





WELCOME.....

......to the second quarter 2023 edition of Panorama, T. Rowe Price's investment magazine for Asian investors.

After all the ups and downs of the first quarter, our global multi-asset specialists expect elevated levels of uncertainty and volatility to continue in the months ahead. Yet the deep levels of bearishness in recent fund manager polls seems excessive. We believe there is a good chance that overall returns this year are unlikely to prove as disappointing for investors as they did in 2022.

Our lead article by Yoram Lustig and his Multi-Asset Solutions colleagues looks at five trends that may dominate markets in 2023: (1) inflation, (2) policy, (3) recession, (4) uncertainty and (5) opportunity. In Q1 Panorama, we described 2023 as a "year of transition" that would prove challenging to investors. Here are some investment ideas that may help position portfolios for the challenges and opportunities ahead.

Our second article describes how Yoichiro Kai invests in a portfolio of high-quality, durable dividend payers and dividend growers that he believes can drive consistent risk-adjusted returns over market cycles. Dividend stocks have returned to favor with investors amid more volatile post-pandemic markets, as S&P 500 dividends posted annual growth of around 8% in Q1 2023.

Next, Justin White—who manages T. Rowe Price's All-Cap Opportunities Strategy—argues that in a tight risk/reward environment, stock selection will likely be the key driver of returns in 2023. He has adopted a cautious stance, noting that the equity risk premium currently available from the U.S. equity market is around historically low levels, which makes for a less attractive ex-ante risk/reward profile.

Turning to China, Wenli Zheng considers what might come next for investors. In terms of valuations such as price-to-book value or price-to-earnings ratios, China equities are below their historic averages and appear cheap relative to other markets. Following the positive growth surprise in the first quarter GDP figures, China equities remains a bright spot, in our view.

Nathan Wang and Wenting Shen consider the merits of Emerging Market (EM) Local Currency Debt as an asset class, looking at how the relative importance of coupon, price appreciation and currency to total returns changes with the time horizon. They believe the current attractive yield level of EM local currency bond may provide a good entry point for investors with investment horizons over three years.

In our Personal Profile, we take a break from interviewing key managers and instead invite you to meet our first two China interns, Reese Feng and Neil Wang.

We welcome comments and feedback at Panorama and our contact details appear on page 29.

T. Rowe Price Australia

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FIVE INVESTMENT TRENDS FOR THE NEXT 12 MONTHS

Positioning your portfolio for the challenges and opportunities ahead.

- While returns in 2023 are not anticipated to be as disappointing for most investors as in 2022, we expect elevated levels of uncertainty and volatility to continue.
- We believe five trends will dominate markets over the next 12 months: (1) inflation, (2) policy, (3) recession, (4) uncertainty and (5) opportunity.
- We have identified a range of investment ideas that we believe may be effective in helping to steer portfolios through the period ahead.

Investment outcomes in 2023 are anticipated to be better for most investors than in 2022. After more than a decade of relatively benign markets, benefiting from low inflation, supportive central banks and moderate economic growth, conditions changed in 2022. With global equities falling 18.0% and global fixed income falling 11.2%,¹ investors had only a few places to hide. Historically high inflationary pressures, central banks aggressively raising interest rates and increasing concerns about an economic slowdown or recession weighed on markets. A new regime has come to pass.

We expect more changes in 2023 as the new regime matures, entering a new phase. Inflation is likely to linger at higher levels but recede over time. This above-target inflation means that many central banks may well have to keep interest rates elevated for a prolonged time. However, while a pivot to monetary easing may be elusive, this tightening cycle is nearing its peak. The global economy is likely to continue to slow down. It is yet unclear whether major economies will slip into recession or manage to avoid it.

¹ Past performance is not a reliable indicator of future performance.
Sources: MSCI All Country World Index (ACWI) measured in US dollars (USD). Bloomberg Global Aggregate Bond Index hedged to USD (see Additional Disclosures).



Yoram Lustig, CFA Head of Multi-Asset Solutions, FMFA & LatAm



Michael Walsh, FIA, CFA, CAIA Multi-Asset Solutions Strategist



Niklas Jeschke, CFA Multi-Asset Solutions Strategist

...while a pivot to monetary easing may be elusive, this tightening cycle is nearing its peak.

- Yoram Lustig

Head of Multi-Asset Solutions, EMEA & LatAm

Five Investment Trends for 2023

1. Inflation: A Path to 2%



After surging to multi-decade highs in 2022, inflation is likely to recede erratically in 2023.

2. Policy: Higher for Longer



Monetary policy tightness is likely to peak in 2023, but a pivot to easing may elude markets.

3. Recession: Dodged or Delayed?



Recession in 2023 remains a risk but also an opportunity.

4. Uncertainty: A World in Revolution



Geopolitical events, increasingly polarized politics and continuous change create uncertainty.

5. Opportunity: Make the Most of the New Normal



Change, and more reasonable valuations, mean opportunities for long-term investors.

Furthermore, geopolitical risks include the ongoing war between Russia and Ukraine, the impact of the post-COVID reopening and the centralization of power in China and political polarization in the U.S. ahead of next year's presidential election. Add to this the recent duress in the U.S. and European banking sectors, and these concerns will continue to have a major impact on sentiment and the direction of the markets, adding to uncertainty. So much change means volatility could remain elevated, ripe with both risks and opportunities.

Our Multi-Asset Solutions team has identified five key trends that we believe will drive the performance of markets over the coming 12 months, and beyond:

1.

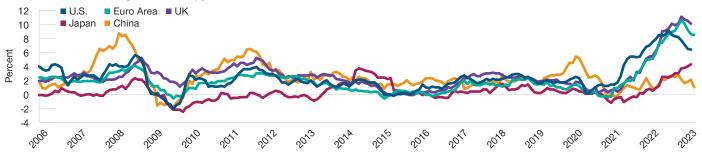
Inflation: A Path to 2%

After surging to multi-decade highs in 2022, inflation is likely to recede erratically in 2023.

The job of central banks is to manage inflation; for example, the U.S. Federal Reserve has an explicit inflation target of 2%. Inflation in the U.S. and Europe is expected to recede in 2023 because of

FIGURE 1: Realised Inflation Has Surged but Is Showing Signs of Peaking

The path lower is likely to be bumpy



¹ As of 28 February 2023.

Source: CPI/Haver Analytics. Analysis by T. Rowe Price. Monthly, for the period January 2006 through February 2023. Consumer price index (CPI).

Investment Idea #1

Position for Disinflation Maintain Inflation Hedges **Play Defence** Balance investments that should Include investments that should Include positions that should Rationale fare well in a disinflationary fare well in an inflationary perform reasonably well if environment with those that environment but do not perform sentiment changes quickly do not perform too badly if too badly if inflation falls between risk-on (disinflation) and inflation continues risk-off (inflation) Mix global value and growth equity, Natural resources equity and Cash, which is now yielding **Examples** tactically leaning into value or real estate equity (real estate interest rates not seen in years growth cycles investment trusts—REITs) Diversified tail-risk mitigation Blend U.S. growth and value equity Shorter-duration, high-yielding fixed derivative overlays to automatically income (global high yield bonds, mitigate downside risk Blend growth-oriented emerging EM debt) Agile and active portfolio market (EM) equity and value-oriented strategies Value stocks with exposure management to adapt as to financials conditions change

Source: T. Rowe Price.

easing supply-side pressures (e.g., healing supply chains, lower energy and commodity prices), easing demand-side pressures (e.g., normalization of post-pandemic pent-up demand), base effects (prices will be compared with already elevated prices a year ago) and, eventually, the impact of tighter monetary policy kicking in with a lag. Disinflation is good news: Inflation is a key risk for markets and the driver behind hawkish central banks.

However, the path for inflation in 2023 is likely to be rocky. As China reopens, inflation may rise as it did in other major economies after the pandemic. Core inflation—excluding volatile food and energy prices—has not yet been falling as rapidly as the headline measure. Inflation has shifted from goods to stickier services. As long as labor markets remain tight, the risk remains that the receding inflation trend may pause or reverse.

2.

Policy: Higher for Longer

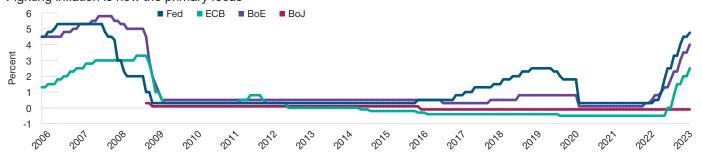
Monetary policy tightness is likely to peak in 2023, but a pivot to easing may elude markets.

