





The Jump in U.S. Inflation is Here. This is Where it May Head Next

By Nathan Sheets, PhD, Chief Economist and Head of Global Macroeconomic Research, and George Jiranek, Associate, Global Macroeconomic Research Team May 12, 2021

The highly-anticipated jump in U.S. inflation has arrived. While the sustainability of the increase remains open for debate, recent readings have surged and market-based indicators continue to show a surprisingly prolonged increase in inflation expectations. In particular, following today's strong CPI report for April, U.S. 10-year inflation breakevens stepped up to a fresh cycle high of just under 2.6%, prompting intensified inquiries from inflation-wary clients. In response to these questions, and in the context of the ongoing inflation debate, we have not only revisited some of the findings from our <u>earlier work on global inflation</u>, such as the effects of central bank liquidity, rising government debt levels, and ageing demographics, but we have also examined the effect that tightening labor market conditions and other potential shocks may have on inflation looking toward 2022.

For many, the speed at which inflation has accelerated has been the most eye-catching development. Today's U.S. CPI numbers showed core prices posting a breath-taking 0.9% increase in April, the largest gain since the early 1980s. Some of the upward moves pointed to genuine improvements in economic conditions and a return to pre-pandemic price patterns. For example, airline fares and hotel prices bounced back sharply. But other increases had the imprint of deepening bottlenecks— most notably, used car prices were up sharply as the chip shortage constrained new car production and pushed up used-car demand. On a 12-month basis, the core CPI jumped to 3%, reflecting the strong monthly readings in March and April as well as the so-called base effects from the pandemic.¹

In response to these data, 10-year inflation breakevens climbed further and are now approaching pre-COVID highs, which occurred in an environment of relatively subdued inflation when the core PCE only exceeded the Fed's target for brief periods in early 2012 and late 2018 (Figure 1). While expectations for inflation beyond five years have moved higher, the preponderance of market concern appears focused on the next several years when these measures signal sustained inflation of well over 2%. We too have marked up our inflation projections for this year, but we continue to anticipate that inflation pressures will moderate as the year progresses and, by 2022, readings will have returned to slightly below 2%, similar to the years before the pandemic.



Figure 1: Inflation Expectations Have Been Here Before in a Tepid Inflation Environment

Source: Bloomberg. *Based on inflation breakevens.

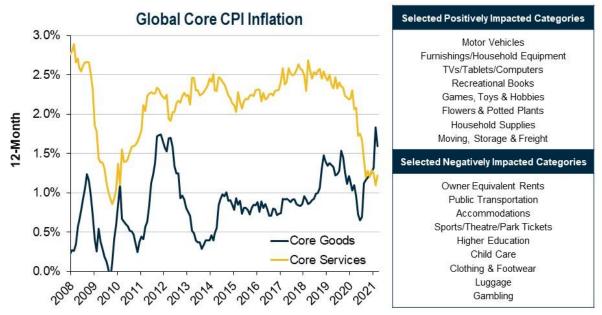
¹ Our early assessment is that core PCE prices were up roughly 0.5% on the month (PCE excludes used cars), and 2.8% higher over the past 12-months.

Everyone's a Gardener

Looking at the performance of inflation through the pandemic, we interpret the data as generally reflecting shifts in relative prices, rather than to higher prices across the board. That shift clearly started with global core services (Figure 2), which were averaging pre-COVID inflation of about 2.5% and were subsequently decimated by the lockdowns. However, the relative shift also occurred in core goods as inflation in the sector rose from about 1% pre-COVID to nearly 2% during the pandemic.

The right panel of Figure 2 highlights some U.S. PCE categories where prices have been positively and negatively affected by the pandemic. The resulting breakdown is consistent with lockdown conditions—inflation for electronics, household furnishings, and flowers/potted plants rose, while inflation for sports tickets, luggage, and accommodations declined.





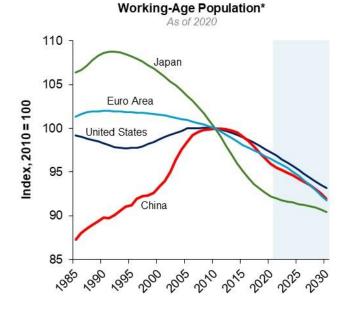
Source: PGIM Fixed Income, Bureau of Economic Analysis, and Haver Analytics

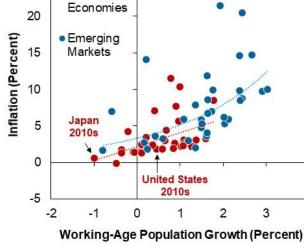
These abrupt shifts raise the question of how inflation will revert during the recovery. We clearly are now seeing a rebound in the demand for services that could allow their prices to bounce back fairly quickly. However, given the broad income effect and savings accumulation during the pandemic, we expect that demand for goods, including those that have performed well over the past year, will remain solid. For example, as we take further steps toward herd immunity and labor market healing gains steam, the improved circumstances should support household spending on cars, furnishings, and electronics. Over time, however, we see goods inflation returning to the more gentle pace observed before the pandemic.

