

---

# FRBSF WEEKLY LETTER

Number 94-20, May 20, 1994

## The Persistence of the Prime Rate

Perhaps no quoted interest rate has had as much publicity as the prime rate. Used as a benchmark rate for various types of bank lending arrangements, the prime is generally considered a barometer of credit market conditions. Some observers criticize this use of the prime rate as anti-competitive and argue that its role in loan pricing is nothing short of tyranny. Much of the misunderstanding about this loan pricing convention stems from confusion over the historical and current role of the prime rate in loan pricing. This *Letter* examines the history and current use of the prime rate and provides an analysis of the economics of this pricing mechanism.

### The role of the prime rate

Many firms approaching banks want to purchase an option to borrow for a period of three to five years. Most are unwilling to pay the cost of locking in a fixed rate over this long of a period when they are uncertain about exactly what their borrowing patterns will be. Thus, the bank needs an index to float the interest rate that reflects the costs of making the funds available and permits it to earn a fair rate of return on its capital. The prime rate convention evolved to serve as a pricing index. Prior to the mid-1970s it was used for virtually all floating rate business loans and was often referred to as the rate that banks charged their best customers. Customers judged to be less than "prime" quality were charged a rate that reflected a fixed mark-up over prime.

During the credit crunch of the early 1970s many banks found they were unable to meet the credit needs of their corporate borrowers. This led to the growth, with many banks' support, of the commercial paper market. In this market high credit quality firms sell short-term notes directly to investors, though banks typically offer credit enhancements by backing the issues with a standby letter of credit.

As the commercial paper market began to expand in the late 1970s, some business loans to the highest quality borrowers were priced below prime, a practice that continues today. This led to abandoning the definition of the prime as the rate

banks charge their best customers and redefining it simply as a reference rate used in loan pricing.

Around this time banks also started to use additional pricing indices, of which the most popular was LIBOR (London Interbank Offered Rate). This index appears frequently in loans that have characteristics similar to commercial paper. These loans are usually made to high-quality borrowers, and on average, the loans are larger and of shorter maturity than typical bank business loans. This shift to an increasing use of other indices affected the role of the prime. However, predictions that the prime would become extinct were exaggerated.

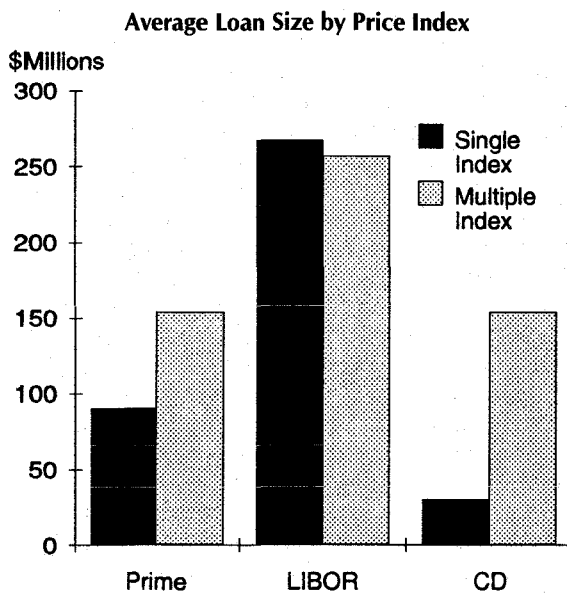
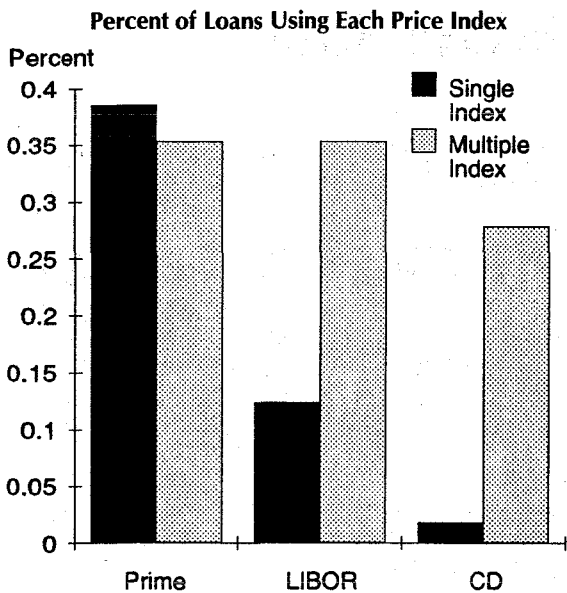
### Still important in loan pricing

