INSIGHTS & PERSPECTIVES

from MacKay Shields High Yield Team

FEBRUARY 2023

High Yield Market Update 4Q2022

From the outset, 2022 was a year to forget. The US high yield market started selling off in early January 2022 and didn't let up until October. The ICE BofA US High Yield Index posted three consecutive negative quarters—the longest quarterly losing streak since 1990!

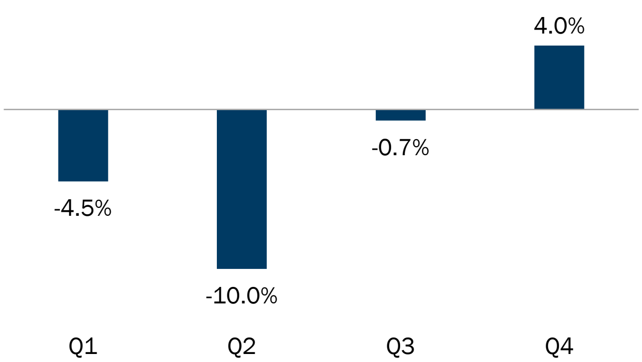
Market Outlook

A fourth quarter rebound of 4.0% culled high yield's annual loss to 11.2%. Nevertheless, 2022 represented the ICE BofA US High Yield Index's second worst annual performance in history, behind only 2008, and only its fourth losing year in the past twenty.

Investors can take little solace that high yield outperformed both equities and investment grade bonds. In 2022 the S&P 500 and the ICE BofA US Corporate Inde x shed 18.1% and 15.5%, respectively. Leveraged loans were the big winners - the Morningstar LSTA US Leveraged Loan Index lost just 0.6%.

High yield is off to a scorching start in 2023, gaining 3.9% through January 13 as measured by the ICE BofA US High Yield Index. Longer term market performance will depend on the two principal drivers for high yield bonds—the path of interest rates and credit trends. We see a wide range of outcomes for both, and therefore for the high yield market in 2023.

FIGURE 1: 2022 ICE BOFA US HY INDEX QUARTERLY RETURNS



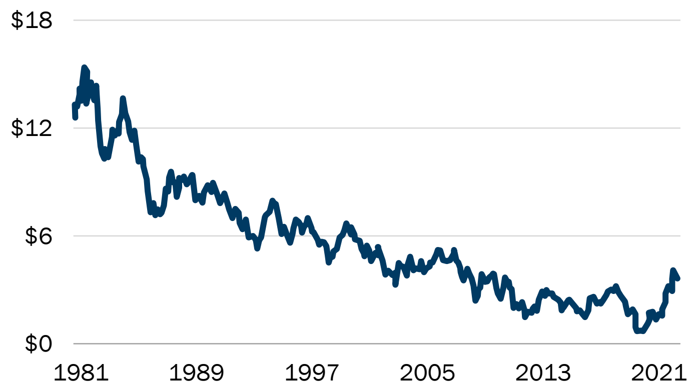
As of December 31, 2022.
It is not possible to invest directly in an index. Please see disclosures for index descriptions. **Past performance is not indicative of future results.**
Source: ICE data

Interest Rates

The interest rate outlook is worrisome. "Don't fight the Fed," the late Marty Zweig famously coined in 1970. Investors heeding that advice have profited handsomely during the bull market in interest rates that started in 1984, especially in the past twelve years. Unfortunately, the mantra may have the complete opposite meaning today. The era of accommodative monetary policy may have reversed; the Fed has hiked interest rates and started to drain liquidity from the bond market through quantitative tightening.

Inflation has also historically proven to be hard to extinguish. If it persists, or worse, flares up again, higher interest rates are likely in store. Even after 2022's large spike, interest rates remain low in a historical context, as seen in the Figure 2.

FIGURE 2: ICE BOFA US HIGH YIELD AVERAGE DOLLAR PRICE



As of December 31, 2022
Source: Bloomberg

Surprisingly, investors today seem sanguine that interest rates will prove to be benign. They are taking cues from short term signals. Recent measures of inflation have showed signs of cooling, and interest rates have reacted in kind – the 10-year Treasury yield stands at 3.5% after peaking at 4.3% in October. The curve suggests that investors are anticipating the end to interest rate hikes by the Fed.

If interest rates spike, we maintain the US high yield market is better positioned than most fixed income asset classes due to its higher spreads, bigger coupons and shorter maturities. High yield returns have usually been positive during previous rising interest rate environments because of the correlation between rising rates and economic growth. However, today's high yield market is clearly more vulnerable to rising interest rates than it has been historically. As overall credit quality has improved, coupons have shrunk.

Credit Trends

On a more positive note, credit trends in the US high yield market remain stable.

