



2024 Global Market Outlook Midyear Update

How central bank policy could impact your portfolio

# 2024 Global Market Outlook Midyear Update

Broadening global growth, resurgent inflation

define outlook	Page 2
Murky environment to challenge Fed policymakers	Page 5
ECB and BoE to cut as BoJ remains an outlier	Page 6
Reaccelerating inflation to make central banks walk tightrope	Page 8
U.S. stocks face a broadening, not a rotation	Page 10
International stocks still appear good value	Page 12
Investors moving out of cash may favor equities and short duration bonds	Page 14
Shifting market conditions will favor active management	Page 16
2024 tactical allocation views	Page 17



Nikolaj Schmidt Chief Global Economist



**Ken Orchard**Head of International
Fixed Income



**Peter Bates, CFA**Portfolio Manager,
Global Equities



**Tim Murray, CFA**Capital Markets
Strategist, Multi-Asset
Division

# All eyes on central banks

We are pleased to share our outlook for global economies and markets for the second half of 2024.

In the six months since we published our 2024 Global Market Outlook, the market environment has changed in many ways. Consensus expectations for central bank policy, in particular, are markedly different. Prices of interest rate futures reflect expectations for far fewer interest rate cuts from global central banks than seemed likely in December 2023. Equity and fixed income markets are readjusting accordingly.

The European Central Bank (ECB) kicked off the cycle of lowering rates by the major developed market central banks at its June policy meeting. But the path and magnitude of easing by the world's rate setters for the rest of the year is far from certain. This outlook details the factors shaping that path for the Federal Reserve (Fed) and other key central banks.

For the global economy, we anticipate broadening growth. While the U.S. remains strong, leading indicators elsewhere suggest that the narrative of U.S. economic exceptionalism may abate.

What does this backdrop mean for markets and asset classes? We expect a broadening in U.S. equity market performance and see attractive value in some international stock markets. Investors seeking to move out of cash may find attractive opportunities in shorter-term bonds, as well as equities.

Most importantly, we believe the ongoing transition from the low rates that prevailed after the 2008–2009 financial crisis to an environment characterized by structurally higher interest rates will present favorable conditions for active managers to outperform.

# Broadening global growth, resurgent inflation define outlook

Six months ago, the consensus outlook for the global economy in late 2024 featured steadily falling inflation amid a slide toward recession that would trigger aggressive central bank rate cuts. The best outcome would be a "soft landing" slowdown that dodged a recession thanks to central bank action. Investor hopes for this scenario led to simultaneous rallies in equities, high-quality government bonds, and bonds with credit risk.

What a difference a few months make: Consensus now expects continued expansion, resurgent inflation pressures, and limited easing from central banks. We're not quite as sanguine on growth as this "no landing" scenario, but it looks like recession is off the table for at least the next six months.

### Broadening of global growth

The consensus also still involves U.S. exceptionalism, with U.S. expansion easily outpacing anemic growth in other developed markets. But U.S. first-quarter growth disappointed. With leading indicators in the eurozone moving smartly higher, we could easily see an overall broadening of global growth, undercutting the U.S. exceptionalism narrative.

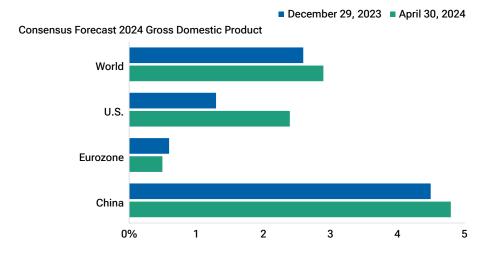
# "...recession is off the table for at least the next six months."

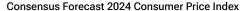


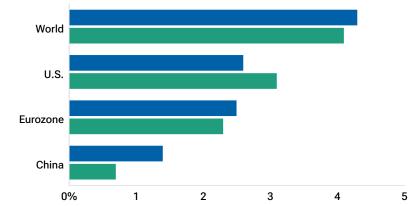
**Nikolaj Schmidt** Chief Global Economist

# More growth, more U.S. inflation

(Fig. 1) How consensus forecasts have shifted since the end of last year







As of April 30, 2024.

Source: Bloomberg Finance L.P.

There is no guarantee that any forecasts made will come to pass.

The consensus forecasts are for full-year 2024 GDP and CPI figures, taken at the end of December and the end of April, respectively.

The European Central Bank at its June meeting became the first major developed market central bank to cut interest rates. The Bank of England (BoE) looks poised to be the next to ease ahead of the UK general election on July 4, followed by the Federal Reserve. Because of the weaker starting point for the eurozone economy, we think the ECB will cut the most in 2024, with sticky inflation keeping the Fed to only one or possibly two rate reductions of 25 basis points each.

