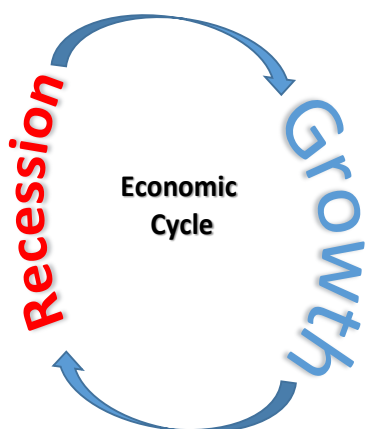


FixedIncomeQuarterly

MARKET PERSPECTIVES – FIXED INCOME SERVICES GROUP



The Economic Cycle

Investing over a lifetime is sure to involve various market conditions attributed to economic cycles. As the economy advances or declines, the financial markets reach intermittent stages which can create confusion for investors as they try to navigate through financial hurdles.

This quarterly report is aimed at digging a little deeper into the different economic stages in order to provide some history as to how often economic cycles turnover, how mild or severe they can be and most importantly, what it means for short and long term investment planning.

Recent events, which include the inversion of the 3 month Treasury Bill and 10 year Treasury note (the 3 month Bill's yield is higher than the 10 year Treasury's yield), have left many investors with questions. We will attempt to distinguish the facts from the hype and

provide a road map on how to position your fixed income allocation as the economic cycle progresses.

For many investors, fixed income marks the allocation of assets dedicated to long term investments with less concern about short term market movements. Investment discipline commands an understanding of the economic cycle in order to assist in sound investment decision-making.

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Reading the Treasury Yield Curve

For some time, the U.S. economy has been in an extraordinarily coveted state: high employment, low inflation and steady moderate growth. The growth of an economy is referred to as an expansionary period while a recession is denoted as a contractionary period, accordingly the 2 main stages of an economic cycle. The economic cycle will start with *expansion*, move to its' *peak*, and begin to *contract* until it dips to its' *trough* and *recovery* begins the process again.

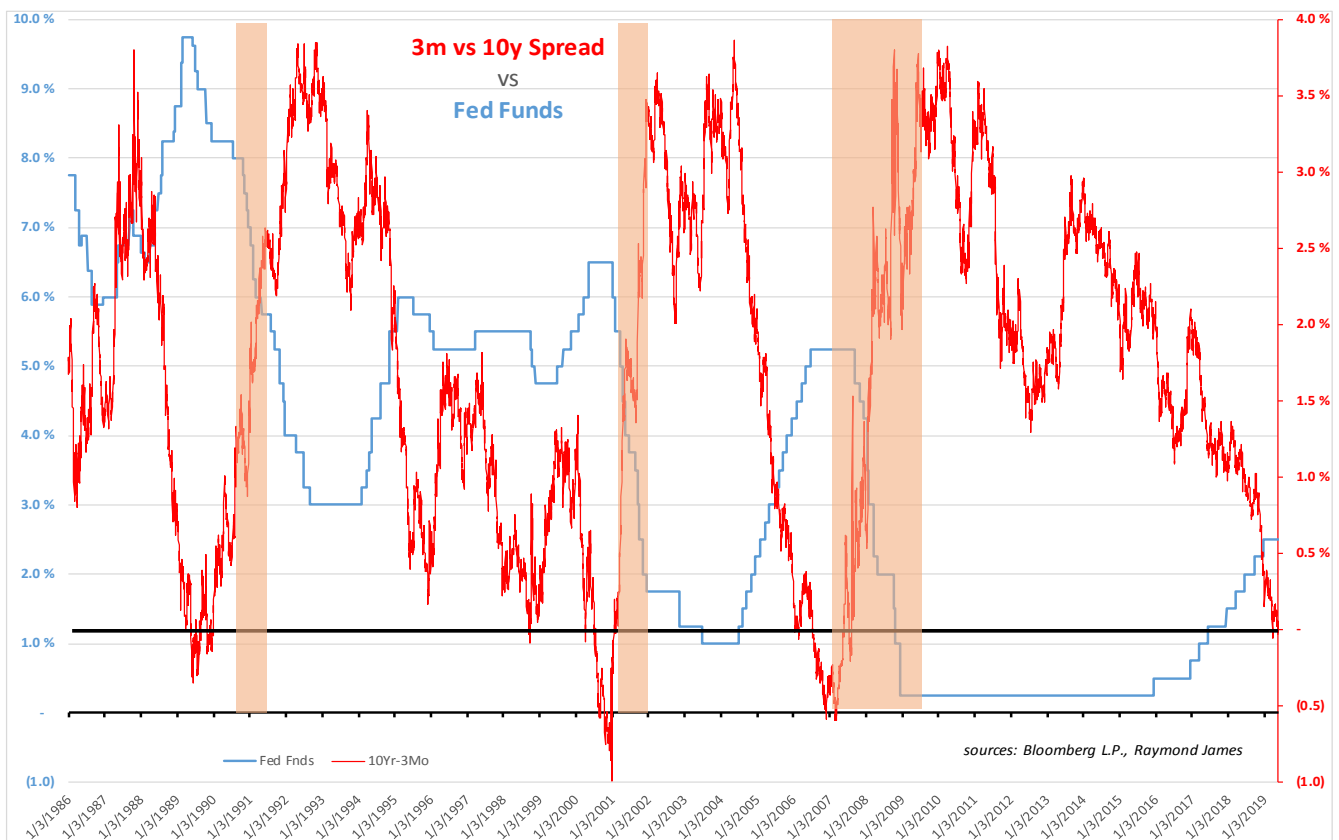
The U.S. economy appears to be somewhere between the peak and contraction period, which is sure to increase investor angst.

