For professional investors - Marketing communication - March 2022

THE INFLATION REVIVAL

BNP PARIBAS
ASSET MANAGEMENT

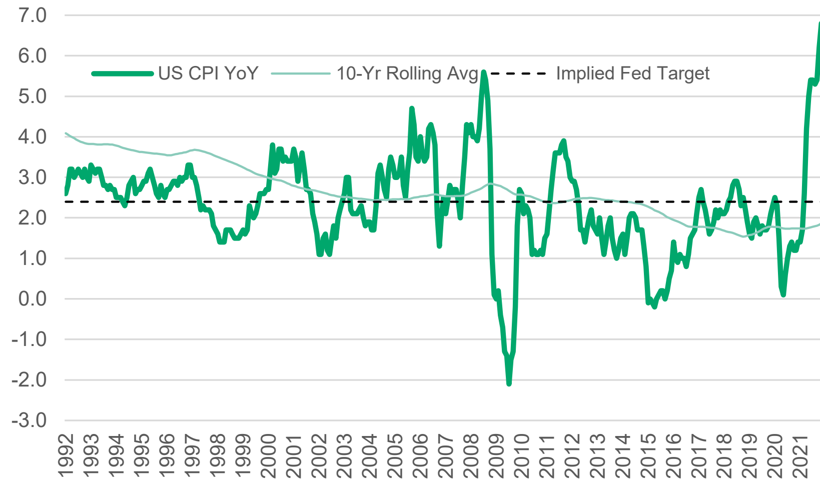
The sustainable investor for a changing world

INTRODUCTION

Inflation has rebounded from the pandemic-induced recession lows with a vengeance. In the US, the pace of the yearly headline consumer price index (CPI) accelerated to 7.5% in January, a 40-year high. Similarly in the euro area, the annual rate of the annual headline harmonised index of consumer prices (HICP) is expected to reach 5.8% in February, the highest level in its entire 20-year lifespan.

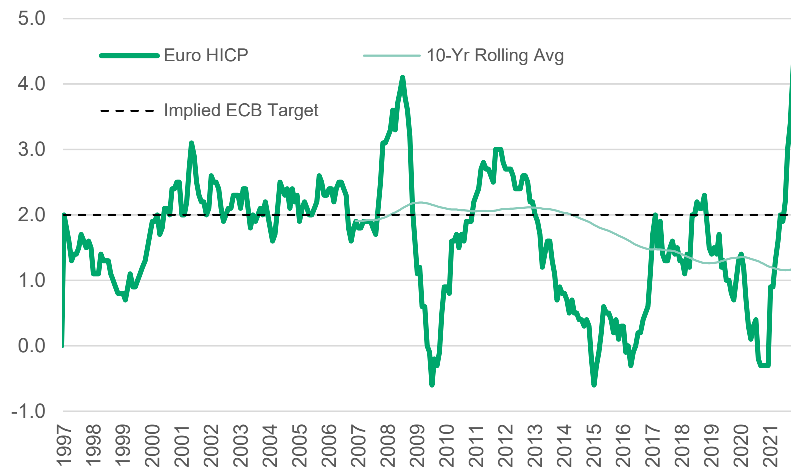
Russia's invasion of the Ukraine is a new exogenous supply shock. It will further exacerbate inflationary pressures, reduce real disposable incomes with negative consequences for growth.

Exhibit 1: Changes in US consumer price inflation (% year-on-year), 1992 through 2021



Source: BNPP AM, Bloomberg, as of 31 December 2021

Exhibit 2: Changes in euro area HICP inflation (% year-on-year), 1997 through 2021



Source: BNPP AM, Bloomberg, as of 31 December 2021

At the beginning of 2021, inflation was still thought to be "transitory" by many. Distortions coming from the pandemic, be it supply bottlenecks or reopening effects, were the major drivers of inflation. These sources of inflation were expected to resolve themselves over time. Yet, successive waves of new COVID infections, uneven vaccination rates and different containment strategies across the emerging and developed economies have led to prolonged supply disruptions.

With the supply-side of the economy unable to meet the surge in stimulus-induced demand, price increases accelerated during the second half of 2021. Skyrocketing natural gas prices seen in the fourth quarter added fuel to the fire. Inflation rates in the US, UK and the euro area were previously forecast to peak towards the end of 2021. Instead, the inflation spikes are materialising at higher-than-expected levels, and are lasting much longer than anticipated.