### Which way for monetary policy in 2025?

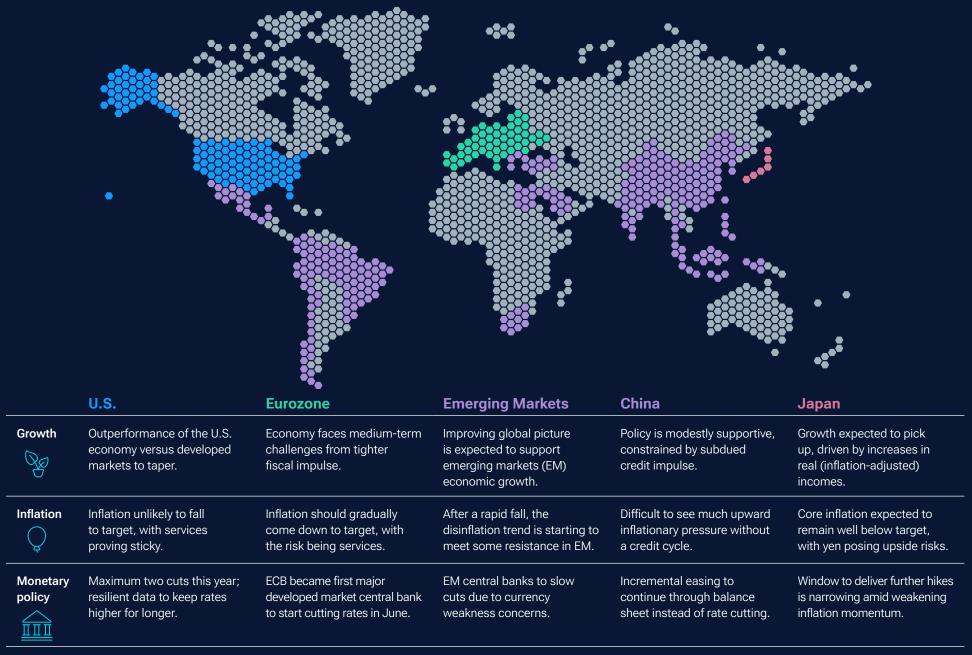
The overarching question is: Where will this bring monetary policy in 2025? Even modest rate cuts this year could easily lead to reaccelerating growth—and inflation that would force the Fed to raise rates next year, with other major central banks following close behind. This could mean that central banks will be tightening policy as the labor market weakens going into the next recession.

In this unusual scenario, we would expect more divergence in returns as investors sort through the implications for sectors and individual securities. Active portfolio management, with a focus on fundamental analysis and relative value, would be vital in this environment.



# Global macro and monetary policy guide 2024

As of May 31, 2024.



# Murky environment to challenge Fed policymakers

Investors have steadily ratcheted back their expectations for Federal Reserve rate cuts in 2024. In most previous economic cycles, the Fed has been the first to ease, but the ECB was the first mover this time. We still see a slight possibility of a Fed cut this summer followed by the central bank cutting 25 basis points at its December policy meeting, after the November elections are out of the way.

Fed policymakers seem eager to implement an "insurance cut" or two in 2024 to preempt a slowdown—assuming that inflation moderates. The Fed believes that monetary policy is tight, so it would only take modest softening in the labor market to convince the central bank to cut.

The Fed wants to avoid any sign that it is influenced or motivated by politics, so will not act at the September or November Federal Open Market Committee (FOMC) meetings. In fact, a July rate reduction might be earlier than the Fed would act if it were not an election year.

### **Elevated potential for Fed surprises**

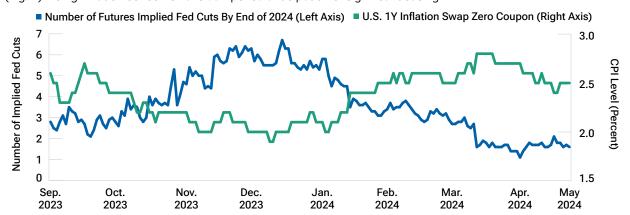
The potential for surprises from the Fed is much greater than in a typical late-business-cycle environment. There's an increasing chance that a lack of progress on getting annual core inflation to 2% will prompt the Fed to keep rates steady

for an extended period. Stepping back for a broader view, we are more likely to see the Fed surprise with fewer cuts than with more. Preempting the question on whether it is possible that resurgent inflation could prompt the Fed to raise rates later this year, we place less than 20% odds on that outcome.

The outlook for Fed easing in 2025 is even murkier. Two to three cuts in 2025 are priced in now, which appears too dovish. One or two rate reductions next year seems more realistic. And there is a risk that "insurance cuts" by the Fed could allow inflation to fester and raise the chances of the Fed moving back to a hiking bias in 2025.

### Rate cut expectations have fallen steadily in 2024

(Fig. 2) Rising inflation concerns have dampened anticipation of significant easing



As of May 22, 2024.

Source: Bloomberg Finance L.P.

Actual outcomes may differ materially from any expectations made.

# Key takeaway

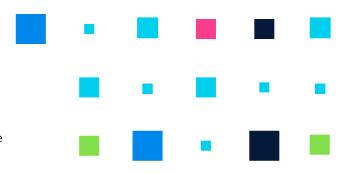
The Fed is more likely to surprise with fewer cuts than with more.



# ECB and BoE to cut as BoJ remains an outlier

For all developed market central banks (excluding the Bank of Japan (BoJ), which is an outlier), monetary policy is quite tight. They will want to avoid tipping their economies into recession. Consequently, these central banks can cut while preserving a tight monetary policy

stance. In fact, they will probably ease proactively if inflation allows—if they wait until economic activity craters before cutting, they will be far behind the curve because it will be a long way back to neutral.<sup>1</sup>



### Persistent wage growth will make ECB cautious over easing

(Fig. 3) The eurozone economy could be susceptible to an abrupt labor market slowdown

#### **Labor Shortage vs. Eurozone Wages**



As of May 24, 2024. Sources: ECB, European Commission.

