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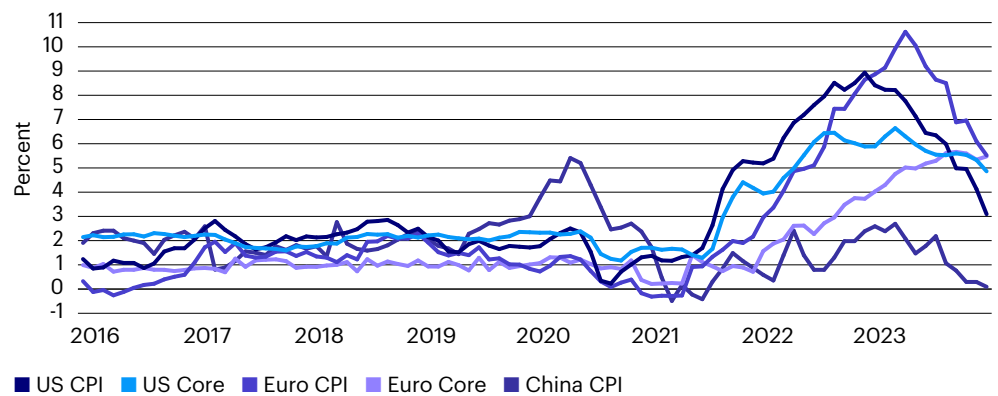
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Are we there yet?

As the market patiently waits for global central banks to wind down their rate hiking cycles, we wonder, is the journey

really this long, or have we gotten lost along the way?

Figure 1: Inflation is declining



Source: Macrobond. Data from Jan. 1, 2016 to June 30, 2023.

Recent economic data have been favorable for markets. The disinflationary trend that's been in place for several quarters continues, and core inflation appears to be in retreat across Western economies. Even China is showing signs of deflation, with recent reports of falling producer prices and steady consumer prices compared to a year ago. It would appear to be time to put fears of rising inflation to rest.

On the other hand, global growth is progressing at an unexciting, but non-recessionary pace, near our estimates for potential growth. We believe slow positive growth and disinflation provide a good backdrop for market risk takers and should be generally associated with strong risky asset performance. Recent positive market performance is most likely related to investors' growing confidence

in the slow growth, disinflationary environment and their positioning accordingly.

Central banks hew to their inflation fight

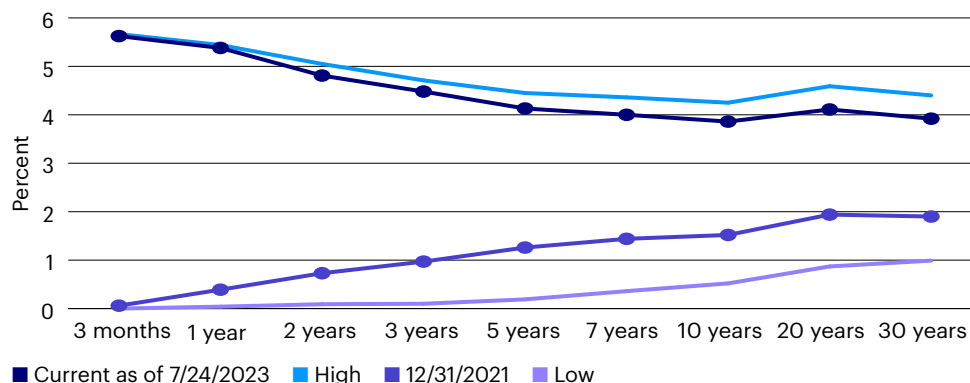
The doubters continue to be led by global central banks who have continued to raise interest rates, despite what appears to be clear evidence of disinflation. Inflation proved to be higher and more persistent than central banks anticipated coming out of the pandemic lockdowns, and their reaction to this miscalculation seems to be to consciously err on the side of caution now. While the disinflationary trend has been clear, and central banks could plausibly pause to observe the impact of significant rate increases, they have continued to hike rates. Central banks

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also are signaling that rates will likely stay elevated for an extended period. If rates stay high while inflation continues to decline, chances of a policy overshoot increase. This overshoot could arise

through lower-than-desired inflation, or a recession. Either of these outcomes would likely damage the current favorable investing environment.

