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Headline vs. Core Inflation: A Look at Some Issues

Monetary policymakers are responsible for maintaining overall price stability, which is usually interpreted as low and stable inflation. In order to decide on appropriate policy actions given their objective, policymakers need to know the current rate of inflation and where it is headed. What makes for a reliable predictor of future inflation has been debated throughout the years and continues to be the subject of economic analyses today. One debate that has received attention recently is whether the focus should be on headline or core inflation. The former is calculated from an all-item index, whereas the latter is commonly calculated from a price index that excludes the highly volatile food and energy components.

Central bankers around the world have taken both sides of the debate. For instance, the inflation goals of the European Central Bank and the Bank of England are explicitly stated in terms of headline measures, and their policymakers pay less attention to core measures. In contrast, the Federal Open Market Committee (FOMC) focuses on inflation that is derived from the personal consumption expenditures price index excluding food and energy ("core PCE"). This does not mean, however, that the FOMC ignores headline PCE. In fact, since 2008 the FOMC has reported its forecasts for both core and headline inflation in the semiannual *Monetary Policy Report to the Congress*. At the end of the day, the Fed's main concern is long-run headline inflation and the prices people actually pay.

A natural question to ask, then, is: If the Fed ultimately cares about overall prices, why would it ever look at core inflation, thereby excluding items on which Americans spend a nontrivial portion of their income? The reason is because, historically, the food and energy components were highly variable (for example, due to temporary supply disruptions), and their large price fluctuations were usually expected to correct themselves within a relatively short period of time. Consequently, the FOMC focuses on core PCE as a measure of underlying inflation trends and, thus, a predictor of future headline PCE inflation. Assuming core PCE is an appropriate measure to use, we would expect to see headline inflation fluctuate above and below core inflation over the short run.

As I discussed in a 2007 commentary, the relationship seemed to break down in the mid-2000s when there was persistent divergence in headline and core inflation rates.[1] Measured on a year-over-year basis, headline PCE remained higher than core PCE from 2002:Q4 to 2006:Q3. During that period, the divergence was largely driven by rapid economic growth in Asia; the rising global demand for commodities caused their prices to rise faster than other prices, putting upward pressure on headline inflation.

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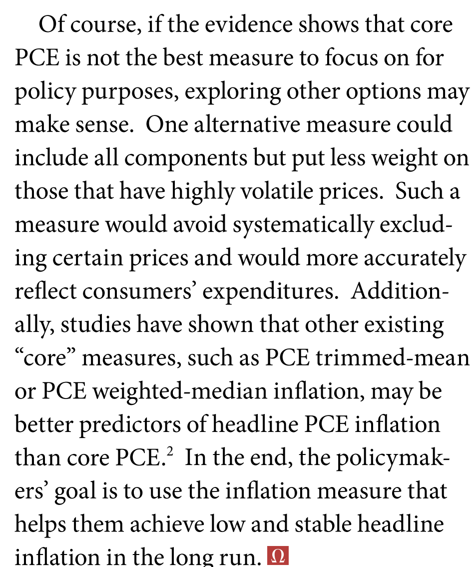
During the financial crisis and recession, the expected patterns re-emerged—headline PCE inflation fluctuated around core PCE inflation. But now that the economy is recovering again, do we see the mid-2000s trend reasserting itself? Since June 2010, the two measures have been diverging slowly, with core inflation below headline. It is too early to tell if the divergence reflects another persistent increase in the relative prices of global commodities or if the divergence is more temporary. Given the strong growth rates of emerging economies during the global recovery, though, the divergence in the two inflation measures deserves close attention.

What would it mean for monetary policy analysis if the FOMC does expect headline and core inflation to continue diverging in 2011 and 2012? As I asserted in my previous commentary, one interpretation is that, during times of continuous increases in the relative price of energy, perhaps core PCE is a misleading indicator of underlying inflation trends. This implies that core PCE may not be a good predictor of future headline inflation after all. Under these circumstances, headline PCE inflation should probably have more weight in policymaking decisions than core PCE inflation.

Of course, if the evidence shows that core PCE is not the best measure to focus on for policy purposes, exploring other options may make sense. One alternative measure could include all components but put less weight on those that have highly volatile prices. Such a measure would avoid systematically excluding certain prices and would more accurately reflect consumers' expenditures. Additionally, studies have shown that other existing "core" measures, such as PCE trimmed-mean or PCE weighted-median inflation, may be better predictors of headline PCE inflation than core PCE.[2] In the end, the policymakers' goal is to use the inflation measure that helps them achieve low and stable headline inflation in the long run. Ω



1 Bullard, James B.; and Pande; Geetanjali. "Energy Prices: In the Mix or Swept Under the Rug?" Federal Reserve Bank of St. Louis *National Economic Trends*, April 2007.

2 For example, see Smith, Julie K. "PCE Inflation and Core Inflation." Unpublished manuscript, Department of Economics, Lafayette College, Easton, Pa., January 2010.