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Q3. 2023





Introduction

Welcome to another edition of Vantage Point, the quarterly economic and investment outlook from the Global Economics and Investment Strategy (GEIA) team.

Another three months have passed, and still no sign of a major global recession. It's true that Germany marked a 'technical' recession around the turn of the year, but I think of the 'two consecutive quarters' rule as the journalist's, as opposed to the economist's, definition of recession. Elsewhere, economies and labor markets have held up better than expected, while inflation remains higher and stickier (more persistent) than central banks would like. In response, the past quarter has seen several interest rate hikes from the major central banks, and while this has impeded equity market performance, we haven't seen a major sell off yet, though what upside performance we have seen has been dominated by large technology firms, notably in the US.

That said, signs of weakness are emerging. Manufacturing Purchasing Manager's Indexes (PMIs) worldwide have moved into sub-50 contraction territory, while inventories have built up in both the US and Europe, pointing to weaker final demand. Much of the growth we have seen has been in service sectors, thanks in part to the belated impact of the pandemic, though that effect is waning. Loan growth is weakening in several places, as the impact of higher rates and bank failures start to be felt. Inflation in many countries has started to fall, though the picture in terms of surprises is mixed – falling slightly faster than expected in Europe, broadly in line in the US and remaining stickier and higher in the UK. China's growth also appears to be slowing a bit quicker than many thought, though the outlook for the year remains robust compared with most others. More worryingly, economy-wide prices have slumped into deflation with producer prices running at nearly -5% annual rate and consumer prices virtually flat versus a year ago.

So overall the outlook remains pretty cloudy. We have retained the same scenarios as last time, and the chance of recession sooner or later remains very high in a number of the major countries. The two recessionary scenarios '**Credit Crunch**' and '**Delayed Landing**' now have the same probability – 40% each. In other words, compared with last time, we have shifted 10% into the likelihood that recession comes next year not this.

The arguments for a '**Credit Crunch**' (40%) this year remain the same. Financial and credit conditions have tightened, most notably in the US, where the move out of small/regional banks into larger institutions continues. This is more of a bank 'jog' than a bank 'run', but the failure of First Republic Bank highlighted that the issue has not gone away. Smaller, regional banks account for around 40% of total US bank lending and are disproportionately large funders of SMEs and commercial real estate. Clearly, larger banks and broader capital markets can take up some of the slack there, but probably not most of it. Hence what economists call the 'bank lending' channel - a sharp rise in the cost of capital mediated through the banking sector - is likely to have an impact on the economy through the second half of this year. And although we haven't seen much evidence of it yet, that impact could yet be buttressed by the 'bank capital' channel (where falls in bank stock prices threaten their net worth and ability to lend), as well as the traditional 'credit channel', where falls in asset prices (e.g., real estate) affect the net worth of financial institutions more broadly. Meanwhile, high inflation prevents the Federal Reserve from coming to the rescue with large rate cuts, meaning a significant chance of recession later this year.

In truth, the likelihood of a credit crunch is probably highest in the US, but many countries share the problem of inflation that is persistently higher than target at the current level of interest rates. Our '**Delayed Landing**' scenario (40%) confronts this issue head on. Unlike the credit crunch scenario, if the rise in interest rates and tightening of financial conditions proves insufficient to slow the economy significantly in the second half, then interest rates may have to go up significantly more in several countries. Essentially, past policy errors by central banks (leaving rates too low for too long) come back to bite, and rates must go much higher for longer to tame the inflation consequences. There is clear evidence of 'second round effects' emerging in the UK and to some degree the US, as much in product markets (food retailers for instance) as in labor markets, and these will have to be combatted before inflation expectations destabilize. Ultimately, in this world that can only happen if interest rates go up far enough to create enough economic slack to bring inflation down. That may well mean a second leg upwards in rates later this year, followed by recession in 2024. The US and UK are most vulnerable to this outcome.

Finally, we retain a path to a 'Soft Landing' (20%), though we think it's heavily odds against. In truth, debate about this scenario within the team took up a lot more time than its published probability suggests. On the one hand, the longer we go without recession, but inflation continues to fall, the more likely this scenario seems to become. More fundamentally, economists know less about what determines inflation than they sometimes profess. Our two recessionary scenarios reflect the standard model - that ultimately an inflation surprise must be met by creating large amounts of economic slack to bring it back to target. In technical terms, this view of the world places the so-called 'short-run Phillips curve' at its heart: there is supposedly a negative tradeoff between inflation and unemployment in the short run and, if inflation surprises to the upside, then policy makers must create more unemployment to keep (wage) inflation in check. In truth, the Phillips curve is an unobservable, unstable thing and some economists claim it doesn't even exist. It is possible instead that the labor market loosens in an unprecedented, unexpected way, with vacancies falling relative to jobs, voluntary guits falling and wage inflation remaining well contained (an inward shift of the so-called 'Beveridge Curve'). Every strong payrolls print with relatively well-behaved wages - such as May's - lends some support to that view. We continue to think the economy is unlikely to evolve in such a surprising way, but I must admit to feeling increasingly uncomfortable about that.

As ever, Vantage Point continues to evolve. Our scenarios remain independent, well-defined outcomes for the major economic variables and we probability weight them to create our fan charts. This time around, we have changed the look of our fan charts – emphasising the central bands – not because they are any more likely (they remain the central 20% of outcomes), but to aid interpretation. We have also enhanced the Investment Conclusions section, including new graphics that help the reader understand the logical chain going from what we think compared with what the market thinks, to broad investment implications on both a tactical (nearterm) and strategic (medium-term) basis.

Once again, we hope you enjoy reading this edition of Vantage Point and are keen to hear any feedback.



SHAMIK DHAR CHIEF ECONOMIST

Vantage Point summary

We summarize the outlook in the graphics below. These show: 1) our 12-month forecasts of GDP growth, inflation, and monetary policy relative to their long-term trend; 2) how our fan chart forecasts differ from market expectations- in terms of expected returns and expected uncertainty; and 3) Our investment conclusions, based on the largest discrepancies between our own views and what the market is pricing in. Our conviction around our tactical investment views is higher when the level of uncertainty around our forecast is lower.

TABLE 1: SUMMARY OF OUR OUTLOOK

How to read the heatmap. **Green** indicates above trend growth, below target inflation, policy accommodation and lower-than-average levels of uncertainty. **Grey** indicates economic growth in line with trend, inflation in line with target, a neutral policy stance, and average levels of uncertainty. **Red** indicates below trend growth, above target inflation, a tight policy stance, and higher-than-average levels of uncertainty.

