

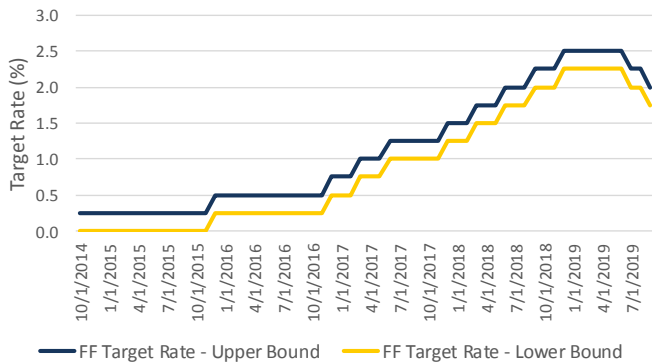
Weekly Briefing

SKYView: FOMC Meeting Implications

On September 18, 2019, the Fed voted to cut rates by 25 bps, the second such move in 2019. In his speech that followed a two-day meeting of the Board of Governors, Fed Chairman Jerome Powell was sanguine about the US economy, but noted that a rate cut was warranted to “provide insurance against ongoing risks.”¹ While the cut was widely anticipated, Powell once again declined to commit to the more extensive and sustained path to lowering interest rates that the Trump Administration has long coveted. Importantly, the Fed also boosted its GDP growth expectation to 2.2% in 2019, up from a 2.1% forecast in June. In this *Weekly Briefing*, we examine the historical relationship between GDP growth and asset class returns in order to identify the optimal environment for US high yield bonds.

Fed Funds Target Rate Decreased by 25 bps

monthly data, trailing 5 years



Source: SKY Harbor, Federal Reserve, Bloomberg

Fed Commentary September '19

Quotes from Jerome Powell's Speech on Sep 18, 2019

"...we took this step to help keep the US economy strong in the face of some notable developments, and to provide insurance against ongoing risks."

"...weakness in global growth and trade policy uncertainty have weighed on the economy and pose ongoing risks."

"...the median expectation for real GDP growth remains near 2% this year and next, before edging down toward its estimated longer run value."

Amidst dissent (the most since December '14) among committee members regarding the need for future rate cuts, the FOMC raised 2019 GDP growth expectations by 10 basis points. Additionally, members reaffirmed 2020 GDP growth expectations of 2.0%, raised 2021 estimates by 10 bps, and introduced their 2022 GDP growth estimate of 1.8%. These growth projections, which appear modestly higher than Wall Street economist expectations in 2020 and beyond, appear favorable for the US high yield market.

Consensus US GDP Growth

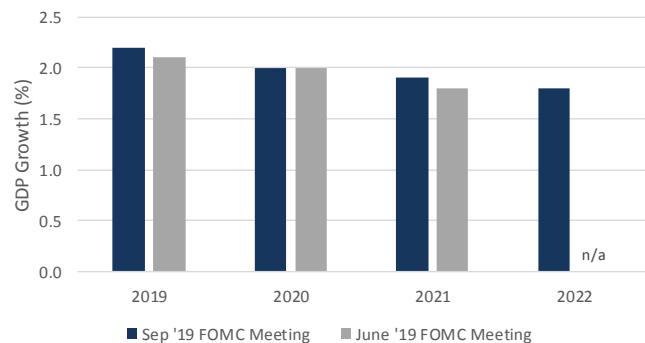
Bloomberg Consensus Expectations (%)

Q2'19 A	Q3'19 E	Q4'19 E	Q1'20 E	Q2'20 E	Q3'20 E	Q4'20 E	Q1'21 E
2.3	2.0	2.2	1.8	1.7	1.7	1.7	1.8
2018 A	2019 E	2020 E	2021 E				
2.9	2.3	1.7	1.8				

