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Inflation-Linked Bonds

More accommodative monetary and fiscal policy combined with supply pressures suggest that developed market inflationary pressures are likely to increase over the medium term. We recommend a 5% allocation to Inflation-Linked Bonds (ILBs) or Treasury Inflation-Protected Securities (TIPS) as part of a diversifying basket of safety assets.

In our base-case scenario, developed market inflation is expected to increase from 0.7% in 2020 to 2.0% in 2021. Inflation will rise rapidly in the US but take longer in the UK and Europe. Over the next five years, there is a risk that DM inflation could approach 3% or higher, but much will depend on the political agenda. Factors supporting higher inflation would include the degree of political appetite for ongoing fiscal spending beyond the pandemic, continued easy monetary policy, increased supply chain friction as a result of both greater protectionism and post-pandemic supply chain localisation, and finally policies aimed at income redistribution.

Asset Class Definition

Inflation-linked bonds are government bonds that have their coupon income and principal repayment indexed to a measure of inflation. The underlying inflation index is typically the consumer price index (CPI) in the US and Europe and the retail price index (RPI) in the UK, although the UK is gradually phasing out the use of RPI and will switch to the CPI by 2030.

Role in the Portfolio

Inflation-linked bonds are a highly efficient use of capital to the extent that they deliver multiple betas in a single instrument. In particular, ILBs contribute four different sources of value to investment portfolios:

1. Inflation protection
2. Duration risk
3. Safety net with low correlation to risk assets such as equities
4. Liquidity provision – allowing for a quick rebalancing of portfolios in equity market sell-offs

Our recommended allocation is determined by decomposing the attractiveness of ILBs into each of these components, with a focus on the attractiveness of interest rate duration and inflation protection. The latter is assessed in terms of the “breakeven inflation rate”, which is the average level of inflation required over the life of the bond such that an ILB and nominal bond of comparable maturity provide the same total return. When valuing ILBs we focus on the implied breakeven rates and determine whether those are cheap or expensive relative to our outlook on inflation.

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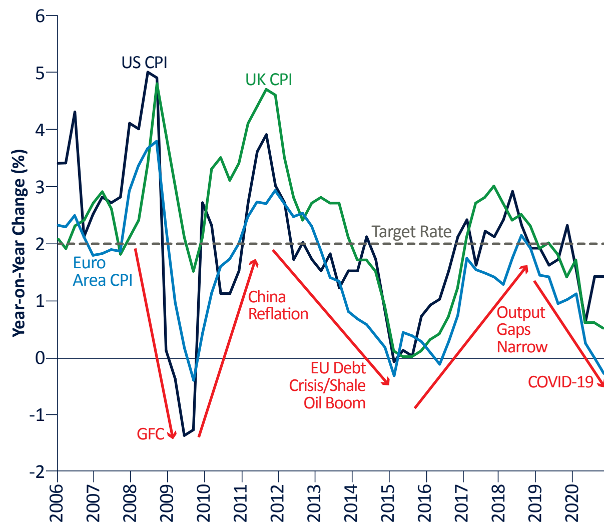
Market overview

Despite regional differences, the broad trends in inflation have been similar across major western economies (Exhibit 1). Prior to the 2020 COVID-19 demand shock, CPI inflation was close to the central bank target rate of 2% in the US and UK, with structurally lower inflation in Europe. Over the last ten years, the rate of CPI inflation has averaged 2.0% in the UK, 1.7% in US and 1.2% in Europe. As per Exhibit 2 breakeven inflation rates continue to discount a level of inflation over the next decade that is either close to or below the level of inflation observed over the last decade.

Exhibit 1

Inflation rates have followed similar cyclical trends across western economies



Source: *Bloomberg*

In the near-term, reported measures of inflation will be above average

Inflation is typically reported on a rolling 12-month basis. Due to the decline in prices in March and April last year, the base effects of this simple arithmetic will result in above-average levels of inflation being reported by the middle of 2021. For example, if the US Consumer Price Index rises through May 2021 at a rate consistent with a 2% trend rate of annual inflation, the index will show a 3.2% year-over-year rise from the depressed May 2020 level. This would be the highest level of reported inflation since 2011, but it would be misleading to place any major significance on this, since the price level would only be 1.9% higher than it was in February 2020. A transitory spike in near-term inflation is expected and has been discounted by the market.

