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ECONOMIC Synopses

Overshooting the Inflation Target

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While economists think that central banks have fair control of average inflation over long periods, price changes can be volatile over shorter horizons—especially during unusual business conditions. Beginning in February 2020, the COVID-19 crisis has created very unusual conditions. Figure 1 shows that the Fed's preferred inflation measure, personal consumption expenditures (PCE) inflation, was about 4.2 percent in July 2021; this is well above its 2 percent target and a level not seen since July 2008, just before the crest of the Great Financial Crisis. Consumer price index (CPI) inflation was even higher, over 5 percent per annum in July 2021.[1]

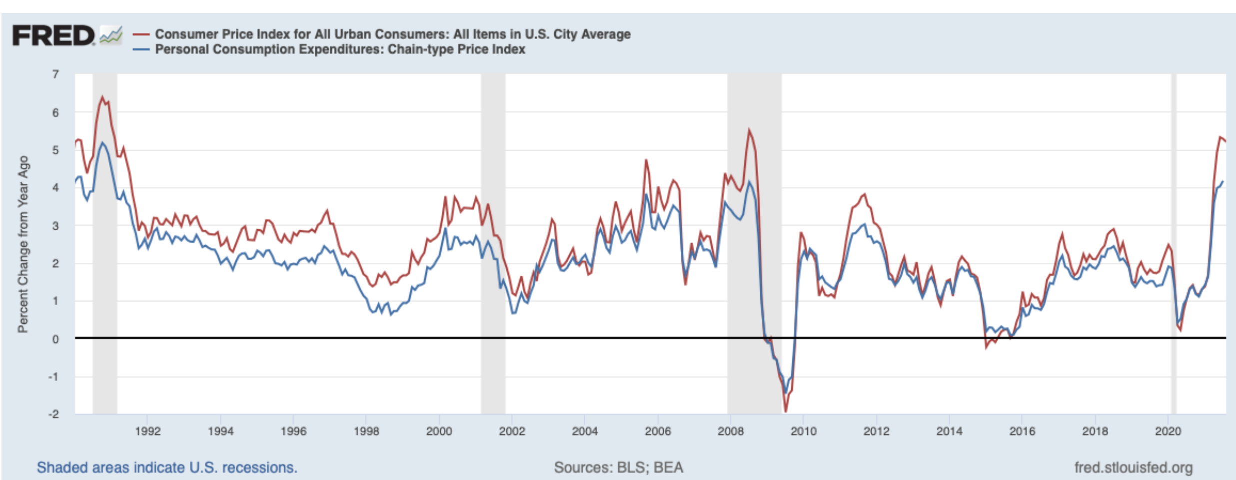
Transitory factors, Federal Reserve actions, and government spending have all contributed to high inflation. This essay explains how recent changes in the Fed's policy framework may have played a role in the expansionary policies that have both cushioned the impact of COVID-19 containment measures on the economy and sparked recent price increases.

"Base effects" have strongly boosted recent PCE and CPI inflation. That is, the outbreak of the COVID-19 crisis in 2020 dramatically reduced demand for many types of goods—such as travel and energy—causing their prices to plunge. Figure 1 shows the depressing effect of these low prices on aggregate inflation during spring and summer 2020. As inflation is calculated as a 12-month percentage price change, low "base" prices in mid-2020 produced large positive inflation numbers in mid-2021. For example, the price of energy rose almost 24 percent on an annual basis in the July 2021 CPI (BLS, 2021). Other non-monetary factors, such as supply-chain disruptions in the automotive sector, have also contributed to recent inflation. As past price drops and supply disruptions cannot perpetually raise inflation rates into the future, their effects will be transitory.

> Although transitory factors have largely driven the recent rise in inflation, expansionary policy to relieve unusual economic conditions also played a role.

A recent change in the Fed's monetary policy framework also may have played a limited role in the inflationary jump. In January 2012, the Fed began formally targeting

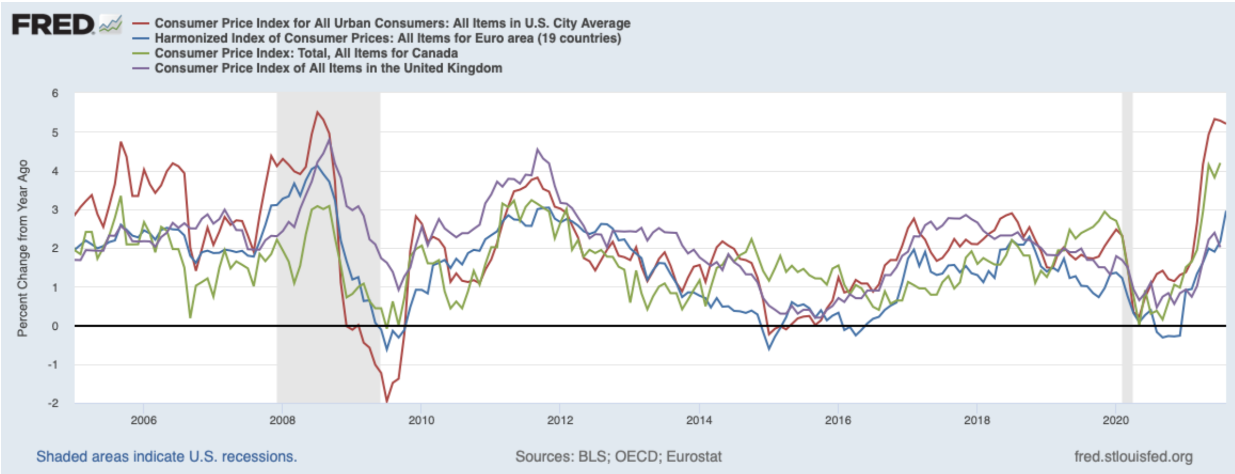
Figure 1
CPI and PCE Inflation Rates in the United States



