Vantage Point

Q3. 2021

TRANSITORY?

BNY MELLON
INVESTMENT MANAGEMENT

Introduction

Welcome to the latest edition of Vantage Point, the quarterly economic outlook from the Global Economic and Investment Analysis team at BNY Mellon Investment Management.

Since we last published three months ago, world economic activity has continued to pick up strongly, particularly in those countries that have rolled out vaccinations to a large proportion of the population. As economies like the US, euro area and UK continue to open up, we expect economic activity to surge in the second half of 2021, on the back of enormous pent-up demand and the delayed impact of huge fiscal and monetary stimulus. That's particularly true of the US, where the economic impact of the additional $1.9 trillion stimulus package is yet to be fully felt.

Elsewhere, however, the pace of vaccine rollout has been less dramatic. Most notably in some key emerging economies, such as India, Brazil and South Africa, distribution and take up has been much slower. The spread of the virus in India in recent months has been particularly alarming and the Indian Variant (or variant delta) is beginning to crop up as the dominant strain in other countries. Overall then, while the global recovery remains strong and intact, it appears to be more uneven than we felt most likely three months ago. Of course, that unevenness could smooth out over the next few quarters as vaccine rollouts pick up pace in those countries, but for now our forecasts allow for a bit more international variability in economic performance over the next year, with a particular distinction between the major developed world (plus China) and some important emerging markets.

Meanwhile, financial markets priced in the strong 'V' some time ago, and are now looking beyond, with much focus on what will happen to inflation. Again, that debate is most vibrant in the US, where the combination of fiscal and monetary stimulus yet to be felt is in the order of 20% of GDP. One school holds that there will be an uptick in inflation this year, but it is likely to prove transitory – a correction of the price level if you like, whose impact on the inflation rate will be felt for 12 months or so. The key argument here is that the pandemic saw a collapse of both demand and output, most notably in the close-contact services sectors (e.g. hospitality and travel) and that demand and output will bounce back together as the economy opens up again, so long as those firms can hire enough people to staff bars, restaurants and airplanes reasonably quickly. With unemployment still elevated and labour markets reasonably flexible, there is no reason why this shouldn't be the case according to this school. And the Federal Reserve (Fed) seems to believe this is the most likely outcome.

Against that, others – notably ex-Treasury Secretary Lawrence Summers – argue that output gaps (spare capacity) weren't large going into the pandemic, and didn't widen significantly during it precisely because aggregate demand and supply fell together. In that case, adding even more fiscal and monetary stimulus to a world in which both demand and output are recovering strongly is just adding fuel to the fire. As Summers puts it, stimulus of 15-25% of GDP with an output gap of just 2-3% can only result in higher inflation, higher interest rates or both. The situation only gets worse if there turn out to be serious bottlenecks in labour markets and supply chains, and supply cannot respond to supercharged demand as rapidly as the optimists would have it. The April and May payrolls data in the US, which were weaker than expected, bolstered this view of the world in some eyes.

A third view is that central banks can afford to wait and see. If we get the strong supply response, then an early monetary tightening could prove to be disastrous, especially with unemployment rates still high. On the other hand, if inflation does prove to be more persistent, then central banks have the tools to deal with that – better an inflation overshoot that we know how to control than another undershoot that we don't.

Our scenarios represent these fundamentally different ways of looking at the world. As usual, we don't pretend to know what will happen, nor do we claim to be blessed with a unique insight others don't have. What we can do is use our analysis to assess the arguments and, as a team, assign probabilities to them. As usual, our forecasts come in the form of fan charts, which offer a rich set of metrics on which to base investment decisions: not just the expected outcome, but the uncertainty, balance of

risks and fat-tailedness of the outlook too. These fan charts are the result of both rigorous objective economic modelling of the scenarios and our collective subjective assessment of probabilities.

Our **'good recovery'** scenario is similar to the view the Fed appears to hold. A strong supply response to rapid demand growth means we get a very strong recovery in those countries where the vaccine rollout is most advanced, with others following shortly behind. There is an inflation spike in the US this year, but it proves to be transitory. Inflation also picks up temporarily in the euro area and the UK, but not as much as in the US and is more a feature of headline than core indices. The good recovery story is a bit patchier than it was in terms of the growth outlook for 2021 in emerging economies, but this is fundamentally a story of recovery delayed, as vaccine rollouts pick up during 2022, so countries like India, South Africa and Turkey join the party during 2022. In countries like Japan, South Korea, Australia and New Zealand, where non-pharmaceutical intervention (in the form of targeted lockdown and border closures) has been relatively successful in keeping infection rates low, the economic downturn has not been as severe to date, so the bounce back is unlikely to be as strong either. Nevertheless, even these countries accelerate their vaccine programmes during 2022 and see a significant pickup. The 'Good Recovery' scenario remains our single-most likely scenario, at a 45% probability.

We retain our two inflationary scenarios, which are distinguished by differing central banks' reaction to rising inflationary pressure this year. The mismatch between strong demand and a more hesitant supply response drives rising inflationary pressure, and in the **'overheating'** scenario that translates into a large and persistent rise in inflation itself because central banks remain 'strategically patient' and fail to tighten policy until recorded inflation rates are well above target and inflation expectations begin to de-stabilize. This is particularly true of the Fed and the inflationary surge is largest in the US partly because stimulus is larger than elsewhere and partly because the Fed has made a greater commitment to 'strategic patience' than other central banks. Ultimately, this manifests itself as a 'policy error' since the Fed is eventually forced into tightening sharply, generating a big market selloff and sharp economic downturn towards the end of our forecast period. The 'Overheating' scenario is closest to Larry Summers' view of the world.

The second inflationary scenario is called **'tighter money'**. It sees a similar rise in inflationary pressure this year, but unlike 'overheating' central banks respond much earlier. Specifically, the Fed signals tightening to come at a lower trailing average rate of inflation and slightly higher level of unemployment than under 'overheating'. The upshot is an earlier, but ultimately smaller monetary tightening, that jolts markets in 2022 but ultimately means a smaller and shorter economic slowdown than under 'overheating'.

Finally, our **'bad recovery'** scenario allows for new variants to disrupt the re-opening of economies as vaccines prove less effective than currently hoped. The result is the re-introduction of social restriction in a number of countries and further economic turbulence. It also magnifies the divergence between countries, in that the virus spreads further and quicker in countries that are currently under-vaccinated, exacerbating the unevenness of economic performance worldwide.

We have changed our scenario probabilities a little this time. Until recently we had been worried that central banks and the Fed in particular had 'painted themselves into a corner' by committing to leave monetary policy looser for longer, so we were inclined to put the largest weights on 'good recovery' and 'overheating'. But the Fed's communication on 16th June allayed those fears somewhat, so our two most likely scenarios are now 'good recovery' and 'tight money', which get 45% and 30% respectively. 'Overheating' and 'bad recovery' get 15% and 10% respectively, reflecting the view that an inflationary policy error or virus resurgence are less likely than they were.

I don't want to exaggerate the change in tone however. We still remain on course in a number of key economies for a strong and vigorous economic recovery. I have long argued that this recession was different: it wasn't prompted by a major imbalance in the economy, such as high embedded inflation or excessive debt. Rather, it was an 'exogenous' shock which, once passed, would allow a sharp bounce back to pre-existing levels of economic activity relatively quickly. We look set to enter that phase over the next few quarters, with a positive outlook for markets as broad economic recovery facilitates a broad market one too. Let's hope we can all enjoy it.

SHAMIK DHAR
CHIEF ECONOMIST

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Executive Summary

WHAT WE THINK – ECONOMIC SCENARIOS

45%

Good Recovery

Vaccines prove effective and rollouts pick up around the world so that global herd immunity is reached over the course of the next 12 months. There is a strong bounce back in demand during 2021 in countries where the vaccine rollout has been rapid, including the US, Euro area and UK. Other countries lag behind on rollout, but pick up during the course of 2021 and into 2022 and experience their own recoveries with some delay (Japan and a number of emerging market economies). Pent-up demand and the lagged effects of huge fiscal and monetary stimulus drive the recovery in demand. The supply response to the rebound in demand is strong too – notably in service sectors that have been locked down. The main constraint – labour availability – proves to be temporary and employment rates rise as labour is redeployed quickly into sectors where demand is strongest. Because supply adjusts rapidly, excess demand is limited and inflationary pressures prove transitory too – a temporary inflation spike driven by base effects and short-term mismatch is followed by a return towards targets during 2022 and into 2023. Central Banks are able to keep policy loose and broadly follow the very gradual tightening paths implied by their forward guidance. Specifically, the Federal Reserve (Fed) tapers in 2022 and QE ends at the end of the year or at start of '23. The first rate rise is towards the end of our forecast horizon, while quantitative tightening follows after a few more rate rises. A benign environment for markets, with equities making steady progress while bond yields evolve in line with current forward expectations.

15%

Overheating

Advanced economies go through a reopening boom, with demand higher than before Covid-19 but supply is lower due to (i) labour supply issues and (ii) disruptions to trade and global value chains (GVCs). The US is the most vulnerable to this outcome: too much stimulus is poured into a recovered economy, which generates higher-than-expected inflation that lasts longer thanks to stickiness in the labor market. The Fed continues to see these issues as temporary and stays resolute in its strategic patience as it pursues the full employment goal, accepting higher inflation as part of its average inflation targeting, possibly even implicitly raising its inflation target. However, it underestimates the likelihood of destabilizing inflation expectations. These start to move higher towards the end of 2021 and wage bids start to rise. The Fed initially looks through as 2021 is a Fed-declared noisy year but by end-2022, it is clear that forward guidance has been too dovish and the Fed is forced to hike rates quickly. The monetary tightening is sharper and lasts longer since it takes time to bring inflation expectations back down. The upshot is a sharp downturn towards the end of our forecast period, with nasty spill over effects to other economies, notably dollar-financed emerging markets (EMs).

PROBABILITY*

SCENARIO

30%

Tight Money

Similar growth trajectory and build up in inflation as 'overheating'. Prices, wages, and housing continue to move higher into the fall. Concerned it may be behind the curve and that inflation expectations are becoming unanchored, monetary policy tightens much sooner than expected. The Fed tapers and signals additional tightening in Q4 2021. Although recovery is less strong in developed markets ex-US, other central banks also tighten early given their more 'traditional' strategy. Since central banks respond sooner, there is ultimately less tightening than in 'overheating' and the economic and market impact is lower. A short slowdown is followed by a resumption of growth. Equity markets and other risk assets sell off in late 2021 and early 2022, as the yield curve flattens and inverts. But markets soon discount a short, sharp economic downturn and begin to recover again in early-to-mid 2022.

10%

Bad Recovery

In this scenario 'bad news' dominates 'good.' New variants disrupt the re-opening of economies as vaccines prove less effective than currently hoped. The result is the re-introduction of social restriction in a number of countries and further economic turbulence. It also magnifies the divergence between countries. The virus resurges in some EMs due to a combination of new strains and low vaccination rates with further restrictions/ lockdowns required. China rebalances and addresses financial stability issues and the world lacks an engine of growth. Overall, global growth is sluggish and inflation is low as global recovery is de-synchronised. Monetary and fiscal policy remain supportive. Risk premia remain elevated since there is little central banks can do to counter the rise in uncertainty. A generalized flight from risky assets ensues. US markets outperform rest of the world, but the S&P 500 falls sharply by end-Q1 2022. Credit markets weaken especially in high yield. Bond yields trend lower and remain depressed. Fixed income performs well relative to equities in this scenario.

CAPITAL MARKET PRICING – WHAT THE MARKETS THINK

SUMMARY

As financial markets priced in a strong economic recovery some time ago, investors are looking beyond, with much focus on the outlook for inflation and the central banks' reaction to it.

For most of the quarter, and until the June FOMC meeting, financial markets had become relatively more relaxed around the risk of persistently higher inflation and the need for central banks to react to it, looking through signs of increasing inflationary pressures. Interest rates in major economies fell or were broadly flat. With lower US interest rates and the relative improvement in growth expectations in non-US advanced economies over Q2, the dollar unwound the gains made earlier in 2021.

Then, in mid-June, the FOMC delivered a hawkish surprise to the market. The market-implied timing of the first rate rise came forward, the market-pricing of the pace of rate hikes quickened, real rates rose and breakeven inflation rates fell, the yield curve flattened, the US dollar appreciated, and equity markets fell. In sum, financial markets priced in a greater risk that central banks may need to tighten policy sooner to prevent an overheating of the economy.

Going forward the market will continue to watch closely Fed communications. The market also remains focused on further labor market progress, whether consumers will spend a significant portion of the additional savings they have accumulated since the start of the pandemic, and, relatedly, whether higher inflation will be transitory as suggested by the Fed. With labor market 'slack' and transitory inflation, a slow pace of policy unwind is still possible.

Short Rates

- The June FOMC meeting delivered a hawkish surprise to the market, as the median dot in the Summary of Economic Projections signaled that interest rates may need to be raised twice in 2023, up from no rate rises signaled in March. The first rate hike is now priced for December 2022/February 2023 (as it was back in March), with expectations for a total of ~3 rate hikes by mid-2024 (as of 21 June). Our outlook for policy rates is more aggressive than the markets' one, as our inflation forecast is stronger than the markets. While our 'good recovery' scenario is one where policy rates remain at their effective lower bound until the end of 2023, our probability-weighted expectation is for around 5 interest rate hikes over the next few years (vs. less than 2 priced by the market).

Inflation

- In Q2 as a whole, US short term real interest rates increased somewhat while US long term real interest rates fell significantly. The moves were strongest since the end of May, with the difference between long term and short term real interest rates falling by as much as 60bp since then on some measures. Overall, the inflation compensation component increased somewhat at the shorter end of the curve, in line with the recent upward surprises in actual inflation data, but remained broadly flat at the longer end. Forward inflation expectations are at or above pre-Covid levels across most major economies, including in the euro area, where, however, they remain below target. This suggests there remains scepticism in the market around the longer term outlook for growth and inflation in the currency union.

Equities

- Equity markets performance remained strong in Q2 in line with progress on the cyclical economic recovery. With the debate over the outlook for inflation, equity markets were volatile at times. US equity market performance was driven by an improvement in corporate profitability rather than an expansion in valuations. As interest rates remain low and risk premia moderate, historically high multiples remain supportive of equity prices, although they continue contributing little to returns in the nearer term. In the US, sectors that have higher sensitivity to the economic recovery (e.g. energy, real estate, financials) continued to drive overall returns until the June FOMC meeting. Afterwards, there was a shift in sectoral equity leadership, with the outperformance of longer duration sectors that benefit from lower long term interest rates.

Fixed Income

- Considering the increased focus of investors on inflationary pressures in the US government bond markets had remained surprisingly quiet until the FOMC June meeting. Since then, the US yield curve 'bear flattened' significantly, with short term rates rising and long term forward nominal rates falling. UK government bond yields moved in a similar direction but by less than US yields, while the move in euro area yields was significantly more contained. The component of long term interest rates driven by expectations for future short term interest rates remained low throughout the curve, and the compensation that investors demand for holding the risk that long term interest rates may turn out higher than expected (i.e. the term premium) fell from the higher, positive level reached in Q1. US government bond yields remain higher than those of other major advanced economies, albeit less so than at the start of the quarter.

Credit

- Corporate bond spreads compressed further in Q2 and remain close to historical lows across the quality spectrum. Default rates remain relatively low in most countries compared with the size of the hit to earnings seen in 2020 and previous recessions. In line with the low and declining actual default rates, a decomposition of a broad measure of US corporate bond credit spreads shows a continued fall in the component associated with expected defaults. That said, risks in the corporate sector remain. For instance, US corporate gross leverage is still at historically high levels for both investment grade and high yield credit and interest coverage is low relative to post Global Financial Crisis levels. That said, healthy cash buffers should facilitate balance sheet repair as earnings continues to increase.

FX

- Prospect for exchange rates continue to be tightly linked to views on relative growth differentials, policy stances and risk premia. Following the spike in global interest rates at the start of 2021 and the associated appreciation of the US dollar, Q2 saw the resumption of the weaker dollar narrative, with USD depreciating against all G10 currencies and most EM currencies. This narrative changed again in mid-June, with USD rising rapidly following the FOMC meeting and paring back some of the losses occurred earlier in the quarter.

INVESTMENT CONCLUSIONS

Equities

- Overall, we believe equities remain an attractive option in risk assets. We expect the remainder of 2021 to be characterized by sector and stock selection as markets transition to a mid-cycle theme, continued economic strength and stronger focus on valuations. With the Fed removing inflation tail risk we see a broadening of sectors to include cyclical, secular growth and healthcare. We expect European equities to have potential for a strong second half. Many of the tailwinds remain including better valuations compared to US equities and an economy which benefits from trade and strong consumer.
- The pandemic has changed the risk-reward balance for EMs, and there is significant dispersion of region and country outcomes. From a macro standpoint, we distinguish between EM winners and losers based on three factors: 1. Speed of vaccine rollouts vs new infections; 2. Monetary and fiscal policy space; 3. Idiosyncratic, country-specific risk factors. For countries that come out of lockdowns, cyclical sectors will fare well. North Asia will likely continue to attract flows as the opportunity set is wide in both growth and value space. We expect countries such as Mexico, Chile, and Brazil to benefit from elevated commodity prices and continued demand for real assets.

