

The reason for borrowing money is not simply to acquire the money itself. For instance, people borrow money to build a building, buy a car, or expand a business, but if the economy is in a decline, there may be no need for that building, the car, or even the business expansion. So what determines interest rates? It is a complex mix of influences, not the least of which is generated by the government's needs, clearly colored by the government's unique power to create money.

There are four major influences on interest rates: supply of money, demand for credit, monetary policies of the Federal Reserve, and fiscal policies of the United States government. Each of these will be discussed in the pages to follow.

Where Are We Now?

Implications for the Real Estate Market

Why is the real estate industry so concerned about interest rates? Imagine that someone wants to buy a home priced at \$300,000. The buyer makes a 20% down payment and, therefore, needs to borrow the balance of the purchase price, \$240,000. If the interest rate is 5%, her monthly payment will be \$1,288.37. Monthly income required to qualify for a 30-year, fixed-rate mortgage loan—specifically, a conventional mortgage—requires a housing to income ratio of 28%, making it necessary that this borrower would earn at least \$4,600 per month to qualify for the mortgage. If mortgage interest rates go up to 6%, this purchaser will need monthly income of \$5,139 in order to buy the same house. The buyer will need a \$539 raise (after taxes) just to buy the house. If interest rates climb to 7%, an increase in income to \$5,703 will be required—the equivalent of a raise of almost \$1,103 per month after all payroll taxes are withheld.

For a 90% LTV loan, the variations are even more dramatic. The monthly income requirement for that loan at 5% would be \$5,177, while at 6%, it would be \$5,781—a difference of a little over \$600 per month.

Supply of Money

Thirty years ago, dependence on savings accounts as a source of mortgage money caused periodic shortages in the availability of funds. These shortages

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occurred when savings were withdrawn from depository institutions and placed in higher-yielding investments such as money market funds. As real estate financing shifted to the use of mortgage-backed securities, the capacity to tap huge financial markets for funds accelerated, bringing ample cash into the mortgage market. Just prior to the recent financial crisis, it seemed that a shortage of mortgage money had become a thing of the past. Now the supply of money derives from a much broader base of sources including pension funds, money market funds, and mutual funds, all in addition to savings deposits in the banking system. As discussed in Chapter 1 and later chapters, any current shortages in mortgage money availability have been made up by the intervention of the Federal Reserve Bank.

Demand for Credit

The demand for credit comes from the following four categories of borrowers:

1. *Government*—includes net debt increase for federal, state, and local governments
2. *Corporate*—business borrowing for inventory requirements, capital needs, and longer-term investment
3. *Mortgage loans*—includes housing, construction, industrial, and other investment purposes
4. *Consumer*—personal loans for such things as automobiles, furniture, appliances, or other personal needs

A normal balance between the four categories of credit demand exists when each takes about one-quarter of the available supply of funds each year. However, the demand for borrowed money by business and consumers is generally less in an economy with slow to modest growth. That was the situation in the 1990s and the early part of the 21st century.

Although mortgage money competes with all other demands for credit—all seeking essentially the same pool of funds—that pool has been large enough in recent years to supply each of their requirements even at declining interest rates.

Table 2-1 compares credit demand in 2007 with credit demand in 2009. This table shows a decrease in total demand for credit from 2007 to 2009. The year 2007 had peak credit demand just before the recent financial crisis, with all categories taking a lesser share of demand except the

TABLE 2-1 Funds Raised in U.S. Credit Markets* (in billions of dollars)

	2007		2009		2013	
	Amount	Percent	Amount	Percent	Amount	Percent
Total Net Borrowing	\$4,483	100%	(\$ 644)	100%	\$1,945	100%
Government (Fed, local)	358	30	1,515	335	716	37
Corporate	1,055	24	(540)	(84)	388	20
Mortgage loans	1,062	24	(293)	(45)	100	05
Consumer	139	03	(115)	(18)	174	09
Other	869	19	(1,211)	(188)	567	29

*Figures interpolated from *Federal Reserve Bulletin*, Dec. 9, 2010, Table F.4, "Funds Raised in U.S. Credit & Federal Reserve Statistical Release" and Dec. 11, 2014, Table F.4, "Credit Market Borrowing, All Sectors, by Instrument Markets."

government. Mortgage lending decreased because of the recession. Note that the federal government borrows substantially more than the publicized amounts in order to pay for off-budget items. In 2007, mortgage loans took \$1,062 billion in net credit, which means new money. The loan origination market growing threefold over the decade of 1997 to 2007 was only exceeded by federal, state, and local borrowing. With the financial crisis that began in the fall of 2007, the government slowly became the dominant borrower in the U.S. credit markets by 2009, and continued to have more than a one-third share in 2013.

