# MacKay Shields Fixed Income Quarterly Outlooks

December 2023



### **Table of Contents**

Macroeconomic Outlook	
Active Fixed Income Outlook	
US High Yield Outlook	
Investment Grade Credit Outlook	
Securitized Outlook	
Convertibles Outlook	

Macroeconomic Outlook Active Fixed Income Outlook US High Yield Outlook Investment Grade Credit Outlook Securitized Outlook Convertibles Outlook

## Macroeconomic 1Q2024

Steven Friedman, Senior Macroeconomist, Head of the Macro and Quantitative Solutions Team, Portfolio Manager

## Moving Past the Peak, in Growth and Policy Rates

The US economy put in a remarkable performance in the third quarter, with GDP surging at a 5.2 percent annualized growth rate. Looking ahead, however, growth is likely to slow materially in coming quarters. Most importantly, monetary policy turned restrictive earlier this year, and is likely to remain so for an extended period of time. Even if further disinflation opens the door to rate cuts next year, these cuts will be gradual until policy makers regain full confidence that inflation is on a sustainable trend towards two percent. As a result, interest rates will likely remain high for the foreseeable future, and will increasingly weigh on household and business spending.

Figure 1: Measuring the Monetary Policy Stance: Real Policy Rate less Neutral Rate



Source: Federal Reserve Banks of Philadelphia and New York, University of Michigan, Bloomberg, MacKay Shields. Real policy rate calculated by subtracting one-year inflation expectations from the effective federal funds rate. One-year inflation expectations based on the average of the inflation swap rate, and median expectations from the Survey of Professional Forecasters and the University of Michigan Survey of Consumers. Neutral rate estimate is from the Federal Reserve Bank of New York's Holston-Laubach-Williams model. Shading indicates NBER recessions.

In addition, sources of resilience that supported growth this year should continue to fade. Households and nonfinancial corporates have run through a substantial portion of the stock of liquid assets built up in recent years. In addition, while the vast majority of homeowners locked in low mortgage rates prior to Fed tightening, the rise in rates on credit card debt, auto loans and other consumer loans has had a more noticeable effect on consumer finances, taking total household interest payments as a percent of income up to levels last seen during the Great Recession of fifteen years ago. Not surprisingly, the burden of higher borrowing costs is an increasing source of stress for many households; data from the Federal Reserve Bank of New York indicate that delinguency rates on auto loans and credit card debt continue to increase and are now above pre-COVID levels. And borrowing conditions for households are only becoming more challenging; on net, banks report continued tightening of lending standards across all categories of consumer loans.



### Figure 2: Household Interest Payments as a Percent of Disposable Income

Source: Bureau of Economic Analysis. Shading indicates NBER recessions.

## Macroeconomic 1Q2024 (cont'd)

Pressure on household balance sheets will likely increase further, as wage growth has continued to moderate amidst a cooling in labor demand. While economy-wide layoffs remain quite low, firms appear to be cutting back on labor on the margins, as seen in the decline in total overtime hours worked and temporary employment payrolls. And stripping away education and health care employment, which tends to have little correlation with the economic cycle, service sector jobs growth has fallen to anemic levels.

### Figure 3: Service Sector Jobs Growth excluding Health Care and Education

600 400 200 0 -200 -400 -600 1988 1993 1998 2003 2008 2013 2018 2023

Source: Bureau of Labor Statistics, MacKay Shields. Six-month moving average. Shading indicates NBER recessions.

With signs of labor market softening and inflation moderating, it appears that the monetary tightening cycle has come to an end. But the central bank's task now becomes more challenging, as risks to the outlook are now two-sided. Cutting rates too quickly to support growth and employment risks inflation stabilizing at too high a level, or potentially picking back up. Alternatively, keeping policy restrictive for an extended period risks a recession and a significant rise in unemployment. To navigate the year ahead successfully will require significant agility, from the Fed and investors alike.

