Mercer

Inflation protection

Hope for the best, but build robust portfolios

Building a robust portfolio has gotten tougher

The last two years have been full of extraordinary challenges. Following the outbreak of the pandemic, the lockdowns and restrictions imposed by governments around the globe hit economies and markets hard and fast. What followed was unprecedented fiscal and monetary support to stop an economic meltdown not seen since the Great Depression. Pharmaceutical companies worked tirelessly to provide a solution, and once found, regulators swiftly approved and health services quickly distributed vaccinations, initially in developed countries but increasingly in emerging countries as well.

However, the short, sharp recession followed by the recovery has brought about another potential challenge — **the reemergence of an old foe, inflation.**

The question is whether this post-reopening bout of inflation will persist and, if so, how it will affect portfolios. There has been no shortage of opinions on the future trajectory of inflation. The Federal Reserve and other major central banks believe the current rise is transitory and inflation will fall back down to normal levels. However, inflation is notoriously hard to predict. It is driven as much, if not more, by collective psychology as any conventional mathematical formula. While inflation expectations remaining anchored is still our base case, it is far from certain and definitely less certain than before the pandemic.

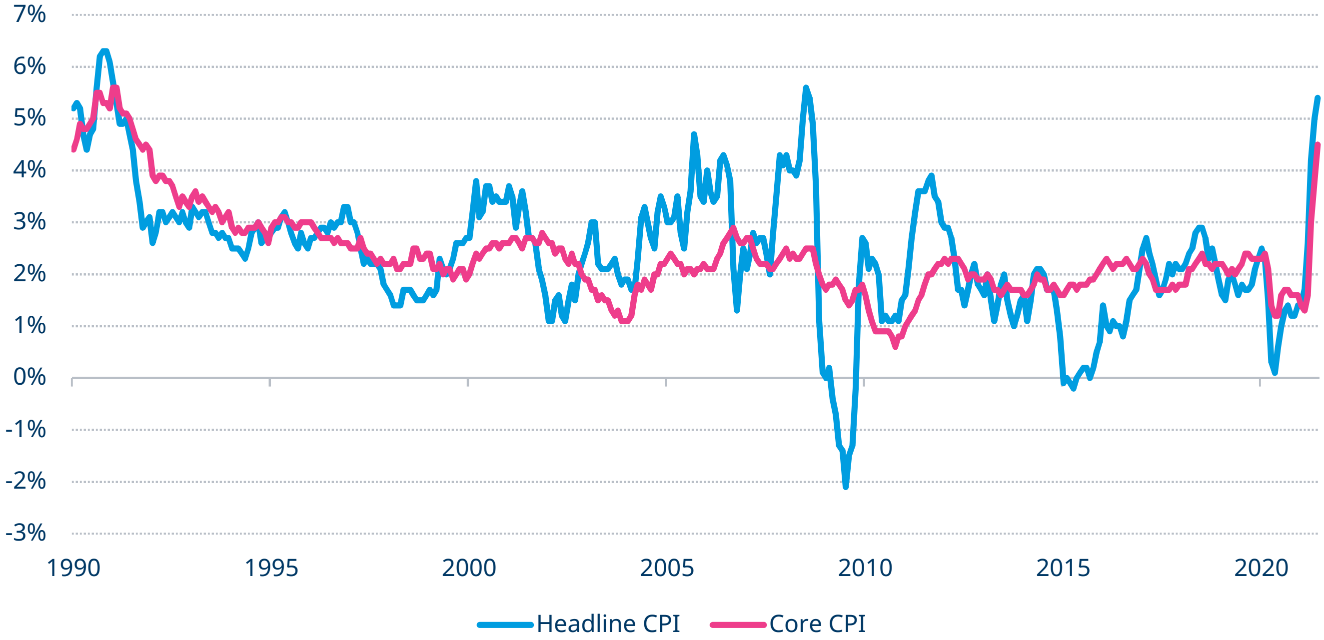
Portfolio construction needs to reflect this increased risk. Traditional portfolios, dominated by equities and bonds, have performed exceptionally well through the disinflationary environment over the last decade. But in an environment of persistently higher and more volatile inflation, they would likely experience a negative impact.

We discuss the implications for portfolios under a range of possible scenarios for economies and markets as well as the scenarios' impact on a broad range of asset classes. Inflation is clearly not a homogenous phenomenon but appears in different shapes depending on the economic environment. As such, it cannot be addressed with a silver-bullet, single-inflation-protecting strategy. We find the solution, for our portfolios at least, is a diversified blend of strategies that seek to provide broad inflation protection in a number of different scenarios. The lessons learned can be tailored to investors' respective portfolios and investment objectives, as we demonstrate in our final section.

Why are inflation worries resurfacing now?