#### **Eurozone Labor Demand vs. Labor Supply**



As of May 24, 2024.

Sources: European Commission, Eurostat.

<sup>&</sup>lt;sup>1</sup> The neutral rate neither stimulates nor restrains economic growth.

#### Fears of labor market cracks lead ECB to act

Eurozone inflation has fallen to the extent that the ECB was able to cut rates in June. ECB policymakers think that eurozone employers have been hoarding labor over the past 12 months. This makes the region's economy susceptible to an abrupt labor market downturn if corporate profit margins come under pressure amid softer final demand.

The big questions are: When will the ECB ease after June, and how large will the cuts be? The number of expected cuts has been steadily dropping, but we believe the ECB will likely cut twice before the end of 2024—however, it could be as few as once or as many as three times.

### BoE likely to follow in the third quarter

There have been hopes that the BoE would follow fast on the heels of the ECB by cutting rates later in June, but we believe it may be a little later than that. With tentative signs that the UK economy is recovering, the BoE may not feel it needs to rush in cutting rates and is likely to wait until the autumn before doing so.

### **Gradual tightening from the BoJ**

Japan has also struggled with inflation—but the lack of it rather than prices rising too quickly. After finally moving away from its subzero rates policy earlier in 2024, we expect the BoJ to continue gradually tightening while sounding dovish enough that the market doesn't undo its work in boosting inflation. By tightening policy, the BoJ would also support the yen, which has plumbed multi-decade lows against other major currencies in 2024.

# "The BoE may not feel it needs to rush in cutting rates...."



**Ken Orchard**Head of International
Fixed Income



# Central bank decisions to watch

June 6 June 12

ECB became the first major developed market central bank to cut rates

Fed likely to stay put at FOMC meeting

#### June 14

BoJ could continue to tighten policy

### July 31

Fed could make its first rate cut

#### September 18 September 19

With the U.S. presidential election on the horizon, Fed policymakers likely hesitant to cut

Possible first cut from the BoE

#### **November 7**

Two days after presidential election, Fed likely to hold rates steady

#### **December 18**

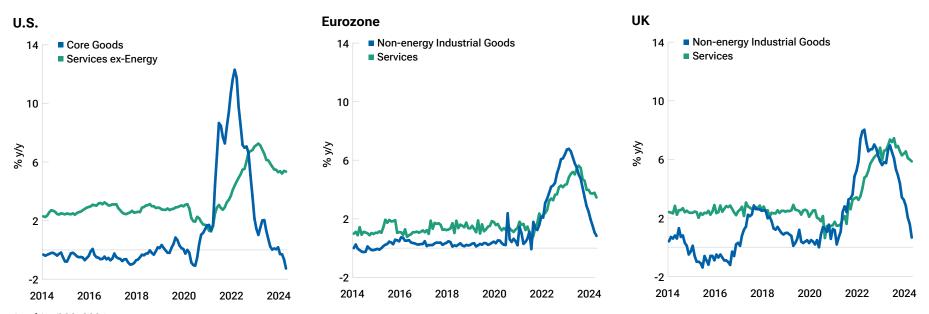
Look for the Fed to lower rates

# Reaccelerating inflation to make central banks walk tightrope



### Developed market services inflation is proving sticky

(Fig. 4) Goods inflation is falling much faster



As of April 30, 2024. y/y=year-over-year.

Source: U.S. Bureau of Labor Statistics, EU Statistical Office of European Communities, UK Office for National Statistics/Haver Analytics.

Inflation is notoriously difficult to predict, and it has continued to baffle most forecasters since the onset of the pandemic in 2020. However, it's becoming clear that inflation isn't going away, and we see a meaningful risk that it will reaccelerate as U.S. exceptionalism moderates and global growth broadens.

# Several factors drive risk of reaccelerating inflation

The big decrease in global inflation from 2022 to 2023 was due to goods disinflation, which is the easy part of taming inflation. Now services inflation, which is sticky, needs to fall. But for this to happen, the labor market

must have space to adjust—wage pressures drive services inflation, and higher unemployment is required to control wage pressures. Artificial intelligence (AI) is one countervailing force that could help tame services sector wage growth, but AI will take time (and expense) to implement, making it a longer-term factor.

**Global Rates U.S. Equities Economy U.S. Rates Inflation** 

Fiscal spending in an election year will also put upward pressure on inflation, and energy prices - which have been a headline inflation tailwind since surging in 2022 following Russia's invasion of Ukraine—are a wild card that could easily spike again if conflict in the Middle East escalates or other geopolitical hot spots erupt.

These factors would, of course, make central banks' difficult balancing act between supporting growth and restraining inflation that much harder.

Because we see renewed upward pressure on inflation, investors may benefit from exposure to real assets such as commodities—including gold and silver—and real estate or to inflation protected government bonds. Real assets tend to hold up well in inflationary environments, while inflation-protected government debt has principal and interest payments that adjust based on inflation data.

# Key takeaway

The big decrease in global inflation from 2022 to 2023 was due to goods disinflation, which is the easy part of taming inflation. Now services inflation, which is sticky, needs to fall.



# U.S. stocks face a broadening, not a rotation

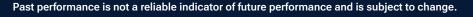
In recent years, the U.S. stock market has been dominated by the "Magnificent Seven" technology stocks, but there are signs this once-monolithic group of large-cap growth firms is beginning to fragment. The outperformance of the Magnificent Seven propelled the S&P 500 to new highs earlier this year and resulted in the index becoming concentrated to an unprecedented degree.

