

Mackay Shields Fixed Income Quarterly Outlooks

July 2024

Table of Contents

Macroeconomic Outlook	3-4
Active Fixed Income Outlook	5-6
U.S. High Yield Outlook	7
Investment Grade Credit Outlook	8-10
Convertibles Outlook	11

Macroeconomic 3Q2024

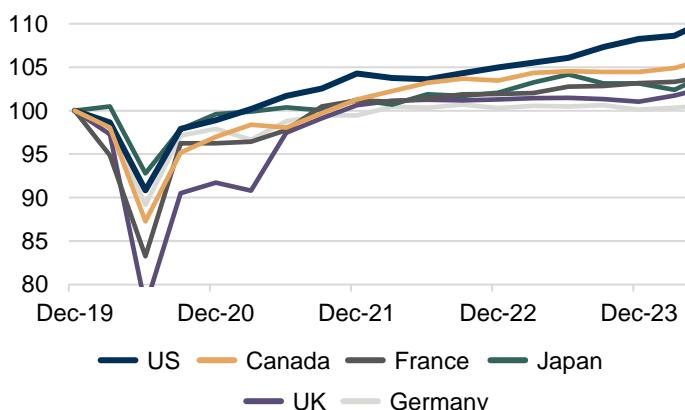
A Constructive Base Case, But Politics Inject Uncertainty

Steven Friedman, Senior Macroeconomist,
Portfolio Manager

- The U.S. economy has remained resilient in the face of moderately restrictive monetary policy. We expect this to remain the case in the second half of the year.
- Lower inflation readings and a rebalanced labor market set the stage for a recalibration of monetary policy, beginning in September.
- This recalibration can pave the way for an extended economic expansion. However, uncertainty regarding the presidential election and implementation of former President Trump's policy platform add an extra degree of uncertainty to the medium-term outlook.

One of the more notable aspects of the global economy over the past few years has been the widening gulf in economic performance between the United States and many of its developed market peers. The comparison is not necessarily "apples-to-apples". Countries have different rates of trend growth, different monetary and fiscal policy stances, and face different exogenous shocks. Most notably, Russia's invasion of Ukraine led to a pronounced energy and confidence shock in many European countries, dampening growth in 2022 and into 2023. But at the very least, continued solid economic performance in the United States indicates a high degree of resilience to monetary tightening.

Figure 1: Level of Real GDP | Indexed to 100 at End-2019

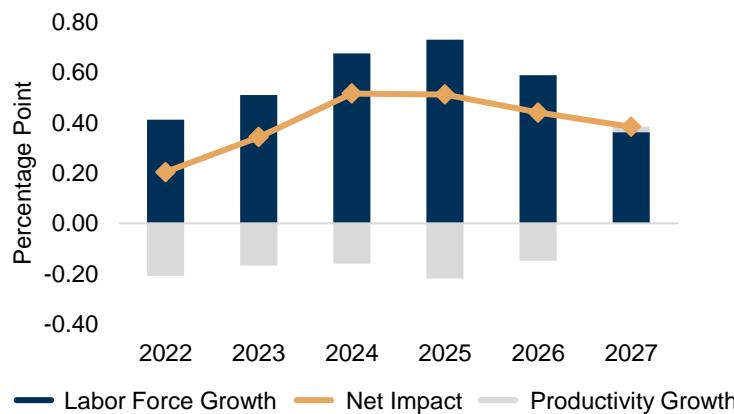


Source: Bloomberg, MacKay Shields. US real GDP through Q2, for all others Q2 value is based on Bloomberg consensus forecasts as of July 19th, 2024.

We wrote extensively on this topic in our last quarterly commentary and continue to see evidence that a number of resiliencies, including locked-in low mortgage rates and fiscal incentives for investment, remain supportive of the economic outlook. One conclusion from that analysis was that the economy may be able to sustain a rate of growth at or above 2% over the remainder of the year, even as the pace of growth steps down somewhat from 2023. Recent data have conformed to our expectations. Importantly, a still-strong labor market along with wealth effects from gains on financial assets continue to support solid household spending. In fact, the second quarter saw a stronger contribution to GDP from household spending compared to the prior quarter.

While our overall views have not changed, we are struck by the extent to which sharp increases in immigration have impacted overall economic activity, the labor market and potentially even inflation. First and foremost, high levels of immigration not only increase household spending, but have also boosted the trend rate of growth in the economy through its effect on the size of the labor force. Along with anticipated monetary easing, this remains a primary reason why we see the economy sustaining a solid pace of expansion.

Figure 2: Revision to Trend Growth Estimates Resulting from Higher Immigration



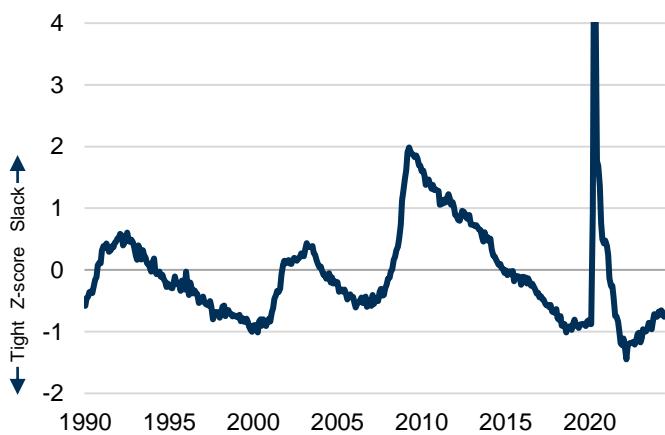
Source: Congressional Budget Office, MacKay Shields. Revision based on CBO's February 2024 projection vs. projection one year earlier. www.cbo.gov/publication/59710

Macroeconomic 3Q2024 (cont'd)

A Constructive Base Case, But Politics Inject Uncertainty

The immigration-backed increase in labor supply has occurred over a period of time when marginal labor demand has moderated, as evidenced by the steady decline in job openings over the past two years. As a result, the labor market is much closer to balance and should no longer be a source of meaningful inflationary pressures. For example, our labor market conditions index, which draws on a range of labor indicators from the Bureau of Labor Statistics and household and business surveys, has returned to levels seen in 2019 – certainly not a period associated with too-rapid wage growth and high inflation. The labor market remains strong but is no longer tight.