## Active Fixed Income 1Q2024

### **Volatility Brings Opportunity**

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

We believe U.S. economic growth will slow in 2024, with risk of a recession elevated; accordingly, we believe interest rates are at or near cycle peaks

Agency mortgage-backed securities offer high yields and compelling value

The battered CMBS sector offers high yields and historically wide spreads. Add selectively.

Short duration corporate credit offers high yields and more cushion should credit spreads widen as the economy slows

### Duration

Long duration bias as we believe interest rates are near cycle peaks

### Yield Curve

Favor short-intermediate maturities

### **Spreads**

Modest overweight

### Volatility

Elevated in the short run, but should gradually normalize Asset Allocation

Favor agency mortgage-backed securities, select commercial mortgage-backed securities and front-end Investment grade corporate debt

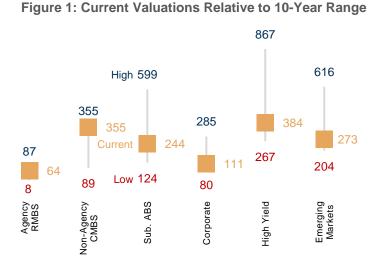
### Looking Back

During the past month, we heard from the Federal Reserve and the Treasury Department, with the net result for U.S. bonds being a strong rally, reversing losses from the substantial increase in interest rates endured during the month of October. The U.S. Treasury increased its planned sales of longer-term securities by slightly less than most

market participants expected in its quarterly debt-issuance plan, helping spur a rally in bonds amid the possibility that a wave of larger supply will soon come to an end. The Federal Reserve refrained from further rate increases at its last meeting. For the year, the Federal Reserve kept its resolve in attacking inflation by continuing its tightening cycle, then held off on hiking further in three of the last four meetings. While we cannot dismiss the notion that there may be one or even two additional increases in the near future, the bond market seems to have settled on the idea that we are approaching the end of this hiking cycle.

### **Opportunities Looking Ahead**

During our last quarterly update, we discussed the higher yields available to fixed income investors across the spectrum of asset classes, while also pointing out the historically cheap valuations of the agency mortgagebacked and CMBS markets relative to mostly fair valuations available elsewhere in fixed income markets. As seen in the chart below, spreads for both remain at or close to their 10year widest levels, with little change for other bonds.



OAS (Option Adjusted Spreads) as of October 31, 2023. Source: ICE Data Corporates - ICE BofA US Corporate Index; High Yield - ICE BofA US High Yield Index; Agency RMBS - ICE BofA US Mortgage Backed Securities Index; CMBS - ICE BofA US CMBS Index; Subordinated ABS - ICE BofA AA-BBB US Asset Backed Securities Index; Emerging Markets - ICE BofA US Emerging Markets External Debt Sovereign & Corporate Plus Index. Please see disclosures at the end of this presentation for additional information and index descriptions.

Macroeconomic Outlook Active Fixed Income Outlook

**US High Yield Outlook** 

Investment Grade Credit Outlook Securitized Outlook

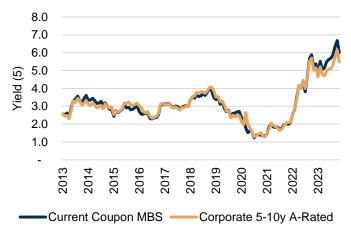
Specialty Fixed Income Solutions provided by MacKay Shields LLC

## Active Fixed Income 1Q2024 (cont'd)

### **Volatility Brings Opportunity**

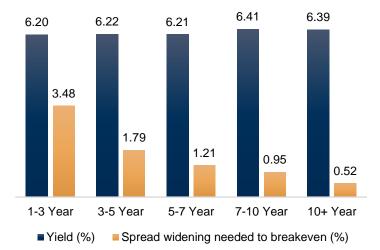
As the FDIC sales begin to wind down, and with valuations in other asset classes at best fair, it is our expectation that the agency mortgage market will begin to attract valueseeking investors and outperform. The much-maligned commercial mortgage-backed securities market continues to trade at levels not seen in many years, with the entire sector feeling the pain, and more acutely in specific segments such as office. However, away from office, fundamentals remain sound and we continue to seek select opportunities across the spectrum of properties, notably in self-storage and data centers. In the office sector, we look for opportunities in select Class A properties, and those with diverse sources of income, not solely reliant on leasing to corporate clients.