		Growth	Inflation	Policy	Takeaway
Summary of VP outlook	Average expectations				Growth is weak over the next 12 months; inflation is still above target and policy remains restrictive.
	Uncertainty				Uncertainty is high on the timing of the recession and the policy reaction to slow/negative growth and high inflation.

TABLE 2: OWN FORECAST VS THE MARKET

How to read the heatmap. **Green** indicates that we expect growth to be higher compared to what implied by market prices, inflation to be lower than expected by the market and policy accommodation to be greater than expected. Green also indicates that uncertainty around our macro expectations is lower than what signaled by the market. **Grey** indicates that expectations (or uncertainty around expectations) for economic growth, inflation and policy are broadly in line with the market. **Red** indicates that uncertainty around our macro expected growth, greater than expected inflation and a tighter than expected policy stance. Red also indicates that uncertainty around our macro expectations is higher than what signaled by the market.

		Growth	Inflation	Policy	Takeaway
Vantage Point vs market pricing	Average expectations				We see growth disappointing, inflation surprising to the upside and tighter policy vs expectations.
	Uncertainty				Our fan charts imply greater uncertainty in the outcomes for growth, inflation, and policy, compared to what is priced in option markets.

TABLE 3: SUMMARY OF 12 MONTH INVESTMENT CONCLUSIONS

How to read the heatmap. **Green** indicates overweight. **Grey** indicates neutral. **Red** indicates underweight. Polarized possible outcomes for the economy mean this is an environment to tighten risk budgets and not make bold directional bets.

Asset class	Q2 '23	Q3 '23	Conviction	Rationale
Cash			High	Cash attractive given income returns and optionality it provides
Fixed Income			Medium	Benefits from high yields and ultimately from recession and the policy-related response
Equities			Medium	Suffers from slower growth, and tighter policy. Historically, equities bottom during recessions
Credit			Medium	Elevated yields are attractive, but spreads remain compressed providing less cushion for slower growth, particularly in lower quality credits.
Alternatives			Medium	Focus on assets less sensitive to growth and/or benefit from an increase in risk and upside inflation surprises

Source: BNY Mellon Investment Management, as of June 13, 2023.

Executive Summary

OUR NEW SCENARIOS IN BRIEF

40%

Scenario 1 – Credit Crunch

PROBABILITY

SCENARIO

- Monetary tightening starts to bite, but there is more to come, with no cuts until 2024.
- US and Europe avoid a full-blown banking crisis, but tighter credit/financial conditions hasten economic slowdown.
- US and Europe enter a recession sometime in 2023 H2.
- Labor market loosens rapidly (i.e., unemployment jumps) taking the heat out of inflation.
- China's re-opening has short-lived positive effects.

The banking crisis in the US and Europe cause credit conditions to tighten significantly, the equivalent of around 50-100 bps higher policy rates. Persistently high real rates exacerbate tail risks in the global economy, including, but not limited to disruptions in US credit; distress in the leveraged loan and/or less liquid private equity markets; sovereign debt distress in peripheral countries of the Eurozone; and emerging market (EM) sovereigns or corporate distress on renewed USD strength. China growth impulse fizzles out, with slumping external demand, weaker-than-hoped recovery in the property sector negatively impacting consumer sentiment, and the economy experiencing foreign exchange (FX) pressure from elevated developed market rates.

40%

PROBABILITY

Scenario 2 – Delayed Landing

SCENARIO

- Major central banks' pause rate hikes near-term, but this proves premature.
- The labor market does not adjust via shift downward in the Beveridge curve, and wage growth remains firm, keeping pressure on core services inflation.
- As a result, central banks need to re-start hiking cycle and shock-tighten, which sends the US into a recession in 2024.
- China's reopening regathers momentum and is, on balance, inflationary for core goods.

The banking crisis leads the US Federal Reserve (Fed) and the European Central Bank (ECB) to pause near-term, only to discover that core inflation remains persistent and re-accelerates on insufficiently tight financial conditions. Forward-looking indicators, which tend to over-rely on manufacturing/real estate momentum, misinterpret post-COVID realignment of activity as a heightened recessionary risk; meanwhile, employment and services consumption remains robust. Persistent inflation and strong labor demand in the US keeps wage growth above the pace consistent with the Fed's 2% inflation objective and promotes a re-start of the hiking cycle, which surprises the market. In Europe, sticky core inflation continues to re-set wages higher, triggering more hikes from the ECB. Large monetary policy-led recessions follow in advanced economies.

20%

Scenario 3 – Soft Landing

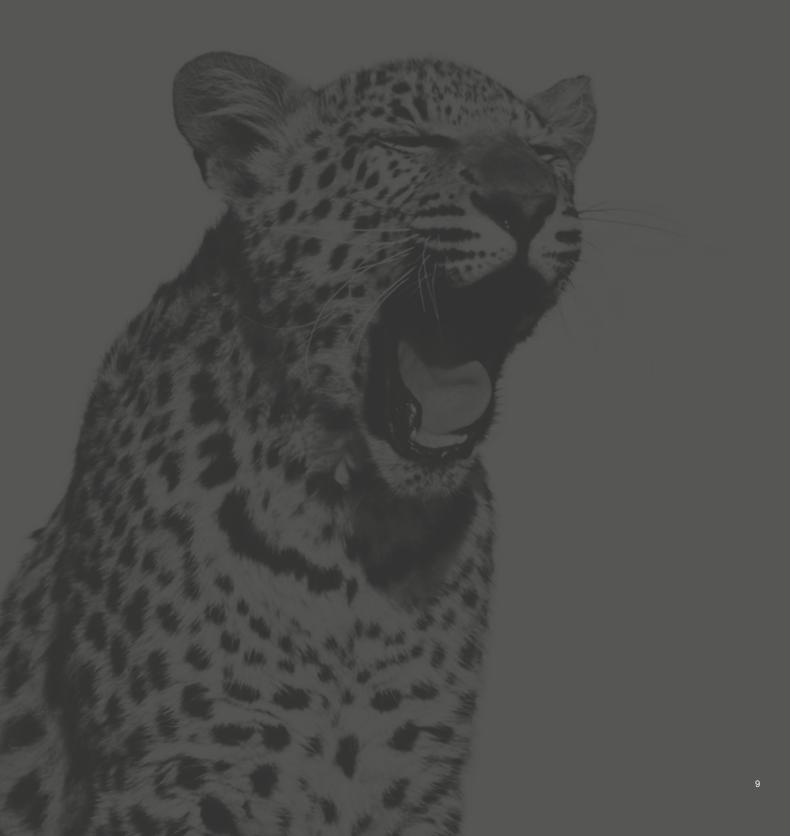
SCENARIO

PROBABILITY

- Inflation falls without the need for much more tightening.
- US rates peak around 5.25%, and central banks more broadly are quick to cut rates in early 2024 to prevent the economic damage of tight policy.
- Labor market adjusts via a shift in the Beveridge curve i.e., slower wage growth without a jump in unemployment
- China's reopening has positive spill over effects on global activity and is, on balance, disinflationary for core goods.