Until they can declare a victory in the war against inflation, central banks are likely to keep policy rates in restrictive territory. The good news is that markets should not undergo the steep tightening of financial conditions experienced in 2022, as central banks move to pause hikes as disinflation sets in. However, many key questions remain. Will U.S. inflation recede to the 2% target or stop at a higher level? What will central banks do if inflation stops, instead, at around 4%? Will the Bank of Japan (BoJ) change its yield curve control policy, seen as an anchor for rates throughout the world? Will economies slip into recession, forcing a policy pivot from tightening to easing? Will quantitative tightening drain liquidity from fixed income markets? Will the 'central bank put' stage a comeback?

Policy has been a key of markets since the global financial crisis, allowing investment in equities with the implicit safety of a central bank put. Investors need to adapt to the new reality of policymakers focusing on fighting inflation, not soothing markets.

FIGURE 2: Most Major Central Banks Have Rapidly Tightened Policy Rates

Fighting inflation is now the primary focus



¹ As of 28 February 2023.

Source: Central banks. Analysis by T. Rowe Price. Monthly, for the period January 2006 through February 2023. Fed is the US Federal Reserve. ECB is the European Central Bank. BoE is the Bank of England. BoJ is the Bank of Japan.

Investment Idea #2

Go Global for Bonds Remain Hydrated Big in Japan Central banks are adopting In a volatile environment where A change of policy by the BoJ may (Rationale different policy approaches, central banks are selling bond have implications for Japanese while bond yields are at the most holdings, maintaining liquidity in assets as well as global rates attractive levels in years. Global portfolios could be an edge (Japan's bond market is the bond diversification could be second largest after the U.S. in advantageous if policies ease at the Bloomberg Global Aggregate different paces Bond Index) Strategies benchmarked to Liquid alternatives, such as Japanese yen may rally if the BoJ Examples Bloomberg Global Aggregate multi-asset total return strategies changes its policy **Bond Index** Strategies with daily liquidity Japanese equity Global government bonds Cash and government bonds Dynamic duration management in Diversified, flexible bond strategies a global bond portfolio

Source: T. Rowe Price.

3. Recession: Dodged or Delayed?

Recession in 2023 remains a risk but also an opportunity.

While the global economy has started 2023 in reasonable shape, winning the fight against inflation without a recession is rare. While nobody wants to excessively slow economic growth, central banks may need to push economies into recession to tame inflation. That said, hot labor markets in the U.S. and Europe have been a major obstacle in the path to recession. Historically, the U.S. has never entered a

recession without weakness in the labor market. A global recession—or an economic slowdown—is still a risk in 2023.

However, recession is also part of the business cycle, and a temporary slowdown also brings opportunities. It clears the market of weaker companies with stronger businesses surviving, leading to more reasonable allocation of capital. Stock markets tend to rally before the recession is over, moving from pessimism to pricing in the ensuing recovery.

FIGURE 3: Leading Indicators Point to a Slowdown in the U.S., but Not Yet to a Recession



¹ As of 4 March 2023.

GDP = Gross Domestic Product.

Sources: Federal Reserve Bank of New York (Weekly Economic Index—WEI), National Bureau of Economic Research (GDP US Chained 2012 Dollars YoY SA). Analysis by T. Rowe Price. Weekly, for the period 2 February 2008 through 4 March 2023. Grey shaded periods reflect economic recessions.

Investment Idea #3

Create Your Own Put Preparing for a Recession **The Day After Tomorrow** Include investments that should Recession is not necessarily bad The central bank put is unlikely to Rationale fare well in a recession. return until bankers can declare news, unless something systemic breaks down. Stock markets tend mission accomplished in their fight to rally mid-recession, pricing in the against inflation. Investors should eventual recovery. Companies that create their own puts while being survive can come out stronger conscious of costs and efficacy Global government bonds with Nimble asset allocation, adjusting Truly defensive strategies, such **Q**-Examples long, high-quality duration positioning for developments as unconstrained, defensive fixed income Have cash on hand, ready to Fixed income strategies benchmarked against Bloomberg invest in risky assets as sentiment Derivative overlay to mitigate Global Aggregate Index improves or as liquidity distortions downside risk and manage provide rare opportunities volatility Defensive equity sectors (e.g., utilities, health care, Liquid alternative strategies Tactical asset allocation for agile consumer staples) that can deliver returns across portfolio management market environments

Source: T. Rowe Price.

Uncertainty: A World in Revolution

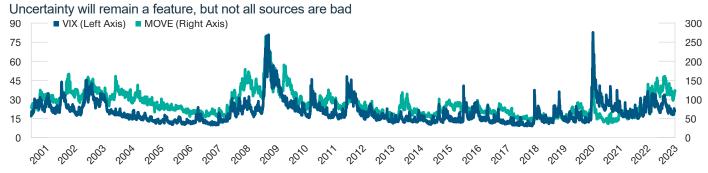
Geopolitical events, increasingly polarized politics and continuous change create uncertainty.

The world is in the midst of a number of secular revolutions: the ongoing information revolution, the green revolution and the remote working revolution. Transitions between regimes means adaptation, and adaptation brings uncertainty. At present, it feels like the world is fraught with even more unsettling events than usual. Some highlights include the war in Ukraine raging on; China's reopening making waves across the world; the U.S. debt ceiling meaning

a standoff between Republicans and Democrats, attempting brinkmanship in a divided nation; and the tensions between China and the U.S. further escalating. These are the known unknowns, while unknown unknowns may bring new black swans.

When geopolitical events drive sentiment, markets can oscillate between risk-on and risk-off, challenging logical, fundamentals-based investing. Nevertheless, while we tend to focus on 'what can go wrong,' uncertainty should also prompt us to look for 'what can go right.' When sentiment is fragile, positive developments may lead to a melt-up.

FIGURE 4: Elevated Equity and Fixed Income Market Volatility, But Not Yet at Panic Levels



¹ As of 28 February 2023.

Past performance is not a reliable indicator of future performance.

Sources: Chicago Board Options Exchange Volatility Index (VIX), and ICE BofA MOVE Index (MOVE). Analysis by T. Rowe Price. Daily, for the period 31 August 2000 through 28 February 2023.

Investment Idea #4

China Reopens Diversify the Diversifiers Make Volatility a Friend Volatility could create opportunities Chinese assets have lagged since After failing to diversify portfolios Rationale in 2022 due to single risk factors for skilled active management. the pandemic as the impact of continued lockdowns has been driving markets (e.g., inflation, Active managers can thrive on felt. A reopened China has the policy), government bonds may dispersion among investments. potential to boost not just its own become a diversifier of equity risk Volatility can separate prices economy, but countries throughout again in 2023. However, investors from intrinsic values, creating the region should rely on more than a convergence opportunities single diversifier Chinese equities with a focus on Global government bonds, Active security selection **Examples** domestic consumption focusing on high-quality duration Tactical asset allocation Asia ex Japan equities Safe-haven currencies (e.g., U.S. Managed volatility overlays dollar, Japanese yen, Swiss franc) Asian credit strategies to maintain overall risk at Defensive strategies and acceptable levels liquid alternatives

Source: T. Rowe Price.

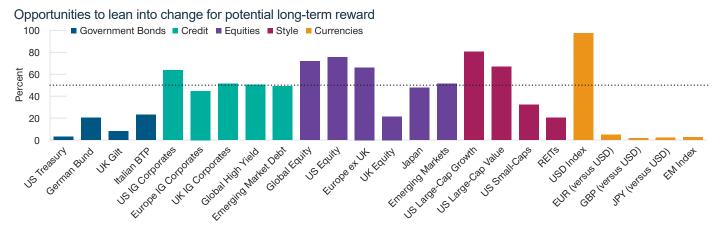
Change, and more reasonable valuations, mean opportunities for long-term investors.

After more than a decade of negative bond yields and cash interest rates at zero, we are getting back to reality. This transition is painful, as we saw in 2022. However, normality can be good. After a brutal 2022, valuations are more reasonable. Although valuations

directly impact returns over the long term, not over the short term, lower valuations today mean higher expected returns in the future.

One theme woven across all others is change. Some existential risks, such as wars, climate change and social transformation, create uncertainty. However, they also bring opportunities for investors who can lean into the change and benefit from its disruption.

FIGURE 5: Valuations Have Become More Reasonable Across Markets and Asset Classes



¹ As of 28 February 2023.

Sources: T. Rowe Price analysis using data from FactSet Research Systems Inc. All rights reserved. Indices: US 10-year Treasury, German 10-year bund, UK 10-year gilt, Italian 10-year BTP, Bloomberg US Corporate Aggregate, Bloomberg Euro Agg. Corporate, Bloomberg Global Aggregate Corporate—United Kingdom, Bloomberg Global High Yield, Bloomberg EM USD Aggregate, MSCI AC World, S&P 500, MSCI Europe ex UK, MSCI UK, MSCI Japan, MSCI EM, Russell 1000 Growth, Russell 1000 Value, Russell 2000, FTSE EPRA/NAREIT Developed, US dollar index, EUR spot, GBP spot, JPY spot, JPM EM currency index. Monthly, percentile rankings versus past 15 years.