### Figure 2: MBS Offer Attractive Yields with Lower Credit Risk



Source: Bloomberg, MacKay Shields LLC

Lastly, investment grade corporates have delivered low positive returns thus far in 2023, despite headwinds from higher interest rates. As we believe interest rates are near cycle peaks, we favor owning short and intermediate maturities in light of an anticipated steepening of the yield curve as the economy slows. We consider strong corporate balance sheets and lower expected issuance in 2024 against a relatively flat yield curve today that offers insufficient compensation to extend maturities. Below we look at the relative attractiveness of short, intermediate and long-dated corporate bonds bucketed by maturities. Figure 3 shows the yield of each along with the credit spread widening that would be needed to breakeven (i.e., to produce a 0% return) over a one-year period. For the shortest of corporates, those with maturities between 1-year and 3-years, credit spreads would need to widen by more than 348 basis points to result in a negative return over the next year. The corresponding required spread widening for longer maturity debt, that maturing in 10-years and longer, is just over 50 basis points: this for an additional 20 basis points in yield! We view the yield differential as inadequate compensation for the risk of owning much longer maturity debt, as a 50 basis point spread widening would be plausible even in a relatively mild recession.



### Figure 3: Value in Front-End Corporates

Source: Bloomberg, MacKay Shields LLC

## US High Yield 1Q2024

Andrew Susser, Executive Managing Director, Head of High Yield

Joseph Maietta, CFA, Client Portfolio Manager

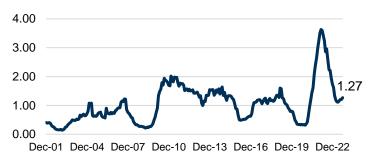
One not paying close attention to the US high yield market might understandably think that the fourth quarter has so far been uneventful. Following weakness in October, the ICE BofA US High Yield Index (the "Index") has sharply risen. As of November 20th, the yield and spread to worst of the Index stood at 8.7% and 407bps, respectively, slightly lower than where they started the fourth quarter.

In reality, the high yield market has experienced extreme volatility. A market selloff that started in September – the Index lost 1.2% that month - bled into October. From October 1st through October 20th the Index declined a further 1.7%. Few anticipated what has happened since. Since October 20th, the US high yield market has rebounded 4.0% through November 20th.

The coinciding of several factors explains the ferocity of the recent rally. Interest rates have declined sharply. After peaking at 4.98% on October 19th, the 10-year Treasury yield has plunged to 4.42% as of November 20th. In the blink of an eye, investor sentiment turned bullish once again – the S&P 500 has also rebounded 7.8% since October 20th – resulting in a sudden surge in demand for high yield bonds. According to Lipper FMI, after experiencing outflows of \$14.1bn from August through October (including \$8.1bn in October), investors poured \$10.8bn into high yield mutual funds in the three weeks ending November 15th.

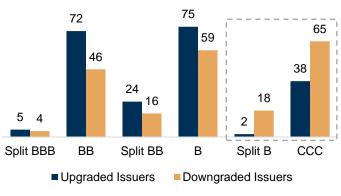
In addition, on October 30th, S&P upgraded Ford from BB+ to BBB-, meaning that over \$41bn of high yield bonds will exit most high yield indices in November. Ford represents approximately 3.2% of the Index. Ford's imminent departure from the high yield market has created unusually strong demand for BB bonds, as managers look to replace their exposure. As a result, BB bonds have outperformed during the recent rally in Q4. Credit trends remain stable within US high yield. As shown in the chart below, the "upgrade-to-downgrade" ratio for the high yield market remains above one (i.e., for every \$1 of high yield bonds downgraded by credit rating agencies, \$1.27 in high yield bonds were upgraded). While this ratio has declined sharply from the 2021 high, it suggests that broad credit trends remain firm.