The resurfacing inflation worries have led to an ongoing debate: is inflation simply taking longer to revert back to the pre-pandemic levels, or is the world progressing to a different inflation regime?

WE WERE IN A DISINFLATIONARY WORLD NOT SO LONG AGO...

After the Great Financial Crisis, unprecedented amounts of quantitative easing did not generate the inflation many had feared. Despite exceptionally accommodative monetary policy, the disinflationary impacts from the balance sheet recession, alongside secular disinflationary forces, kept inflation rates below the Federal Reserve and the European Central Bank's targets. The causes of the disinflationary environment can be attributed to the following factors:

- **Debt** – High debt levels discouraged private sector consumption via Ricardian equivalence[1]; in the euro area, rigid fiscal rules and self-defeating austerity led to higher debt service costs for countries most exposed to the crisis
- **Demographics** – an ageing population, in aggregate still in the saving phase, consumed less and saved more
- **Globalisation** – offshoring allowed cheaper supply chains to replace expensive onshore labour and production
- **Technology** – automation substituted capital for labour; the rise of "superstar" companies suppressed labour bargaining power
- **Inflation targeting** – central banks had adopted inflation targeting frameworks and anchored inflation expectations at low levels

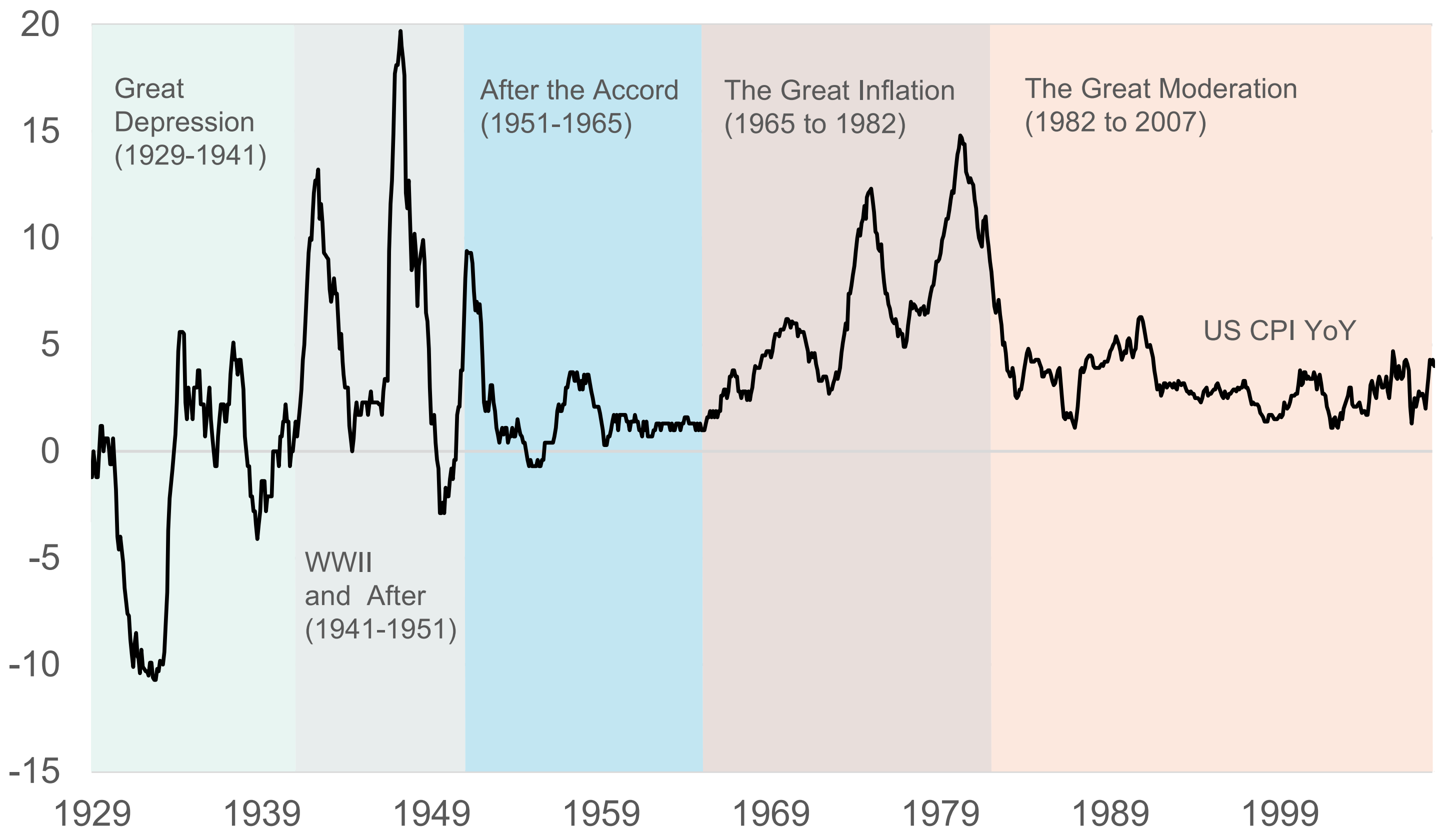
The formation of subjective inflation expectations partly depends on the individual's experiences. It is therefore not surprising that past inflation experience from the decade that followed the Great Financial Crisis might have led some to believe that the recent bouts of higher and longer inflation spikes would eventually fade, and that a period of moderate or low inflation would return.