Investment Idea #5

Time Is on Your Side **ESG** and Impact The Right Side of Change Investing when valuations are Each decade has seen the The transition to sustainable (⁽³⁾) Rationale reasonable has translated in the energy is gaining pace. Leaving largest companies in the world past to higher long-term returns. a liveable world for the next change. This decade is not likely For those who can, invest for the generation is one of humanity's to be different. Disruption is ever long term greatest challenges present. Investors who identify the trends and surf the wind of change can benefit from emerging opportunities Small-cap equities Investing in selected sector Growth equity **Examples** strategies, such as technology European corporate bonds Global equity strategies with a Sustainable and focus on innovation and being on Enter the market over time using ESG-aware strategies the right side of change dollar cost averaging Impact strategies EM and frontier market equity

Source: T. Rowe Price.



TAPPING THE POWER OF GLOBAL EQUITY DIVIDENDS

What we seek—and avoid—in pursuit of consistent returns.

- We believe that investing in a portfolio of high-quality, durable dividend payers and dividend growers can drive consistent risk-adjusted returns over market cycles.
- Identifying the opportunities and avoiding the traps in dividend investing requires active stock selection and a rigorous, disciplined investment approach.
- We hunt for stable, established companies with the fundamentals to support sustainable dividend growth. High dividend yields that look fragile are a red flag to us.

Dividend stocks have regained favor with investors amid sharp market volatility over the past 12 months. In particular, compressed valuations for once buoyant growth stocks have highlighted the role of dividends as a potential cushion for returns.

We believe that dividend investing deserves greater attention, and not just in this challenging market environment. History and our experience suggest that, over market cycles, a select group of high-quality, durable dividend payers and dividend growers can deliver consistent risk-adjusted total returns.

Why Dividends Matter

Dividends historically have been a powerful engine for total returns, especially when that income was reinvested over time. Since 1970, compounded dividends have accounted for over 70% of global equity returns (Figure 1).

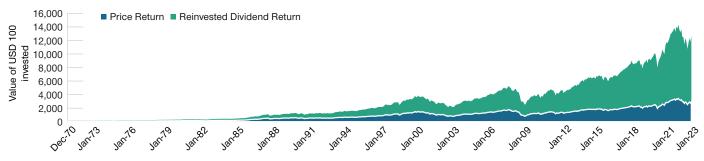


Yoichiro Kai Portfolio Manager, Global Equity Dividend Strategy

...High dividend yields by themselves do not promise strong total returns.

FIGURE 1: Dividend Compounding Is Too Strong to Ignore

Total return composition of the MSCI World Index



Past performance is not a reliable indicator of future performance.

For illustrative purposes only, not representative of an actual investment.

As of January 31, 2023.

Source: T. Rowe Price calculations using data from FactSet Research Systems Inc. All rights reserved (see Additional Disclosures).

FIGURE 2: The Long-Term Power of Dividends Is Clear Across Regions

20-year return breakdown for major regions



Past performance is not a reliable indicator of future performance.

As of December 30, 2022.

Based on MSCI China Index, MSCI Australia Index, MSCI USA Index, MSCI AC Asia ex Japan Index, MSCI Emerging Markets Index, MSCI World Index, MSCI AC World Index, MSCI China A Onshore Index, MSCI Europe Index, MSCI Japan Index, respectively.

Source: T. Rowe Price calculations using data from FactSet Research Systems Inc. All rights reserved (see Additional Disclosures).

Zooming in on the last 20 years, dividends have composed a prominent part of total returns across major regions in both developed and emerging markets (Figure 2).

The importance of dividends is especially evident in markets that tend to have stronger equity income cultures. We see this in Europe, where dividends have contributed to more than 46% of total returns since 1999 (Figure 3).

That importance is even clearer with sustained dividend growth. As an example, the S&P 500 Dividend Aristocrats Index, which represents over 60 S&P 500 companies with 25 consecutive years of dividend increases, has outperformed the S&P 500 Index by more than 75% since 1989 (Figure 4). By identifying companies with the ability to sustain and grow dividends

FIGURE 3: Dividends Explain Large Differences Between Price Returns and Total Returns in Income-Oriented Europe

Indexed total returns for MSCI Europe Price Index and MSCI Europe Total Return Index



Past performance is not a reliable indicator of future performance.

s of January 27, 2023.

Source: T. Rowe Price analysis using data from Bloomberg Finance L.P. (see Additional Disclosures).

and taking an active, global approach, we believe we have the potential to drive consistent long-term returns.

From our perspective, in addition to helping drive returns, dividends are a barometer of shareholder value. Dividends can indicate companies' commitment to shareholder returns. That commitment is typically backed by managements' confidence in the long-term strength and cash-generating ability of their business models.

Moreover, we see dividends reflecting management discipline. Building a strong track record of dividend payouts understandably calls for sound judgment on capital allocation and the management of leverage. Determining the amount of cash to set aside for shareholder distributions and future investments and the optimal level of debt to take on are critical decisions to get right.

What Yields Do Not Show

But what investors commonly overlook is this: High dividend yields by themselves do not promise strong total returns. More crucial are the sustainability of the dividends and the business fundamentals supporting them. Some companies that pay hefty dividends may simply have limited growth opportunities and few uses for cash on hand. Also questionable are capital-intensive companies that overstretch themselves with high payouts to entice investors.

These examples underscore the danger of compromising company quality in exchange for high dividend yields. Such companies may struggle to maintain their dividends over time or attain the earnings growth needed to drive share price appreciation. Taken together, we would be wary of the total return profiles of these stocks.

FIGURE 4: Return Differences Are Even More Pronounced **With Sustained Dividend Increases**

Indexed total returns for S&P 500 Dividend Aristocrats Index and S&P 500 Index



Past performance is not a reliable indicator of future performance

As of January 27, 2023.

Source: T. Rowe Price analysis using data from Bloomberg Finance L.P. (see Additional Disclosures).

Similarly, avoiding low-yield stocks without a careful evaluation of the companies' prospects comes with pitfalls. Low yet growing dividends may point to companies that are on a path of earnings expansion, with cash flows that are starting to exceed their capital expenditure needs. These stocks may ultimately generate sizable total returns through dividends and earnings growth combined. Understanding their commitment to shareholder returns and emphasis on dividends is especially important when assessing these companies.

...we seek high-quality earnings compounders that are well positioned to pay or grow dividends over time....

Selecting Dividend Payers and Dividend Growers

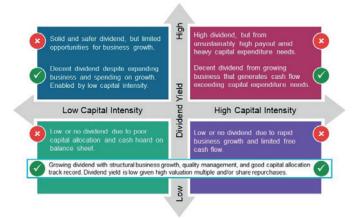
In short, stock selection is key. We believe there is a far better chance of achieving consistent risk-adjusted total returns over the long run by investing in durable dividend payers and dividend growers. Certain characteristics stand out to us in our search for these companies.

- 1. High-quality fundamentals: Foremost on our radar are strong company fundamentals that support dividends. Healthy free cash flow growth, compounding earnings, and robust returns on invested capital are among the features that we look out for.
- 2. Attractive growth potential: Companies should also possess what we think are attractive growth prospects. Enduring competitive advantages, favorable industry structures, and healthy end markets often enable them to get ahead.
- 3. Capital allocation discipline: We like management teams with established track records in allocating capital and building solid balance sheets, including the sound use of leverage even in tough market conditions.
- 4. Commitment to shareholder returns: It is vital that management teams have well-articulated dividend and share buyback policies that are in keeping with the companies' financial health and strategy

Put in another way, we seek high-quality earnings compounders that are well positioned to pay or grow dividends over time, while avoiding low-quality companies that pay unsustainable dividends. This framework guides our overall approach in assessing companies across the dividend yield and capital intensity spectrums (Figure 5).

FIGURE 5: Our Stock Selection Approach Is Guided by a Proprietary Framework

Companies we like and companies we avoid



For illustrative purposes only. This is not intended to be investment advice or a recommendation to take any particular investment action.

Companies that we seek include those that have been growing cash flow and dividends in industries benefiting from structural tailwinds. Amphenol, for example, is exposed to the rise of electrification in the automotive and industrial markets that it serves. The company is one of the world's leading suppliers of connectors used in electric vehicles, heavy equipment, and many other areas, and electrification has broadly led to increased connector content per application. Over the past five years, management has been committed to returning a significant portion of free cash flow to shareholders.¹

Conversely, companies that appear less compelling include high dividend yielders that face secular business challenges. Consider tobacco companies,

whose generous dividends have traditionally drawn income-seeking investors. Nonetheless, the outlook for these companies has weakened amid mounting competition from new nicotine products and growing ESG concerns.²

We would also be cautious about companies that pay either no or a very low dividend yield due to their tendency to hoard cash on the balance sheet. These companies are often poor capital allocators. Companies with large capital expenditures for growth, resulting in limited free cash flow generation, would also not meet our criteria. Young technology companies are likely to fall into this category.