Figure 3: Labor Market Conditions Index



Source: MacKay Shields, based on data from the Bureau of Labor Statistics, Department of Labor, National Federation of Independent Businesses, Institute for Supply Management, and Conference Board.

The rebalancing of the labor market and moderation in inflation set the stage for a sustained recalibration of monetary policy as the FOMC turns its attention to extending the economic expansion. However, there is a large degree of uncertainty surrounding our medium-term economic and monetary policy outlook as we head into a consequential election cycle that has the potential to reshape domestic economic policy as well as foreign policy. At the time of writing, former president Donald Trump maintains a lead in polls over Vice President Harris, including in many electoral swing states, and prediction markets currently assign about 60% odds of him returning to the White House. In looking through his agenda, we are struck by the mix of inflationary policies, including tariffs, immigration restrictions and deportations, and expansionary fiscal policy. However, the growth implications are much more mixed. Further corporate tax cuts and deregulation would support growth, but immigration restrictions and tariffs (and retaliation by trading partners) decidedly push in the opposite direction. The outlook for Congressional elections, as well as questions about which aspects of his election platform Trump will carry out in full, add additional uncertainty. As such, even as the data in hand increasingly support prospects for policy easing and an extended economic expansion, the election and an uncertain policy agenda will require an added level of vigilance and nimbleness on the part of investors.

Active Fixed Income 3Q2024

Strong, But Not Overheated

Michael DePalma, Co-Head of Global Fixed Income Team, Senior Portfolio Manager

Neil Moriarty, Co-Head of the Global Fixed Income Team, Senior Portfolio Manager

Thomas Musmanno, CFA, Senior Managing Director

- *Federal Reserve Chairman Jerome Powell said that conditions in the labor market were “strong, but not overheated.”¹*
- *Meanwhile, Core PCE inflation is tracking at 2.6% through June, more than a percent and a half lower than a year ago.*
- *A labor market in better balance and ongoing disinflation set the stage for a rate cut as early as September.*
- *Building a diversified portfolio in asset classes offering attractive yields, while staying in higher quality credits, will benefit investors as monetary policy shifts course.*

Key Investment Themes

- Maintain neutral duration bias and favor curve steepening
- Favor select U.S. and European financials trading cheap to the market
- Build better convexity through mortgages
- Stay long residential mortgage credit
- Reduce CMBS, focus on higher quality deals

Duration—Staying Close to Home

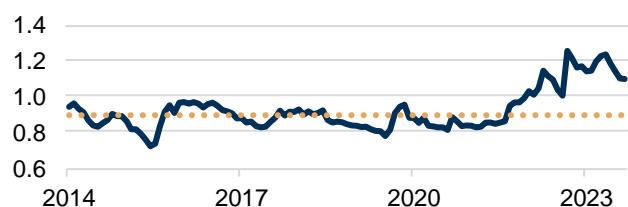
We believe we are moving past the peak in policy rates and that a gradual easing cycle will soon unfold. We expect the yield curve to steepen modestly with a positive slope emerging over the balance of the year.

1. Source: Federal Reserve Chair Jerome Powell remarks to the Committee on Financial Services, U.S. House of Representatives, on July 10, 2024

A Steeper Curve May Favor Banks

The regional banking sector continues to trade wide relative to the rest of the corporate market, and more recently, European bank spreads widened on election-related volatility. We believe these trends will reverse. Last year's banking troubles have not been broadly systemic. As the commercial property market cycle plays out and the yield curve normalizes, banks will work with borrowers to restructure troubled commercial real estate loans. The performance of individual banks will ultimately depend on their size, loan mix and profitability.

Figure 1: Ratio of Financial to Industrial OAS



Data as of June 30, 2024, Option-adjusted spread

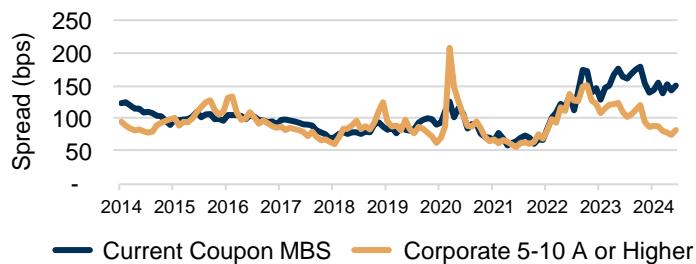
Dashed line = Median (monthly data from July 2014 to June 2024)

Source: ICE Data

Adding Convexity Moving Down the Coupon Stack

In the Agency mortgage market, higher coupon securities are trading with wider spreads, lower durations and higher yields than lower rated investment grade corporates. However, as interest rates fall, lower coupons are likely to outperform due to their lower prepayment speeds while offering good liquidity.