Fixed Income

- Although yields have consolidated in Q2, particularly in the US, the rise in inflation expectations globally is likely to put pressure on DM sovereign bond prices through the end of 2021 and into 2022. That said, higher bond yields, e.g. in the US, provide higher income returns as well as hedging benefit for some of our downside scenarios.
- This quarter, our outlook on the credit space has become more widely dispersed among scenarios and we remind the reader that the scores and attractiveness on our heat map are based on price return potential, income potential and expected hedging properties. For US investment grade credit, we have become more cautious in the shorter term but remain positive further out.
- Much like the investment grade space, we do not see much change in the very near-term for high yield credit, as default risk has plummeted. Next year could become more challenging though. Too-hot inflation data and rising yields could pose risks to the high yield space as the cost of borrowing rises.
- Given expectations for higher US rate volatility, we suggest a diversified approach to allocation within EM local, HY and sovereign USD debt.

Alternatives

- With heightened inflation and rate risk, alternatives can provide uncorrelated exposure to traditional asset classes. Precious metals remain attractive in the face of higher inflation risk, and gold in particular continues to be a hedge against short-term drawdowns in the case of a market shock.

FX

- Compared to Q2, we have increased the upside risk to the USD due to A) two inflationary scenarios ('tight money' and 'overheating') which make up 45% probability and B) the Fed's June communication weakened the market's USD bearish conviction somewhat.

Economics

SECTION 1

SECTION 1A

Economic Scenarios

45%
(Probability)

Scenario #1: Good Recovery

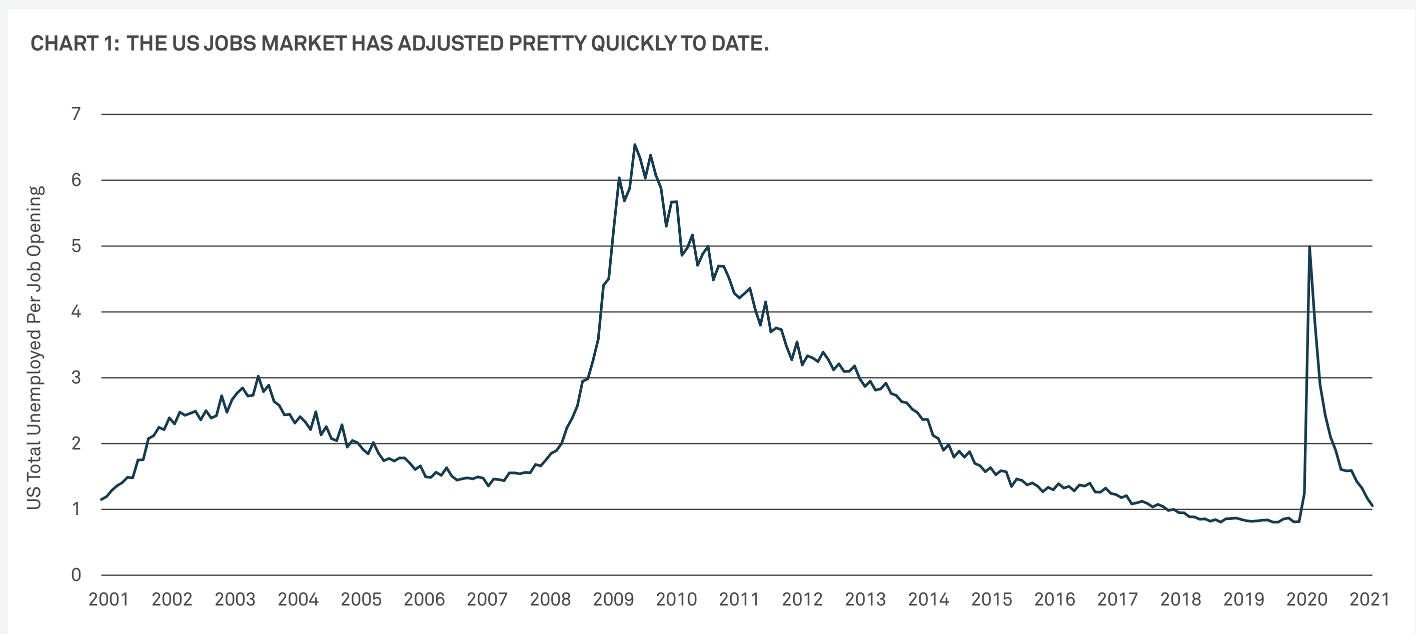
The 'Good Recovery' scenario has been a feature of our forecasts ever since the pandemic broke. It describes a world in which the return to economic 'normality' is rapid once the exogenous shock that is the virus has worn off. The 'V'-shaped path it implies for output, demand and trade is already evident in a number of activity indicators, such as GDP and world trade, while forward-looking surveys such as the purchasing manager indices (PMIs), as well as real-time activity indicators such as mobility and restaurant bookings point to a very strong H2 in the US, euro area and many other developed economies.

Of course, equity markets priced much of this in a long time ago, well before the economic consensus shifted towards it at the end of 2020. The big question now is not so much whether economic activity will surpass pre-pandemic levels this year – that looks to be a certainty in the major developed economies – but whether it will also move ahead of the pre-pandemic trend soon, potentially bringing inflationary pressure with it. The key feature of the 'Good Recovery' then is not so much the strong bounce back in aggregate demand, but the likelihood that aggregate supply will recover strongly with it, keeping a lid on inflationary pressure.

In this scenario, aggregate supply can and does recover strongly because there is a large pool of willing labour able to satisfy the upsurge in demand for close-contact services, notably in hospitality and travel. Moreover, there are relatively few constraints that prevent resources moving from industries where demand is not so strong into those that need them. The upshot is that, while relative wages and prices might move significantly – rising in those industries where demand is hottest, falling in others – the impact on the aggregate wage and price level is small. The upshot is that any inflation pick up is transitory – more accurately described as a rise in the price level from pandemic lows, which affects the inflation rate for 12 months or so, before it falls back again once the price level pick up drops out of the 12-month comparison in a year's time.

This is also a scenario in which unemployment falls steadily as labour is reallocated across the economy and the Fed and other

Number of people unemployed per job opening



Data as of April 2021. Source: Bloomberg.

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

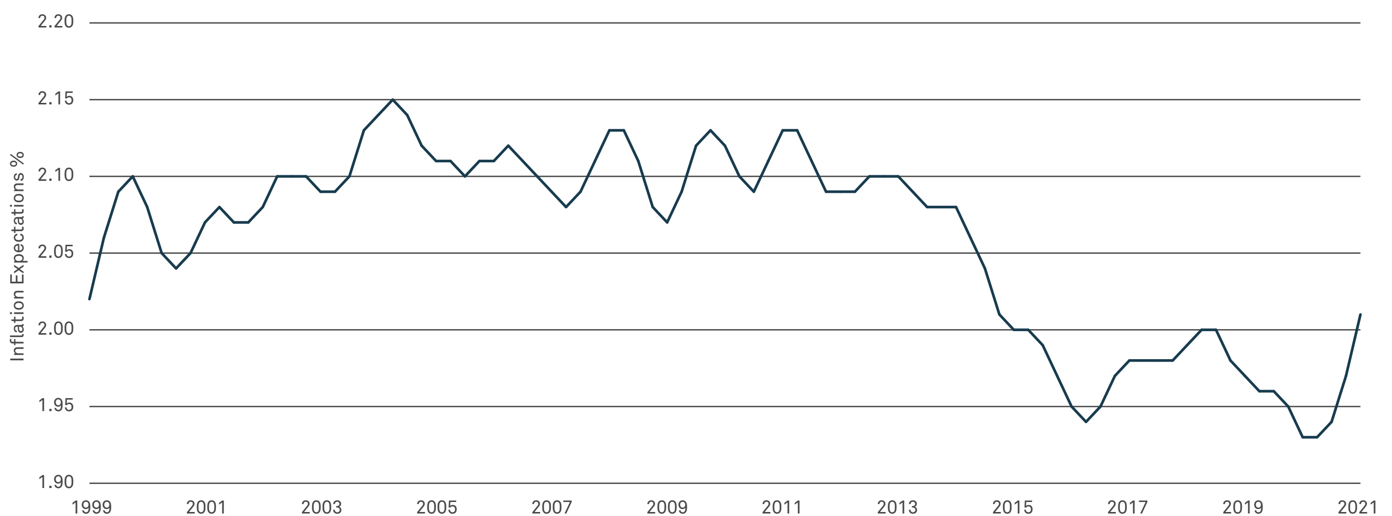
central banks can afford to be 'strategically patient' and focus on getting the labour market back to where they want it to be.

The scenario incorporates more international 'unevenness' than last time. The story is probably most applicable to the US, euro area and the UK. Key emerging economies, such as India, Brazil and South Africa lag well behind, simply because the vaccine rollout is not as fast and the virus remains a threat for longer, necessitating economic shutdowns. China moved past its pre-pandemic levels of activity some time ago and has progressed rapidly with vaccine supply in recent weeks. That said, there have been a number of new outbreaks in parts of China and across South East Asia (notably Malaysia) and these have the potential to disrupt activity during H2. Alongside that, the Chinese authorities are pondering the appropriate rate of policy tightening given some relatively disappointing activity news.

The market implications are pretty straightforward. Equities continue to make progress, though not at the stellar rates of 2020. And just as the economic recovery broadens out to incorporate those parts of the economy previously shut down, the same is true of equity markets, where a broad recovery based on cyclicals, consumer stocks, small cap and, to some extent, value gathers pace again over the coming months. Bond yields remain capped in this world, both by the expectation that major central banks will keep policy loose for quite some time and by the expectation that fixed income offers strong hedging value once US Treasury yields move north of around 1.75%. The outlook for credit is slightly more nuanced: just as the recession was highly unusual, in that insolvencies and defaults remained incredibly low thanks to policy intervention, so the recovery might also be unusual in that some of those 'delayed defaults' may come to the surface, moving the high-yield spread up a touch, though not dramatically so. The developed world and US-centric recovery means that the dollar tends to rise a little, though not so sharply that it threatens a major tightening of global financial conditions, so there is no rush out of dollar-funded debt or any kind of 'taper tantrum' repeat.

The 'Good Recovery' scenario has long been our single most likely (modal) outcome, in contrast to the economic consensus for much of 2020, and it remains so this time. That said, it remains slightly odds against, and we remain concerned that inflationary pressures may be building a bit more quickly than we had anticipated because labour supply elasticities may not be quite as high as we previously thought. Overall however, we remain confident that strong growth in the major economies remains a highly likely outcome. Attention is rapidly turning to what the implications might be for inflation and interest rates instead.

The Fed's Index of Common Inflation Expectations



The index is constructed using 21 inflation expectation indicators including expectations derived from households, firms, professional forecasters, and financial markets. Data as of Q1 2021.
Source: Bloomberg.

Charts are provided for illustrative purposes and are not indicative of the past or future performance of any BNY Mellon product. Past performance is no guarantee of future results.

15%
(Probability)

Scenario #2 – Overheating

In this scenario, pent-up demand and the lagged impact of stimulus combine with rapid reopenings to generate even stronger growth than in the 'good recovery' scenario. However, unlike in the good recovery scenario labor markets are unable to adjust and meet the increased demand. Labor shortages and the mismatch between available and needed skills are higher than anticipated adding to wage and price pressure. Supply bottlenecks, as shown in elevated order backlogs and long delivery times, persist. Greater demand and less supply put upward pressure on prices.

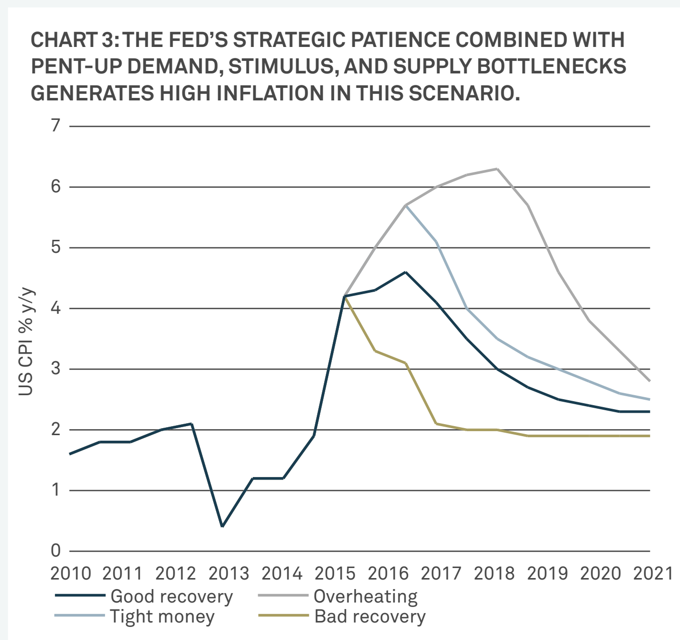
Given its more successful vaccine rollout and larger stimulus, the recovery in growth and price pressure is strongest in the US. Despite high and rising inflation, the Fed sees the price shock as temporary and remains committed to targeting full employment and average inflation targeting.

Because policy remains unchanged, the economy begins to 'overheat'. By the end of 2021 inflation expectations shift higher and wages accelerate. Higher rates lead to periodic episodes of short term volatility in equities and credit yet are brief and minor. Equities rise for several more quarters as the market accepts the Fed's inflation tolerance and remains supported by low real rates and improving earnings.

Inflation is a bigger issue in the US than anywhere else, though other countries see some pickup too. Ultimately, a combination of easy policy with strong demand growth and supply side issues translate to persistently high inflation in the US. Eventually, the Fed is forced to react once it is clear inflation expectations are destabilizing and inflation levels are notably above target. The Fed hikes rates sharply and tapers when the two-year trailing average of core PCE (personal consumption expenditure) inflation surpasses 2.75% which is not until around mid-2022. Since the Fed is late, it eventually has to tighten by more in order to stabilize expectations.

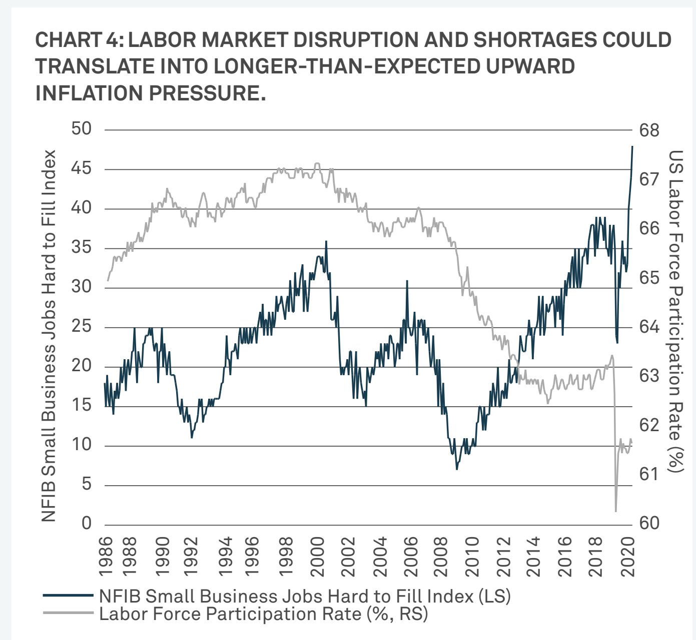
By the end of 2022, a sharp sell-off in risk assets ensues, leading to a higher USD, and spills over internationally particularly to dollar-financed emerging markets. The market correction and economic downturn are the worst amongst all of our scenarios. Inflation-linked bonds outperform initially, but underperform once tighter policy is priced in by financial markets. Conventional fixed income declines significantly.

US Inflation Forecasts Across Our Scenarios



Data and forecasts as of June 2021. Forecasts start in Q2 2021. Source: Fathom Consulting and GEIA.

US Labor Market – Jobs Hard to Fill and Labor Force Participation Rate



Data as of May 2021. Source: Bloomberg.

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

30%
(Probability)

Scenario #3: Tight Money

The demand and supply-side mismatch lead to a similar rise in inflationary pressure as in the 'Overheating' scenario. Unlike 'overheating' however, and despite a higher unemployment rate, the Fed decides that expectations are starting to destabilize and signals it will begin to tighten much earlier. Other central banks also look to get ahead and keep inflation expectations anchored at target. Compared with 'overheating', the Fed signals it is tightening at a lower average of rate of inflation but higher level of unemployment. It waits until the trailing 2-year average of PCE (personal consumption expenditure) inflation reaches 2% and states it will taper earlier than markets currently expect. Similar reactions occur at other central banks around the world, though the timing and pace may differ slightly.

Give the unexpected and sharp adjustment, a taper tantrum ensues. Real yields rise as markets recalibrate the central bank policy framework alongside higher volatility and risk premia. Risky assets, particularly growth sensitive equities, are hit hard. Volatility picks up, financial conditions tighten, and higher debt servicing costs lead to greater defaults in credit. The fixed income sell-off is the worst in EM debt and high yield.

Higher than expected rates and USD cause carry trades to reverse sharply.

The market downturn and economic contraction happens sooner than in the 'overheating' scenario. Ultimately however, because central banks respond earlier to higher inflationary pressure, they have to tighten by less. There is a short, sharp downturn in 2022, but economies are recovering by the end of our forecast horizon. By the end of 2022, inflationary pressure is lower. Rates peak at lower levels and earlier and the impact on growth and markets is less than in 'overheating.' This scenario is similar to the 'taper tantrum' or possibly even the 1994 bond market crash. By the second half of 2022, growth and 'risk on' resumes.