Pursuing Consistency

In our search for consistent total returns across bear and bull markets, our conviction lies in a distinct group of high-quality companies with the potential to pay or grow dividends sustainably. To draw a parallel with the famous fable "The Tortoise and the Hare," we would not expect these stocks to race ahead like the hare and attain top-notch returns in any given year—a rare feat for long-term investments. Stocks we like tend to be more like the tortoise, driving steadier returns through earnings growth and dividends with the goal of providing long-term capital appreciation.

Finding companies with this risk/reward profile requires investors to look beyond headline dividend yields and delve into business fundamentals. By conducting rigorous stock-by-stock analysis, we believe we are able to construct a portfolio of the best equity income ideas from our global opportunity set.

The specific security identified and described does not represent all of the securities purchased, sold, or recommended for advisory clients, and no assumptions should be made that investments in the security identified and discussed were or will be profitable.

¹ As of December 31, 2022. Source: Financial data and analytics provider FactSet. Copyright 2023 FactSet. All Rights Reserved.

² ESG: environmental, social, and governance.



WHY AN ALL-CAP APPROACH MAKES SENSE IN TODAY'S U.S. EQUITY MARKET

In a tight risk/reward environment, stock selection will likely be the key driver of returns.

- After a difficult 2022 for investors, the U.S. equity market narrative has turned more positive in 2023. However, this positivity feels premature, in our view.
- The equity risk premium currently available from the U.S. equity market is around historically low levels, which makes for a disappointing risk/reward profile.
- Stock selection will likely drive near-term U.S. equity returns. An all-cap remit provides the flexibility to find potential alpha sources from across the entire market.

After a difficult 2022 for investors, the narrative in the U.S. equity market has turned more positive in early 2023. This is largely due to expectations of cooling inflation, which will allow the Federal Reserve to pull back on aggressive interest rate hikes. However, with much that remains uncertain, this positivity feels premature, in our view. There is no denying investor sentiment has become more fragile over the past year. Stocks leading the market are changing at an unusually fast pace, regardless of fundamentals, making it more difficult to find reliable sources of alpha. On a risk/reward basis, the



Justin White Portfolio Manager, T. Rowe Price All-Cap Opportunities Strategy U.S. equity market also looks broadly expensive, in our view, meaning performance is likely to be driven by individual stock selection. This is where an all-cap equity remit can be beneficial, providing the flexibility to find potential sources of alpha from across the entire market and the broad diversification to better manage risk and potentially deliver more consistent performance outcomes.

Taking Stock of the Current Landscape

Consensus opinion has turned more positive since the start of 2023, with expectations that inflation has peaked, thereby enabling the Federal Reserve (Fed) to stop raising interest rates later this year. However, we do not feel a whole lot has changed since 2022. The rise in inflation has been fueled by structural changes in the U.S. economy; and while it is indeed receding, we anticipate the path back down toward the Fed's 2% target will be a much more drawn-out process than the consensus appears to believe. If we look back to the late 1970s and early 1980s, when inflation was similarly elevated, history tells us that the disinflation process tends to be slow and drawn out, especially when similar inflationary trends are observable in other major regions. As such, we believe that—unless there is a recession—U.S. inflation could take much longer to get down to target level than the consensus currently expects.

...we believe that—unless there is a recession—U.S. inflation could take much longer to get down to target level than the consensus currently expects.

History also argues that a deeply inverted yield curve makes recession difficult to avoid. However, the longer an economic landing is delayed, in the hope that it can be avoided altogether, the harsher the landing is ultimately likely to be. What seems to be underappreciated, in our view, is that we have entered a new investment regime, and there is a great deal that remains uncertain. Adjusting to this new landscape will take time and be potentially uncomfortable along the way.

Investors' more positive outlook in early 2023 sparked a sharp rotation in the equity market, with more cyclical, growth-oriented companies rallying strongly, notably led by beaten-down technology, consumer discretionary, and industrial stocks. More recently, investors have applied the brakes to the market, seemingly wary after such a strong start to the year.

Implications of Banking Sector Duress

More recently, the banking sector has come under extreme duress, with a potential crisis emerging in the U.S. regional banking sphere. We know from history that the Federal Reserve tends to tighten policy until something breaks; reining in inflation is their job. And, in this instance, the first things to break have been Silicon Valley Bank and Signature Bank, and, in Europe, Credit Suisse has suffered the same fate. While we think that the acute crisis will likely pass, the reality is that this shock to the system will cause a tightening of financial conditions. More plainly, regional banks are an important source of liquidity for small and mid-size businesses (SMBs), and the self-preservation instinct means that these banks are going to be more reluctant to make loans. The impacts of this will not be immediate but, over time, if SMBs find it more difficult to get loans, there will be consequences for U.S. economic growth. This is unlikely to spiral into a full-blown banking crisis, in our view, but it is the clearest sign so far of knock-on consequences of the Fed's rate hike campaign.

Another interesting feature of the U.S. equity market during the early part of 2023 is that the companies that have posted the strongest year-to-date returns are generally those that have missed their target earnings. Those that have met their earnings expectations, on the other hand, and where fundamentals appear robust, have generally underperformed. History shows, however, that markets ultimately behave rationally and that the leading stocks of the previous cycle are invariably not the same stocks that lead going forward. History also shows us that fundamentally good businesses have tended to outperform the market over the long term, and an all-cap investment remit is key in finding these businesses.

Corporate Earnings May Come Under Pressure

From an earnings perspective, 2023 looks challenging for U.S. companies. After record monetary and fiscal stimulus supported post-pandemic business activity in 2021, last year proved a more difficult earnings environment. This trend is likely to continue in 2023 with corporate earnings vulnerable to further pressure. The prospect of economic recession looms large, while the full impact of higher input costs has also yet to be fully reflected. The tight labor market means competition for workers will also remain high, putting pressure on margins across a range of industries, but particularly in the service sector.

This all adds up to a much more challenging environment for corporate profitability. A lot of U.S.

companies have either already reported, or are at risk of, declining earnings in early 2023. As such, we expect investor returns to be driven more by individual stock performance than by broad sector trends. Macro considerations remain important, but in our view performance will come from astute selection of individual names—good businesses, at reasonable valuations, where there is a degree of comfort that earnings will be met.

Market Valuation Needs to Be Viewed in Context

After what reasonably can be described as a miserable year for U.S. equities in 2022, particularly for expensive growth-oriented stocks, much has been written about the U.S. equity market now trading at more attractive valuation levels. Certainly, the market today does not look outrageously expensive and is notably cheaper than the peak 2021 valuation levels. However, as with most things, context is everything.

The S&P 500 Index, for example, is currently trading around 19x forward price/earnings (fwd P/E),¹ above the long-term average (15x fwd P/E).² Compared with the consistently higher-level valuations that we have become accustomed to in recent years (in the 20x to 23x fwd P/E range), some might argue that current valuation levels look reasonable. However, this view does not take into account today's structurally altered market conditions. In an environment of elevated inflation, higher-for-longer interest rates, signs of corporate earnings contraction, and the storm clouds of a possible recession, the current market valuation looks less enticing, in our view.

Recent interest rate rises mean that investors can now get returns of close to 5% from 3-Month U.S. Treasuries.

Equity Risk Premium in Focus

One valuation measure worth highlighting is the equity risk premium (ERP). The ERP effectively measures the additional reward that equity investors can expect to receive above that available from risk-free benchmark U.S. Treasuries. Analysis shows that the ERP on the S&P 500 Index today is around historic lows (Figure 1). Recent interest rate rises mean that investors can now get returns of close to 5% from 3-Month U.S. Treasuries. Given the considerable market and economic risks that have been outlined, one might reasonably expect equities to be paying a sizable premium over and above the return available from Treasuries. However, the current risk premium of around 200 to 250 basis points for investing in the U.S. equity market looks unattractive in this context.

Performance Consistency Over Time

Individual company names, of course, can and should perform well for idiosyncratic reasons. This is where an all-cap strategy can be beneficial, providing an expansive opportunity set in which to find good businesses. The past year has shown us that market volatility can be dramatic. An all-cap mandate allows a manager to quickly adapt to changing market

FIGURE 1: U.S. Equity Market Equity Risk Premium (ERP)

U.S. equities currently offer a disappointing risk/return trade-off



¹ As of January 31, 2023

Based on the S&P (500 Equal Weight Index). ERP calculated as S&P 500 Index (Equal Weight) Fwd Earnings Yield—10-Year U.S. Treasury Yield. Source: T. Rowe Price calculations using data from FactSet Research Systems Inc. All rights reserved.