### Figure 1: Last 12 Months US High Yield Upgrade to Downgrade Ratio (by Par)



Source: JP Morgan

Beneath the surface, however, there is a stark difference in credit trends between CCC issuers and the rest of the high yield market. As seen in the chart below, so far in 2023 the number of CCC issuers downgraded (65) has significantly outnumbered the number upgraded (38). On the other hand, both BB and B issuers have continued to more frequently experience upgrades than downgrades.



### Figure 2: # of Issuer Upgrades and Downgrades YTD to Sept' 2023

Source: JP Morgan

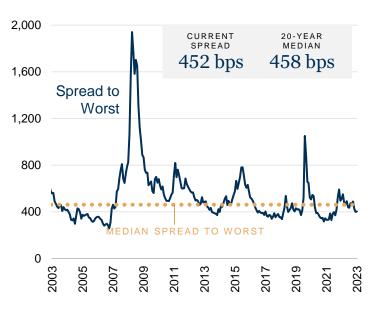
## US High Yield 1Q2024 (cont'd)

It is important to note that CCCs represent only 11% of the market, and the credit outlook for high yield remains strong. The quality of high yield bonds has improved significantly over the past decade. The 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. High yield issuers today are generally publicly traded companies -69%, according to JP Morgan. Even if the US economy heads into a recession, in our view it is unlikely that default rates spike far above historical norms.

From a historical perspective, spread levels remain fair at 407bps – the middle of the range the market has traded in non-panic environments of 350bps to 550bps. We would expect the market to maintain this range.

Overall yields are attractive relative to historical levels given the rise in rates. Starting yields (currently 8.7% as of November 20th) have generally been good indicators for subsequent 5-year performance for the market. Moreover, US 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 now at 4.2%. US High Yield has also performed well relative to equities in past cycles when starting yields for US High Yield have been near current levels.

### Figure 3: US High Yield Market Spreads



Source: ICE Data Index: ICE BofA US High Yield Index As of October 31, 2023

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

## Investment Grade Credit 1Q2024

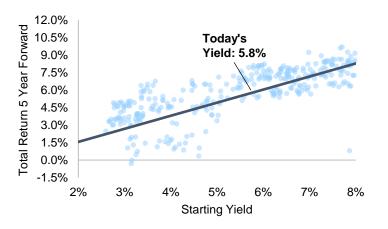
Shu-Yang Tan, CFA, Senior Portfolio Manager Lesya Paisley, CFA, Portfolio Manager Mark Kehoe, CFA, Portfolio Manager

### **Opportunities to Thrive in 2024**

Investment grade returns have been historically driven by income, and 2024's total returns are expected to follow this pattern. We maintain that higher yields, supported by "higher for longer" rates and Treasury yields, should result in satisfying total returns.

We don't expect material spread changes during 2024 as fundamental and technical factors are generally favorable, which should mean that credit spreads remain close to their historic averages. In light of this, and today's high yields relative to history, we expect returns to be consistent within some reasonable range around starting yields for investment grade corporate credit. Below we show the fairly tight relationship historically between starting yield and five-year forward total return.

### Figure 1: Starting Yield Drives Total Returns Expectations: Today's Higher Yields Help



Source: Bloomberg US Aggregate Corporate Index; Data from Jan 1, 1973 to Nov 22, 2023. It is not possible to invest directly in an index. See disclosures at the end of this document. Past performance is not indicative of future results.

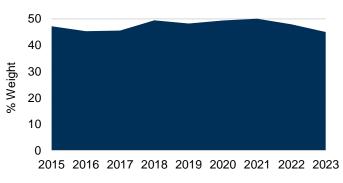
### Benign environment for investment grade credit with respectable fundamentals

Investment grade companies will enter 2024 with generally healthy balance sheets as higher interest rates have lessened the desire to take on more debt to fund higher payouts to equity holders or engage in debt funded M&A. The numbers bears this out; investment grade nonfinancial issuers have reduced shareholder payouts (dividends and share buybacks) by 5% year-on-year (-12% excluding the commodity sectors). Overall, we expect corporate leverage to remain anchored at its current 2.6x (gross debt to EBITDA) as management teams are expected to remain generally cautious and intent on controlling their cost of capital.

