

In search of precision – What's the ideal inflation indicator?

From the April/May
FOMC Minutes:

At least part of the recent softness in inflation could be attributed to *idiosyncratic factors that seemed likely to have only transitory effects on inflation*, including unusually sharp declines in the prices of apparel and of portfolio management services.

Some research suggests that idiosyncratic factors that largely affected acyclical sectors in the economy had accounted for a substantial portion of the fluctuations in inflation over the past couple of years.

Consistent with the view that recent lower inflation readings could be temporary, a number of participants mentioned the *trimmed mean measure of PCE price inflation*, produced by the Federal Reserve Bank of Dallas, which removes the influence of unusually large changes in the prices of individual items in either direction; these participants observed that the trimmed mean measure had been stable at or close to 2 percent over recent months.

The [Dallas Fed](#) was quick to explain why its indicator of inflation is better:

Twice since 2014, core personal consumption expenditures

(PCE) inflation—inflation excluding food and energy—decelerated sharply, only to ultimately reverse course. The Dallas Fed's [Trimmed Mean PCE inflation rate](#) *correctly identified the downward moves as transitory* and looked through them.

However, they acknowledge that getting to the Trimmed Mean is not a simple enterprise:

The Dallas Fed calculates the trimmed mean inflation rate each month using price and expenditure data for 178 PCE components published by the [Bureau of Economic Analysis](#). Price changes from the prior month are calculated for all the components and sorted from lowest to highest. In March, for example, the extremes were the price indexes for tax preparation, which declined at a 62 percent annualized rate, and for watches, which rose at a 138 percent annualized rate.

Once the price changes are sorted, the lowest 24 percent (using components' expenditure weights) and highest 31 percent are excluded, or "trimmed." The trimmed mean inflation rate for the month is the weighted average—using the expenditure weights—of the price changes left in the middle.

The 24 and 31 percent trimming proportions were chosen to produce an inflation series that came closest to a measure of all-items PCE trend inflation. The proportions have been fixed since the trimmed mean's [last major revision](#) in 2009.

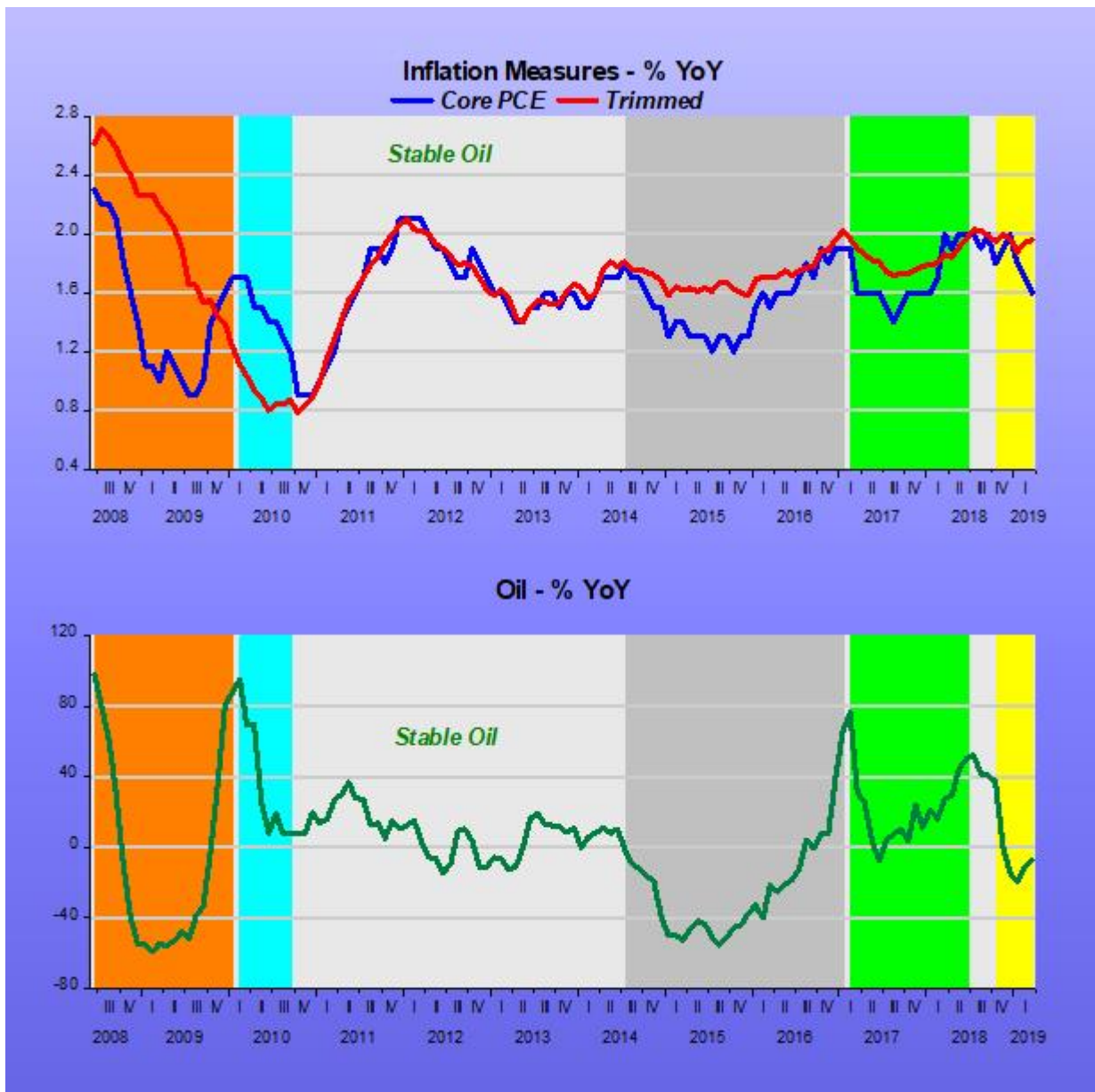
We're glossing over a few technical details here,