Since mid-2020, inflation has risen sharply. As countries whose vaccination rollouts had reached critical mass reopened their economies, the sudden release of pent-up demand boosted by stimulus and unconditional handouts ran into supply bottlenecks. Consequently, we have witnessed shortages in goods across the spectrum — from semiconductors and lumber to garden sheds and used cars. This was compounded by the formula base effect — year-over-year inflation figures are still comparing to periods of lockdown or depressed economic activity. The end result is higher inflation. In fact, US inflation reached a three-decade high at the end of Q2 2021.

Figure 1. US consumer price inflation, year-over-year



Source: Bloomberg, Mercer. Data as of June 30, 2021.

However, this rise in itself is not necessarily a structural reason to worry about inflation risk. We believe the recent rise in inflation will level out and inflation will gradually fall back toward central bank targets. Supply shortages will dissipate as production picks up, continued global vaccination efforts will reduce labor shortages and the formula base effect will disappear. This is exactly why central banks describe the inflation surge as being transitory.

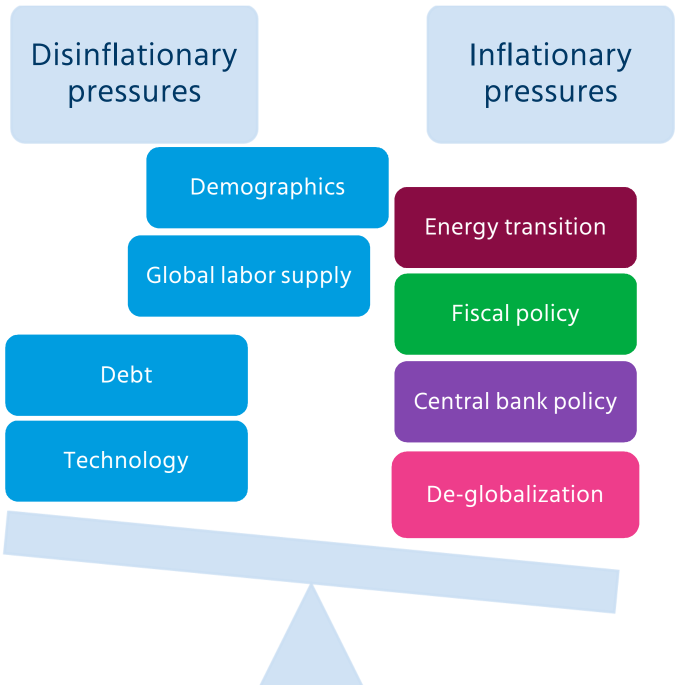
This relatively sanguine base case is not the only possible future state of the world, of course. Investors are concerned about a less benign turn of events, as evidenced by the daily avalanche of opinion pieces in the financial press and a sharp increase in investor interest in inflation-linked bonds, whose exchange-traded funds have seen massive inflows in 2021.[1]

[1] Bloomberg. "ETF Fund Flows," available at https://www.bloomberg.com/graphics/etf-fund-flows/?srnd=fixed-income.

What fuels our concerns over higher inflation risk and wider tail outcomes is not so much this short-term spike in inflation seen in 2021 as it is the weakening of long-term secular, disinflationary forces in the background. The near-term rebound in inflation is merely a potential catalyst to knock loose the psychological anchor formed by central banks' efforts of the 1980s and supported by globalization and technology.

Central banks now appear to be putting as much or more weight on economic and employment outcomes as on inflation-fighting credibility. Fiscal authorities seem less concerned with the need for fiscal discipline and balancing budgets after periods of largesse, even though some countries have at least started to make an effort to reduce deficits. More broadly, the populist renaissance over the last decade has seen globalization, with its downward force on the prices of manufactured goods, under pressure. We expect technological progress to continue to provide a disinflationary impulse, but we believe the push for energy transition and higher sustainability credentials in end products will also likely prove inflationary.