In the medium-term, inflation is likely to run modestly above the 2% central bank target rate in US and UK, and close to 2% in Europe.

The medium-term inflation outlook is perhaps the most topical debate in current economic discourse. The risk of deflation is no longer seen as a major risk. Rather the focus of the debate is whether inflation will remain close to the central bank target rate of 2% or rise to between 3-5% per annum or more. Exhibit 3 outlines some of the factors in favour of higher inflation and those likely to keep inflation in check. On balance, the combination of these factors is likely to see inflation trend moderately above 2% over the medium-term.

Exhibit 2

Markets are discounting a level of future inflation over the next 10 years that is close to, the realised inflation of the last 10 years

Measure of inflation/yield as of 31 Jan 2021	US	Germany	UK	Japan
Core CPI (ex food and energy, annual change)	1.4%	2.0%	1.4%	0.2%
Headline CPI (annual change)	1.4%	1.6%	0.7%	-0.6%
Last 10-year average headline inflation	**1.7%**	**1.2%**	**2.0%**	**0.5%**
10–year breakeven rate	**2.1%**	**1.1%**	**3.1%**	**0.1%**
10–year nominal yield	1.1%	-0.5%	0.3%	0.0%
10–year real yield	-1.0%	-1.6%	-2.8%	0.0%

Note: *UK ILBs are indexed to the Retail Price Index (RPI) rather than Consumer Price Index (CPI). The former includes the cost of housing and has averaged 2.8% over the last 10-years*
Source: *Bloomberg*

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Exhibit 3

Over the next decade factors supporting higher inflation are likely to gain prominence

Factors supporting higher inflation (>3%)	Factors weighing on inflation
Global fiscal expansion of c. $14T (or about 16% of global GDP), in response to the crisis, with more expected in 2021 and beyond. Money velocity likely to increase with direct fiscal spending.	The pandemic will result in a permanent decline in demand in some sectors resulting in a supply overhang that will last for years, e.g., office space/business travel/hotels.
Ultra-accommodative monetary policy to be maintained by developed market central banks even as inflationary pressures build.	Technological improvements will continue to boost productivity gains and exert downward cost pressures (e.g., further digitalisation, AI in service sectors, declining energy input costs from renewables).
Greater production onshoring as the vulnerability of global supply chains to both protectionist policies and pandemics has been made evident. Prioritising resiliency and redundancy over costs and JIT (just in time) delivery could result in lower productivity and higher inflation	Any fiscal spending via infrastructure development is a slow process delivered over multiple years. Also risks crowding out private investment, so overall impact on inflation will be lower than expected
Greater attention to workers' rights and increased union power resulting in higher wage costs. Taxation policies aimed at wealth redistribution results in higher consumption levels as lower-income groups have a higher propensity to spend the marginal dollar.	A generational shift in consumer behaviour expected to result in lower levels of consumption expenditure (e.g., car sharing vs. car ownership)

Source: *Partners Capital*

Review of inflationary pressures by region

To better assess the regional divergences in inflationary pressures we monitor six key drivers of inflation, including money supply, credit growth, capacity constraints (as measured by the output gap), unemployment rate, currency changes and changes in commodity prices. In general terms, all developed markets have attempted to offset the exogenous demand shock of the recent crisis with a significant positive money supply shock.

US: The 10-year breakeven inflation rate was 2.1% as of 31 January 2021, meaning markets are discounting an average inflation rate that is close to the Fed's target rate of 2% over the next ten years. This is despite the Fed moving to average inflation targeting in which it will allow inflation to overshoot the 2% target to make up for recent periods of below 2% inflation. While money supply growth is running at an unprecedented 26% year-on-year, weak credit growth of 3.0% year-on-year vs the 20-year average of 6.5% and a high output gap (with actual GDP growth estimated to be 3.2% below potential) both suggest that inflationary pressures will remain subdued in the near-term. Unemployment of 6.8% is close to the 20-year average of 6.2%, but still materially higher than the 3.8% pre-pandemic level, again pointing to slack in the economy. In their latest forecasts, the IMF estimate that US inflation will be 2.2% on average over the next 5-years.