Inflation continues to decline and proves largely non-sticky. In the US, this is due to: ongoing commodities disinflation; shelter and medical components of major inflation indices sustainably reversing last year's strength; and the labor market loosening benignly, with the ratio of job openings relative to job seekers bearing most of the brunt, while the unemployment rate rises only modestly. Most of the tightening in the US economy already took place in 2022 through tighter financial conditions. In Europe, receding geopolitical risks and adequate energy supply provide succour; automatic wage adjustments across many euro area countries that incorporate higher inflation prove to be one-time events in 2023, not continuous into future years. China reopening momentum is sustained and proves disinflationary on balance, as higher global goods production offsets higher energy demand. USD weakens on credible Fed and ECB policy pauses, global growth resilience and receding recessionary risks. Risk assets rally as recession fears fade and an improving earnings outlook is priced in.

What We Think SECTION 1



SECTION 1

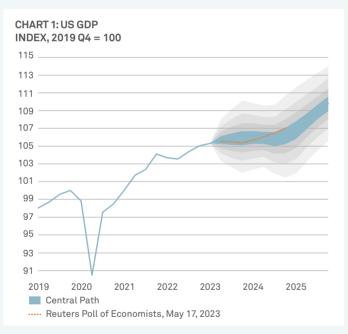
What we think: Forecast summary

The global economy has continued to expand. Although Germany saw output fall in Q1, putting the single currency bloc's largest economy in a technical recession, other member states, including both France and Italy, saw a pick-up in growth. US GDP increased at an annualised pace of 1.3% in Q1, broadly in line with our expectations at the time of the previous Vantage Point. US employment growth remains strong, with non-farm payrolls surprising on the upside in eleven of the past twelve months. The resilience of the household sector to what has been a prolonged period of declining real wages in most major economies has been impressive, fuelled by a combination of savings acquired during the pandemic and, in some cases, further government support. Headline measures of CPI inflation continue to fall across the major economies, as last year's sharp rises in energy costs drop out of the twelve-month comparison, and in many cases go into reverse. However, core inflation remains elevated. It is no longer falling in the US, it may have peaked in the euro area, but it has

unexpectedly begun to rise again in the UK, reminding us that central banks may yet have more to do. Troubles in the US banking sector, which began as we finalised the previous Vantage Point with the collapse of Silicon Valley Bank (SVB), have not intensified, but neither have they gone away.

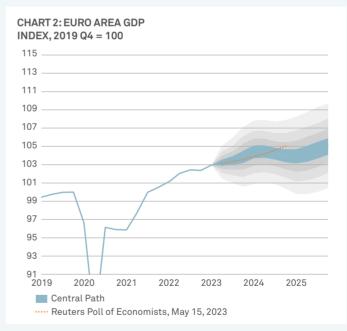
The principal uncertainties facing the global economy and its financial markets remain, in our judgement, much as they were three months ago. Our three scenarios are similar in character, and identical in name, to those we set out in the previous Vantage Point, although the weights we attach to each have shifted slightly. Our views about the prospects for economic activity in the US, the euro area and China are summarised in the first three fan charts. Our mean path for US GDP is close to the consensus among economists as captured by the Reuters Poll, with both implying near stagnation over the next four quarters. Nevertheless, that mean path is the average of three quite different scenarios, with the US entering recession either

¹Institute of Supply Management.



Source: Refinitiv Datastream/Fathom Consulting.

Key Takeaway: US growth prospects look weak in the shorter run and worse than consensus expectations, particularly in 2024 due to our 'Delayed Landing' scenario. The fan chart suggests recession in 2023 or early 2024 is more likely than not.



Source: Refinitiv Datastream/Fathom Consulting.

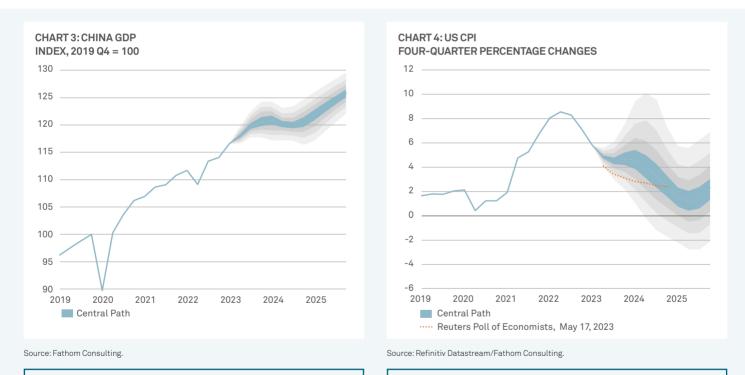
Key takeaway: The picture is similar in Europe, as rate rises and tighter financial conditions weigh heavily on growth prospects in the short run.

Forecasts begin in Q2 2023 and were calculated as of June 2, 2023. Source: BNY Mellon Investment Management and Fathom Consulting. The "central path" (i.e., blue bands) represents the central 20% of outcomes based on a mean or probability-weighted average forecast across all three scenarios. The light gray bands show progressively less likely outcomes covering a combined 60% of the forecast distribution. The width of the fan chart shows the level of uncertainty and when the bands below the central path are wider than those above, this shows the balance of risks lies to the downside.

this year ('Credit Crunch') or next ('Delayed Landing') in two of them, with a combined weight of 80%. We see a 40% chance that the US economy contracts in the four quarters to 2023 Q4, and a 50% chance that it does so in the four quarters to 2024 Q4. With US economic activity falling through the year in this way only once every ten years or so, recessions risks remain elevated. Our fan chart for euro area GDP has a very similar shape to that of the US. With China's economy benefitting from the lifting of COVID restrictions in December, the odds of a recession in that country this year are low. Next year, by contrast, the odds of a contraction in Chinese economic activity are similar to those for the US and Europe.

Headline inflation peaked last year in most major economies and has tended to fall steadily since then. The consensus among both economists, as surveyed, and investors whose views are reflected in market pricing, is that in most cases it will continue to make steady progress back towards target. We are not convinced. Indeed, we attach a weight of 40% to a scenario where central banks pause too soon and, with substantial pandemic savings remaining in the US and in Europe, and real wages no longer falling, household expenditure accelerates pushing inflation higher. It is the possibility of a renewed pick-up in inflation that accounts for the upward bulge in our fan charts for both US and euro area inflation early next year. While the pricing of inflation swaps is consistent with US inflation moving to within a whisker of the 2% target by the second quarter of next year, we see just a 1-in-4 chance that this happens. Moreover, we see a 1-in-10 chance that US inflation has moved back above its previous peak of 9.1% by that time.