Figure 2. Disinflationary and inflationary pressures



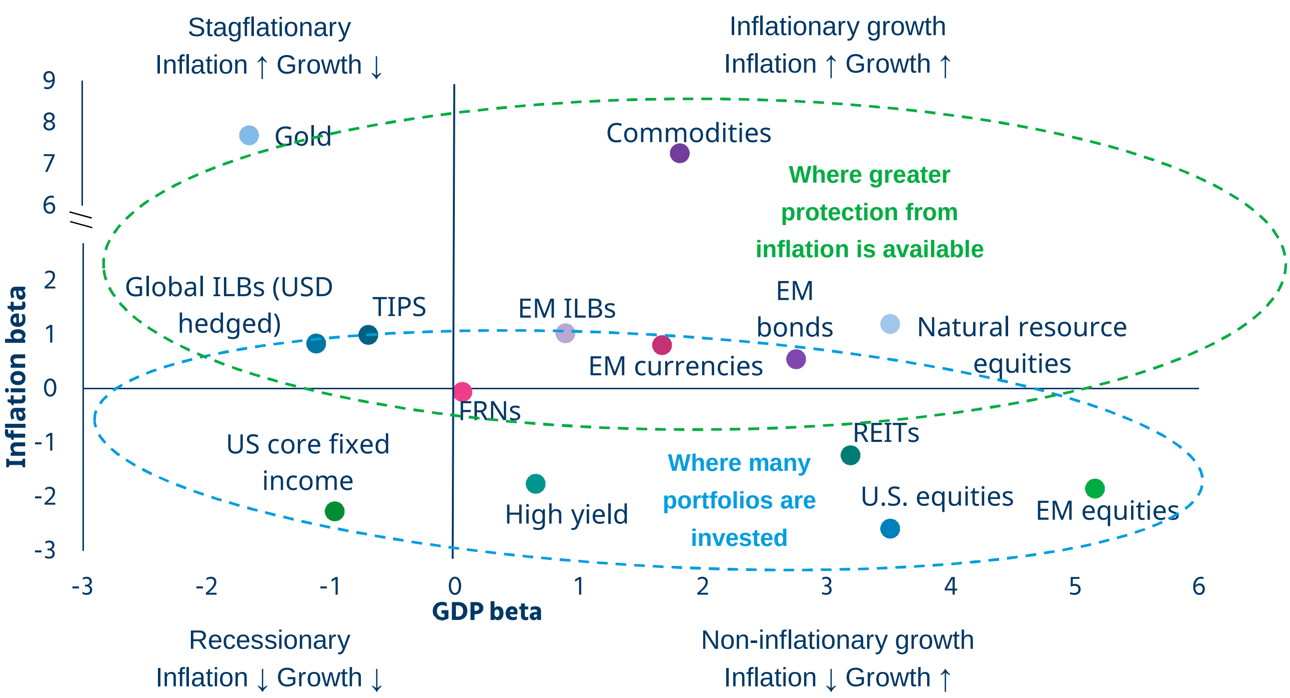
What implications would structurally higher inflation have for conventional portfolios?

Many portfolios have been constructed during and for disinflationary environments. Dominated by equities and bonds and diversified into asset classes like private equity, real assets and more aggressive credit-oriented fixed income strategies, they have performed strongly throughout the past two decades. The secular trend of declining yields increased discounted values of dividends and coupon payments.

Furthermore, portfolio efficiency was supported by the typically negative correlation between equities and duration, especially in major stress events, when it was needed most. With inflation low and cyclical, rising inflation was associated with economic growth that benefited equities and hurt government bonds due to central banks tightening policy preemptively and vice versa. However, the market reaction to rising inflation is far less positive when inflation is already high, and, at this point, just when investors do not want it, correlations can become positive again.

Adding a less predictable inflation environment now increases complexity for portfolio construction, as the asset allocator needs to think about inflation sensitivity ("inflation beta"), not just growth sensitivity ("GDP beta"). Although some portfolios will employ inflation protection through investing in TIPS or index-linked gilts which also come with limitations, few portfolios appear comprehensively hedged against inflation risks.

Figure 3. Inflation sensitivity of asset classes



Source: PIMCO. Data as of March 31, 2021.