Source: SKY Harbor, Federal Reserve, Bloomberg

Federal Reserve US GDP Growth Expectations

June '19 & Sep '19 Estimates



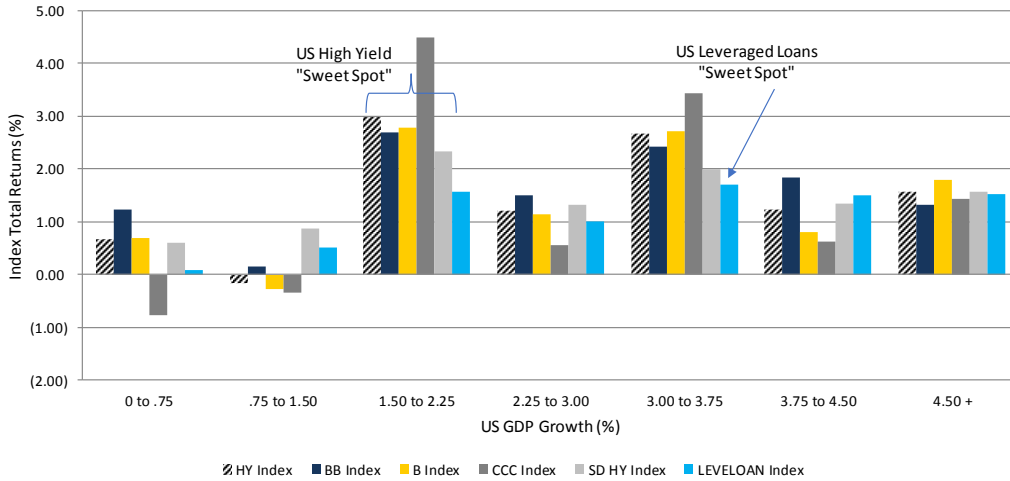
Comparing quarterly US GDP growth and high yield return datapoints over the last twenty years, we find that the relationship between the two factors is not linear in nature – rather, the “sweet spot” for US high yield bond performance resides within the middle of the economic growth spectrum. Note that our analysis excludes the six negative GDP growth quarters from the sample set (high yield returns during these periods are highly volatile and bifurcated, encompassing significantly negative returns as we enter recessions, and significantly positive returns in anticipation of the end of a recession) and groups quarterly GDP growth into 75 bps range buckets. Our findings, which are presented below, demonstrate that **high yield total returns tend to be highest when GDP growth is in the range of +1.50% and +2.25%, an optimal range for the broad index, the short duration index, and all individual ratings classes.**

¹ <https://www.rev.com/blog/jerome-powell-september-fed-speech-transcript-fed-cuts-rates-for-2nd-time-in-2019>

Average Quarterly Returns in Various GDP Growth Environments
Q1'97 to Q2'19

GDP Growth (%)	Occurrences (#)	High Yield Bonds						Lev. Loans	Equities	
		US HY Index (HOA0)	BB Index (HOA1)	BB / B Index (HOA4)	B Index (HOA2)	CCC Index (HOA3)	Short Dur. US HY Index (JVC4)	CS Lev Loan Index (LEVLOAN)	S&P 500 Index (SPX)	Russell 2000 Index (RTY)
0 to .75	2	0.67	1.22	0.94	0.70	(0.76)	0.59	0.08	(2.00)	0.15
.75 to 1.50	11	(0.16)	0.15	(0.11)	(0.28)	(0.34)	0.87	0.52	(1.55)	0.17
1.50 to 2.25	19	2.99	2.68	2.74	2.78	4.49	2.32	1.56	4.13	4.22
2.25 to 3.00	23	1.21	1.49	1.29	1.15	0.55	1.32	1.01	1.08	0.28
3.00 to 3.75	11	2.68	2.43	2.56	2.70	3.42	1.99	1.70	3.67	5.89
3.75 to 4.50	9	1.24	1.82	1.23	0.81	0.62	1.35	1.49	3.40	1.94
4.50 +	9	1.57	1.32	1.58	1.79	1.43	1.56	1.52	7.04	6.06

Quarterly Index Returns vs. US GDP Growth



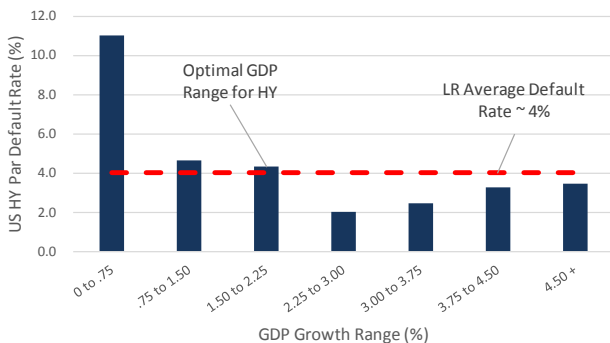
Source: SKY Harbor, ICE BofAML Indices, Credit Suisse, Bloomberg, Bureau of Economic Analysis

Furthermore, results show that US high yield bond performance will often diminish in exceptionally low (below 1.50% seems to represent a “floor”) and high (over 3.75% seems to represent a “ceiling”) GDP growth environments.