Market pricing suggests that the federal funds rate is at or very close to a peak. We share that view. Our federal funds rate fan chart is wide, emphasising the considerable degree of uncertainty about the outlook for US monetary policy at present. We see close to an evens chance that US monetary policy is



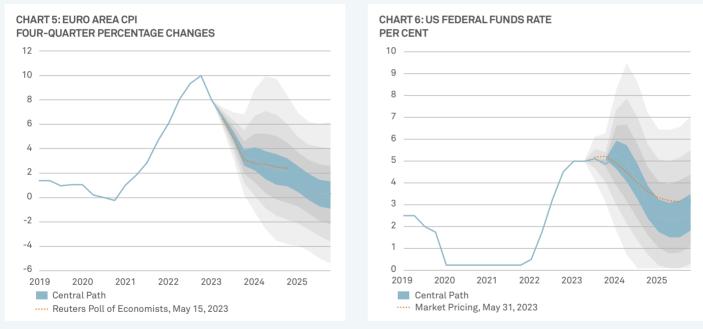
Key Takeaway: China's reopening boost is set to fade during 2023, though 4-quarter growth rates are likely to remain positive and significantly higher than in the US or Euro Area. Key Takeaway: The outlook for US inflation is particularly uncertain. It is likely to fall, but more slowly than the consensus expects and the risks of it picking up again are odds against but significant.

Forecasts begin in Q2 2023 and were calculated as of June 2, 2023. Source: BNY Mellon Investment Management and Fathom Consulting. The "central path" (i.e., blue bands) represents the central 20% of outcomes based on a mean or probability-weighted average forecast across all three scenarios. The light gray bands show progressively less likely outcomes covering a combined 60% of the forecast distribution. The width of the fan chart shows the level of uncertainty and when the bands below the central path are wider than those above, this shows the balance of risks lies to the downside.

tighter in a year's time than it is today, and a 1-in-3 chance that it is tighter by 100 basis points or more. With a substantial chance of recession within the next two years, we nevertheless see around a 20% chance that the federal funds rate is back at the zero lower bound by the end of our forecast horizon. Our fan chart for ten-year US Treasury yields has a similar shape to our chart for the federal funds rate. While our mean path is close to market pricing, there is a considerable degree of uncertainty surrounding the outlook for US Treasury yields.

Both economists' forecasts, and market pricing, are consistent with equity prices drifting steadily higher from here. Our own forecast, summarised in our fan chart for the S&P 500, is more nuanced. We attach a combined weight of 80% to scenarios where the US economy enters recession, either this year or next, which explains why our mean path sees US equities fall through the remainder of this year, before recovering. We see close to an 80% chance that US equities end the year below current values, either because the US is in recession ('Credit Crunch'), or because growth and inflation have risen to such an extent that a further, significant tightening of US monetary policy is expected ('Delayed Landing').

The US dollar has fallen some 10% in effective terms from its peak late last year. With a significant chance of a global economic downturn during our forecast horizon, which would see the dollar benefit from safe haven flows, and with a 40% chance of much higher US interest rates (in 'Delayed Landing'), we see the dollar as more likely to rise from here than fall, with a greater-than-evens chance that it is testing last year's highs by the end of this year.



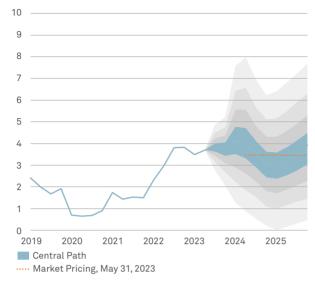
Source: Refinitiv Datastream/Fathom Consulting.

Key takeaway: A similar story for Euro Area inflation, though it may well fall more quickly than in the US. Source: Refinitiv Datastream/Fathom Consulting.

Key Takeaway: US interest rates are likely to stay slightly higher for longer than the market expects, and there is a significant risk of a second leg up. However, rates are set to fall later in the forecast and could come down quite quickly.

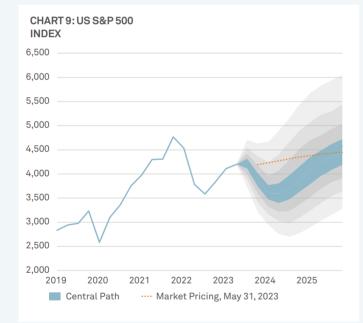
Forecasts begin in Q2 2023 and were calculated as of June 2, 2023. Source: BNY Mellon Investment Management and Fathom Consulting. The "central path" (i.e., blue bands) represents the central 20% of outcomes based on a mean or probability-weighted average forecast across all three scenarios. The light gray bands show progressively less likely outcomes covering a combined 60% of the forecast distribution. The width of the fan chart shows the level of uncertainty and when the bands below the central path are wider than those above, this shows the balance of risks lies to the downside.

CHART 7: US TEN-YEAR GOVERNMENT BOND YIELDS PER CENT



Source: Refinitiv Datastream/Fathom Consulting.

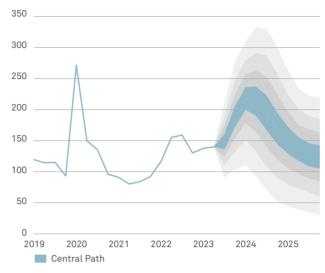
Key takeaway: Bond yields are set to evolve broadly in line with market expectations, though there is some chance of un upside spike later this year if inflation picks up again.



Source: Refinitiv Datastream/Fathom Consulting.

Key takeaway: Equity markets are likely to remain volatile while inflation and rate uncertainty persists. Our forecasts suggest underperformance in the near term, though picking up strongly further out.

CHART 8: US INVESTMENT-GRADE SPREAD BASIS POINTS



Source: Fathom Consulting.

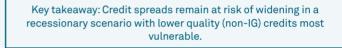
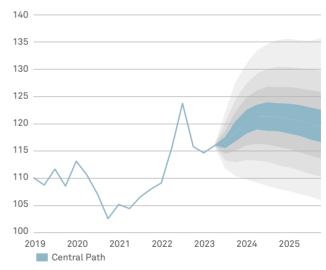


CHART 10: USD ERI AGAINST MAJOR CURRENCIES INDEX, JANUARY 2006 = 100



Source: Fathom Consulting.

Key takeaway: The dollar forecast is not particularly directional, with a small bias towards modest depreciation once recession is behind us.