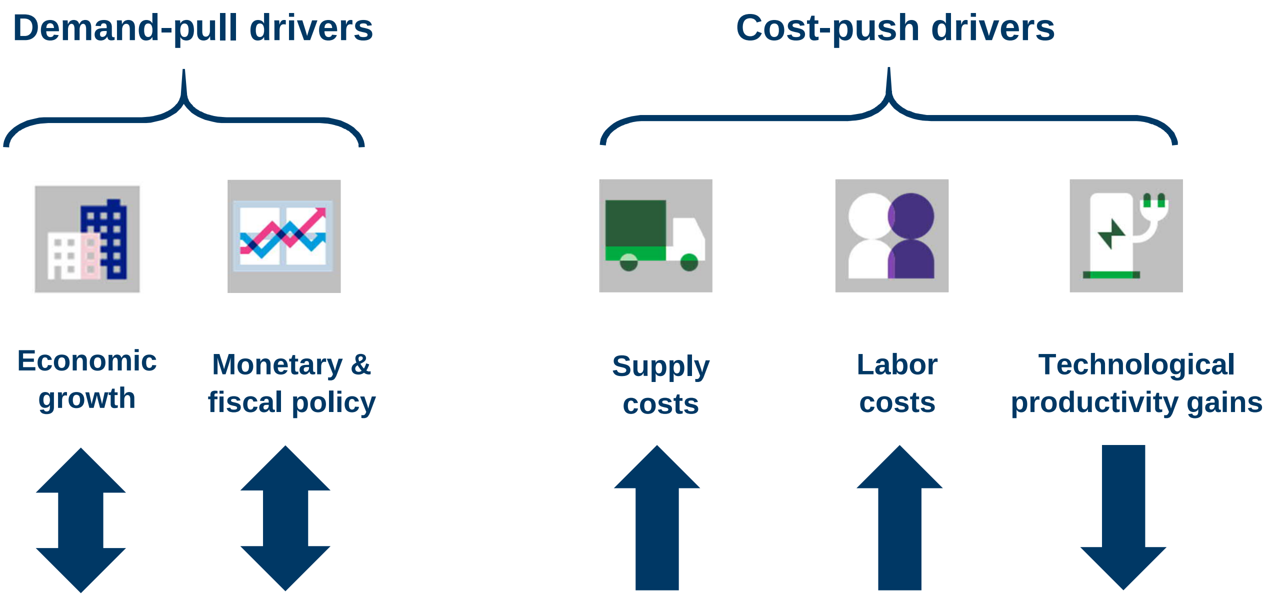
Different futures

Scenario analysis is particularly useful at times like these, when the probability of a regime shift — specifically, a shift to a higher-inflation regime — has increased. History has shown us how frequently regimes have shifted between secular inflation and disinflation.[2] This has informed our

[2] See Appendix 2.

decision to allow for future inflation regimes to be materially different from that of the last four decades, even though a return to a benign disinflationary environment is also a possibility.

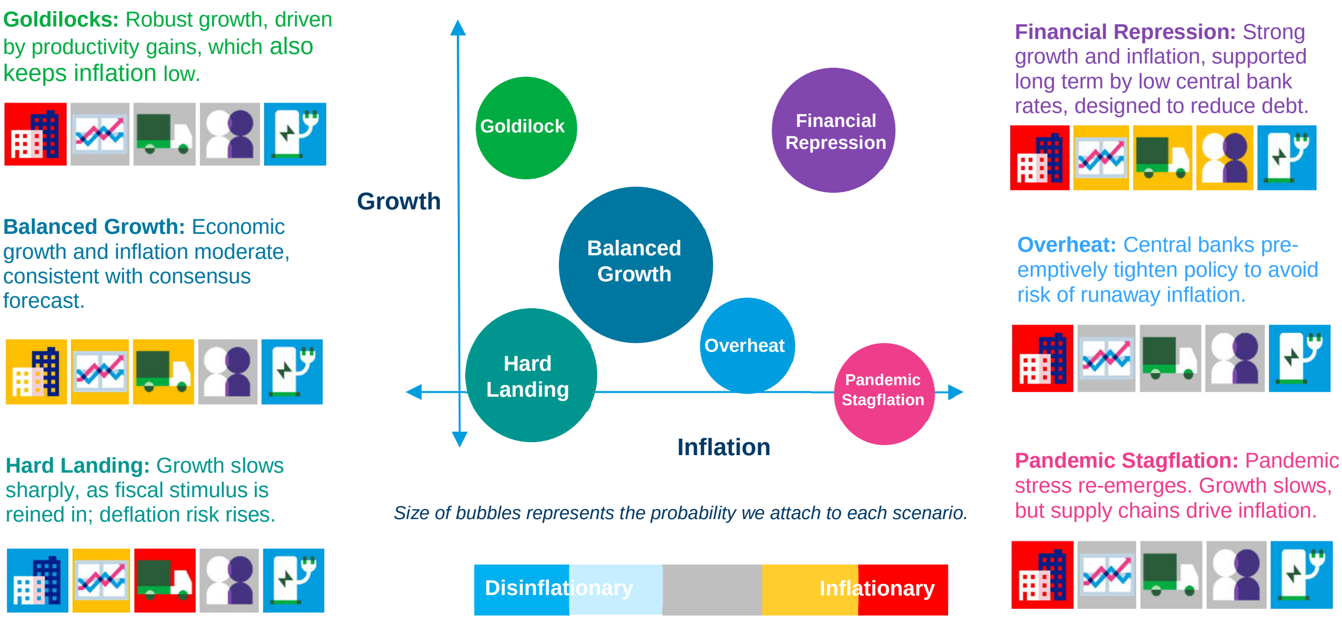
Figure 4. Demand-pull and cost-push drivers



Source: Mercer.

Below, we consider different scenarios of how economies and markets could behave under different conditions. These are forward-looking assessments set over a three-year time horizon. They span inflationary and disinflationary conditions, cost-push and demand-pull drivers of inflation, and strong and weak growth, factoring in the influence of central bank and government policy.

Figure 5. Scenarios of how economies and markets could behave under different conditions[3]



Source: Mercer. Expected returns are hypothetical average returns of economic asset classes derived using Mercer's capital markets assumptions. There can be no assurance that these returns can be achieved. Actual returns are likely to vary. Please see important notices for further information on return expectations. Data as of June 30, 2021.

