

November 2021





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Inflation has made a forceful comeback recently, and we believe it will last longer than the financial markets and many investors currently anticipate. In part one of a two-part paper, we look at the factors that may cause a more persistent rise in consumer price inflation – and why it matters to investors.

The inflation spike is real – and it may last for some time

After years of subdued price pressure and a brief disinflationary bout early in the Covid-19 pandemic, global inflation has made a forceful comeback. Consumer prices in OECD countries rose by 4.3% from August 2020 to August 2021 – the fastest pace in 13 years.¹

But contrary to the market consensus, we believe that only part of the inflation spike is transitory. To be sure, some of the recent rise in inflation is a byproduct of the sharp post-Covid economic recovery, powered by unprecedented monetary and fiscal stimulus, lingering pent-up demand and surging commodity prices. The inflation spike has also been amplified by several extraordinary and temporary factors – including base effects, tax effects and supply-side bottlenecks.

Yet in our view, there are cyclical and structural forces at work that could lead to a more persistent rise in goods and service inflation in the years ahead. Importantly, we believe this increase could be notably more than what the financial markets

Key takeaways

- The recent inflation spike has been amplified by several extraordinary and temporary factors – including the post-Covid rebound and base effects
- But there are other reasons why consumer price inflation may turn out to be "sticky" – including continued accommodation from central banks, less globalisation and an aging population
- We also expect the fight against climate change and economic inequality to contribute to upward inflationary pressure

and many investors currently anticipate. We expect inflation to regularly reach and at least temporarily overshoot central banks' targets over time. That makes it worthwhile to take a deeper look at the factors that are driving inflation higher.



Eight factors driving inflation higher

Central banks' reaction function is changing After the global financial crisis of 2007-2008, long-term inflation expectations regularly dropped below central banks' target levels due to a sluggish reflation process. Their efforts at sparking higher levels of inflation were held back by factors such as the shallow global economic recovery and after-effects from the multi decade rise in globalization. In order to address the risk of a "de-anchoring" of inflation expectations to the downside² (see Exhibit 1), many central banks made adjustments to their monetary policy approach and related reaction functions – some clearly signalled and others more implicit. Some of their more reactive strategies have new names, such as the "flexible average inflation targeting" by the Federal Reserve or the "symmetric 2%

But the shift to these new reactive strategies raises the risk of a monetary policy error, particularly when it gets late in the economic cycle. If central banks are too late in addressing the risks that may de-anchor long-term inflation expectations to the upside, they could be forced into a more aggressive and disruptive tightening of monetary policy. This could upend parts of the global economy and make inflation more volatile. It would likely also affect financial markets. Rising long-term inflation uncertainty means investors would expect to be compensated accordingly, which would lead to higher inflation risk premia.

inflation target" by the European Central Bank.

Excessive policy stimulus is threatening the independence of central banks

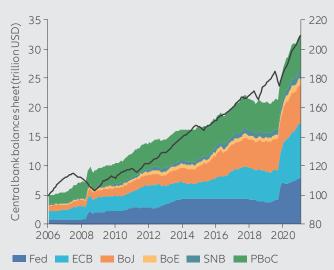
During the Covid-19 crisis, central banks around the world stepped up their unconventional stimulus measures, buying sovereign bonds at an unprecedented pace. This massive injection of central bank liquidity led to an unparalleled surge in global money supply (see Exhibit 2) that could fan consumer price inflation over time, in particular against the backdrop of rapidly shrinking output gaps.3

Critically, we don't expect this situation to reverse anytime soon. There has been a steady rise in private and public indebtedness around the world, and ultra-accommodative monetary policy has kept the financial system afloat. But the system has also come to rely on this support, leading to

what has been termed "fiscal and financial dominance" an environment where central banks essentially do the bidding of their governments.⁴ To be fair, higher coordination between the monetary policy of central banks and the fiscal policy of governments was necessary to contain the immediate economic fallout of the Covid-19 crisis. But maintaining this close link for too long would effectively prevent central banks from being independent. It could also introduce some form of modern monetary theory (MMT) which broadly describes an environment where governments would end the era of independent monetary policy by taking back full control over the printing of their fiat currency to fund spending. In either case, the rising risk of MMT and fiscal/ financial dominance should be reflected in higher long-term inflation expectations and rising inflation risk premia.