¹ Source: FactSet: Financial data and analytics provider, FactSet. Copyright 2023 FactSet. All rights reserved, as of March 15, 2023.

² From 1940 through to December 31, 2022, using year end forward P/E data.

conditions, enabling investment anywhere along the market capitalization spectrum and the rebalancing of risk, across themes, sectors, and individual stocks without restraint.

...stock prices are ultimately a function of supply and demand over the short to medium term.

An all-cap strategy manager can apply a methodical investment framework that revolves around a basic view that stock prices are ultimately a function of supply and demand over the short to medium term. This means that when stocks have more incremental reasons for investors to want to buy them (i.e., they are in higher demand) and fewer incremental reasons for people to sell them (i.e., supply them back to the market), then stock prices must find a higher equilibrium point.

The consistency of good performance outcomes stem from an investor's belief that the supply and demand framework remains true in any market environment and avoids becoming overexposed to either growth or value styles. In 2022, for example, the inflationary/rising interest rate backdrop turned sharply against growth companies. Conversely, 2022 was a strong year for value-oriented companies, as mean reversion became the driving force behind stock prices. But, while this proved a great support last year, for most of the 2010 decade, it was a substantial headwind.

Cautious for Now

There are still considerable risks in the economy, and a recession in the U.S. at some point remains the most likely outcome, in our view. On this basis, investors could maintain a more cautious stance on the U.S. equity market, particularly as the current risk/ reward profile gives little incentive to add risk at this point. We think investor returns are likely to be driven by individual company performances in the near term, rather than by broad-brush decision-making at a sector level. And, while we are cautious about the near-term outlook, it is also important to highlight that the U.S. equity market is enormous, and we believe that investors with an all-cap remit can benefit from tapping the broad range of opportunities, diversifying across investment styles and across the market capitalization spectrum.



CHINA INVESTING: WHAT COMES NEXT?

A three-stage recovery is underway.

On December 31, 2022, T. Rowe Price's China Evolution Equity Strategy celebrated its third anniversary. In this recent Q&A session, Wenli responds to questions that were foremost on the minds of our clients in 2023.



Wenli Zheng Portfolio Manager, China Evolution Equity Strategy

Q1: Is it too late to join the China rally?

Following the end of zero-COVID, China equities bounced 40% to 50% from last November's lows, leading some investors to ask whether it was too late to participate. However, the Q4 rebound was from very depressed levels (Figure 1). In terms of valuation metrics, such as price-to-book value (PBV) or price-to-earnings (PER) ratios, China equities are still far below their historic averages. They also appear cheap relative to other markets. According to the latest consensus analyst forecasts, growth in earnings per share (EPS) in China this year is projected to be one of the highest among the world's major stock markets. The risk-off episode in February followed by a global banking scare in March did not leave China equities unscathed. The MSCI China Index is 10% off its January peak (as of April 11, 2023), potentially providing a good entry point for investors. So no, it is not too late to join the rally in China stocks, in our view.

This favorable forecast earnings differential stems primarily from China's unique position within the business cycle compared to other

FIGURE 1: China Is Still Trading at Attractive Valuations

MSCI China (MXCN) Index 12-month forward price-to-book value (PBV) ratio



As of March 31, 2023

Past performance is not a reliable indicator of future performance.

Actual outcomes may differ materially from estimates

*SD = Standard deviation.

Source: Bloomberg Finance L.P. and MSCI

countries. Other economies are grappling with the emergence of high inflation, forcing central banks to tighten monetary policy significantly. That is not the case with China. Thanks to post-COVID reopening, the Chinese economy is starting to rebound. While economic activity is picking up pace, inflation in China is low. In fact, inflation has remained benign in China since the pandemic.

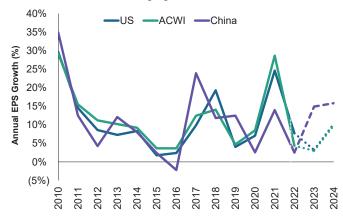
China is in a very different stage of the business cycle compared to other major economies thanks to the rapid COVID reopening. As a result, I believe economic growth is likely to accelerate this year and possibly next year also. Because the economy is accelerating, we do not expect Beijing to add strong economic stimulus at this point in time. Much better for the government to wait and see how strongly the reopening rebound unfolds.

Q2: What do you expect from China's economy in 2023?

We believe a consumption recovery and an improvement in private investment are going to drive a better macro-economic outlook for China this year. We believe that we are in the very early stages of China's cyclical recovery, which still has a long way to go. The March housing data suggest that the property sector—a major drag on activity last year—has stabilized and is finding its footing, supported by the raft of government policies since November. Beyond the general recovery expected in consumer spending and some cyclical areas this year, over the medium term China's growth drivers are expected to shift more towards technology, highend manufacturing, and consumption upgrading.

FIGURE 2: China Is Also at a Different Stage of the Profit Cycle

MSCI China Index earnings growth forecast



As of March 31, 2023.

Past performance is not a reliable indicator of future performance.

Actual outcomes may differ materially from estimates.

EPS = Earnings per Share.

ACWI = MSCI All Country World Index; US = S&P 500 Index; China = MSCI China Index Source: Goldman Sachs Research and MSCI. Please see Additional Disclosures page for information about this MSCI information.

In 2022, we saw a sharp decline in corporate earnings which were dragged down by the rolling COVID lockdowns and by the slump in China's residential property sector. I believe that the earnings picture for China going forward will be very different. The consensus estimate is that China's earnings growth may accelerate from low single digits to mid double digits in 2023. However, I believe there is potential room for further upside to this number, representing a positive surprise to investors. I think there is a realistic chance of this happening because China's economic reopening has taken place much faster and more smoothly than anyone expected. Indeed, China's corporate earnings growth in 2023 could be the highest it has been in over five years (Figure 2).

Currently, a strong herd immunity has developed in China since the end to the zero-COVID policy in early December. We have very quickly seen a strong recovery in consumption, especially for smaller ticket items, such as apparel, restaurants, cinema entertainment, etc. For larger ticket items, such as home appliances, autos, home property, etc, these are improving as well, but at a more gradual pace. This is also the case for private investment, which is also seeing some gradual improvement. However, I believe consumers as well as business owners are going to need some more time to gain greater confidence in the economic outlook before they spend on large ticket items more aggressively or spend to expand their businesses again.

Provided the economy stays on an improving trend, we may expect that at some point in the second half of the year, small- and medium-sized private

companies will start investing in their facilities and operations again.

Q3: You see economic reopening taking place in stages. Why is that?

Since the announcement of reopening in November 2022, China very quickly achieved herd immunity from COVID. With China's rapid reopening, the first reaction for investors was to buy travel agencies, airlines, restaurants, hotels and Macau gaming stocks, which are pure reopening plays. They also bought mega-cap internet stocks, or the most familiar names. The direct COVID-off beneficiaries have enjoyed a significant rerating. For many of these names we have started to reduce exposure, although we think there is still room to run for select businesses in this category.

I believe the first phase of the recovery trade from China's opening is largely over, but the second stage has only just started. It will likely be driven by the recovery of general consumption, names such as shopping malls, apparel, sportswear, home appliances, and furniture. Over the past two to three years, many of these areas suffered both from earnings deceleration and from a significant multiple derating when they missed earnings estimates last year. However, I think that both of these negative factors are going to go into reverse this year. The majority of these businesses are trading on very reasonable valuations. At the same time, we are projecting an earnings acceleration and with this, hopefully, is likely to come some multiple expansion. Many of the stocks in the general consumption category appear well positioned in 2023 in our view, because they started the year on very reasonable valuations.

We are seeing green shoots in the spending on many small ticket items, and this is likely to spill over to larger ticket items as consumer confidence recovers. It is important to note that Chinese households accumulated enormous excess savings during the pandemic years, estimated to be in excess of RMB 4 trillion. We don't expect them to spend it all, but if they spend just a fraction, it is going to be a powerful boost for the economy.

The third stage of the reopening trade could be about private investment. Business confidence tends to follow when consumer confidence recovers. As more entrepreneurs open new businesses, we will likely also see demand for upstream equipment, machines, software etc, so we are also finding more opportunities in industrials. When business confidence comes back, areas such as advertising and recruitment might see a more meaningful pickup towards the end of the year. While the initial risk rally was focused on high-beta names, I think the next phase of the China rally will really be about finding alpha, which will suit our bottom-up stock picking style.

Q4: What is your view on the property sector in 2023?