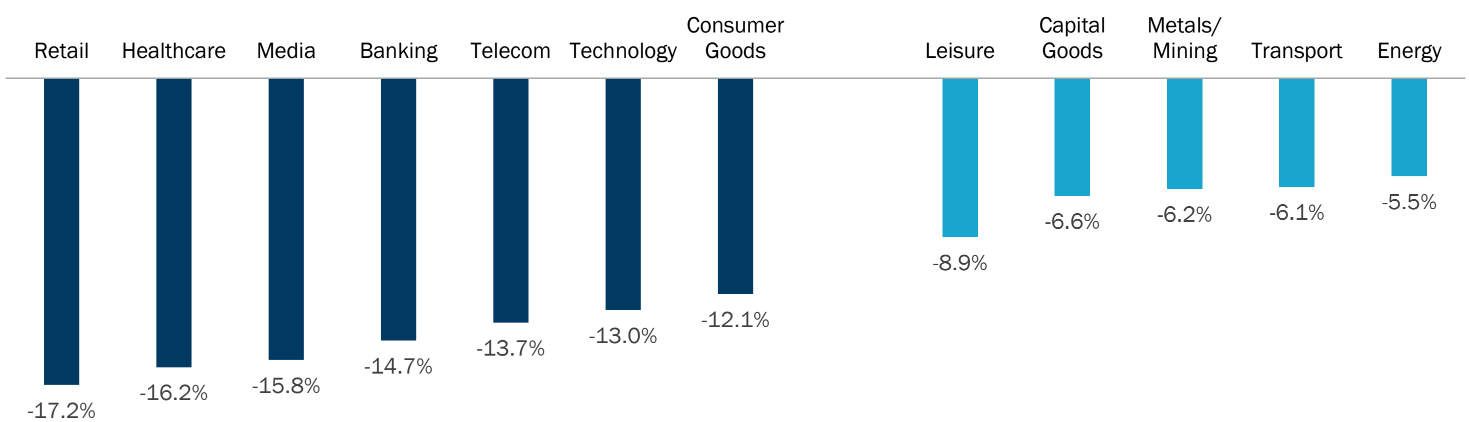
The quality of high yield bonds has improved significantly in the past decade. The ICE BofA US High Yield Index is now comprised of 51% BBs (on a par value basis) at the end of 2022, up from 43% at the end of 2011. At the same time, CCCs have declined to 11%. (BBs percentage of the market did decline modestly in 2022 from 54% in 2021 due to the significant volume of bonds that were upgraded to investment grade and exited the high yield market).[1]

The largest high yield issuers today are generally large publicly traded companies; 69% of the US High Yield market has publicly traded equity, according to JP Morgan. Even if the US economy heads into a recession, we feel it is unlikely that default rates spike far above historical norms.

In contrast, credit quality in the leveraged loan market has slipped. Single-B and below rated loans now make up 52% of the loan market, compared to 40% ten years ago. This has occurred largely as private equity sponsors came to favor leveraged loans for the greater flexibility they afford – loans that financed LBOs account for more than 70% of the market. As a result, the overlap between high yield and loan issuers has eroded. "Loan only" issuers account for approximately 57% of the market – compared to just 35% ten years ago.[2]

While the credit risk profile of high yield is broadly constructive, the outlook for individual sectors varies greatly. As shown in Figure 3, the difference in performance between sectors was significant in 2022. This dynamic is actually normal historically in high yield and will likely persist in 2023.

FIGURE 3 2022 US HIGH YIELD TOTAL RETURN BY SECTOR



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Source: ICE Data.

1. Source: ICE Data
2. Source: ICE BofA US High Yield Index

The placid market environment of 2021 was actually abnormal; insatiable investor appetite for "beta" suppressed volatility and resulted in low dispersion in returns between high yield bonds with very different credit trends.

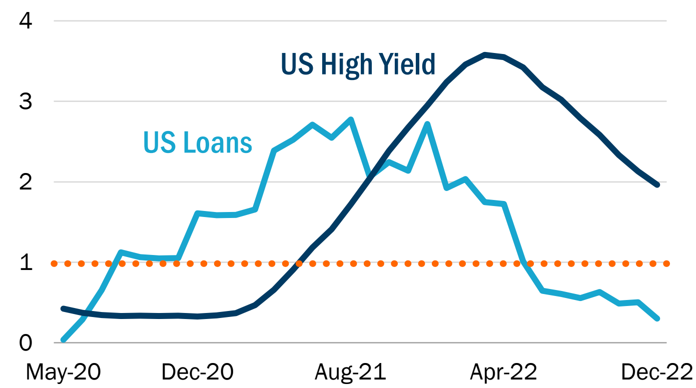
Some companies are already experiencing recessionary pressures—those that sell to lower end consumers, industrial companies exposed to Europe, retailers that are carrying bloated inventories, or housing related companies experiencing the hangover after the post-Covid boom. Margins for many healthcare companies are being pressured due to skyrocketing inflation in costs that cannot be recouped as existing reimbursement contracts were put in place years ago.

