

Agricultural Economy

Interest Rates on Farm Loans to Increase During 2002-03

Borrowers, including farm borrowers, are likely to encounter rising interest rates in 2002 and 2003 after enjoying declining rates since mid-2000. The upward pressure comes from the unexpectedly strong pace of the economic rebound that began in late 2001. Because agricultural credit is only a small proportion (0.7 percent in 2001) of total credit, interest rates on agricultural loans are determined primarily by factors outside agriculture in national and international credit markets. Changes in demand for credit on the part of consumers, nonfarm business, and government, as well as the supply of credit funds from consumers and depository institutions, all strongly influence interest rates on farm loans.

Interest rates are determined in credit markets by the collective actions of credit suppliers and users. Credit markets determine interest rates and risk premiums on debt that balance the overall supply and demand for credit. Interest rates are composed of a real return (in terms of purchasing power of real goods and services) and an inflationary expectations return (to compensate lenders for changes in a dollar's purchasing power over time). The real rate of interest represents a return to the lender for forgoing current consumption of goods and services in exchange for the opportunity to consume more goods and services in the future.

An increase in inflationary expectations will cause nominal interest rates to rise as lenders demand higher interest rates in order to maintain purchasing power. Interest rates will vary among borrowers depending upon borrower characteristics (such as default risk), loan characteristics (including liquidity, collateral quality, and loan size), and lender's risk aversion.

Interest Rates Moved Sharply Lower in 2001

Between mid-2000 and the end of 2001, nominal and real interest rates fell sharply as economic growth slowed, then turned negative in the third quarter of 2001. Interest rates on nonreal-estate farm loans from commercial banks, for example, fell from 10.2 percent to 6.2 percent. The two most important macroeconomic factors behind the fall were an aggressive easing of U.S. monetary policy by the Federal Reserve Board in 2001 and much lower credit demand by business. Other contributing factors were a rise in the consumer savings rate in the second half of 2001, strong foreign demand for U.S. securities, a loosening of foreign monetary policies, and a moderate fall in year-ahead inflationary expectations in late 2001. Most of the fall in actual interest rates was in the real (inflationary expectations adjusted) component.

Beginning in January 2001, the Federal Reserve Board eased monetary policy by lowering its Federal funds interest rate target (the interest rate on deposits held at Federal Reserve banks primarily by depository institutions) by 4.75 percentage points in 11 separate moves ending in December. This reduced other interest rates by lowering the expected level of the Federal funds rate for 2001 and 2002 and encouraging a more rapid expansion in the supply of money and credit by depository institutions.

Overall private credit demand grew at a 2-percent slower pace in 2001 relative to 2000, led by 3.8-percent slower growth in outstanding credit of nonfinancial business firms. Credit demanded by business dropped because of falling real business fixed investment spending and reduced business inventories. Falling business fixed investment reflected lower capacity utilization rates (which lowered the productivity of the existing capital stock), falling profits, tighter credit standards,

and much weaker equity markets. Businesses reduced inventories by \$62 billion in 2001 in response to weaker final sales and falling corporate profits.

Stronger Economic Growth to Pressure Interest Rates

Interest rates are likely to be under increasing upward pressure in 2002 and 2003, although inflation and inflationary expectations are expected to remain low. The upward pressure will come from stronger business credit demand, expected tighter domestic monetary policy, and gradually accelerating economic growth. Real interest rates may rise more sharply in 2003 if business fixed investment spending accelerates, world economic growth picks up sharply, or the Federal Reserve aggressively raises Federal funds rates. Increases in farm interest rates will be tempered by sluggishness in the adjustment of farm interest rates to changes in open market interest rates.

Economic growth was unexpectedly positive in late 2001, led by very strong growth in consumer and government spending. The recovery picked up steam in early 2002, led by robust growth in residential construction, an unexpected upturn in manufacturing output, and a moderate rise in consumer spending. With the U.S. economy clearly growing at least at a moderate pace in early 2002, credit market participants grew increasingly concerned that the recovery would lead to robust growth in credit demand and much tighter monetary policy by the Federal Reserve. Because debt markets are forward looking, interest rates rose significantly in response to these concerns.

Over the October 2001-March 2002 period, 1-year and 10-year Treasury bonds rose approximately 0.3 and 0.8 percentage points, respectively. Rising money market yields caused bond investors to demand higher risk premiums to hold long-term bonds, further boosting bond rates. The

rise in Treasury interest rates has put upward pressure on private lending rates in general, including farm interest rates. In 2002, if U.S. economic growth is moderate, inflation remains low, and Federal Reserve tightening is not severe, further increases in bond market interest rates during the balance of the year could be relatively mild.