The following graph can be somewhat intimidating but it will be broken down on the following pages. The shaded rectangles represent the last 3 recessions. The red line reflects the 10 year Treasury yield relative to

the 3 month T-Bill. When the curve inverts, the 3 month T-Bill has a higher yield versus the 10 year Treasury. When this spread (red line) drops below the black horizontal line (0 on the right side scale), the curve is inverted. Note that each of the pictured recessionary periods is preceded by an inverted yield curve. Every recession since 1956 has been preceded by an inverted yield curve.

The blue line represents the upper bound Federal Funds Target Rate (Fed Funds). Fed Funds are determined by the Federal Open Market Committee (FOMC). Observe that 3 of the 4 inverted yield curves were preceded by a series of FOMC rate hikes (increases in the Fed Funds rate).

The graphed cycle reflects the typical sequence of events: Fed hikes... inverted curve... recession. ■

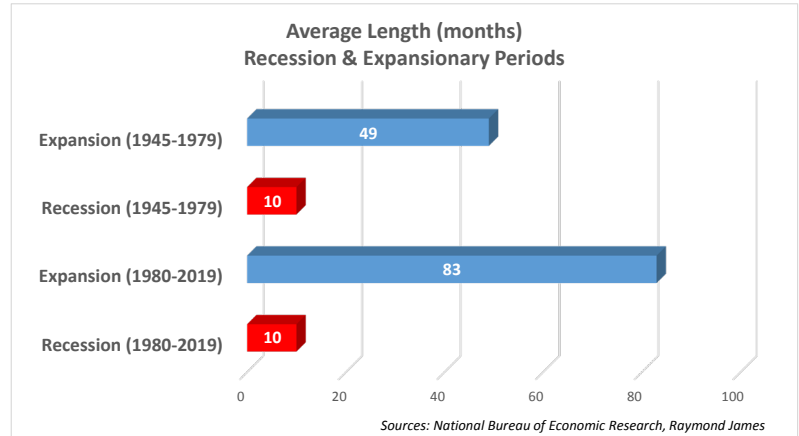


How Long Are the Economic Cycles & How Do the Financial Markets React

This is not an exact science and the past is not a guarantee of future results but the trends may provide an educated path as investment decisions are managed. The last 40 years (1980-2019) as well 35 years prior (1945—1979) reflect the same average that recessions last approximately 10 months.

Contrarily, the expansionary (growth) periods have been significantly longer over the last 30 years versus expansionary periods prior to 1980. They have averaged 83 months or just about 7 years since 1980, a 70% increase over 1945-1979 expansionary periods which averaged 49 months or just over 4 years.

We now approach the longest expansionary period in U.S. history at 10+ years and counting.



significant decline in economic activity spread across the economy, lasting more than a few months, normally visible in real GDP (*Gross Domestic Product*), real income, employment, industrial production and wholesale-retail sales.

Given the short average recession phases, it is difficult to rationalize timing the market with fixed income assets. Long term investment planning goes well beyond 10 months and speculative investing is often assigned to more volatile asset classes which provide opportunities for larger total return.

So where are we in this economic cycle? At the time of this article, the economy is 6 days into an inverted yield curve. Inverted yield curves that precede recessions have lasted around 6.5 to 10.5 months. History suggests that if this inversion persists, it is likely a warning of an upcoming recession.

The following chart provides a historic timeline of when and how long inverted curves last as well as the average timeline from the start of an inverted curve to a recession, which happens somewhere between 8 to 13 months later (inversion of 3 month T-Bills and 10 year Treasury notes).

