
** They assume a 1-month Term SOFR index and do not account for such terms as partial interest periods, index rounding, and non-constant loan balances*
** Costs are exclusive of any advisory fee*
** Information from Chatham Financial : https://www.chathamfinancial.com/technology/interest-rate-cap-calculator*

Economic Dashboard

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13) Economic Dashboard	Current	Historical: 1 Month	3 Months	6 Months	1 Year	2 Years
Date	07-Aug-23	7-Jul-23	9-May-23	8-Feb-23	5-Aug-22	6-Aug-21
Benchmarks:						
30d Avg SOFR	5.30%	5.06%	5.06%	4.55%	2.28%	0.05%
Change (bps)		*24 bps*	*24 bps*	*75 bps*	*302 bps*	*525 bps*
1M Term SOFR	5.32%	5.18%	5.05%	4.56%	2.29%	0.05%
Change (bps)		*14 bps*	*26 bps*	*75 bps*	*302 bps*	*527 bps*
Fed Funds Rate - Effective	5.33%	5.08%	5.08%	4.58%	2.33%	0.10%
Change (bps)		*25 bps*	*25 bps*	*75 bps*	*300 bps*	*523 bps*
1M Treasury Bill	5.38%	5.24%	5.46%	4.56%	2.12%	0.04%
Change (bps)		*14 bps*	*-8 bps*	*82 bps*	*326 bps*	*534 bps*
10 Year Treasury	4.08%	4.07%	3.52%	3.61%	2.83%	1.30%
Change (bps)		*1 bps*	*56 bps*	*46 bps*	*125 bps*	*278 bps*
10 Year Swap Spread (SOFR)	-0.29%	-0.25%	-0.28%	-0.30%	-0.23%	-0.23%
Change (bps)		*-4 bps*	*-1 bps*	*1 bps*	*-6 bps*	*-6 bps*
10 Year Swap Rate (SOFR)	3.79%	3.82%	3.24%	3.31%	2.60%	1.07%
Change (bps)		*-3 bps*	*55 bps*	*48 bps*	*119 bps*	*272 bps*
Equity Indicies:						
S&P 500	4,497	4,405	4,124	4,153	4,116	4,429
% Change		*2.1%*	*9.0%*	*8.3%*	*9.3%*	*1.5%*
Dow Jones	35,368.8	33,837.1	33,589.9	34,132.9	32,593.9	35,077.4
% Change		*4.5%*	*5.3%*	*3.6%*	*8.5%*	*0.8%*
Nasdaq	13,884	13,668	12,196	12,069	12,539	14,864
% Change		*1.6%*	*13.8%*	*15.0%*	*10.7%*	*-6.6%*
Commodities:						
Gold	$1,934.57	$1,910.87	$2,021.26	$1,873.11	$1,791.26	$1,804.37
% Change		*1.2%*	*-4.3%*	*3.3%*	*8.0%*	*7.2%*
Silver	$23.21	$22.72	$25.55	$22.17	$20.18	$25.16
% Change		*2.2%*	*-9.2%*	*4.7%*	*15.0%*	*-7.7%*
Oil	$81.63	$71.85	$72.21	$76.79	$82.87	
% Change		*13.6%*	*13.0%*	*6.3%*	*-1.5%*	
Other:						
DJ US Real Estate Index	333.9	333.4	326.0	359.0	377.8	419.0
% Change		*0.1%*	*2.4%*	*-7.0%*	*-11.6%*	*-20.3%*
Residential REIT ETF (REZ)	$72.79	$73.51	$72.30	$76.17	$83.34	$90.06
% Change		*-1.0%*	*0.7%*	*-4.4%*	*-12.7%*	*-19.2%*
Mortgage REIT ETF (REM)	$24.13	$22.70	$20.98	$26.24	$29.48	$36.36
% Change		*6.3%*	*15.0%*	*-8.0%*	*-18.1%*	*-33.6%*
Homebuilders ETF (XHB)	$84.57	$77.61	$71.11	$69.94	$63.24	$76.49
% Change		*9.0%*	*18.9%*	*20.9%*	*33.7%*	*10.6%*
Financial Sector ETF (XLF)	$35.33	$33.40	$32.14	$36.73	$33.36	$37.46
% Change		*5.8%*	*9.9%*	*-3.8%*	*5.9%*	*-5.7%*
Volatility Index (VIX)	16.65	15.97	17.29	18.88	21.50	17.46
% Change		*4.3%*	*-3.7%*	*-11.8%*	*-22.6%*	*-4.6%*

Source: Bloomberg