Forecasts begin in Q2 2023 and were calculated as of June 2, 2023. Source: BNY Mellon Investment Management and Fathom Consulting. The "central path" (i.e., blue bands) represents the central 20% of outcomes based on a mean or probability-weighted average forecast across all three scenarios. The light gray bands show progressively less likely outcomes covering a combined 60% of the forecast distribution. The width of the fan chart shows the level of uncertainty and when the bands below the central path are wider than those above, this shows the balance of risks lies to the downside.

What the Market Thinks SECTION 2



SECTION 2A

What's priced in

Markets remained volatile over the guarter, in the attempt to price in the different outcomes for the global economy, and related probabilities. In April and May, expectations for growth were low (particularly in the rates market) and several rate cuts were priced in by the end of 2023 - market pricing was shifting closer to our 'Credit Crunch' scenario. Since then, the market has upgraded its growth view and shifted more recently towards pricing in tighter monetary policy. Presently, markets appear to be (once again) closer to pricing a 'Soft Landing' scenario than anything else. For example, the cyclical parts of the market continue to outperform more defensive ones, and interest rates are expected to fall driven by a speedy return of inflation to 2% and a less restrictive monetary policy stance (rather than by recession and a return to monetary policy stimulus). Forward real interest rates (i.e., adjusted for inflation expectations) suggest the market has shifted to expecting a higher level of equilibrium interest rates once inflation has returned to target. Overall, the probability of persistent inflation and recession are not adequately reflected in financial markets, providing opportunities for investors who, like us, believe that both risks are much higher than what is currently priced in. As

an example, at the time of writing, the option market implied probability of US treasury yields falling below 2% in 12-months' time is less than 10%, compared to our own probability of >30%. As a reminder to our readers, investing is not about finding which investment is the most likely winner, rather it is about finding investments which offer odds that are mispriced relative to their actual chances of 'victory'.

Growth: Market-implied growth expectations recovered in Q2, unwinding most of their fall since the start of the banking sector troubles in March. The relative performance of asset classes and strategies most sensitive to the economic cycle was robust overall. It was particularly strong in the US, in line with continued resilience in its economy, and sluggish in EMs, consistent with disappointing activity trends emanating from China. In the past, we have discussed a divergence between high market-implied growth expectations and the caution suggested by leading indicators of growth. While there remains some divergence, particularly when looking at early indicators of growth in the manufacturing sector, the gap has largely closed elsewhere, with short-term growth expectations rising close to what priced in by the market. Looking ahead, despite

Summary of market pricing

TABLE 1: THE MARKET IS EXPECTING TEPID, BUT POSITIVE, GROWTH, AT TARGET INFLATION AND RATES TO BE CUT TO NEUTRAL LEVELS, ALBEIT LESS QUICKLY THAN IN APRIL. CONFIDENCE AROUND THIS VIEW HAS RISEN, AS INDICATED BY LOW, AND/OR FALLING, LEVELS OF IMPLIED VOLATILITY

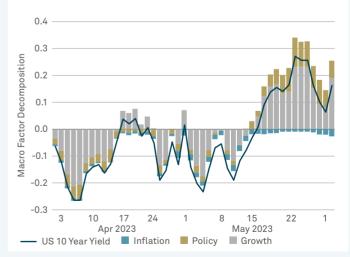
Market pricing	Growth	Inflation	Policy
Expectations – at end Q1			
Expectations – current			

Green indicates above trend growth, below target inflation and policy accommodation. **Grey** indicates economic growth in line with trend, inflation in line with target and a neutral policy stance. **Red** indicates below trend growth, above target inflation and a tight policy stance.

Source: BNY Mellon Investment Management, Macrobond. Data as of June 2, 2023.

Cumulative quarterly move in 10-year US treasury yield, decomposed by macro driver





Note: macro factors (growth, policy and inflation) are derived by identifying common drivers of asset returns, and classifying them based on their correlation with macroeconomic variables. Source: BNY Mellon Investment Management, Macrobond. Data as of June 2, 2023.

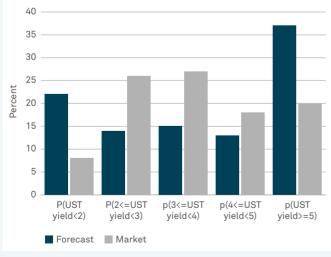
yield curve-based measures of recession probability suggest risks are elevated, other measures based on equity option prices, better suited to assess market expectations for growth, imply that risks are contained.

Inflation: Markets are pricing a fast return of inflation to target across most economies. For the US, the market sees inflation reaching ~2% next year. In the euro area, inflation is expected to remain only slightly higher than target, before returning to target the year after. The outlier is the UK, where the market is pricing inflation to settle significantly above target for several years. Our probability-weighted inflation expectations for the next few years are higher than what expected is by the market for the US. This is driven by a slow move of inflation to target in our 'Delayed Landing' scenario, which we see as significantly more likely compared to the market. History seems to agree with us, as one troubling recurrence emerges when looking at past evidence: the market systematically tends to underestimate future inflation when actual inflation is well above target.

Monetary Policy: Global monetary policy expectations repriced higher over the quarter, as the market reassessed risks emanating from the banking sector and the need for several rate cuts this year. Uncertainty around the policy

Vantage Point forecast-implied and optionimplied probability for the level of the 10-year US Treasury yield in 12-months

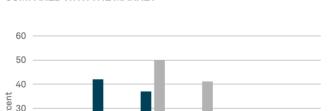




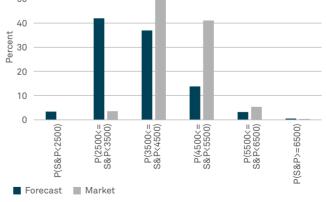
Source: BNY Mellon Investment Management, Bloomberg. Data as of June 5, 2023.

outlook is not unusual close to, and after, the peak in the hiking cycle. But market moves have arguably been more violent than in many previous cycles. Going forward, monetary policy is expected to diverge across regions and remain volatile. At the time of writing, for the US, one additional rate hike (25 bps) is priced in by the market, with the first interest rate cut expected by mid-2024 and rates seen falling to ~4% by the end of next year. However, near term forward rates are below what Fed's dot plot suggest, and PCE (Personal Consumption Expenditure) inflation has kept surprising to the upside relative to the Fed's expectations. Against this backdrop, we think it's more likely than not that short-dated forward US rates will reprice higher in the near term. In the UK markets expect the Bank of England to deliver ~100bps of additional tightening in the next few guarters and to remain on hold until mid-2024, before roundtripping to bring rates close to current levels by mid-2025. The ECB is expected to bring up policy rates by an additional 25-50 bps and keep them there until H2 2024. The elephant in the room remains Japan, where the monetary policy stance is highly accommodative, the market expects a tightening to occur at a glacial pace, but price pressures, and even wages, have been strengthening significantly and current policy settings will likely need more significant tweaks over the long run.