Expansion Periods				Recessionary Periods			
Rank			Duration (in months)	Duration (in months)			Rank
9	Oct-1945	Nov-1948	37	10	Dec-1948	Sep-1949	4
7	Oct-1949	Jul-1953	45	9	Aug-1953	Apr-1954	6
8	May-1954	Aug-1957	39	6	Sep-1957	Mar-1958	8
11	Apr-1958	Apr-1960	24	9	May-1960	Jan-1961	6
3	Feb-1961	Dec-1969	106	10	Jan-1970	Oct-1970	4
10	Nov-1970	Nov-1973	36	15	Dec-1973	Feb-1975	3
6	Mar-1975	Jan-1980	58	4	Feb-1980	Jun-1980	11
12	Jul-1980	Jul-1981	12	16	Aug-1981	Nov-1982	2
4	Dec-1982	Jul-1990	92	6	Aug-1990	Feb-1991	8
2	Mar-1991	Mar-2001	120	6	Apr-2001	Oct-2001	8
5	Nov-2001	Dec-2007	73	17	Jan-2008	May-2009	1
1	Jun-2009	?	120+				

Sources: National Bureau of Economic Research, Raymond James

We have now approached the longest expansionary period in U.S. history at 10+ years and counting. Four of the longest expansionary periods occurred since 1982. The previous recession also marked the longest contractionary period in history.

There are many different definitions of a recession. The National Bureau of Economic Research defines it as: a

3m Bill vs 10y Treasury		# Days Inverted	Start of Inversion to Recession	Recession			Post Expansion Period
-----Inversion-----				-----Recession-----			
10/27/1980	9/8/1981	293/316	8mos	Jul-1981	Nov-1982	16mos	8yrs 4 mos
5/22/1989	12/28/1989	142/220	13mos	Jul-1990	Mar-1991	8 mos	10yrs
7/7/2000	1/22/2001	199/199	8mos	Mar-2001	Nov-2001	8mos	6yrs 1mo
7/17/2006	5/28/2007	313/315	16mos	Dec-2007	Jun-2009	18mos	10yrs+?
5/23/2019	?						

sources: Bloomberg L.P., Raymond James

What occurs before, during and after these cycles may provide insight for investors. Please remember, as fixed income investors, many of us should not be concerned with trying to time markets and providing this information is not intended to assist or promote timing the market with the portfolio's fixed income assets. Long term investment planning trumps short term market movements for fixed income planning.

High sustained demand for U.S. investment products persists and is a contributing factor in lowering U.S. interest rates. This is where some pundits argue that our current inverted curve "may be different this time" as good old supply and demand is at play. But be careful at convincing yourself that it is different this time. Troubled economies of much of the rest of the world along with the trade wars and other geopolitical issues all contribute to muting the U.S. economy, directly and indirectly which most assuredly can slow production and have negative ripple effects on domestic GDP. As of May 28th, Bloomberg Barclays Global Aggregate Negative Yielding Debt index puts the world's negatively yielding debt at \$10.8 trillion. Growing

negative debt is a sign of continued deteriorating global growth. Here in the U.S., the future implied probability of a Fed rate cut as reported by Bloomberg is 86% by the end of 2019.

During the last 4 inverted yield curves, 3 times stocks and bonds moved in the same direction, that is, as stocks dropped, so did the price of bonds (yields went up) and as stocks rose, bond prices also rallied. Half the time stocks rallied.

World Bond Markets				
	2-Year	5-Year	10-Year	30-Year
United States	1.843	1.858	2.111	2.609
Canada	1.327	1.289	1.429	1.731
France	-0.582	-0.393	0.150	1.158
Germany	-0.652	-0.573	-0.214	0.392
Greece	-	1.731	2.925	-
Ireland	-0.438	-0.294	0.334	1.316
Italy	0.548	1.773	2.518	3.450
Japan	-0.203	-0.234	-0.120	0.409
Netherlands	-0.589	-0.535	-0.034	0.431
Spain	-0.358	-0.057	0.613	1.710
Sweden	-0.573	-0.446	0.080	-
United Kingdom	0.575	0.628	0.870	1.454

** as of 06/06/2019*
Source: Bloomberg LP, Raymond James

What Happened to Stocks & Bonds During Inverted Curves				
		-----% Change-----		
		SPX Index	3mo Yld	10yr Yld
10/27/1980	9/8/1981	-7.4%	27.1%	28.5%
5/22/1989	12/28/1989	8.9%	-7.9%	-8.0%
7/7/2000	1/22/2001	-9.2%	-13.1%	-12.9%
7/17/2006	5/28/2007	22.8%	-4.1%	-4.1%
5/23/2019	?			

sources: Bloomberg L.P., Raymond James

What Happened to Stocks & Bonds During Recessions				
		-----% Change-----		
		SPX Index	3mo Yld	10yr Yld
Jul-1981	Nov-1982	4.4%	-46.7%	-24.8%
Jul-1990	Mar-1991	3.5%	-21.3%	-3.4%
Mar-2001	Nov-2001	-12.7%	-57.4%	-13.0%
Dec-2007	Jun-2009	-36.3%	-96.9%	-4.5%

sources: Bloomberg L.P., Raymond James

When the recession occurred 8 to 13 months later, changes to the yield curve were more defined. The 3 month T-Bill rallied significantly versus the 10 year Treasury. In all cases, yields dropped.