The property supply chain accounts for close to 20% of China's GDP, and the decline in housing new starts last year was a major drag for the overall economy. But policies from the government have effectively helped the market to stabilize. We see signs of both improvement and divergence within the sector. Opportunity in the

FIGURE 3: China's Recovery Still Has Room to Go

We see a three-stage recovery taking place



As of March 31, 2023.

For illustrative purposes only. This is not intended to be investment advice or a recommendation to take any particular investment action. Sources: Financial data and analytics provider FactSet. Copyright 2023 FactSet. All Rights Reserved. Bloomberg Finance L.P.

FIGURE 4: Property—The Worst May Be Behind Us

City primary (new home) property sales (year-on-year % change)

China 28-City Primary Property Sales



Chart truncated to omit early 2021 COVID distortions.>

Sources: CRIES and Morgan Stanley Research (left), Bloomberg Finance L.P. (right).

New Property Support Measures Announced in November 2022



Debt funding to address

Equity financing to

sector, we believe, has shifted from construction and new building materials to property management, aftersales service, and home renovation. Overall, the property sector is going to be a smaller part of the economy from now on. As a result, China's trend growth rate might be slower.

However, what's also important is that the growth drivers for the Chinese economy will naturally shift over time—they will not stay static in such a dynamic, rapidly evolving economy. I believe that increased reliance on domestic technology, high-end manufacturing and consumption upgrading will each need to make a higher contribution to drive economic growth going forward.

Property sales have struggled now for over 18 months, triggered initially by stricter government oversight and regulations. Since late 2022 residential property has shown more signs of stability, and we think that the central and local government support measures have succeeded in putting a floor under the sector. There is still some uncertainty, as the front-end of the property supply chain—land purchase and new housing starts remains at historically low levels. There are some divergences within the sector, with secondary home sales having been positive for six months, while housing completions and furniture and appliance sales have started to improve more recently.

Q5: What is everyday life like in China now?

We recently took a large party of our investors on a field trip in China. It was their first visit since 2019 before the pandemic began. I think most of them were pleasantly surprised by how rapidly social and economic conditions in China had normalized. To put this into perspective,

there were key economic areas within China, such as Shenzhen, where lockdowns during 2022 had been comparatively rare. Hence the economic damage due to the zero-COVID policy last year in their case was moderate. However, the global media focused exclusively on the worst-affected cities and regions, such as Shanghai and Xinjiang. This gave the world an extremely negative picture of conditions in China under the pandemic. But I think the average impact of lockdowns will have been much less.

In December, Beijing abruptly ended all COVID restrictions. Within the short space of a few weeks, around 80% of China's population had succumbed to COVID infections. In my own case, eight out of nine family members caught COVID within one week. Fortunately, this chaotic phase soon passed, and China acquired herd immunity. So far, there has been no sign of a major second wave and the probability of one occurring is seen as low. From a social mobility perspective, travel, hotel and entertainment data show China has returned quite close to pre-pandemic activity levels.

Q6: What about geopolitical tensions between China and the U.S.?

Increased strategic competition between China and the U.S. is structural and is not going to go away. For investors, the important thing is for strategic competition between the two countries to become more predictable. Agreed "policy guide rails" are one way of better managing the China-U.S. relationship. Our job as investors then is to analyze which areas are most likely to benefit from supply chain reconfiguration and which areas are likely to suffer, as there will be both winners and losers. In the mature node area of semiconductor production, Chinese firms have actually been gaining market share due to local substitution in place of imports. Government policy since the 20th National Congress of the Communist Party of China has increasingly stressed the importance of supply chain security to Chinese firms.

In other areas where the production of low valueadded manufacturing items is moving to countries with lower labor costs, such as Vietnam or Malaysia, it is Chinese companies that are leading the move offshore. China continues to attract significant Foreign Direct Investment in areas where it is competitive, such as renewable energy and electric vehicles, and this appears unlikely to change purely on account of geopolitical tensions.

Q7: Might the recent U.S. banking turmoil spill over to China?

China has made significant ongoing efforts to defuse financial risks in the past few years including reducing non-performing loans within the banking system, especially at smaller banks. These efforts have been under-appreciated until today.

Most banks in China are state-owned and are thus under the direct scrutiny of the government. Chinese financials are also mainly funded by relatively sticky domestic deposits and the securities-to-total asset ratio is low. This makes China's financial system relatively immune from the events that have recently shocked the U.S. banking system, notably the failure of two smaller banks, Silicon Valley Bank and Signature Bank, and the need for the Fed to step in as lender-of-last-resort.

Coda

We believe there is opportunity to find future winners in the Chinese stock market, where we focus on two elements: fundamentals and mispricing. With the flexibility that we have to build a portfolio that is very different from the benchmark, we have a good opportunity to generate alpha potential and capitalize on the many inefficiencies of this exciting but immature market.

T. Rowe Price's China Evolution Equity Strategy has a unique design. By excluding the 100 largest stocks by market cap from the China universe, it differs from the majority of China mutual funds in the market. China is a deep market with over 6,000 public companies listed onshore and offshore, in which 60 to 70 stocks are mega caps with a market capitalization above USD30 billion¹. Popular China benchmark indices are focused heavily on these mega caps which represent just 1-1.5% of the total stock universe. This means that the market is still largely underexplored by foreign investors, an inefficiency which the China Evolution Equity Strategy seeks to address.

While some investors may have been disappointed that China's economy didn't rebound from reopening at an even faster rate, economic activity data for January, February and March support the view that recovery is under way. Although China announced a deliberately cautious 5% GDP target at the National People's Congress in March, there is potential for this to be exceeded. New premier Li Qiang has demonstrated clear pro-business pragmatism, and this could facilitate a gradual comeback of private confidence. According to the IMF, China is set to contribute one-third of global growth in 2023, once again performing the heavy lifting for the world economy.

¹ As at December 31, 2022. Sources: MSCI, HKex, Wind, Morningstar, and FactSet. Calculations by T. Rowe Price.



INSIDE THE ENGINE ROOM OF EM LOCAL CURRENCY DEBT

A potentially rewarding asset class.

- The volatility of Emerging Market (EM) local currency bonds falls significantly with the holding period. This means investment time horizon is key when investing in the asset class.
- The importance of coupon, price appreciation and currency to total returns changes with the time horizon. Currency dominates the short run, coupon the longer term.
- We think the current attractive yield level of EM local currency bond may provide a good entry point for investors with over three-year investment horizons.

Emerging Market local currency debt (EMLC) is a complex asset class that can behave quite differently over different time horizons. This can make it challenging for investors to analyze the opportunity that it offers. In this paper we take a look at how investors might frame the opportunity more clearly, exploring alternative ways to think about the risk and return drivers of what is potentially a rewarding asset class.

EMLC is essentially a government bond investment, driven by currency and sovereign risk. It may be thought of as a higher-yielding, higher-risk extension of an investor's global government bond allocation rather than being solely part of an EM allocation.



Nathan Wang Solutions Analyst, Multi-Asset Solutions



Wenting Shen Solutions Strategist, Global Multi-Asset Team

EMLC is essentially a government bond investment, driven by currency and sovereign risk.

- Nathan Wang

The starting point for any analysis is recognizing that the total return to investors in EMLC consists of three distinct drivers: coupon, price appreciation and currency (FX). We'll begin by looking at the impact of time horizon on EMLC investment outcomes and the role played by the different return drivers. We'll then discuss some underlying dynamics of the three return drivers, seeking to draw investment implications for asset owners and asset managers along the way.

While elevated within short periods, the volatility of EMLC falls significantly as we extend the holding period. This means investment time horizon should be one of the first decisions to make when thinking about investing in EMLC.

The relative importance of the three underlying drivers—coupon, price appreciation and currency—to total return changes dramatically depending on the time horizon: currency is the largest driver in the short run, but coupon becomes the dominating factor over time. While investors cannot cleanly access the three components of EMLC returns separately, they can actively tilt their exposure towards or away from one or more return drivers.

...realized volatility of the returns can differ markedly depending upon the holding period.

- Wenting Shen

The Importance of the Investment Horizon

It is tempting for investors to view EMLC as a volatile asset class. This is understandable given that it seldom makes the headlines except at times of market turbulence—often in the form of currency weakness. As a result, these episodes of 'blow-ups' tend to eclipse the steady, consistent properties that make EMLC a worthwhile addition to a portfolio. Away from such short-term noise, and in common with most asset classes, the level of realized volatility of the returns can differ markedly depending upon the holding period.

Figures 1 and 2 show historical EMLC performance from two angles: (a) the dispersion of returns, and (b) the volatility of those returns. In Figure 1, the "box and whisker" chart shows returns measured over one-, three- and ten-year holding periods, on a rolling monthly basis since 2002. The distribution of these returns is substantially narrower for the ten-year holding periods—a pattern that occurs to varying degrees in most asset classes, for different reasons.