Strategies to manage different economic environments

The heat map below summarizes how we expect different strategies to perform across these different scenarios over a three-year time horizon.

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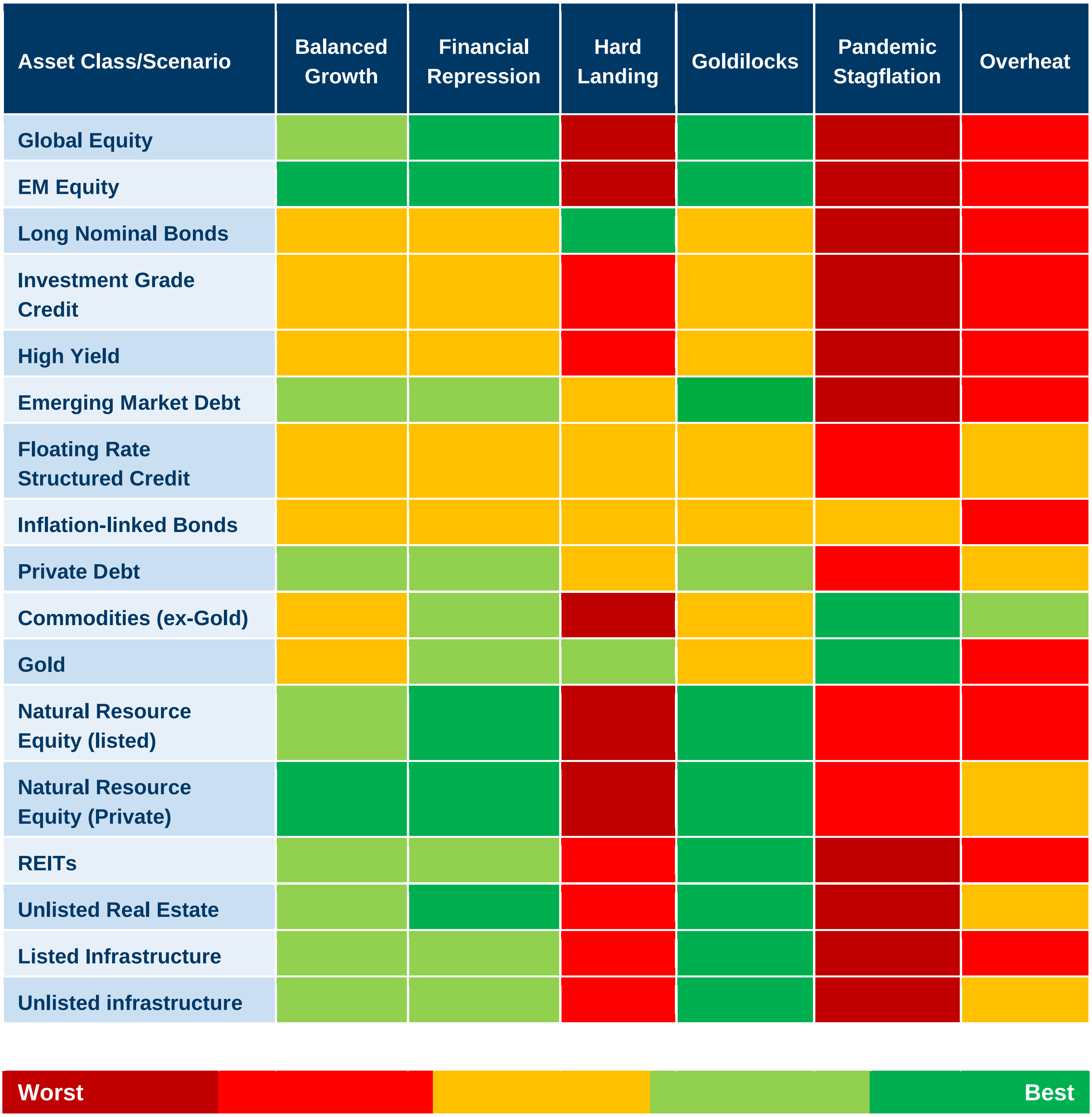
[3] Please see Appendix 1 for further details on the different economic scenarios

Figure 6. Asset class heat map



Source: Mercer. Expected returns are hypothetical average returns of economic asset classes derived using Mercer's capital markets assumptions. There can be no assurance that these returns can be achieved. Actual returns are likely to vary. Please see important notices for further information on return expectations. Data as of June 30, 2021.

The table demonstrates the exposure of traditional portfolios — concentrated in the asset classes toward the top of the table — to the more severe inflationary scenarios, at least in the short term.