Vantage Point forecast-implied and option implied probability for the level of the S&P500 yield in 12-months







Source: BNY Mellon Investment Management, Bloomberg. Data as of June 5, 2023.

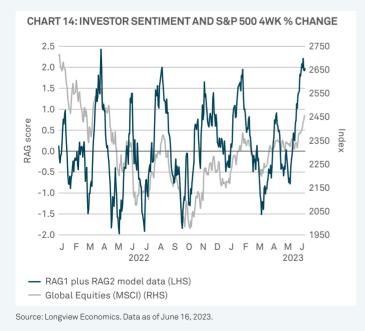
SECTION 2B

Market Sentiment

During the quarter, cross-asset measures of market sentiment and positioning remained broadly at neutral levels, i.e., not too 'bearish' or too 'bullish', and as such are currently not proving a very strong signal for tactical shifts in portfolio allocations. Recall that 'stretched' levels of sentiment and positioning can be useful contrarian indicators. That is, when sentiment and/or positioning reach extremely negative (positive) levels, it may be a tactical buying (selling) opportunity as subsequent performance tends to be positive (negative) in the near-term.

In equities, the S&P 500, at the time of writing, is trading above 4,200, a level it 'tested', but previously failed to move above several times this year. When an asset class 'breaks higher' to the upside of the range it has been trading in for some time, previous 'stop losses' are closed and new technically-informed 'take profit'/'stop losses' are set for new trades, which is likely to lead to an extension of the previous directional move. In our case, it means a potentially higher S&P 500 in the near term. But looking ahead over the next few quarters, there are a number of reasons to remain cautious. First, 'risk appetite' models we track show that US equities have reached levels normally associated with a sub-sequent 1-2 month sell-off (see chart 14). Second, Tech and long duration growth stocks (which form a key part of the S&P 500) appear to be 'overbought' on a variety of metrics (unless bubble-like behaviour is forming on the back of AI-induced optimism). Third, and relatedly, other areas of the market would need to take up the leadership from Tech, but the equal-weighted S&P 500 is showing only tentative signs of recovery – and remains marginally up YTD. With about 75% of the total market capitalisation now coming from the largest 10 stocks, the US market has never been so concentrated in the last 100 years. Admittedly, extreme levels of concentration are not necessarily a sign of a market peak, as high concentration is often seen at market troughs. And smallcaps, value and dividend stocks show significant underperformance relative to a top-down, macro-based benchmark. Many of these indices are heavily exposed to Financials, which have been adversely affected by the recent turmoil in the banking sector and could start outperforming if

Medium term 'risk appetite' model and the S&P 500



S&P 500 YTD performance, decomposed by 10 largest caps and the rest

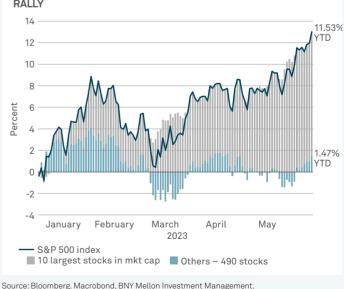


CHART 15: LARGEST STOCKS ARE DRIVING THE CURRENT S&P RALLY

Charts are provided for illustrative purposes and are not indicative of the past or future performance of any BNY Mellon product.

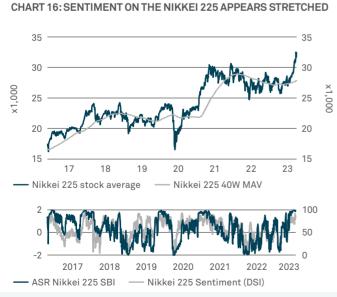
Data as of June 6, 2023

sentiment on banks improves. That said, sideways price action in the equal-weighted S&P 500 in a tightening cycle is often followed by a downtrend (e.g., H1 2015, ahead of August 2015 sell-off, and May to December 2007). Fourth, option-based models are signalling market complacency. For instance, measures based on the steepness of the volatility curve and option-implied skew are signalling sell. Finally, market liquidity is likely to tighten significantly in H2 2023 as a result of the resolution of the US debt ceiling and the US treasury issuing new debt to replenish its coffers at the Fed.

Elsewhere in equities, sentiment indicators suggest Japanese equities are currently trading in overbought territory.

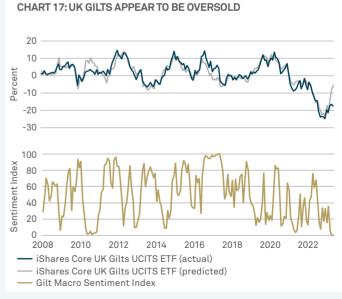
In fixed income, a quantitative macro-based valuation of UK Gilts provides a more upbeat picture than what market prices are suggesting, and levels of sentiment are very close to 'oversold' territory. In contrast, EM Local Currency bonds are trading around 'stretched' levels of positive sentiment. Elsewhere, positioning or sentiment do not appear to be particularly extreme.

Nikkei Sentiment



Source: Absolute Strategy Research Ltd. Data as of June 12, 2023.

UK Gilt sentiment



Source: Macrobond, BNY Mellon Investment Management. Data as of June 7, 2023.

Investment Conclusions SECTION 3



SECTION 3

Investment Conclusions

Summary

Recent months have passed relatively well for broad-based portfolios, especially compared to 2022's rout. In fact, headlines in early June proclaimed the S&P 500 entered a new bull market. So, is it time to throw a party? If consumer and fund manager's surveys are any indication, no one is in the mood to celebrate. Our scenarios might seem to suggest that we feel similarly pessimistic. While our scenarios point to a high likelihood that risk assets face headwinds in coming quarters, fortunately, we see many attractive opportunities to build greater portfolio resiliency without significantly sacrificing return potential.

Where are these opportunities? For some time now, we've argued in favor of high-quality fixed income as it's particularly attractive currently due to the combination of high yields, near peak policy rates, and a macro-outlook that suggests fixed income's hedging characteristics may soon be on full display. A reasonable push back is that rates could keep going higher while inflation eats away at income returns. What if the market, the Fed, and us are grossly wrong about where policy rates peak. We capture this possibility in our 'Delayed Landing' scenario, where bond returns would struggle as rates rise. However, we expect that equity returns would sell-off even more as this unexpected tightening signals to the market that the Fed has little choice but to generate a recession to slay the inflation dragon. As recession ensues, bonds rally as the market prices in policy cuts, which the Fed eventually delivers. This is all to say that high quality fixed income looks attractive even if peak rates are higher than expected because the risk/reward trade off favors bonds.