US Upward Inflation Pressure

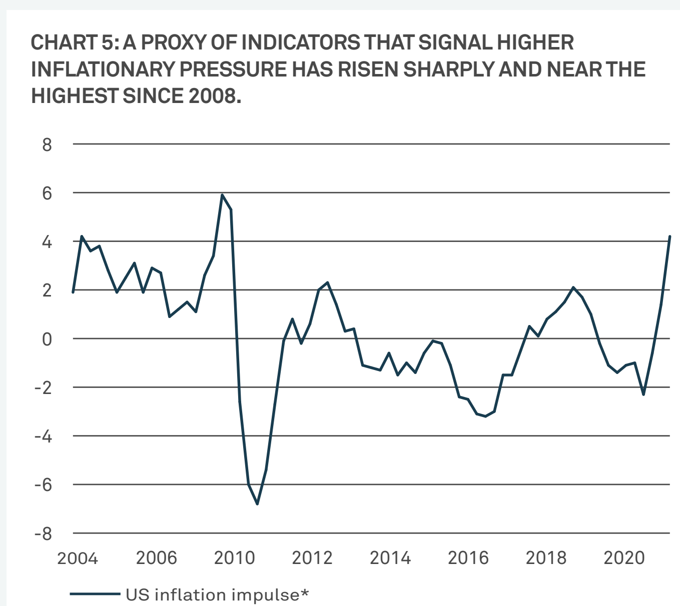
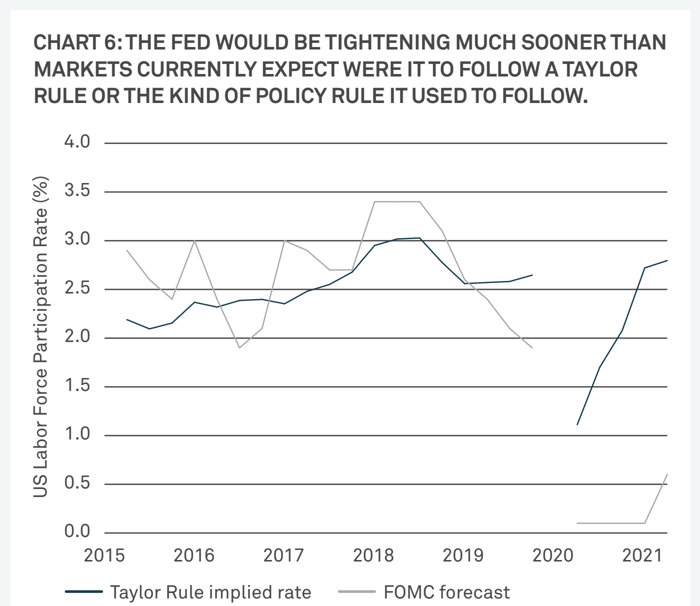


*Chart shows the first principal component of 13 variables likely to signal higher inflationary pressure and is shown as a z-score which measures the distance between the mean of the distribution. The higher the line in the chart, the higher the inflationary pressure. if above 0, it means that the upwards inflationary pressure is higher than average. Data and forecasts as of June 2021. Source: Fathom Consulting and GEIA.

The Fed's Rate Forecast vs. Implied via the Taylor Rule**



**The Taylor rule is a formula used by the Fed to calculate the appropriate level Fed Funds rate given inflation, inflation expectations, and output relative to potential. Data and forecasts as of June 2021. Source: Fathom Consulting and GEIA.

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

10%
(Probability)

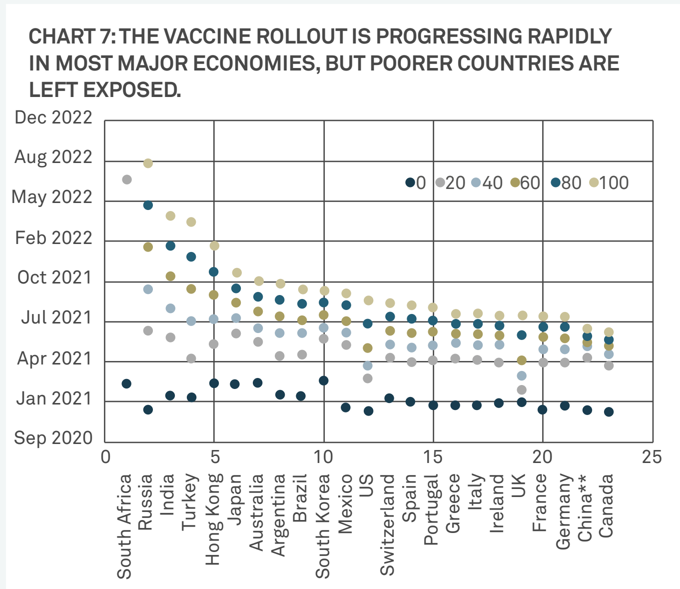
Scenario #4: Bad Recovery

New variants disrupt the re-opening of economies as vaccines prove less effective than currently hoped. The result is the re-introduction of social restriction in a number of countries and further economic turbulence. It also magnifies the divergence between countries, in that the virus spreads further and quicker in countries that are currently under-vaccinated. Overall, global growth is sluggish and inflation is low as global recovery is de-synchronised.

Advanced economies impose some restrictions in Autumn '21 and Winter '22 because of variants and portions of the population which are not vaccinated. Although restrictions are less than in Q4'20/Q1'21, and the economic impact of restrictions is less severe, growth remains weak. Self-fulfilling pessimism may kick-in, as consumers and firms reassess when and how the pandemic will be over. Many EMs face even bigger problems. Populous, under-vaccinated countries such as India, Brazil, and Indonesia are exposed to more contagious variants. In these countries, lack of policy space exacerbates the blow to the real economy from additional rounds of lockdowns. China rebalances and addresses financial stability issues and the world lacks an engine of growth. World trade is hit hard, as world's net exporters (EMs) are hit hard. The US and Europe are affected by the supply-side constraints due to lockdowns in major EMs, but inflation falls too as risk averse behavior from both consumers and businesses constrain aggregate demand. Despite the ability to draw down on still-elevated savings, consumers hold back on spending as negative news coverage keeps consumers cautious. Business investment stays weak due to heightened global uncertainty.

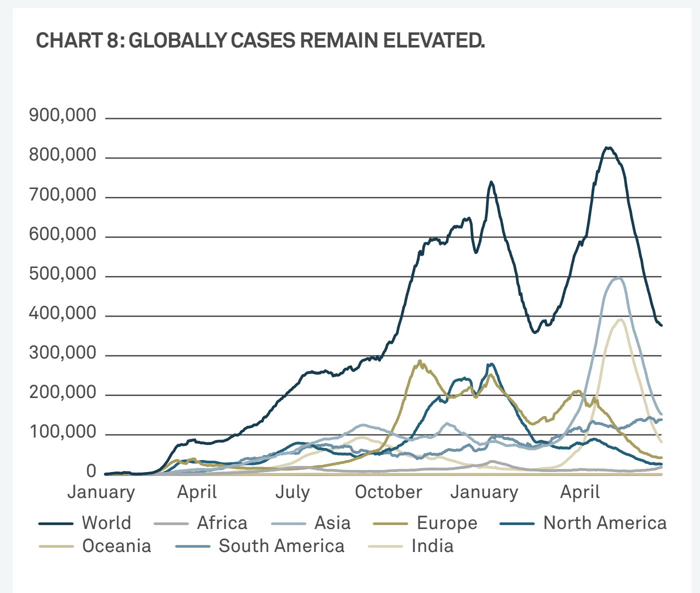
Monetary and fiscal policy remain supportive. Inflation is not an issue at all – if anything it tends to fall. In markets, risk premia remain elevated although central banks do counter some of the rise in uncertainty. A generalized flight from risky assets ensues. US markets outperform rest of the world, but compared with June 2021 highs, the S&P 500 falls sharply by end-Q1 2022. Credit markets weaken especially in high yield. Bond yields trend lower and remain depressed. Fixed income performs well relative to equities in this scenario.

Covid Vaccination – % of population 15+ with at least one dose*



*Projections based on average new vaccinations during 20 May – 2 June. **No split of first and second doses available, projection of total vaccinations administered to fulfil one vaccination per person. Source: Our World in Data and Fathom Consulting.

New cases of Covid-19 by Continent



7-day moving average. Data as of June 18, 2021. Source: OurWorldInData / Fathom Consulting.

The following corresponds to all charts in section 1B. The information in our scenarios contains projections or other forward-looking statements regarding future events, targets or expectations, and is only current as of the date indicated. There is no assurance that such events or expectations will be achieved, and actual results may be significantly different from that shown here. The information in this presentation is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons.

SECTION 1B

Economic Forecasts

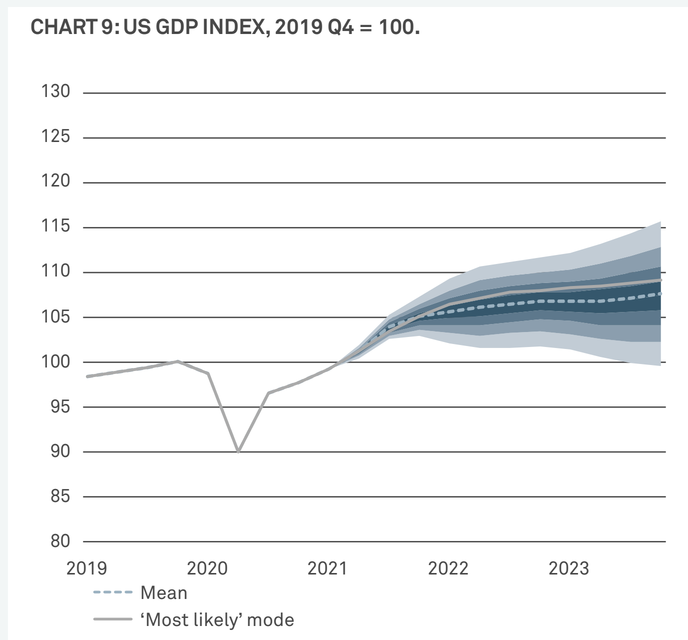
Since the previous edition of Vantage Point, the pace of vaccine deployment has increased in many economies, including China and much of Europe. At the same time, more transmissible strains of Sars-Cov-2 have emerged, including the so-called Delta variant. Many vaccines appear to retain their efficacy against this strain, at least after two doses. Nevertheless, the point at which countries begin to reach herd immunity, whether through vaccination or through natural infection, may have been brought a little closer. Our four macroeconomic and financial market scenarios are similar to those we described three months ago. And the probabilities we assign to each are similar too, though we have rebalanced a little away from 'overheating' towards 'good recovery' and 'tight money'. We had been nervous that the Fed's 'strategic patience' could turn into a policy error and rising inflation, but its communication after the June 16th meeting has allayed those fears somewhat.

Our first fan chart shows the distribution of possible outturns for US GDP.

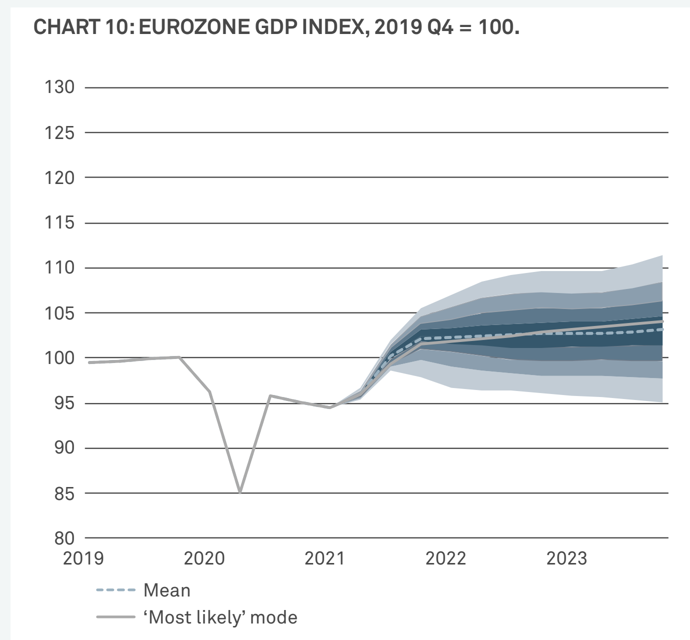
In all but our 'Bad Recovery' scenario, a significant portion of the excess savings pots that have built up in many of the Developed Markets is spent over the next few quarters as economies reopen, leading to a period of rapid economic growth. In the US, where those excess savings pots are equivalent to almost 10% of GDP, we see close to an evens chance that economic output has returned to its pre-COVID trend by the end of this year —as if the pandemic had never occurred. Thereafter, risks to US economic activity are skewed to the downside, as it becomes increasingly likely that the Fed will need to take action to correct an overheating economy. Risks to growth in the euro area and in China, where there is less likely to be a need for tighter monetary policy, are more balanced.

Inflation has surprised on the upside, globally, over the past three months, and not just because of base effects. Cyclical pressures have been in play too. In our 'Bad Recovery' scenario, further restrictions on economic activity in response to new variants cause the recovery to stall, and upward pressures on inflation fade away rapidly. In 'Good Recovery', supply responds rapidly to the increase in demand, causing inflation to move back towards

The solid line shows the good recovery upside scenario mode and the dashed line is the mean or probability-weighted average forecast across all four scenarios. The darker bands towards the center of the fan chart show the more likely outcomes, while the lighter bands show progressively less likely outcomes covering 90% of the forecast distribution. The width of the fan chart shows the level of uncertainty and when the bands below the central forecast are wider than those above shows the balance of risks lies to the downside. Forecasts begin in Q2 2021 and were calculated as of June 2021. Source: BNY Mellon GEIA and Fathom Consulting.



Source: BNY Mellon GEIA and Fathom Consulting.



Source: BNY Mellon GEIA and Fathom Consulting.

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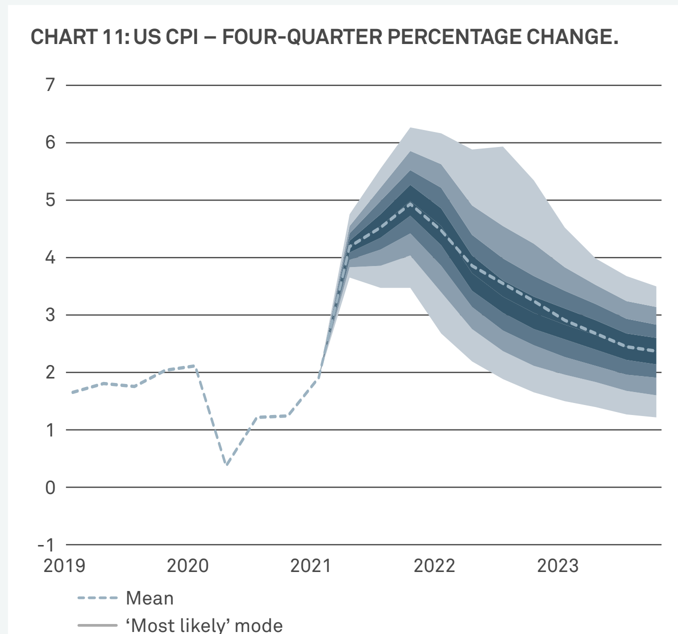
target in most major economies before it becomes entrenched – minimal central bank action is required. In the remaining two scenarios, which together account for 45% of the distribution of possible outcomes, inflation is more problematic. Supply fails to respond in time, particularly in the US, and inflation expectations start to slip their anchor. In these circumstances, inflation can spiral upwards rapidly, and that is why our US inflation fan chart has a significant bulge above the 'Good Recovery' path. We see a 50% chance that US CPI inflation is above 5% by the end of this year, and a 16% chance that it is above 6%.

The Fed's intention is that it will slow the rate at which it purchases assets below the current target of $120 billion per month before it raises the Fed funds rate. In our 'Bad Recovery' scenario, inflation falls rapidly through the second half of this year, and asset purchases are likely to continue at their current pace. In the remaining three scenarios, which have a combined weight of 80%, expansion of the Fed's balance sheet begins to slow, and possibly goes into reverse. In 'Tight Money' and 'Good Recovery', the Fed begins to taper during the first half of next year, more rapidly and earlier in the former scenario than in the latter. In 'Overheating', inflationary pressures build to such an extent that more aggressive action is required, and in this scenario we see a good chance that the Fed engages in outright asset sales. Our mean path for the size of the Fed balance sheet is gently downward sloping from the beginning of next year. As we show in our fan chart for the Fed balance sheet, we see close to a 1-in-10 chance that the additional QE put in place to combat the economic consequences of the pandemic will be unwound by the end of our forecast horizon.

Our fan chart for ten-year US Treasury yields has changed little over the past three months. As before, the sharp upward spike in yields later this year reflects the possibility of a second 'taper tantrum'. With inflation rising more sharply than we had imagined in the previous Vantage Point, we have brought forward the announcement of tapering in the 'Tight Money' scenario by one quarter. In the 'Good Recovery' scenario, yields climb steadily higher over the next year or two, before settling at around 2.5%. Risks around this path are broadly balanced.

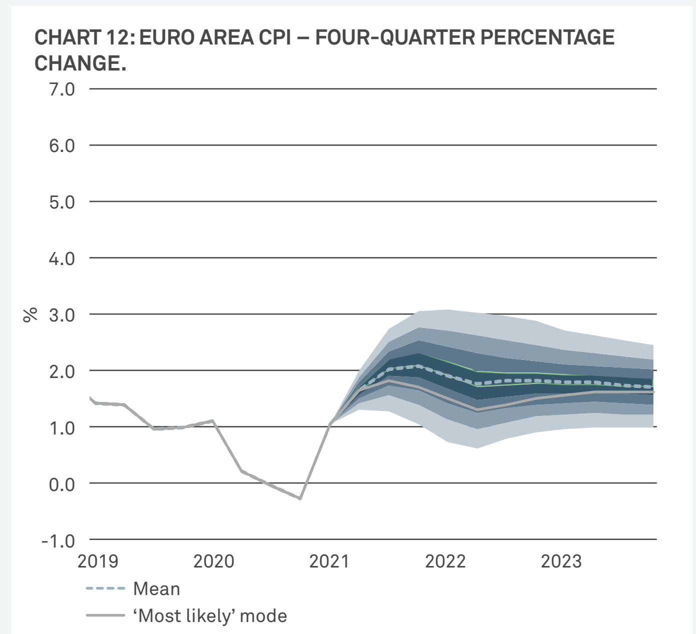
The solid line shows the good recovery upside scenario mode and the dashed line is the mean or probability-weighted average forecast across all four scenarios. The darker bands towards the center of the fan chart show the more likely outcomes, while the lighter bands show progressively less likely outcomes covering 90% of the forecast distribution. The width of the fan chart shows the level of uncertainty and when the bands below the central forecast are wider than those above shows the balance of risks lies to the downside. Forecasts begin in Q2 2021 and were calculated as of June 2021. Source: BNY Mellon GEIA and Fathom Consulting.

