

February 5, 2019

U.S. Treasury Yields			
Coupon	Maturity	YTM	
0.000%	01/30/20	2.55%	
2.500%	01/31/21	2.52%	
2.500%	01/15/22	2.51%	
2.375%	01/31/23	2.51%	
2.500%	01/31/24	2.51%	
3.125%	11/15/28	2.70%	
3.375%	11/15/48	3.03%	

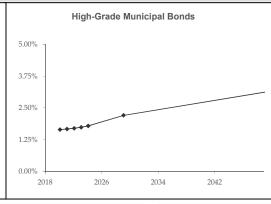
2020

Municipal Bond Yields ¹			
Maturity	YTM	Tax-Equiv. ²	
02/04/20	1.65%	2.35%	
02/04/21	1.67%	2.38%	
02/04/22	1.70%	2.43%	
02/04/23	1.74%	2.48%	
02/04/24	1.79%	2.56%	
02/04/29	2.21%	3.15%	
02/04/49	3.12%	4.46%	

U.S. Agency Yields - Active Bonds					
Agency	Coupon	Maturity	Price	YTM	To Muni (bp)
FHLB	2.453%	12/17/19	\$100.02	2.41%	+6
FNMA	1.875%	12/28/20	\$98.81	2.52%	+14
FHLB	2.625%	12/10/21	\$100.11	2.58%	+16
FFCB	2.350%	12/22/22	\$98.77	2.69%	+20
FFCB	3.500%	12/20/23	\$103.64	2.70%	+14
FHLB	3.500%	12/08/28	\$103.50	3.08%	-7
FFCB	3.580%	04/11/47	\$95.56	3.82%	-64

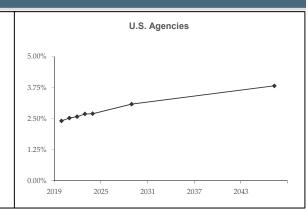
U.S. Treasuries 5.00% 3.75% 2.50% 1.25% 0.00% 2018 2026 2034 2042

2022



Description

Current Yield Curves



Price

YTM

YTW

Corpor	are Bona Trems		
Description	Price	YTM	To Treasury (bp)
JPM (A2/A-) 4.25% 10/15/2020	\$101.99	3.03%	+51
C (Baa1 *+/BBB+) 3.88% 10/25/2023	\$101.81	3.45%	+95
BAC (A3 *+/A-) 3.88% 8/1/2025	\$101.71	3.58%	+107
MS (A3/BBB+) 4.02% 5/11/2028	\$100.20	3.25%	+55
4.00% - 2.00% -	•	-	•
0.00%			

2024

2026

Corporate Bond Yields

FFCB 1.16% 11/1/2019	N/A	\$98.73	2.73%	2.73%
FHLB 2.84% 9/25/2020	09/25/19	\$99.95	2.84%	2.84%
FHLMC 3.375% 8/16/2023	02/16/19	\$100.02	3.37%	2.54%
FFCB 3.7% 10/4/2028	10/04/23	\$101.20	3.55%	3.42%
6.00%				
4.00% -				
•	•			—
2.00% -				
0.00%	1	1	1 .	

Bullet & Callable Agency Bond Yields ³

Call Date

2028



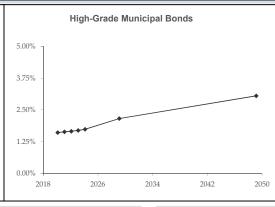
February 12, 2019

U.S. Treasury Yields			
Coupon	Maturity	YTM	
0.000%	01/30/20	2.54%	
2.500%	01/31/21	2.50%	
2.500%	02/15/22	2.48%	
2.375%	01/31/23	2.49%	
2.500%	01/31/24	2.48%	
2.625%	02/15/29	2.68%	
3.000%	02/15/49	3.01%	