Most portfolios are diversified into asset classes that are better positioned for inflation risk — for instance, via real estate or REITs — but that protection is typically for longer-term scenarios and those more reliant on growth, such as under the **financial repression** scenario.

A starting point is to diversify that inflation protection. The table highlights that there is no “silver bullet,” no single asset class solution that deals with inflation as a “one-stop shop.” Even inflation-linked bonds, which may appear as the most intuitive solution given their contractual link to inflation, do not perform well in any of the short-term scenarios. This is because, in the near term, they are more exposed to changes in real rates than to changes in inflation expectations. Over the longer term, the inflation linkage strengthens, but in many markets, investors are locking in negative real rates by investing in inflation-linked bonds. We see inflation-linked bonds as part of the toolkit, but more tools are needed.

Investors could strengthen the growth-inflation relationship through strategies such as **natural resource equities**, **active commodity strategies** or **core**, **monopolistic infrastructure**, which thrive in a growth environment, where demand faces real resource constraints.

Where portfolios are typically most vulnerable, however, is in the more bearish scenarios, in which inflation is not transitory and central banks need to respond. In a rising interest rate environment, such as our **overheat** scenario, floating rate strategies, such as **structured credit (for example, asset backed securities and leveraged loans)**, or some **private debt issues** could fare better than duration-heavy bonds. We note, however, that this “benefit” is constrained to the extent that rates increase with inflation — rates are clearly below inflation today.

The scenario few portfolios would be well-positioned for is **pandemic stagflation**. Returns generated in this scenario by long-term assets like real assets or natural resource equities would be heavily dependent on the extent to which market fears of inflation translate into higher discount rates and lower valuations. We expect **commodity-related strategies** or **gold** to provide more reliable protection. The former, because stagflation is often associated with cost-push inflation, of which commodity prices tend to be a key driver. The latter due to its safe-haven characteristics and higher sensitivity to inflation when accelerating from already-high levels. Actively managed macro hedge fund strategies with a focus on commodities could also be well-positioned to pick up such momentum.

Building inflation protection into your portfolio — the solution depends on your criteria

As there is no one silver-bullet asset that protects against all inflation scenarios and no two starting portfolios look alike, there is no single solution. Investors and their advisors need to discuss their clients' individual situations and needs to determine appropriate inflation protection.

More generically, the mix of assets suited to the investor depends on its specific criteria, such as:

- What inflation-sensitive assets already exist in the portfolio, such as equities and real assets
- Over which time horizon these inflation-sensitive assets provide protection
- Under which economic scenario the portfolio is most vulnerable
- The type of inflation protection needed; that is, general CPI or specific types (education, healthcare)
- The liquidity budget and its impact on the ability to invest in private assets that have longer lock-up periods
- The governance budget and thus tolerance for complexity and monitoring of strategies
- The importance of ESG and nonfinancial considerations

On the subject of ESG, some of the suggested strategies are associated with higher emissions and present a dilemma for clients looking to manage climate-transition risk and decarbonize portfolios over time. Careful strategy selection and tailoring can manage emissions; for instance, controlling the fossil fuel exposure in a commodity strategy or investing in gold strategies that adhere to the Responsible Gold Mining Principles framework. Investors also need to balance positioning portfolios for higher inflation risk in the medium term while maintaining their long-term focus on decarbonizing portfolios — we refer to de-carbonization-at-the-right-price (DARP).

Conclusion

For the first time in a generation, investors need to seriously consider inflation. It has not been a concern for those based in developed markets for many decades, but the future will not be like the past. Although some disinflationary pressures remain, a number of factors have shifted in the past 18 months. The march of globalization has stalled, governments are engaging in huge spending programs and central banks have loosened their price-stability targets. The range of scenarios for inflation in the future has increased, and scenario analysis can provide insight into the risks to portfolios.

We believe **investors should review their inflation protection**, noting the following:

- **Inflation is not a homogenous phenomenon** — it can manifest in different ways, and the risk posed by different scenarios evolves over time.
- **There is no silver-bullet strategy** that works all the time and across all scenarios — a diversified exposure across a range of assets is a more pragmatic solution.
- Traditional portfolios (dominated by equities and fixed income) are ill-suited for inflation.

Most sophisticated, institutional portfolios already have assets that protect against growth-oriented and/or long-term inflation scenarios, such as infrastructure or real estate, which they could complement with commodity-oriented strategies. Other inflationary scenarios, especially stagflation, leave most portfolios vulnerable. Here, commodity-oriented strategies and gold may prove valuable additions to portfolios. Scenarios in which inflation is met with an aggressive rate response leave portfolios vulnerable to duration risk. They are first a reminder to revisit traditional downside protection sleeves, but they also highlight the potential benefits of floating-rate fixed income assets to portfolios.