Performance within the group is now diverging, however— as of late May, NVIDIA, Meta, Microsoft, and Amazon have continued to outpace the market, while Apple, Alphabet, and Tesla have begun to lag. As the benefits of Al technology are unlikely to be evenly spread

among the members of the Magnificent Seven, further dispersion within the group can be expected.

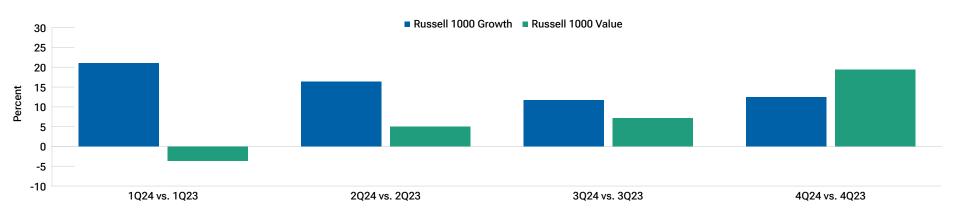
#### Fewer cuts should favor value stocks

Meanwhile, value stocks could be primed for a comeback as investors seek to diversify their exposure beyond the Magnificent Seven, particularly given growing expectations that the higher rate environment will persist. If the Fed only makes a few cuts or does not cut at all, value companies should benefit as they have tended to be more rate-sensitive and have typically fared better in a world where interest rates



# Value stocks look poised for earnings resurgence

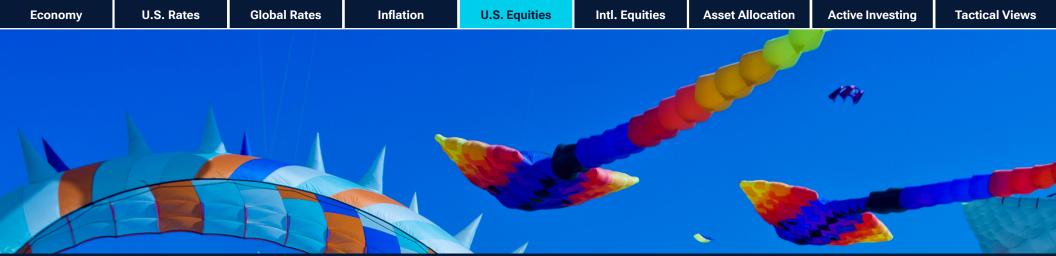
(Fig. 5) Estimated earnings per share of value stocks set to outstrip growth stocks later this year



As of May 13, 2024.

Source: FTSE Russell (see Additional Disclosures). Actual outcomes may differ materially from estimates.

Each time period shows the estimated year-over-year change in quarterly earnings for growth and value stocks for each quarter this year.



remained higher for longer. And while value stocks have begun to perform better in recent months, they continue to trade at a significant discount to growth stocks. If conditions continue to favor value stocks—as we believe they will—the dominance of growth stocks may start to fade.

Small-cap stocks are trading at a major discount to larger companies after struggling for several years against high inflation and a steep rise in borrowing costs. While the persistence of a higher rate environment could limit the upside of small-cap stocks, the earnings of smaller firms should improve if rates come down.

### A widening opportunity set

Although we believe that value—and possibly small-cap—stocks may begin to challenge the dominance of large-cap growth stocks, it is important to stress the difference between a broadening of the market's opportunity set and a rotation between market styles, sectors, or capitalization. We are not predicting the imminent demise of the Magnificent Seven—rather, we anticipate a continued broadening of opportunities to include more companies and sectors across the market that may have lagged in recent years.

"...we anticipate a continued broadening of opportunities to include more companies and sectors across the market that may have lagged in recent years."



Peter Bates, CFA
Portfolio Manager,
Global Equities



# International stocks still appear to be good value

Fueled by the outperformance of growth technology stocks, U.S. equities reached all-time highs earlier this year, pushing their premium versus international (i.e., non-U.S.) stocks to 20-year wide levels. International stocks remain favorably valued but are fundamentally more attractive in the post-COVID environment, as demonstrated by improved earnings growth in recent years. This is because, in contrast to the U.S. market's heavy exposure to growth stocks, the international

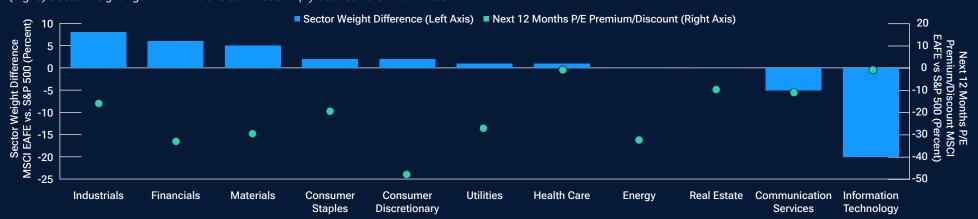
market is more exposed to value-oriented sectors such as financials, materials, industrials, and energy, where we see secular support in the years ahead. The S&P 500 Index, for example, has a very different sector composition from the MSCI EAFE Index.