Municipal Bond Yields ¹			
Maturity	YTM	Tax-Equiv. ²	
02/11/20	1.61%	2.30%	
02/11/21	1.64%	2.34%	
02/11/22	1.66%	2.37%	
02/11/23	1.69%	2.42%	
02/11/24	1.74%	2.48%	
02/11/29	2.16%	3.09%	
02/11/49	3.06%	4.36%	

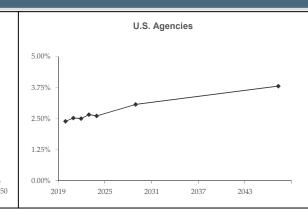
U.S. Agency Yields - Active Bonds					
Agency	Coupon	Maturity	Price	YTM	To Muni (bp)
FHLB	2.453%	12/17/19	\$100.03	2.39%	+9
FNMA	1.875%	12/28/20	\$98.81	2.53%	+19
FHLB	2.625%	12/10/21	\$100.33	2.50%	+13
FFCB	2.350%	12/22/22	\$98.61	2.66%	+24
FFCB	3.500%	12/20/23	\$103.93	2.61%	+13
FHLB	3.500%	12/08/28	\$103.60	3.07%	-1
FFCB	3.580%	04/11/47	\$95.77	3.81%	-56

U.S. Treasuries 5.00% 3.75% 2.50% 1.25% 0.00% 2026 2034 2042 2050



Description

Current Yield Curves



Price

YTM

Description	Price	YTM	To Treasury (bp)
JPM (A2/A-) 4.25% 10/15/2020	\$101.97	3.03%	+53
C (Baa1 *+/BBB+) 3.88% 10/25/2023	\$102.49	3.30%	+81
BAC (A3 *+/A-) 3.88% 8/1/2025	\$101.84	3.55%	+107
MS (A3/BBB+) 3.68% 5/11/2028	\$100.56	3.19%	+52
6.00% 4.00% - 2.00% - 0.00%	•	, ,	•
2020 2022	2024	2026	2028

Corporate Bond Yields

FFCB 1.16% 11/1/2019 N/A \$98.75 2.75% FHLB 2.84% 9/25/2020 09/25/19 \$99.92 2.86% FHLMC 3.375% 8/16/2023 02/16/19 \$100.01 2.14% FFCB 3.7% 10/4/2028 10/04/23 \$101.33 3.53%	
FHLMC 3.375% 8/16/2023 02/16/19 \$100.01 2.14% FFCB 3.7% 10/4/2028 10/04/23 \$101.33 3.53%	2.75%
FFCB 3.7% 10/4/2028 10/04/23 \$101.33 3.53%	2.86%
6.00%	2.14%
	3.39%
2.00% -	*
2019 2021 2023 2025 2027	2029

Bullet & Callable Agency Bond Yields ³ Call Date



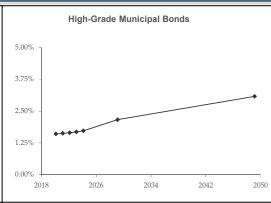
February 19, 2019

U.S. Treasury Yields			
Coupon	Maturity	YTM	
0.000%	01/30/20	2.53%	
2.500%	01/31/21	2.49%	
2.500%	02/15/22	2.47%	
2.375%	01/31/23	2.47%	
2.500%	01/31/24	2.47%	
2.625%	02/15/29	2.64%	
3.000%	02/15/49	2.98%	

Municipal Bond Yields ¹			
Maturity	YTM	Tax-Equiv. ²	
02/15/20	1.60%	2.29%	
02/15/21	1.63%	2.32%	
02/15/22	1.65%	2.36%	
02/15/23	1.68%	2.40%	
02/15/24	1.72%	2.46%	
02/15/29	2.16%	3.09%	
02/15/49	3.08%	4.40%	

