May 2018

## Why are Variable Interest Rates Increasing?

In this report, we take a look at the background story of how interest rates are set and answer some questions that borrowers are asking today.

#### The U.S. Federal Reserve and the Federal Funds Rate

Over the past couple of years, the U.S. Federal Reserve Bank has made multiple interest rate adjustments to the federal funds rate, raising the rate to its current target range of 1.50-1.75 percent. This follows a historically unusual period in which the target rate was 0.00-0.25 percent for a period of 84 months.

The federal funds rate is the rate at which depository institutions (banks and credit unions) lend reserve balances to each other overnight. The federal funds rate, along with the London Interbank Offered Rate (LIBOR), are components that set the foundation for lending institutions' cost of capital.

Lending institutions, such as commercial banks, as well as Farm Credit associations, are basically in the business of renting money. They obtain capital from depositors, investors and other financial institutions, add a reasonable spread to it and lend that capital out. Therefore, rates offered on loans are a combination of the underlying cost of capital, as well as the spread the lending institution needs to finance its operations, build capital for the future and account for risk of loss.

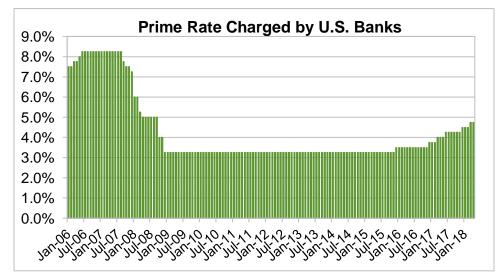


Figure 1: U.S. Federal Reserve



Multiple interest rate adjustments

Fed funds rate and LIBOR set foundation for cost of capital The Farm Credit System obtains funds from selling Farm Credit bonds to various investors, adds a reasonable spread on those funds, and lends them out to farmers, commercial fishing enterprises and forest product producers throughout the country. We are able to offer competitive rates to borrowers because our underlying cost of capital is low, we continue to focus on operating efficiently and we manage our lending risks prudently. The earnings left over after adequately capitalizing the association are typically turned back over to members in the form of patronage dividends, which were \$60 million last year based on 2017 earnings and members' loans outstanding.

Farm Credit East's variable rates are linked to the federal funds rate, prime rate and LIBOR. When the Fed moves to raise the federal funds rate, the prime rate and LIBOR generally follow with similar increases. This immediately increases Farm Credit East's cost of funds as well. This is why that cost is passed onto variable-rate borrowers at the next billing cycle (the lag between the Fed's announcement and the next billing cycle creates cost to the association in a rising interest rate environment). The U.S. prime rate and LIBOR typically follow any Fed action immediately, thus commercial banks and other lenders pass these increased costs to their borrowers as well.

#### Why is the Fed raising rates?

There are a number of reasons why we are in a rising interest rate environment. The U.S. Federal Reserve has a broad mandate to help manage the economy in order to minimize inflation and promote maximum employment. The primary tool the Fed has to achieve this is managing the federal funds rate. During periods of high inflation, the Fed typically raises interest rates, and during periods of high unemployment, the Fed typically lowers interest rates to stimulate borrowing and investment.

Prior to the Great Recession of 2008-09, the federal funds rate was at 5.25 percent and the U.S. prime rate was at about 7.5 percent. (The average prime rate from 1995-2007 was 7.2 percent.) Typically, when a recession hits, the Fed will reduce rates by about 300 basis points or three percent. Following the recession, interest rates are gradually ratcheted upwards to return to normal levels.

Following the 2008-09 crash, the Fed reduced the federal funds rate from 5.25 percent to a range of 0.00-0.25 percent – a historic move – which reflected the severity of the recession. What followed was an unusual period in which rates remained at those levels for an extended time. Now that the general economy is on a firmer footing, growth is accelerating and inflation is beginning to rise. Most of the Federal Reserve's Open Market

We are able to offer competitive rates

Variable rates linked to the federal funds rate, prime rate and LIBOR

Economic factors initiate change in interest rate

General economy is on a firmer footing



Committee (FOMC) believe that now is the time to return rates to more historically normal levels. If they do not, there are two main concerns; that inflationary pressure will increase and that the Fed will be left with little recourse to help the economy in the next recession.

Even within the FOMC, rate moves can be controversial. While most committee members support a return to more normal interest rate levels, they do not always agree on the rate of movement in that direction. In general however, the FOMC committee members project that rates will be about 100 basis points higher one year from now. Figure 2 depicts individual FOMC members' opinions of what the federal funds rate will be or should be at given time periods. Each dot represents one member of the committee. While there is general agreement for 2018 levels, members' views diverge as time goes on.

### Should I fix my interest rates?

About one-third of Farm Credit East's loans are fixed rate and about twothirds are variable-rate loans. Variable-rate loans generally move with the federal funds rate, while fixed rates are set for a period of time up to the life of the loan. Farm Credit East fixes a portion of its own debt to hedge against rate increases and to balance risk on its fixed-rate loans.

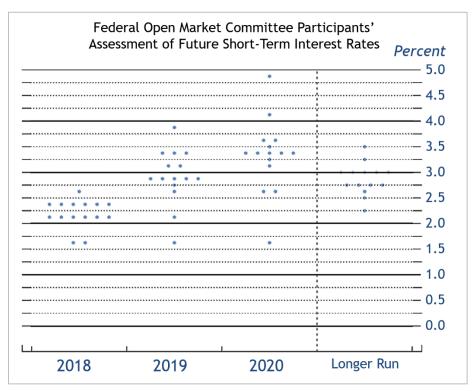


Figure 2: Federal Open Market Committee participants' assessment of appropriate monetary policy: Midpoint of target range or target level for the federal funds rate, released March 21, 2018

FARM CREDIT EAST

Time to return rates to more historically normal levels

FOMC share opinions of future federal funds rate

In a rising interest rate environment, fixed rates are typically higher than variable rates, as the fixed rate market factors in anticipated rate moves. The decision on whether to fix interest rates or not is one which customer have to make on their own, depending on their tolerance for interest rate risk.

By fixing your interest rate, you are essentially protecting yourself against future rate increases above what the market expects today. It is a similar concept to hedging on commodity futures. Consider average interest rates of the past, and whether your business could handle rate increases beyond what you expect.

#### What do rising interest rates mean for the cooperative?

Farm Credit East manages its lending operations so that it generates comparable earnings at varying interest rate levels. As mentioned previously, there is a negative earnings impact due to the lag between Fed interest rate movements and loan billing cycles, but that is budgeted for at our organization. Farm Credit East maintains fixed-rate debt to balance risk on our fixed-rate loans, and hedges our own equity to stabilize variable interest rate risk. These practices ensure a strong cooperative regardless of the external interest rate environment.

#### **Farm Credit East Contributors**

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More information can be found at FarmCreditEast.com

Fixed or variable rate decisions up to customer's risk tolerance

Fixed-rate debt to balance risk on fixed-rate loans

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