An interesting feature of **credit markets** is the position of federal borrowing. Since there are no legal limits on what the government can pay for its money, it is capable of driving all other demands for credit out of the market. Of course, such an action is extreme, but it did occur in 1944 at the peak of World War II, when the government took 99% of available credit. This scenario was exceeded, however, in 2008 and 2009—a fact that exposes the full scope of the financial crisis that still haunts the U.S. credit markets. The only period when the federal government was not a net borrower over the past 50 years occurred between 1998 and 2001, when the federal government was, for the first time since the 1950s, not in a deficit spending position. Recent decades with the highest increases in federal deficit spending are 1981–1990 and 2001–2014.

Monetary Policies of the Federal Reserve

A substantial influence on interest rates is the Fed's ability to increase the money available in this country at any time, as described earlier in this

chapter. The other "tools" available to the Fed can also be used to effectively change short-term interest rates.

Fiscal Policies of the United States Government

The way in which the federal government handles its tax and spending policies is called its *fiscal policies*. Fiscal policies represent a key factor in the competitive markets that control interest rates. If Congress and the president decide to spend more than the available income (tax revenues), the difference must be made up by either borrowing or printing money, thus forcing the U.S. Treasury and the Fed to act almost regardless of the effect on interest rates.

Interest Rate Indicators

There are a number of different interest rates published daily in leading business magazines and newspapers. All of these give good clues as to the direction in which money costs are moving. Following is a discussion of the four rates that represent important **interest rate indicators** for the real estate mortgage business.

Treasury Bill Rate

The cost of short-term borrowing by the federal government is determined each week at the auctions of three-month and six-month Treasury bills. T-bills are sold by the Federal Reserve Banks every Monday in minimum denominations of \$10,000, and can be purchased from banks or through authorized security dealers. The return on this type of investment is expressed not as an interest rate but as a yield because it is determined by the difference between the purchase price and the face value of the bill. The auctions provide an accurate indication of current short-term rates, and the trend, up or down, gives a clue to the future.

Prime Rate

The prime rate is often defined as the interest rate charged by a commercial bank to its most creditworthy customers. Each bank may set its prime rate by any method it chooses, as the rate is not regulated. Some banks use complicated formulas, while others depend on the wisdom of their boards of directors. In practice, most banks simply follow the lead of one of the major commercial banks.

Today, the prime rate is used more as a base upon which to float an interest rate for many kinds of loans than as an actual lending rate. For example, a construction loan may be quoted at two points over prime; if the prime rate is 3.25%, the construction loan will be 5.25%. If the prime rate moves up to 6%, the construction loan automatically will be increased to 8%, and is calculated from the date the prime rate change is announced. Another direct effect of the prime rate on the mortgage field is that warehouse lines of credit held by mortgage companies with commercial banks are usually quoted at prime or a point over prime.

Where Are We Now?

The History of 10-Year Treasury Rate

MONTHLY 10-YEAR RATE	
2014-Jan	3.2%
2014-Feb	2.7%
2014-Mar	2.8%
2014-Apr	2.8%
2014-May	2.6%
2014-Jun	2.6%
2014-Jul	2.5%
2014-Aug	2.6%
2014-Sept	2.5%
2014-Oct	2.4%
2014-Nov	2.3%
2014-Dec	2.2%

HISTORICAL 10-YEAR TREASURY RATE

Average (Last 12 Months)	2.42%
Average (Last 10 Years)	3.16%
High (Last 12 Months)	3.01% (January 2014)
Low (Last 12 Months)	2.10% (December 2014)
High (Since April 1953)	15.32% (September 1981)
Low (Since April 1953)	1.44% (June 2012)

Recent rates are close to the all-time lows.

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Fannie Mae/Freddie Mac—Administered Yield Requirements

During the early 1980s, the Federal National Mortgage Association (FNMA)—“Fannie Mae”—and the Federal Home Loan Mortgage Corporation (FHLMC)—“Freddie Mac”—phased out their frequent auctions for loan commitments to their seller/servicers. The auctions have been replaced by daily access to these secondary-market purchasers by seller/servicers through indicative pricing processes. When an approved Fannie Mae seller/servicer sells whole loan products to Fannie Mae for cash, this action generates immediate funds for additional mortgage originations. During 2004, Fannie Mae developed new technology to replace the old manual management of pipeline risk (covered in Chapters 4 and 5), which in a faster-paced mortgage market had become too difficult and required too much attention from key employees, taking them away from other value-added tasks. The system Fannie Mae calls **eCommitting™** was developed to allow approved conventional mortgage lenders more time to focus on growing their business. **eCommitONE™** is an easy-to-use, Web-based application that provides automated pricing information and best efforts committing processes.