1. In economics, the theory of Ricardian equivalence states that stimulating an economy by deficit-funded spending will ultimately be ineffective because consumers will reign in their spending in anticipation of future corresponding tax increases.

THE LONGER HISTORY OF INFLATION

However, looking back longer in history, one would realise that we have in fact been living in an almost unbroken period of rising prices since World War II (WW II). History suggests that inflationary and disinflationary cycles wax and wane over varying periods of time. Historical experience also shows that determined reflation policy can defeat deflationary shocks.

Exhibit 3: Inflationary and disinflationary cycles between 1929 and 2000



Source: BNPP AM, Bloomberg, February 2022

The pandemic has sped up pre-existing trends of economic and social transformation, and will likely accelerate fundamental realignments in consumer demand, labour and financial markets, as well as in global economics. It is probably fair to assume that the post-pandemic economic backdrop will look different from that observed during the period of Great Moderation. A return to the multi-decade disinflationary cycle should not be a forgone conclusion.

Instead, economists and market commentators have drawn parallels between the current period and the Great Inflation regime, when inflation began ratcheting up in the mid-1960s and peaked at above 14% in 1980. From a monetary policy perspective, the Federal Reserve (the Fed) back then believed that permanently lower unemployment rates could be "bought" with modestly higher inflation. By the time the Fed grew worried about price pressures in the mid-1960s, it still raised rates only slowly. The Fed fell further behind the curve in the 1970s, given the intense political pressure from the Nixon Administration to keep accommodative policies in place.

Fast forward to today, the Fed has renewed its focus on the labour market, with the goal to deliver a broad-based and inclusive recovery. After years of inflation undershoot in the pre-pandemic world, the Fed adopted, in 2020, a Flexible Average Inflation Targeting (FAIT) framework, signaling its willingness to accept periods of modest inflation overshoot.

On the fiscal side, in the 1960s and 70s, President Lyndon Johnson's deficit-funded spending programmes across a range of social initiatives at a time when the US fiscal situation was already strained by spending on the Vietnam War was one of the culprits for higher inflation.

Today, massive fiscal rescue packages deployed during the pandemic were followed by further plans for infrastructure and social spending, at a time when the economy was already at or close to full employment.

In the 1970s, the US economy saw two disruptive energy crises. The Arab oil embargo in 1973-74 and the Iranian revolution of 1979 both resulted in an oil supply slump. Skyrocketing energy prices generated substantial cost-push inflation, which in turn passed through the chain of production into higher retail prices. We face similar supply-side shocks today: supply chain disruptions limiting the availability of goods, higher energy prices, and labour market shortages in some economies.

SUPPLY SHOCKS THEN AND NOW

Businesses are already passing on the higher input costs to their customers, and there is more evidence of second order effects from higher energy prices. No wonder photographs showing long queues of cars for petrol in the UK in the autumn of 2021 invoked fears of a return to 1970s-style inflation, although the scenes were caused by a severe shortage of delivery lorry drivers, rather than an actual lack of fuel.