Structural Restraints

Looking further ahead, we expect several structural factors, such as ageing demographics, high global debt levels, and the onward march of technology and innovation to influence inflation in the coming years. For example, the deterioration in developed market demographic trends has occurred over decades, and we've found a strong relationship between the softening growth of working-age populations and declining inflation (Figure 3). More broadly, our finding that ageing demographics are associated with slower growth and weaker economic performance extends across the developed and emerging markets.

Figure 3: Declining Working-Age Populations are Closely Related to Declining Inflation





Working-Age Population & Inflation

1980s to Present

*Ages 15-64; share of total population. Source: Haver Analytics, United Nations.

Note: Decadal observations for 20 countries; EM decadal inflation rates above 25% are excluded. Source: PGIM Fixed Income, IMF, United Nations.

4

Our prior work on the labor market also ties into some frequently discussed inflation dynamics. The rapid healing in the U.S. labor market may foster concerns regarding worker shortages and potential wage inflation. The vast majority of workers who have returned to payrolls have been those who were temporarily laid off during the pandemic. Of workers who have not returned to employment, however, the preponderance have permanently lost their jobs or have left the labor force entirely. Over the past six or eight months, the return of these workers to employment has been limited and, historically, it has taken much longer for these workers to start looking for work again.

25

Advanced

In line with these observations, the disappointing April employment report has stoked concerns that, as a practical matter, the labor market may be tighter than previously thought and that firms will need to offer higher wages to entice workers back to employment. This, in turn, could result in higher inflation. While we are watching this risk closely, our expectation is that the ongoing vaccination campaign (and improving health conditions), the further re-opening of schools, and the expiration of enhanced payments to the unemployed will allow the labor market to heal at a historically rapid pace.

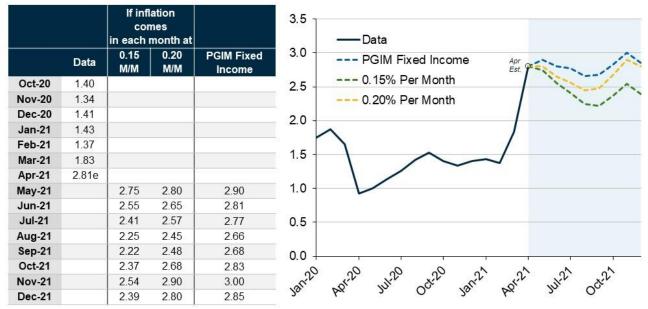
The debt and money supply arguments for faster inflation will likely be with us for some time considering the scale of the monetary and fiscal stimulus implemented during the pandemic. The classical view of rising debt levels posits that increased concerns about debt-service and repayment risks can lift inflation expectations and weigh on the currency, triggering a potential inflationary pass-through into the economy. Yet, <u>our prior work revealed</u> a negative relationship between government debt and GDP growth—and, hence, inflation—as uncertainties regarding future taxes, debt sustainability, and anticipation of fiscal retrenchment likely contribute to slower growth.

Similarly, the classical view of increased money supply is that too much money will end up chasing too few goods, and prices will consequently rise. Yet, one of the hallmarks of the past two decades has been a sustained decline in the velocity of money in the economy. This decline may have its foundations in tightened financial regulations, falling interest rates, and disintermediation from the banking sector. In addition, rather than driving spending on goods and services, it is also possible that more of the increased money supply has found its way into the financial markets and contributed to rising asset prices in recent years.

Where to from Here...

With core PCE readings having moved up sharply in recent months, the trajectory in late 2021 and into 2022—particularly as it pertains to the Fed's 2% average inflation target—emerges as a focal question. With this in mind, Figure 4 extrapolates where varying rates of monthly price increases might place the inflation rate as the base-effect and supply-bottleneck surge starts to subside. While the 0.20% extrapolation nears 3% in late 2021, inflation should then resume a downward trajectory heading into 2022. Consistent with this, our assessment (the dashed-blue line) is that price pressures will gradually lose steam later this year and early next, as demand moderates and aggregate supply catches up. By the end of 2022, we see inflation declining to a bit below 2%, broadly consistent with its pre-pandemic performance. For its part, the Fed also appears to acknowledge the challenge of sustaining inflation of more than 2% given its projection that it will keep rates on hold through 2023.

