

SKY Harbor Weekly Briefing

In the Zone

In our most recent video presentation, we noted that high yield bonds typically perform best in low to moderate GDP growth rate environments, similar to what the Fed expects over the next few years. Given the counterintuitive nature of our findings, we thought it appropriate to explain this analysis more fully, and to do so while identifying additional portfolio positioning preferences aimed at taking advantage of the economic outlook. In this *Weekly Briefing*, we find that a barbell approach to credit risk, along with an overweighting of duration within the 2 to 4 unit range, is perhaps best suited for the expected market backdrop in the coming years.

A GDP Growth “Sweet Spot”

There are 106 quarters between the start of 1997 and Q2'23, and we removed 18 from our dataset, as they represent either ultra-high or negative GDP growth rate environments (asset class performance during these periods is bifurcated, encompassing significantly negative returns as we enter recessions, and significantly positive returns in anticipation of an end to a recession). In an effort to increase the statistical significance of our results, we also grouped GDP growth rates into buckets, each encompassing a range of 75 basis points. The chart below (left side) is a summary of our findings – **broad market¹ and short duration high yield² total returns tend to be highest when GDP growth is in the range of +1.50% and +2.25%**. This range falls below the optimal zone for the ICE BofA US Corporate Index (our investment grade credit proxy) and the S&P 500 Index (our equity proxy), and lines up well with the Fed’s estimate of real GDP growth rates between now and the end of 2026.

US High Yield Performs Best in Modest GDP Growth Environments

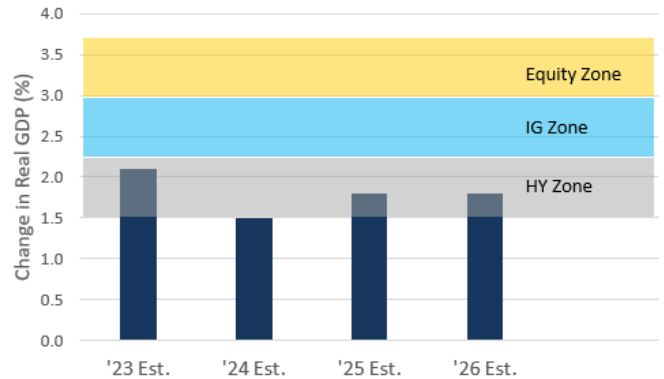
quarterly data since 1997

GDP Growth Rate (%)	Average Quarterly Return			
	US High Yield Index (H0A0)	US Short Dur. HY Index (JVC4)	US Inv. Grade Index (COA0)	S&P 500 Index (SPX)
0 to .75	0.4	0.6	0.4	0.2
.75 to 1.50	(1.7)	(0.5)	0.2	(3.6)
1.50 to 2.25	2.2	2.0	1.2	1.6
2.25 to 3.00	1.3	1.2	1.8	3.1
3.00 to 3.75	1.7	1.5	0.0	3.3
3.75 to 4.50	1.1	1.2	1.6	2.7

← Fed Est.

Fed's GDP Growth Projections Fall Into High Yield's "Sweet Spot"

September Summary of Economic Projections



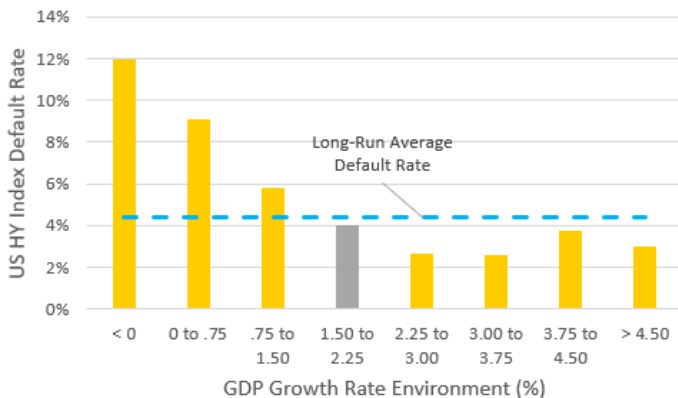
Source: SKY Harbor, ICE Data Indices, Bureau of Economic Analysis, Federal Reserve