All Things Considered

Whether you believe in something or do not, whether something is true or is not... it might not matter if enough people believe it or enough people perceive it as truth.

You don't have look too hard to obtain differing opinions on the markets. After all, different points of view, various data interpretations and emotions can change the course or market's direction. Clearly the markets are not an exact science.

The latest media hype is the trade war between China and the U.S., the world's two largest economies. If you have a point of view, you can locate an article to back your view: anything from why the trade war is huge to the trade war hysterics. Reality is not necessarily the catalyst which moves markets. If enough people believe in something, if abundant models prompt a response and/or if the media endorses a notion, the markets can and will likely react.

In a 1996 televised speech, the then Federal Reserve Board chairman, Alan Greenspan, coined the phrase "irrational exuberance". At the time he referenced the known status of low inflation which implied the potential for higher prices of earning assets but warned that we may not be able to determine when asset values become "unduly escalated". The notion of factually based yet emotionally charged exaggeration in the markets has been going on forever: from Holland's 17th century Tulip Mania to the more recent Bitcoin Currency.

What seems lost in the trade war rundown is its underpinning basis. Many experts will argue that for years, China cheated and stole their way into an unfair advantage. Most of this centers around China's theft of intellectual property. Developing products and innovation can be an expensive endeavor. Corporations spend billions of dollars in research and development. Skipping right to production is an obvious advantage. According to the CIA World Factbook, China's GDP per capita is \$16,600 while the U.S. GDP per capita is \$59,500. You can pay a laborer in China much less due to their lower cost of living. The net result: producing a product is cheaper in China than in the U.S. for fair and

unfair reasons. The rationale behind the U.S. position: level the playing field.

Whether you believe in something or do not, whether something is true or is not... it might not matter if enough people believe it or enough people perceive it as truth.

The International Monetary Fund reports the U.S. GDP at ~\$20.5 trillion, roughly 53% larger than the world's second biggest GDP, China's ~\$13.4 trillion.