Economic growth in 2002 will get a substantial boost from business efforts to rebuild inventories. In 2001, inventories fell approximately \$62 billion, lowering real GDP growth by approximately 1.5 percent. Rising inventory levels will raise short-term credit demand. Moreover, with concerns over business accounting standards expected to continue, large firms will continue to have difficulty raising funds in the commercial paper market and will be more dependent on commercial banks for their short-term credit needs.

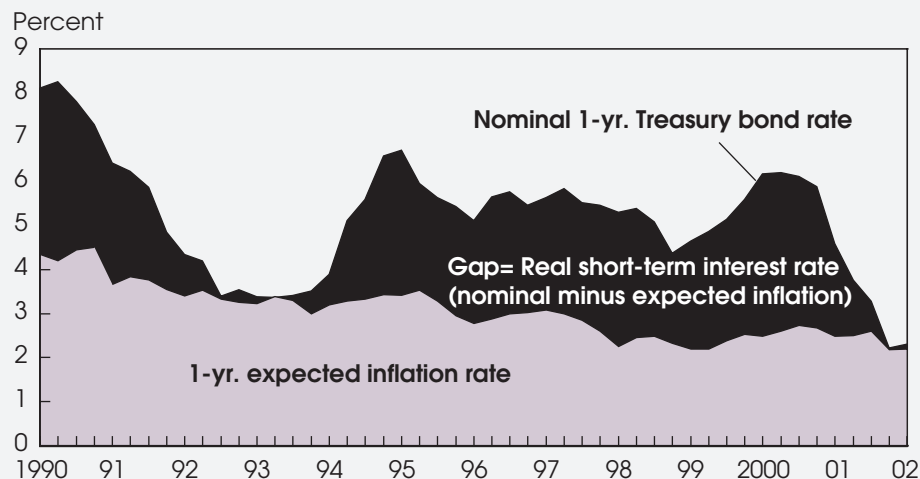
Economic growth in 2002 is likely to be moderate, tempered by a lack of pent-up demand on the part of consumers and homebuyers. Typically in recessions, with increased employment uncertainty, consumer purchases of durables and homes falls. But in 2001, purchases of consumer durables and residential housing rose 6.7 and 1.5 percent, respectively. Business investment in plant and equipment, which fell 3.2 percent in 2001, is expected to turn positive by the second quarter of 2002 and gradually pick up pace in the second half of 2002 and in 2003. Business spending will be constrained by current excess capacity and poor profitability in many industries.

Stronger economic growth in general will raise the demand for credit and money to support higher levels of economic activity. In 2002 and 2003, the combination of stronger short- and long-term business credit demand, coupled with expected tighter domestic monetary policy and more rapid domestic and foreign growth, will place upward pressure on real interest rates.

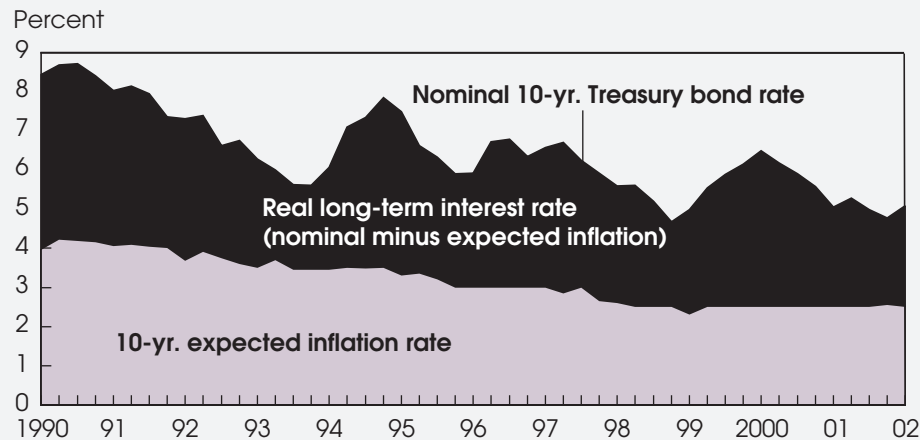
As excess capacity is reduced over the course of the recovery and business profit margins slowly improve, real returns to the existing business capital stock will

Short- and Long-Term Interest Rates Bottomed Out in Late 2001

Short-term loans



Long-term loans



2001 preliminary. 2002 forecast. Inflation rates based on consumer price index and Survey of Professional Forecasters.
Sources: Federal Reserve Board of Governors and Federal Reserve Bank of Philadelphia.
Economic Research Service, USDA