Figure 2: US Treasury yield curve, 10-year range



Source: Macrobond. Data from July 25, 2013 to July 25, 2023.

Rate cuts could be a long way off

The question is, how will central banks manage going forward? If evidence of disinflation continues to build, as we expect it will, how will central banks respond? As the risk of lower than desired inflation builds, rate cuts would appear to become more appropriate. On the other hand, central bank rhetoric and expectations implied by markets argue that rate cuts will be a long time coming. Higher than necessary interest rates will likely increase downside risks in the coming quarters and is something we as investors will need to pay attention to.

An opportunity in bonds

Either way, we conclude that interest rate structures across most developed markets offer value. With interest rates across yield curves close to cyclical highs, disinflation well-established, and central banks leaning very hawkish, we believe investors have a very compelling opportunity in bonds. With the risk of an inflationary spiral off the table, we believe both the base case and risk cases involve solid potential total returns in bonds.

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Interest rate outlook

US: Overweight. US bond yields are caught between two countervailing forces. A slow growth, disinflationary environment should normally allow yields to decline. However, an aggressive Fed that is driving the yield curve to be deeply inverted is pushing yields higher. We expect 10-year US Treasuries to stay in a 3.5% to 4.0% range, bound by the interplay of these two forces. We are currently near the top of the range and recommend an overweight stance to US duration. With the Fed close to the end of its rate hiking cycle, yields may decline through the bottom of our range if disinflationary conditions persist over the coming quarter.

Europe: Overweight. We are positive on European rates, despite the continued hawkishness of the European Central Bank (ECB). Recent economic data in the region point to a markedly deteriorating economic landscape, which should reduce inflationary pressures over the coming months and quarters. However, the ECB seems determined to continue hiking, irrespective of the data, and our analysis indicates that it will have to start cutting rates sooner than the market anticipates.

China: Overweight. We see room for Chinese government bond yields to decline, with the potential for the yield curve to steepen. Investor positioning has been relatively crowded after the onshore bond market rally in 2Q 2023 and the weaker-than-expected economic growth report. However, the growth trajectory, household risk appetite, and our expectation of relatively moderate easing measures point to potential further yield declines, especially at the front end. We expect monetary policy to remain accommodative, with sufficient liquidity in the interbank market. Yield spikes on the back of unexpected policy easing measures may be seen as potential buying opportunities, in our view. As longer-term yields approach historically low levels, additional yield moves through key levels may face resistance.

Japan: Underweight. After largely ignoring the global bond selloff in May, Japanese government bond yields finally rose in late June after higher-than-expected wage data reignited speculation that the Bank of Japan (BoJ) might finally drop its Yield Curve Control policy, potentially as soon as its July meeting. Even if policy makers retain the current policy this month, the likelihood of an eventual change, leading to a jump in bond yields above 0.50%, has increased due to the build-up of inflation pressures. The depreciation of the yen has also increased the focus on the BoJ's

divergent policy versus other major central banks and the potentially negative side effects from higher import prices.

UK: Overweight. UK rates markets were volatile in July. Rates spiked higher to price a Bank of England terminal rate of close to 6.5% and a 10-year gilt yield of 4.66%, before reversing on better-than-expected US and UK inflation data, leaving yields almost unchanged from the previous month.¹ The recent rally has taken valuations from cheap to reasonable, in our view, with a peak rate now priced at around 5.9% and the 10-year gilt yield at 4.30%.² However, the recent tightening in financial conditions will probably weigh on domestic data going forward, creating scope for a further fall in yields. In addition, the reversal of the UK's recent inflation surprises makes it look less idiosyncratic relative to the global disinflation trend, allowing further scope for UK yields to reconverge with US and European equivalents.

Australia: Overweight. At 4%, 10-year Australia government bond yields offer reasonable value, in our view.³ Although, it is still possible that the Reserve Bank of Australia (RBA) will hike a further 25 basis points in August, especially if Q2 inflation data surprise to the upside, recent downside inflation surprises in Australia and internationally have reduced the chances of a substantial extension of the hiking cycle. Other domestic data remain relatively mixed; employment data have been buoyant, but forward-looking indicators are starting to point toward a deterioration in the labor market ahead. Yields are likely to remain relatively rangebound between 4.3% and 3.7%. While the RBA is likely to go on hold shortly, it will probably not cut until inflation falls decisively and/or the labor market deteriorates.