The future is very uncertain, but our scenario-based approach identifies high likelihood outcomes that when considered through a probability-weighted lens points to the most favourable asset classes on a total return risk-adjusted basis. Our scenarios suggest a tactical underweight to equities and overweight to fixed income, alts, and cash. On a multi-year strategic allocation, our scenarios point to equities as the preferred asset class.

Within equities, we favor EM over DM for tactical exposure with a general preference for Asia regional exposure on a relatively better macro backdrop near-term. We're considerably more positive on a multi-year horizon (strategic overweight US equity), as we project attractive expected returns coming out of downturns as the cycle resets, earnings expectations rise, and monetary policy normalizes. On the tactical fixed income side, we lean toward developed market sovereign debt (US Treasuries over international exposure), and up-in-quality Investment Grade credit over High-Yield, with the latter our only tactical fixed income, but somewhat less so, given expectations of more attractive relative returns in other non-fixed income asset classes.

We continue to emphasize quality factor exposure as we expect portfolios with greater quality tilts to outperform in market drawdowns. We favor large caps given more robust quality characteristics compared to small caps. Looking for a combination of defensive characteristics and quality exposure, we prefer the Healthcare sector and other defensives like Consumer Staples on tactical basis to hedge recession risk. Strategically, we favor Energy and Financials for value exposure and positive multi-year return outlook. Value has lagged YTD as growth has surged, but we maintain our strategic preference for value over growth, albeit the tactical call is challenged by Artificial Intelligence (AI) enthusiasm. Keep in mind that growth drawdowns have been larger than for value in the past and that value remains historically cheap compared to growth.

Digging into potential paths for the S&P 500 using estimates of P/E and EPS (price/earnings and earnings per share, respectively), we see relatively limited upside from current valuations across our scenarios. For example, in our upside 'Soft Landing' scenario, we expect a single-digit return for the rest of this year, albeit a calendar year return of ~20% will keep most investors content. Whereas our two recessionary scenarios both project negative returns into year-end, but with more immediate pain in the 'Credit Crunch' scenario.

S&P 500

Soft Landing	Year End Values				
	2023	2024	2025		
EPS Estimate	231	249	274		
Earnings Growth	5%	8%	10%		
Price/Earnings	20	20	19		
Approximate Level	4,620	4,990	5,214		
Annual Return Estimate	20%	8%	5%		
Credit Crunch	Y	ear End Value	S		
	2023	2024	2025		
EPS Estimate	209	240	257		
Earnings Growth	-5%	15%	7%		
Price/Earnings	17	18	18		
Approximate Level	3,553	4,326	4,629		
Annual Return Estimate	-7%	22%	7%		
Delayed Landing	Y	ear End Value	S		
	2023	2024	2025		
EPS Estimate	222	196	231		
Earnings Growth	1%	-12%	18%		
Price/Earnings	19	16	18		
Approximate Level	4,222	3,129	4,153		
Annual Return Estimate	10%	-26%	33%		

Forecasts were calculated as of June 2, 2023. BNY Mellon Investment Management GEIA.

Asset Class Views

The table below si	ummarizes our major asset o	class views:	KEY
Major asset class	Tactical view	Strategic view	Comments
Equities			We perceive a higher probability of recession in the near-term than currently being priced into equity markets. We are tactically underweight equity, however, given recession timing uncertainty, we focus on portfolio balance and mitigating exposure to large downside risks. Recessions are painful, but often present investors with excellent equity buying opportunities. We're strategically overweight equity, as we expect strong positive returns recovering from recession and leading to asset class outperformance.
Fixed Income	┕╼═╌╌┤║╌	┝╼═┿══┽║╝┼═╌┼══╼┥	Fixed income presents an attractive risk-return profile, especially relative to risk assets more sensitive to growth. Our analysis suggests that it's time to begin extending duration as rates are likely near peak with an elevated probability of near-term recession. Increasing duration exposure ahead of downturns has historically benefited portfolios in terms of higher returns and diversification, leading us to be tactically overweight high quality fixed income. Strategically, we're also positive, but somewhat less so, given expectations of more attractive relative opportunities. Crucially, given high levels of nominal yields, income returns are attractive, providing an "income cushion" to short-term price return volatility and likely lifting total returns into positive territory, both on a tactical and strategic horizon.
Alts/Real Assets			Alternatives are historically less sensitive to growth and as such may provide additional portfolio stability. We're tactically favorable on alternatives and real assets.
Cash	⊷⊡⊷		Elevated recession risk maintains attractiveness of cash, especially given high yields currently offered on cash-like bonds. However, we expect that currently high short-term rates will not persist through a recession, so there is material reinvestment risk that appears underappreciated. Tactically, cash remains favorable, however, lower yields and more attractive returns on risk assets in the coming years lowers our strategic view.
Equity	Tactical view	Strategic view	Comments
Developed Markets Equity	⊷		A concoction of slowing growth and restrictive monetary policy is a recipe for DM equity market headwinds. Performance YTD is much better than expected, however, without an improved growth outlook, immaculate disinflation, and unexpected central bank dovishness, we expect that DM equities broadly will struggle in the near-term particularly if/when labour markets begin to show material signs of weakness. We're considerably more positive on a multi-year horizon, as we project attractive expected returns coming out of downturns as the cycle resets, earnings expectations rise, and monetary policy normalizes.
US Equity	╺┥═╌╢╢╌╷╴╷╴┍╸╸	┕┥═╌┥╴┤╻┝╴╼╸	Earnings outlook looks complacent. Better-than-feared earnings so far, haven't lifted outlook, which we think suggests the consensus knows there are dark clouds looming. Valuations are not sufficiently cheap to compensate for likelihood of recession. Tactically, given what we see as limited near-term upside potential – even in a genuine 'Soft Landing' scenario – and a downside skew of risk, we remain cautious on the near-term US equity outlook. Strategically, we're much more favorable on US equity exposure and expect that during a recession, there will be attractive valuation entry points to increase exposure, which may arrive during the latter part of this year.
UK Equity			Cheap valuations on both a relative and historical average basis remain attractive and imply that minimal less bad news could spur on markets to re-rate. But a poor macro backdrop both domestically and externally (which is critical for larger UK-listed firms) keep us tactically underweight. We're more positive on a strategic basis.
Europe ex UK	⊷		Tactically underweight European equities on a risk-return basis as economic momentum fades. The asset class may outperform peers given recent strong earnings growth, low valuations, and exposure to value factor (which we see favorably on a strategic basis). However, a global recession remains highest probability, and the asset class is more cyclical, making it a greater downside risk potential.