eCommitONE™ has been through nine upgrades over the past seven years; it now allows a mortgage lender to pass pipeline management risk onto Fannie Mae. Many lenders prefer the **eCommitONE™** software application to commit loans in their mortgage loan pipeline to be purchased by Fannie Mae. If the committed loan does not close, lenders will not have “pair-off” fees like they have in mandatory commitments, as long as the committed loans that the lender closes are delivered to Fannie Mae before the commitment expiration date and receive the commitment price. These approved seller/servicers use one or both of two execution options to meet business objectives: mandatory committing (through Fannie Mae’s **eCommitting™** application) and best efforts committing (through Fannie Mae’s **eCommitONE™** application). When approved sellers/servicers enter into mandatory commitment with Fannie Mae, they agree to sell a specified dollar amount of mortgage loans to Fannie Mae at an agreed-upon price within a specified timeframe. Because these commitments are mandatory, if the approved seller/servicer is not able to fulfill the terms of his or her commitment to Fannie Mae, he or she will be required to pair out of the contract, and may be subject to a pair-off fee. A best efforts commitment, conversely, allows an approved seller/servicer to

enter into an agreement to sell the loan to Fannie Mae, but if the loan does not close, he or she will not be charged a pair-off fee for non-delivery. Both options are available to Fannie Mae's approved seller/servicers. Required net yields and indicative prices are typically updated once a day at approximately 8:15 a.m. Eastern time. While these rates can fluctuate during any one working day, an approved seller/servicer has online access to current pricing. Fannie Mae does post a historically required net yield by day online on all currently offered loan products². The yield requirements of both Fannie Mae and Freddie Mac are quoted in what might be called the "wholesale" market rate for mortgage loans at that time. Within the industry, this wholesale rate is referred to as a *required net basis yield*, or a yield that must be delivered to the loan purchaser. Loan originators add 0.25 to 0.375 percent for servicing the loan, and the cost of private mortgage insurance is often combined as a part of the gross rate quoted to a borrower.

U.S. Treasury Security Rates

Shorter-term (one- to five-year) Treasury rates have become more important as an indicator of mortgage rates. Not only do they accurately reflect the shorter-term money market rates that affect mortgage money, but they are also being used as a major index for setting adjustable rate mortgage (ARM) loan interest rates. Because the market for Treasuries is constantly changing to reflect the money markets, the rates reported are usually averages of daily rates for weekly or monthly time periods. All financial publications carry information on U.S. Treasury yields, and the Federal Reserve Board now offers a weekly release covering selected interest rates.³

London Interbank Offered Rate

More commonly referred to as **LIBOR**, the London Interbank Offered Rate is a daily reference rate based on the interest rates at which banks

²Approved seller/servicers can obtain this information online by logging into the eCommitting™ or eCommitONE™ system or this can be Accessed at: <https://www.fanniemae.com/singlefamily/historical-daily-required-net-yields>

³For further information, contact Publications Services, Mail Stop 138, Board of Governors of the Federal Reserve System, Washington, DC 20551, and ask for Selected Interest Rates and Bond Prices (Weekly). The St. Louis Federal Reserve Bank offers these reports online at <http://www.federalreserve.gov/releases/h15/>

borrow unsecured funds from other banks in the London wholesale money market (or interbank lending market). LIBOR rates are a favorite referenced rate for adjustable rate mortgages. The divergence of these more market-based rates from those set or affected by Federal Reserve Bank monetary policy helped trigger problems with many adjustable rate mortgage products during the subprime loan crisis. LIBOR rates remained higher than rates based on Treasury bills, Treasury notes, and the Eleventh District Monthly Weighted Average Cost of Funds Index (COFI) from 2004 to 2009. Therefore, ARM products based on LIBOR caused higher mortgage delinquencies as borrowers struggled with higher payments.

USURY

Usury laws are state laws, not federal statutes, limiting the amount of interest that may be charged on different kinds of loans and to various categories of borrowers. For the first 70 years of the 20th century, market interest rates remained generally below the various state limits, and there was little concern for this particular restriction. But as interest rates continued to climb in the late 1970s, usury limits began to surface and restricted mortgage lending in some states. The rising cost of money made it more and more difficult to make loans at interest rates within the statutory limits and still retain a safe operating margin. Furthermore, states with higher interest limits were able to attract the big secondary market investors that can purchase mortgages anywhere. Many states were simply excluded from the national market by restrictive usury laws. To help resolve the dilemma, Congress preempted state usury limits for first-mortgage residential loans as of March 31, 1980.

The concept supporting usury laws is that the individual borrower should have some protection from the substantial power represented by a lender. In earlier times, and perhaps in some smaller communities today, that protection may be appropriate. But where mortgage loans are concerned, the growth of lending across state lines, coupled with the big national markets for loans, has made restrictive usury laws somewhat counterproductive. In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act was signed into law. It provides for a Consumer Financial Protection Agency to regulate some credit practices, including notices for rate changes on credit cards, but does not have an interest rate limit.