

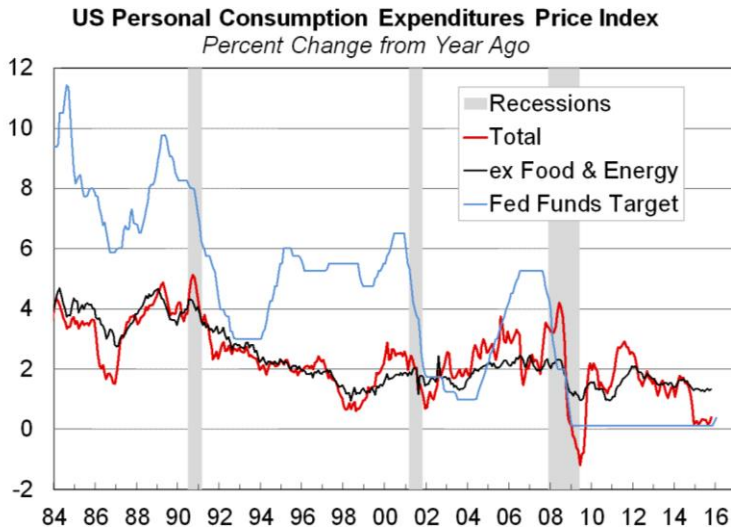
# Current Economic Conditions

Robert C. Fry, Jr., Ph.D.

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## CAN EASY MONEY CAUSE DEFLATION?

The U.S. Federal Reserve raised its target federal funds rate (to 0.25%-0.50%) in December, ending seven years of “Zero Interest Rate Policy” or ZIRP.



During this period, the Fed also gave us three installments of “quantitative easing” or QE, the massive purchase of long-term government securities to inject reserves into the banking system and push down long-term interest rates. Central banks in Europe and Japan have implemented similar policies, with different timing. The “easy” monetary policies of the last seven years raised (understandable) fears that inflation would rise. Instead, inflation has fallen. The Fed’s preferred measure of inflation, the 12-month percent change in the Personal Consumption Expenditure Price Index, stood at just 0.4% in November, well below the Fed’s target of 2%.

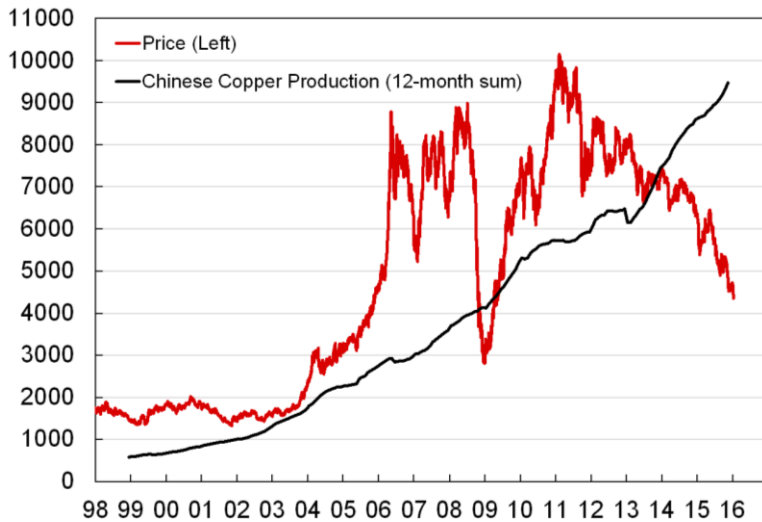
Now, some of my friends – the ones who complained the most about the inflationary impact of the Fed’s policies – claim that easy money is causing deflation. I find many of their arguments unconvincing, and I was tempted to dismiss them as the product of inveterate Fed-bashers who need to attack the Fed about something but who can no longer argue that the Fed is causing inflation. But upon further reflection, I have realized that easy money is not **inherently** inflationary and that there are conditions under which low interest rates and excessive money/credit expansion can cause prices to decline rather than rise.