Figure 2: Agency MBS Offer a Significant Yield Advantage Over Corporates Without the Rich Valuations



Source: Bloomberg. Data as of June 28, 2024

Active Fixed Income 3Q2024 (cont'd)

Strong, But Not Overheated

Don't Transfer That Credit Risk Just Yet

The Credit Risk Transfer (CRT) market, which was created by the agencies as a way to reduce their credit exposure to borrowers, continues to benefit from limited supply and early payoffs by the Agencies. We believe spreads will continue to grind tighter, particularly on subordinate deals with elevated home price appreciation (HPA).

Additionally, banks are selling credit-linked notes in an effort to reduce risk-weighted assets and qualify for better treatment under new bank capital rules. Many of these notes are tied to prime auto loans that offer attractive spreads. We expect this new market to continue to grow.

Figure 3: CRT B1 to HY BB



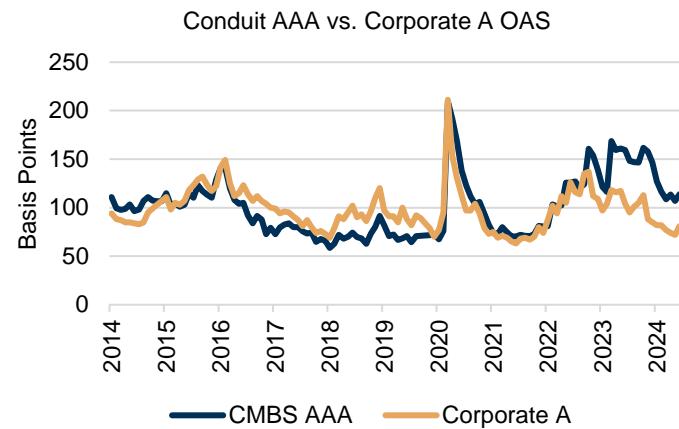
Data as of June 28, 2024

Source: ICE Data

CMBS: A Good Diversifier with Resilience

Historically, conduit triple-A spreads have traded tighter than single A-rated corporate credit, reflecting their high credit quality and robust underwriting standards. Recently, however, we've seen a significant widening, offering a unique opportunity to capture enhanced yields with minimal incremental risk. Given the solid levels of credit support and improved underwriting standards in CMBS, these securities are better positioned to weather market volatility. The senior triple-A tranches in particular are expected to remain resilient, making them a strong diversifier in uncertain times.

Figure 4: Despite The Recent Rally, CMBS Spreads Can Offer Value for Selective Investors



Source: Bloomberg. Data as of June 28, 2024

U.S. High Yield 3Q2024

Andrew Susser, Executive Managing Director,
Head of High Yield

Joseph Maietta, CFA, Client Portfolio Manager

With many risks in the financial market today, the team gives their outlook on the U.S. High Yield Market.

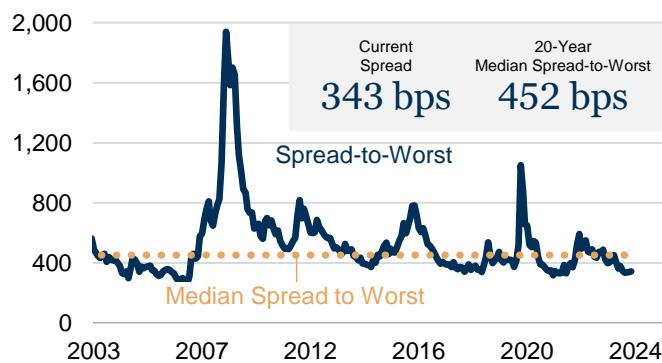
Specialty Fixed Income | High Yield

High yield spreads have tightened considerably since October 2023 and remain near the lowest levels since the Global Financial Crisis.

Narrow high yield spreads are just another sign of the current bullish environment. The S&P 500 has gained nearly 30% since the end of October 2023 to all-time highs. The concerns that kept investors up at night in 2023 — recession fears, stubborn inflation and geopolitical instability — have given way to optimism about the strength of the U.S. economy, the potential trajectory of interest rate cuts and the transformative potential of AI.

The rally in high yield since late 2023 — the ICE BofA U.S. High Yield Index (the “Index”) has gained 10.85% since November 1, 2023 - also reflects technical factors specific to the U.S. high yield market. High yield bond ETFs have experienced significant inflows, creating a surge in demand that the supply of new bonds has been unable to meet. Additionally, pension funds can now better meet return hurdles with exposure to the high yield bond market without taking additional risk in equities.

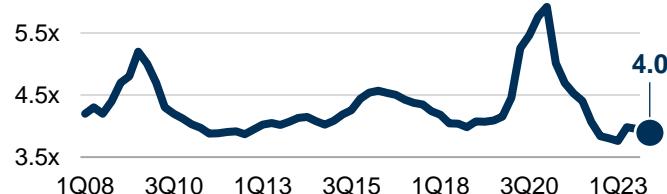
Figure 1: Spread-to-Worst



Index: ICE BofA US High Yield Index. As of June 30, 2024.

Source: ICE Data

Figure 2: Leverage Ratio



Data as of March 31, 2024. Source: JP Morgan

From a fundamental perspective, credit trends within the U.S. high yield bond market remain stable. The leverage level of high yield issuers is near historical lows, according to JP Morgan (Figure 2).

Similarly, the "upgrade-to-downgrade" ratio in the high yield bond market is above one, meaning that for every \$1.00 of high yield bonds downgraded by credit rating agencies, \$1.40 in high yield bonds have been upgraded¹. Although this ratio has decreased significantly from its peak in 2021, it indicates that overall credit trends continue to be strong.