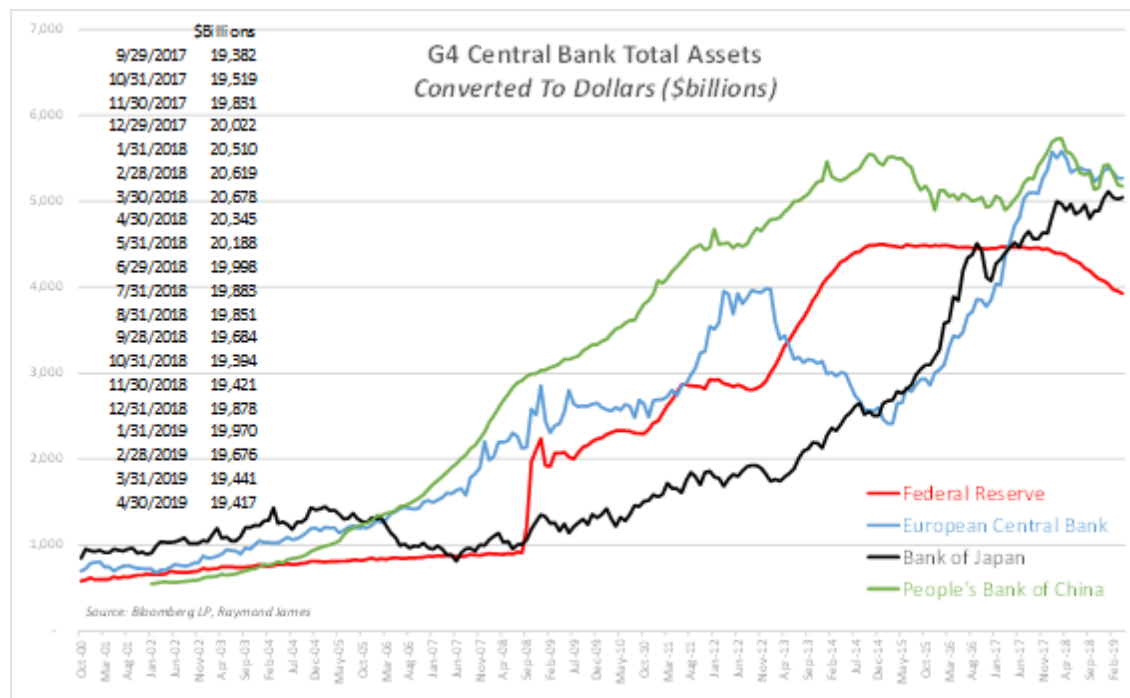
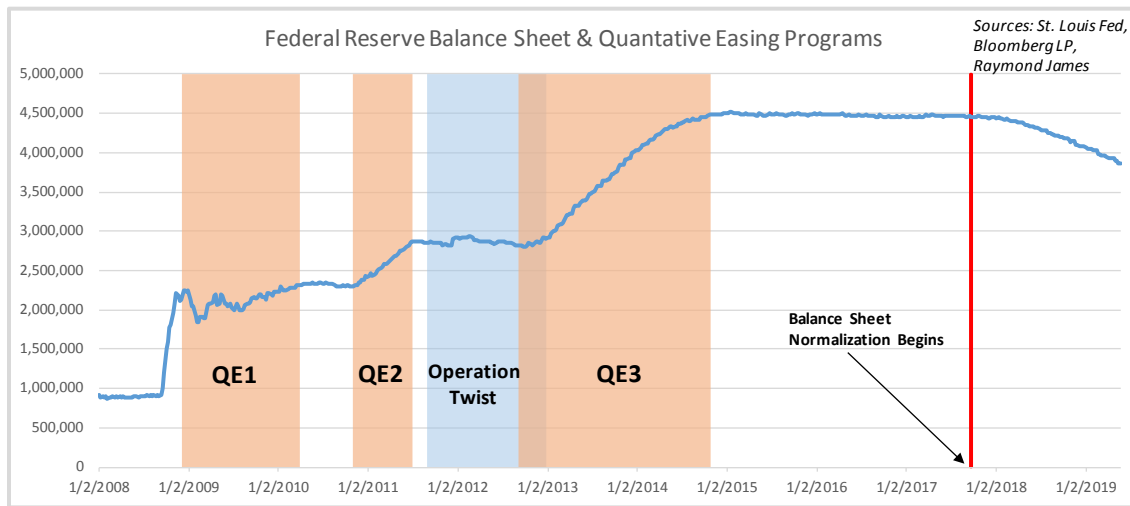
The U.S. imports about \$580 billion from China representing roughly 4.3% of China's GDP. China imports about \$179.2 billion from the U.S. which is 0.9% of U.S. GDP. The trade talks are disproportionately important. Imports from China represent around 18% of the U.S. total imports and many observers point out that most of these imports can be obtained from other countries, although potentially at a higher cost.

The facts cannot be isolated as we point out the potential exuberance behind market behavior. Some may argue that the markets were overly excited about the assumed trade compromise prematurely; therefore, any correction is not so surprising. The power of persuasion and market's exuberance has history on its side. What might be a fair assessment is that eventually, time brings rationality back to the markets. Although it is a much tougher process for equity evaluation and timing, fixed income requires discipline, not predictability.

A portfolio's allocation to fixed income should not be substituted for all the behavioral rationales discussed above. A trade war translates to a consumer tax. The free markets will eventually seek the level at which consumers support that tax. The current trade war in itself is not significant to the overall U.S. economy yet the exuberance will likely continue to effect the markets. Don't lose sight of long term fixed income investing or alter your fixed income portfolio based solely on this trade war hype.

There are some pundits that believe the current inversion is a “head fake”. Once the trade disagreements are settled, all will be good. The yield curve will return back from inversion and our “fake” recession warning will fade away. Be careful to dismiss all the signs: 1) A trade agreement *may not* be reached now or perhaps months or years from now. 2) A recession is a nationwide decline in economic activity. Our exports to China represent only 0.9% of our GDP. Even with perfect trade cooperation, is this enough to

reverse a slowing economy? 3) The central banks have created \$20 trillion of money, Bloomberg Barclays Global Aggregate Negative Yielding Debt Index shows that the world reached a record \$11.1 trillion in negative debt on May 29th. The growth jump-start strategies of creating money and/or easing access to money are failing miserably to improve growth in many European and Asian countries, while at the same time piling up an exorbitant amount of government debt.



Spread Product Opportunities

Treasuries have rallied significantly over the past 6 months from 11/28/18 through 5/28/19. The 2 year Treasury has gone from a 2.83% yield to a 2.13% yield while the 10 year Treasury moved from 3.06% to 2.27% yield. Identifying value opportunities presents a challenge for investors during economic conditions that drive interest rates lower.

It is imperative to remain disciplined with fixed income allocations despite the temptations to acquiesce to the market’s momentum trade or the herd mentality often accentuated in the media. Investors can benefit from well-organized ladder strategies, controlled duration bogies or credit analysis.