Supply chain diversification, infrastructure rebuild, defense spending, and the likelihood of higher energy prices should favor traditional value sectors as

capital spending accelerates. As these sectors are currently cheaper and, in some cases, have a lower earnings bar than their U.S. counterparts, investors seeking diversification from large-cap tech growth stocks may seek to increase their exposure to select international markets.

#### The MSCI EAFE Index is not an ex-U.S. S&P 500 Index

(Fig. 6) Sector weightings and valuations contrast sharply between the two indices



As of April 30, 2024.

Source: T. Rowe Price analysis using data from FactSet Research Systems Inc. All rights reserved. Please see Additional Disclosures page for more information about this Standard & Poor's information. These statistics are not a projection of future results. Actual results may vary.

P/E= price-to-earnings.

# Improving corporate governance is driving Japanese stock performance

Of the international markets, we continue to favor Japan. Improved corporate governance standards continue to have a tangible—and considerable—impact on company performance. Shareholders are now a much higher priority in Japan than they were in the past. While the BoJ recently ended its negative interest rate policy, it is not expected to embark on a hiking cycle that brings Japanese rates in line with those of other developed markets. This should keep the yen relatively weak and Japanese exports competitive. Valuations are reasonably attractive, too—although the Nikkei 225 has climbed to within reach of its record high, Japanese stocks continue to trade at a low price-to-book value. However, investors outside of Japan will need to consider how yen weakness relative to other currencies will impact the value of their returns.

# South Korea and Vietnam the pick of emerging economies

South Korea has sought to emulate Japan's success in boosting stock valuations with a corporate governance drive. Tax incentives have been offered to businesses that prioritize shareholder returns, while the new "Korea Value-up Index" will list firms that have improved capital efficiency. Vietnamese stocks also appear cheap despite a cyclical recovery, an expanding consumer economy, and a looming upgrade to emerging market status. With corporations seeking to diversify their supply chains beyond China, Vietnam appears well placed to attract manufacturing capacity.

# **Key takeaway**

Of the international equity markets, we continue to favor Japan, South Korea, and Vietnam.



# Investors moving out of cash may favor equities and short duration bonds

A vast amount of money is hanging over U.S. financial markets in money market funds and other short-term liquid instruments. Evidence from past economic cycles suggests that this strong liquidity preference will ease at some point, especially if the U.S. avoids a deep recession.

As concerns over a hard landing for the U.S. economy have receded, focus has shifted from recession risk to inflation risk. This will impact where investors seek to allocate their money. Historically, bonds—particularly longer-dated bonds—have been an excellent hedge against recession but a poor hedge against inflation. During rare periods when inflation has turned negative due to sharp economic downturns, bonds have outperformed stocks.

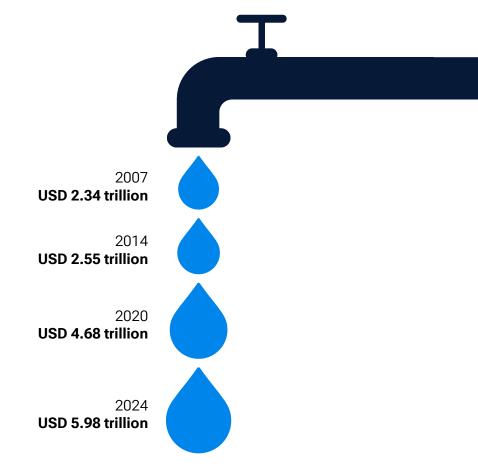
"Evidence from past economic cycles suggests that this strong liquidity preference will ease at some point, especially if the U.S. avoids a deep recession."



**Tim Murray, CFA**Capital Markets Strategist,
Multi-Asset Division

# U.S. investors are flush with liquidity

(Fig. 7) Money market fund assets are highly elevated



As of April 1, 2024.

Source: Investment Company Institute.

# Energy stocks may offer best hedge against inflation

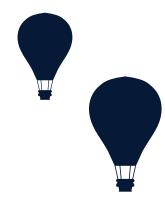
Stocks have tended to perform best during periods of low, moderate, or even slightly elevated inflation. But they have typically dipped sharply during recessions and have also weakened when inflation has moved to very high levels. However, energy sector stocks have historically performed quite well during periods of very high inflation. These patterns suggest that one way to hedge against inflation risk would be to tilt portfolios to stocks, with an emphasis on the energy sector and other commodity-oriented equities.

Investors are also likely to turn to shorter-term bonds given attractive yield levels available and the potential for price appreciation if yields move lower. Short-term bonds are highly valued during uncertain periods—such as the present—as they are less exposed to interest rate changes than longer-dated bonds. They also provide the potential for higher returns than cash while being almost as flexible. This flexibility may be useful given uncertain economic and market conditions.



Commodity-oriented equities may offer an effective hedge against inflation risk.







# Shifting market conditions will favor active management

The investment environment is changing. The post-GFC era of low rates and abundant liquidity is being replaced by one of higher rates, greater divergence of returns, and more volatile markets. We believe this period of transition will continue in the second half of 2024 and underpin conditions for active managers to outperform.