Beneath the surface, however, there is a stark difference in credit trends between CCC issuers and the rest of the high yield market. As of June 30, 2024, the number of CCC issuers downgraded (33) has been larger than the number upgraded (28). On the other hand, both BB and B issuers have continued to more frequently experience upgrades than downgrades. BB and B issuers have seen 138 upgrades in 2024 versus 104 downgrades.¹

Overall yields are attractive relative to historical levels given the rise in rates. Starting yields (currently 7.9% as of June 30) have generally been good indicators for subsequent five-year performance for the market.

Moreover, U.S. High Yield looks attractive relative to equities, with the spread between the yield on the Index and the earnings yield of the S&P 500 Index at 4.0%. U.S. High Yield has also performed well relative to equities in past cycles when starting yields have been near current levels.

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

1. Source: JP Morgan as of June 30, 2024

Investment Grade Credit 3Q2024

Shu-Yang Tan, CFA, Senior Portfolio Manager

Lesya Paisley, CFA, Portfolio Manager

Mark Kehoe, CFA, Portfolio Manager

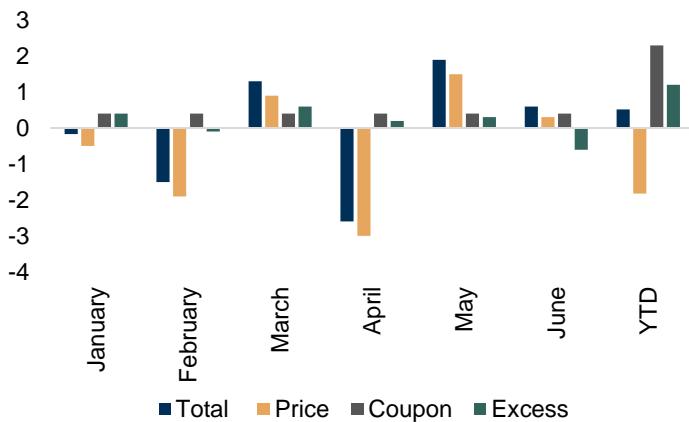
We remain cautiously constructive on investment grade credit and believe that the asset class offers relatively stable carry with yields.

Investment Grade Credit

- Investment grade credit fundamentals have weakened somewhat but overall remain healthy.
- We remain constructive on H2 returns as lower rates should offset any spread widening.
- Our portfolios are positioned with a modest carry advantage, over weight regional banks and positioned for a steeper yield curve.

At the start of 2024, we anticipated range-bound spreads with interest rates declining as the year progressed. Contrary to these expectations, however, in the first half of 2024, the market saw tighter spreads and higher interest rates. Despite this, we remain constructive on total returns for the full year. Even if, as we expect, economic growth slows somewhat, and spreads were to widen modestly, we still expect full-year returns to be attractive, with lower interest rates in the second half of the year more than offsetting any widening in credit spreads.

Figure 1: Corporate Index Return Composition (%)

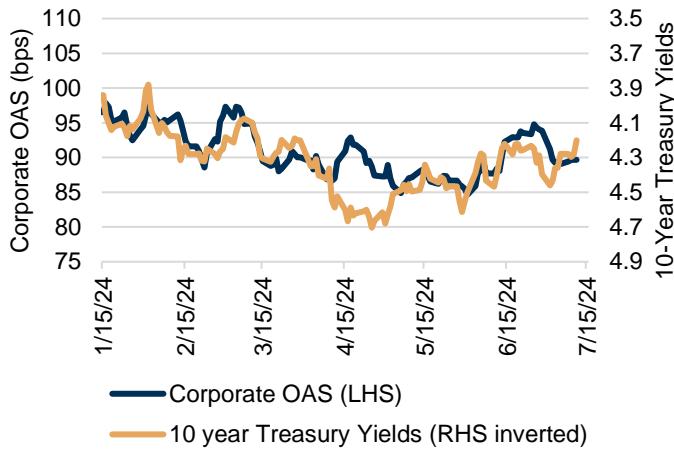


Source: Bloomberg as of July 15th, 2024.

What to Watch for in H2 2024

As bond investors, we are generally predisposed to look at risk from a downside perspective, not least as corporate bonds have all the upside of par and much of the downside of equity. We think credit spreads face some headwinds in the second half of 2024. The month of June illustrated how swiftly declining U.S. Treasury yields can weigh on investment-grade credit spreads as Treasury yields fell more than all-in corporate yields. In a scenario of softening labor and inflation data, falling Treasury yields would likely reduce the attractiveness of fixed income investments, slowing inflows into the asset class from yield-seeking investors such as pension funds and, at the same time, reducing the attractiveness of U.S. fixed income markets to foreign investors as local currency alternatives may become relatively more attractive. This setup could be magnified by previously sidelined issuers entering the new issue market, especially the longer-tenor market, to take advantage of all-in lower yields to issue debt. This means that spreads could drift wider from the current 90-100 bp range.

Figure 2: Corporate OAS (bp) vs 10-Year Treasury Yields



Source: Bloomberg as of July 15th, 2024.

Investment Grade Credit 3Q2024 (cont'd)

There are some notable factors that lead us to be more vigilant around the direction of credit spreads in the second half of 2024 and lead us to believe credit spreads are, at best, likely to remain rangebound. First, the pace of flows into investment grade is slowing. The first half of 2024 saw inflows of \$176 billion into investment grade bond mutual funds and ETFs, using data from JP Morgan. This translates to around 5% of the total assets under management as of the start of the year. Importantly, 69% of this inflow came in the first quarter, which means flows slowed in Q2 2024. This typically follows a period of rising interest rates, which is precisely what we saw in Q1 as conviction regarding rate cuts later in the year waned. As Q2 progressed, softer labor and inflation data rekindled rate cut expectations, although members of the Federal Reserve continue to reiterate their data dependency.

