Global Letter Trimmed Means

16 July 2021

The 'Core' measure of US inflation has risen misleadingly: it seems unlikely to 'infect' other prices

A central question for many investors is whether the pickup in the growth of the aggregate price level in the US will prove to be transitory, or whether it presages a sustained pickup in inflation?

Addressing the question is made all the more difficult by the fact that – unusually – two of the most commonly-used measures of inflation are currently saying rather different things:

- The so-called 'Core' PCE Deflator,[1] which excludes the prices of food and energy, grew by 3.1% year-on-year in April, and 3.4% in May. Patently this is significantly above the 2% figure that many central banks, including the US Fed, take as a longish-run target. By contrast:
- The Dallas Fed's 'Trimmed means' PCE-deflator-based measure of 'core' inflation registered an increase of just 1.8% in April and 1.9% in May, thereby below any 2% target.[2]

The divergences between the two measures, at 1.3 ppts for April and 1.5 ppts for May, are substantial; and the largest positive discrepancies since the Trimmed Means series began in 1978.

Most of the major positive discrepancies occurred back in the mid-1970s and early 1980s, following the initial quadrupling, and subsequent doubling, of oil prices in 1973-74 and 1978-79, respectively. Thereafter the discrepancies between the two measures became smaller; and indeed they turned negative – the Trimmed Mean measure being greater than the 'Core' measure – through the first five months of 2009.

The recent surge in the US price level, and which presumably the Trimmed Mean measure trimmed out, was due, somewhat oddly, in substantial part to sharp increases in the costs of purchasing and renting both new and used cars and trucks (as well as of insuring them). Together these accounted for something like one-third of the total increase in the aggregate figure.[3] Housing costs and air fares were also important.

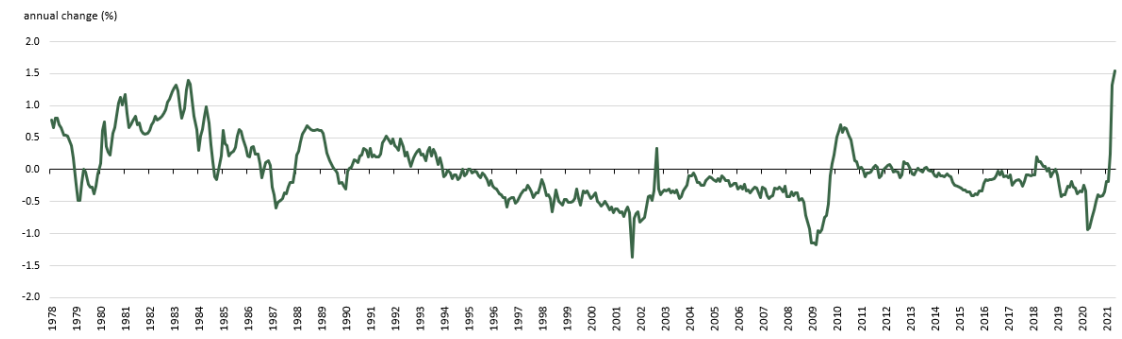
So what to conclude?

The *crucial* issue – both for central banks and for investors – is whether the sharply rising minority of prices that were excluded (by definition) from the 'Core' (ex-food and energy) measure of inflation, but (by construction) 'taken out' from the Trimmed Mean, will subside; or will eventually 'infect' other components.

Here the key point is that now is neither the 1970s nor the 1980s. That epoch was characterised in many countries by strong unionisation, *de facto* or *de jure* indexation of wages to prices, and inflation expectations that had been shaped by the two huge oil price increases and wage-price-wage spirals that had taken inflation rates into double digits.[4] Moreover, in the 1970s only the Bundesbank had firmly established anti-inflationary 'cred': the Federal Reserve had only recently established it under Paul Volcker, and during the second half of the 1980s it was not initially clear whether that 'cred' would carry over to the then relatively newly-ensconced Alan Greenspan.