Ultimately, the mix of assets appropriate for an investor will depend on a range of factors, including the investor’s existing asset mix and time horizon, under which scenarios the portfolio is most vulnerable, and other investor-specific constraints — such as climate transition and ESG considerations. Investors should discuss their individual circumstances with their consultants.

Appendix 1. Mercer's economic scenario descriptions

Our base case is **balanced growth**, where economic growth and inflation both moderate over time, consistent with consensus forecast.[4] This assumes the current level of inflation is indeed transitory, even if inflation remains slightly elevated. Under this scenario, rates normalize, but the need for aggressive response is avoided.

The **financial repression** scenario shares similarities with the 10 years following World War II, the last time government debt was at today's level. In both cases, an adverse external event (war and pandemic) required large government outlays. Rather than repaying the debt with higher taxes, it is monetized by central banks holding rates low in spite of sustained high inflation, which supports overall growth.

The **hard landing** scenario assumes a return to fiscal austerity, not necessarily as a deliberate choice but because of political gridlock. This would likely lead to a sharp slowdown in growth and falling inflation.

The **goldilocks** scenario is a more optimistic version of the balanced growth scenario, in which a post-pandemic productivity boom, driven by the accelerated digitalization of economies and strong private and public investment, likely leads to sustained growth above consensus and low inflation.

The **overheat** scenario incorporates the classic reaction function of central banks tightening policy preemptively to avoid runaway inflation, which has often triggered recessions in the past.

The severe bear case that captures the most worrisome inflation impact is **pandemic stagflation**. Here, we have a scenario in which the COVID-19 situation deteriorates again because of waning vaccine efficiency and/or vaccine-resistant strains. New lockdowns lead to another growth collapse and simultaneously compound the already-severe supply chain stress driving inflation higher — the nightmare scenario of simultaneous recession and high inflation.

This last scenario highlights the need to consider both the likelihood and impact of different scenarios. Pandemic stagflation is a low-likelihood but high-impact scenario.

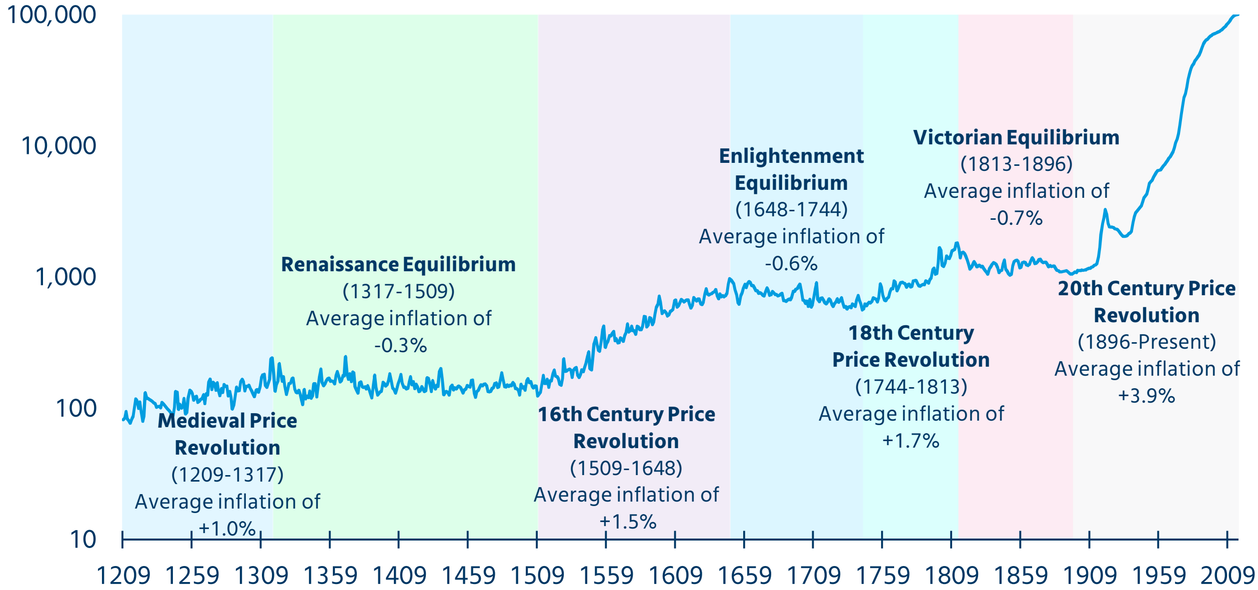
[4] We use the latest growth and inflation forecasts from Consensus Economics©.

Appendix 2. Taking the long view: A brief history of inflation

We suffer from recency bias — we are better at remembering the immediate past, which can lead us to believe that recent trends can be extrapolated. Current inflation is a good example. We have lived in a disinflationary environment for decades, with many of us having grown up or come of age with inflation firmly anchored around the 2% mark —the inflation level central banks in many developed countries target. It is therefore tempting to believe that we live in a new era in which structurally higher inflation will never return no matter how unorthodox monetary and fiscal policy becomes.

