READING

INTEREST RATES

Prime rate

Many banks set a prime rate (sometimes called a "base" rate) that reflects their cost of funds, overhead expenses, overall loan portfolio risk, profit objectives, and other relevant factors. Loans are then priced at a spread or percentage above the prime rate, depending on the expense and risk characteristics unique to each of those loans. Prime rate pricing generally is reserved for very low-risk loans that usually are short-term in duration, with strong primary and secondary sources of repayment. Even rarer are below-prime rate loans, usually reserved for the bank's best and most creditworthy customers.

Although any bank can set its own prime rate, most follow the prime rate set by the large money center banks, which more closely corresponds to the cost of funds in major money markets. These prime rates normally are published daily in major financial publications such as *The Wall Street Journal*. In fact, this money center-derived prime rate often is referred to as "New York Prime" or "Wall Street Journal Prime."

Other indexes used

While the prime rate is perhaps the most common index used by community banks, especially for operating lines of credit and other short-term credit facilities, banks can also link loan rates to other national and international indicators. For example, the interest rate on a short-term loan might be set as a certain percentage or spread above the 90-day Treasury bill rate. Interest rates also are tied to federal funds, certificates of deposit, commercial paper, other Treasury securities, and the London Inter-bank Offered Rate (LIBOR). Money center and large regional banks are the most frequent users of interest rates tied to LIBOR.

The concept of matching loan term to appropriate index

One of the more confusing principles involving time value of money relative to loan pricing is the matching concept. In order to reduce interest rate risk, a lender should attempt to match the underlying loan price index to the duration of the loan. The following are some examples of matching loan term to the appropriate indexes:

- ***Prime rate, adjusted as prime adjusts*** for short-term loans and lines of credit that will mature in one year or less, generally at a variable rate
- ***1-month, 3-month, 6-month, or one year Treasury securities*** for other short-term loans that will mature in 1, 3 or 6 months, up to one year, generally at a fixed rate
- ***2-year, 3-year, 4-year, and 5-year Treasury securities*** for long-term, amortizing loans with maturities up to 5 years, generally at a fixed rate; in some cases, such as commercial real estate loans, the amortization period may extend beyond the maturity date, and the loan price will be re-set for another period of up to five years
- ***LIBOR equivalents*** can be substituted for Treasury securities, but usually involve a much different spread or increment above the index
- ***Federal Home Loan Bank (FHLB) advance rates*** for loans with maturities longer than five years, generally at a fixed rate, and if the bank can obtain FHLB funding

In general, following the matching concept creates a loan portfolio tied to appropriate market rates. This reduces interest rate risk if the bank takes a similar, disciplined, market index-based approach to establishing its funding costs. Accordingly, because the prime rate is based on short-term funding costs, it should not be fixed for extended periods of time, certainly for no more than one year, unless it has a periodic adjustment mechanism in place.

READING

Variable vs. fixed rates

Floating or variable-rate loans provide some protection against the risk of unpredictable interest rate changes. This reduces interest rate risk for most banks, because most funding sources are paid a variable rate, and sometimes works best for the borrower. For example, by tying the interest rate charged on a loan to a national indicator, a bank ensures that as its cost of funds goes up, so does the income it receives from its assets. Also, because longer-term interest rates tend to be higher than shorter-term interest rates, a variable-rate loan usually is priced lower than a fixed-rate loan with similar terms and conditions. However, if interest rates rise too much, a variable-rate loan actually may increase credit risk because the larger resulting loan payment may not fit within the borrower's cash flow.

With a fixed-rate lending arrangement, a business banker may negotiate a prepayment penalty to compensate for bank losses resulting from the early payment of a loan when interest rates decline. Many borrowers will want to "lock in" fixed interest rates when interest rates are relatively low. Of course, this is good for the borrower but may adversely affect the bank later if interest rates rise on the bank's core funding source: deposits.

Ceilings and floors

To protect borrowers and banks from unusual swings in interest rates, ceilings (maximums), and floors (minimums) are sometimes placed on the rate charged on a loan. For example, the interest rate on a variable-rate loan might be set at 2 percentage points above the bank's prime rate, but not to exceed 12 percent and not fall below 6 percent. In theory, this ensures that the borrower is protected in a high-interest environment and the bank is protected if interest rates fall too low. Often, however, if the market interest rate falls below the floor established on the loan, the customer becomes unhappy. Unless prepayment penalties are in place, the borrower may refinance the loan at another bank, if the current bank is not willing to adjust the interest rate.

There is an economic cost to the bank for offering ceilings on loan rates, and this can be approximated by actual fees and costs of the formal hedging market that is used by large banks and large borrowers for very large loans, generally $5 million and larger. For this reason, unless a ceiling can be paired with an attractive floor, most banks prefer to avoid offering ceilings.

Tax-exempt rates

The interest income a bank earns on loans to states, counties, and municipalities usually is exempt from federal income taxation. Therefore, in setting interest rates for these loans, a business banker considers the tax-exempt status of the loan. If a bank's effective tax rate is 25 percent, for example, it needs to charge approximately 9 percent on a tax-free municipal loan to realize an interest return comparable to that of a 12 percent rate on a taxable loan. For example, in a loan to a municipality for $100,000 at 9 percent interest due in one year, the income would be $9,000 with no taxes due. However, a loan to a business for $100,000 at 12 percent interest would earn $12,000 with taxes due of $3,000 (25 percent of $12,000) for an after-tax income of the same $9,000.

Competitive considerations

The interest rate quoted by competitors is an important consideration. Indeed, competitive factors often have more bearing on the loan pricing than any number of complex formulas, and banks can price aggressively to keep making loans. A bank, for example, may adjust the interest rate it charges for loans if a competing lender, not necessarily a bank, offers lower rates for similar lending arrangements. Alternatively, a bank may settle for a lower profit or try a strategy that combines a lower interest rate with a lower profitability objective.