### Positive Technical: Increasing credit quality

The quality of the investment grade corporate market has improved in recent years. As a result of companies' improving financial resiliency and control over debt metrics, the percentage of the investment corporate market that is BBB is now just 47%, down from a peak of 51% in 2018. Furthermore, the share of BBB- in the index, the level just bordering on high yield, has dropped to an 11 year low of 10.7%. This improving trend is expected to continue into 2024, though at a slowing pace.<sup>1</sup>

### Figure 2: Upping the Quality: BBB are Shrinking as a % of Overall Credit Index



Source: Bloomberg

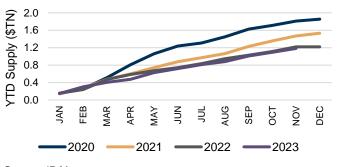
<sup>1</sup>Source: JP Morgan

## Investment Grade Credit 1Q2024 (cont'd)

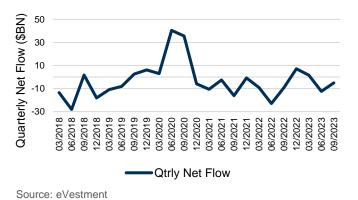
### Positive Technical: Less supply, more demand

Supply of corporate debt is expected to shrink in 2024. That's good news for investors. Annualized 2024 supply of investment grade bonds should be lower by 1% year-onyear on a gross basis and down 24% year-on-year on a net basis, according to JP Morgan. Should this forecast prove correct, it would be the slowest growth rate for the investment grade market in terms of net issuance since 2011. One sector that is expected to issue more bonds in 2024 compared to 2023 is the financial sector, notably the larger US banks and regional banks, with the latter expected to issue more debt to satisfy anticipated regulations requiring them to hold more loss absorbing unsecured debt.

### Figure 3: Less Supply of Investment Grade Bonds as Higher Rates Take Effect



Source: JP Morgan



### Figure 4: More Demand for Investment Grade as Yields Are Attractive

### Demand for investment grade bonds is expected to remain positive

We expect demand for investment grade debt to remain positive for the foreseeable future. The highest yields in more than a decade and solid fundamentals support the asset class despite generally fairly valued credit spreads.

### Sector Selection to augment returns

Entering 2024, while credit spreads are broadly fair, we believe a few sectors offer compelling value.

The telecommunications sector is interesting as the larger wireless companies come to the end of their costly 5G network roll-outs and revert to more maintenance capital spending. This likely means these companies will issue less debt and financial leverage should be restrained.

In the financial sector, the largest sector in the market, the implementation of further regulations is expected to benefit bond investors and may ultimately mean regional banks experience credit rating upgrades. However, before that happens these banks will need to issue sizable amounts of debt, likely resulting in wider credit spreads. With thorough financial analysis and proper security selection, we view this as an opportunity to add higher yields with compelling total return potential to an investment grade portfolio.

### Eye on possible sources of risk

The full impact of higher interest rates on the economy has likely not been fully experienced given the long and variable lag of monetary policy. As is typically the case, we expect the effects to be felt greatest by lower-rated companies, especially those with considerable floating rate debt, that have higher leverage and face near term liquidity needs. Investment grade companies are less levered and typically have debt service coverage ratios of 9x-11x, offering greater resilience should the economy take a turn for the worse. Furthermore, investment grade companies did a good job terming out their debt maturities when interest rates were much lower, suggesting near term liquidity needs appear more manageable.

In sum, we think investment grade credit markets in 2024 present an attractive opportunity for investors to earn high income from a diversified asset class with solid fundamentals and a strong technical backdrop, which should offer resiliency should economic growth fail to meet already diminished expectations.