The post-global financial crisis experience, in which unprecedented stimulus did not lead to the feared return of consumer inflation, may have strengthened this conviction. However, it is worth taking a longer view to see how inflation has moved in long, slow-burning cycles, making four decades of low inflation not long at all. At times, inflation was driven by demand exceeding the economy's productive capacity and at other times by random supply shocks. A regime change is entirely possible, and using history as a guide, it is virtually certain — it's just a question of when.[5]

Figure 7. History of inflation path (England, 1200-2016, index at 100,000 in 2015)



Source: MAN Institute (2021), Inflation Regime Roadmap. As of June 2020. Original data source: David Hackett Fischer (1996) – The Great Wave: Price Revolutions and the Rhythm of History – Figure 0.01. Recreated from Bank of England data.

Inflation is as old as the hills. Whether Roman emperors, medieval kings, military dictatorships or parliamentary democracies, governments have always tampered with the money supply, offering "bread and games" or "guns and butter" — to appease the masses with "free" goods or to finance

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[5] For more details on inflation history, see the MAN Institute "Inflation Regime Roadmap," 2020, and David Hackett Fischer's *The Great Wave: Price Revolutions and the Rhythm of History*, 1996.

costly wars without raising taxes directly. This often led to initial economic booms, followed by demand-pull inflation and ultimate supply constraints.

During the heyday of the Middle Ages, from late-12th-century Europe, a baby boom by a confident population initiated a long inflationary cycle that would last more than 150 years, driven by rising prices of food and firewood and accelerated by governments reducing the metal content of coins — the medieval version of quantitative easing. Fast-forwarding to more recent history, the 1960s saw a similar combination after World War II. A rising and confident population with a can-do attitude, high government deficits and loose monetary policy that financed both the Vietnam War and Great Society programs set the scene for demand-pull inflation that lasted “only” a bit over two decades.

Just when demand-pull inflation had gained pace in the 13th century, the Dark Ages of the 14th century delivered massive unexpected supply shocks and thus cost-push inflation. A major change in weather patterns, possibly caused by a volcanic eruption, destroyed several harvests in a row, sent food prices soaring and led to one of the worst famines in history. A few decades later, the medieval plague wiped out around half the population[6] of Europe, and ensuing labor shortages put enormous pressure on wages. Pressing the fast-forward button again, oil price shocks came out of the blue in the 1970s, creating yet another perfect storm of a supply-side shock just when demand-pull inflation created throughout the 1960s was already running hot — the dreaded 1970s-style stagflation. Time will tell whether the COVID-19-induced supply shock across many different sectors is temporary or the start of a new trend.

History, of course, has also seen periods of low and stable inflation that lasted from decades to almost a full century, the Enlightenment Era and Victorian Age being prime examples. For the latter, from the early 19th century onward, we saw a benign combination of unprecedented productivity increases driven by the Industrial Revolution and global trade integration. Governments in the US and UK were wedded to the principles of sound money, fiscal discipline and very limited interference with business decisions, and they took a break from large-scale wars for a change.[7] This led to a century of rising prosperity and stable inflation, sometimes even deflation.

The four decades preceding the COVID-19 shock were not dissimilar. The 1980s and ’90s saw a change to a disinflationary regime as central bank independence increased and inflation mandates became their main focus following the traumatic experience of the 1970s. Government deficits were reined in, and the books were even balanced in some years during the Clinton administration. The prevailing free market ethos that limited government interference with business decisions, rapid globalization of supply chains, and extraordinary technology gains — such as the personal computer and internet — created the conditions for four decades of disinflation and massive

[6] Estimates vary, and regions were affected differently, with some believed to have lost up to 60% of the population (https://www.historytoday.com/archive/black-death-greatest-catastrophe-ever).

[7] The US Civil War is the obvious exception — but it lasted less than five years and was geographically confined.

improvement in living standards. Not even the unconventional monetary policy response to the financial crisis could disrupt these.

The key takeaway from this express journey through history is that inflation has always been around and has always come in inflationary (or disinflationary) cycles, which can be very long. The last 40 years are just a blip when we look back at an entire millennium. The recent disinflationary cycle is certainly not the shortest we have seen and there is hence no reason to believe that the next decades cannot be materially different from the previous ones. Historical experience can be dismissed as irrelevant due to the completely different economic and political environment that prevails now compared to the past. There is indeed merit in not extrapolating naively, yet the world looked as modern to the Victorians compared to the Dark Ages as the current era looks to us compared to the pre-internet era. Just because we have been fortunate enough to live through a multi-decade disinflationary cycle until now does not mean we have reached the end of history.

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