1. Source: Bloomberg L.P. Data as of June 21, 2023.

2. Source: Bloomberg L.P. Data as of June 21, 2023.

3. Source: Bloomberg L.P. Data as of June 21, 2023

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Currency outlook

USD: Neutral. As the Fed approaches the end of its current rate hiking cycle, we believe the outlook for the US dollar is finely balanced. If the Fed can engineer a soft landing while global growth improves, then the gradual decline in the US dollar since last year is likely to continue, especially versus emerging markets. However, we remain cautious - we are concerned that the cumulative impact of such an aggressive rate hiking cycle could begin to weigh on the US economy in the second half of the year, generating more market volatility and potentially providing some short term support to the dollar.

EUR: Neutral. The outlook for the European economy has deteriorated over the past few months as the impact of the ECB's aggressive rate hiking cycle has begun to weigh on it. Against that backdrop, the euro has retreated from its recent high while the market assesses the magnitude and duration of the slowdown. We expect the euro to trade in a range versus the US dollar until we get a clearer understanding of whether the Fed has reached a peak in rates. Ultimately the euro/dollar exchange rate will likely be driven by the broad US dollar beta.

RMB: Neutral. We think the main driver of the USD/RMB exchange rate's performance continues to be the US dollar strength against major currencies. Although China's growth trajectory and rate differential have continued to weigh on the renminbi's performance in the first half of this year, recent rhetoric from policy makers and a series of fixing deviations showed a tendency to contain USD/RMB moves when seen as excessive. We think the purpose of policymakers' recent actions is to contain the acceleration of speculative positioning, rather than reversing a trend. The valuation of the renminbi against the basket of currencies has started to return to the more neutral range from a historical context and has already corrected a substantial amount of the overvaluation accumulated in 2022, from the basket perspective.

JPY: Neutral. Stronger than forecast Japanese wage gains and lower than expected US inflation led to yen weakness in July, in tandem with the tightening in interest rate differentials. While the risk reward around long JPY positions is improving, given current valuations and a potential pause in the Fed hiking cycle, a large yen rally will likely require a shift toward rate cuts in the US and Europe, which could reduce the punitive negative

carry of running long yen positions. As a consequence, resilient economic data in the US likely limits the downside for the USD/JPY exchange rate currently.

GBP: Underweight. The British pound has outperformed the US dollar and euro lately, helped by widening interest rate differentials and relatively resilient UK growth. However, the recent spike in UK yields now looks to have plateaued and might even reverse, as inflation pressure look to be subsiding. In addition, the idiosyncratic tightening of financial conditions in the UK will likely lead to weaker data than elsewhere, probably weighing on the currency. Nevertheless, it is worth noting that the downside for the pound has diminished substantially relative to 2022, in our view, due to the better terms of trade outlook, largely due to lower energy prices, and the BoE's relatively hawkish stance compared to the Fed and ECB.

AUD: Neutral. The Australian dollar is caught between competing crosswinds; long-term fundamentals remain supportive, with the current account in surplus thanks to still relatively supportive terms of trade, but international risk sentiment, especially around Chinese growth prospects, and a still negative interest rate differential with the US, continue to weigh on the currency.

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This section highlights the views of Invesco Fixed Income's credit analysts across a broad range of fixed income assets managed by Invesco.

The Global Debt Team's active approach to EM sovereign ESG investing

Long history of ESG and sustainable fixed income investing

The Invesco Global Debt Team's approach to integrating environmental, social, and governance (ESG) factors into sovereign investment is rooted in our decades-long experience and belief that evaluating ESG criteria can lead to better long-term risk-adjusted returns. Our sovereign investment process combines top-down global macroeconomic analysis with bottom-up country analysis to identify investment opportunities and determine our portfolios' overall risk budgets.

The Global Debt Team is part of the Invesco Fixed Income (IFI) platform, a well-resourced team that combines local market knowledge with a global perspective to manage over USD6 billion in assets, including more than USD3 billion in sovereign emerging market (EM) debt.⁴ We believe our independent research and global approach to sustainable investing could offer value to clients seeking strategic partnerships in EM fixed income.