Not Too Hot, Not Too Cold

While a number of macroeconomic indicators can influence high yield index returns, the primary driver is risk associated with principal loss. Using historical data over the same timeframe, we find that **the high yield bond market default rate tends to come in lower than the long-run annual average until GDP growth falls below 1.5%**, effectively explaining the floor of our optimal output growth range. Conversely, higher GDP growth rate environments often entice investors to seek greater upside return potential, which can lead to flows out of high yield bonds and into equities. Additionally, higher GDP growth environments often lead to monetary policy tightening, which can reduce the attractiveness of HY index yields relative to Treasuries as the Fed begins to hike and spread cushions compress. As demonstrated below (right side), **GDP growth above 2.25% tends to push the HY carry advantage below a longer-run average of ~ 500 bps**, helping to explain the ceiling of our optimal growth range.

Defaults Stay Below Average Until Growth Falls Below 1.5%

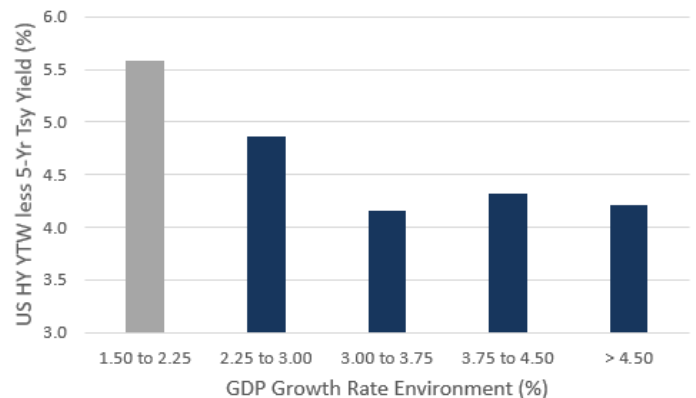
quarterly data since 1997



Source: SKY Harbor, ICE Data Indices, Bureau of Economic Analysis, BofA Merrill Lynch, Moody's

HY Carry Advantage Erodes in High GDP Growth Environments

quarterly data since 1997



¹ ICE BofA US High Yield Index, ticker H0A0

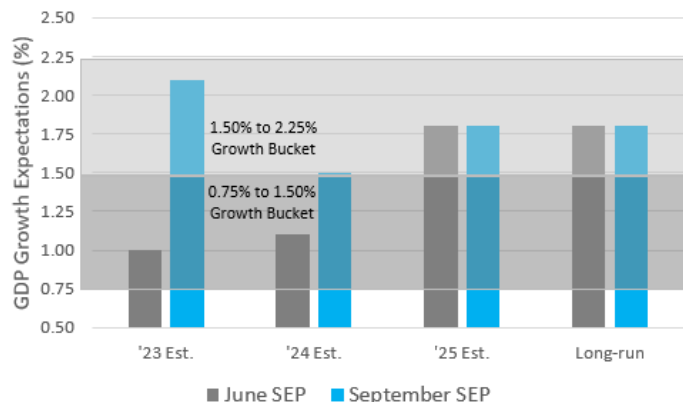
² ICE BofA 1-5 Year BB-B US Cash Pay High Yield Constrained Index, ticker JVC4

A Divergence of Opinion

Though the Fed’s GDP growth expectations – as outlined in the September iteration of their Summary of Economic Projections – fall within the high yield “sweet spot” for each year through 2026, not all economists agree. As outlined below, **Bloomberg consensus expectations call for 2024 GDP growth to fall into the lower 0.75% to 1.50% bucket**, and remains more closely aligned with the Fed’s view in June. Unfortunately, the differences between these adjacent buckets can be meaningful – recall that in our prior analysis, we found that high yield default rates may start to exceed long-run averages once GDP growth falls below the 1.5% growth bucket threshold.