Others companies seem relatively unaffected. The energy sector is benefiting from the tailwind of high prices. Demand for lodging and gaming in the US remains strong. There is pent up demand for cars, as auto production has been crimped by supply chain issues.

The trend in credit ratings for high yield companies has weakened recently. December represented the third consecutive month that downgraded bond issuers (29) outnumbered those that were upgraded (15). This "upgrade/downgrade" ratio peaked in March 2022 at 3.6.[3]

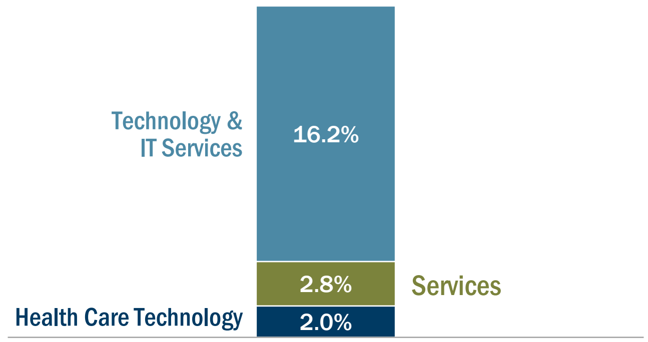
However, the ratings trend for high yield is decidedly stronger than that for leveraged loans, as seen in Figure 4. According to JP Morgan, the number of loan downgrades have outpaced

FIGURE 4: UPGRADE TO DOWNGRADE RATIO BY PAR AMOUNT—ROLLING 3 MONTHS



As of December 31, 2022
Source: JP Morgan

FIGURE 5: PAR WEIGHT MORNINGSTAR LSTA LEVERAGED LOAN INDEX



As of December 31, 2022
Source: LCD Data

upgrades for eight consecutive months, and December included the largest number of downgrades since May 2020 during the throes of the Covid induced panic.

High yield also compares favorably to loans in the types of companies that issue bonds. The energy sector represents 13% of the ICE BofA High Yield Index and is the single largest sector. High yield has limited exposure to high growth companies (many of which are unprofitable) that have performed the worst in the stock market. As shown in Figure 5, these "new economy" companies are much more prevalent in the loan market.

Supply/Demand Technicals

There is a third factor aside from interest rates and credit that exerts a significant influence on the direction of the high yield market – supply/demand technicals. In 2022 demand for high yield cooled due to overall shrinking demand for bonds (higher interest rates and poorer liquidity), waning foreign demand (the strong US dollar increased hedging costs), and heavy retail outflows.

Under normal conditions, the supply of new high yield bonds would have overwhelmed demand. However, the supply of high yield bonds also dried up. New issuance ground to a virtual halt; in 2022, net new issuance in high yield bonds was down 71% from its prior 5-year average. The dearth of supply was exacerbated by several large issuers who were upgraded to investment grade. In 2022, $113 billion of "rising star" high yield bonds, or 8% of the index, exited the market.[4]

3. Source: JP Morgan
4. Source: JP Morgan

Valuation

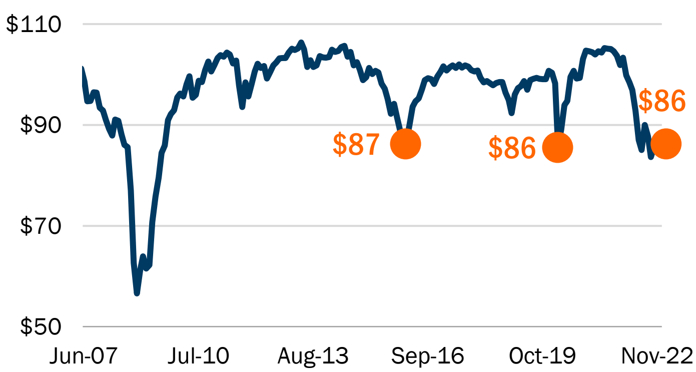
In our view, overall valuations are reasonable (albeit not compelling). The current spread of 491bps is in line than the historical average of 471bps and toward the middle of the non-panic range of 350-550. More importantly, the average high yield bond trades at a significant discount to par, as seen in Figure 6.

While coupons might be lower today, a lower dollar price markedly improves the upside/downside profile of a bond. As seen in Figure 7, historical market returns have been strong when the dollar price is below $90.