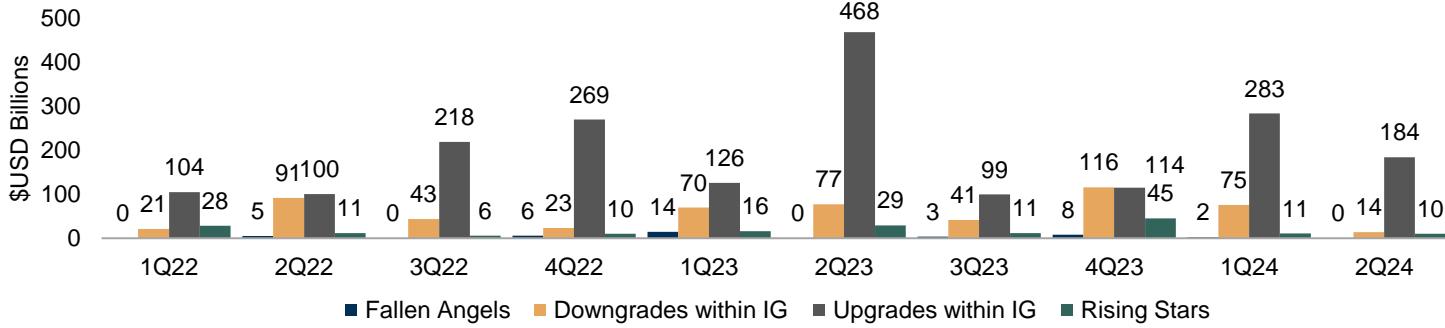
This volatility in rate cut expectations may temper any significant moves in spreads due to flows until investors gain more conviction, which may not be until after the first rate cut. At the same time, as mentioned above, lower rates also reduce the overall attractiveness of investment grade and could spur investors to allocate to other asset classes with greater return potential.

The second factor holding our attention is receding credit fundamentals. Credit fundamentals are still solid, but they have weakened over the last few quarters. We expect neither the economy nor credit fundamentals to materially weaken. Nonetheless, it is worth noting that credit trends are turning downward.

Our research indicates that negative EBITDA growth combined with higher interest rates are driving interest coverage ratios lower, as companies issuing new debt or refinancing existing debt are doing so at significantly higher interest rates than just a few years ago. We estimate that newly issued debt carries an average coupon of 2% more than existing debt, driving interest coverage ratios to the low end of their five-year range. Reflecting weakening earnings, companies have responded in a creditor-friendly way by reducing share buybacks and dividends as well as slowing the pace of capital expenditures.

Credit rating trends remain strongly positive, though we view changes in credit ratings more as a lagging rather than a leading indicator. For the year thus far, upward ratings momentum in the investment grade space has been strong, with the upgrade/downgrade ratio at a record 4.8x, translating into almost 5% of the investment grade market being upgraded in 2024 on a net basis. Trends matter when investing; perhaps more critical is spotting changes in trends. A change in this trend may become more evident as we go through 2024. Last year, 8% of the market was upgraded, and 7% was upgraded in 2022. This all means that the composition of the investment grade market has been improving, with BBBs now 46% of the index, the lowest since 2015. A-rated bonds make up 45% of the index, the highest percentage since 1H-2012. We are carefully watching whether the upgrade/downgrade ratio weakens as strong credit fundamentals begin to fade.

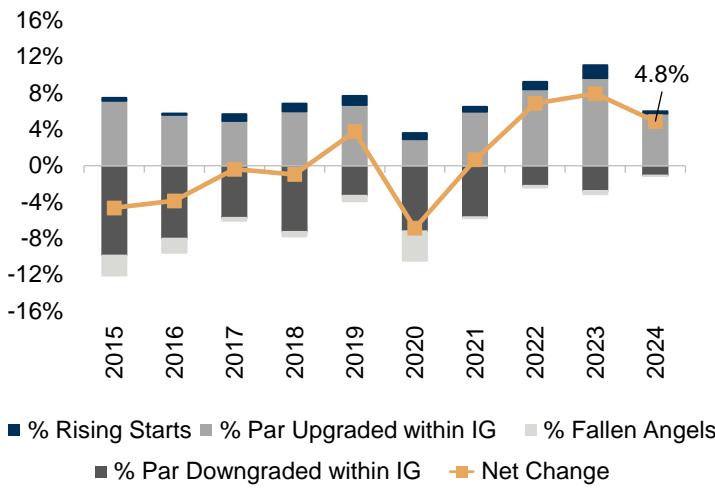
Figure 3: Upgrades Exceeded Downgrades Every Quarter Since 2021



Source: JP Morgan as of July 15th, 2024.

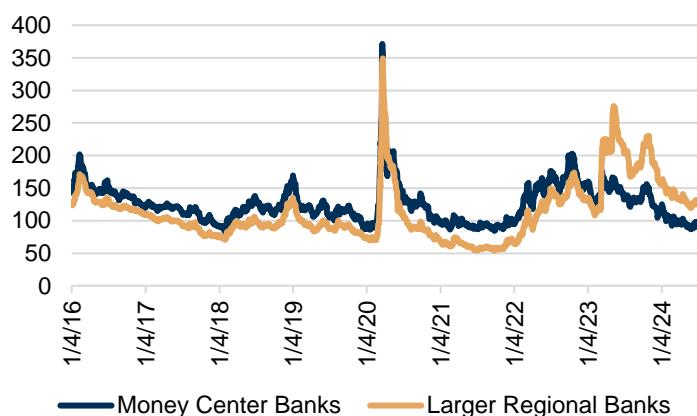
Investment Grade Credit 3Q2024 (cont'd)

Figure 4: 4.8% of IG Debt Was Upgraded (Net of Downgrades) in 1H24



Source: JP Morgan as of July 15th, 2024.