particularly regarding the weights, which are a bit more complicated than simple expenditure shares, and the notion of trend that the trimming proportions were chosen to target. Readers interested in those particular nuts and bolts can find them [here](#).

In 2008, the Fed made the huge mistake of looking only at the headline measure of the PCE to guide its decisions. Hopefully, it will not repeat the mistake.

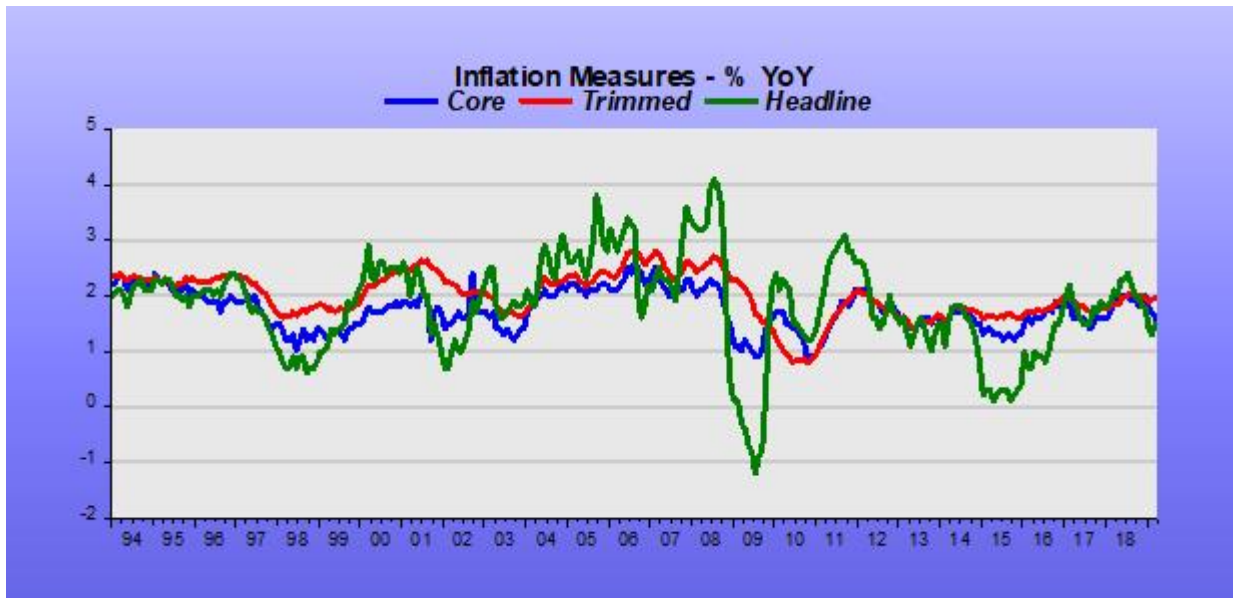
It appears, however, that the systematic undershooting of inflation from the 2% target frustrates it. Since January 2012, when the target became official, the average for the headline PCE is 1.41%, for the core PCE is 1.65% and 1.76% for the Trimmed Mean.

The chart below helps us understand the factor that determines the difference between the core and trimmed mean measures of inflation. It appears that oil plays the major role!



Although the core PCE excludes the direct effect from oil price swings, the indirect effects remain. Note in the chart that when oil prices are relatively stable, both the core and trimmed mean measures give the same indication for the trend rate of inflation, with deviations in the measures being associated with oil price swings, which mostly affect the core.

The important point to note is that for the past 25 years, inflation has not been a problem, as the chart indicates.



The Greenspan “target” was “low & stable” inflation, or the kind of inflation that doesn’t bother anyone. In trying to make the definition more precise, the Fed, as James Meade foresaw more than 40 years ago, put the system in danger:

From Meade’s 1977 [Nobel Lecture](#):

Earlier I spoke of ‘price stability’ as being one of the components of ‘internal balance’. Yet in the outline which I have just given of a possible distribution of responsibilities no one is directly responsible for price stability.

To make price stability itself the objective of demand management would be very **dangerous**. If there were an upward pressure on prices because the prices of imports had risen or because indirect taxes had been raised, the maintenance of price stability would require an offsetting absolute reduction in domestic money wage costs; **and who knows what levels of depression and unemployment it might be necessary consciously to engineer in order to achieve such a result?**