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Economics Group

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Interest Rates and Consumption: A Complex Matter!

The relationship between real personal consumption expenditures (PCE) and real interest rates is a complex one. As interest rates in the U.S. continue to increase, the question is how long will PCE growth hang on?

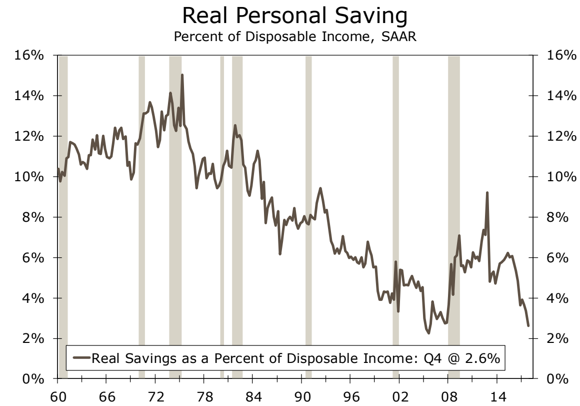
Interest Rates Up, Consumption Down? Not so Fast!

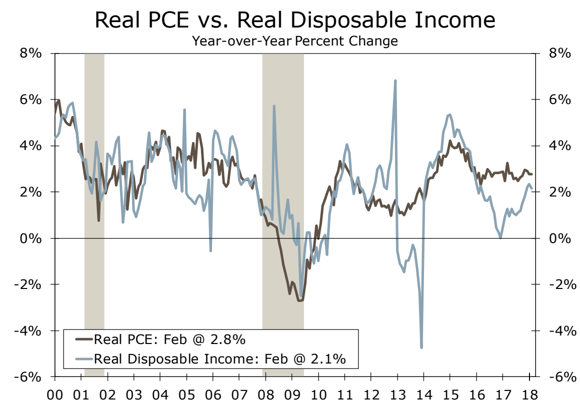
The relationship between interest rates and consumption is not as simple as it appears. Economic theory argues that individuals choose consuming today versus consuming tomorrow depending on the rate of interest. Research on the theory of intertemporal consumption, i.e., consumption over time, talks about the intertemporal rate of time preference, which may also depend on interest rates today versus the future. In principle, if interest rates are high today, individuals will choose to save more and consume less compared to the future and vice versa. However, this is not necessarily true, as shown in the top graph.

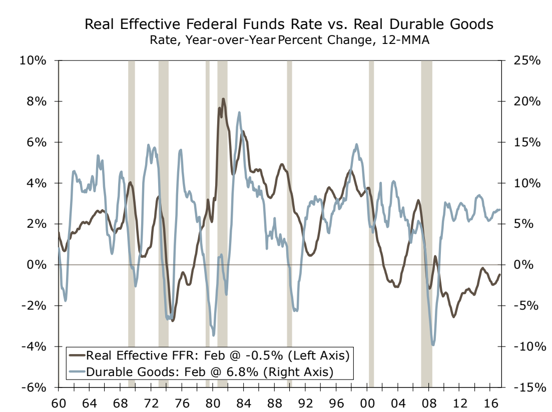
Furthermore, individuals will consume less if interest rates increase and the rest of the variables that affect consumption remain constant, that is, ceteris paribus. However, this is seldom the case. Normally, other variables like our real income, our confidence about our job prospects, and our confidence regarding the economy, etc., are on the move. Many times, higher interest rates mean that the economy is strengthening, which suggests that individuals economic prospects are also improving. Thus, individuals may choose to increase consumption in an increasing interest rate environment. That is, if our real income is expected to increase, we may be able to afford higher interest rates for the goods we want to buy. At the same time, the recently enacted tax reform is expected to contribute to higher growth in real incomes this year, so this may also contribute to higher consumption, even in an increasing interest rate environment (middle graph). On the other hand, higher inflation will work against higher real consumption, as it lowers the rate of growth of real disposable income.

Consumption of Durable Goods and Interest Rates

The component of PCE that is most vulnerable to increases in the rate of interest is the consumption of durable goods because some of these goods, especially big-ticket items, need to be financed over time. In the bottom graph, we plotted the real effective federal funds rate and the real rate of growth of durable goods consumption since 1960. The plotted rates are 12-month-moving averages. It is clear from the graph that during a recession the growth rate of durable goods consumption collapses. However, what is not clear is that higher interest rates are the cause of this collapse. In fact, the Federal Reserve increases interest rates to slow down consumption due to the effects of strong demand on the rate of inflation. That is, when consumption growth strengthens, this puts upward pressure on prices and the Federal Reserve has to increase interest rates to slow down the rate of growth of consumption. However, as the bottom graph shows, the real federal funds rate is still in negative territory and thus there is still plenty of room for the Federal Reserve to increase interest rates without negatively affecting consumption.







Source: Federal Reserve Bank of New York, U.S. Department of Commerce and Wells Fargo Securities

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