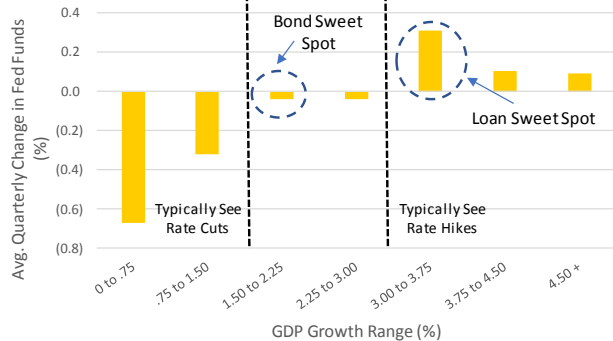
While various macro indicators and fund flows in and out of high yield have an impact on the asset class, the primary driver of returns has historically been underlying fundamental strength. Given a focus on avoiding principal losses, the high yield default rate is of the utmost concern for investors, and has been a key driver of performance. Using quarterly data since 1998, we find that the average quarterly default rate (par-weighted basis) has been approximately 4%. If we then organize results by our GDP buckets, **we find that defaults begin to rise to above-average levels when GDP growth falls below 1.5%, lending credence to the “floor” previously calculated in our optimal range.**

The ceiling, by contrast, would appear a bit more counter-intuitive at first glance given expectations that riskier asset classes perform well when economic growth is at its peak. In our view, this dynamic is largely explained by two factors. First, high yield competes for asset allocation dollars with all other investing options, which can often lead to fund flows influencing periodic total returns. As demonstrated in the table above, equity products (in this analysis, we used the S&P 500 and Russell 2000 Indices) have typically outperformed in high-growth economic environments. As such, investors’ anticipation of superior returns may influence fund flows out of the high yield asset class and into equities at sufficiently high levels of GDP growth (perhaps above 3.75%). Second, higher levels of GDP growth often coincide with higher interest rates, with the Fed more inclined to hike when GDP growth climbs above 3%. Eventually, elevated rates can begin to diminish the relative attractiveness of the high yield asset class as the spread cushion compresses. Ultimately, **we find that higher rates and fund outflows that tend to weaken high yield returns typically occur when GDP growth rises above 3.75%, lending credence to the “ceiling” previously calculated in our optimal range.**

Defaults Accelerate in Very Low GDP Environments
quarterly data since 1998



Changes in Federal Funds Target Rate by GDP Growth Environment
quarterly data since 1998



Source: SKY Harbor, BofA Merrill Lynch, Credit Suisse, Bloomberg, Bureau of Economic Analysis

In conclusion, we find that US high yield bond indices tend to perform the best in slow to moderate US GDP growth environments (1.50% to 2.25%). In these periods, the economy is strong enough to prevent an uptick in default rates, and not so strong as to compel fund outflows (into equities) or Fed rate hikes (which can eventually hinder returns as spread cushions diminish). Furthermore, we find it encouraging that the Fed's recently updated projection for GDP growth from 2019 through 2022 falls into the historical "sweet spot" for US high yield bond returns and remains below the corresponding range for US leveraged loan and equity peak performance.

On the Calendar

Occurred

Event	Release Date	Period	Survey	Actual	Prior
Empire Manufacturing	16-Sep-19	Sep	4.0	2.0	4.8
Industrial Production MoM	17-Sep-19	Aug	0.2%	0.6%	-0.2%
Housing Starts	18-Sep-19	Aug	1250k	1364k	1191k

Source: SKY Harbor, Bloomberg

Upcoming

Event	Release Date	Period	Survey	Actual	Prior
Markit US Manufacturing PMI	23-Sep-19	Sep	50.3		50.3
Conf. Bd. Consumer Confidence	24-Sep-19	Sep	134.0		135.1
GDP Annualized QoQ	26-Sep-19	2Q	2.0%		2.0%

Recommended Reading

Samson, Adam and Rennison, Joe (2019, September 19). Federal Reserve Intervenes for Third Day to Ease Market Strains. *Financial Times* (subs. req.), Retrieved from <https://www.ft.com/content/8f3d0374-dadc-11e9-8f9b-77216ebe1f17>

McGregor, Sarah and Leonard, Jenny (2019, September 19). US-China Talks Resume, With Chinese Officials Set to Visit US Farm Belt. *Bloomberg*, Retrieved from <https://www.bloomberg.com/news/articles/2019-09-19/u-s-china-talks-resume-as-chinese-officials-to-visit-farm-belt?srnd=premium>

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