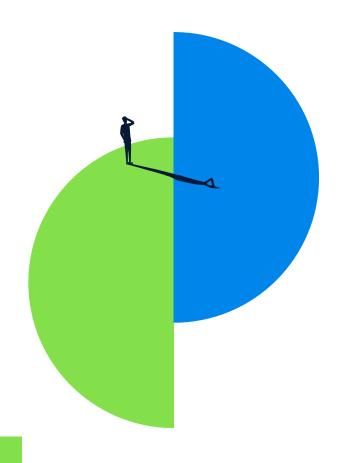
Challenging market conditions will require investors to be more valuation-sensitive than in recent times, when a rising tide lifted all boats. Traditional skills, such as identifying stock drivers and idiosyncratic risk, will continue to be essential, but investors will need to take into account wider macroeconomic, social, and geopolitical factors along with company fundamentals.

# Active managers have performed well following periods of index concentration

Active managers tend to go beyond benchmarks and into factors that can be cyclical, such as small-cap and value stocks—both of which we believe may perform well in the period ahead. Top performing active managers have also historically performed well following periods of heavy index concentration—and markets recently have been concentrated to an unprecedented degree.<sup>2</sup> Although it is difficult to predict when the current period of index concentration will recede meaningfully, there are already signs that the dominance of the Magnificent Seven is beginning to fade.

The end of the period of very low rates will also, we believe, lead to greater dispersion and heightened volatility in bond markets. Active investing can help with duration management, as well as managing country selection, curve positioning, and security selection.

These developments do not mean we expect passive investing to undergo a major retreat. However, we believe that active management will be the better option for the period ahead, as it can offer better outcomes during periods of greater volatility and dispersion.



# Key takeaway

We believe the likelihood of continued asset price dispersion and heightened volatility will suit active management strategies.



<sup>&</sup>lt;sup>2</sup> Based on eVestment U.S. large-cap manager performance and S&P 500 Index concentration analyzed from September 30, 1989 to December 31, 2023. Past performance is not a reliable indicator of future performance. As of April 30, 2024, the S&P 500 Index and Russell 1000 Growth Index both registered their highest levels of concentration in 20 years, as measured by the combined weighting of the 10 largest stocks in each index.

# 2024 tactical allocation views

As of May 31, 2024.



## T. Rowe Price multi-asset positioning—asset class



Earnings continue to strengthen, but face elevated expectations. Potential for broader market participation as economic growth improves, commodity prices increase, and consumer spending remains resilient.



Yields remain attractive but volatility could persist due to global divergence in growth, inflation, and central bank expectations. Credit fundamentals remain supportive; however, spreads remain tight.



Continues to offer attractive yields as the yield curve remains inverted, and continues to offer liquidity should market opportunities arise.

This material is not intended to be investment advice or a recommendation to take any particular investment action.

### T. Rowe Price multi-asset positioning—equities



Earnings expectations improving. Economic activity resilient. Valuations may limit upside.



Improving economic outlook and broadening of equity market performance could be supportive for value.



Valuations attractive on a relative basis. European equity outlook improving. Chinese growth appears to have stabilized.



Value stocks cheap and could benefit if recession concerns fade. Growth stocks challenged by consumer weakness in China and Europe.



Inflation had been steadily declining but is showing signs of bottoming. Economic growth remains weak.



Large-Cap1

Small-caps offer attractive relative valuations but are challenged by higher-for-longer interest rates.



Economy welcomes inflation after decades fighting deflation. Corporate governance continues to gradually improve.



vs. Large-Cap1

Small-caps offer very reasonable valuations against a muted global growth profile. Could benefit from improvement in economic growth.



Valuations attractive. Monetary policy easing could provide support. Chinese equities finding some footing, but structurally challenged.



Commodity-related equities are cheap and offer an attractive hedge to stickier inflation.

<sup>&</sup>lt;sup>1</sup> For pairwise decisions in style & market capitalization, positioning pointed represents positioning in the first mentioned asset class relative to the second asset class. This material is not intended to be investment advice or a recommendation to take any particular investment action.

# T. Rowe Price multi-asset positioning—bonds



Yields broadly attractive. Credit fundamentals and technical backdrop supportive. But yields have upside risk and credit spreads<sup>1</sup> are tight.



Attractive absolute yield levels supportive, but tight spreads may reflect a too optimistic backdrop.



Global central banks cautiously eyeing rate cuts. Yields look attractive on a USD-hedged basis.



Yields could remain elevated on less aggressive Fed cut expectations. Spreads attractive, although default rates expected to rise.



Longer term yields biased higher due to increased supply, resilient growth, and stickier inflation.



Yields modestly attractive. Central banks easing cycles and moderating inflation may benefit EM bonds.



Sector offers a hedge should inflation settle at, or move higher, than current levels.



Central bank easing and lower inflation could be tailwinds, but a higher-for-longer Fed could sustain dollar strength.

This material is not intended to be investment advice or a recommendation to take any particular investment action.

The asset classes across the equity and fixed income markets shown are represented in our Multi-Asset portfolios. Certain style & market capitalization asset classes are represented as pairwise decisions as part of our tactical asset allocation framework.

<sup>1</sup> Credit spreads measure the additional yield that investors demand for holding a bond with credit risk over a similar-maturity, high-quality government security.

#### INVEST WITH CONFIDENCE

T. Rowe Price identifies and actively invests in opportunities to help people thrive in an evolving world, bringing our dynamic perspective and meaningful partnership to clients so they can feel more confident.

Active investing may have higher costs than passive investing and may underperform the broad market or passive peers with similar objectives.