Macroeconomic Outlook

Active Fixed Income Outlook US

US High Yield Outlook

Investment Grade Credit Outlook Securitized Outlook

d Outlook Convertibles Outlook

## Securitized 1Q2024

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

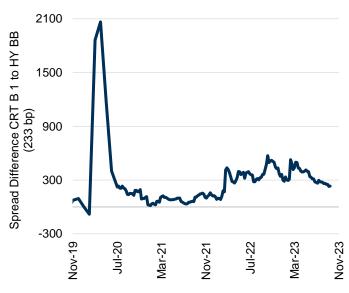
Zachary Aronson, Structured Products Credit Analyst, Portfolio Manager

### Agency Mortgage Backed Securities May Have Further Room To Outperform

After widening significantly through the first half of the year to levels not seen in over a decade, Agency Mortgage spreads have tightened through the end of 2023. Despite this, when viewed against a softening economic backdrop, resilient corporate credit spreads and room for further spread compression, we maintain that exposure to the sector remains attractive. Net supply is projected to drop 40% - 50% due to higher mortgage rates and less bank selling<sup>1</sup> which will relieve the pressure on the money management community to support spreads. This supply technical together with interest rate stability, lower volatility and renewed demand from banks is expected to further support spread levels. As previously noted, mortgage backed securities (MBS) remain historically wide to investment grade corporates, and we believe offer an excellent vehicle to reduce credit exposure while maintaining carry within a portfolio.

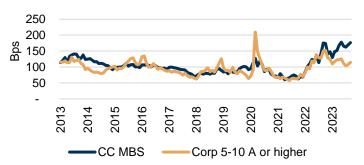
Credit risk transfer (CRT) securities<sup>2</sup> offer another avenue to diversify portfolios. CRT was one of the best performing sectors in the securitized market in 2023 and we still believe there is room to outperform due to favorable supply/demand technicals and a strong housing market. High mortgage rates and tepid housing turnover are expected to keep 2024 issuance equal to 2023's at \$9 billion, yet remain less than half of 2022 issuance when low rates contributed to heavy supply. In addition to low issuance, we expect Fannie Mae and Freddie Mac to continue tendering bonds (2023 amounted to \$5.6bn tendered) 1-2pts through current market levels. This makes economic sense for the GSEs (Government Sponsored Enterprises) because seasoned vintages such as 2019-2021 contain underlying collateral with 10% -40% embedded home price appreciation. Lastly, we believe significant relative value opportunities continue to exist within CRTs. For example, B1s are historically cheap to BB high yield, and we expect this spread to continue to compress.

### Figure 2: Relative Value Opportunities Between CRT B1 and BB High Yield



Sources: International Data Corporation (IDC) and Bloomberg

Grade Corporates



Sources: Bloomberg, Credit Risk Transfer Sector (CRT)

Figure 1: MBS Spreads Against Investment

1. Source: JP Morgan 2024 Securitized Products Outlook, November 21, 2023

2. Credit risk transfer securities were created in 2013 by two government sponsored enterprises (GSEs), Freddie Mac and Fannie Mae, to transfer the credit risk within pools of conventional residential mortgage loans from the GSEs to the private sector.

Macroeconomic Outlook	Active Fixed Income Outlook	US High Yield Outlook	Investment Grade Credit Outlook	Securitized Outlook	Convertibles Outlook

## Convertibles 1Q2024

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

### Performance

Convertible performance year-to-date has been a case of three steps forward, two steps back. At the end of July, the ICE BofA All U.S. Convertibles Index (the "Index") had advanced more than 11% from the start of the year. Just three months later, the Index was up less than one percent. Adding to the frustration has been the relatively poor performance of the Index versus the S&P 500 and NASDAQ to which the Index is usually closely correlated. Both equity indices have benefitted from the strong performance of a handful of their largest respective constituents. The broader and more small- cap focused Russell 2000, which may be a better reflection of many companies with convertible bonds outstanding, is roughly flat for the year. Our expectation is that the performance gap between the Russell 2000 and the larger cap indices will narrow.

On a positive note, convertibles have performed far better than traditional straight bonds, highlighting their correlation to equities and historical negative correlation to interest rates. In addition, with data suggesting that inflation may have peaked, our expectation is that the advance in equities can broaden out to include more of the issuers in the convertible universe. With valuations on smaller cap companies far lower than their larger cap peers, we expect that, in the absence of a durable recession, equity advances will include a greater number of small and midcap companies, allowing convertibles to make up ground with the large cap equity indices.