Exhibit 2: massive stimulus from central banks has pushed up asset prices

Central bank balance sheets vs global asset prices (since 2006)



Source: Bloomberg, Bank for International Settlement (BIS). Data as at 30 June 2021. Fed = Federal Reserve; ECB = European Central Bank; BoJ = Bank of Japan; BoE = Bank of England; SNB = Swiss National Bank; PBoC = People's Bank of China. Global asset prices based on IMF Global House Price Index, BIS Property Price Statistics, FTSE World Broach Investment-Grade Bond Index and MSCI All Countries Equity Index (real estate, equities, bonds each 1/3 weight).

Exhibit 1: inflation expectations are on the rise

US inflation expectations/compensations (since 1999)



· Philadelphia Fed Survey of Professional Forecasters: 10-year inflation expectations — US breakeven inflation rate (5y5y forward) Cleveland Fed: 10-year inflation expectations Uni Michigan consumer sentiment: 5-10 year inflation expectations

Source: Bloomberg, Philadelphia Fed, Cleveland Fed. Data as at 30 September 2021.

"Slowbalisation" and protectionism are growing Globalisation had been a powerful disinflationary force in the two decades before the eruption of the financial crisis (see Exhibit 3), but it is now in retreat – an environment that some call "slowbalisation". Growth in the volume of international trade has slowed and protectionism is on the rise. Reduced international access to cheap labour is putting upward pressure on wages, and eventually on prices. In addition, severe disruptions in global supply chains since the outbreak of the pandemic have triggered a wave of "re-shoring" activities in the corporate sector.⁵ There have also been supply shortages in the UK as a consequence of Brexit. These examples illustrate how the longer-term trend of re-regionalisation and slowbalisation are structural issues that weigh on global economic growth while pushing consumer price inflation higher.

Favourable demographics are in decline as populations age

For 30-plus years, the global workforce has been growing, reinforced by globalisation and access to cheap labour. Together, these forces provided a powerful tailwind that drove output up and inflation down, but this environment is coming to an end. A progressive ageing of the world population (see Exhibit 4), rising dependency ratios (where the working-age population is shrinking as a proportion of the total population) and slower growth in labour supply in the emerging world (particularly in China) may contribute to a return of inflation in the years ahead.⁶ The interplay between these factors is complex, but consider that as the world grows older, there will be an increase in the "consuming" part of the population relative to the "productive" part of the population. All else equal, prices for goods and services would rise as demand outstrips supply.

Much-needed efforts to reduce inequality could also be inflationary

In the last 40 years, there has been a persistent rise in wealth and income inequality around the world, contributing to a structural slowdown in consumer price inflation.⁷ Fortunately, many governments are now making a concerted effort to reduce inequality. This could bring economic benefits and invite higher inflation – as seen in these examples:

- The shift towards "bigger government" in the United States and large parts of the industrialised world may lead to rising fiscal deficits, which could foster an inflationary environment of fiscal dominance.
- When lower-income households get a boost in discretionary income, they're more likely to spend it – and this additional boost in spending can push up goods and services prices. (In contrast, middle- and higherincome households already have more discretionary

Exhibit 3: globalisation's second wave seems to be ebbing

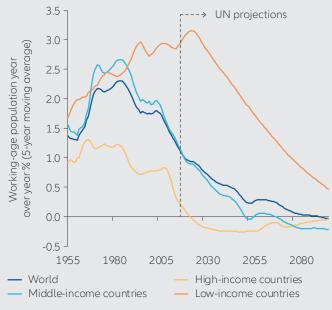
Global merchandise exports and global exports of goods and services (as a share of world GDP; 1827-2019)



Source: JH Fouquin, J Hugot (2016): "Two Centuries of Bilateral Trade and Gravity Data: 1827-2014", Ourworldindata, World Bank. Data as at December 2019.

Exhibit 4: demographic trends point to fewer workers, which could push up wages

Working-age population (1955-2100)



Source: United Nations. Data as at 2019.

Exhibit 5a: redistributionist policies are reducing economic inequality but could drive inflation higher

US wealth inequality vs consumer inflation (1962-2019)



Source: World Inequality Database, Bloomberg. Data as at 2019.

Exhibit 5b: labour share is rising

US labour compensation share (since 1960)



Source: Refinitiv Datastream, Allianz Global Investors. Data as at 4 October 2021.

income and are more likely to save, rather than spend, additional cash.) As a result, economic policies that help "redistribute" wealth and income could be inflationary (see Exhibit 5a).

- The combined effects of changing demographics and efforts to reduce inequality may already be showing up in a rising share of labour compensation (wages plus benefits) relative to GDP (see Exhibit 5b).
- In addition, we are observing voluntary increases of minimum wages by companies in order to attract staff.