CHART 11: US CPI – FOUR-QUARTER PERCENTAGE CHANGE.



Source: BNY Mellon GEIA and Fathom Consulting.

CHART 12: EURO AREA CPI – FOUR-QUARTER PERCENTAGE CHANGE.



Source: BNY Mellon GEIA and Fathom Consulting.

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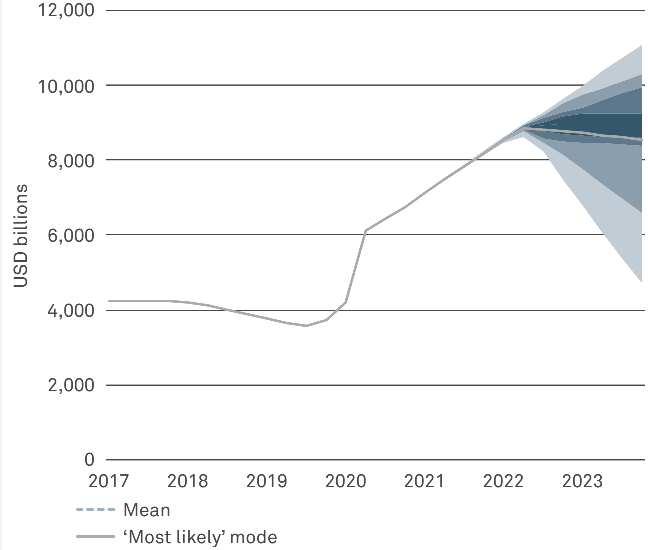
In our 'Good Recovery' scenario, the S&P500 makes modest progress over the next 12 months, reaching around 4600 before flattening off. Risks to this path are to the downside, particularly through next year, either because bad news about the virus causes the economic recovery to stall, or because a material increase in inflation causes the Fed to take action, raising the discount rate and pushing equities lower.

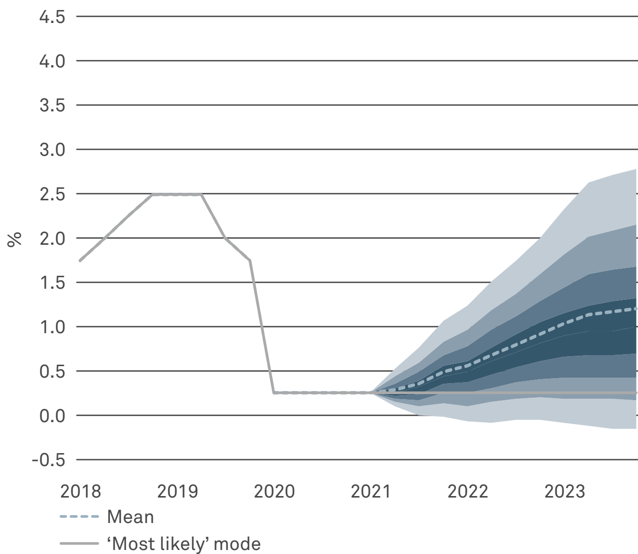
CHART 14: FED BALANCE SHEET – SECURITIES BOUGHT OUTRIGHT, USD, BILLIONS.



Source: BNY Mellon GEIA and Fathom Consulting.

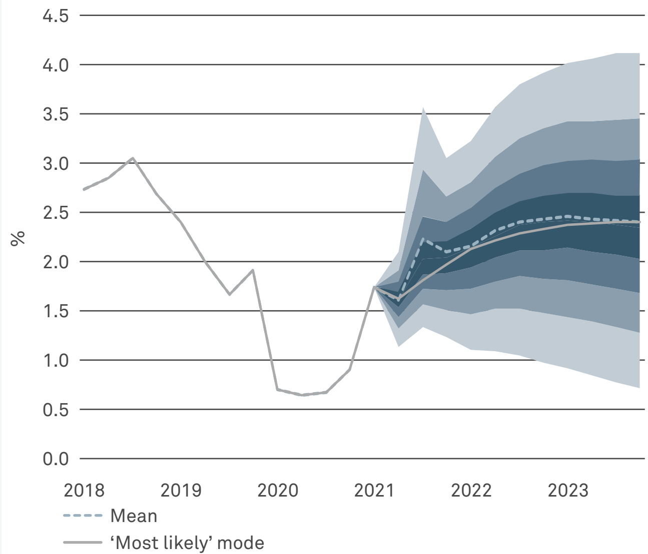
The solid line shows the good recovery upside scenario mode and the dashed line is the mean or probability-weighted average forecast across all four scenarios. The darker bands towards the center of the fan chart show the more likely outcomes, while the lighter bands show progressively less likely outcomes covering 90% of the forecast distribution. The width of the fan chart shows the level of uncertainty and when the bands below the central forecast are wider than those above shows the balance of risks lies to the downside. Forecasts begin in Q2 2021 and were calculated as of June 2021. Source: BNY Mellon GEIA and Fathom Consulting.

CHART 13: US FEDERAL FUNDS RATE %.



Source: BNY Mellon GEIA and Fathom Consulting.

CHART 15: US TEN-YEAR GOVERNMENT BOND YIELDS %.



Source: BNY Mellon GEIA and Fathom Consulting.

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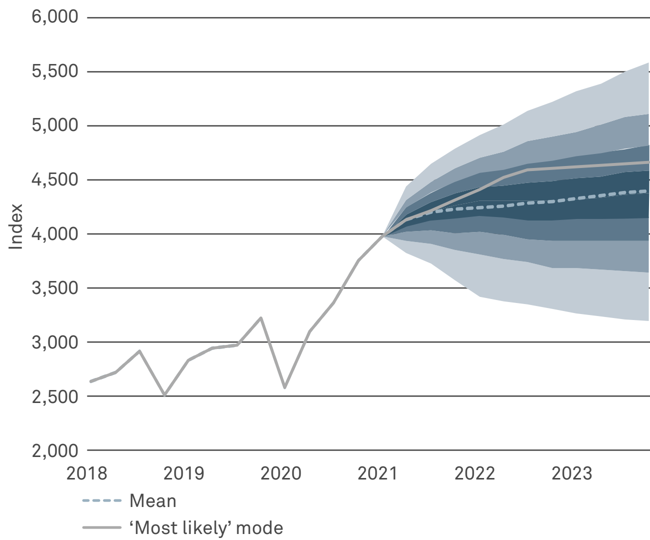
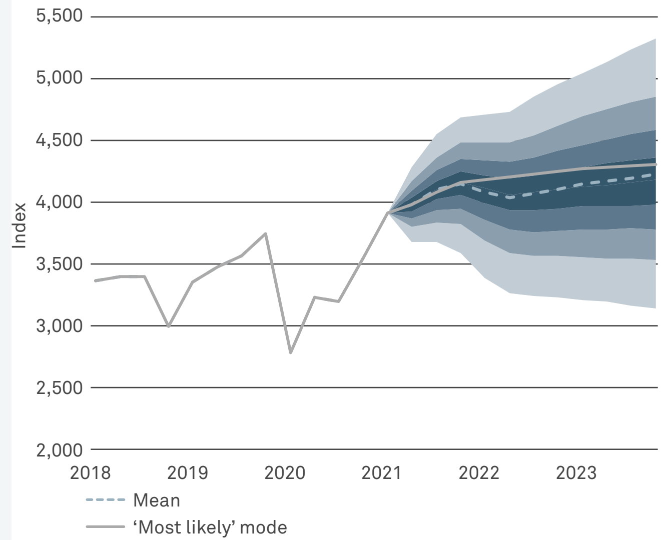
The solid line shows the good recovery upside scenario mode and the dashed line is the mean or probability-weighted average forecast across all four scenarios. The darker bands towards the center of the fan chart show the more likely outcomes, while the lighter bands show progressively less likely outcomes covering 90% of the forecast distribution. The width of the fan chart shows the level of uncertainty and when the bands below the central forecast are wider than those above shows the balance of risks lies to the downside. Forecasts begin in Q2 2021 and were calculated as of June 2021. Source: BNY Mellon GEIA and Fathom Consulting.

CHART 16: S&P 500 – INDEX.



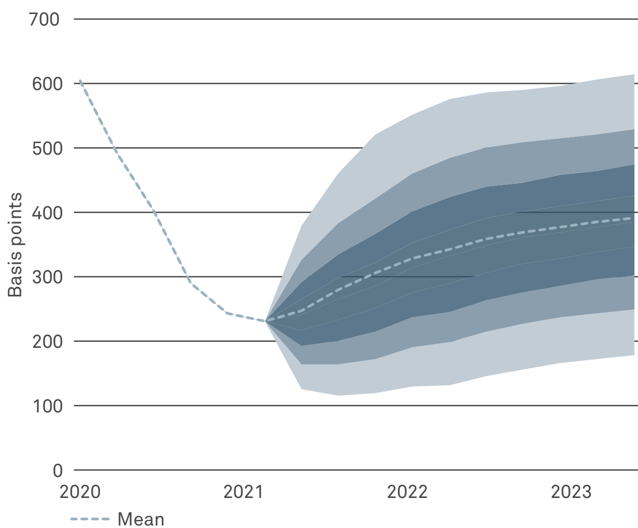
Source: Fathom Consulting and Global Economics and Investment Analysis (GEIA).

CHART 17: EURO STOXX 50 – INDEX.



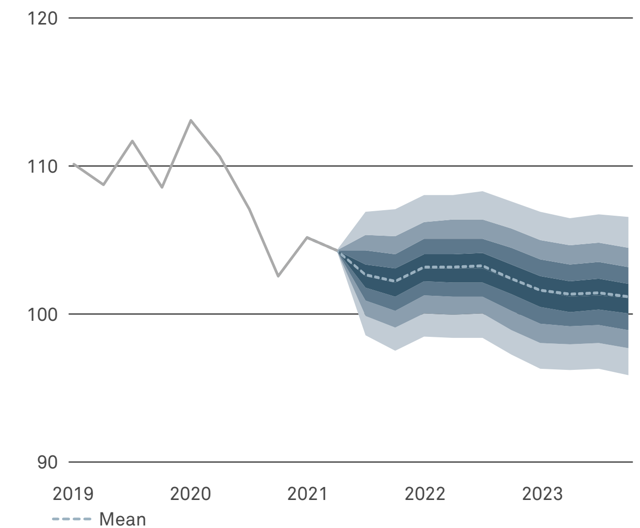
Source: Fathom Consulting and Global Economics and Investment Analysis (GEIA).

CHART 18: US HY–IG SPREAD BASIS POINTS.



Source: Fathom Consulting and Global Economics and Investment Analysis (GEIA).

CHART 19: USD ERI AGAINST MAJOR CURRENCIES INDEX, JANUARY 2006 = 100.



Source: Fathom Consulting and Global Economics and Investment Analysis (GEIA).

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SECTION 2

SECTION 2A

Capital Market Pricing – What is Priced In?

OVERVIEW

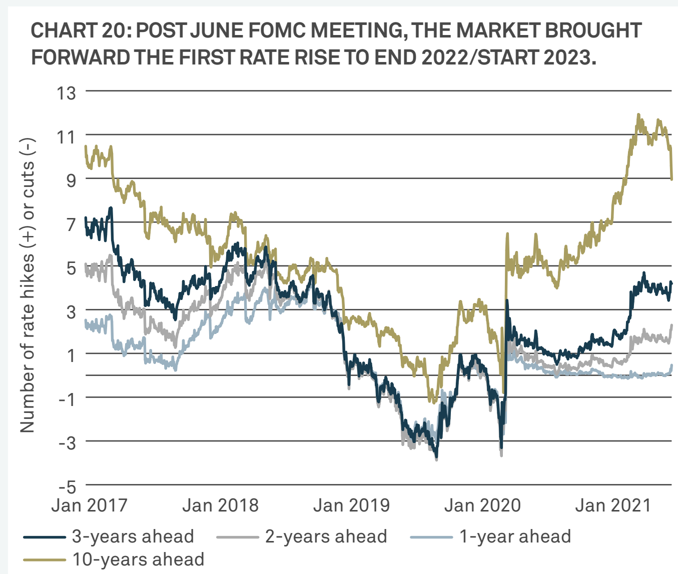
For most of the quarter, and until the June FOMC meeting, financial markets had become relatively more relaxed around the risk of persistently higher inflation and the need of central banks to react to it, looking through signs of increasing inflationary pressures. Interest rates in major economies fell or were broadly flat.

Supported by low discount rates, and the continued improvement in fundamentals, risky asset prices' positive performance continued on a solid footing, with both equity markets and corporate credit markets posting positive returns. With lower US interest rates and the relative improvement in growth expectations in non-US advanced economies over Q2, the dollar unwound the gains made earlier in 2021.

Then, in mid-June, the FOMC delivered a hawkish surprise to the market. The market-implied timing of the first rate rise came forward, the market-pricing of the pace of rate hikes quickened, real rates rose and breakeven inflation rates fell, the yield curve flattened, the US dollar appreciated, and equity markets fell. In sum, financial markets priced in a greater risk that central banks may need to tighten policy sooner to prevent an overheating of the economy.

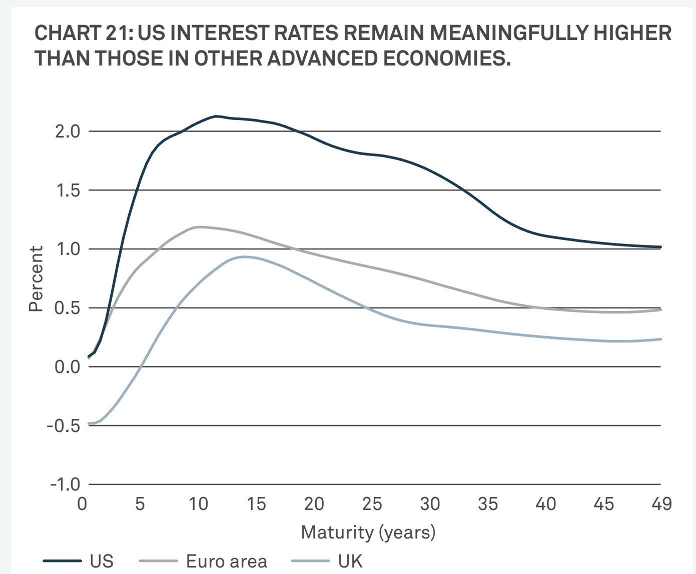
Going forward the market will continue to watch closely Fed communications, as it improves its understanding of the Fed's new strategy and reaction function. The market also remains focused on further labor market progress, whether consumers will spend a significant portion of the additional savings they have accumulated since the start of the pandemic, and, relatedly, whether higher inflation will be transitory as suggested by the Fed. With labor market 'slack' and transitory inflation, a slow pace of policy unwind is still possible. Without it, the Fed's mandate points to a faster removal of accommodation and possibly the need to engineer a slowdown in the economy. For now, the market still seems to be pricing the first outcome (albeit with an earlier first rate rise and a faster pace of rate hikes than what suggested by the Fed), but it remains nervous that an 'overheating' of the economy or the Fed wanting to prevent one, will eventually lead to significantly higher interest rates, and a fall in valuations and returns.

Number of US rate hikes/cuts as implied by the market



Data as of June 25, 2021. Source: BNY Mellon and Macrobond.

US, Euro Area, UK 1-year forward interest rate* curves



*We use forward overnight index swap (OIS) rates. Data as of June 2021.
Source: BNY Mellon and Barclays Live.

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

INTEREST RATES

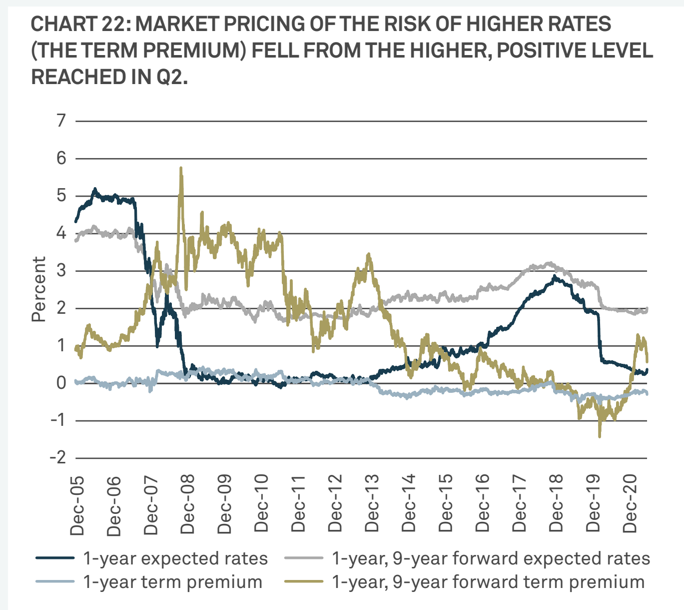
The June FOMC meeting delivered a hawkish surprise to the market, as the median dot in the Summary of Economic Projections signaled that interest rates may need to be raised twice in 2023, up from no rate rises signaled in March. Coming into the FOMC meeting, market expectations for policy rates had weakened somewhat, with US interest rate markets pricing the first rate hike for the end of Q2 2023 and expecting less than four rate rises by mid-2024. Following the FOMC meeting, there was a significant repricing of market expectations. The US interest rate curve 'bear flattened', with short term interest rates rising by 15bp and longer term forward rates falling by as much as 15bp in the few days after the June FOMC. The first rate hike is now priced for December 2022/February 2023 (as it was back in March), with expectations for a total of ~3 rate hikes by mid-2024 (as of 21 June).

