The prime rate revisited*

The unusually wide spreads that have persisted over the last two years between the prime rate-the interest rate that banks charge on loans to their most creditworthy business customers-and money-market interest rates are now narrowing. Bankers themselves were the first to focus attention on the relationship between the prime and openmarket rates. In October 1971 a few moneycenter banks decided to link their prime rates directly to the cost of open-market funds. They adopted "formula prime rates" based on fixed relationships to the interest rate on commercial paper-specifically, the average of quoted dealer rates on paper maturing in three to four months. Commercial paper is unsecured promissory notes issued by large corporations and sold to large-volume investors. To borrowers the commercial paper market represents an alternative to bank loans

Ever since the advent of the formula prime, the nexus between the prime rate and the short-term commercial paper rate has been the major focal point of prime rate analysis, even though prime formulas have never been used at most commercial banks and have not been applied rigidly and consistently at any bank. Citibank, N.A. (formerly First National City Bank) in New York, the originator and major proponent of the formula prime, has stated repeatedly that the formula is only a guide and that other factors must also be considered in setting the best lending rate.

One objective of devising the formula prime was to deflect attention from the prime rate as a rate subject to some degree of discretionary control by the banks. The Committee on Interest and Dividends (CID), a part of the Wage-Price Stabilization Program, began scrutinizing bank lending rates in 1971. Some banks felt that changes in their prime quotations would be easier to justify to all concerned parties (the CID, Congress, bank borrowers, and even other banks) if the relationship between interest charges on the best credit-rated bank loans and on an openmarket source of funds for business borrowers was spotlighted.

By publicizing the linkage between prime and the commercial paper rate, however, formula-prime banks implicitly deemphasized other factors which are important in setting the prime rate. These factors include interest costs on banks' lendable funds, interest returns on nonloan assets held by banks, and expected future growth in bank loans and deposits.

Formulas and rate spreads

Citibank's first formula called for setting its prime rate approximately 1/2 percentage point above the rate on three- to four-month commercial paper subject to weekly review. Since then, Citibank has exercised considerable latitude in tempering the formula prime concept to the financial and political environment-rounding up or down from the formula, temporarily discontinuing the formula in 1973, intermittantly ignoring weekly rate changes implied by the formula, and revising the formula itself. The current Citibank formula, and the only one now publicized nationally, calls for a prime rate that is 11/4 percentage points above the threeprevious-week average of the 90-119 day, dealer-placed commercial paper rate. The present Citibank prime-setting method is the culmination of four changes in the differential between the formula prime and the com-

^{*}Methods used by banks both historically and in recent years to set the prime rate were surveyed by the author in "The Prime Rate," *Business Conditions*, Federal Reserve Bank of Chicago (April 1975), pp. 3-12. The present discussion highlights prime rate developments occuring since that article appeared.

mercial paper rate since the CID ended. The formula spread was increased from ³/₄ to 1 percentage point in October 1974, from 1 to 1¹/₄ percentage point in April 1975, and from 1¹/₄ to 1¹/₂ percentage points in January 1976, and then was lowered to 1¹/₄ percentage points in June 1977.

Although other large commercial banks do not presently issue formula-prime quotations, some acknowledge that they use the commercial paper rate as an informal indicator for prime rate revisions. Some banks also admit to using Citibank's prime as a benchmark for their own prime rate revisions, although clearly they do not have a simple follow-the-leader allegiance to Citibank's prime. Industry-wide prime quotations have tended to stay within $\frac{1}{4}$, or at most $\frac{1}{2}$, percentage point of Citibank's rate.

Even though prime bank loans and commercial paper are both tailored to borrowers' needs and are close substitutes for short-term business financing, a historical spread exists between the respective rates. The basic spread depends on differences in administrative costs and nonprice lending terms involved in issuing and servicing each type of debt contract. Differences in interest cost calculations—discount method for commercial paper and typically bond-yield method for prime loans—also contribute to the spread.

Money-market rates, influencing the level at which banks set the prime rate, were relatively stable in 1976 and 1977. As a result, prime rate revisions in 1976 were less frequent than in any other year since the introduction of the formula prime in 1971. During 1976 the prime rate fluctuated within a narrow band of 1¼ percentage points, starting the year at or near 7¼ percent and ending 1976 at 6 percent. In the first five months of 1977, the prime rate was revised only three times, and between late-January and mid-May of this year, the



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prime stood at 6¼ percent—the longest uninterrupted duration for an industry-wide prime rate since 1969.

Why the wide spread?

The most noteworthy development in 1976 and 1977, however, has been the widened margin of the prime rate above the commercial paper rate. Prime rate adjustments typically lag behind changes in the commercial paper rate, widening the differential between the rates when the commercial paper rate falls and narrowing the spread when the paper rate rises. Such lagged response was not an important factor in explaining the wider prime-paper rate differentials in 1976 and 1977. For example, the weekly average paper rate remained at or very near 43/4 percent from mid-January through April 1977 while the prime remained at 61/4 percent industry-wide—a persistent prime-paperrate spread of 11/2 percent.

Several partial explanations for the wider prime-paper rate differential, offered by bankers and financial observers, have focused on institutional features of banking.