Exhibit 4

Money supply growth has been used to try to offset the large disinflationary impulse of weak credit growth, negative output gaps, high unemployment

					Key Inflation Drivers (green = inflationary, red = disinflationary, amber = neutral)									
	Inflation Rate (CPI YoY)	Target Inflation Rate	Average IMF Inflation Forecast	Market Inflation Forecast	Money Supply Growth		Credit Growth		"Output Gap (Actual vs. Potential GDP)"		Unemployment Rate		Trade Weighted FX Change	"S&P GSCI Spot Price Change (local currency)"
			2020-2025	10 year breakeven	YoY	20yr Average	YoY	20yr Average	Current	20yr Average	Current	20yr Average	YoY	YoY
US	1.4%	2.0%	2.2%	2.1%	25.8%	6.4%	3.0%	6.5%	-3.2%	-1.9%	6.8%	6.1%	0.7%	10.8%
Eurozone	-0.3%	2.0%	1.2%	1.1%	11.7%	5.8%	4.2%	4.0%	-5.1%	-0.6%	8.3%	9.3%	5.3%	1.3%
UK	0.7%	2.0%	1.6%	3.1%	13.4%	5.7%	4.4%	5.9%	-3.9%	-0.4%	4.5%	5.7%	-3.0%	6.7%
Japan	-0.6%	2.0%	0.6%	0.1%	9.4%	5.9%	6.4%	1.7%	-3.0%	-1.1%	3.0%	4.0%	-1.0%	7.1%

Note: *data as of 31 January 2021*

Source: *Bloomberg, the IMF, the US Bureau of Economic Analysis*

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UK: In January 2021, the UK's Office for Budget Responsibility forecasted UK CPI Inflation of less than 2% per annum over the next three years, primarily due to relatively weak earnings growth given labour market slack and the need for some firms to rebuild balance sheets by rebuilding margins, which may weigh on labour's share of income. This view is fairly consensus. The median forecast of medium-term UK inflation from large investment banks is 1.7% per annum over the next 2-3 years. In these forecasts, Brexit is seen as generally disinflationary, with non-tariff barriers and ongoing uncertainty regarding trade in services reducing growth and demand.

The most recent economic data for the UK does support these views. Unemployment in the UK may look relatively low, but this is a side-effect of the government's job-retention scheme in which the government covers the wages of furloughed staff. This scheme has been extended to the end of April. It is estimated that without the scheme the unemployment rate would be closer to 10%, suggesting significant slack in labour markets, and the potential for a spike in redundancies in Q2 2021.

Last November, UK Chancellor Rishi Sunak announced that the government will stop using the Retail Price Index (RPI) in 2030 and will be replacing it with the Consumer Price Index including owner occupiers' housing costs (CPIH). CPIH is typically 70-80bps below RPI, so the change will likely result is lower coupon income for bondholders over time. This change was largely expected by the market and has already been priced into existing ILBs with maturities beyond 2030.

Eurozone: The year-on-year change in inflation in the Eurozone fell below zero at the end of 2020, to -0.3%. The IMF forecast Euro-area inflation of 1.2% over the next five years, while financial markets are discounting an average annual rate of inflation of just 0.9% over the next ten years based on German inflation-linked bonds. Estimates of Europe's output gap suggest that GDP in the region is more than 5% below potential, implying significant spare capacity and economic slack.

In December 2020, EU leaders finalised an agreement on the EU budget and Next Generation EU recovery fund. The recovery fund will provide €750 billion in spending (c. 6% of EU27 GDP), financed by borrowing at the EU level. The funds are split between grants (€390 billion) and loans (€360 billion), and so will partly avoid adding more debt to the balance sheet of already indebted EU countries. The spending is expected to be front-loaded, with most of the funds deployed over the next two years. This should partly help push inflation higher, but additional fiscal spending is expected to face greater political opposition in Europe compared to other countries such as the US and UK, which may result in structurally lower inflation in Europe.