Overall, there remains a discrepancy between what the market thinks about future US monetary policy and what the Fed is signaling, but the gap between the two has narrowed since the June FOMC meeting. This is particularly true in the short-to-medium term, as the market is expecting rates to start rising only slightly earlier (as soon as end 2022/start 2023)and to move up marginally faster (2.5 hikes in total by end 2023) than the Fed's 'dot plot' would suggest (first rate hike in 2023 and 2 total hikes by end of the year). Longer run, the discrepancy remains bigger, with the market expecting inflation to fall back at the Fed's target, but real rates to settle at a significantly lower level than the Fed's long-run dot would suggest.

Our outlook for policy rates continues to be more aggressive than the markets' one, as our inflation forecast is stronger than what is currently priced in the market. While our 'good recovery' scenario is one where policy rates remain at their effective lower bound until around the end of 2023 (closer to Fed expectations), our probability-weighted expectation is for around 5 interest rate hikes over the next few years (vs. around 2 priced in by the market).

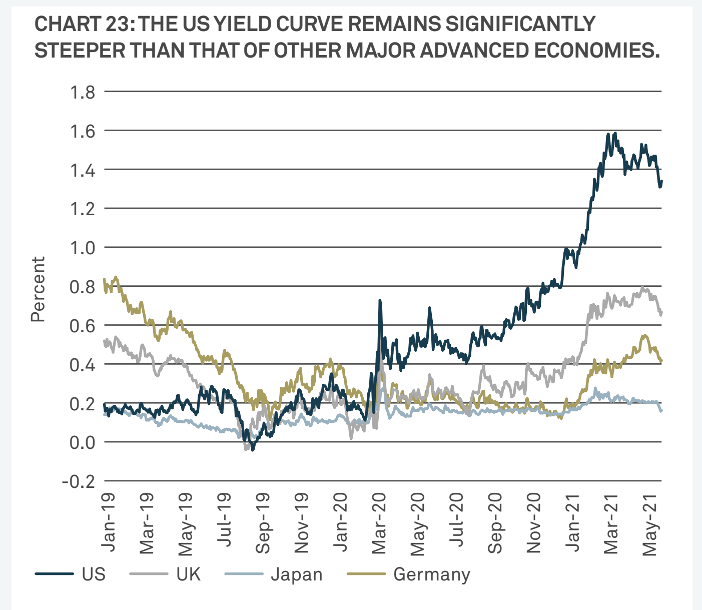
The US is more likely to tighten policy than the euro area and Japan, where secular stagnation and below-target inflation expectations remain key features of the economy. The policy reaction varies more across emerging markets, with China tightening this year, while others accommodate in the face of still high infections.

US nominal rates decomposed into expected short term rates and term premium



Data as of June 2021. Source: BNY Mellon and Federal Reserve Bank of New York.

US, UK and German and Japanese yield curves



Data as of June 2021. Source: BNY Mellon and Refinitiv Datasteam.

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

GOVERNMENT BONDS

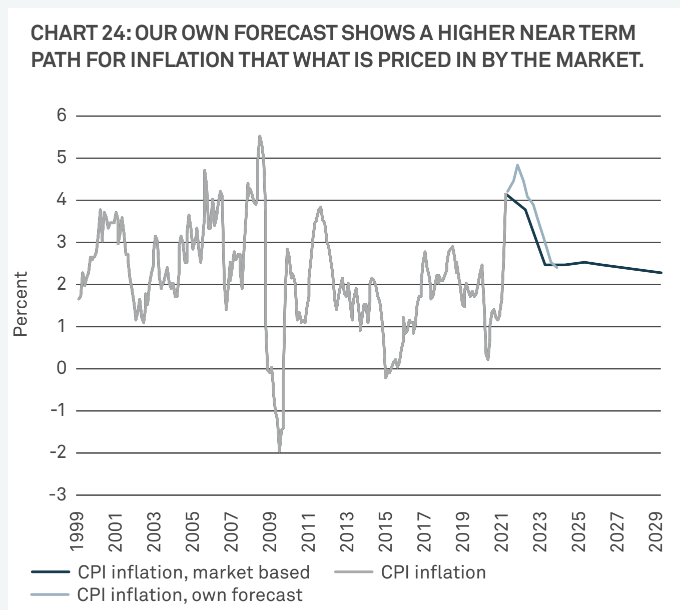
Considering the increased focus of investors on inflationary pressures in the US, government bond markets had remained surprisingly quiet until the FOMC June meeting. Since then, the US yield curve 'bear flattened', with short-term rates rising and long-term forward nominal rates falling. UK government bond yields moved in a similar direction but by less than US yields, while the move in euro area yields was significantly more contained.

The component of long term interest rates driven by expectations for future short term interest rates remains low well into the future, and the compensation that investors demand for holding the risk that longer term interest rates may turn out higher than expected (i.e. the term premium) fell from the higher, positive level reached in Q1. The fall in long term yields took place in mid-June, immediately following the release of a strong upward surprise in US CPI data and after the FOMC June meeting. In an attempt to explain the post CPI data moves, market participants reported an unwind of short positioning in US rates ahead of the summer period and before a likely fading of base effects from the collapse in prices in H1 2020. The moves following the June FOMC meeting instead suggest that the market is reassessing the FOMC's reaction function in more hawkish terms and is pricing out of some higher growth/higher inflation expectations from US interest rates markets.

Longer term US government bond yields remain relatively higher than those of other major advanced economies and the US yield curve is also significantly steeper. That said, unlike the US, yields in a number of other major advanced economies have moved closer to, or slightly above, pre-pandemic levels. Our mean, or probability weighted, forecast suggests the 10-year Treasury yield will be at around 2.5% in two/three years' time, above but not far from what is currently implied by the forward government bond yield curve.

CPI inflation, market implied CPI inflation and our 'good recovery' inflation forecast

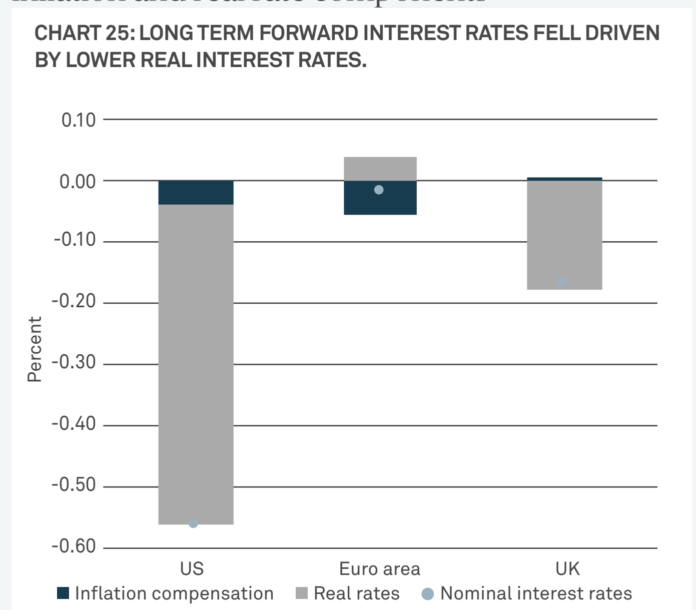
CHART 24: OUR OWN FORECAST SHOWS A HIGHER NEAR TERM PATH FOR INFLATION THAT WHAT IS PRICED IN BY THE MARKET.



Data as of June 2021. Source: BNY Mellon, Fathom Consulting, and Macrobond.

Change in US, euro area and UK 1-year, 10-year forward interest rates, decomposed into inflation and real rate components

CHART 25: LONG TERM FORWARD INTEREST RATES FELL DRIVEN BY LOWER REAL INTEREST RATES.



Data show change between 1 April and 18 June 2021. Source: BNY Mellon and Barclays live.

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

INFLATION

In Q2 as a whole, US short term real interest rates rose somewhat while US long term real interest rates fell significantly. The moves were strongest since the end of May, with the difference between long term and short term real interest rates falling by as much as 60bp since then on some measures. Overall, the inflation compensation component increased somewhat at the shorter end of the curve, in line with the recent upward surprises in actual inflation data, but remained broadly flat at the longer end.

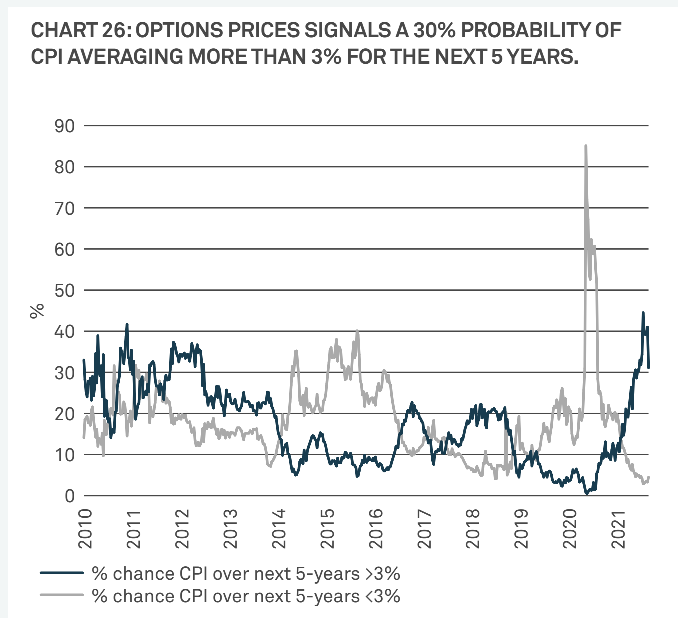
Zooming in on the days post the June FOMC meeting, inflation compensation fell at both the short and long end of the curve. By contrast, real rates rose at the short end and fell at the long end of the curve. Directionally, this combination of moves in inflation and real interest rate curves is in line with what usually observed following a negative monetary policy surprise. The size of the moves however was significant compared to previous comparable episodes.

Looking at the level of inflation and real components of long term forward interest rates, the market appears to be signalling that inflation is expected to gradually fall back to target, and that real interest rates will settle below the Fed's median long run expectation for the real Fed funds rate (0.5%, which many interpret as the Fed's implicit estimate of R*[1]). On average, the market's view of inflation is broadly consistent with our 'good recovery' scenario characterized by a healthy recovery, moderate inflation, and a very gradual and limited unwind in monetary policy accommodation. Our view of longer term real interest rates however is more positive than what currently signaled by the market.

Beneath the surface, the market shows divergent views on inflation. For instance, the pricing of significantly higher inflation has fallen but remains elevated, with option markets now signalling a 30% (risk-neutral) probability of CPI averaging more than 3% for the next 5 years. If we compare the current option implied probability distribution of CPI inflation over the next 5 years, with that from April 2011 – a period when

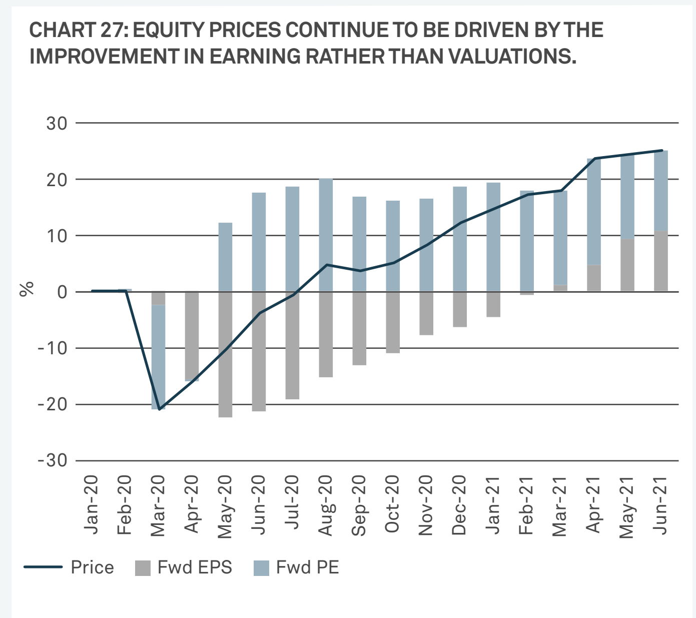
[1] R*, is the long run level of the real policy rate that, if allowed to prevail for several years, would place economic activity at its potential and keep inflation low and stable.

Option-implied probability of CPI inflation averaging >3% or <1% over the next 5 years



Data as of June 2021. Source: BNY Mellon and Federal Reserve Bank of Minneapolis.

Decomposition of (log) returns in the S&P500 since 2020



Data as of June 2021. Source: BNY Mellon and Bloomberg.

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

expectations for future inflation were as high and CPI inflation reached comparable levels to today – it's interesting to note that today's expectations are less dispersed around the mean (i.e. the standard deviation is lower) and that the pricing of extreme downside and upside inflationary outcomes has also fallen (i.e. the kurtosis is lower). This suggests a higher degree of conviction in the market that inflation will remain above, but not too far from, target for a number of years to come.

Forward inflation expectations are at or above pre-Covid levels across most major economies, including in the euro area, where, however, they remain, below target. This suggests that notwithstanding the positive macro and institutional developments in the euro area since the early phases of the pandemic, there remains scepticism in the market around the longer term outlook for growth and inflation in the currency union.

EQUITIES

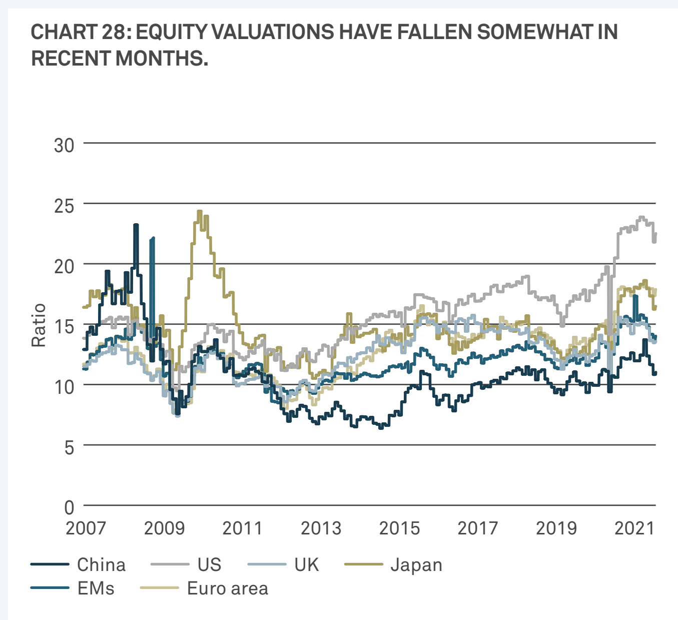
Equity markets performance remained positive in Q2 overall in line with progress on the virus/vaccination front and the cyclical economic recovery. With the debate over the outlook for inflation and central bank's reaction to it remaining central in the mind of investors, equity markets were volatile at times, and pared back some the earlier gains following the June FOMC meeting.

Over the quarter as a whole, and in line with what seen since the start of H2 2020, US equity market performance was driven by an improvement in corporate profitability rather than an expansion in valuation. As interest rates remain low and risk premia moderate, historically high multiples remain broadly supportive of equity prices, although they have declined over Q2.

Ahead of the June FOMC meeting, the market showed some increased cautiousness in its willingness to translate lower real interest rates into higher equity index valuations. Indeed, a decomposition of equity earnings yield into what explained by long term real interest rates and a component driven by growth expectations and a risk premia (the 'excess' earnings yield component), shows that as real interest rates fell, the 'excess earnings yield component rose, leaving the earnings yield only

Global Price-to-Earnings Multiples

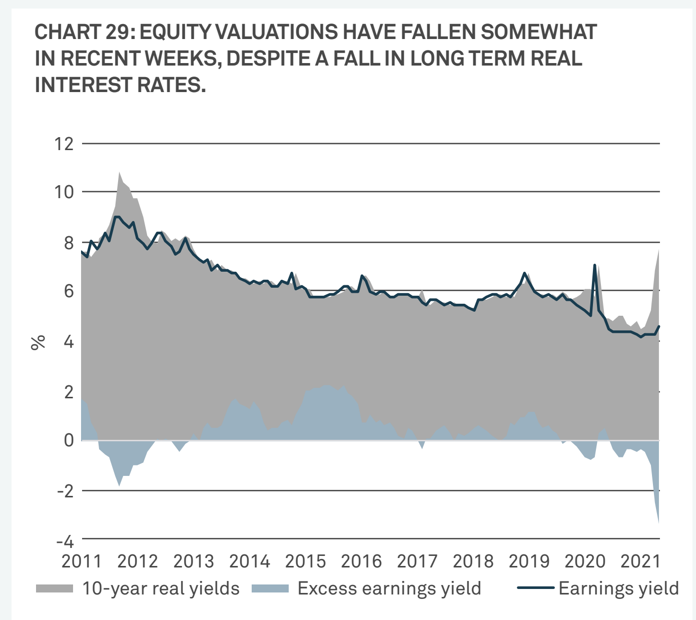
CHART 28: EQUITY VALUATIONS HAVE FALLEN SOMEWHAT IN RECENT MONTHS.