Figure 4: Core PCE Inflation (12-month, %)



Source: PGIM Fixed Income and Bureau of Economic Analysis

The global inflation story is one that we'll undoubtedly revisit in coming months, and we're cognizant of the factors that could maintain inflation pressures for longer than we anticipate. Households' savings stockpile is substantial, and its drawdown could add to the momentum as more of the country continues to reopen and additional fiscal stimulus comes through. Yet, there are mitigating factors as well—taxes may be rising on portions of the economy as fiscal and monetary stimulus eventually wanes. When these factors combine with the structural impediments to a sustainable increase in inflation, we continue to see an environment that resembles pre-COVID conditions with inflation near, or below, 2%, rather than one where the reactions to the pandemic have launched a new paradigm of consistently elevated demand for goods and services.

This material reflects the views of the author as of May 12, 2021 and is provided for informational or educational purposes only. Source(s) of data (unless otherwise noted): PGIM Fixed Income.

Source(s) of data (unless otherwise noted): PGIM Fixed Income, as of May 2021.

PGIM Fixed Income operates primarily through PGIM, Inc., a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended, and a Prudential Financial, Inc. ("PFI") company. Registration as a registered investment adviser does not imply a certain level or skill or training. PGIM Fixed Income is headquartered in Newark, New Jersey and also includes the following businesses globally: (i) the public fixed income unit within PGIM Limited, located in London; (ii) PGIM Netherlands B.V., located in Amsterdam; (iii) PGIM Japan Co., Ltd. ("PGIM Japan"), located in Tokyo; (iv) the public fixed income unit within PGIM (Hong Kong) Ltd. located in Hong Kong; and (v) the public fixed income unit within PGIM (Singapore) Pte. Ltd., located in Singapore ("PGIM Singapore"). PFI of the United States is not affiliated in any manner with Prudential plc, incorporated in the United Kingdom or with Prudential Assurance Company, a subsidiary of M&G plc, incorporated Kingdom. Prudential, PGIM, their respective logos, and the Rock symbol are service marks of PFI and its related entities, registered in many jurisdictions worldwide.

These materials are for informational or educational purposes only. The information is not intended as investment advice and is not a recommendation about managing or investing assets. In providing these materials, PGIM is not acting as your fiduciary. Clients seeking information regarding their particular investment needs should contact their financial professional. These materials represent the views and opinions of the author(s) regarding the economic conditions. asset classes, securities, issuers or financial instruments referenced herein. Distribution of this information to any person other than the person to whom it was originally delivered and to such person's advisers is unauthorized, and any reproduction of these materials, in whole or in part, or the divulgence of any of the contents hereof, without prior consent of PGIM Fixed Income is prohibited. Certain information contained herein has been obtained from sources that PGIM Fixed Income believes to be reliable as of the date presented; however, PGIM Fixed Income cannot guarantee the accuracy of such information, assure its completeness, or warrant such information will not be changed. The information contained herein is current as of the date of issuance (or such earlier date as referenced herein) and is subject to change without notice. PGIM Fixed Income has no obligation to update any or all of such information; nor do we make any express or implied warranties or representations as to the completeness or accuracy or accept responsibility for errors. All investments involve risk, including the possible loss of capital. These materials are not intended as an offer or solicitation with respect to the purchase or sale of any security or other financial instrument or any investment management services and should not be used as the basis for any investment decision. No risk management technique can guarantee the mitigation or elimination of risk in any market environment. Past performance is not a guarantee or a reliable indicator of future results and an investment could lose value. No liability whatsoever is accepted for any loss (whether direct, indirect, or consequential) that may arise from any use of the information contained in or derived from this report. PGIM Fixed Income and its affiliates may make investment decisions that are inconsistent with the recommendations or views expressed herein, including for proprietary accounts of PGIM Fixed Income or its affiliates.

The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients or prospects. No determination has been made regarding the suitability of any securities, financial instruments or strategies for particular clients or prospects. For any securities or financial instruments mentioned herein, the recipient(s) of this report must make its own independent decisions.