Japan: The COVID-19 pandemic pushed Japan into deflation. The year-on-year change in CPI was -1.2% through December 2020. The result has prompted the Bank of Japan to launch an overall review of its monetary policy for the first time since 2016, considering "further effective and sustainable monetary easing". The experience of Japan is a good example of how monetary policy alone is insufficient to produce inflation. Already the BoJ has purchased Japanese government bonds (JGBs) worth over 100% of GDP, while short rates have been cut to -0.1% and a policy of yield curve control caps the 10-year yield at close to 0%, yet inflation remains elusive. The results of the monetary policy review are due in March 2021, but currently market forecasts for Japanese inflation remain very subdued, with the 10-year breakeven inflation rate of 0%.

2021 Investment Strategy

We expect global inflation to be moderately higher in the 2020s than it was over the 2010s. Inflation is neither imminent nor certain, but the balance of probabilities suggests pressures are likely to build. At a minimum, direct fiscal spending will force capital into the real economy and should be more effective at generating higher inflation than accommodative monetary policy in isolation. An acceleration in credit growth would be needed for inflation to rise above 3% on a sustained basis. This is likely to be limited by weak credit demand due to already high levels of leverage in the private sector. Runaway inflation appears to be a very low probability tail-risk, but a period of stagflation (low growth and high inflation) is sufficiently probable to merit hedging against. ILBs/TIPS are an effective means of achieving this.

We recommend that clients continue to allocate at least 3% of their investment portfolio to inflation-linked bonds (tax considerations permitting). This is 3% below the model portfolio benchmark allocation, but should be considered in conjunction with the +2% gold allocation and recommended underweight to nominal bonds.

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Exhibit 5

Inflation Linked Bonds Total Return Expectations by Scenario

Scenario	Summary Analysis	2021 Calendar Year Total Expected Return	Weighted Return	Long-term Return Forecast	Recommended Deviation from Benchmark for 2021
Upside Scenario: "Warp speed to normal growth" (20% probability)	CPI rises 3% over 2021. By the end of 2021 the 10-year nominal Treasury yield is 1.9% while 10-year inflation expectations rise to 2.8% p.a. Using the Barclays US TIPS index which has a duration of 7.8 years, the duration impact of rising real yields causes a -1% detraction, which is more than offset by the inflation-linked coupon payment assumed to match CPI, resulting in a total return of 2%	**2%**	**0.2%**	**0.9%**	**0.0%**
Base Case: "The herd slowly immunises" (60% probability)	CPI rises 2.5% over 2021. By the end of 2021 the 10-year nominal Treasury yield is 1.7% while 10-year inflation expectations rise to 2.4% p.a. The duration impact of rising real yields causes a -2.6% detraction, which is largely offset by the inflation-linked coupon payment assumed to match CPI, resulting in a total return of 0%	**0%**			
Downside Scenario: "Ongoing waves" (20% probability)	CPI rises 1.0% over 2021. By the end of 2021 the 10-year nominal Treasury yield falls to 0.7% while 10-year inflation expectations decline to 1.5% p.a. The duration impact of rising real yields causes a -1.8% detraction. The inflation-linked coupon payment is assumed to match CPI, resulting in a total return of -1%	**-1%**			
TAA Implications of short-term returns vs. long-term expectations	Highly supportive fiscal and monetary policy across many developed economies is expected to cause inflation expectations to rise and minimise any changes in real yields in comparison to changes in nominal yields. As such we expect inflation-linked bonds to outperform nominal bonds in the near-term. Nevertheless, our short-term return assumptions lag longer-term forecasts, as rising nominal yields drags down near-term returns but improves future return prospects. We recommend an allocation in line with benchmark.				

Hypothetical return expectations are based on simulations with forward looking assumptions, which have inherent limitations. Such forecasts are not a reliable indicator of future performance.

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