Equity	Tactical view	Strategic view	Comments
Japan Equity			Biggest reflation in decades is underway but weakening external earnings expected Yield Curve Control (YCC) tweaks, and sharp Yen strengthening keep us tactically cautious and neutral for now. The authorities continuing policy support, prospects for improve nominal growth and scope to narrow valuation gaps support a strategic overweight.
EM Equity		⊷();_;_,	Attractive valuations but weakening Chinese and G2 demand alongside high real rates expected to weigh on EM equities more broadly causing us to stay tactically neutral. Over a longer horizon, China will likely remain a drag but an improvement in global growth and financial conditions, alongside catch-up potential in several EM economies raises the potential for country-specific success stories.
EM ex China	╺╼┲╌╌╢╟═┼══╍	╺╼┲╌┲╌	Attractive valuations and the resilience of domestic demand-driven economies or those poised to benefit more directly from China's re-opening spillovers or via a bottoming out of the tech (semiconductor) cycle keep us selectively constructive and tactically neutral. Sound macro management, economic flexibility and long-term potential keep us strategically bullish and overweight on EM ex-China.
China Equity			Faltering growth and worsening deflation but very cheap valuations, excessively weak sentiment and possibility of stimulus keeps us neutral Much greater market reform needed, but economic model turning more statist. Geopolitical risks may keep valuations suppressed at low levels.
Fixed Income	Tactical view	Strategic view	Comments
US Treasuries			In a global slowdown, sovereign bonds rally with US Treasuries typically outperforming non-US sovereigns. US is higher yielding than many sovereigns and more likely close to peak rates.
Intl. Sovereign Debt	┍╼┲┲╌	┝┥═╋═┽║╫═┾══┿	We maintain an overall overweight allocation to developed market sovereign fixed income, particularly in core areas of the market that offe attractive yields. We prefer the UK to Europe, and Europe to Japan. The UK remains at risk of higher inflation and rates, but the market is alread pricing above target inflation for years to come, and offer robust income returns. In contrast, Japanese bonds are not priced for a normalization of policy and offer little yield.
Global IG		⊷	Higher quality and better income buffers, but rich spreads imply modest defensive value amidst impending G2 slowdown, which leads us to a neutral positioning for now. On a longer time horizon, G2 policy easing and better underlying credit quality likely to support healthy returns but unlikely to be exceptional – we stay neutral.
High Yield Debt	╺╼═╌┤ <mark>╸</mark> ╞╶═╌╶╴╴	⊷	Sub-investment grade credits resilient so far against higher rates, but prolonged tightening of financial conditions raises outsized vulnerabilities causing us to stay tactically underweight. A bounce back post-recession and easier financial conditions to help ease credit spreads pointing to higher expected returns – we are strategically overweight.
EM Local Currency Debt		⊷	An earlier and lower inflation peak than DMs, alongside strong real rate buffers in several EMs keep us overweight. On a longer horizon, a track record of economic flexibility and improving policy credibility, despite the drag from China, as well as relatively better long-term macro prospects keep us bullish EM local currency debt.
EM USD Debt			Reasonable yields but combination of G2 and China slowdown, tight spreads and frontier market distress keep us cautious and tactically neutral. Over time, easier global financial conditions will help, but sovereign USD debt issuers' heavier reliance on China and a relatively lower yield, versus local currency, keep us strategically neutral as well.

Source: BNY Mellon Investment Management, as of June 13, 2023.

Past performance is no guarantee of future results.

All investments involve risk, including the possible loss of principal. No investment strategy or risk management technique can guarantee returns or eliminate risk in any market environment.

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INDEX DEFINITIONS

Beveridge Curve: The relationship between the unemployment rate and the job openings rate. It is a measure of the general state of the labor market, highlighting if the market is tight (lots of jobs available, low unemployment), or loose (few jobs available, high unemployment). Japan (Nikkei 225): The NIKKEI 225 is an index that tracks the performance of the largest 225 companies traded in the Japanese market. **10Y UK Gilt** – Average yield of a range of UK government bonds all adjusted to the equivalent of a ten-year maturity. Phillips Curve: An economic theory that inflation and unemployment have a stable and inverse relationship. US Consumer Prices (CPI) Index measure of prices paid by consumers for a market basket of consumer goods and services. The yearly (or monthly) growth rate represents the inflation rate. The **10Y US Treasuries Average Yield** of a range of Treasury securities all adjusted to the equivalent of a ten-year maturity. The CBOE VIX Index (VIX) is an indicator of the implied volatility of S&P 500 Index as calculated by the Chicago Board Options Exchange (CBOE). The Majors Dollar Index (USD) measures the value of the US dollar relative to a basket of currencies of the most significant trading partners of the US including the euro, Japanese yen, Canadian dollar, British pound, Swedish krona, and Swiss franc. The MSCI EM Index (Emerging Markets Equities) tracks the total return performance of emerging market equities. The S&P 500 Composite Index (S&P 500) is designed to track the performance of the largest 500 US companies. Europe STOXX 600 Index represents the performance of 600 large, mid and small capitalization companies across 18 countries in the European Union. Bloomberg US Corporate High Yield: covers the universe of fixed-rate, non-investment grade corporate debt in the US. Bloomberg US Corporate Investment Grade: designed to measure the performance of the investment grade corporate sector in the US 1-mth. 1-year forward swap: the avg. interest rate for 1-mth. in 1-year forward. GDP: gross domestic product is the total monetary or market value of all the finished goods and services produced within a country's borders over a given time period. Fed funds Rate: the target interest rate for overnight lending and borrowing between banks. Purchasing Managers Index (PMI): An economic indicator derived from monthly surveys of private sector companies. A level above 50 indicates expansion compared to the prior month and below 50 contraction. Investors cannot invest directly in any index.

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Skewness in statistics represents an imbalance and an asymmetry from the mean of a data distribution. In a normal data distribution with a symmetrical bell curve, the mean and median are the same. **Kurtosis** is a measure of whether the data are heavy-tailed or light-tailed relative to a normal distribution. That is, data sets with high/low kurtosis tend to have heavy/low tails, or outliers. **Probability-weighted mean** is similar to an ordinary arithmetic mean, except that instead of each of the data points contributing equally to the final average, data points are weighted by the statistical probability for a particular scenario outcome. **Duration** is a measure of a bond's interest-rate sensitivity, expressed in years. The higher the number, the greater the potential for volatility as interest rates change.

OTHER

QE: quantitative easing. Fed: US Federal Reserve. ECB: European Central Bank. BOJ: Bank of Japan. BOE: Bank of England.

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