INSIGHTS & PERSPECTIVES

from MacKay Shields High Yield Team

MAY 2022

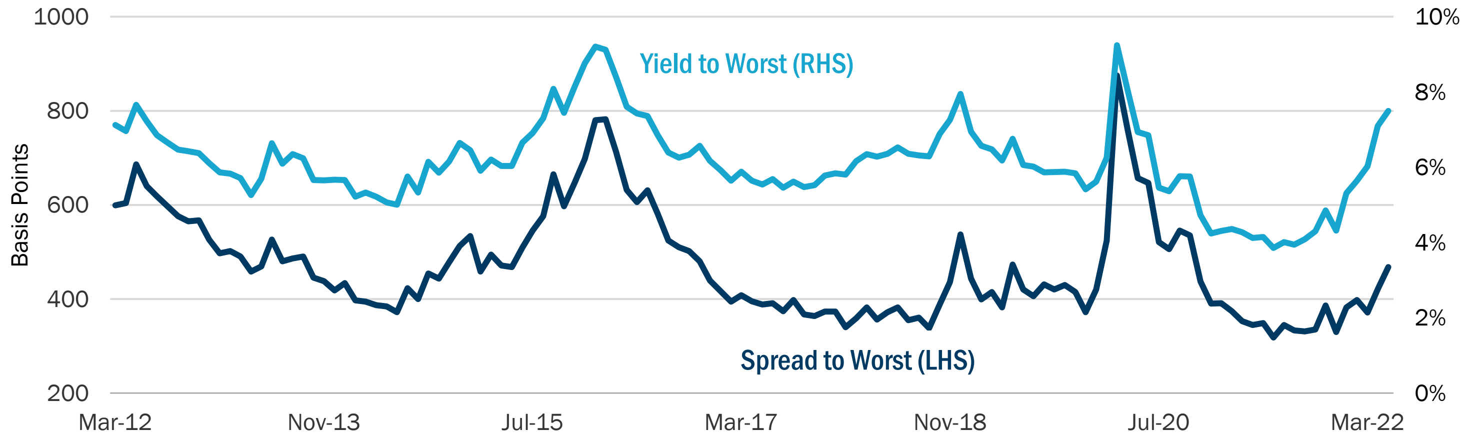
High Yield Market Update

Investors shaken by the ICE BofA US High Yield Index's Q1 loss of 4.5% didn't find any relief in April. The index's April loss of 3.6% represented its worst monthly performance since March 2020, bringing its year to date decline to 7.99%. Weakness has continued in May, with the index shedding an additional 2.5% through May 12. However, the broader credit risk profile of the US high yield market continues to remain strong. We continue to believe the US high yield market represents a reasonable, lower duration fixed income investment option.

Valuations

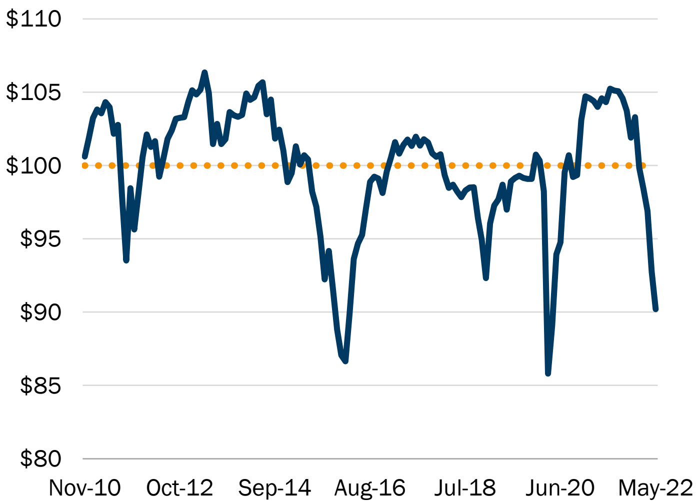
Yields on the ICE BofA US High Yield Index (the "US High Yield Index" or the "Index") have increased over 2% already in 2022 given the rise in US Treasury rates. The yield on the US High Yield Index now stands at 7.5% vs. 4.3% at the start of the year. Yields at these levels are comparable to what was seen in mid-2018 to 2019 and are now above long-term median levels. Moreover, the average dollar price of the US high yield market as measured by the Index is now approximately $90—meaning there is now more potential for capital appreciation. Spreads have also recently widened in line with historical median levels of approximately 470bps—up from 330bps at the start of 2022. We believe these levels now compensate investors for making additional allocations to US high yield.

FIGURE 1: ICE BOFA US HIGH YIELD INDEX YIELD AND SPREADS



As of May 12, 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.