Focus often centers on the Treasury market and the Treasury yield curve. In reality, many fixed income investors apply spread products such as municipal or corporate bonds to their strategies. Although municipal and corporate yields have dropped along with Treasury yields, their spreads remain viable. Unlike the Treasury yield curve, the municipal and corporate curves have maintained their positive slopes and therefore deliver opportunities.

Kicker Municipal Bonds: 2 year AAA municipal yields have moved from 2.00% to 1.44% (MMD scale) from 11/28/18 to 5/28/19. In the same time frame, the 10 year has gone from 2.60% to 1.72%. Investors looking to pick up yield can do so by buying *kicker municipal bonds*, which characteristically feature high coupons (generally 4.00%-5.00% or higher) coupled with longer maturities, but call dates within 10 years. The appeal is their often higher yields to both the call and the maturity dates. The yield to the call is often better than bonds maturing on that call date. If the bond is not called, the bond’s high coupon will likely provide a well above market yield to maturity.

AMT Municipal Bonds:

Another way to pick up yield in the municipal bond market is with bonds subject to the Alternative Minimum Tax (AMT)*. In 2017, ~5 million Americans paid the AMT tax. The newly implemented Tax Cuts and Jobs Act of 2018 is estimated to reduce the number of Americans affected by the AMT from 5 million to around 200,000. Bonds subject to AMT typically yield more than similarly rated

non-AMT bonds of the same maturity and credit quality.

Including AMT bonds in your bond search may dramatically boost yield with little or no difference in other search criteria.

Criticized Municipal States: Neglected opportunities may be waiting with municipal bonds from states that have isolated issues and/or often overblown criticisms that spread guilt by association upon solid in-state credits. For example, there are many exceptional credits within the state of Illinois, but they are overshadowed by the very real political and budgetary issues that plague the state and in particular the city of Chicago. The repercussions of these adverse credits spread to other state issued municipals which often times stand independent from the real issues associated elsewhere. As a result, these credits may trade cheap relative to similar issues outside of the state.

Investment Grade Corporate Spreads: The majority of investment grade corporate bond supply rests in the BBB credit space. Spreads in A rated credits are relatively tight in part because of the lesser supply and by comparison BBB corporate bonds provide greater value. Within the BBB corporate bond offerings, specific industries may trade wider. For example, there are currently wider spreads (greater value) in certain oil and gas and energy names.

Premium Corporate Bonds: Premium pricing is often misunderstood and detailed articles explaining the math are available upon request. In short, investors are not paying a penalty but probably benefitting from comparatively higher yields. By example, the following AT&T bonds demonstrate relative value differences:

Description	CUSIP	Moody's Rating	S&P Rating	Coupon	Maturity	Callable	Price	YTW	YTM
AT&T Inc	00206RCT7	Baa 2	BBB	4.125%	2/17/2026	11/17/2025 @ 100	104.320	3.374%	3.398%
AT&T Inc	00206RGH9	Baa 2	BBB	7.125%	3/15/2026	N/A	121.541	3.524%	3.524%

Source: TradeWeb Direct LLC. As of 5/31/2019

both offered at a premium (\$104 & \$121), relatively close maturities yet 15 bp yield difference:

Stay disciplined. Maintain dedicated allocations to the appropriate investment classes. Within fixed income, utilize these market nuances to optimize your returns and better preserve your principal.

* Interest is not subject to federal income tax but may be subject to AMT, state or local taxes.

Defined Cash Flow, Predictable Income, Return of Face Value... (and Total Return?)

There is a reason bond allocations with a buy-and-hold strategy are the cornerstone of many investors' long-term strategy. Bonds provide stable cash flow and income regardless of interest rate movements or other market influences. Although bond prices react to interest rate movements, they are muted over time as a bond approaches its maturity date. Barring default, an individual bond is redeemed at its face value.

Many media endorsed financial headlines focus on short-term price movement and total return strategies based on holding either packaged products or index-based investments. A general theme asserts that if interest rates rise, it will lead to negative fixed income returns. There are a two drawbacks with these narratives: 1) they are focused on short-term price movement, not the long-term strategy, and 2) they ignore the cash flow, which is the primary reason that most investors purchase fixed income and a large part of the total return generated when holdings bonds.

To point out the shortcomings in thinking bonds will perform poorly if/when interest rates rise, the chart below highlights the projected performance over a 5 year period of an intermediate-term corporate bond ladder in three different interest rate scenarios: the yield curve falling by 1%, no change in the yield curve, and the yield curve rising by 1%. Regardless of the scenario, this portfolio is projected to perform quite well. Most of the commentary focuses on the top line of this chart (Price Return), completely ignoring other important features which paint a very different picture.