In short, if easy money boosts productive capacity (supply) more than it boosts demand, it can cause prices to go down rather than up. That has not been the historical experience of developed economies. In the United States, low interest rates boost home sales and purchases of consumer durables, chiefly motor vehicles, but have little impact on the investment in plant and equipment that boosts productive capacity. Contrary to the theoretical models in economic textbooks and the econometric models used by forecasters and policy-makers, the interest elasticity of demand for plant and equipment is, to a first approximation, zero. (And contrary to a theory called “Tobin’s q”, rising stock prices also have little impact on investment in plant and equipment.) Thus, easy money boosts demand more than it boosts supply and eventually puts **upward** pressure on prices.

But what if there were a large economy where access to mortgages and consumer credit was very limited and where investment was seen as the best way to grow the economy? And what if a desire to provide sufficient employment to minimize political unrest encouraged investment far beyond what profit-maximizing companies would undertake in a free-market economy? You could have a situation where low interest rates and easy access to credit boost supply more than they boost demand, putting downward pressure on the prices of goods for which there is excess capacity. There is such an economy: China. If the Fed’s easy-money policies are causing prices to fall, here is the transmission mechanism: The Fed

holds short-term interest rates low (ZIRP) and purchases large quantities of securities (QE). To prevent a strengthening of the yuan that would hurt Chinese exporters, the Peoples Bank of China pursues a similarly expansionary policy. Low interest rates and the easy availability of credit in China are channeled primarily

**Price of Copper vs Output of Copper Products**  
 US \$/Tonne                      Million Tonnes



into investment in plant and equipment, not into the underdeveloped consumer sector. 22 Because of the combination of easy credit and 20 the fact that investment decisions are not 18 based on profit-maximization, many industries 16 end up with excess capacity, which puts 14 downward pressure on prices. 12

While the policies of the Fed might have 10 contributed to this deflationary process, the 8 Peoples Bank of China and the governments 6 and state-owned enterprises making 4 investment decisions are certainly capable of 2 generating this process without any help from 0 the Fed. Inventory behavior in China is also contributing to price declines. In 2008, an oil-company economist attributed the huge run-up

in oil prices to inventory-building in China in advance of the Beijing Olympics. Once the Chinese authorities realized they had enough oil for the Olympics, the build stopped and prices fell. This process has been repeated with other commodities. The Chinese government expresses a desire to build inventories of “strategic materials.” Chinese companies comply by building large inventories, putting upward pressure on commodity prices. When global growth slows, inventory-building stops and prices fall. But Chinese inventory-building has had an impact far beyond China. It is reasonable to conclude that manufacturers, miners, and farmers all over the world mistook the boost in their sales due to Chinese inventory-building for a more-permanent increase in final demand, and increased their capacity accordingly.

Most industries in the United States have not built excess capacity in response to easy money, but there is one major exception: the oil industry. In 1986, while working for Conoco, I was part of the drafting team for a National Petroleum Council study. After meeting owners of independent oil companies for the first time, I observed that these “oil men” did not diversify their investments. “If they get a dollar, they’ll use it to drill a well,” I said to my boss. That apparently hasn’t changed in the last 30 years. The combination of high oil prices (through June 2014) and the availability of cheap credit led to an enormous increase in U.S. oil and gas production, ultimately leading to a decline in crude oil prices from \$145/barrel to \$30/barrel.

The standard explanation for inflation is “too much money chasing too few goods.” Perhaps the recent declines in commodity prices are just the unwinding of bubbles caused by easy money in the past, and this explanation still holds. But given the increase in capacity, especially in China, what we’re seeing now might be a case of “too much money chasing **too many** goods” or, given the reluctance of banks to lend and of consumers to spend, “too much money half-heartedly chasing **way too many** goods.” And the problem does seem largely confined to goods. Prices of services are rising, while excess capacity and excess inventories push goods prices down.

Now that I’m “retired” and will soon begin to draw a pension that will be fixed in nominal dollars for the rest of my life, I can understand why my retired friends are so anti-inflation: any increase in prices permanently reduces our standard of living. Pensioners would be better off with deflation. The Fed won’t adopt a **deflation** target, but I wish they would lower their inflation target to zero. At a minimum, they should realize that Chinese investment and currency policies might make getting inflation up to 2% very difficult. They should change their target from 2% to a 0-2% range, declare victory, and go home, i.e., “normalize” monetary policy. But the “new normal” for interest rates is likely to be well below the old normal.