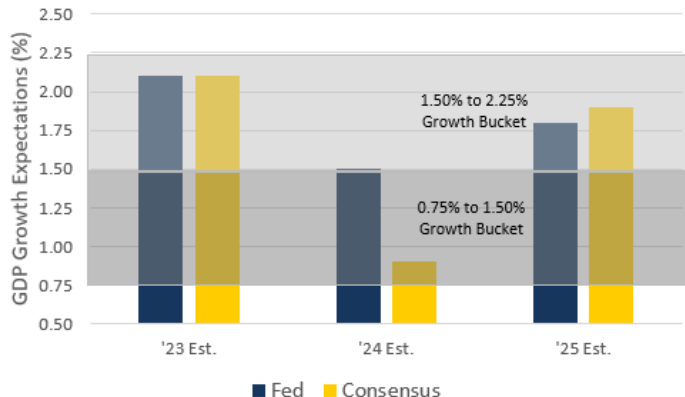
Fed Expectations Recently Moved Up

June vs. September Summary of Economic Projections



Fed Now More Optimistic Than Consensus Expectations

September SEP & Bloomberg Consensus as of October 4, 2022



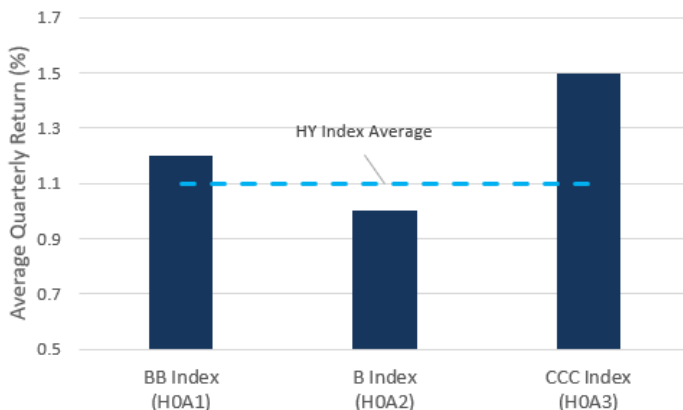
Source: SKY Harbor, Federal Reserve, Bureau of Economic Analysis, Bloomberg

Positioning Preferences

Taking the viewpoint of both the Fed and consensus expectations into consideration, we next calculated average quarterly returns by rating and duration bucket, limited to periods in which GDP growth was in the 0.75% to 2.25% range (~ 35% of all observations). As demonstrated below, **a barbell approach to credit risk taking has, on average, provided the best setup for the output growth environment expected in the coming year**. However, given sensitivity to CCC-rated bond returns to default expectations, we acknowledge that this bucket poses the greatest risk of underperforming expectations for each incremental leg lower in GDP growth. At the same time, note that **low to moderate duration (0-2, 2-4 DTW buckets) has historically outperformed under the same GDP growth rate parameters**, bolstering a preference for shorter bonds put forth in our recent *Weekly Briefing* entitled “[Notes from the Road – Miami Edition](#),” though the thesis for that work was based on the shape of the corporate credit curve.

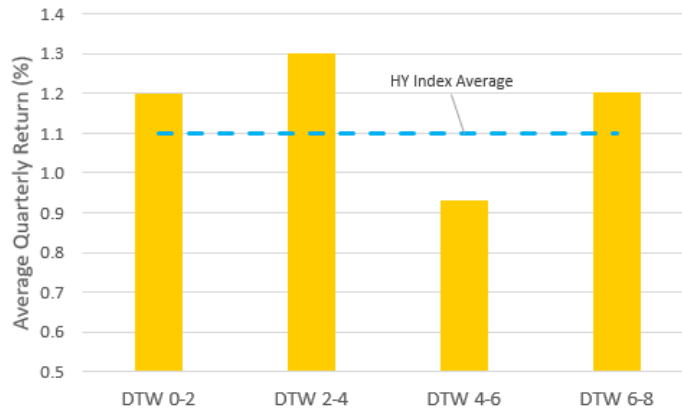
A Barbell Approach May Prove Best Setup in Base Case...

.75% to 2.25% GDP Growth Quarters



...Along With Short / Moderate Duration

.75% to 2.25% GDP Growth Quarters



Source: SKY Harbor, Bureau of Economic Analysis, ICE Data Indices

Slow and Steady Wins the Race

In conclusion, we do not view the Fed’s forecast for average GDP growth of ~1.8% (30 bps below the trailing eighty quarter average) through 2026 to be concerning. Rather, this level of output has historically produced the most attractive average returns for the high yield bond market – strong enough to limit defaults, but not so strong that monetary policy tightening and/or fund flows disadvantage the asset class. Additionally, we remain comfortable with our lower duration / higher-quality tilt, though again acknowledge value in keeping some exposure to the more speculative parts of the market.

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