INSIGHTS & PERSPECTIVES

from MacKay Shields Global Credit Team

DECEMBER 2022

Global Credit Outlook for 2023

MACKAYSHIE

A NEW YORK LIFE INVESTMENTS COMPANY

We believe that 2023 will be a game of twohalves. In light of valuations, which we believe are rich given our macroeconomic views, the first half will be about remaining defensivehigher quality, recession resilient industries, selective on issuers. The second half is equally important. This is when we may be able to consider adding risk. This would depend on the severity of any recession, its impact on corporate credit fundamentals, the status of inflation control and, perhaps most importantly, valuations or compensation for risk taking. Markets do not operate on any particular script, but at a minimum we expect markets to offer plenty of relative value opportunities in 2023.

Rate Hikes and Tighter Financial Conditions Drive Negative Returns in 2022

The bond market went through a significant resetting of interest rates in 2022. We came into the year with short-term interest rates near zero and credit spreads near historic lows on the back of the rally initiated by unprecedented fiscal and monetary stimulus in response to the pandemic. The US Federal Reserve began a gradual shift to tighter monetary policy in March 2022 as inflation began to accelerate on the heels of strong economic growth and still impaired supply chains. This gradualism soon gave way to aggressive tightening as continued shortages, resilient economic growth and higher





Data as of December 23, 2022.

US IG represented by ICE BofA US Corporate Index, US HY represented by ICE BofA US High Yield Index, EU IG represented by ICE BofA Euro Corporate Index, EU HY represented by ICE BofA Euro High Yield Index, EM IG represented by ICE BofA High Grade Emerging Markets Corporate Plus Index, EM HY represented by ICE BofA High Yield Emerging Markets Corporate Plus Index and US Loans represented by Credit Suisse Leveraged Loan Index.

Please see index definitions and descriptions at the end of the document. Source: ICE Data, Credit Suisse.

energy prices due to the war in Ukraine led to a surge in inflation. As a result, total returns were negative across most asset classes in 2022, especially bonds with long durations (Figure 1).

The poor performance of fixed income assets was driven largely by changes in interest rates. This is evident in the chart above, which shows that investment grade assets, US, EU and EM, which are more sensitive to changes in interest rates than below investment grade assets, generally underperformed. Indeed, US investment grade corporate credit delivered its worst calendar year return in history, with a total return of -14.9% (Figure 2) and its worst 12-month return ever of - 19.6% for the 12-month period ending October 31, 2022, underperforming even the S&P 500 (-14.6%) over this period.



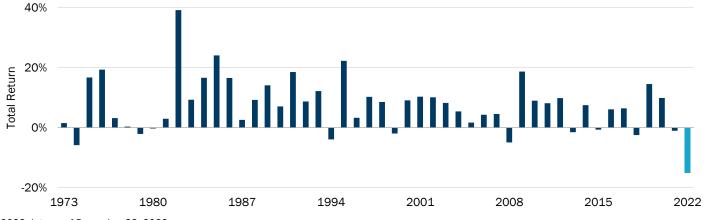


FIGURE 2: US INVESTMENT GRADE CORPORATES | CALENDAR YEAR RETURNS: 1973-2022

2022 data as of December 23, 2022.

Please see index definitions and descriptions at the end of the document. Source: Bloomberg, US Corporate Index.

On the opposite end of the spectrum, leveraged loans, which are below investment grade and carry floating-rate coupons, therefore benefiting from rising short-term interest rates, outperformed all other credit assets. Emerging market high yield debt appears an outlier relative to US and EU high yield, and even EM investment grade given its shorter duration relative to the US. Emerging markets were disproportionally impacted by the war in Ukraine, and to a lesser degree by the China property sector. For example, excluding Russia and Belarus (which were eventually removed from the bond indices completely) and Ukraine from the universe would have resulted in year-to-date returns of -11.0% for EM IG and -10.6% for EM HY.

Amid the ashes of 2022, we see opportunity and reason for optimism about the future. Below we highlight a few reasons why investors may find some of the best opportunities in fixed income that we have seen for many years.