The Great Inflation period ended with inflation hitting a peak of more than 14% in 1980, when Fed Chairman Paul Volcker took bold policy steps to rein in inflation. With the benefit of hindsight, the lesson from the 1970s on inflation was that with an economy already primed by an accommodative fiscal and monetary stance, successive transitory inflation shocks could lead to an unanchoring of inflation expectations. But to the policymakers facing the inflation uncertainty at that time, the conclusion was not obvious. Policymakers today face a similar dilemma – tighter monetary policy will not help address the root cause of supply shortages, but could make things worse by undermining the economic recovery. At the same time, leaving monetary policy too loose would risk inflation expectations becoming unanchored.

NEAR-TERM INFLATION OUTLOOK

To be clear, we are not calling for a return to 1970s-style inflation. While there are many similarities between now and the 1970s, there are differences, too. One obvious difference is that today's central bankers are well aware of the lessons of the 1970s, and will strive not to repeat the same mistakes. But that does not make the task of balancing growth versus inflation any easier. After all, the last pandemic of a magnitude equivalent to COVID-19 happened a century ago. There is simply no economic precedent of a global pandemic followed by armed conflict involving major global commodity suppliers in modern history for policymakers and investors to look to. Uncertainty with regard to the future path of inflation remains elevated. In our view, the risk for inflation is skewed to the upside, both from a near-term and a longer-term perspective, making a sustained path of inflation moderately above the central banks' target more likely in major developed economies.

In the near term, we take the view that the US economic expansion is robust, that the economy is essentially at full employment, and that inflation pressures are due to a combination of supply bottlenecks, cyclical factors and structural forces. Crucially, once supply bottlenecks clear and consumption switches back from goods to services, we think the strengthening of the labour market, rising shelter costs, and tightness in commodity markets will prevent inflation from falling back to target.

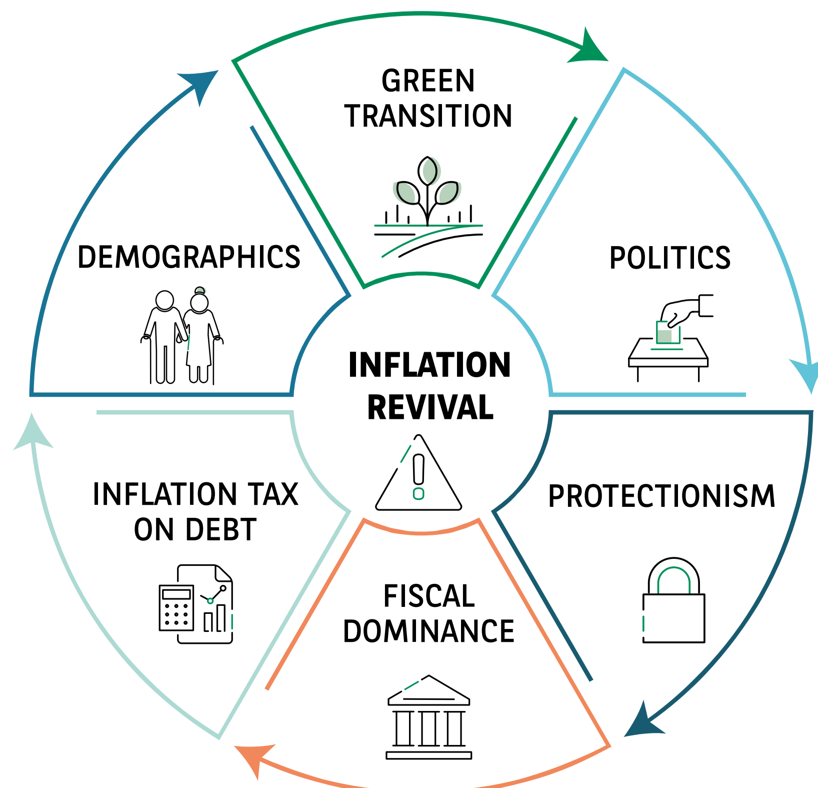
In the euro area, headline Euro HICP prints have consistently surprised on the upside in recent months. The most recent data releases suggest that energy pass-through and second order effects are higher than previously thought. The nature of inflation in the euro area is different from that in the US. Currently, the spike in euro area inflation is overwhelmingly attributable to rising energy prices. This is "cost push" inflation (resulting from an increase in prices of inputs such as raw material and production costs), rather than "demand pull" (where aggregate demand outstrips aggregate supply).