Integrating ESG factors into the sovereign investment process

Our approach considers governance factors along with the impact of environmental and social policies to analyze country-level growth and sustainability. Our top-down global macro analysis then aggregates individual country views into a global economic baseline to help determine our portfolios' overall risk profiles. Our global macro view emphasizes a country's growth level together with its progress toward sustainability, including efforts to increase the use of sustainable energy and access to health care, and ensure food security — all crucial factors in stable long-term economic growth, in our view. We believe identifying broad macroeconomic ESG themes and incorporating financially material ESG factors is fundamental in identifying and monitoring risks at the overall portfolio level when investing in EM countries.

Our philosophy is also based on our belief and experience regarding the positive impact of ESG investing on human welfare and long-term sustainable

growth. We believe that good governance and a strong pro-investment policy mindset are inherently beneficial to a country's long-term sustainability and are likely to have an enduring positive impact on the welfare of its citizens.

The Global Debt Team implements a proprietary two-pronged ESG rating framework that is unique within the sovereign fixed income asset class. The first prong is the foundation provided by a quantitative model, based on a formula that incorporates multiple data indicators against specified weightings for the normalization of the data. The initial output provides a numeric rating on which the second prong is built. The second prong is a qualitative assessment that incorporates the analytical expertise of economists and macro strategists who are well-versed in ESG risk considerations specific to sovereign entities. We consider each country's individual endowment of resources, its stage of development, the opportunity presented, and the probability of achieving it. This allows us to encourage positive development and favorable policy outcomes on various environmental and social issues, which is at the core of our sustainable investing strategy.

Case Study: Russia

Our proprietary ESG ratings and assessment of momentum toward ESG objectives help us gauge a country's potential for success, which contributes to the sizing of our portfolio positions. Frequent analyst assessments help bridge the "time gap" between traditional ESG data sets and real-time changes in sovereign sustainability factors. We believe this leads to improved portfolio risk signaling and better investment outcomes, which can be seen in our gradual decrease in exposure to Russian sovereigns and the Russian ruble prior to Russia's invasion of Ukraine in early 2022 (Figure 1).

4. Source: Invesco. Data as of June 30, 2023.

Figure 1: December 2021 Russia ESG summary

Pillar rating score: 1 is best, 5 is worst	Momentum rating: weakening/improving/stable
Environment	3 with stable momentum. Recent events suggest that the true trend is 'stable'. While we do not expect the score to drop, we think more decisive government action is needed to change the trend back to positive. At issue are industrial accidents that cause significant pollution (e.g., oil spills).
Social	2 with weakening momentum. Although the current score puts Russia at an above average 2 with an 'improving' trend, we think the post-COVID backdrop reverses the past positive momentum, and we think scores may fall in the future, thus assigning a 'weakening' trend. A deterioration in life expectancy and rising inequality are most likely to be triggered.
Governance	4 with weakening momentum. The current score is 4 with a 'stable' trend. However, we now think the direction of travel is a lower score and thus we update to a 'weakening' trend. This is based on recent corruption, and we believe foreign outcry for accountability is putting pressure on the current autocratic regime toward even more political oppression domestically and increased aggressiveness in foreign policy.

Source: Invesco.

We did not believe an immediate portfolio adjustment was necessary since the overall ESG score for Russia did not change. However, given the escalating rhetoric from both sides, we recognized the potential for the weakening ESG momentum trend to accelerate if ongoing discussions between Russia and Ukraine collapsed, leading to the team's heightened sensitivity to portfolio sizing.

In early 2022, despite our constructive view on the ruble and Russian interest rates, based on a fundamental view that inflation was peaking and the end of the rate hiking cycle was near, we began to reduce our duration and currency exposure to the sovereign by the middle of January and were formally underweight by early February (Figure 2).

We were concerned that ESG momentum was deteriorating rapidly, and that the probability of an actual conflict was increasing. Additionally, given our multi-decade experience investing in the asset class through systemic and idiosyncratic market shocks and our investment philosophy, which focuses on downside risk mitigation, we converted our remaining interest rate exposures to an interest rate swap format, as opposed to holding traditional Russian bonds (OFZ), to help guard against a sharp decline in liquidity in Russia's bond market, were an escalation to unfold. These strategic moves proved prescient, as they helped mitigate the impact of the geopolitical event on our portfolio.