Looking into 2023: Initially Cautious, But Fixed Income Becoming Fashionable Again

There is good reason for caution in fixed income markets in the near term. Recession remains our base case scenario in most corners of the globe given higher policy rates and inflation still above central bank targets. Add to this geopolitical uncertainties and risks surrounding China's loosening of Covid-19 restrictions, it is easy to justify conservative positioning. To summarize our macroeconomic views:

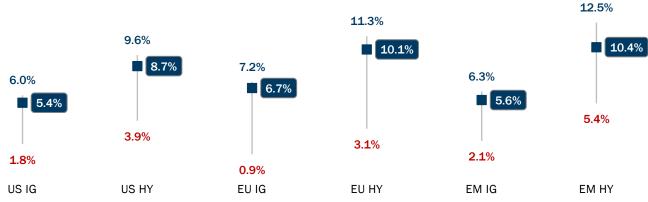
- In the US, FOMC's resolve to defend inflation objective infers very high recession odds. Lack of meaningful policy support in a recession suggests a moderately-sized downturn and sluggish recovery.
- European Union imminent, protracted recession on energy supply shock, policy tightening and weak external demand.
 Fiscal measures to counteract high energy prices could make price stability even harder to achieve.
- Emerging Markets Policy tightening started early in 2021 leaving inflation control in a better position. Growth is still robust mainly due to real currency devaluation and high commodity prices. External balances and FX reserves appear to be in good shape.

If history is any guide, the elevated levels of inflation we see today are likely to persist for longer than many believe, even with a recession in our forecast. However, even with recession as our base case scenario, we think there are reasons to be optimistic. As a result of the historic losses experienced in 2022, yields are now the highest in years (Figure 3). Importantly, with inflation likely to have peaked in most countries around the world, further significant increases in interest rates are expected to be limited, particularly with slowing economic growth. In addition, today's higher yields provide some margin of safety against further increases in interest rates not present when interest rates were near historic lows a year ago.

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FIGURE 3: BOND YIELDS NEAR 10-YEAR HIGHS ACROSS CREDIT MARKETS | YIELD-TO-WORST RANGE (JAN 2011 - DEC 2022)



Current yields in blue boxes as of December 23, 2022. All yields in USD.

US IG represented by ICE BofA US Corporate Index, US HY represented by ICE BofA US High Yield Index, EU IG represented by ICE BofA Euro Corporate Index, EU HY represented by ICE BofA Euro High Yield Index, EM IG represented by ICE BofA High Grade Emerging Markets Corporate Plus Index, EM HY represented by ICE BofA High Yield Emerging Markets Corporate Plus Index.

Please see index definitions and descriptions at the end of the document.

Source: ICE Data, Bloomberg, Refinitiv and MacKay Shields.

Today's high yields might seem unusual, but they surely are not by historical standards. The near zero interest rates of the past several years were the real anomaly. Starting yield-to-worst has also proven to be a reliable indicator of total returns over the next five years. Accordingly, the prospects for strong returns from credit markets over the next several years is the best it has been in a long time, particularly if inflation has indeed peaked. However, given current economic and financial conditions and, geopolitical uncertainties, we believe the nearterm still merits caution.

Fundamentals Are Solid But Vulnerable—We Still Favor Defense

On most relevant measures, issuer fundamentals remain strong today. The virtual shutdown of the economy due to the pandemic triggered a wave of credit downgrades, defaults and distressed exchanges. Many companies used the very receptive capital markets to restructure debt, extend maturities and get their balance sheets in order. Measures of fundamental strength—leverage ratios (Figure 4), free-cashflow-to-debt and EBITDA margins—are exceptionally strong by historical measures, and interest coverage ratios are among the highest in a decade after an extended period of low interest rates allowed companies to issue debt at much lower yields than in the past.

However, slower economic growth in 2023 should pressure top-line revenues and elevated inflation is likely to shrink corporate profit margins. Corporate revenue and EBITDA growth peaked at the end of 2021 and have been declining since. In such an environment, we favor business models with strong pricing power that provides protection to their margins.

