

## Rising Interest Rates Place Upward Pressure On Farm Lending Rates

Higher nominal and real interest rates in the general economy are expected in second-half 2000 and first-half 2001, putting upward pressure on interest rates for farm loans. Interest rates have moved sharply higher in the general economy since fall 1998. From October 1998 through late March 2000, nominal 3-month Treasury bill interest rates rose roughly 1.8 percentage points—from slightly below 4 percent to over 5.7 percent. Over the same period, the 10-year Treasury bond was up approximately 1.6 percentage points to 6.1 percent.

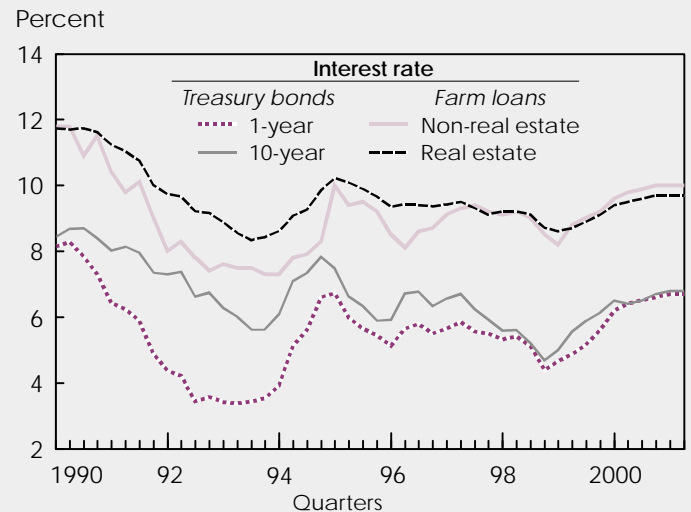
Inflationary expectations have changed little since fourth-quarter 1998. Short-term median inflationary expectations (1 year ahead) increased only 0.15 percent, while median long-term (10-year) inflationary expectations remained unchanged at 2.5 percent, according to the Survey of Professional Forecasters. Thus, the rise in both short- and long-term nominal interest rates is due almost entirely to rising real interest rates (nominal rate minus inflation rate equals real interest rate).

From early 1995 until late 1998, Treasury bond rates moved generally downward, primarily because of declining short- and long-term inflationary expectations, and the Asian financial crises of 1997 and 1998. The Asian financial crises not only lowered nominal and real U.S. interest rates (especially for high-quality debt securities) by slowing world growth and world credit demand, but also increased demand (and prices) for U.S. financial assets (e.g., money market instruments, bonds, and stocks) as a relatively low-risk investment. By fourth-quarter 1998 (1998IV), nominal yields on 1- and 10-year Treasury bonds fell to approximately 4.4 and 4.7 percent.

Four main factors have contributed to rising real interest rates since 1998IV: 1) strong growth in private credit demand, 2) tighter monetary policy to head off higher future inflation, 3) lower household saving, and 4) weaker growth in foreign demand for U.S. financial assets in recent quarters. Growth in credit demand by households and nonfinancial businesses has accelerated sharply since 1997. After growing at a 6.4-percent rate in 1997, household credit growth accelerated to 8.7 in 1998 and 9.4 percent in 1999. Nonfinancial business credit demand has shown a similar pattern of strong growth in recent years, up 8.2 percent in 1997 and accelerating to 10.5 percent in 1998 and 10.6 percent in 1999. Growth in household and business credit demand is not expected to slow substantially until 2001.

A tightening of monetary policy since summer 1999 has also raised short-term interest rates. Between late June 1999 and late March 2000, the Federal Reserve Board has raised its target for the Federal funds rate from 4.75 to 6.00 percent (this is the rate depository institutions charge each other for borrowing funds on deposit at Federal Reserve Banks). By

### Farm Loan Rates at Commercial Banks Will Likely Continue to Rise Through Mid-2001



Nominal non-real estate loans and 1-year Treasury bonds are relatively short-term rates; real estate loans as well as 10-year Treasury bonds are relatively long-term. Forecast beginning 2000(II) for Treasury bonds; 2000(I) for non-real estate loans; and 1999(IV) for real estate loans.

Source: Federal Reserve Board of Governors, *Federal Reserve Statistical Release* (G.13) and *Agricultural Finance Databook*.