Finally, high yield compares favorably to equities. The following chart compares high yield bond yields with the earnings yield (EY) of the S&P 500 (the earning yield is the inverse of the P/E ratio). When the differential of HY to EY is 3.5% or greater – it stands at 3.6% today – high yield has historically outperformed equities 82% of the time over the following one-year period.

There are many risks in financial markets today. However, we believe stable fundamentals and reasonable valuations suggest that US high yield continues to represent a reasonable, lower duration fixed income investment option.

FIGURE 6: AVERAGE DOLLAR PRICE OF ICE BOFA HIGH YIELD INDEX



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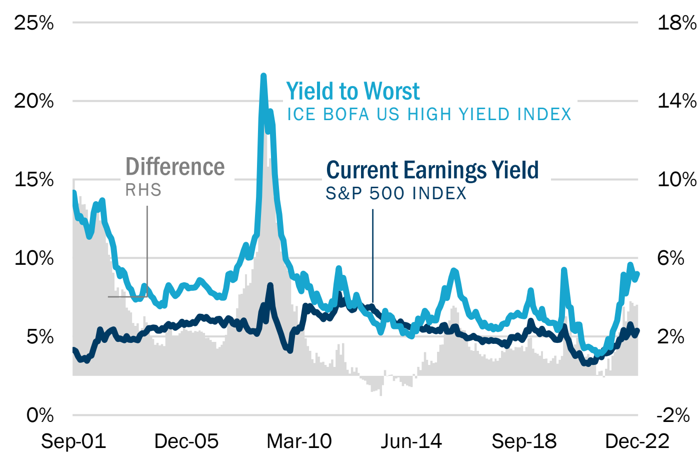
Source: ICE data

FIGURE 8: AVERAGE DOLLAR PRICE OF ICE BOFA HIGH YIELD INDEX



As of December 31, 2022
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FIGURE 7: MONTH END AVERAGE $ OF HY INDEX | LAST 20 YEARS[1]

	% of Monthly Observations	Median Subsequent Annualized Return			% of Time Subsequent Annualized Return >7%		
		1-Year	2-Year	3-Year	1-Year	2-Year	3-Year
PRICE ABOVE $100	43%	4.4%	5.7%	5.3%	34%	48%	42%
PRICE BETWEEN $95 AND $100	34%	9.1%	6.9%	6.6%	65%	49%	49%
PRICE BETWEEN $90 AND $95	10%	12.8%	9.4%	9.6%	70%	83%	96%
PRICE BETWEEN $80 AND $90	8%	21.5%	13.6%	12.5%	83%	94%	100%
PRICE BELOW $80	6%	33.1%	23.8%	16.6%	100%	100%	100%

As of May 31, 2022.
1. ICE BofA US High Yield Index. Monthly observations since [date].
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Source: ICE data, MacKay Shields

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The following indices may be referred to in this document:

BLOOMBERG GLOBAL AGGREGATE INDEX — The Bloomberg Global Aggregate Index is a flagship measure of global investment grade debt from twenty-four local currency markets. This multi-currency benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers.

BLOOMBERG US GOVERNMENT 10 YEAR TOTAL RETURN INDEX — The Bloomberg US Government 10-Year Total Return Index is a wealth series that starts on January 1, 1999, based on holding US 10yr treasuries (see last chart – showing the complete wealth series to date); calculated in USD; unhedged and rebalanced monthly.

CREDIT SUISSE LEVERAGED LOAN INDEX —The Credit Suisse Leveraged Loan Index s a representative index of tradable, senior secured, U.S. dollar-denominated non-investment grade loans.

ICE BOFA CORPORATES CASH PAY BB-B 1-5 YEAR INDEX — A subset of the ICE BofA U.S. Cash Pay High Yield Index including all securities with a remaining term to final maturity less than 5 years and rated BB1 through B3 inclusive. Index results assume the reinvestment of all capital gain and dividend distributions. An investment cannot be made directly into an index.

ICE BOFA US CORPORATE INDEX — ICE BofA U.S. Corporate Index tracks the performance of U.S. dollar denominated investment grade corporate debt publicly issued in the U.S. domestic market.

ICE BOFA US HIGH YIELD INDEX — The ICE BofA US High Yield Index tracks the performance of U.S. dollar denominated below investment grade corporate debt publicly issued in the U.S. domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch) and an investment grade rated country of risk (based on an average of Moody's, S&P and Fitch foreign currency long term sovereign debt ratings). In addition, qualifying securities must have at least one year remaining term to final maturity, a fixed coupon schedule and a minimum amount outstanding of $100 million. Original issue zero coupon bonds, "global" securities (debt issued simultaneously in the eurobond and U. S. domestic bond markets), 144a securities and pay-in-kind securities, including toggle notes, qualify for inclusion in the Index. Callable perpetual securities qualify provided they are at least one year from the first call date. Fixed-to-floating rate securities