Fundamental strength varies across different segments of the corporate bond market, so sector and security selection are critical. We favor utilities, health insurance, telecommunication and REITS as these sectors have characteristics of stable margins, disciplined leverage and recurring cash flows.

Across the credit spectrum, real and nominal yields have reached decade highs that we believe compensate investors for inflation, particularly as it begins to moderate. However, interest rate risk is only one of the big risks we face as investors in corporate bonds and loans. The other is credit risk, and here the picture is more mixed.

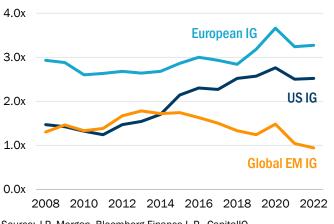
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FIGURE 4: STRONG LEVERAGE RATIOS BY HISTORICAL MEASURES INVESTMENT GRADE NET LEVERAGE



Source: J.P. Morgan, Bloomberg Finance L.P., CapitallQ.

Valuations Inconsistent with Economic Risks

Our base case scenario is for recession in the world's major economies, likely by mid-2023, with emerging markets likely faring better than developed markets, although it is hard to imagine they would escape unscathed. Many economic indicators are already moving in this direction. For example, global manufacturing PMIs (Purchasing Managers' Index) dipped below the 50 level in September and services PMIs did the same in October. Central banks around the world have

FIGURE 5: CREDIT SPREAD NEAR HISTORICAL AVERAGES

HIGH YIELD NET LEVERAGE 8.0x 6.0x **European HY** 4.0x **US HY** 2.0x **Global EM HY** 0.0x 2008 2010 2012 2014 2016 2018 2020 2022

tightened financial conditions, credit growth is slowing and most developed market yield curves are either flat or inverted. Despite these typically reliable signs, credit spreads are generally at or near historical averages (Figure 5), with the exception of the lowest rated debt. The only exception appears to be European investment grade, which is struggling with war, costly energy, record inflation and slowing growth. Markets appear keenly aware and credit spreads have begun to reflect a highly probable recession.

	Investment Grade				High Yield		
	AAA	AA	А	BBB	BB	В	CCC
US CORPORATE							
CURRENT OAS	58	76	114	172	295	495	1082
CURRENT PERCENTILE RANK	25%	45%	55%	47%	46%	53%	68%
1-YEAR AGO PERCENTILE RANK	9%	22%	17%	13%	10%	15%	13%
EU CORPORATE							
CURRENT OAS	68	99	140	202	371	622	1309
CURRENT PERCENTILE RANK	65%	75%	76%	71%	58%	58%	74%
1-YEAR AGO PERCENTILE RANK	60%	54%	40%	31%	27%	22%	20%
EM CORPORATE							
CURRENT OAS	68	83	120	239	443	770	1764
CURRENT PERCENTILE RANK	36%	33%	24%	46%	50%	46%	69%
1-YEAR AGO PERCENTILE RANK	7%	21%	13%	19%	42%	77%	38%

Current OAS: as of December 23, 2022. Percentile Rankings: January 1998 through December 23, 2022. Source: ICE Data.



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The US economy, for example, continues to enjoy robust growth and low unemployment and, despite signs of slowing, markets appear to discount the FOMC's resolve to keep financial conditions tight for extend period and the potential ripple effects of such action. Perhaps they believe current strong fundamentals and lack of refinancing needs are sufficient to keep the default rate low in an economic downturn. Interest rate markets continue to price lower rates in the second half of 2023, so despite numerous mentions to the contrary, the markets believe the Federal Reserve will capitulate in the face of a recession.

Emerging market corporates are similarly priced with what appears to be little concern, and this may be more justified

than their developed markets counterparts. The departure of challenged issuers from the investable universe, largely from Russia and the China property sector, has improved the quality of the sector and this is reflected in spreads appearing richer today than they might otherwise. In addition, EM central banks were proactive in addressing inflation, in contrast to their developed market counterparts and companies display strong fundamentals.