Unlike in the US where support to consumers during the pandemic was provided through direct fiscal transfers, income replacement in the euro area came in the form of furlough schemes, which preserved the employment relationship, and reduced labour market friction in the recovery phase. Indeed, labour force participation in the euro area has already normalised toward pre-pandemic levels. Negotiated wage settlements over the course of 2021 were modest. However, higher inflation, rising minimum wages, and a robust economic recovery may provide impetus for higher wage growth in 2022.

LONGER-TERM CATALYSTS FOR AN INFLATION REVIVAL

In the longer term, while technological advances and digitalisation will likely continue to help contain inflation through automation and improvement in productivity, there are reasons to believe the secular forces shaping the inflation picture are becoming less disinflationary, or even inflationary.

Exhibit 4: Secular forces becoming more inflationary, less disinflationary

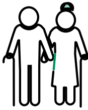


Source: BNP Paribas Asset Management, February 2022

Debt

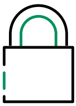
In contrast to the previous crisis (the Great Financial Crisis of 2007-2008), there is today no appetite for austerity; fiscal and monetary policies are working more in tandem than before. This coordination was seen as logical and essential in nurturing the economy back to health during the pandemic. But if central banks find themselves later with no choice but to keep policy easier than they should to accommodate fiscal deficits and to deliver full employment, then their independence could be in jeopardy. At the extreme, investors could start to worry about fiscal dominance[2].

The elevated public debt loads also incentivise policymakers to have a higher tolerance for inflation. The real stock of debt will be reduced over time through financial repression, where inflation will be effectively a tax on investors.



Demographics

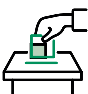
Global demographics are also changing slowly but surely. In the couple of decades following the accession of China to the World Trade Organisation (WTO), we have seen goods inflation plunge in developed economies thanks to the hundreds of millions of workers in China joining the global manufacturing engine. But in recent years, not only developed economies are seeing an ageing population. China is also seeing a demographic reversal, with its working age population set to decline. As more of the global population switches from being net producers to net consumers, competition for productive workers will rise, and wages in turn should increase. Similarly, as more people move from being net savers into the dissaving phase and start to consume more services, global demographics could turn from being disinflationary to inflationary.



Globalisation / Protectionism

The pandemic has revealed the vulnerabilities of global supply chains. Governments are recognising that a number of sectors, such as medical goods, vaccines and semiconductors, have a national security importance that requires a degree of domestic self-sufficiency and protection. Some business sectors are also re-thinking their efficiency-centric "just-in-time" model to incorporate "just-in-case" considerations by improving the responsiveness and resilience of their supply chains. The exercise of building redundancy and reliability into the supply chain will likely encourage re-shoring of manufacturing in certain sectors, protecting domestic capacity from international competition.

In addition, the pandemic has both deepened and highlighted the problem of inequality. At the same time, the pandemic is seen as a prelude to the disasters that the climate crisis can bring to global communities, and as a warning which stressed the urgency of the world's battle against climate change. We see a potential inflationary impact as a by-product of the fight against inequality and the green transition journey.



Inequality & Politics

Income and wealth inequality is disinflationary, since the rich have a higher propensity to save while the poor have a higher propensity to spend. Inequality was already on a worrying widening trend prior to the pandemic, and COVID-19 has exacerbated the problem, as negative economic effects from the lockdowns were borne more heavily by the poor. This paradoxically brought higher consciousness of the inequality problem, which in turn forced a political consensus across the spectrum on the need to combat the increasing income gap, and drove political demands for redistributive fiscal policies and higher wages.

2. Under fiscal (rather than monetary) dominance the size of government debt is such that the primary role of monetary policy is to avoid bankruptcy (rather than to serve as a tool in managing growth, inflation and employment).