Economic Research Service, USDA

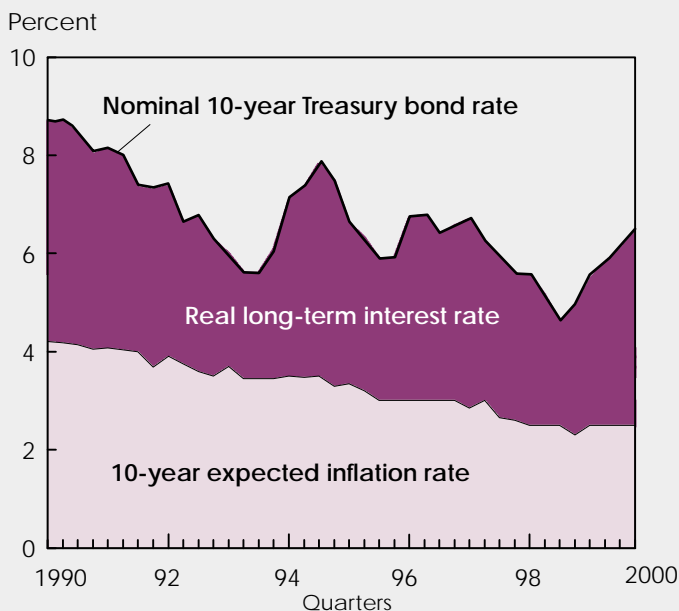
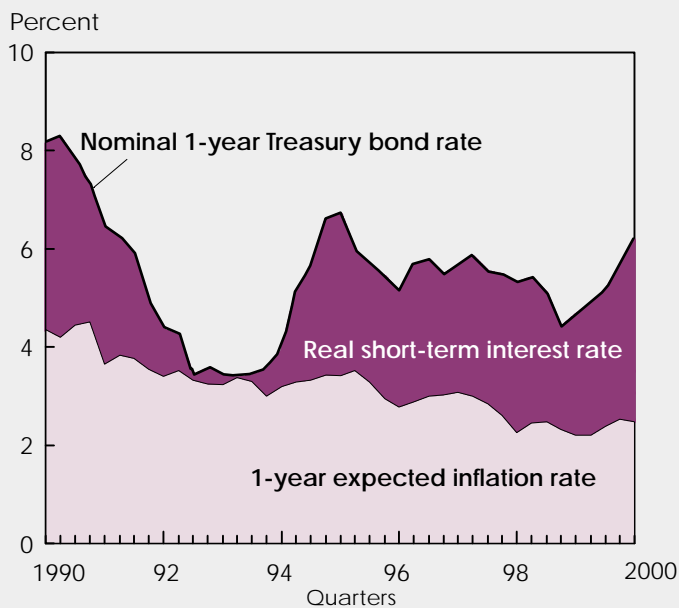
raising the costs of acquiring bank reserves for depository institutions, the Federal Reserve Board has placed upward pressure on short-term interest rates and, to a smaller extent, long-term rates. Substantial additional tightening by the Fed remains likely in second-half 2000 and early 2001, unless economic growth slows substantially and inflation remains low.

The supply of savings entering credit markets directly or indirectly from households has slowed sharply since 1998IV. Total household savings declined from \$228 billion in 1998IV to \$120 billion in 1999IV as the personal saving rate (savings as a share of personal disposable income) fell from 3.5 percent in 1998IV to 1.8 percent in 1999IV. The personal savings rate is expected to increase only modestly (to 2 percent) in 2000 and to reach 2.8 percent in 2001.

Foreign purchases of U.S. financial assets, although still very large, have slowed in recent quarters. Foreign financial investment in the U.S. in 1997 through mid-1999 surged with the onset of the Asian financial crises and accompanying slower foreign growth in 1997 and 1998, and with the boom in the U.S. stock market. Net foreign purchases of U.S. financial assets peaked in 1999II at \$479 billion, slowing to \$350 billion by 1999IV. With foreign growth and demand for capital expected to increase substantially in 2000 and 2001,

## Farm Finance

### Short- and Long-Term Interest Rates Are Rising As Inflationary Expectations Hold Steady



Expected inflation rates based on consumer price index (CPI).

Sources: For nominal Treasury bond rates, Federal Reserve Board of Governors. For expected inflation rates, Survey of Professional Forecasters (compiled by the Federal Reserve Bank of Philadelphia).

Economic Research Service, USDA

Both Treasury rates and farm loan rates from commercial banks are expected to rise throughout 2000 and the first half of 2001, although expected increases are more moderate than over the last 2 years, because of somewhat slower real growth and less additional tightening by the Federal Reserve. Interest rates on farm loans will likely increase less than most nonfarm interest rates. A mild increase in inflation is expected. Continued strong, though slower, productivity growth will moderate upward pressure on inflation resulting from a combination of very high employment rates in labor markets, general tightness in product markets, and higher overall petroleum prices.

Rates charged on farm loans must in the long term earn competitive risk-adjusted returns for lenders that are comparable to returns from nonfarm financial assets. Therefore, the rise in real interest rates in the general economy will continue to place upward pressure on farm loan rates charged by private lenders. However, the expected rise in farm loan rates is less than for nonfarm interest rates. This reflects the strong competition from the Farm Credit System—which aggressively pursues the larger, more established, lower-risk farm borrowers—as well as the less interest-sensitive deposit base of rural banks. Rural banks 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 respond sluggishly and with a lag to rising open market interest rates.

In addition, loan rates at rural banks typically respond more slowly to changes in open market interest rates. These banks generally prefer to price their business loans at the average cost of bank funds, keeping the interest rate margin between the cost of funds (the rate paid to depositors) and return from lending (expected interest rate paid by borrowers) fairly stable.

Finally, because of the overall weaker farm income outlook for 2000 as well as recent increases in real interest rates, agricultural lenders will be more hesitant to substantially raise real interest rates charged to farm borrowers. If real farm lending rates increase substantially, lenders risk higher probabilities of loan defaults and the prospect of reduced overall loan quality. Private farm lenders also face strong competition from the Farm Credit System. The competition from FCS further reduces expected increases in real interest rates on farm loans. **AO**

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real interest rates and expected returns on U.S. assets (e.g., stocks, bonds, and real estate) will likely have to rise further to encourage increased purchases of U.S. financial assets by foreigners.