Data as of June 2021. Source: BNY Mellon and Bloomberg.

S&P 500 earnings yield, decomposed into real interest rates and an 'excess earning yield' component

CHART 29: EQUITY VALUATIONS HAVE FALLEN SOMEWHAT IN RECENT WEEKS, DESPITE A FALL IN LONG TERM REAL INTEREST RATES.



Data as of June 21, 2021. Source: BNY Mellon and Refinitiv Datastream.

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

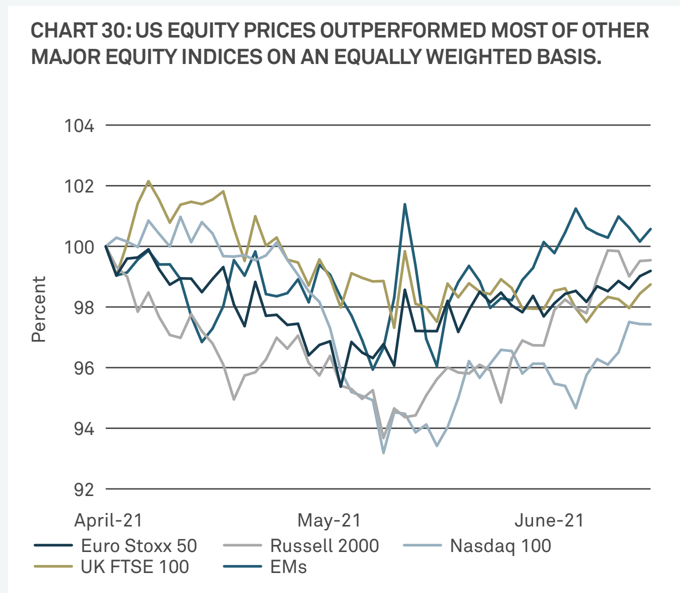
slightly higher (Chart 29). It's possible that with real interest rates at historically lows, the rate of economic growth soon approaching a peak before falling back to trend, and risk premia already at moderate levels, the market viewed the risk from a change in valuations to be negatively skewed going into the June FOMC meeting.

In the US, sectors that have higher sensitivity to the economic recovery (e.g. energy, real estate, financials) drove overall returns until the June FOMC meeting. Afterwards, there was a shift in sectoral equity leadership, with sectors benefitting from the "reflation trade" falling and longer duration sectors benefitting from lower long term interest rates, such as tech, rising. This sector differentiation in performance was not entirely consistent across major equity markets, with European equities for example showing less of a clear pattern over Q2. Until the June FOMC, in a vote of confidence over the relative strength of the US economic recovery, US equities continued outperforming many major equity indices on an equally-weighted basis (although not on a market cap basis, which suggests an impact of sector weighting on overall index returns). Since then however, US equities underperformed, ending the review period broadly in line with other major equity indices.

As usual, we compare the probability distribution of possible outcomes for the S&P 500 in one year from now as implied by the options market to that implied by our own fan charts (table 1). Option prices indicate significant risks to the downside, with a noticeable ~40% probability of outcomes more than 10% below current levels. Our distribution assigns a significantly smaller probability to such negative outcomes reflecting our more balanced outlook for equities over the next 12-months than the market. We assign a ~60% probability to outcomes above current levels (vs a 43% probability priced in by the market), although we remain somewhat cautious over the outlook for equities further out.

Cumulative performance of equally weighted major equity indices, relative to the equally weighted S&P500

CHART 30: US EQUITY PRICES OUTPERFORMED MOST OF OTHER MAJOR EQUITY INDICES ON AN EQUALLY WEIGHTED BASIS.



Data as of 14 June 2021. Source: BNY Mellon and Bloomberg.

S&P 500 outcomes in 1 year

TABLE 1

S&P 500 OUTCOMES IN 1 YEAR		
Per cent	Market	Own forecast
P(S&P 500 < -10%)	39	17
P(-10% <= S&P 500 < -5%)	8	6
P(-5% <= S&P 500 < 0%)	10	8
P(0% <= S&P 500 < 5%)	11	12
P(5% <= S&P 500 < 10%)	12	12
P(S&P 500 > 10%)	20	45

Data as of 21 June 2021. Source: BNY Mellon and Fathom Consulting.

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

CREDIT

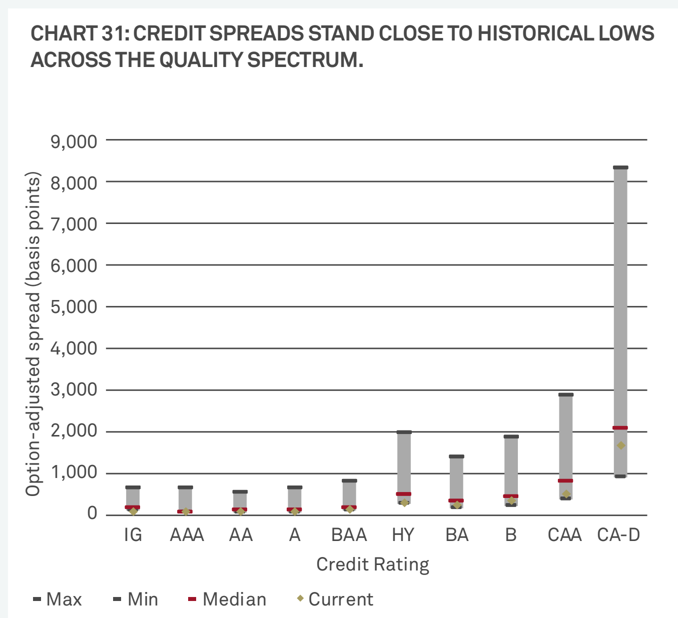
Corporate bond spreads compressed further in Q2, with USD investment grade and high yield credit spreads falling 8 and 30 bps respectively over the period. Credit spreads stand close to historical lows across the quality spectrum, aside from the lowest graded high yields credits where they remain somewhat higher (Chart 31).

Default rates remain relatively low in most countries compared with the size of the hit to earnings seen in 2020 and previous recessions. Trailing-12-month default rates for the US and European high yield bond markets are around 6%, up from around 3% pre-pandemic but falling.

In line with the decline in actual default rates, a decomposition of a broad measure of US corporate bond credit spreads shows a continued fall in the component associated with expected defaults. The component of spreads explained by a residual risk premium component rose over the quarter but remains negative and close to historically low levels.

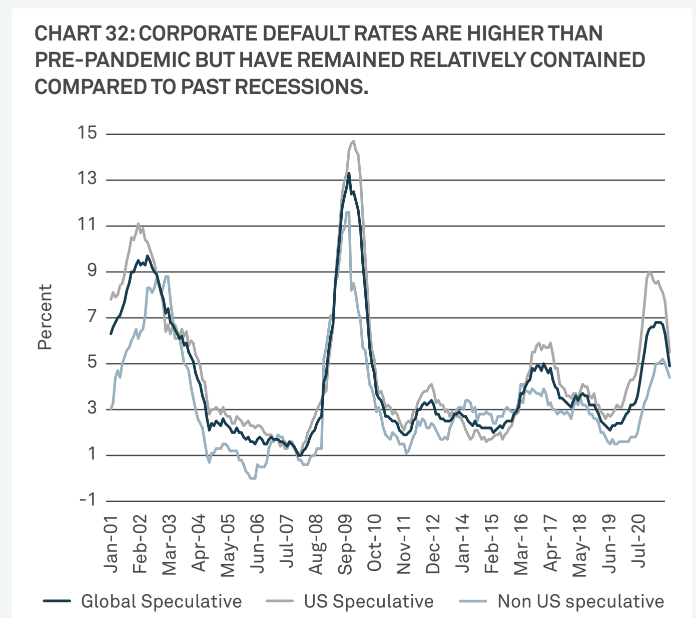
Beneath the surface, risks in the corporate sector remain. For instance, although US corporate gross leverage continued to fall on the back of a broad-based earnings recovery outpacing debt growth, it remains at historically high levels for both investment grade and high yield credit. And interest coverage remains low relative to post Global Financial Crisis levels. Healthy cash buffers (with cash/debt ratios at multi-year highs) should facilitate balance sheet repair as EBITDA continues to increase. But given how compressed risk premia are, our economic outlook pointing to higher interest rates, and an abundant support to corporates that will eventually be withdrawn, we remain watchful of signs of stress in pockets of the credit market.

USD corporate credit spreads since 2000 (max, min, median and most recent)



Data as of June 2021. Source: BNY Mellon and Barclays live.

Global, US and Non US Speculative grade Corporate Debt Default rates



Data as of May 2021. Source: Moody's Investors Service.

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

EXCHANGE RATES

Prospects for exchange rates continue to be tightly linked to views on relative growth differentials, policy stances and risk premia. Following the spike in global interest rates at the start of 2021 and the associated appreciation of the US dollar, Q2 saw the resumption of the weaker dollar narrative, with USD depreciating against all G10 currencies and most EM currencies. This narrative changed again in mid-June, with USD rising rapidly following the FOMC meeting and paring back some of the losses occurred earlier in the quarter.

Looking ahead, the market's assessment of relative macro performance and policy response remain crucial to the FX outlook. With the Fed signalling a tighter policy to come, and break-evens fully priced for Fed credibility (thus likely struggling to rise further from here), option prices signal a more favourable balance of risk for the dollar going forward. US dollar risk reversals (a measure of skewness in expectations derived from option prices) have become less negative and increased further above longer term average levels (Chart 33).

The near term outlook for the euro remains more puzzling for the market. This is in part due to a possible tension between the emphasis put by the ECB on maintaining 'favourable' financing conditions (with many in the market assuming the ECB will lean against any rises in interest rates for some time) and the positive cyclical rebound in the economy. Euro risk reversals rose to historically high positive levels in 2020, but have fallen somewhat more recently.

Overall, and taking a longer term perspective, since the COVID crisis G10 currencies have moved closely in line with the historical sensitivity of FX to equity performance (Chart 34). This close relationship suggests that currencies, equities and interest rate expectations are being strongly driven by underlying cyclical conditions.

3-month and 1-year USD risk reversals

CHART 33: OPTION PRICES INDICATE A MORE FAVORABLE BALANCE OF RISK FOR THE USD.

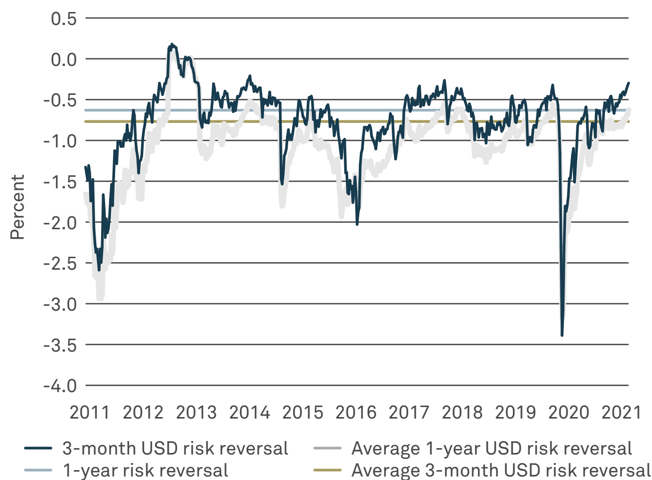
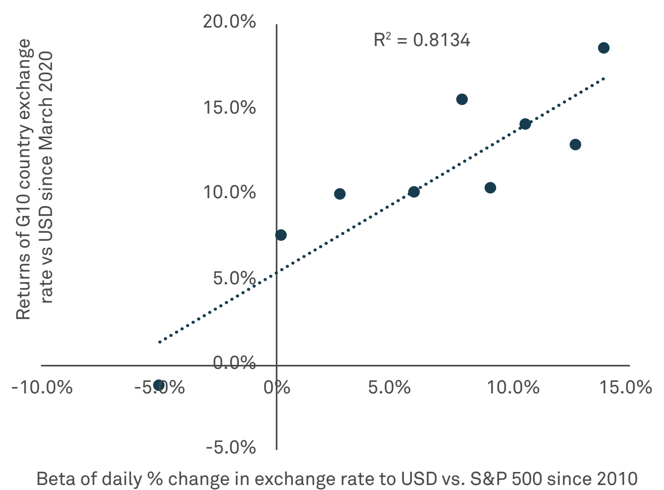


Chart shows a simple average of risk reversals of the USD vs AUD, EUR, GBP, JPY, NOK, CAD, SEK, NZD, CHF. Data as of June 2021. Source: BNY Mellon and Reuters Datastream.

Returns of major advanced economy exchange rates (G10) versus the USD since March 2020 and sensitivity of returns of the same exchange rates to changes in the S&P

CHART 34: CURRENCIES, EQUITIES AND INTEREST RATES ARE RESPONDING TO COMMON CYCLICAL FACTORS.



Data as of June 11, 2021. Source: BNY Mellon and Reuters Datastream.

SECTION 2B

Market Sentiment

NOW WHAT?

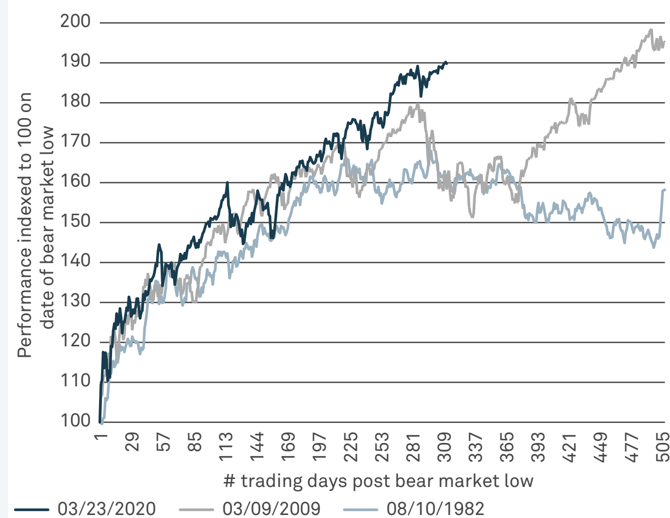
Global growth continues on the road to recovery. Economic data are moving unevenly back toward normal as the US joins China in a V-shaped recovery to pre-pandemic GDP. The global economy is in the midst of a peak everything moment. Peak growth, peak earnings, peak monetary accommodation, peak fiscal push and, likely peak inflation data. To some extent, this is inevitable. As inflation, consumption and growth return to normalized levels, investors are preparing for an eventual recalibration and a reduction of the fiscal and monetary policy backdrop. As such, the quickest recession and recovery in history is likely to move to a period which we would term mid-cycle. Growth rates and earnings which remain very strong, will come off the boil and the market is likely to pivot to areas which do well in a still strengthening economy. The yield curve has moved beyond the early stages of recovery and is pricing in rate hikes and more normalized inflation expectations.

While this suggests that the easy gains in asset prices are behind us, focusing on the dual and interlinked trajectories of inflation and growth will determine where assets classes are headed from here. If history is any guide, the S&P performance off the low of March 2020 closely mirrors the move off major lows in 2009 and 1982. In both the previous recoveries, the second year had more challenged price performance with a sideways grind before it resumed its upward multi-year trend.

Treasury yields have held to narrow ranges since coming off the late March/early April cycle highs pricing in higher but not too high inflation in the short term and moderating in the out years. The market had been ratcheting down inflation expectations, but the move was accelerated by the June Fed meeting as the market quickly priced in the Fed's target inflation 10 years out. Part of the decline in inflation expectations is consistent with a Fed policy that reduces right tail inflation risk. Five-year inflation

S&P 500 Post Bear Market Lows

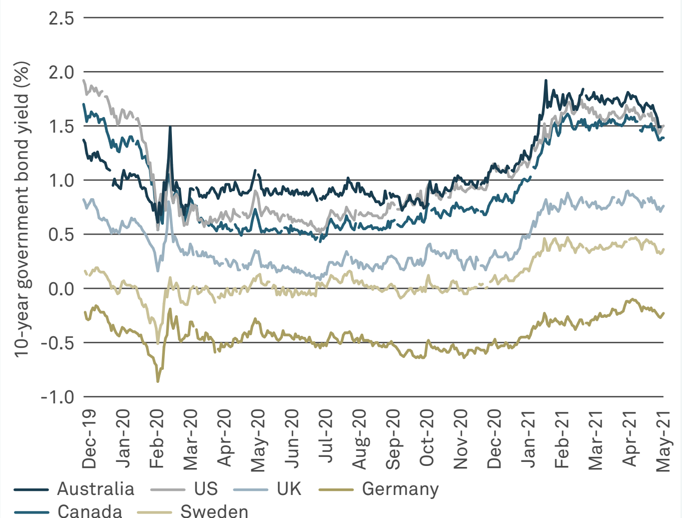
CHART 35: RALLIES OFF MARKET LOWS TYPICALLY SLOW IN THE SECOND YEAR.



Data as of June 15, 2021. Source: Bloomberg.

Developed economies' 10-year government bond yield (%)

CHART 36: RISING YIELDS HAVE STABILIZED SIGNALING THE MARKET IS IN-LINE WITH THE FED ON INFLATION.



Data as of June 15, 2021. Source: Bloomberg.

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

expectations have eased from a peak of 2.77% in May to about 2.4% while the 10 year forecast has dropped more than 30bps from 2.57% to about 2.25%--not far from the Fed target. As a result, the end of the month saw a partial unwind of the reflation trade which defined markets for the last nine months and longer duration assets began to rally.