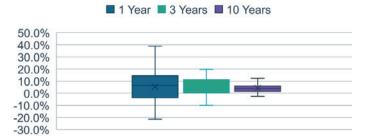
In the next section we'll discuss the factors behind the short-term dispersion of returns on the one hand, and the long-term compression of return distributions on the other.

Given that returns over 120-month holding periods have been more stable than those over 12-month periods, we would expect to see this pattern reflected in the volatility numbers. The bar chart in Figure 2 shows the volatility of the rolling one-, three- and ten-year periods. On an annualized basis, volatility over three- and ten-year periods has indeed been significantly lower than for one-year periods.

The holding period over which to examine the volatility of an investment is an important (and often incorrectly made) decision. Many investors use monthly return data, as a default, to estimate the volatility of an asset class. But this prism only makes sense if you expect to invest in and out of the asset class for periods of months. Most investors tend

FIGURE 1: Distribution of Returns

The Impact of Time Horizon on EMLC Returns Distribution of 1-, 3- and 10-year returns



Past performance is not a reliable indicator of future performance.

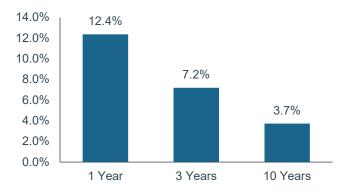
As of February 28, 2023.

Data from December 31, 2002 to February 28, 2023.

The cross is the average return, the line is the median return. Returns within the box represent the middle 50% of all the returns. The upper and lower vertical lines show the maximum and minimum returns corresponding to 1.5 times the interquartile range. Source: Bloomberg Finance L.P., analysis by T. Rowe Price..

FIGURE 2: Volatility of Returns

The Impact of Time Horizon on EMLC Bond Volatility Volatility of 1-, 3-, and 10-year EMLC returns in USD



Past performance is not a reliable indicator of future performance.

As of February 28, 2023.

Data from December 31, 2002 to February 28, 2023. Source: Bloomberg Finance L.P., analysis by T. Rowe Price. to hold the investment for much longer horizons, typically years. This implies that the correct measure of the range of possible investment outcomes is best measured in terms of the volatility of longer holding periods, aligning the calculation period with the investment period.

Decomposing the Drivers of EMLC Performance

We have noted that longer holding periods are associated with narrower distributions of returns in EMLC. The reason lies in the changing importance, over time, of the underlying return drivers of the asset class. The total return to investors in EMLC consists of three related, but distinct, components:

- Coupon: The regular coupons paid on the debt by the issuing EM sovereigns over time.
- Price: Returns from price appreciation based on mark-to-market local interest rate movements.
- Currency: The impact of currency fluctuations on the value of both the principal and the coupons, given that both are denominated in EM local currencies rather than in the investor's base currency.

Figure 3 shows the proportionate contribution to total return of EMLC at the asset class level of the three return drivers. Over short investment periods the largest driver of returns is the currency component. Over time, the largest driver becomes the coupon component. Interestingly, currency is the most volatile component while coupon is very stable. As coupon payments accumulate over time, they account for a growing proportion of cumulative total returns. By implication, as the less volatile component becomes dominant, superseding the more volatile component over longer and longer investment periods, the asset class as a whole becomes appreciably less volatile.

FIGURE 3: Drivers of EMLC Performance Over Time in USD Contribution to Return



Past performance is not a reliable indicator of future performance.

As of February 28, 2023

Data from December 31, 2002 to February 28, 2023. Source: Bloomberg Finance L.P., analysis by T. Rowe Price.

Over short investment periods the largest driver of returns is the currency component.

- Nathan Wang

For investors considering EMLC, it is important to establish their investment time frame in advance. Shorter-term investments require a view on the direction of EM currencies and rates as well as sufficient risk appetite to absorb short-term FX volatility. Longer-term investments must acknowledge the growing importance and attractiveness of the coupon component.

From a manager selection perspective, the divergent behavior of the return drivers highlights the dangers of placing undue emphasis on short-term performance. For example, looking at a sample of managers on a one-year horizon, the winners will likely be those who spend a significant portion of their risk budget on active currency positioning to drive alpha. Over a longer time horizon, large currency bets are likely to be less important; the winners will more often than not be those who can collect coupon and generate idiosyncratic alpha via security selection.

Putting this a different way, the short-term views give a good picture of the interaction between a manager's currency stance and the way the currency has moved, but it may reveal little about the manager's bond selection skills. (This, as we explored in "Analyzing Manager Style in EM Local Currency Debt", is why it's important to identify what exposures EMLC managers are using to generate their alpha.)

Risk and Return Relationships

The historical paradox of EMLC is that lower-risk components have delivered higher returns, while higher-risk components have produced lower returns. As shown in Figure 4, the biggest driver of risk in EMLC has clearly been the FX component, but it generated negative returns over the long term. On the other hand, the coupon component, which has minimal volatility (given predictable, contractually agreed coupon flows) and no drawdowns, has been by far the largest driver of long-term returns for the asset class. This is consistent with the investment grade credit quality of the index. As of the end of December 2022, the sovereign issuers in the J.P. Morgan GBI-EM Global Diversified Index had an average credit quality of BBB+, a yield of about 6.84%, and a zero default rate.

FIGURE 4: EMLC and Its Components

31 December 2002 – 28 February 2023, Calculated in USD

	Total Return	FX Component	Coupon Component	Price Component
Return	4.9%	-2.0%	6.4%	0.7%
Volatility	11.8%	8.8%	0.2%	4.5%
Drawdown	-29%	-57%	0%	-20%

Past performance is not a reliable indicator of future performance.

As of February 28, 2023.

Data from December 31, 2002 to February 28, 2023. Source: Bloomberg Finance L.P., analysis by T. Rowe Price.

Learning to Live with Currency Risk

Given that currency has offered the lowest returnto-risk trade-off over time, it would seem an obvious strategy to separate out the three components and invest only in the low-risk, high-return coupon component. Sadly, this is not possible to do. The asset class is a combined package of its underlying components and investors necessarily need to be exposed to all their risks and returns.

The historical paradox of EMLC is that lower-risk components have delivered higher returns...

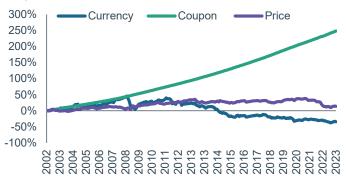
- Wenting Shen

The main reason for this is that the cost of hedging out the FX risk through currency contracts can remove almost all of the income advantage, as EMs have high front-end rates that are only marginally lower than their long-end rates. This is because as EMs are competing for international capital, they tend to have higher interest rate structures, particularly at the shorter end. Moreover, when EM countries are under stress, much of the pressure is felt through the currency (assuming a freely floating exchange rate). This often has a knock-on impact at the short end as EM policy makers choose to raise domestic shortterm rates to shore up confidence. In other words, while a developed country might not need to adjust policy to deal with currency weakness, EMs tend to be capital importers and thus more vulnerable.

While investors cannot profitably isolate and remove all currency exposure, they can be selective about the FX risks they take. Our discussion so far has focused on the asset class as represented by index level data, which assumes passive currency exposure.

Cumulative Returns (USD)

Cumulative Returns From the Three Drivers—Currency, Coupon, Price



Past performance is not a reliable indicator of future performance

As of February 28, 2023.

Data from December 31, 2002 to February 28, 2023. Source: Bloomberg Finance L.P., analysis by T. Rowe Price.

Active managers can manage FX risk with a range of techniques such as relative-value pairings and funding EM long positions with non-dollar developed market currencies to reduce short dollar exposure.

Two Asset Classes in One

The starkly different behavior of the drivers of EMLC returns implies that it makes sense to think of it as two separate asset classes in risk terms: a relatively high-yielding government bond portfolio and a potentially volatile currency stream.

Over the past decade, one obvious challenge in currency management has been the impact of U.S. dollar strength on EM FX returns. More generally, the Sharpe ratio available from a given currency can be persistently low, because currency valuations can deviate from their fair value for a long time; a valuation-based assessment on a given currency can stay "wrong" for extended periods. Currency also tends to move in a wider range around a variable fair value so that it's not unusual for a currency to be more than 20% over- or under-valued for an extended period.

Bond prices, on the other hand, are more driven by investment flows, which helps create a valuation "anchor" where over- or under-valuation tends to result in an adjustment. One explanation is that there are dedicated investors whose actions tend to "regulate" bond prices. For example, the insurance and pension fund investor base in Malaysia is likely to step in and buy domestic government bonds if yields reach a certain level, but they would not respond to a depreciating ringgit in the same way. The self-correcting mechanism for currency is a change in the fundamentals, which can take longer to feed through. At T. Rowe Price, our sovereign analysts review each country carefully and generate rate forecasts and gauge sovereign risk over various time horizons. By

We argued earlier that managers should approach bond and currency exposure as two separate asset classes.

longing duration of an EM country when its yield is expected to fall while shorting duration of another country when yield is expected to rise, we aim to gain additional alpha from the subsequent price fluctuations.