Even in the “worst” of these three scenarios under the interest rates “Up 1%” column, this portfolio, despite its negative price return, has a projected holding period return of **positive** 17.5%. This is hardly the “bonds will get crushed” scenario that is often portrayed for a rising rate environment.

The recent bond price rally has provided many portfolios with significant price gains; however, even though it is an additional plus, buy-and-hold investors should be content to focus on the intended benefits of defined cash flow, predictable income and return of face value... none of which will vary when held to maturity. Price appreciation and/or total return becomes an additional benefit. All three of these potential scenarios highlight the positive stability individual bonds can add as part of many investors' long-term financial plans. ■

	Down 1%	No Change	Up 1%
Price Return	15,031	(9,461)	(33,990)
Interest on Reinvested Cash Flow	+	+	+
	11,841	16,870	22,042
Coupon Return	+	+	+
	187,499	187,499	187,499
	=	=	=
Total Return	214,371	194,908	175,551
Holding Period Return	21.37%	19.43%	17.5%

Horizon: 5/24/19 to 5/24/24. Assumes a parallel shift in the Treasury curve. Numbers are forecasted estimates and not a guarantee of actual results. This example is for illustrative purposes only. Actual investor results will vary.

Portfolio Statistics

Total Market Value: 1,002,612	Duration: 6.49
Face Value: 975,000	Yield to Maturity: 3.55%
Avg. Coupon: 3.85%	Yield to Worst: 3.54%
Avg. Maturity: 7.84 yrs	Avg. Market Price: 102.059

Sources: TradeWeb Direct LLC, Raymond James

Where Is The Value?

<u>Municipals (AAA)</u>				<u>Corporate A</u>			
Year	Yield	Add'l Yld	Capture	Year	Yield	Add'l Yld	Capture
1	1.39		60%	1	2.58		67%
2	1.40	0.01	60%	2	2.58	0.00	67%
3	1.40	0.01	61%	3	2.59	0.01	67%
4	1.41	0.01	61%	4	2.66	0.07	69%
5	1.43	0.02	62%	5	2.75	0.09	71%
6	1.45	0.02	63%	6	2.85	0.11	74%
7	1.49	0.04	64%	7	2.96	0.11	76%
8	1.53	0.04	66%	8	3.06	0.10	79%
9	1.58	0.05	68%	9	3.16	0.09	81%
10	1.64	0.06	71%	10	3.24	0.09	84%
11	1.73	0.09	75%	11	3.32	0.08	86%
12	1.80	0.08	78%	12	3.41	0.08	88%
13	1.86	0.06	81%	13	3.49	0.08	90%
14	1.92	0.06	83%	14	3.57	0.08	92%
15	1.95	0.02	84%	15	3.66	0.08	94%
16	2.00	0.05	86%	16	3.70	0.05	96%
17	2.04	0.04	88%	17	3.75	0.05	97%
18	2.08	0.04	90%	18	3.80	0.05	98%
19	2.11	0.03	91%	19	3.85	0.05	99%
20	2.14	0.03	93%	20	3.90	0.05	101%
21	2.18	0.04	94%	21	3.90	0.00	101%
22	2.21	0.02	95%	22	3.90	0.00	101%
23	2.23	0.02	96%	23	3.90	0.00	101%
24	2.25	0.02	97%	24	3.89	0.00	100%
25	2.26	0.01	98%	25	3.89	0.00	100%
26	2.27	0.01	98%	26	3.89	0.00	100%
27	2.27	0.01	98%	27	3.88	0.00	100%
28	2.29	0.01	99%	28	3.88	0.00	100%
29	2.30	0.01	99%	29	3.88	0.00	100%
30	2.31	0.01	100%	30	3.88	0.00	100%

As of: 5/31/2019 Source: Bloomberg LP, Raymond James

Know What You Can Own

Many wealthy investors choose individual bonds to preserve their wealth. These laddered strategies can provide defined cash flows, steady income and the flexibility afforded by owning bonds with stated maturities. The table below summarizes a few illustrative portfolios to give investors an idea of current yields.

	Portfolio Statistics					Credit Quality			
	Maturity	Avg.	Duration	Yield to		AAA	AA	A	BBB
	Range	Maturity		Worst	TEY*				
Municipal Ladders	1 to 5	3	2.80	1.50%	2.53%	20%	60%	15%	5%
	1 to 10	5.5	4.87	1.60%	2.70%	20%	60%	15%	5%
	1 to 15	8	6.77	1.76%	2.96%	20%	60%	15%	5%
	5 to 10	7.5	6.40	1.68%	2.84%	20%	60%	15%	5%
	5 to 15	10	8.17	1.85%	3.13%	20%	60%	15%	5%
	5 to 20	12.5	9.78	1.99%	3.37%	20%	60%	15%	5%
	10 to 20	15	11.27	2.15%	3.63%	20%	60%	15%	5%
Corporate Ladders	1 to 5	3	2.76	2.88%				25%	75%
	1 to 10	5.5	4.79	3.17%				25%	75%
	1 to 15	8	6.62	3.43%				25%	75%
	5 to 10	7.5	6.27	3.39%				25%	75%
	5 to 15	10	7.93	3.65%				25%	75%
CD Ladders	1 to 2	1.5	1.41	2.48%					
	1 to 3	2	1.88	2.50%					
	1 to 4	2.5	2.32	2.53%					
	1 to 5	3	2.77	2.56%					