FIGURE 2: ICE BOFA US HIGH YIELD AVERAGE DOLLAR PRICE



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Source: ICE data

Credit Fundamentals

Credit trends have weakened somewhat. First quarter earnings from high yield issuers are showing the effects of cost inflation, strained supply chains, and scarce raw materials.

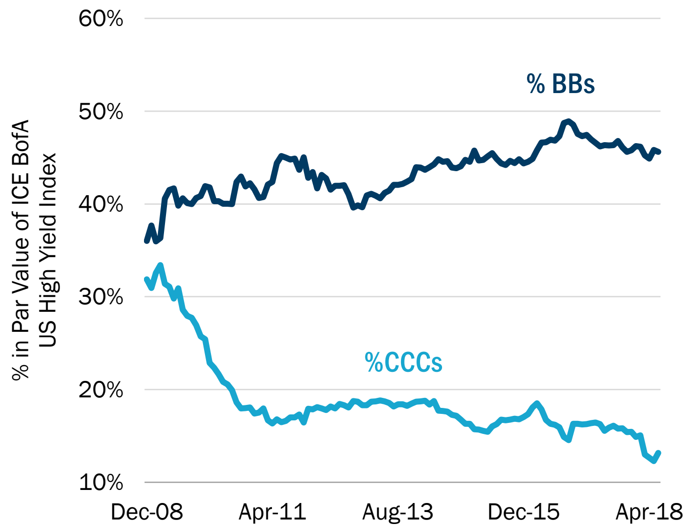
Cost inflation in Europe is particularly concerning. Even though most US high yield issuers are focused domestically (88% are located in the US), others have manufacturing operations in Europe that are experiencing severe cost shocks; for example, natural gas is almost 7x higher in Europe than the US.

The broader credit risk profile of the US high yield market continues to remain strong. The largest high yield issuers are generally large publicly traded companies; S&P 500 companies represent 25% percent of the ICE BofA US High Yield Index. The credit quality of the US high yield market continued to improve in 2021, with 58% of new issues rated BB. The ICE BofA US High Yield Index is now comprised of 54% BBs (on a par value basis), up from 43% at the end of 2011.

Default rates remain subdued in this environment given better long-term credit fundamentals. As seen in Figure 4, right, the US high yield default rate over the last twelve months has decreased to just 0.5% versus a long-term average of about 3%.

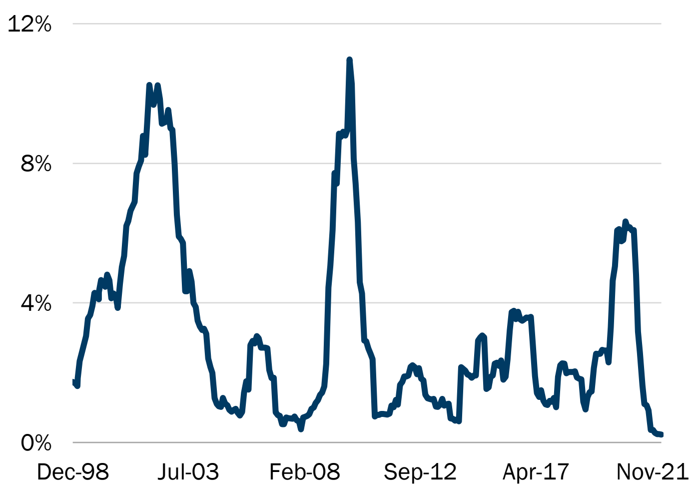
FIGURE 3: US HIGH YIELD HAS TRENDED TOWARDS HIGHER QUALITY, PUBLIC COMPANIES

BB-RATED CREDITS HAVE INCREASED AS A PROPORTION OF THE US HIGH YIELD MARKET, ALONGSIDE A DECREASE IN CCC-BONDS: 25% OF THE US HIGH YIELD INDEX IS NOW COMPRISED OF COMPANIES IN THE S&P 500 INDEX



As of March 31, 2022.
It is not possible to invest directly in an index. Please see disclosures for index descriptions.
Source: ICE Data.

FIGURE 4: US HIGH YIELD PAR WEIGHTED DEFAULT RATE



As of March 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: JPMorgan Chase, S&P LCD.

Rising Rate Performance

From an interest rate perspective, we believe US high yield is better positioned than most fixed income asset classes to withstand a sharp rise in rates due to its higher coupons and shorter durations. Credit (rather than interest rates) has historically been the more important risk for high yield, and the market has been resilient during previous rising interest rate environments because of the correlation between rising rates and economic growth. However, today's high yield market is more vulnerable than it has been historically. As the overall credit quality has improved, coupons have shrunk.