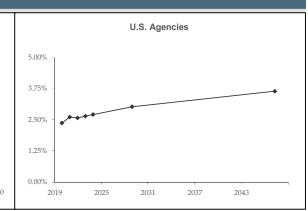
U.S. Agency Yields - Active Bonds						
Agency	Coupon	Maturity	Price	YTM	To Muni (bp)	
FHLB	2.426%	12/17/19	\$100.03	2.37%	+8	
FNMA	1.875%	12/28/20	\$98.68	2.61%	+29	
FHLB	2.625%	12/10/21	\$100.13	2.57%	+22	
FFCB	2.350%	12/22/22	\$98.67	2.65%	+25	
FFCB	3.500%	12/20/23	\$103.54	2.71%	+25	
FHLB	3.500%	12/08/28	\$103.99	3.03%	-6	
FFCB	3.580%	04/11/47	\$98.47	3.65%	-75	

U.S. Treasuries 5.00% 3.75% 2.50% 1.25% 0.00% 2026 2034 2042 2050



Description

Current Yield Curves

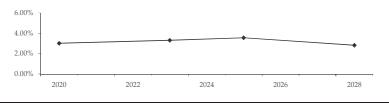


Price

YTM

YTW

Corporate Bond Yields						
Description	Price	YTM	To Treasury (bp)			
JPM (A2/A-) 4.25% 10/15/2020	\$101.95	3.03%	+53			
C (Baa1 *+/BBB+) 3.88% 10/25/2023	\$102.41	3.31%	+84			
BAC (A3 *+/A-) 3.88% 8/1/2025	\$101.78	3.56%	+110			
MS (A3/BBB+) 3.68% 5/11/2028	\$100.60	2.83%	+19			
6.00%						



FFCB 1.16% 11/1/2	2019	N/A	\$98.75	2.79%	2.79%
FHLB 2.84% 9/25/	2020	09/25/19	\$99.91	2.87%	2.87%
FFCB 3% 2/7/2024	Į.	05/07/19	\$99.93	3.02%	3.02%
FHLB 3.04% 2/28/	2029	02/26/19	\$97.05	3.38%	3.39%
6.00% -		•			
2.00% -	•				
0.00%			1		
2019	2021	2023	2025	2027	2029

Bullet & Callable Agency Bond Yields ³ Call Date

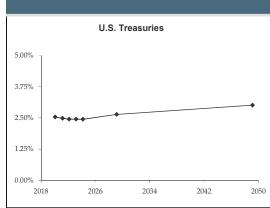


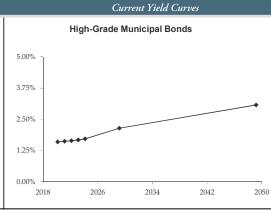
February 26, 2019

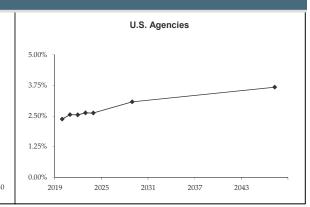
	U.S. Treasury Y	ields
Coupon	Maturity	YTM
0.000%	01/30/20	2.54%
2.500%	02/28/21	2.49%
2.500%	02/15/22	2.45%
2.625%	02/28/23	2.45%
2.375%	02/29/24	2.45%
2.625%	02/15/29	2.64%
3.000%	02/15/49	3.01%

Municipal Bond Yields ¹					
Maturity	YTM	Tax-Equiv. 2			
02/25/20	1.60%	2.28%			
02/25/21	1.62%	2.31%			
02/25/22	1.64%	2.35%			
02/25/23	1.67%	2.39%			
02/25/24	1.72%	2.45%			
02/25/29	2.14%	3.06%			
02/25/49	3.08%	4.39%			

		U.S. Agency Yields - 1	Active Bonds		
Agency	Coupon	Maturity	Price	YTM	To Muni (bp)
FHLB	2.426%	12/17/19	\$100.03	2.37%	+9
FNMA	1.875%	12/28/20	\$98.79	2.55%	+24
FHLB	2.625%	12/10/21	\$100.20	2.55%	+20
FFCB	2.350%	12/22/22	\$98.74	2.63%	+23
FFCB	3.500%	12/20/23	\$103.95	2.62%	+17
FHLB	3.500%	12/08/28	\$103.53	3.08%	+2
FFCB	3.580%	04/11/47	\$97.97	3.68%	-72