Green transition

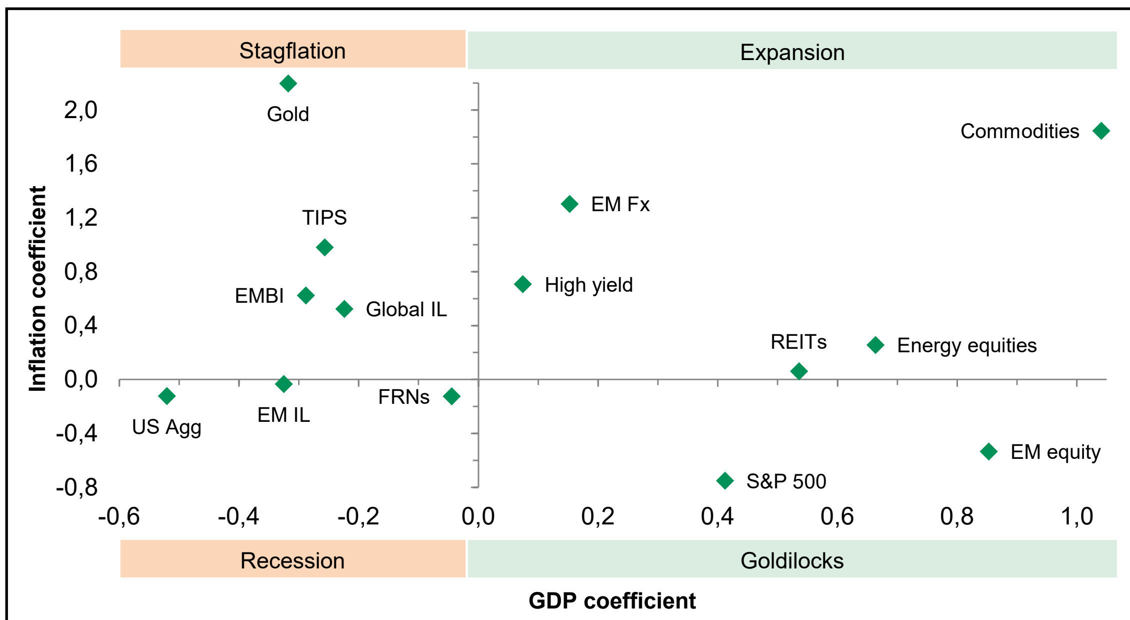
In order to meet the goal of limiting the increase in global average temperature to 1.5 degree Celsius above pre-industrial levels, a measurable rise of carbon prices will be needed to accelerate the transition and dis-incentivise new investments in fossil fuel energy production. In the longer-term, a higher dependence on renewable energy should be disinflationary given the low cost of marginal production. However, during the transitional phase, a rush to build renewable energy production could be costly. In addition, the supply of renewable energy can be unpredictable as storage technology is still in a developmental stage, intermittent fallbacks on traditional energy buffer whose supply capacity has already begun to wind down could lead to energy shortages, resulting in higher and unstable energy prices.

CONCLUSION - IMPLICATIONS FOR INVESTORS

As the case for an inflation revival has grown stronger, and inflation uncertainty remains high, it has become increasingly important for investors to manage inflation risk. Inflation erodes the purchasing power of a portfolio's value, and can be particularly detrimental to investors who rely on cash flows generated from fixed income asset classes. A move to a sustained path of inflation, even at only moderately higher levels, would represent a significant change from the disinflationary environment over the past 10 years. Indeed, in the past decade, with structurally low inflation, a typical investor with a mix of fixed income and equity investments did not have to worry much about hedging inflation risks, as equities and fixed income assets exhibited a negative correlation, providing diversification benefits.

However, equities and fixed income perform less well in periods of high and rising inflation – rising prices can shrink profit margins, and with inflation already going up and bond yields still close to their historical lows, fixed income and equities performance will become positively correlated. As such, unexpected inflation presents a risk to the performance of traditional stock-bond portfolios. Investors should consider incorporating inflation-sensitive asset classes into their allocations, such as real assets, as a strategy to improve a portfolio's resilience against inflation risks.

Exhibit 5: Inflation sensitivity of a selection of asset classes



Source: BNP Paribas Asset Management, Bloomberg, February 2022

USING INFLATION-LINKED BONDS AS HEDGES

There are different categories of inflation-sensitive asset classes, each exhibiting a varying degree of protection against inflation over different investment horizons. For investors looking for a fixed-income solution to hedge against inflation, inflation-linked bonds are an important building block.