Housing-related consumer price inflation hasn't yet surged – but it may soon

While central banks in general exclude asset prices from their inflation mandate, real estate represents a grey zone. Owner-occupied housing costs (as part of the "rent of shelter" component) affect consumer price inflation in several countries – including the United States, where rent of shelter accounts for 33% of the overall CPI basket and 42% of the core index (excluding food and energy). Within the next few quarters, the surging housing market (see Exhibit 6) is expected to drive up goods and services price inflation. (Higher home prices usually take around 12 to 18 months to spill over into consumer prices.) In this way, there is at least an indirect link to the spillover of monetary policy into asset markets.

Exhibit 6: surging housing prices aren't yet reflected in consumer price inflation

CPI – rent of shelter vs model (year-over-year change, since 1985



Source: Bloomberg, Allianz Global Investors. Data as at 30 September 2021.

7. Stronger economic growth means more jobs – but also higher inflation

The continued rapid closure of output gaps (the difference between an economy's actual and potential output; see Exhibit 7) means the global economy has rebounded well and unemployment should continue to fall. This is where the "Phillips curve" relationship comes into play, which states that along with lower unemployment comes higher prices. While the curve has flattened over the past 20 years, it still shows a link between low unemployment and higher services price inflation. Goods price inflation has behaved differently in recent decades, thanks to international forces helping to keep prices down. But goods prices may soon also begin to rise in a more sustainable way in light of "slowbalisation", rising protectionism and the re-shoring of production – all of which are inflationary.

8. The fight against climate change could lift mediumterm inflation

Decarbonising the world economy to limit global warming and address climate change has become the preeminent challenge of our time. The importance of this task is undisputable, and "green growth" and similar investments may lead to higher economic output and lower inflation in the long run. Before we reach this point, however, the necessary transformation of the global economy may go hand in hand with less access to "cheap" energy, an increase in environment-related regulations, the obsolescence of "cheap" but dirty production processes and high volumes of stranded

assets that are subject to write-downs. All of this means that the energy transition will likely be an inflationary one (see Exhibit 8). Yet it is also important to note that this inflationary pressure is a byproduct of internalising costs (at the product level) that have until recently been borne by other stakeholders.

For an example of how policy efforts to achieve long-term climate goals have an impact on inflation, consider two recent developments. The sharp rise in gas prices globally in 2021 to some extent reflect the increased demand for energy from gas-fired power plants, which emit fewer greenhouse gases than coal-powered ones. In addition, local governments in China recently restricted coal-fired power generation to meet climate targets set by the central government. But this also caused disruptions in many industries, thereby exacerbating global supply-side constraints and adding to inflationary pressures.

Learn more about the implications for investors

Taken together, these eight factors make a compelling argument as to why consumer price inflation may turn out to be more sticky than what the market currently anticipates. As a consequence, it may be a good idea to hedge against the risk of a persistent rise in inflation. In part two of this two-part paper, we share the results of our proprietary analysis into the asset classes that may provide an optimal inflation hedge.

Exhibit 7: narrowing output gaps point to higher inflation

Output gaps in major developed economies (since 2000)



Source: OECD. Data as at May 2021.

Exhibit 8: the energy transition will likely push up near-term inflation

US, EU, China: change in inflation vs baseline for "net zero 2050" scenario



Source: Network for Greening the Financial System. Data as at 28 June 2021.

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Data as at 30 June 2021

Endnotes

- 1. Source: OECD as at August 2021. OECD is the Organisation for Economic Co-operation and Development.
- 2. When consumers, corporations and other parties expect inflation to remain steady, their "anchored" inflation expectations help central banks maintain price stability. If inflation expectations are de-anchored to the downside, the markets think inflation will be lower than the central banks' target level.
- 3. In the US, the multi-year growth in broad money supply now exceeds the multi-year growth in real GDP by a wide margin. Historically, this measure of excess liquidity has also coincided with a rise in consumer-price inflation.
- 4. They do this by pegging interest rates at artificially low levels to reduce the costs of servicing sovereign and private debt.
- 5. This also has the added political aim of helping countries ensure the domestic supply of critical products, which increases their strategic self-sufficiency.
- 6. For a deeper discussion of the demographic impact on inflation see, for example, Goodhart, C., Pradhan, M. (2020): "The Great Demographic Reversal" and Juselius, M. and Takáts, E. (2018): "The enduring link between demography and inflation"
- 7. The precise mechanism linking high inequality and low inflation remains unclear, but one driver is that lower-income households tend to spend a proportionately higher share of their discretionary income on consumer goods and services. Higher consumer spending tends to push up inflation, all else equal.
- 8. Other factors pushing up gas prices include supply-side constraints and a generally higher demand for energy.

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