For fund managers seeking to use their clients' risk budgets efficiently, these relationships have important implications. We argued earlier that managers should approach bond and currency exposure as two separate asset classes. In bond selection, we think stronger valuation anchors, together with compensation for risk in the form of coupon, justify a pure alpha-seeking approach. In currency selection, weaker valuation anchors and a more volatile profile imply that the primary focus should be on volatility management, with active return generation as a secondary objective.

Having said that, active currency selection can be an attractive source of alpha, so long as investors are mindful of the risks and cognizant that reversion to fair value can take time. In an asset class where the penalty for being wrong can be costly, our preference is for active risk to be taken in the form of multiple smaller bets rather than few large exposures.

The Impact of Yield Levels

From an asset allocation perspective, the forward return of EMLC looks promising. An empirical

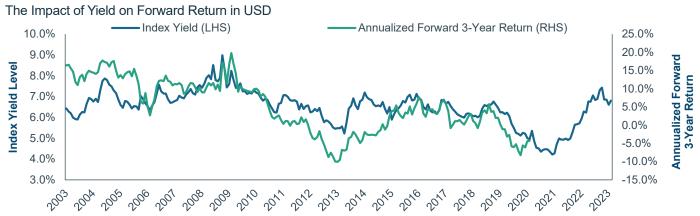
study of historical data shows a strong positive correlation (0.68) between the yield level of EMLC and the asset class's three-year forward return as depicted in Figure 5 below. Hence, starting from an elevated yield level of 6.8% now, the forward return of this asset class looks promising compared to the lackluster performance over the past years.

This finding may not come as a surprise to many investors. As we demonstrated in Figure 2, when the time horizon extends beyond three years, the impact from the currency component becomes modest. On the other hand, the higher yield level reflects larger coupons from the newly issued EM government bonds and more discounted valuations of the existing debt, both of which will translate to higher total returns down the road. We think the compelling yield level of EMLC may provide a good entry point for investors with over three-year investment horizons.

Conclusion

We think the best way to think about EMLC is that the reward (return) comes from the coupon, the risk comes from the currency, and the duration exposure is a more traditional bridging risk-return relationship. The most important driver in the short term is currency, while over the longer term it is the coupon. These subtleties of risk and return drivers, and their relative importance over time, are key to understanding the asset class. While investors cannot cleanly access the three components of EMLC separately, they can tilt their exposure towards or away from one or more of these drivers. Luckily, we think the current attractive yield level of EMLC may provide a good entry point for investors with investment horizons of three years or longer.

FIGURE 5: Yield vs. Annualized Forward 3-Year Return



Past performance is not a reliable indicator of future performance.

Actual outcomes may differ materially from estimates. As of February 28, 2023.

Data from December 31, 2002 to February 28, 2023. Source: Bloomberg Finance L.P., analysis by T. Rowe Price.

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MEET OUR INTERNS

We Talk to Reese Feng And Neil Wang, Our First China Interns to Join T. Rowe Price



Reese Feng

n this edition of Personal Profile, we are taking a break from interviewing T. Rowe Price's (TRP's) portfolio managers and other key staff. Instead, we invite you to meet two of our first China interns—Reese Feng and Neil Wang—who have both been offered and accepted employment with our equity team. Reese graduated one year before Neil and came on board as an Associate Analyst in September 2022. Neil will graduate in June 2023 and will officially join the company in September 2023, prior to which he is maintaining his internship contract with TRP.

Reese and Neil are happy to share their internship experience at TRP as they hope that this information can help the next cohort of university students in China get to know more about TRP and the opportunities that a career in asset management has to offer. Their stories also help to promote TRP's ongoing China campus recruitment. Our first university internship is part of an ongoing program in which we aim to promote knowledge of the firm and our corporate culture among graduates at China's top universities, such as Peking University and Tsinghua University in Beijing and Fudan University in Shanghai.

Neil and Reese were applicants in what was TRP's first official China Internship Program. As you may imagine, the scheme proved very popular and was thus highly competitive. In the initial stage, over 200 candidates were narrowed down by our APAC Human Resources and Shanghai analysts to around 30 who went on to interview. The first round of interviews was conducted by our Shanghai general



Neil Wang

manager and a senior analyst. Ten candidates were then selected for a final round of interviews, including with Director of Equity Research, Asia, Tetsuji Inoue. Three were later offered four-month internships with the firm.

Reese initially aspired to a job in private equity but after a few years became interested in asset management. It was on asking his school seniors for their views on financial institutions that he first heard about TRP. In December 2021 he read about the TRP internship scheme and decided to apply. In contrast, Neil had focused more on public markets, completing internships at a number of large 'buy-side' firms during his studies for a B.A. and a Master's degree. As an aspiring junior, what was important to him was how much responsibility a company was prepared to give its interns.

In comparison to banking or private equity, with their many layers of management, asset managers offered a better chance to learn and explore the field. Neil's family background also pointed him towards a career in fund management. His father had engaged in stock investing for more than 15 years and had opened a personal equity account for him after his high school graduation. So Neil chose to major in Finance at college. On first hearing about TRP, he did his own homework on the firm and why it was successful, so that he came to the internship already knowing quite a lot about us.

Looking back, how do Reese and Neil rate their internship experience at TRP? What are their key takeaways? Was the process sufficiently flexible? And did it fully meet their expectations?

For Reese, the TRP internship scheme scored highly, with the major negative being COVID. Clearly, working from home was not ideal for someone who had just joined the team! Nonetheless, working from home gave Reese a chance to be more independent. He appreciated that as an intern, at the start of each project he would be given some general directions, rather than a precise set of instructions. His mentor, Forest Shultz, would provide valuable feedback and guidance along the way¹, including 'dry runs' with subsequent suggestions to improve the investment thesis.

Neil rated his own internship experience similarly to Reese, appreciating TRP's culture, people and the support from his mentor, team members and Human Resources. He spent two months researching a company in depth before giving a final presentation to the investment team, having benefited from discussions with his mentor and the Director of Equity Research. Reese and Neil had an opportunity to accompany our analysts in the field on company visits and participate in management interviews, as well as learn all about financial modeling and portfolio construction, giving them a broad exposure to the analyst's role during their four months at T. Rowe Price.

Finally, what would Neil and Reese say to today's graduate students in China who might be thinking of applying for a TRP internship in 2023? Neil advises that it is important for students to have a clear career goal, in a field that they are passionate about. For those with an interest in finance, asset management could be an ideal choice. Of course, there is a clear quantitative dimension to being an equity analyst, as ultimately, companies need to be ranked in order of their attractiveness as an investment. However, Reese notes that TRP provided good opportunities for interns to learn all about financial analysis and modelling, and also provided support with language skills.

Thus a degree in quantitative finance is not a prerequisite for a position at TRP, only a passion for finance and an ambition to execute tasks well. TRP's open-minded culture provides the flexibility for junior analysts to be given more responsibility at an earlier stage in their careers. China is a land full of growth opportunities. As a growth-focused long-term investor, our firm can provide Chinese graduate analysts with the stepping stones to become seasoned equity investors. After this successful start, T. Rowe Price plans to hold further China internship programs in future.

¹ In order to improve our interns' experience at TRP and make it as smooth as possible. Reese's mentor was Singapore-based Forest Shultz, while Neil's mentor was Bill Bai, based in Hong Kong.

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T. Rowe Price is a global independent investment management firm. We are solely focused on long-term results for our clients, managing a full range of investment strategies in multiple asset classes. For over 80 years, our consistent investment approach has helped us focus on promising opportunities while at the same time carefully managing risk.

We established our Tokyo office and Hong Kong office in 1982 and 1987 respectively, and since then we have expanded our business by operating in Australia and Singapore. Today we have more than 300 associates based locally.

INDEPENDENT ASSET MANAGER

Our sole business is managing our clients' interests

ALIGNMENT OF INTERESTS

We are a publicly listed company with substantial employee ownership

FINANCIAL STRENGTH

We carry no outstanding long-term debt and maintain substantial cash reserves

GLOBAL EXPERTISE

Continually growing global team of investment professionals

Founded in

Baltimore, USA in 1937

USD1.34

trillion in assets under management 1,2

831

investment professionals worldwide3

Local presence in

17

markets

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¹ Firmwide preliminary AUM includes assets managed by T. Rowe Price Associates, Inc. and its investment advisory affiliates.

² As at 31 March 2023.

³ As at 31 March 2023

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