Nevertheless, with an economic downturn as our central scenario not reflected in valuations, we believe there is ample room for spreads to widen from current levels (Figure 6). Below are current spreads and the average levels from previous recessions.

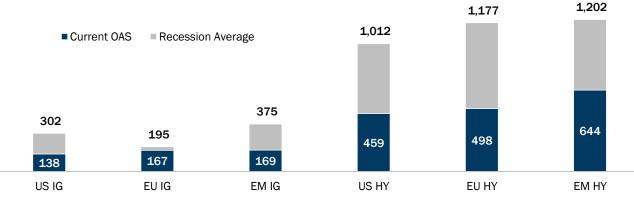


FIGURE 6: CREDIT MARKETS NOT PRICED FOR RECESSION | OAS IN BPS

Data from January 1998 to December 2022.

US IG represented by ICE BofA US Corporate Index, US HY represented by ICE BofA US High Yield Index, EU IG represented by ICE BofA Euro Corporate Index, EU HY represented by ICE BofA Euro High Yield Index, EM IG represented by ICE BofA High Grade Emerging Markets Corporate Plus Index, EM HY represented by ICE BofA High Yield Emerging Markets Corporate Plus Index.

Please see index definitions and descriptions at the end of the document.

Source: ICE Data, Bloomberg and MacKay Shields.

Should a recession materialize, credit spreads clearly have room to widen. Today's high yield levels will offer some protection against spread widening, cushioning the downside on a total return basis. This is in marked contrast to 2022, where as we saw in Figure 1, higher interest rates drove the negative total returns we experienced. It is important to bear in mind that European and Emerging Markets are significantly higher quality than US markets, particularly in high yield. However, this needs to be balanced against the inferior liquidity of both markets relative to the US. During times of elevated volatility, poor liquidity can lead to more violent moves in credit spreads, even for higher quality assets. This is, in part, why issue selection in credit markets is always so critical.



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What Next?

We believe that 2023 will be a game of two-halves. In light of valuations, which we believe are rich given our macroeconomic views, the first half will be about remaining defensive - higher quality, recession resilient industries, selective on issuers. As 2022 delivered higher interest rates and negative total returns, we expect the first-half of 2023 to be more about wider credit spreads and a challenging environment for excess returns. If markets propagate as expected, cheaper entry points for riskier names will be available to us later in the year. Emerging markets appear better positioned than developed

markets, and their bonds offer attractive yield premiums relative to equivalent developed markets companies, however, selectivity is critical, particularly in light of inferior liquidity.

The second half is equally important. This is when we may be able to consider adding risk. This would depend on the severity of any recession, its impact on corporate credit fundamentals, the status of inflation control and, perhaps most importantly, valuations or compensation for risk taking. Markets do not operate on any particular script, but at a minimum, we expect markets to offer plenty of relative value opportunities in 2023.

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The ICE BofA US Corporate Index tracks the performance of U.S. dollar denominated investment grade corporate debt publicly issued in the U.S. domestic market. You cannot invest directly in an index.



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ICE BOFA US HIGH YIELD INDEX

The ICE Bank of America US High Yield Index is market capitalization weighted and is designed to measure the performance of U.S. dollar denominated below investment grade (commonly referred to as "junk") corporate debt publicly issued in the U.S. domestic market.

ICE BOFA EURO CORPORATE INDEX

The ICE BofA Euro Corporate Index tracks the performance of Euro denominated below investment grade corporate debt publicly issued in the euro domestic or eurobond markets.

ICE BOFA EURO HIGH YIELD INDEX

The ICE BofA Euro High Yield Index tracks the performance of EUR denominated below investment grade corporate debt publicly issued in the euro domestic or eurobond markets.

ICE BOFA HIGH GRADE EMERGING MARKETS CORPORATE PLUS INDEX

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ICE BOFA HIGH YIELD EMERGING MARKETS CORPORATE PLUS INDEX

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