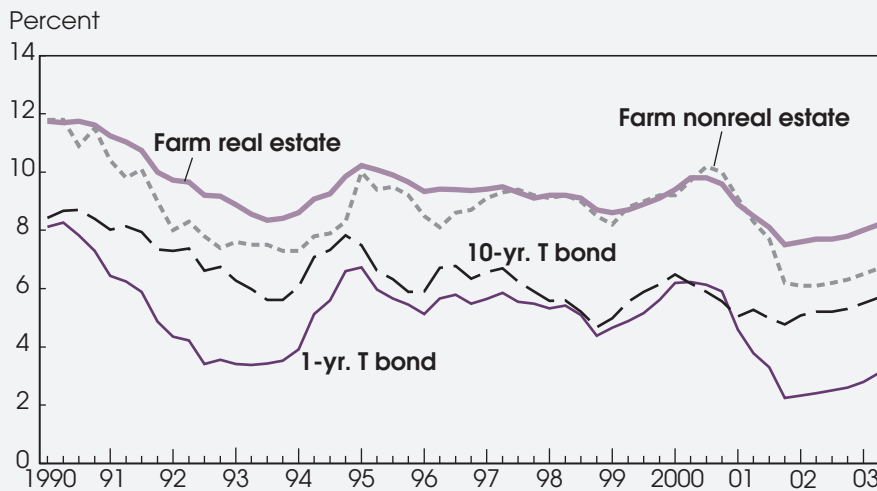
increase. Higher returns to existing capital stock will raise expected real returns to business investment in plant and equipment and place upward pressure on real interest rates. Also, expected tighter monetary policy in the second half of 2002 and in 2003 will place upward pressure on real short-term interest rates and, to a lesser extent, real long-term interest rates

Inflation should remain low in 2002. Declines in producer prices in the second half of 2001 were broad-based, extending

well beyond energy and food prices. In addition, growth in employment costs—as measured by the employment cost index—slowed in the second half of 2001. Given excess capacity in most industries, and the very strong dollar, business profit margins will continue to be squeezed in the first half of 2002. Therefore, little inflationary pressure from rising costs exists in the economy outside the volatile energy area. Low inflation in the first half of 2002 and expected continued strong productivity growth should keep short-term inflationary expectations low for the

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Interest Rates on Farm Loans Likely to Increase in 2002-03, Reflecting Movement in Treasury Bonds



2001 preliminary; 2002-03 forecast. Based on monthly data from Federal Reserve Board of Governors. Economic Research Service, USDA

remainder of 2002 and 2003. Inflation is likely to pick up mildly in 2003 in response to tighter labor and capital markets coupled with stronger economic growth abroad.

Farm Interest Rates Should Trail Interest Rates in General

While interest rates are likely to rise in 2002 and 2003, farm loan rates are expected to increase less than most interest rates. Typically, interest rates on farm

loans at commercial banks are less volatile than most nonfarm interest rates and adjust more slowly. However in the long term, interest rates charged on farm loans by lenders must earn competitive risk-adjusted returns that are comparable to risk-adjusted returns from nonfarm loans and other financial assets.

Banks in rural areas are heavily dependent on consumer deposits (checking and savings accounts, plus time deposits of less than \$100,000) for the bulk of their loan

funds. Rates paid on consumer deposits typically lag changes in open-market interest rates. In addition, changes in deposit interest rates typically affect loan rates at rural banks relatively slowly. Banks prefer to keep their small business loan rates more stable by determining their loan fund costs on an average cost-of-funds basis. This helps stabilize interest rate margins between the expected return from lending and the average interest rate paid to depositors.

The relative stability of farm loan interest rates charged by commercial banks has been enhanced in recent years by the lack of large fluctuations in farm loan delinquency rates. In 2000 and 2001, agricultural loan performance held up well in relation to nonagricultural business loans. Loan delinquency rates for agriculture have been relatively stable since 1998, while delinquency rates for nonreal-estate business loans have moved upward during this period, especially during the economic slowdown and recession of 2000 and 2001. Given the Federal government's commitment to supporting farm income and the likelihood of some overall improvement in export market conditions for U.S. agricultural products in 2002, agricultural loan delinquency rates are not expected to rise sharply over the next year. **AO**

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FOR MORE INFORMATION

Real-estate and nonreal-estate farm loan rates are reported in the Agricultural Finance Data Book, published quarterly by the Board of Governors, Federal Reserve System, Washington, DC.

Forecasts for key real, inflation, and financial variables are published quarterly by the Federal Reserve Bank of Philadelphia in the Survey of Professional Forecasters. www.phil.frb.org/econ/spf/index.html

Macroeconomic Factors Behind the Fall in Farm Interest Rates

ERS Outlook No. AIS 78-01, March 2002. www.ers.usda.gov/publications/ais78/