

INVESTMENT UPDATE

The Federal Reserve Bank of Atlanta recently published a study that sheds light on a topic that has been weighing on the minds of nervous bond investors lately: inflation. The Atlanta Fed's *Working Paper 2004-7, Examining Contributions to Core Consumer Inflation Measures* takes a hard look at both of the most commonly-used measures of consumer inflation, the Bureau of Labor Statistics' consumer price index (CPI) and the Bureau of Economic Analysis' personal consumption expenditures price index (PCEPI).

The paper examines the components of US inflation in an effort to determine which factors drive long-term rates of inflation and how changes in the inflation rate can be caused, at least in the short run, by just a few components. The ultimate purpose is to both explain the recent past behavior of inflation and to make some projections of the long-term future rate of inflation. The Atlanta Fed focuses (as do most studies of inflation) on "core" measures of consumer price movements, excluding the food and energy components of inflation, as they are highly volatile and can obscure the true underlying rate.

One big revelation of this study is that the declining price of core goods, which set off the warning siren of deflation when it began to appear in the core CPI series in 2001, showed up in the core goods PCEPI *six years earlier!* But since the core PCEPI components aren't published (only major categories like "durable", "non-durable" and "services"), we didn't know that the core goods prices were declining. Frankly, we're a little jealous that the Fed has access to data, like the components of the PCEPI, that is not publicly available. But that's a story for another day.

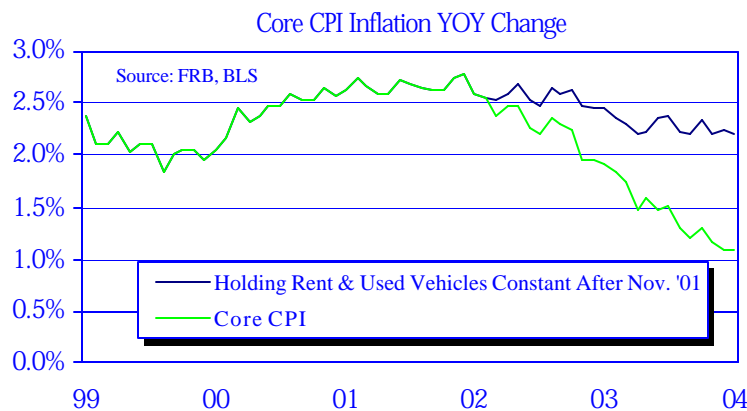
As most investors know, the US economy is dominated by the service sector, which currently represents approximately 70% of US GDP; the goods sector makes

up the difference. It follows, therefore, that core service inflation must be the major contributor to overall core inflation. The Atlanta Fed discovered, by looking at the components of core services, that the decrease in inflation from 1999-2003 was due in large measure to a decline in the price of rent over this period; most of the other components of core services were relatively stable during this time.

Meanwhile, from 2001 to 2003 the smaller core goods components moved into the deflation zone after a long period of relative stability. In reviewing the historical data, the Atlanta Fed discovered that much of this decrease was due to a steep drop in the price of transportation goods, primarily falling prices for used vehicles.

These two components, used vehicles and rent, are both relatively large; when they fell they had a measurable impact on the overall level of core US inflation. To be exact, from November 2001 to December 2003, these two components together contributed 1.1% of the 1.6% total decline experienced by the core CPI.

The chart on this page shows what the core CPI looked



like over this time period, and how it would have looked if the rent and used vehicles components were held steady from November 2001 to December 2003. We should point out that there is some bias in this chart, as these two components "ran up" in 2000 and early 2001. But even holding

these components steady from 2000 on produces similar conclusions: core CPI would have been far more stable, and wouldn't have dropped as precipitously, if not for significant slippage in the price of rent and used cars.

In terms of the "bigger picture," the authors note the relative stability in both the composition and the pricing of services inflation over the recent period, and contrast this with the significant changes in the composition of



the goods components. They conclude that because of its stability, services price inflation should continue to have a dampening effect on core inflation in the years ahead. The volatile and shifting components of goods inflation, the authors conclude, are still in a long-term decline, noting that “significant changes in market structure, trade patterns, productivity growth, and price measurement...suggest continued downward pressure on goods prices going forward.” Their conclusion? “With stable core services inflation and stable core goods deflation, we expect that overall core inflation will remain low.”

That doesn't mean they expect inflation to head lower, only that there are certain structural factors that are working to keep the lid on inflation for some time to come. Our thoughts are that we've seen the low in inflation in this cycle, but we're not quite as optimistic as the Atlanta Fed when it comes to the outlook for inflation.

Let's go back to the two factors that were most responsible for inflation moving lower over the past few years: used car prices and rent. One thing these measures have in common is that they are both highly sensitive to interest rates. Lower rates mean more affordable home ownership, reducing the demand for rental property, and eventually driving rents lower (see the chart on this page). Likewise, lower rates make the financing of new cars more affordable; the prices of used vehicles have to fall in order to remain competitive with cheap new cars.

Most of us are used to thinking in terms of economic activity having an impact on inflation, but here is a study undertaken by the Federal Reserve that connects the Fed's own actions (stimulative monetary policy and an extremely low Fed funds rate) directly to consumer price inflation (or in this case, deflation). We are left to wonder why the authors of this study fail to take the next step and point out that the Fed itself helped to create the deflation scare of 2001-early 2003 by pushing rates to 45-year lows and depressing the market for interest-rate sensitive items such as used cars and rents.

It now seems clear that the Fed, who less than a year ago was still wringing its hands over the possibility of the US slipping into a Japanese deflationary spiral, is in the process of changing to a neutral (and eventually a restrictive) monetary policy. The funds rate is headed

higher, and the market has already begun the process of pushing up rates all along the yield curve in anticipation. Having successfully spurred the economy into a faster pace of growth, the Fed will raise rates to keep the economy from overheating, but in so doing will also push inflation into a higher trajectory by taking away the low-cost financing that has depressed rent and used vehicle prices.

This is occurring at the same time that commodity prices, especially energy prices, are skyrocketing. At more than \$40 per barrel, benchmark West Texas light sweet crude recently hit its highest price (in nominal

terms) ever recorded. While this may be partially a reflection of the shaky political scene in the Middle East, fundamentals are also at work, as supplies are short and the demand for petroleum-based products is projected to be very strong as the global economy gets back on track. Of course, the “core”

measures of inflation don't include food and energy, but energy prices have an impact on so much of the economy (including the service sector—think higher operating costs) that it's reasonable to expect a cost-push element coming into the inflation picture over the next few quarters.

As the Atlanta Fed pointed out, there are plenty of factors in place in the global economy that should continue to keep the overall inflation rate subdued, including excess manufacturing capacity, slack labor markets, and high productivity. But unless this expansion is unlike those in previous cycles, we expect that these factors, which have acted as a deflationary tailwind, will fade as the economy picks up momentum. Companies will need to hire more workers, those workers will begin to demand higher compensation, production costs will go up, and the providers of goods and services, if they can, will raise prices.

The most recent CPI data was a harbinger of what may come: core CPI in April rose by 1.8% year-over-year, up from a 1.1% rate just three months earlier. That's a trend that is sure to make both the Fed and investors uncomfortable.