Figure 2: Russia duration exposure over time

Date	Portfolio	Benchmark	Relative to benchmark
Nov. 30, 2021	0.54	0.34	+0.20
Dec. 31, 2021	0.47	0.33	+0.14
Jan. 31, 2022	0.29	0.30	-0.01
Feb. 23, 2022	0.20	0.26	-0.06

Source: Invesco.

Sovereign engagement and investor stewardship

We view ourselves as proactive and engaged investors. Engagement with policymakers is a core part of our due diligence and investment process. We engage prior to investing and afterward for monitoring purposes. We assess the quality of countries' policies via research trips and by engaging directly with local policymakers and stakeholders, including senior government officials, central bank representatives, state administrators and agencies, local politicians, non-governmental organizations, and consultants, as well as senior executives from the private sector. Assembling a holistic picture gives us greater confidence in our assessment of a country's policy feasibility and sustainability trajectory, which we believe are critical for a country's long-term economic prospects and investment returns.

Consistent engagement also allows us to identify financially material sustainability trends earlier, giving us time to gauge their potential impact on our portfolios. Our commitment to consistent and relatively frequent engagement with sovereigns on ESG topics also creates a positive feedback loop of information exchange with EM sovereign issuers, with the objective of furthering their sustainability development and improving their overall economic profile and structural health over a medium to long-term time horizon.

Panelists



Matt Brill
Head of North America
Investment Grade



Todd Schomberg
Senior Portfolio Manager

The bottom line: All signs point to extending duration

June's inflation results were better than expected, shifting bond market dynamics. And while the Fed's July decision to raise interest rates was well telegraphed, it still has implications for investors and bond markets. We speak with Invesco portfolio managers Matt Brill and Todd Schomberg about the potential implications for the investment grade market and their expectations looking ahead.

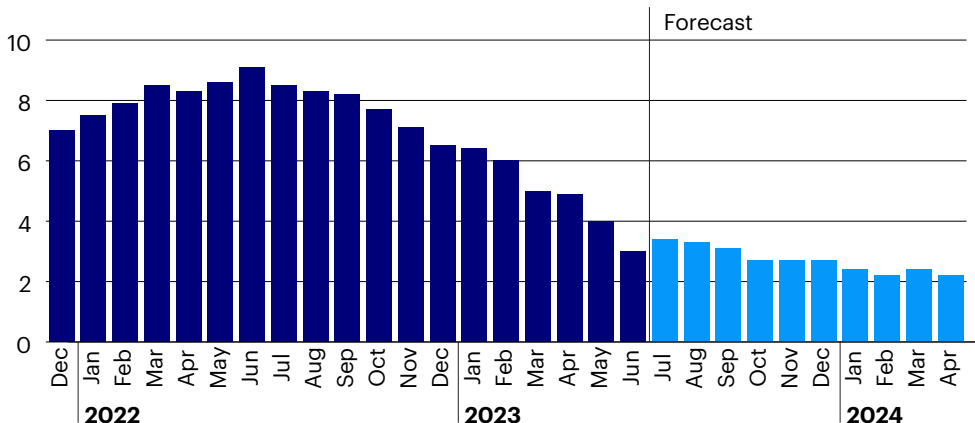
Q: Inflation has been a big focus for your team. What are your thoughts on the recent inflation data?

Matt: Annual inflation is finally falling into line with our forecasts. Year-over-year consumer price inflation declined to 3% in June and month-over-month inflation was 0.2%.⁵ Annualizing that figure leads to a run rate of around 2% for annual inflation, in line with the Fed's target.

On top of falling inflation, companies remain in good shape and the labor market is strong. Some observers had hoped that the labor market would slow, to take some pressure off inflation. But the economy seems to be achieving lower inflation while holding onto jobs, which is positive for consumers and companies. And even though the labor market remains strong, it has not overheated like it did in 2022 nor have we experienced a wage-price spiral. We have been impressed with the balance so far between falling inflation and resilient growth. This backdrop should be positive for risk assets and duration in general, and we believe it supports the notion of moving away from cash to investments further out the yield curve.

Figure 1: Annual inflation is falling

(US CPI year-over-year % chg)



Source: Macrobond, Bloomberg L. P., Invesco forecasts. Data from Jan. 1, 2021 to June 30, 2023. Forecasts thereafter.