SOURCE: FRED®, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/graph/?g=GySS, accessed September 9, 2021.

Figure 2

Inflation Rates in the United States, Euro Area, Canada, and United Kingdom



SOURCE: FRED®, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/graph/?g=Gz3c, accessed September 9, 2021.

PCE inflation (Bernanke, 2012). This switch brought the Federal Reserve policy framework closer to those of peer monetary authorities, most of which have formal commitments to achieve a given inflation target, usually about 2 percent.[2]

The Fed has not come as close as it would have liked to achieving its inflation target, however. Since 2012, annualized U.S. PCE inflation has usually been well under the 2 percent target, averaging only 1.63 percent. While it might seem strange that a central bank would worry about too-low inflation, persistently undershooting a declared inflation target has costs. Specifically, if people make long-term contracts, such as fixed-rate mortgages, under the assumption that inflation would average 2 percent, then a lower rate of inflation over a long period would mean that borrowers would pay a higher real (i.e., inflation-adjusted) rate of interest to lenders than either party had expected. That would transfer resources from borrowers to lenders. In addition, a too-low level of expected inflation will lower average nominal interest rates, impeding central bank rate cuts designed to stimulate the economy. When interest rates are low, a central bank is said to have little "policy space."

Prompted by structural economic changes that reduced average interest rates and the persistent undershoot of the inflation target, the FOMC began to review its monetary policy framework in early 2019. The committee eventually decided to target an inflation rate that averages 2 percent over time, instead of period by period. Federal Reserve Chair Powell (2020) described the new framework as "a flexible form of average inflation targeting." If inflation undershoots the target for a while, the FOMC would make up for such deviations by allowing a bit of overshooting. The theoretical and practical difficulties of keeping average inflation from being too low encouraged the change (Powell, 2020).

In the context of such an "average inflation targeting" policy, the undesirably low PCE inflation from 2012-20 may have motivated a more expansionary monetary policy in 2020-21. Thus, although transitory factors have probably largely driven the recent rise in inflation, expansionary policy to relieve unusual economic conditions also played a role. Quantifying the relative contributions is beyond this essay.

Patterns in international inflation rates seem to be consistent with the interpretation that domestic factors, such as expansionary policy, have played a role. Figure 2 shows that inflation rates in the euro area, Canada, and the United Kingdom have also risen recently, but not as much as U.S. inflation. This difference is only suggestive, however. ■

Notes

[1] Since 1990, annualized PCE inflation has been 2.01 percent, while CPI inflation has been 2.44 percent. PCE and CPI inflation measures weight goods and services differently (Haubrich and Millington, 2014). The author used FRED® data to calculate all the average inflation rates cited in this essay.

[2] In the late 1980s, the Reserve Bank of New Zealand led the way as the first central bank of the modern era to adopt explicit inflation targeting (Reddell, 1999).

References

Bernanke, Benjamin. Transcript of Chairman Bernanke's Press Conference, January 25, 2012; https://www.federalreserve.gov/mediacenter/files/fomcpresconf20120125.pdf.

Bureau of Labor Statistics. "12-Month Percentage Change, Consumer Price Index, Selected Categories." Graphics for Economic News Releases, 2021; https://www.bls.gov/charts/consumer-price-index/consumer-price-index-by-category.htm.

Haubrich, Joseph G. and Millington, Sara. "PCE and CPI Inflation: What's the Difference?" *Economic Trends*, April 17, 2014; https://www.clevelandfed.org/newsroom-and-events/publications/economic-trends/2014-economic-trends/et-20140417-pce-and-cpi-inflation-whats-the-difference.

Powell, Jerome H. "New Economic Challenges and the Fed's Monetary Policy Review." Speech to Economic Policy Symposium Sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, August 27, 2020; https://www.federalreserve.gov/newsevents/speech/powell20200827a.htm.

Reddell, Michael. "Origins and Early Development of the Inflation Target." *Reserve Bank of New Zealand Bulletin*, September 1999, *62*(3), pp. 63-71; https://www.rbnz.govt.nz/-/media/ReserveBank/Files/Publications/Bulletins/1999/1999sep62-3reddell.pdf.

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