In general terms, inflation-linked bonds are debt obligations whose coupon and principal get uprated in line with a referencing inflation index. By contrast, the coupons of conventional fixed-rate bonds are fixed at a nominal rate and the final principal repayment amounts stay constant. Returns from inflation-linked bonds therefore consist of both a realised inflation component, and a real duration component. For the duration component, repricing of real yields is instantaneous and often dominates short-term returns. As such, on a standalone basis, inflation-linked bonds can be poor short-term inflation hedges when compared to other inflation-sensitive asset classes like commodities.

Inflation-linked bonds held to maturity will compensate for realised inflation as it occurs over the life of the bond through the inflation accreting process – a feature that is absent in traditional nominal securities. In a portfolio context, swapping out nominal bonds for inflation-linked bonds provides a robust protection against inflation over the long term. Also, similar to nominal bonds, the real duration component provides diversification benefits against equities in an economic downturn.

Jenny Yiu, CFA
Head of Inflation

Jenny is Head of the Inflation Team and a member of the Rates Committee. She is responsible for the growth and business development of Inflation Strategies, as well as overseeing BNP Paribas Asset Management's global inflation-linked bond portfolios and generating alpha ideas within rates and inflation markets for implementation across applicable portfolios. Jenny joined FFTW, a predecessor of BNP Paribas Asset Management, in 2005 and is based in New York.

Prior to joining us, Jenny worked at HSBC Hong Kong as a Trader in Treasury & Capital Markets, making markets in secondary HKD corporate fixed income products and bringing out primary structured and plain vanilla HKD fixed income issuance along with the origination desk. Jenny also worked at HSBC in London where she gained capital market experience on the Market Risk Management, Debt Capital Markets, Eurobond Trading and Structured Credit Trading desks.

Jenny has 19 years of investment experience. She holds a BS in Economics with a concentration in Finance, magna cum laude from The Wharton School of the University of Pennsylvania. She is a CFA Charterholder.

Cedric Scholtes
Head of Global Sovereign, Inflation and Rates

Cedric is Head of Global Sovereign, Inflation and Rates. He also acts as Chair of the Rates Committee. He is responsible for the growth and development of Sovereign and Inflation Strategies, and is the lead portfolio manager for US Inflation-Linked Bond portfolios, as well as US Treasury portfolios. Cedric chairs the Rates Committee, which is composed of specialists from different fixed income product groups, who are charged with generating alpha in sovereign, derivative and inflation markets for implementation across applicable portfolios. Cedric joined FFTW, a predecessor of BNP Paribas Asset Management, in 2006 as a portfolio manager and is based in Paris.

Cedric joined the firm from the Treasury trading desk at Goldman Sachs, where his responsibilities included taking proprietary positions and market-making in index-linked markets, as well as enhancing the desk's analytical capabilities. Prior to working at Goldman Sachs, Cedric spent five years at the Bank of England, two of which were spent on secondment to the Federal Reserve Bank of New York. At the Bank of England, Cedric spent two years in the Foreign Exchange Division, helping to manage the UK Treasury's foreign exchange reserves. Prior to that, he worked as a Research Economist within the Monetary Analysis Division, researching fixed income markets. Cedric has published articles on nominal and inflation-linked debt markets in Bank of England, BIS and IMF periodicals, as well as RiskBooks.

Cedric has 21 years of investment experience. He holds an MSc in Finance and Economics from Warwick Business School, an MSc in Economics from the London School of Economics, and an MA/BA in Economics from Cambridge University.

Kristen Piskorowski
Investment Specialist, Inflation-Linked Bond and Structured Securities Portfolios

Kristen is an Investment Specialist on the Inflation and Structured Securities teams at BNP Paribas Asset Management. She is responsible for representing the team's capabilities and for the communication and commercialization of inflation-linked and structured securities strategies.

Prior to becoming an Investment Specialist, Kristen was an Assistant Manager of Fixed Income Operations. In this capacity, her primary responsibility was to ensure that all daily operational processes were accurately completed and that any questions and/or requests from clients, custodians and/or internal departments were answered appropriately and promptly. She was also responsible for employee training and development. Kristen joined FFTW, a predecessor of BNP Paribas Asset Management, in 2004 and is based in New York.

Kristen has held several positions at FFTW and its affiliates, including Trade Support Administrator, Portfolio Administrator and Portfolio Administrator Supervisor. She joined FFTW as a Reconciliation Administrator.

Kristen has 17 years of investment related experience. She holds a BS in Finance from Villanova University.

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March 2022 - Design: Creative Services BNPP AM - P2203013

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