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To: Norman Major, Chairman, Ways and Means Committee, New Hampshire House of Representatives
From: Heather Brome, Policy Analyst
Date: March 1, 2006
Re: Higher interest rates

This memo responds to one of the concerns that you and other legislators raised at the seminar presented by Bo Zhao on December 13 about the potential vulnerability of the economy should interest rates rise significantly. The following memo summarizes my research on the subject.

Interest rates and the strength of the economy are closely related. The Federal Reserve uses the federal funds rate—the overnight rate on loans between banks—as its primary instrument to conduct monetary policy. The benchmark federal funds rate affects many other long-term rates such as interest on mortgages, car loans, and business loans. Changes in these long-term rates in turn affect borrowing and consumption by consumers and businesses. High interest rates constrain consumers' and businesses' ability to borrow, while easy access to credit through lower interest rates encourages consumers and businesses to borrow and spend.

The Fed raises or lowers the funds rate in order to achieve full employment and price stability—the two tenants of its federal mandate. In particular, when the economic growth is weak—that is GDP is growing by less than 3.5% and unemployment is higher than around 5%—the Fed lowers the funds rate. In response to the recession of 2001, the Federal Reserve lowered interest rates to encourage consumers and businesses to borrow and spend, in turn stimulating economic growth. By mid-2004, the economic growth was strong enough for the Fed to start a gradual process of bringing interest rates back to a more normal level. In other words, the federal funds rate would not continue to rise unless the economy is growing strongly or inflation is a threat. Therefore, rising interest rates may not expose vulnerabilities in the economy, but rather vulnerabilities in the economy might lead to further interest rate increases.

To understand if there are any potential vulnerabilities in the economy that might lead to an increase in interest rates, we can consider a set of assumptions that might lead to this outcome, and then how businesses and consumers might respond. Global Insight, a comprehensive resource for economic and financial information, conducts economic forecasting. In their pessimistic model, they make several assumptions that lend the outputs of their model to be the "worst case scenario" of rising interest rates. This scenario is based on a doubling of oil prices, foreign investors losing confidence in the dollar due to a rising trade deficit, a falling dollar adding upward pressure on inflation, and housing prices settling abruptly and sharply. In the model inflation begins to pick up in 2006 with CPI inflation at 4.0%. The pessimistic model assumes that the Fed responds to rising inflation by continuing to raise interest rates. The model assumes the federal funds rate averages 6.11% in the fourth quarter of 2006, up from the current target rate of 4.5%.

Businesses have gone through a rapid period of adjustment in response to the overinvestment during the dot-com boom. As a result, further increases in interest rates may to some extent slow borrowing by businesses, but will likely not cripple business investment. Under their pessimistic scenario, business investment would decrease more than 7 percent from their baseline prediction for 2008. Payroll employment would stall and GDP growth would be 0.6 percentage points below the baseline prediction. Even under these conditions, the model does not predict a recession, but rather a slowing of growth.

Of greater concern to many people is the level of debt held by households. As a whole, households are net lenders—that is, they hold more interest bearing investments than debts. However, there is inequality across generations and income. Many retirees hold interest bearing investments while many younger adults have both mortgages and credit card debt. Individuals and households at the lower end of the income distribution will have a tougher time. According to Economy.com, many households with income below $50,000 per year have mortgages at higher interest rates in addition to car loans, student loans, and credit card debt. Additionally, it is thought that appreciation of home values have been a driver of consumer spending through home equity loans. If house prices settle, home owners stand to lose a non-trivial amount of wealth. The World Bank reports that to the extent that home prices are a reflection of unusually low interest rates, the loss of wealth associated with house staying at current levels would be sufficient to reduce consumer demand by more than 1 percent. (World Bank 2005). Under Global Insight's pessimistic model, consumer spending would grow at 1.7% over the next three years, as opposed to 3.0% predicted in their baseline scenario. The big question is what households have done with the money they borrowed. Surveys conducted by the Fed have shown that only a small fraction of new consumer debt has gone to consumption. Households have borrowed to pay off credit cards, student loans, and other high-interest debt and buy new homes or refinance old home loans. While debt-levels seem large, by historical standards consumer debt is not out of line with wealth.

Of particular concern to many analysts is the increase in alternative mortgages including interest only hybrid mortgages and option adjustable rate mortgages. Most alternative mortgages expose consumers to large and sudden increases in their monthly payments when they reset or recast at the end of an introductory period. If interest rates are higher, holders of alternative mortgages are exposed to larger shocks and may be more likely to default on their mortgages. Analysis done by the Federal Reserve Bank of Boston estimates that about $200 billion in mortgages will face payment shocks every year for the next five years. Assuming that all holders of alternative mortgages face a doubling of mortgage payments at the time of recast, households would face an increase in mortgage payments of at most $13 billion this year and $10 billion next year. While this is a large amount, compared with $6 trillion in household spending, even $10 billion will likely have a small effect. Some worry that if a large number of people default on loans at the same time banks could be stressed by a wave of defaults. However, the current mortgage market spreads risks over a large number of stakeholders. Mortgages are often bundled together and sold on the secondary market as bonds. Therefore the risk is shared over a larger pool and even if a large number of mortgage holders default on their mortgages simultaneously, the banking system will be buffered from a shock.

In short, the effect of higher interest rates on consumption should be moderate, especially if other sources of income—particularly wage income—continue to grow. Moreover, the Fed is ready to move the funds rate to achieve its mandate of price stability and full employment. Should the economic growth weaken, the Federal Reserve will respond to make credit more accessible to businesses and consumers.

Sources

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