Figure 5 below highlights the US High Yield Index's return in periods during which the 10-Year US Treasury rose more than 100bps since 2000 compared to other fixed income alternatives.

FIGURE 5: PERIODS SINCE 2000 — 10-YEAR US TREASURY YIELD INCREASES MORE THAN 1%

Rising Rate Period	10-Year US Treasury Yield		Total Return (%)[1]				
Timeframe	Trough / Peak (%)	Change in Bps	US High Yield[2]	US Short Duration High Yield BB-B[2]	US Leveraged Loan[2]	Emerging Markets[2]	Bloomberg Global Aggregate[2]
SEP 98 – JAN 00	4.42 / 6.67	225	3.7	5.8	4.9	—	-3.6
OCT 01 – MAR 02	4.24 / 5.40	116	4.4	5.2	4.0	3.9	-4.0
MAY 03 – JUN 06	3.37 / 5.14	177	9.2	7.8	6.7	5.3	3.6
DEC 08 – MAR 10	2.21 / 3.83	162	49.5	37.7	39.3	27.7	5.3
JUL 12 – DEC 13	1.47 / 3.03	156	9.5	8.7	7.0	1.5	-0.7
JUL 16 – OCT 18	1.45 / 3.14	169	5.8	5.1	5.6	1.5	-1.6
JUL 20 – MAR 22	0.53 / 2.35	182	4.2	4.4	6.8	-4.4	-5.0

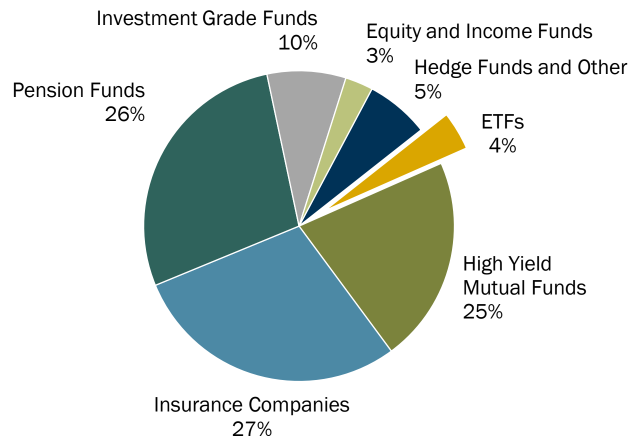
1. Total return annualized for periods that are greater than a year.
2. US High Yield = ICE BofA US HY Index; US Short Duration High Yield BB-B = ICE BofA Corporates Cash Pay BB-B 1-5 Year Index; US Leveraged Loan = Credit Suisse Leveraged Loan Index; Emerging Markets = ICE BofA US Emerging Markets External Debt Sovereign & Corporate Plus Index; Bloomberg Global Aggregate = Bloomberg Global Aggregate Index.
It is not possible to invest directly into an index. Please see disclosures for index descriptions. **Past performance is not indicative of future performance.**

Technicals

Market weakness has caused retail outflows in 2022. Despite heavy retail outflows, the underlying demand for US high yield market has remained stable. Since the start of 2022, the combined assets of the two largest high yield ETFs – the iShares iBoxx High Yield Corporate Bond ETF (HYG) and the SPDR Bloomberg High Yield Bond ETF (JNK) – have plunged 35% from $31bn to $20bn. However, ETFs only represent 4% of the high yield investor base. As shown in the chart below, US high yield is largely held by long-term, unleveraged investors such as pension plans, insurance companies, and foreign institutional buyers. Generally in the past, investors have looked to reduce risk in their overall portfolio by selling equities to fund their US high yield investments as US high yield can provide:

- Potential upside equity beta
- Reduced overall portfolio risk compared to equities
- Relatively attractive income and lower duration compared to other fixed income alternatives.

FIGURE 6: US HIGH YIELD INVESTOR BASE



As of December 31, 2021.
Due to rounding, sum of items may not equal 100% or expressed totals as applicable
Source: JP Morgan.

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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 i
ICE BOFA US EMERGING MARKETS EXTERNAL DEBT SOVEREIGN & CORPORATE PLUS INDEX —The ICE BofA Emerging Markets Corporate Plus Index tracks the performance of US dollar (USD) and Euro denominated emerging markets non-sovereign debt publicly issued within the major domestic and Eurobond markets.

ssued in the U.S. domestic market. 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 also qualify provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. DRD-eligible and defaulted securities are excluded from the Index.

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