Q: What are your expectations for Fed policy?

Todd: Inflation is finally moving into a territory where we believe the Fed feels comfortable, and the market has reacted positively. Interest rates have come down from their recent highs and credit spreads have tightened. Earlier this year, the market had priced in some Fed rate hikes toward the end of the year, but those cuts have been largely taken off the table. We believe the Fed's July rate hike will be its last for some time.

We think it makes sense to extend out the yield curve at this juncture since high short-term interest rates offered by US Treasury-bills and money markets are

not going to last forever. Market pricing supports this view – markets imply that rate cuts will probably start in mid-2024, when the first rate cut is fully priced in.

Q: How do you think about the inverted US Treasury yield curve?

Matt: While investors can still get very good short-term yields due to the steeply inverted yield curve, we think it will start to normalize as the front end moves lower. For one thing, a steeply inverted yield curve isn't healthy for the banking system over an extended period of time. And, as disinflation takes hold and the Fed rate hiking cycle comes to an end, we expect the yield curve to return to normal.

5. Source: US Bureau of Labor Statistics. Data as of July 12, 2023.

Q: Do you expect money market investors to move into equities and longer duration assets?

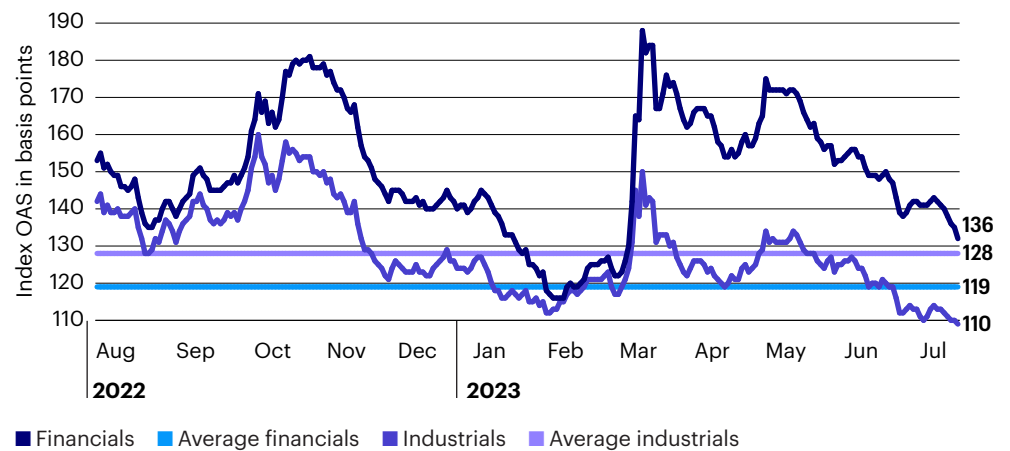
Todd: Money market funds hit a record high of nearly USD6 trillion this year.⁶ We think some of that money will start returning to the markets in the form of equities and longer-term fixed income. Already this year, the S&P 500 Index is up almost 20%, the NASDAQ Composite Index is up 34%, and corporate credit spreads are tighter.⁷ As equities have recovered smartly, we could argue that corporate credit should be performing better. However, we think this lag could be erased as investors potentially see the value in bonds and begin to move out of cash. That points to a positive technical outlook for fixed income, on top of an expected tapering of new issuance in the second half of the year, based on seasonal patterns.

Q: Where do you see opportunities in investment grade?

Matt: Our focus is on yield more than spread. We think spread is important, but all-in yields are at decade highs and that is driving flows into corporate credit. We have added to mortgage-backed securities in some portfolios and feel that mortgages are a great alternative to US Treasuries for a bit more yield, while remaining high in credit quality.

We are also finding good value in BBB's and, in particular, financials. So, we are overweight financials versus non-financials, and overweight BBB's versus single A's.

Figure 2: Financials vs. industrials option-adjusted spreads



Source: Macrobond. Data from July 25, 2022 to July 26, 2023.

6. Source: Federal Reserve Bank of Saint Louis. "Money Market Mutual Fund Total Assets". Data as of March 31, 2023.

7. Source: Bloomberg L.P. Data as of July 13, 2023.

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