### Issuance

Year-to-date, new issuance of convertible securities is well ahead of last year's pace but still below the pace we saw in 2020 and 2021. Through the end of October, new issuance totaled just under \$44 billion which is nearly twice the total for all of 2022.<sup>1</sup> At the current rate, we expect this year's new issuance to approximate \$50-55 billion which is within the range of historical norms. Higher interest rates should continue to incent companies to raise capital in the convertible market as they can issue debt with a much lower coupon by providing investors the potential for upside appreciation tied to the issuer's stock price through the bond's conversion feature.

For investors, nearly 20% of the new convertible issuance this year has been investment grade<sup>1</sup>, which was incredibly scarce for the past decade as investment grade companies could sell non-convertible debt with coupons below 3%. In addition, higher rates have forced issuers to attach larger coupons to their convertible offerings. While convertible coupons remain well below those of high-yield debt, they are significantly higher than they were just one year ago. Lastly, the conversion premiums for most new issues - the amount that the common stock price needs to rise before it becomes advantageous to convert - have returned to more historical norms of 25-35% following 2021's premiums of 50-70% for many large technology and media new issues.<sup>1</sup> These features – lower conversion premiums and higher coupons - should allow investors to capture a greater portion of the underlying equity's upside move and garner an enhanced income stream versus what might have been earned in recent years past.

### Outlook

Fresh economic data continues to suggest that inflation has peaked. If this trend persists, it is likely that equity-linked securities such as convertible bonds may finally be able to break out of the trading range they have been stuck in for the past ten months. Equity valuations, particularly for many small and mid-cap companies, are low enough that they may even be discounting a mild to moderate recession. Barring a deeper economic contraction, we believe these securities are poised to outperform in the coming quarters.

We strive for our bottom-up process, which focuses on companies with a strong fundamental business, free cash flow and a solid balance sheet, to perform well in most market environments. In addition, by utilizing the asymmetric return profile inherent in most balanced convertible bonds, whereby an investor may participate in a greater percentage of the issuer's equity upside than downside, we feel we are well positioned for the year ahead.

1. Source: ICE Data

Macroeconomic Outlook Active Fixed Income Outlook US High Yield Outlook Investment Grade Credit Outlook Securitized Outlook Convertibles Outlook

### **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. ©2023, MacKay Shields LLC. All Rights Reserved.

Information included herein should not be considered predicative 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.

#### **ABOUT RISK**

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.

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.

#### 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.

#### **USE OF ISSUER NAMES**

All security, issuer and company names cited herein are done so for informational purposes only and only to convey factual information. Such names are not intended, nor should they be construed as, a recommendation to buy and sell any individual security or as an indication of current or future profitability. Issuers cited herein do not necessarily represent portfolio positions of MacKay Shields LLC or its affiliates, nor does MacKay Shields express any views, positive or negative, on such issuers.

#### **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.

High yield securities (junk bonds) 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.

#### SOURCE INFORMATION

Source: 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 or 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 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.

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.

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.

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.

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.

Macroeconomic Outlook Active Fixed Income Outlook US High Yield Outlook Investment Grade Credit Outlook Securitized Outlook Convertibles Outlook

### **IMPORTANT DISCLOSURE**

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 publically issued in the U.S. domestic market. To qualify for inclusion in the index, securities must have a below investment grade rated country of risk (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.

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

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 Bloomberg U.S. Aggregate Bond Index is a broad-based index that measures the investment-grade, US dollar-denominated, fixed-rate taxable bond market, including Treasurys, government-related and corporate securities, mortgage-backed securities (agency fixed-rate and hybrid adjustable-rate mortgage pass-throughs), asset-backed securities, and commercial mortgage-backed securities, with maturities of at least one year. Index results assume the reinvestment of all capital gain and dividend distributions.

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

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

Active Management: Active management is the use of a human element, such as a single manager, co-managers or a team of managers, to actively manage a fund's portfolio. Active management strategies typically have higher fees than passive management.

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.

**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 MacKay Shields Europe Investment Management 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.



"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.