Sources: Raymond James, Bloomberg LP, MMD; as of 5/31/19

*TEY is based on the top federal tax bracket (37%) plus the Medicare surtax (3.8%)

Yields shown are illustrative only, calculated using the arithmetic means based on the maturity range combined with the credit quality percentages, and are not inclusive of sales credit.



- ✓ Identify acceptable risk factors.
- ✓ Define desired income.
- ✓ Create required cash flow.
- ✓ Identify requisite redemption period.
- ✓ Create needed liquidity.
- ✓ Isolate personal biases.
- ✓ Use appropriate asset mix.
- ✓ Diversify.
- ✓ Rebalance when applicable.

Diversification and strategic asset allocation do not ensure a profit or protect against a loss. Investments are subject to market risk, including the possible loss of principal. The process of rebalancing may carry tax consequences.

[Additional Fixed Income and Strategy Resources](#)

Doug Drabik - Sr. Fixed Income Strategist

Drew O’Neil - Fixed Income Strategist

Rob Tayloe - Fixed Income Strategist

The Fixed Income Strategy Group provides market commentary, portfolio analysis and strategy to Raymond James advisors for the benefit of their clients. We are part of the larger 13 person Fixed Income Services Group (FISG) within Raymond James’ Fixed Income Capital Markets Group of more than 475 fixed income professionals including trading and public finance experts in 41 nationwide locations. This publication does not constitute Fixed Income research, but rather it represents commentary from a trading perspective.

RaymondJames.com is a vast resource for those seeking fixed income market commentaries, strategies, education materials and index/yield data. Please visit our public webpage at <http://raymondjames.com/fixin.htm> for popular resources which include:

- [Weekly Bond Market Commentary](#)
- [Monthly Fixed Income Perspectives \(PDF\)](#)
- [Fixed Income Market Commentary by Kevin Giddis](#)
- [Fixed Income Weekly Primer \(PDF\)](#)
- [Municipal Bond Investor Weekly \(PDF\)](#)
- [Fixed Income Quarterly \(PDF\)](#)
- [Weekly Index Monitor \(PDF\)](#)
- [Weekly Interest Rate Monitor \(PDF\)](#)

Investment Types/Expertise Include:

- Treasuries/Agencies
- Brokered CDs
- Corporate bonds
- MBS/CMOs
- Tax-exempt municipals
- Taxable municipal bonds
- Preferred securities

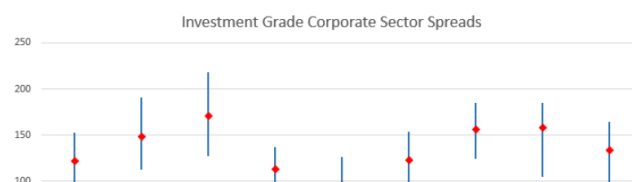


The State of Corporate Spreads

By Drew O’Neil
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A popular discussion topic towards the end of 2018 and into 2019 has revolved around the corporate bond market and trying to determine how much risk is in this asset class is at the moment. Historically, holding investment grade corporate bonds has been a relatively safe investment, with an average default rate over a 5-year period of less than 1% (just 0.91% from 1970-2017, per Moody’s). Some commentators are speculating that due to a combination of factors (increased debts levels, the sheer amount of BBB rated bonds, the potential for a recession, potentially increasing refinancing costs, etc.) that corporate bonds could be the next black eye experienced by the market. But what is the market actually telling us?

One of the best indicators of how much risk the market perceives there to be in a corporate bond is its spread. A spread is the difference between a bond’s yield and the yield on its benchmark (i.e. corresponding Treasury). The wider (higher) the spread, the more yield the market is demanding for this bond versus a corresponding security with little perceived credit risk. Simply put, the wider the spread, the riskier the bond. The graph below plots the range of spreads for corporate sectors over the past year (blue line) along with the current spread of each sector (red diamond). If all of the red diamonds were at the very top of the blue lines, this would be telling us that the market thinks that corporate bonds are the riskiest they have been over the past year. But as you can see, current spread levels are all near the past year’s mid-range point.



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