Description	Price	YTM	To Treasury (bp)
JPM (A2/A-) 4.25% 10/15/2020	\$101.91	3.04%	+55
C (A3/BBB+) 3.88% 10/25/2023	\$102.67	3.25%	+80
BAC (A3 *+/A-) 3.88% 8/1/2025	\$102.12	3.50%	+106
MS (A3/BBB+) 3.68% 5/11/2028	\$100.41	2.88%	+24
4.00% - 2.00% - 0.00%	•	,	•
2020 2022	2024	2026	2028

Corporate Bond Yields

Description	Call Date	Price	YTM	YTW
FFCB 1.16% 11/1/2019	N/A	\$98.75	2.85%	2.85%
FHLB 2.84% 9/25/2020	09/25/19	\$99.91	2.87%	2.87%
FFCB 3% 2/7/2024	05/07/19	\$100.00	3.00%	3.00%
FHLB 3.04% 2/28/2029	03/05/19	\$96.65	3.44%	3.44%
4.00% -	·			

Bullet & Callable Agency Bond Yields 3



OUTLOOKS

February 2019

ECONOMIC OUTLOOK

Summary

Where are we with economic data in the U.S.? The government shutdown has curtailed the timely dissemination of real-time economic statistics and introduced an element of incomplete data collection. It's not a disaster and government offices are up and running once again. Under these circumstances, we can look to private sources of economic data for a better sense of the current state of the U.S. economy. But before we do, the Bureau of Labor Statistics, one department that was not shut down, reported a stellar payroll statistic last Friday with overall job gains above 300,000, 165,000 new jobs were expected. This continues a pattern of robust job gains, weak wage gains and a slowly rising unemployment rate.

The data indicates that the employment market is strong, the service sector is steady and the manufacturing side of our economy is slowing and flashing some warning signs. I would like to focus on the important manufacturing sector, although it represents less than 15% of GDP, it is front and center in the battle for trade realignment and tariff related supply chain disruptions. JP Morgan's Global Manufacturing Index peaked around December 2017, while the U.S. measure peaked near August 2018. The data indicates that the rest of the world has been softening on this measure sooner and more abruptly than the U.S. While China, Japan and Europe generate a larger percentage of their GDP from exports than America does and they are experiencing lower relative growth than the U.S.

So, trade negotiations and threats have everybody's attention and have yet to fully play out. With that in mind, U.S. manufacturing statistics may have lagged their global counterparts but have

deteriorated rapidly over the last four months. Production, new orders, backlog of orders, supplier deliveries and inventories declined sharply the final quarter of 2018. Fortunately, January 2019 data showed a nice snapback but are still below the six month average. We expect a soft landing economically in America, based upon a steady to slightly weaker labor market, a relatively strong service economy (85% of GDP) and a Federal Reserve policy mix that is very wary about tightening financial conditions from today's levels.

Positives

Non-farm payrolls increased 304,000 in January, 165,000 was expected

ISM manufacturing Index surprises to 56.6, 54 was expected

Negatives

Pending home sales fall 9.5% year-over-year in December

Consumer confidence expectations measure falls to 2016 levels over last three months

Unemployment rate increases to 4.0% from 3.7% cycle low



OUTLOOKS

February 2019

EQUITY OUTLOOK

Summary

Major equity indexes saw a nice recovery bouncing off lows made on December 24. The S&P 500 rose 15.0% from the closing low and 8.0% for the month of January alone. Stocks were clearly in an "over sold" position late in the year as markets overreacted to changing conditions though the fundamentals really hadn't changed that much. And the fact is, the situation really isn't that much different today following the recent rally than it was when markets were at the December lows. The China/U.S. trade situation has had few positive developments, Brexit's outlook is still uncertain and global growth is slowing. The U.S. government shutdown ended temporarily but there remain stumbling blocks in search for a long-term budget solution.