The ongoing post-Covid economic burst and inflation has been priced in, and any additional increase in yields has been delayed by expectations that the current rise in inflation will prove transitory, and met with the Fed's more hawkish tilt. For the moment strong consumer activity and acute labor demand remain strong, supporting risk-on factors. At the same time, concerns about tapering of central bank asset purchases, a slowing of fiscal support and the whiff of stickier supply issues are weighing on risk appetites and boosting the appeal of more defensive assets.

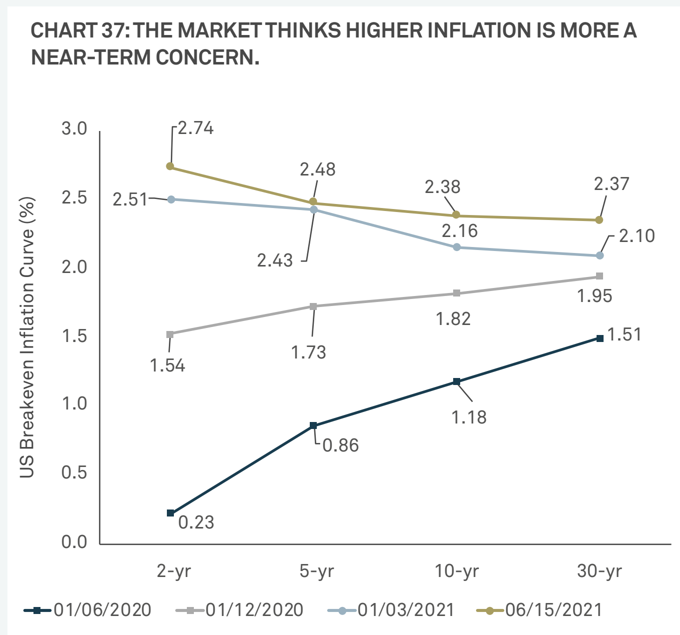
Even as yields have paused, the rising rate regime has slowly eroded the 2020 multiple expansion and has supported the continued rotation into cyclical and value names. From a high of 23.1X in August of 2020 forward 12-month multiple is now 21.1 as strong earnings have propelled the broader market.

The flattening of the yield curve has implications for asset classes and sectors and means that for some, the easy gains are indeed behind us. Our highest probability is for a strong recovery and so we see cyclicals continuing to do well particularly as the multiple spread between value and growth remains near historic highs. The uptick in the real economy will be the best in 35 years and financial conditions remain the easiest in history. Earnings for 2021 and 2022 will be driven by cyclicals which will out-earn a still solid year for growth stocks.

We are in a period where many sectors can do well. Mildly rising inflation in a growth environment is positive for equities overall.

US Breakeven Inflation Curve

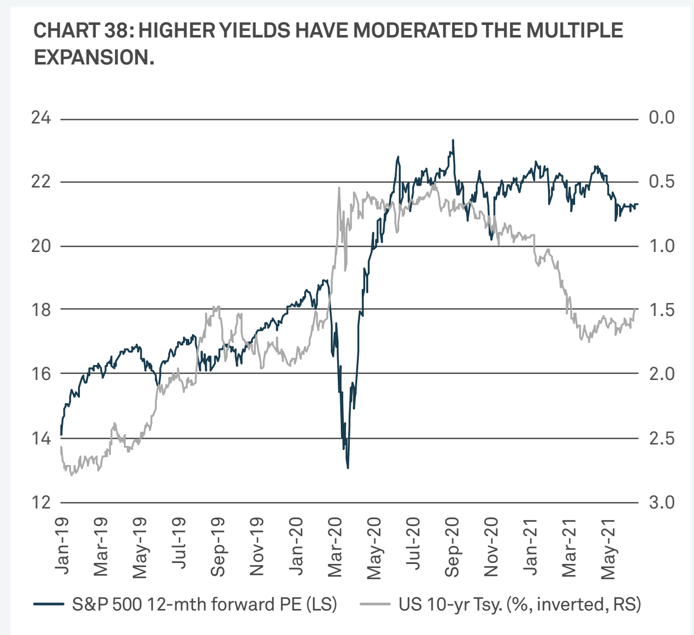
CHART 37: THE MARKET THINKS HIGHER INFLATION IS MORE A NEAR-TERM CONCERN.



Data as of June 15, 2021. Breakeven inflation is a measure of the market's inflation estimate. Source: Bloomberg.

US Price to Earnings Ratio and 10-year Treasury

CHART 38: HIGHER YIELDS HAVE MODERATED THE MULTIPLE EXPANSION.



Data as of June 14, 2021. Source: Bloomberg and FactSet.

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

With the market pricing in a more benign inflation regime in a growth uptrend, sectors including cyclicals, secular growth and healthcare should do well. Note that while utilities and staples continue to underperform on relative basis, our thesis of strong global growth, mild inflation and strong earnings is re-affirmed by market pricing.

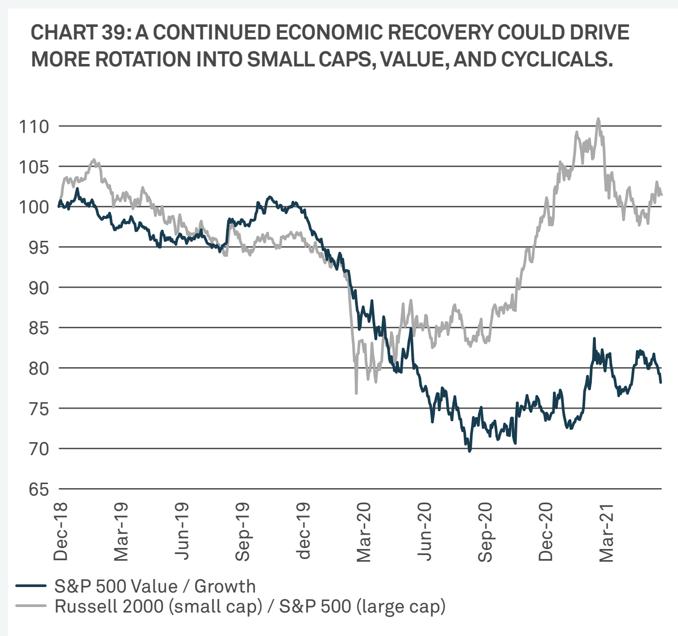
We would use the relative tech YTD underperformance to add selectively to those companies that have an uptick in their growth and cash flow trajectory in upcoming years. Commodities and real assets have already priced in higher inflation and while price moves have been sharp, we expect some of this to moderate. Nevertheless, as there is some risk that inflation data may be hotter and of longer duration it is prudent to maintain exposure to these assets.

With price pressures appearing in input costs, we would focus on high margin companies of any size as inflation headlines remain one of the market's top risks.

Finally, Europe's lagged recovery puts it in early cycle and with that equity market heavily levered to cyclicals we recommend allocation to Europe to capture cyclical recovery. European yields have moved upward and the region's markets are far less expensive than their American cousins.

US Value vs. Growth and Small Caps Relative to Large Caps

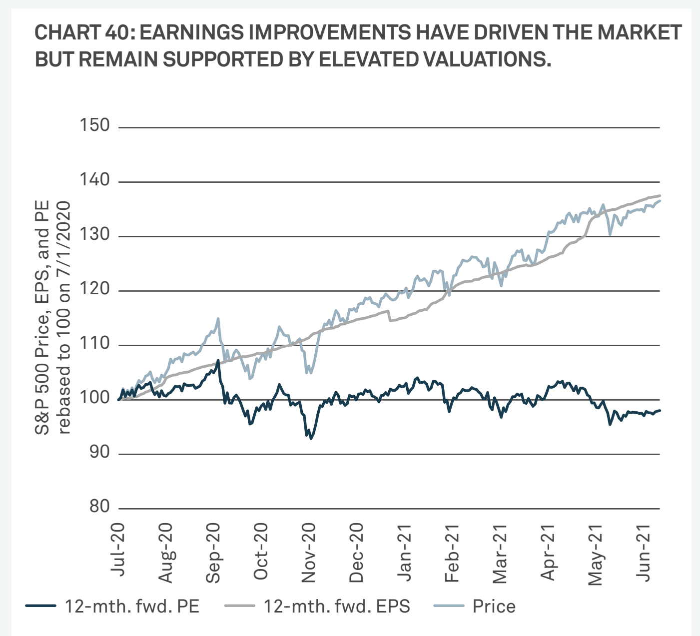
CHART 39: A CONTINUED ECONOMIC RECOVERY COULD DRIVE MORE ROTATION INTO SMALL CAPS, VALUE, AND CYCLICALS.



Data as of June 15, 2021. Source: Bloomberg.

Change in S&P 500, Earnings, and Price to Earnings Since Mid-2020

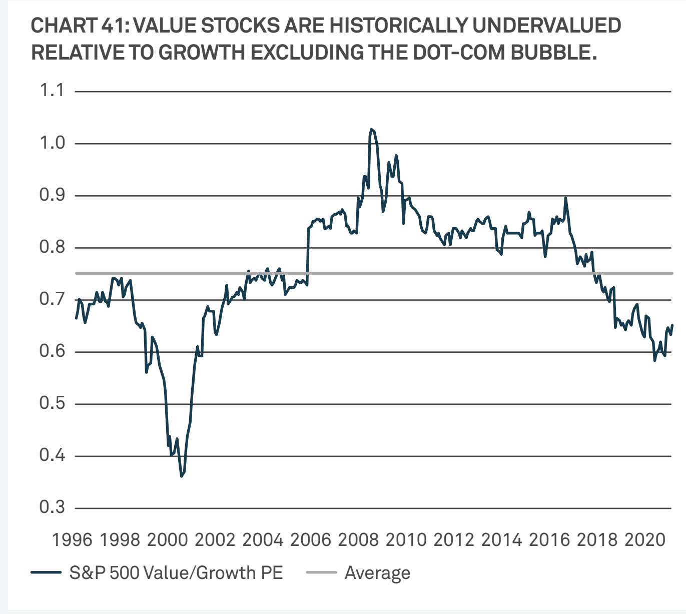
CHART 40: EARNINGS IMPROVEMENTS HAVE DRIVEN THE MARKET BUT REMAIN SUPPORTED BY ELEVATED VALUATIONS.



Data as of June 15, 2021. Source: FactSet.

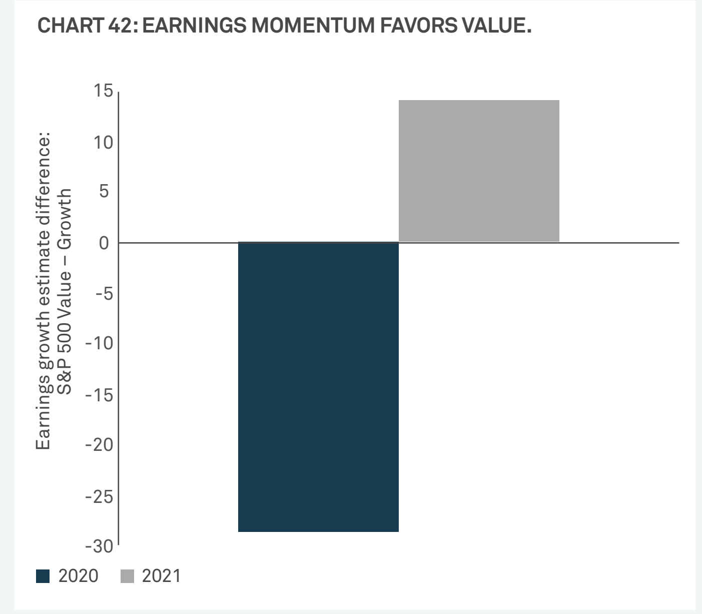
Charts are provided for illustrative purposes and are not indicative of the past or future performance of any BNY Mellon product.

S&P 500 Growth vs. Value PE



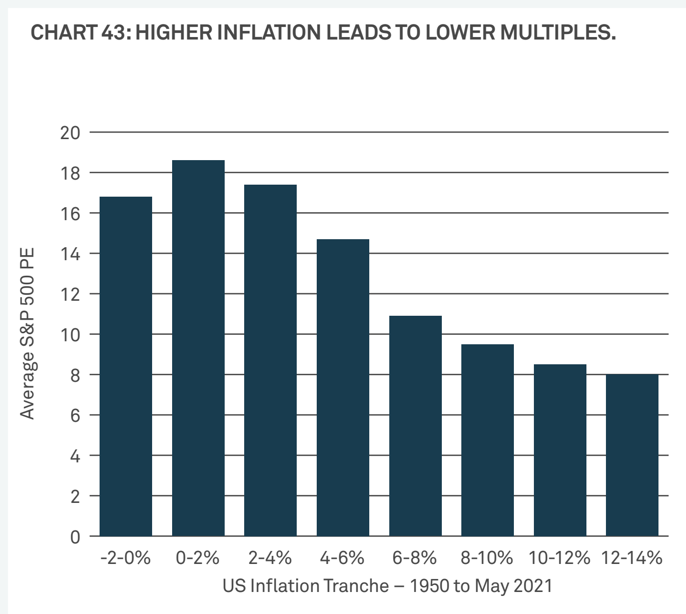
Data as of May 30, 2021. Source: FactSet.

S&P 500 Value – Growth Earnings Growth Difference



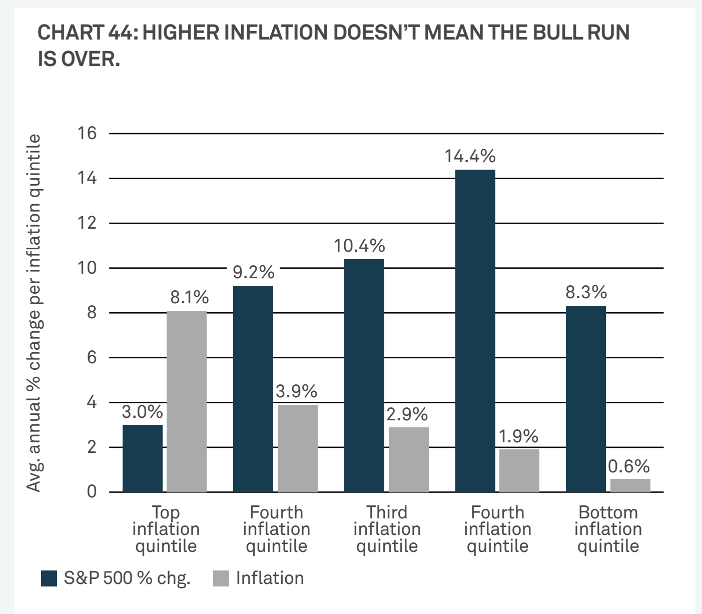
Data as of June 9, 2021. 2021 includes estimates per FactSet. Source: FactSet.

S&P 500 PE by Inflation level



Data from 1950 to May 2021. PE refers to trailing 12-month price to earnings ratio. Source: Strategas.

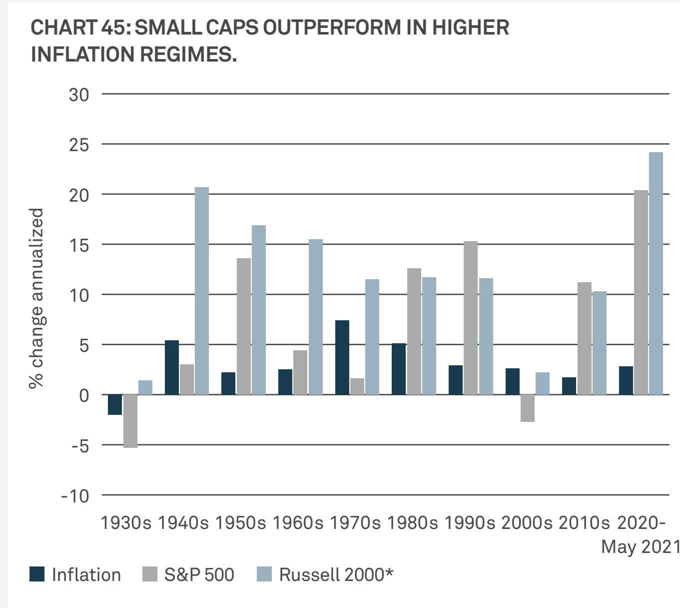
S&P 500 Returns by Inflation Level



Data since 1948. Top quintile: 13%-5.0%; second: 5%-3%; third: 3%-2.5%; fourth: 2.5%-1.5%; bottom: <1.5%. Data as of April 30, 2021. Source: Bloomberg.

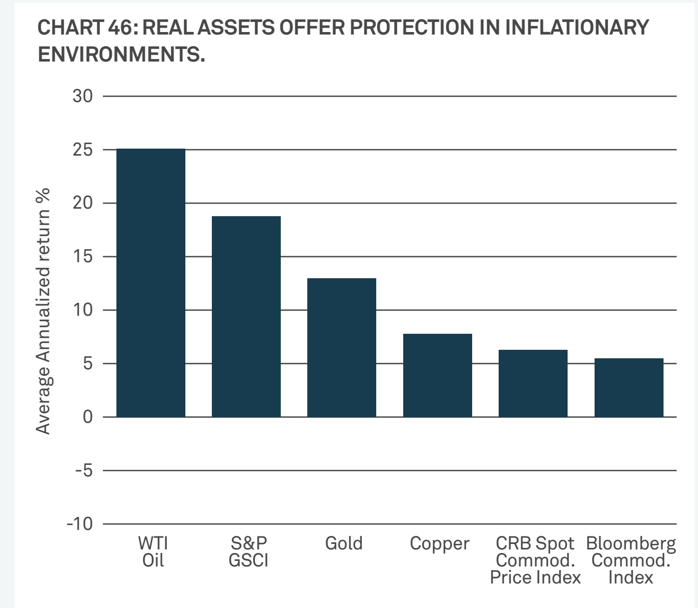
Charts are provided for illustrative purposes and are not indicative of the past or future performance of any BNY Mellon product.