Conflicts of Interest: PGIM Fixed Income and its affiliates may have investment advisory or other business relationships with the issuers of securities referenced herein. PGIM Fixed Income and its affiliates, officers, directors and employees may from time to time have long or short positions in and buy or sell securities or financial instruments referenced herein. PGIM Fixed Income and its affiliates may develop and publish research that is independent of, and different than, the recommendations contained herein. PGIM Fixed Income's personnel other than the author(s), such as sales, marketing and trading personnel, may provide oral or written market commentary or ideas to PGIM Fixed Income's clients or prospects or proprietary investment ideas that differ from the views expressed herein. Additional information regarding actual and potential conflicts of interest is available in Part 2A of PGIM Fixed Income's Form ADV.

In the United Kingdom, information is issued by PGIM Limited with registered office: Grand Buildings, 1-3 Strand, Trafalgar Square, London, WC2N 5HR. PGIM Limited is authorised and regulated by the Financial Conduct Authority ("FCA") of the United Kingdom (Firm Reference Number 193418). In the European Economic Area ("EEA"), information is issued by PGIM Netherlands B.V., an entity authorised by the Autoriteit Financiële Markten ("AFM") in the Netherlands and operating on the basis of a European passport. In certain EEA countries, information is, where permitted, presented by PGIM Limited in reliance of provisions, exemptions or licenses available to PGIM Limited under temporary permission arrangements following the exit of the United Kingdom from the European Union. These materials are issued by PGIM Limited and/or PGIM Netherlands B.V. to persons who are professional clients as defined under the rules of the FCA and/or to persons who are professional clients as defined in the relevant local implementation of Directive 2014/65/EU (MIFID II). In certain countries in Sale-Pacific, information is presented by PGIM (singapore) here. Ltd., a Singapore investment manager registered with and licensed by the Monetary Authority of Singapore. In Japan, information is presented by PGIM Japan Co. Ltd., registered investment adviser with the Japanese Financial Services Agency. In South Korea, information is presented by PGIM, Inc., which is licensed to provide discretionary investment management services directly to South Korean investors. In Hong Kong, information is provided by PGIM (Hong Kong) Limited, a regulated entity with the Securities & Futures Commission in Hong Kong to professional investors as defined in Section 1 of Part 1 of Schedule 1 (paragraph (a) to (i) of the Securities and Futures Ordinance (Cap.571). In Australia, this information is presented by PGIM (Australia) Pty Ltd ("PGIM Australia") for the general information of its "wholesale" customers (as defined in the Corporations Act 2001). PGIM Australia is a representative of PGIM Limited, which is exempt from the requirement to hold an Australian Financial Services License under the Australian Corporations Act 2001 in respect of financial services. PGIM Limited is exempt by virtue of its regulation by the FCA (Reg: 193418) under the laws of the United Kingdom and the application of ASIC Class Order 03/1099. The laws of the United Kingdom differ from Australian laws. In **South Africa**, PGIM, Inc. is an authorised financial services provider – FSP number 49012. In **Canada**, pursuant to the international adviser registration exemption in National Instrument 31-103, PGIM, Inc. is informing you of that: (1) PGIM, Inc. is not registered in Canada and is advising you in reliance upon an exemption from the adviser registration requirement under National Instrument 31-103; (2) PGIM, Inc.'s jurisdiction of residence is New Jersey, U.S.A.; (3) there may be difficulty enforcing legal rights against PGIM, Inc. because it is resident outside of Canada and all or substantially all of its assets may be situated outside of Canada; and (4) the name and address of the agent for service of process of PGIM, Inc. in the applicable Provinces of Canada are as follows: in Québec: Borden Ladner Gervais LLP, 1000 de La Gauchetière Street West, Suite 900 Montréal, QC H3B 5H4; in British Columbia: Borden Ladner Gervais LLP, 1200 Waterfront Centre, 200 Burrard Street, Vancouver, BC V7X 1T2; in Ontario: Borden Ladner Gervais LLP, 22 Adelaide Street West, Suite 3400, Toronto, ON M5H 4E3; in Nova Scotia: Cox & Palmer, Q.C., 1100 Purdy's Wharf Tower One, 1959 Upper Water Street, P.O. Box 2380 - Stn Central RPO, Halifax, NS B3J 3E5; in Alberta: Borden Ladner Gervais LLP, 530 Third Avenue S.W., Calgary, AB T2P R3.

© 2021 PFI and its related entities.

© 2020 Prudential Financial, Inc. (PFI) and its related entities. PGIM, the PGIM logo, and the Rock symbol are service marks of PFI and its related entities, registered in many jurisdictions worldwide.

Mutual Fund investments are subject to market risks, read all scheme related documents carefully.

2021-4001