The only real major difference between today and six weeks ago is that the Federal Reserve dramatically changed their tone with regard to the direction of interest rates and hinted that the balance sheet runoff could be modified if conditions warrant. While that directly impacts fixed income markets, it's important to note how meaningfully that indirectly impacts equity markets. If the Fed's pause successfully results in the engineering of a "soft landing", the economy should be able to extend the current expansion and equity markets may continue to participate.

As was the selloff, the rally in equity markets was noticeably broad based. All 11 economic sectors were higher in January with industrials up 11.4% and energy gaining 11.1% posting the best returns for the month. Utilities +3.4% and health care (+4.8%) were the laggards. Middle and small sized U.S. companies participated as well with the Russell mid cap Index and Russell 2000

Index notching gains of 10.8% and 11.2% respectively. The developed international MSCI EAFE index gained 6.6% and the MSCI emerging market index climbed 8.8%.

To be sure, equity market conditions have stabilized considerably over the last several weeks. We expect stock returns to be relatively strong for the balance of 2019, though some near-term volatility should be expected as markets continue to navigate uncertain waters. Equity valuations look quite reasonable and we continue to view any pullback in stocks as a buying opportunity for long-term investors.

Positives

Federal Reserve policy pivot

Calming investor sentiment

Negatives

Slowing economic growth domestic and abroad

Looming government re-closure

Unknown

Duration of the US/China trade war

Brexit path and impact



OUTLOOKS

February 2019

FIXED INCOME OUTLOOK

Summary

From the peak in interest rates in early November to the bottom on January 3, the 10-year Treasury note yield declined 70 basis points (bps). That is more than a year's worth of volatility in less than two months. Of the benchmarks, the 5-year note declined slightly more at 75 bps over that period and even the 2-year dropped 60 bps. Thankfully, rates bounced off these lows and then traded in a more normal 15 bps range for the majority of January. For the month overall, yields ended just a handful of bps lower than they were at year's end, but down sharply from early November levels. The 10-year Treasury note closed at 2.63%, the 5-year at 2.44% and the 2-year at 2.46%. With the overnight Federal Funds rate set at a range of 2.25% -2.50%, the 2-year Treasury note is validating our belief that a rate cut is as likely as a rate hike in 2019. We also believe that both could happen over the course of the year.

While the volatility in Treasury yields has been impressive, the move in corporate bonds spreads has likewise been noteworthy. The incremental yield offered on the universe of investment-grade corporate bonds increased by about 50% to about 150 bps. The peak in these spreads coincided with the trough in Treasury yields and they then began to decline steadily throughout the rest of January. By the end of the month, spreads had declined to 122 bps, which we still view as relatively attractive. The January decline in spreads led investment-grade corporate bond returns to a significant outperformance of Treasury note returns.

At this point, we believe that the risk of a Fed-induced recession has diminished sharply. Not only has the pause in the rate hiking cycle begun, but also Fed Chair Powell has made it clear that the systematic process established to reduce the balance sheet will also be altered or suspended if conditions warrant. Given the evidence of slowing economies abroad, modest softening domestically, and the continued lack of inflationary pressures, we believe it is the right move for the Fed to make. The markets spoke, the Fed listened, and a crisis has been averted, for now. Short-term rates are accurately pricing no change in the overnight rate for the near future. The curve could steepen a little bit with the longer yields moving up a bit, but that would probably take some good news on the trade front with China. We now think that 3% would be a gift to bond investors.

Positives

Weakening global economic outlook, particularly in China

Modest inflationary pressures

Negatives

Average hourly earnings above 3% could stoke inflationary fears

Federal budget deficit creates massive financing needs

Unknown

Trade negotiations with China

Brexit negotiations