• The wider spread indicates a return to the historically higher prime rate margin over the commercial paper rate.

• Banks have granted some loans at belowprime or "super-prime" rates in order to maintain higher advertised prime quotations while attracting some additional loans to "best" customers.

• Non-rate terms of lending have been relaxed in lieu of lowering the prime rate, particularly by allowing business borrowers to "double count" compensating balances—i.e., use the same noninterest deposit balances to compensate a bank for a credit extension and to reimburse the bank for nonloan services provided to the business customer.

• The cost of lending in 1976 and 1977 has remained relatively high, compared to open-market rates during this period, because of higher average costs for loanable funds attributable to the larger proportions of their deposits in the form of time certificates of deposit.

These reasons may have contributed to the wider prime-paper rate spread for particular banks at certain times during 1976 and 1977. Singly or collectively, however, these reasons do not account for the large industrywide differential. The argument concerning historical spreads has some validity, in the sense that banks felt somewhat more latitude to increase margins between the prime rate and money market rates in the post-CID period. In earlier periods before the formulaprime era, for example, the prime-to-paperrate spread did exceed 1 percentage point on occasion. However, there were no counterparts to the sustained 11/2 percent spread that appeared in the first half of 1977.

But the major reason cited by the banking community itself for the high prime-paper rate spread in 1976 and 1977 has been slack loan demand and unresponsiveness on the part of business borrowers to declining bank loan rates. In economics parlance, banks perceived that the demand for business loans in the existing circumstances was highly inelastic with respect to the loan rate. Inelastic demand for loans implies that a bank's total loan revenue (and, consequently, profits) would decline if it lowered the prime rate, since increased revenue resulting from a greater dollar volume of loans at the lower rate would be more than offset by the loss of revenue from a lower per-dollar return (interest rate) on all loans extended.

The effects on loan revenue resulting from lowering the prime rate are reinforced by the multiple functions served by the prime rate. Revisions in the prime influence a bank's loan revenue from both prime and nonprime loans because nonprime loan charges typically are determined by tying them directly and formally, or indirectly and informally, to the prime.

Prime rate changes also influence revenue from loans contracted by a bank in earlier time periods, as well as loans made after a prime change, since both long- and short-term bank loan rates often are indexed to the prime. That is, interest charges on these loans vary up and down with the prime rate over the duration of the credit contract. "Floating" loan rates of this type have become increasingly important in recent years with a greater share of some banks' loan contracts including this feature and with many banks increasing the proportion of their loan portfolios in term loans—longer-term contracts with rates often linked to prime. Floating-rate contracts on term and other loans were probably a major contributing factor in the recent episode of downward inflexibility of the prime rate.

Linkage to the prime rate of nonprimerated and prior-period lending provides commercial banks with an incentive to offer below-prime-rate loans to some customers in order to make more new business loans without lowering returns on other loans that are linked to officially publicized prime quotations. This has been a major explanation accompanying claims that banks have given below-prime rate concessions.

Banks, however, adamantly deny the granting of "super-prime" loans in 1976 and 1977, and for good reason. While a bank might be tempted to experiment with loans at below-prime rates in order to boost shortterm revenue, a strong disincentive toward such lending arises from the "customer relationship"-arrangements built around bank-customer loyalty whereby a bank provides a variety of services to its longestablished clientele. If prime-rate loan customers discovered that some bank borrowers were receiving even better loan rates, a bank's customer relationships would be placed in extreme jeopardy. Loss of bank revenue from the exodus of longstanding customers could far overshadow short-term gains from below-prime lending.

What about next time?

The spread between the prime rate and commercial paper rate is narrowing as the demand for commercial and industrial loans has started to recover during the past year. But it is too early to predict the extent to which the gap between the two rates will shrink in the months ahead.

Commercial banks may possibly adopt methods in the future that would permit more downward flexibility of the prime. For example, use of proviso clauses governing the extent of rate flotation in "floating-rate" loan contracts could increase. Such arrangements allow the interest rate to vary with the prime rate over the duration of the bank loan but set an absolute lower limit on the rate—a point at which the interest rate ceases to follow the prime downward.

As an alternative approach commercial banks could adopt two prime rates—the regular prime rate on new loan contracts and a special prime for calculations in floatingrate contracts from earlier time periods—with the two rates being allowed to deviate from each other by a specified fraction of a percentage point, or more. Banks would be able to thereby lower the prime rate on new loans, while maintaining the rate used for indexing in earlier loan contracts.

Commercial banks may simply widen the spread between the prime rate and commercial paper rate in future periods when economic circumstances warrant such action, while at the same time engaging in some public reeducation on the prime rate concept. The irony of the formula prime experiment is that private and public financial observers may have learned the formula too well. Another banking lesson in prime-setting that focuses on other factors besides the commercial paper rate may be necessary.

The formula prime experiment holds a different and somewhat more general lesson for commercial bankers. An innovation such as the formula prime can be a political asset partly because of its simplicity and direct link to the money market. But in certain economic situations the same innovation may become a political liability due to its over-simplification of complex banking decisions. In the last analysis, this message may prove to be the greatest legacy of the formula prime concept.

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