T. Rowe Price cautions that economic estimates and forward-looking statements are subject to numerous assumptions, risks, and uncertainties, which change over time. **Actual outcomes could differ materially from those anticipated in estimates and forward-looking statements, and future results could differ materially from any historical performance.** The information presented herein is shown for illustrative, informational purposes only. Any historical data used as a basis for this analysis are based on information gathered by T. Rowe Price and from third-party sources and have not been independently verified. Forward-looking statements speak only as of the date they are made, and T. Rowe Price assumes no duty to and does not undertake to update forward-looking statements. Where securities are mentioned, the specific securities identified and described are for informational purposes only and do not represent recommendations.

#### **Additional Disclosures**

CFA® and Chartered Financial Analyst® are registered trademarks owned by CFA Institute.

London Stock Exchange Group plc and its group undertakings (collectively, the "LSE Group"). © LSE Group 2024.All rights in the FTSE Russell indexes or data vest in the relevant LSE Group company which owns the index or the data. Neither LSE Group nor its licensors accept any liability for any errors or omissions in the indexes or data and no party may rely on any indexes or data contained in this communication. No further distribution of data from the LSE Group is permitted without the relevant LSE Group company's express written consent. The LSE Group does not promote, sponsor or endorse the content of this communication.

The S&P 500 Index is a product of S&P Dow Jones Indices LLC, a division of S&P Global, or its affiliates ("SPDJI") and has been licensed for use by T. Rowe Price. Standard & Poor's® and S&P® are registered trademarks of Standard & Poor's Financial Services LLC, a division of S&P Global ("S&P"); Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"). This product is not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, their respective affiliates, and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability for any errors, omissions, or interruptions of the S&P 500 Index.

MSCI. MSCI and its affiliates and third party sources and providers (collectively, "MSCI") makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any MSCI data contained herein. The MSCI data may not be further redistributed or used as a basis for other indices or any securities or financial products. This report is not approved, reviewed, or produced by MSCI. Historical MSCI data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. None of the MSCI data is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such.

#### Important Information

This material is being furnished for general informational and/or marketing purposes only. The material does not constitute or undertake to give advice of any nature, including fiduciary investment advice, nor is it intended to serve as the primary basis for an investment decision. Prospective investors are recommended to seek independent legal, financial and tax advice before making any investment decision. T. Rowe Price group of companies including T. Rowe Price Associates, Inc. and/or its affiliates receive revenue from T. Rowe Price investment products and services. Past performance is not a reliable indicator of future performance. The value of an investment and any income from it can go down as well as up. Investors may get back less than the amount invested.

The material does not constitute a distribution, an offer, an invitation, a personal or general recommendation or solicitation to sell or buy any securities in any jurisdiction or to conduct any particular investment activity. The material has not been reviewed by any regulatory authority in any jurisdiction.

Information and opinions presented have been obtained or derived from sources believed to be reliable and current; however, we cannot guarantee the sources' accuracy or completeness. There is no guarantee that any forecasts made will come to pass. The views contained herein are as of the date written and are subject to change without notice; these views may differ from those of other T. Rowe Price group companies and/or associates. Under no circumstances should the material, in whole or in part, be copied or redistributed without consent from T. Rowe Price.

The material is not intended for use by persons in jurisdictions which prohibit or restrict the distribution of the material and in certain countries the material is provided upon specific request. It is not intended for distribution to retail investors in any jurisdiction.

DISCLOSURE CONTINUES ON THE FOLLOWING PAGE.

#### Important Information (cont.)

**Australia**—Issued by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 28, Governor Phillip Tower, 1 Farrer Place, Sydney NSW 2000, Australia. For Wholesale Clients only.

**Brunei**—This material can only be delivered to certain specific institutional investors for informational purpose only. Any strategy and/or any products associated with the strategy discussed herein has not been authorised for distribution in Brunei. No distribution of this material to any member of the public in Brunei is permitted.

**Canada**—Issued in Canada by T. Rowe Price (Canada), Inc. T. Rowe Price (Canada), Inc.'s investment management services are only available to Accredited Investors as defined under National Instrument 45-106. T. Rowe Price (Canada), Inc. enters into written delegation agreements with affiliates to provide investment management services.

**Colombia, Chile, Mexico, Perù, Uruguay**—This material is prepared by T. Rowe Price International Ltd - Warwick Court, 5 Paternoster Square, London, EC4M 7DX which is authorised and regulated by the UK Financial Conduct Authority - and issued and distributed by locally authorized distributors only. For professional investors only.

**DIFC**—Issued in the Dubai International Financial Centre by T. Rowe Price International Ltd which is regulated by the Dubai Financial Services Authority as a Representative Office. For Professional Clients only.

**EEA**—Unless indicated otherwise this material is issued and approved by T. Rowe Price (Luxembourg) Management S.à r.l. 35 Boulevard du Prince Henri L-1724 Luxembourg which is authorised and regulated by the Luxembourg Commission de Surveillance du Secteur Financier. For Professional Clients only.

**Hong Kong**—Issued in Hong Kong by T. Rowe Price Hong Kong Limited, 6/F, Chater House, 8 Connaught Road Central, Hong Kong. T. Rowe Price Hong Kong Limited is licensed and regulated by the Securities & Futures Commission. For Professional Investors only.

Indonesia—This material is intended to be used only by the designated recipient to whom T. Rowe Price delivered; it is for institutional use only. Under no circumstances should the material, in whole or in part, be copied, redistributed or shared, in any medium, without prior written consent from T. Rowe Price. No distribution of this material to members of the public in any jurisdiction is permitted.