Figure 5: Money Center Banks Vs Regional Banks: Credit Spreads



Source: JP Morgan as of July 15th, 2024.

Portfolio Positioning

Despite our view that investment grade valuations are likely to be range-bound, there are areas of the investment grade market that appear attractive. U.S. regional banks' credit spreads still remain wide over concerns about possible credit rating downgrades, commercial real estate risk (primarily from office properties) and the inverted yield curve. With regional banks' credit spreads 50 basis points wide of the larger and higher-rated money center banks, and with the prospect that larger regional banks may be forced to issue less debt to comply with new regulations, we expect this gap to close over the next 12 months (regionals have historically traded inside of money center banks). It is noteworthy that the financial sector has significantly outperformed the industrial sector to date.

We remain underweight the long end of the market and overweight short and intermediate debt. The yield curve remains inverted, and compensation for extending maturities beyond 10 years is not justified by current valuations in our view. In addition, as we expect markets to become more certain of rate cuts going forward, we would then expect the yield curve to steepen. This positioning allows us to earn positive carry, and eventually profit from what we see as an inevitable normalization of the yield curve.

Looking Ahead into the Second Half

We remain cautiously constructive on investment grade credit and believe that the asset class offers relatively stable carry with yields of approximately 5.5%. With credit spreads at or near historical tights, signs of a slowing economy, technicals somewhat less certain and the potential for volatility surrounding the presidential election, we view credit spreads as more likely to widen modestly in the coming months. At the same time, we have growing confidence that we will likely see several rate cuts before the end of this year. Accordingly, we believe it likely investors will earn the carry with a small probability of additional price appreciation from lower interest rates.

Convertibles 3Q2024

Edward Silverstein, CFA, Senior Managing Director,
Head of Convertibles

Performance

At first glance, with the U.S. Convertible Index¹ up 2.13% through the first half of 2024, it would appear that the asset class is falling short of its traditional 60-80% upside capture of equity returns. However, a closer look at YTD equity returns shows a very different picture than what the S&P 500's 15.3% advance would suggest. Looking at the S&P 500's returns on an equal-weighted basis puts the benchmark up 5.07%, just one-third of the Index's headline number. Looking beyond mega-cap stocks, the smaller-cap Russell 2000 is up a mere 1.73% through the first six months of 2024.² These returns highlight the influence that just three companies, Nvidia, Meta, and Microsoft, had on the large-cap equity indices. The equal-weighted S&P 500 and Russell 2000 returns are a truer indication of how most stocks have done through the first six months of 2024. Considering the more prevalent low to mid-single-digit equity returns, the U.S. Convertible market return of 2.13% reflects a fairly typical upside capture scenario.

As smaller-cap and mid-cap stocks trade at a significantly lower valuation to large-cap equities, our expectation is that a narrowing of the valuation gap will lead to improved smaller-equity cap and convertible performance relative to the S&P 500 and NASDAQ indices.

Issuance

Issuance of convertible securities for the first half of 2024 has been particularly strong with approximately \$40 billion of new issuance coming to the market. Higher interest rates and a wave of maturing debt have companies searching for less costly avenues to refinance that debt. Higher rates have been a motivating factor for companies seeking financing in our asset class, as they can usually issue a convertible bond with a meaningfully lower coupon than they would be required to pay in the straight high yield or investment grade market. Lastly, with stocks at record levels, companies are comfortable issuing an equity-linked security.

Our expectation is that issuance will meet or exceed \$80 billion this year, which compares to \$53.4 billion of new issuance in 2023 and \$28.7 billion of new issuance in 2023. We do not expect a dropoff in the pace of new issuance as the factors that are driving new offerings, the need to refinance coming maturities and higher rates, are unlikely to subside in the near future. New issuance is generally a positive for the convertible market, as most new securities are priced at a discount to their theoretical fair value and generally trade above the issue price on their first days of trading, providing a small boost to index returns. In addition, new bonds priced at par are balanced securities that usually offer an asymmetric return profile, whereby the bond will capture a greater percentage of the underlying equity's upside than downside. Lastly, with higher prevailing interest rates, most new issues are coming to market with higher coupons and lower conversion premiums - the amount that the common stock price needs to go up before it becomes advantageous to convert - than what was prevalent in the post-financial crisis environment of ultra-low interest rates.

Positioning and Outlook

While the economy appears to be slowing but still relatively healthy, we are not incorporating any macroeconomic views into our investment decisions as our investment process is focused on company-specific fundamentals. While corporate earnings have generally been better than expected, much of that good news may already be reflected in stock prices, absent a cut in interest rates in reaction to a slowing economy. We are also agnostic about the outcome of the presidential and congressional elections in November. We believe that the outcomes of elections often have little impact on the economic cycle and securities markets, or have an outcome that is counter to general expectations. As such, we continue to invest in companies with strong fundamentals and attractive valuations, which has led to a large overweight to the Healthcare sector and an underweighting to the Consumer Discretionary and Financial sectors. We believe that companies with strong fundamentals and attractive free cash yields can continue to deliver mid- to high-single-digit returns for the balance of the year.