Annualized % change by decade – US Small Caps, Large Caps, and Inflation



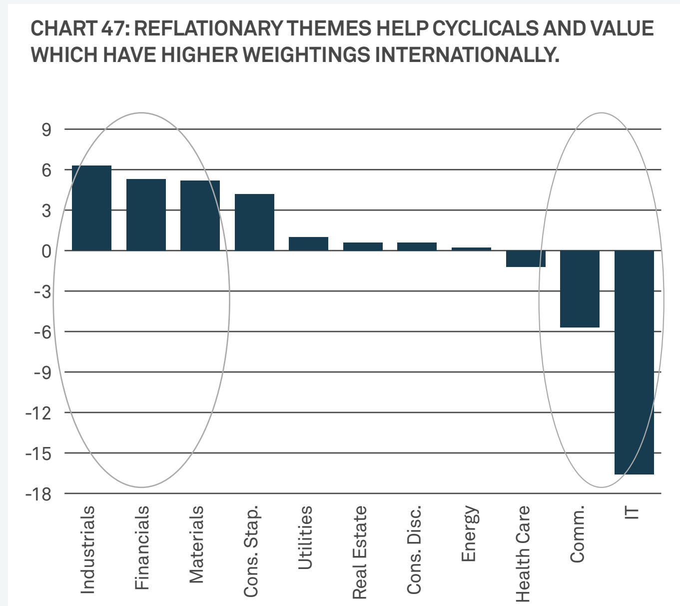
*Pre-1970s, closest available substitute per Strategas. Data as of May 30, 2021. Source: Strategas.

Average Commodity Return (Annualized) in Periods of Rising Inflation*



*Inflation uses the consumer price index and uses 5 periods since 1994 of rising inflation. Data as of June 2021. Source: Strategas.

MSCI EAFE and S&P 500 – % Difference in Sector Weights



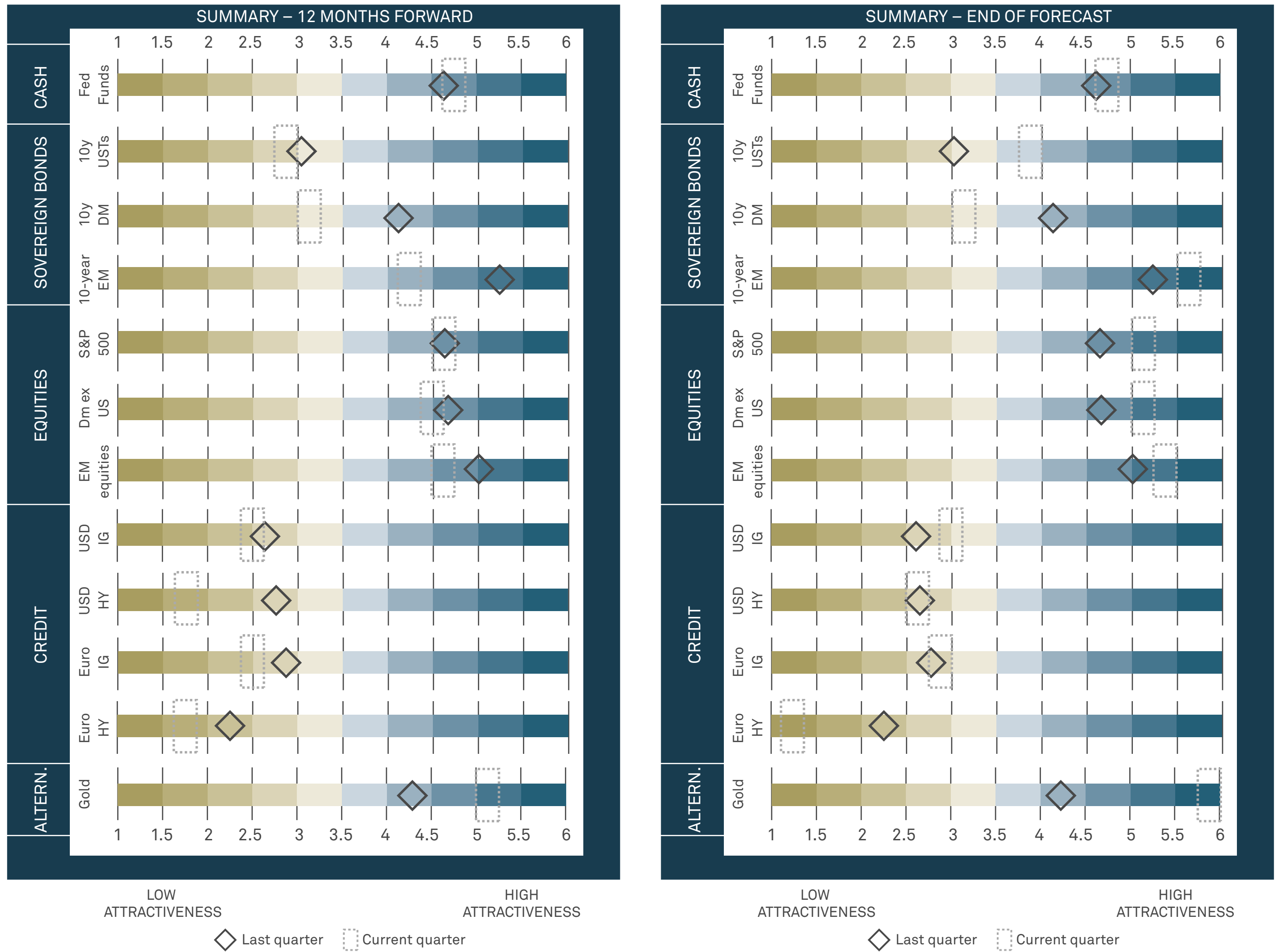
Data as of April 30, 2021. Source: Bloomberg and MSCI.

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

Investment Conclusions

SECTION 3

In our asset class heat map the reader can more easily see the relative attractiveness of broad asset classes based on an array of variables we take into account. These variables include return expectations as they correspond to our economic scenarios, current market pricing, risks of major downside shocks, and hedging potential of certain asset classes against these shocks. As a reminder, this score represents our outlook for each group over a one- and two-year investment horizon.

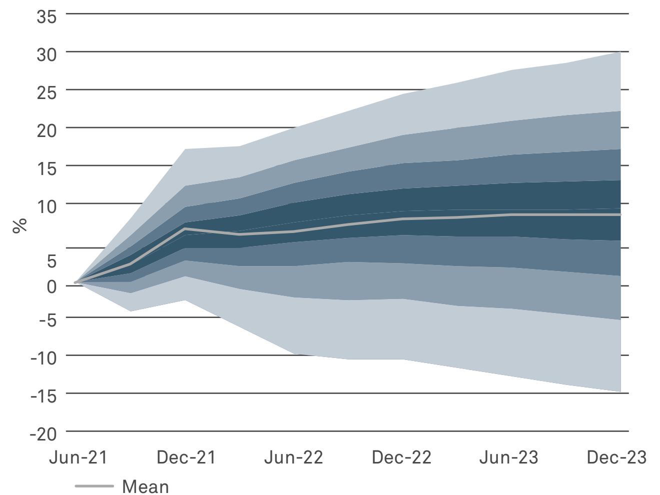


Forecasts were calculated as of June 9, 2021. Source: BNY Mellon GEIA. Footnote: In order to further formalize our investment conclusions, we are introducing a proprietary framework to better illustrate our views of the relative attractiveness of major asset classes. This approach takes into account a number of key variables including the total return expectations of each asset class as they correspond to our economic scenarios, current market pricing, measures of return over risk, risks of a major downside shock, and the hedging potential of certain asset classes against these shocks. The resulting heat map scales indicate where each asset class falls on the distribution of attractiveness scores from low to high (gold to teal) and represent our outlook for each group over a two-year investment horizon. This is not to indicate under/over/neutral weights in any particular asset class, but rather to give the reader a standardized and comparable view of the level of opportunity or risk we see in each category. The variables we use are constructed from the first four moments of the distribution of asset prices we forecast: mean (i.e. expected returns), standard deviation, skewness and kurtosis. We attribute a given score based on the outcome for each variable (for example, we attribute a low score when returns are expected to be lower than -10%, and a high score when returns are expected to be higher than 10%). Finally, we weight the scores for each variable to produce a summary score for each asset (one for US equities, one for EM equities, etc.), where the weights are based on what we consider to be consistent with the preferences of a prudent, total return-seeking investor.

This information in this section contains projections or other forward-looking statements regarding future events, targets or expectations, and is only current as of the date indicated. There is no assurance that such events or expectations will be achieved, and actual results may be significantly different from that shown here. The information is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons.

Portfolio Perspective

Our analysis indicates that the remainder of 2021 will show continued positive momentum for equities and we are optimistic that a more gradual and digestible rise in rates will ensure a friendly environment for diversified portfolios. As compared with Q2 2021, the shape of the fan chart for the expected outperformance of a risk bull portfolio (80% equities / 20% bonds) still looks attractive in the near-term, but the risks have a decidedly downward skew as we move towards the end of the forecast period. The uncertainty around the level of inflation and the speed of its rise, and perhaps more importantly, the central banks' reaction to it, presents possible headwinds to risk assets and traditional fixed income as outlined in our overheating and tight money scenarios.



Forecasts begin in Q2 2021 and were calculated as of June 9, 2021. Source: BNY Mellon GEIA and Fathom Consulting.
The solid line shows the good recovery upside scenario mode and the dashed line is the mean or probability-weighted average forecast across all four scenarios. The darker bands towards the center of the fan chart show the more likely outcomes, while the lighter bands show progressively less likely outcomes covering 90% of the forecast distribution. The width of the fan chart shows the level of uncertainty and when the bands below the central forecast are wider than those above shows the balance of risks lies to the downside.

EQUITIES

US Equities: Overall, we believe equities remain the most attractive option in risk assets. This quarter's heat map maintains an attractive score for US equities. We expect the remainder of 2021 to be characterized by sector and stock selection as markets transition to a mid-cycle theme, continued economic strength and stronger focus on valuations. With the Fed removing inflation tail risk we see a broadening of sectors to include cyclical, secular growth and healthcare. Expect further yield volatility if inflation data come in hot as the market has already priced in mild inflation reads in the long term. Nevertheless, equities will be supported by real growth and mild upward moves on yields even if the second half is a bit of a struggle.

International Developed Equities: The path of recovery for international developed economies, particularly Europe, is expected to be similar to that of the US, albeit slightly delayed. European economies suffered more severe lockdowns in Q4 2020 and Q1 2021, which delayed the economic recovery, but given that markets lead the real economy, we expect European equities to have potential for a strong second half. Many of the tailwinds remain including better valuations compared to US equities and an economy which benefits from trade and strong consumer, further reinforcing the importance of this asset class for diversified portfolios.

Emerging Markets (EM) Equities: The pandemic has changed the risk-reward balance for EMs, and there is significant dispersion of regional and country outcomes. From a macro standpoint, we distinguish (and constantly monitor) EM winners and losers based on three factors: 1. Speed of vaccine rollouts vs new infections; 2. Monetary and fiscal policy space; 3. Idiosyncratic, country-specific risk factors. For countries that come out of lockdowns, cyclical sectors will fare well. North Asia will likely continue to attract flows as the opportunity set is wide in both growth and value space. Long-term investors can tap into the sectoral opportunities in China that lie in the intersection of two trends: China's high-quality consumption focused growth mandate, and digitalization's more permanent change in consumer behavior. This presents opportunities in sectors such as e-commerce, online education, healthcare, internet stocks (with strong cash generation), tech, and insurance. We expect countries such as Mexico, Chile, and Brazil to benefit from elevated commodity prices and demand for real assets, As always, we suggest a more nuanced approach to EM investing and investors to remain on top of idiosyncratic developments. More stressed EMs like Turkey and South Africa that have high dollar debt, external financing needs and current account deficits may come under severe pressure if there is a sustained tightening in global financial conditions in the next few months.

FX

US Dollar and Foreign Exchange (FX): Compared to Q2, we have increased the upside risk to the USD due to A) two inflationary scenarios ('tight money' and 'overheating') which make up 45% probability and B) the Fed's June communication which weakened the market's USD bearish conviction somewhat. That said, we expect higher vol as the rate hiking cycle is accelerating in many EM countries and real yields are still at depressed levels.

ALTERNATIVES

Alternatives: As markets navigate the risk of higher inflation and higher volatility, we believe alternatives offer volatility and hedging protection. Precious metals remain attractive in the face of higher inflation risk, and gold in particular continues to be a hedge against short-term drawdowns in the case of a market shock. Real assets such as real estate, infrastructure commodities outperform during inflationary upswings. With heightened inflation and rate risk alternatives can provide uncorrelated exposure to traditional asset classes.

FIXED INCOME

Developed Sovereign Debt: The early phases of economic expansion and revival of inflation expectations has driven sovereign yields higher around the globe, with the US Treasury seeing the swiftest rise. Although yields have consolidated in Q2, particularly in the US, the rise in inflation expectations globally is likely to put pressure on DM sovereign bond prices through the end of 2021 and into 2022. That said, with the US outgrowing other DMs, Treasury yields remain more attractive than most international sovereigns on a relative basis. Nevertheless, we expect upside in sovereign yields as inflation prints globally reflect bottlenecks. An underweight posture is still prudent although US TIPS could offer opportunity in a rising inflation environment.

Global Investment Grade Credit (IG): This quarter, our outlook on the credit space has become more widely dispersed among scenarios and we remind the reader that the scores and attractiveness on our heat map are based on both price return potential, income potential and future hedging properties.

The overall US IG remains on the less attractive side of the scale given the limited price return potential from here. As the forecast period moves forward into 2022, there is some risk of a widening in spreads while risk assets adjust to the slow removal of the policy support backstop. The same holds true for European investment grade credit, although policy support has been less aggressive and broad-sweeping and the region is likely to experience a delayed, and slightly less robust recovery than the US.

Global High Yield Credit (HY): Much like the investment grade space, we do not see much change in the very near-term for high yield credit, as default risk has plummeted. Next year could become more challenging though. Too-hot inflation data, a hawkish Fed, and rising yields could pose risks to the high yield space as the cost of borrowing rises. Although the score for US HY at the end of the forecast remains largely unchanged from last quarter, we recognize that the balance of risks has changed to reflect the possibility of downside price risk in 2022. European HY carries a lower score given income returns are expected to provide less of a cushion to the negative price returns we expect over the whole forecast period. Both regions remain attractive as income generating instruments and investors must weigh their objectives accordingly.

Emerging Market Debt: Given expectations for higher US rate volatility, we suggest a diversified approach to allocation within EM local, HY and sovereign USD debt. Within local currency sovereign debt, we favor those countries where central banks tend towards easy policy bias and/or real rates are at attractive levels (countries such as Indonesia and Mexico). Within hard currency corporates, from a macro standpoint, we prefer HY to IG due to their high beta to a continued cyclical recovery with attractive valuations compared to IG and less sensitivity to higher interest rates in the US. Within hard currency sovereigns, we favor HY names with minimal risk of default (countries such as Egypt and Kenya with secured IMF assistance).

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

Past performance is no guarantee of future results.

The companies and/or sectors indicated should not be construed as recommendations to buy or sell a security.

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.

FORECASTS

Projections or forecasts regarding future events, targets or expectations, are only current as of the date indicated. There is no assurance that such events or expectations will be achieved, and actual results may be significantly different.

RISKS

Equities are subject to market, market sector, market liquidity, issuer, and investment style risks, to varying degrees. **Bonds** are subject to interest-rate, credit, liquidity, call and market risks, to varying degrees. Generally, all other factors being equal, bond prices are inversely related to interest-rate changes and rate increases can cause price declines. **Commodities** contain heightened risk, including market, political, regulatory, and natural conditions, and may not be appropriate for all investors. **High yield bonds** involve increased credit and liquidity risk than higher-rated bonds and are considered speculative in terms of the issuer's ability to pay interest and repay principal on a timely basis. Investing in **foreign denominated and/or domiciled securities** involves special risks, including changes in currency exchange rates, political, economic, and social instability, limited company information, differing auditing and legal standards, and less market liquidity. These risks generally are greater with emerging market countries. **Small and midsized company stocks** tend to be more volatile and less liquid than larger company stocks as these companies are less established and have more volatile earnings histories. **Currencies** are can decline in value relative to a local currency, or, in the case of hedged positions, the local currency will decline relative to the currency being hedged. These risks may increase volatility. **Alternative strategies** may involve a high degree of risk and prospective investors are advised that these strategies are appropriate only for persons of adequate financial means who have no need for liquidity with respect to their investment and who can bear the economic risk, including the possible complete loss, of their investment. The strategies may not be subject to the same regulatory requirements as registered investment vehicles. The strategies may be leveraged and may engage in speculative investment practices that may increase the risk of investment loss. Investors should consult their financial professional prior to making an investment decision.

INDEX DEFINITIONS

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 Barclays US Corporate High Yield:** covers the universe of fixed-rate, non-investment grade corporate debt in the US. **Bloomberg Barclays 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.

STATISTICAL TERMS

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. **Z-score:** number of standard deviations from the mean a data point is.

OTHER

R: the number of people COVID-19 is transmitted to per person. **QE:** quantitative easing. **WTO:** World Trade Organization. **Synthetic credit:** non-cash assets that obtain exposure to a portfolio of fixed-income assets. **FOMC:** Federal Open Market Committee.

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