Korea—This material is intended only to Qualified Professional Investors. Not for further distribution

Mainland China—This material is provided to qualified investors only. No invitation to offer, or offer for, or sale of, the shares will be made in the mainland of the People's Republic of China ("Mainland China", not including the Hong Kong or Macau Special Administrative Regions or Taiwan) or by any means that would be deemed public under the laws of the Mainland China. The information relating to the strategy contained in this material has not been submitted to or approved by the China Securities Regulatory Commission or any other relevant governmental authority in the Mainland China. The strategy and/or any product associated with the strategy may only be offered or sold to investors in the Mainland China that are expressly authorized under the laws and regulations of the Mainland China to buy and sell securities denominated in a currency other than the Renminbi (or RMB), which is the official currency of the Mainland China. Potential investors who are resident in the Mainland China are responsible for obtaining the required approvals from all relevant government authorities in the Mainland China, including, but not limited to, the State Administration of Foreign Exchange, before purchasing the shares. This document further does not constitute any securities or investment advice to citizens of the Mainland China, or nationals with permanent residence in the Mainland China, or to any corporation, partnership, or other entity incorporated or established in the Mainland China.

**Malaysia**—This material can only be delivered to specific institutional investor. This material is solely for institutional use and for informational purposes only. This material does not provide investment

advice or an offering to make, or an inducement or attempted inducement of any person to enter into or to offer to enter into, an agreement for or with a view to acquiring, disposing of, subscribing for or underwriting securities. Nothing in this material shall be considered a making available of, solicitation to buy, an offering for subscription or purchase or an invitation to subscribe for or purchase any securities, or any other product or service, to any person in any jurisdiction where such offer, solicitation, purchase or sale would be unlawful under the laws of Malaysia.

**New Zealand**—Issued by T. Rowe Price Australia Limited (ABN: 13 620 668 895 and AFSL: 503741), Level 28, Governor Phillip Tower, 1 Farrer Place, Sydney NSW 2000, Australia. No Interests are offered to the public. Accordingly, the Interests may not, directly or indirectly, be offered, sold or delivered in New Zealand, nor may any offering document or advertisement in relation to any offer of the Interests be distributed in New Zealand, other than in circumstances where there is no contravention of the Financial Markets Conduct Act 2013.

Philippines—ANY STRATEGY AND/ OR ANY SECURITIES ASSOCIATED WITH THE STRATEGY BEING DISCUSSED HEREIN HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION UNDER THE SECURITIES REGULATION CODE. ANY FUTURE OFFER OR SALE OF THE STRATEGY AND/ OR ANY SECURITIES IS SUBJECT TO REGISTRATION REQUIREMENTS UNDER THE CODE, UNLESS SUCH OFFER OR SALE QUALIFIES AS AN EXEMPT TRANSACTION.

**Singapore**—Issued by T. Rowe Price Singapore Private Ltd. (UEN: 201021137E), 501 Orchard Rd, #10-02 Wheelock Place, Singapore 238880. T. Rowe Price Singapore Private Ltd. is licensed and regulated by the Monetary Authority of Singapore. For Institutional and Accredited Investors only.

South Africa—Issued in South Africa by T. Rowe Price International Ltd (TRPIL), Warwick Court, 5 Paternoster Square, London EC4M 7DX, is an authorised financial services provider under the Financial Advisory and Intermediary Services Act, 2002 (Financial Services Provider (FSP) Licence Number 31935), authorised to provide "intermediary services" to South African Investors. TRPIL's Complaint Handling Procedures are available to clients upon request. The Financial Advisory and Intermediary Services Act Ombud in South Africa deals with complaints from clients against FSPs in relation to the specific services rendered by FSPs. The contact details are noted below: Telephone: +27 12 762 5000, Web: www.faisombud.co.za, Email: info@faisombud.co.za

**Switzerland**—Issued in Switzerland by T. Rowe Price (Switzerland) GmbH, Talstrasse 65, 6th Floor, 8001 Zurich, Switzerland. For Qualified Investors only.

**Taiwan**—This does not provide investment advice or recommendations. Nothing in this material shall be considered a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person in the Republic of China.

**Thailand**—This material has not been and will not be filed with or approved by the Securities Exchange Commission of Thailand or any other regulatory authority in Thailand. The material is provided solely to "institutional investors" as defined under relevant Thai laws and regulations. No distribution of this material to any member of the public in Thailand is permitted. Nothing in this material shall be considered a provision of service, or a solicitation to buy, or an offer to sell, a security, or any other product or service, to any person where such provision, offer, solicitation, purchase or sale would be unlawful under relevant Thai laws and regulations.

**UK**—This material is issued and approved by T. Rowe Price International Ltd, Warwick Court, 5 Paternoster Square, London EC4M 7DX which is authorised and regulated by the UK Financial Conduct Authority. For Professional Clients only.

**USA**—Issued in the USA by T. Rowe Price Associates, Inc., 100 East Pratt Street, Baltimore, MD, 21202, which is regulated by the U.S. Securities and Exchange Commission. For Institutional Investors only.

© 2024 T. Rowe Price. All Rights Reserved. T. ROWE PRICE, INVEST WITH CONFIDENCE, and the Bighorn Sheep design are, collectively and/or apart, trademarks of T. Rowe Price Group, Inc.