1. ICE BofA All U.S. Convertibles (VXA0) Index

2. Source: Bloomberg, using the S&P 500 Equal Weight Index (EWI) and the Russell 2000 (RTY) respectively, assuming dividends reinvested, from 1/2/24 - 6/28/24

IMPORTANT DISCLOSURE

Availability of this document and products and services provided by MacKay Shields LLC may be limited by applicable laws and regulations in certain jurisdictions and this document is provided only for persons to whom this document and the products and services of MacKay Shields LLC may otherwise lawfully be issued or made available. None of the products and services provided by MacKay Shields LLC are offered to any person in any jurisdiction where such offering would be contrary to local law or regulation. This document is provided for information purposes only. It does not constitute investment or tax advice and should not be construed as an offer to buy securities. The contents of this document have not been reviewed by any regulatory authority in any jurisdiction.

This material contains the opinions of certain professionals at MacKay Shields but not necessarily those of MacKay Shields LLC. The opinions expressed herein are subject to change without notice. This material is distributed for informational purposes only. Forecasts, estimates, and opinions contained herein should not be considered as investment advice or a recommendation of any particular security, strategy or investment product. Information contained herein has been obtained from sources believed to be reliable, but not guaranteed. Any forward-looking statements speak only as of the date they are made and MacKay Shields assumes no duty and does not undertake to update forward-looking statements. No part of this document may be reproduced in any form, or referred to in any other publication, without express written permission of MacKay Shields LLC. ©2024, MacKay Shields LLC. All Rights Reserved.

Information included herein should not be considered predicated of future transactions or commitments made by MacKay Shields LLC nor as an indication of current or future profitability. There is no assurance investment objectives will be met.

Past performance is not indicative of future results.

RISKS OF INVESTING IN ASSET AND MORTGAGE-BACKED SECURITIES

One of the principal risks of mortgage-related and asset-backed securities is that the underlying debt may be prepaid ahead of schedule if interest rates fall, thereby reducing the value of an investment. If interest rates rise, there is less prepayment risk but defaults may increase, potentially causing losses. This is not a complete list of risks associated with the strategy. Consult your professional advisors for further guidance.

COMPARISONS TO AN INDEX

Comparisons to a financial index are provided for illustrative purposes only. Comparisons to an index are subject to limitations because portfolio holdings, volatility and other portfolio characteristics may differ materially from the index. Unlike an index, individual portfolios are actively managed and may also include derivatives. There is no guarantee that any of the securities in an index are contained in any managed portfolio. The performance of an index may assume reinvestment of dividends and income, or follow other index-specific methodologies and criteria, but does not reflect the impact of fees, applicable taxes or trading costs which, unlike an index, may reduce the returns of a managed portfolio. Investors cannot invest in an index. Because of these differences, the performance of an index should not be relied upon as an accurate measure of comparison.

SOURCE INFORMATION

ICE DATA INDICES, LLC ("ICE DATA"), IS USED WITH PERMISSION. ICE® IS A REGISTERED TRADEMARK OF ICE DATA OR ITS AFFILIATES, AND BOFA® IS A REGISTERED TRADEMARK OF BANK OF AMERICA CORPORATION LICENSED BY BANK OF AMERICA CORPORATION AND ITS AFFILIATES ("BOFA") AND MAY NOT BE USED WITHOUT BOFA'S PRIOR WRITTEN APPROVAL. ICE DATA, ITS AFFILIATES AND THEIR RESPECTIVE THIRD PARTY SUPPLIERS DISCLAIM ANY AND ALL WARRANTIES AND REPRESENTATIONS, EXPRESS AND/OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, INCLUDING THE INDICES, INDEX DATA AND ANY DATA INCLUDED IN, RELATED TO, OR DERIVED THEREFROM. NEITHER ICE DATA, ITS AFFILIATES NOR THEIR RESPECTIVE THIRD PARTY SUPPLIERS SHALL BE SUBJECT TO ANY DAMAGES OR LIABILITY WITH RESPECT TO THE ADEQUACY, ACCURACY, TIMELINESS OR COMPLETENESS OF THE INDICES OR THE INDEX DATA OR ANY COMPONENT THEREOF, AND THE INDICES AND INDEX DATA AND ALL COMPONENTS THEREOF ARE PROVIDED ON AN "AS IS" BASIS AND YOUR USE IS AT YOUR OWN RISK. ICE DATA, ITS AFFILIATES AND THEIR RESPECTIVE THIRD PARTY SUPPLIERS DO NOT SPONSOR, ENDORSE, OR RECOMMEND MACKAY SHIELDS LLC, OR ANY OF ITS PRODUCTS OR SERVICES.

"Bloomberg®", "Bloomberg Indices®", Bloomberg Fixed Income Indices, Bloomberg Equity Indices and all other Bloomberg indices referenced herein are service marks of Bloomberg Finance L.P. and its affiliates, including Bloomberg Index Services Limited ("BISL"), the administrator of the indices (collectively, "Bloomberg") and have been licensed for use for certain purposes by MacKay Shields LLC ("MacKay Shields"). Bloomberg is not affiliated with MacKay Shields, and Bloomberg does not approve, endorse, review, or recommend MacKay Shields or any products, funds or services described herein. Bloomberg does not guarantee the timeliness, accurateness, or completeness of any data or information relating to MacKay Shields or any products, funds or services described herein.

The following indices may be referred to in this document:

The **Bloomberg U.S. Aggregate Index** represents securities that are SEC-registered, taxable, and dollar denominated. Must have at least one year to final maturity regardless of call features. Must have at least \$300 million par amount outstanding. Must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch. Must be dollar-denominated and non-convertible.

The **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.

The **ICE BofA U.S. High Yield Index** tracks the performance of U.S. dollar denominated below investment grade corporate debt publicly issued in the U.S. domestic market. The ICE BofA U.S. 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.