Today is different, and probably fundamentally so. Unionisation is much diminished. Wage indexation has all but disappeared. Inflation expectations have risen, but not by much.[5] Rather than seeing a reversion to the 1980s, it would seem likely that soon the Core, as measured, will revert to something near the 2% line that has prevailed ever since 1995. ■

Figure: BEA Core PCE deflator minus Dallas Trimmed Means PCE deflator



Source: U.S. Bureau of Economic Analysis (BEA), Federal Reserve Bank of Dallas, Saul Eslake and Llewellyn Consulting

[1] The PCE deflator or, to give it its full name, the Implicit Price Deflator for Personal Consumption Expenditures, is the Fed's preferred measure of inflation. The reasons for this choice were given in its February 2000 report to the Congress:

"In past Monetary Policy Reports to the Congress, the FOMC has framed its inflation forecasts in terms of the consumer price index. The chain-type price index for PCE draws extensively on data from the consumer price index but, while not entirely free of measurement problems, has several advantages relative to the CPI. The PCE chain-type index is constructed from a formula that reflects the changing composition of spending and thereby avoids some of the upward bias associated with the fixed-weight nature of the CPI. In addition, the weights are based on a more comprehensive measure of expenditures. Finally, historical data used in the PCE price index can be revised to account for newly available information and for improvements in measurement techniques, including those that affect source data from the CPI; the result is a more consistent series over time. This switch in presentation notwithstanding, the FOMC will continue to rely on a variety of aggregate price measures, as well as other information on prices and costs, in assessing the path of inflation." See FullReport.pdf (federalreserve.gov), p. 4

[2] For a discussion of the differences between the two measures, as well as which is the 'better', or more useful, measure see https://www.federalreserve.gov/econres/notes/feds-notes/comparing-two-measures-of-core-inflation-20190802.htmtwo as well as papers by two staff members of the Federal Reserve Bank of Dallas, Jim Dolmas and Evan Koenig, who have long worked in this area: Which Core to Believe? Trimmed Mean Versus Ex-Food-and-Energy Inflation - Dallasfed.org , and Two Measures of Core Inflation: A Comparison – Research Dept. Working Paper No. 1903 – Dallas Fed

[3] Inferred from the May and June press releases by the Bureau of Labour Statistics, Consumer Price Index Archived News Releases : U.S. Bureau of Labor Statistics (bls.gov)

[4] Germany was the one important exception.

[5] Central banks' main concern in respect of inflation expectations nowadays is with their becoming 'unanchored' to the *downside*, not to the upside.

There are many measures of inflation expectations in the US, some survey-based, others model-based. For a general discussion of methods, see Federal Reserve Bank of Cleveland Measures of Expected Inflation: Center for Inflation Research (clevelandfed.org)

The University of Michigan surveys a sample of US households about the change in prices that they expect during the next year and the average change in prices they expect over the next 5 to 10 years. See Surveys of Consumers (umich.edu) The Michigan survey currently shows a spike in 1-year inflation expectations, but that series is disproportionately increased by fluctuations in gasoline prices. The 5-year series has increased, but not nearly as much – the last read was 2.8%, up from lows of early last year of 2.2% – this series averaged 3% for much of the 15 years prior to 2020, so 2.8% would probably be seen by policymakers as 'well anchored' and consistent with 2% actual inflation.

The Fed index of inflation expectations, which is survey based, is constructed *"using 21 inflation expectation indicators …"* Expectations are *"… derived from households, firms, professional forecasters, and financial market participants. [They] include both 'short horizon' inflation expectations, which are typically forecasts for the year ahead, and 'long horizon' inflation expectations, which are typically forecasts made for some period over the subsequent 5 to 10 years. … some indicators … are denominated in terms of a specific inflation measure—like the consumer price index (CPI) or the personal consumption expenditures (PCE) price index — while others are described only in general terms such as "the change in prices."'"* See The Fed - Index of Common Inflation Expectations (federalreserve.gov)

The Federal Reserve Bank of Philadelphia surveys a panel of professional forecasters for their expectations of inflation as measured by a number of price indexes that include the CPI, the core CPI, the PCE index, and the core PCE index. For more, see information about the expected inflation series and the survey at Survey of Professional Forecasters (philadelphiafed.org)

The Cleveland Fed, in a model-based procedure, calculates the US inflation premium using Treasury yields, inflation data, inflation swaps, and survey-based measures of inflation expectations. See Survey of Professional Forecasters (philadelphiafed.org)

The Minneapolis Fed produces estimates of market-based probabilities of significantly higher (or lower) inflation derived from options pricing.