The Fed is dazed and confused (with apologies to Jake Holmes) about the lack of goods/services price inflation currently present in the U.S. economy. No matter how you slice or dice the Personal Consumption Expenditures (PCE) Chain Price Index, its annualized growth has not trended above 2% since 2011. How can this be given that the unemployment rate of those covered by unemployment insurance is at an historic low of 1.3% (see Chart 2)? Wherefore art thou, A.W. Phillips and your curve purporting to show an inverse relationship between the level of the unemployment rate and the rate of goods/services price inflation?
Why the Fed is bothered by the lack of consumer price inflation is a mystery to me. With whatever unemployment rate you choose plumbing cycle, if not decade lows, why is the Fed concerned by persistent low consumer price inflation? Is this not an outcome to celebrate rather than despair? Whatever the reason for the Fed’s angst, with regard to the alleged inverse relationship (negative correlation) between the unemployment rate and consumer price inflation, try as I might, I could not find a consistent one. Starting with quarterly observations from 1955, the best I could tease out of the data was a positive correlation of 0.05 (out of a maximum absolute value of 1.00) when the four-quarter moving average of the unemployment rate was advanced by four quarters (see Chart 3). In effect, the data show no consistent relationship between the level of the unemployment rate and the rate of consumer inflation over time – inverse or positive.

Not one to give up on A. W., I tried a variation on his theme. The logic underlying the Phillips Curve is that the lower the unemployment rate, the narrower is the gap between actual real GDP and the economy’s potential real GDP. Potential GDP is a function of guesstimates of the size of the potential labor force and potential total factor productivity. The hypothesis is that as actual real GDP rises relative to potential real GDP, consumer price inflation also should rise. That is, there should be a positive correlation between the relative gap between actual and potential real GDP and consumer price inflation. And sure enough, I was able to find one using the Congressional Budget Office’s estimates of potential real GDP. When advanced by five quarters, the real GDP relative gap has a positive correlation with the rate of consumer price inflation of 0.22 (see Chart 4). An absolute correlation coefficient of 0.22 is nothing to write home about (remember, the maximum possible is 1.00), but at least this version of the Phillips relationship has the correct sign.
It would appear that the Fed is using an incorrect “model” to forecast consumer price inflation. There was another economist who had an hypothesis about the cause of consumer price inflation. His hypothesis was that consumer price inflation is “always and everywhere a monetary phenomenon”. Of course, that economist was the late (may he rest in peace) Milton Friedman.

So, let’s look at the relationship between a monetary variable and consumer price inflation. I assume that you are not shocked that the monetary variable I have chosen to test the Friedman hypothesis is what I refer to as thin-air credit. I am going to use my “broad” definition of thin-air credit – the sum of the monetary base (reserves of the depository institution system and currency in circulation) plus the credit created by the depository institution system. Commercial banks, S&Ls and credit unions constitute the depository institution system. The Friedman hypothesis is that there should be a positive correlation between growth in the chosen monetary variable and the consumer price inflation rate.

So, let’s look at the data. Plotted in Chart 5 are the year-over-year percent changes in quarterly observations of “broad” thin-air credit and year-over-year percent changes in quarterly observations of PCE Chain Price Index. The period of observation begins in Q1:1956. The highest correlation over this sample occurs when growth in “broad” thin-air credit is advanced by 10 quarters. That positive correlation has a value of 0.59 – almost three times as large as the highest positive correlation between the real GDP relative gap and consumer inflation. The Fed ought to expand its list of suspects to include the behavior of thin-air credit in order to solve the mystery of recent low consumer price inflation.

To smooth things out a bit, I have plotted in Chart 6 year-over-year percent changes in annual averages of “broad” thin-air credit and the PCE Chain Price Index from 1953 through 2016. When using annual averages, the highest positive correlation between the two variables (0.60) occurs when growth in “broad” thin-air credit is advanced by three years. Suffice it to say, that there is a long lag between growth in thin-air credit and consumer price inflation. If that sounds familiar, it was what Milton Friedman observed between money supply growth and price inflation when he looked at the data years ago. The two series in Chart 6 are plotted contemporaneously (i.e., neither series is advanced or retarded) because all I want to do is look for trend breaks in the data. I can identify three distinct periods of growth in “broad” thin-air credit – 1953 through 1988, 1994 through 2008 and 2011 through 2016. From 1953 through 1988, the median year-over-year percent change in “broad” thin-air credit was 8.7%. During the same period, the median year-over-year percent change in the PCE Chain Price Index was 3.5%. From 1994 through 2008, the median year-over-year percent change in “broad” thin-air credit slowed to 6.9%. During the same period, the median year-over-year percent change in the PCE Chain Price Index slowed to 2.1%. From 2011 through 2016, the median year-over-year percent change in “broad” thin-air credit slowed to 4.5%. During the same period, the median year-over-year percent change in the PCE Chain Price Index slowed to 1.4%. I see a pattern here. There has been a secular slowing in “broad” thin-air credit growth accompanied by a secular slowing in consumer inflation.
My data tests (not all included here) have convinced me that percent changes in “broad” thin-air credit lead percent changes in the PCE Chain Price Index. There has been a marked slowing in the growth of “broad” thin-air credit since the Great Recession. There also has been a slowing in the rate of consumer inflation. Where has all the inflation gone? The way of “broad” thin-air credit. When will the Fed ever learn?

Paul L. Kasriel Founder, Econtrarian LLC Senior Economic and Investment Advisor Legacy Private Trust Co. of Neenah, WI econtrarian@gmail.com The Econtrarian 1-920-818-0236 © Econtrarian LLC