The **ICE BofA U.S. Mortgage Backed Securities Index** tracks the performance of U.S. dollar denominated fixed rate residential mortgage pass-through securities publicly issued by U.S. agencies Fannie Mae, Freddie Mac and Ginnie Mae in the U.S. domestic market. 30-year, 20-year and 15- year fixed rate mortgage pools are included in the Index provided they have at least one year remaining term to final maturity and a minimum amount outstanding of at least \$5 billion per generic coupon and \$250 million per production year within each generic coupon.

The **BofA U.S. Fixed Rate CMBS Index** tracks the performance of U.S. dollar denominated investment grade fixed rate commercial mortgage backed securities publicly issued in the U.S. domestic market.

The **ICE BOFA AA-BBB U.S. Asset Backed Securities Index** represents the portion of the ICE BofA U.S. Fixed Rate Asset Backed Securities Index composed solely of bonds that are rated AA-BBB.

The **ICE BofA High Yield Emerging Markets Corporate Plus Index** is a subset of The ICE BofA Emerging Markets Corporate Plus Index including all securities rated BB1 or lower. ICE Bank of America High Yield Master II Index tracks the performance of U.S. dollar denominated below investment grade rated corporate debt publicly issued in the U.S. domestic market. To qualify for inclusion in the index, 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). Each security must have greater than 1 year of remaining maturity, a fixed coupon schedule, and a minimum amount outstanding of \$100 million.

IMPORTANT DISCLOSURE

The **ICE BofA Emerging Markets External Sovereign Index** tracks the performance of U.S. dollar and euro denominated emerging markets sovereign debt publicly issued in the major domestic and eurobond markets.

The **Bloomberg U.S. Corporate Bond Index** measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by U.S. and non-U.S. industrial, utility and financial issuers.

The **ICE BofA All U.S. Convertibles (VXA0) Index** is an unmanaged index that consists of convertible bonds traded in the U.S. dollar denominated investment grade and non-investment grade convertible securities sold into the U.S. market and publicly traded in the United States. The Index constituents are market value weighted based on the convertible securities prices and outstanding shares, and the underlying index is rebalanced daily.

The **S&P 500 Index** is an unmanaged index that is widely regarded as the standard for measuring large-cap U.S. stock market performance.

NASDAQ Composite Index: The NASDAQ Composite Index is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.

Russell 2000 Index: The Russell 2000 Index is an unmanaged and market capitalization weighted equity index maintained by the Russell Investment Group that seeks to be a benchmark of the entire U.S. stock market. More specifically, this index encompasses the 2,000 largest U.S.-traded stocks, in which the underlying companies are all incorporated in the U.S.

DEFINITIONS

Duration: Duration can measure how long it takes, in years, for an investor to be repaid a bond's price by the bond's total cash flows.

Optional Adjusted Spread: The measurement of the spread of a fixed-income security rate and the risk-free rate of return, which is then adjusted to take into account an embedded option.

Spreads: The difference of gap that exists between two prices, rates, or yields.

Yield Curve: A line that plots yields of bonds having equal credit quality but different maturity dates.

NOTE TO UK AND EUROPEAN AUDIENCE

This document is intended only for the use of professional investors as defined in the Alternative Investment Fund Manager's Directive and/or the UK Financial Conduct Authority's Conduct of Business Sourcebook. To the extent this document has been issued in the United Kingdom, it has been issued by MacKay Shields UK LLP, 80 Coleman Street, London, UK EC2R 5BJ, which is authorised and regulated by the UK Financial Conduct Authority. To the extent this document has been issued in the EEA, it has been issued by NYL Investments Europe Limited, Hamilton House, 28 Fitzwilliam Place, Dublin 2 Ireland, which is authorised and regulated by the Central Bank of Ireland.

NOTE TO CANADIAN AUDIENCE

The information in these materials is not an offer to sell securities or a solicitation of an offer to buy securities in any jurisdiction of Canada. In Canada, any offer or sale of securities or the provision of any advisory or investment fund manager services will be made only in accordance with applicable Canadian securities laws. More specifically, any offer or sale of securities will be made in accordance with applicable exemptions to dealer and investment fund manager registration requirements, as well as under an exemption from the requirement to file a prospectus, and any advice given on securities will be made in reliance on applicable exemptions to adviser registration requirements.

ABOUT RISK

Convertible securities are subject to a risk of loss. Convertible securities may be subordinate to other securities. The total return for a convertible security depends, in part, upon the performance of the underlying stock into which it can be converted. Additionally, an issuer may encounter financial difficulties which could affect its ability to make interest and principal payments. If an issuer stops making interest and/or principal payments, an investor could lose its entire investment.

High yield securities have speculative characteristics and present a greater risk of loss than higher quality debt securities. These securities can also be subject to greater price volatility.

CREDIT RATING DISCLOSURES (FOR INDEX)

ICE BofA Credit Ratings

ICE BofA utilizes its own composite scale, similar to those of Moody's, S&P and Fitch, when publishing a composite rating on an index constituent (eg. BBB3, BBB2, BBB1). Index constituent composite ratings are the simple averages of numerical equivalent values of the ratings from Moody's, S&P and Fitch. If only two of the designated agencies rate a bond, the composite rating is based on an average of the two. Likewise, if only one of the designated agencies rates a bond, the composite rating is based on that one rating.

MacKay Shields LLC is a wholly owned subsidiary of New York Life Investment Management Holdings LLC, which is wholly owned by New York Life Insurance Company. "New York Life Investments" is both a service mark, and the common trade name of certain investment advisers affiliated with New York Life Insurance Company. Investments are not guaranteed by New York Life Insurance Company or New York Life Investments.



INVESTMENTS

"New York Life Investments" is both a service mark, and the common trade name, of certain investment advisors affiliated with New York Life Insurance Company.