To examine the current role of the prime in loan pricing, I analyzed a sample of over 2,800 loans received by companies required to report external finance with the Securities and Exchange Commission for the period of January 1987 to May 1990. These are large publicly traded firms that tend to have ready access to the capital markets. The top panel of Figure 1 compares the percent of loans indexed to the prime rate, to LIBOR, and to a CD rate. Single index pricing means that the loan is tied to only one of the indices over its entire life. Multiple index pricing means that the bank quotes the borrower a fixed spread to two or more indices. The borrower then has the option at each pricing interval to choose the least costly alternative. As the top panel indicates, whether used alone or in combination with the LIBOR or some measure of the CD rate, the prime rate continues to be the most popular index with which to price business lending.

Examining the average size of sample loans stratified by pricing index (Figure 1, bottom panel), we see that the prime is most frequently used in smaller loans. Additionally use of the prime or any other single pricing index is most popular for shorter maturity loans. This suggests that as loan pricing has become more complex the reaction has been to move to multiple indices with continued use of the prime as one of the choices.

# FRBSF

Figure 1



## Criticisms of the prime rate

Critics of the use of the prime rate as an index in loan pricing argue it is anti-competitive and slow to respond to changing credit market conditions. Accusations related to collusive behavior have focused on the fact the prime rate is typically uniform nationwide. Also it is argued that the prime is relatively "sticky" compared with other market-determined rates and that banks are slower to adjust it down when rates are declining

than to adjust it up when rates are rising. Empirical evidence confirms that the prime lags other market rates. The slower downward adjustment in the prime has not been readily apparent, however (Furlong 1991). In addition, recent evidence suggests that it is becoming more responsive to changes in open market rates (Laderman 1990). This more responsive behavior of the prime rate may reflect its new role in loan pricing or increased competition from capital markets or both.

## The resilience of the prime rate

Understanding the context in which the prime is most frequently used helps explain how the prime has survived despite the criticism. Most business borrowing occurs under commitments to lend. In this type of contract, typically the bank and firm agree on the maximum amount and the time period that the customer may take down the loan. The interest rate that the borrower must pay is tied to an index or base rate that floats, such as the prime. It is common for these loan commitments to be negotiated for a couple of years. During that time the borrower can take down and repay the loan up to the maximum amount of the commitment.

By agreeing to a loan commitment over a multi-year contract in which the borrower has a take-down option, the bank faces a variety of risks, and the stickiness of the prime rate may help compensate the bank for those risks. For example, in addition to uncertain interest costs banks are subject to regulatory uncertainty, such as changes in reserve and capital requirements.

The stickiness of the prime rate also may reflect a form of average cost pricing. Banks quote a single prime, and as it is adjusted, the pricing index for new and all previously negotiated loan arrangements changes. Thus, banks may use this form of average cost pricing to cover the costs associated with offering multiperiod loan commitment contracts. Calls for the prime to be replaced by a rate linked directly to open market rates ignores the fact that open market rates generally represent the pricing of new contracts only. Consistent with the average pricing role of the prime is the diminished importance of the prime in short-term financing to high quality bank borrowers, where the benefit of average cost pricing is low.

In addition to the issue of stickiness, it has been argued that a uniform national prime constitutes

---

price fixing. But there may be a good rationale for a uniform prime. Most commercial lending is under multiyear commitment contracts. A borrower who wants to price a three-year loan commitment from two banks might get quotes of 50 and 75 basis points over each bank's prime rate. But if the borrower were not certain that the two banks' prime rates will be equal over the term of the commitment, then the borrower would not know which was the cheapest source of funds. Thus, a uniform prime can be useful when comparing floating rate loans between competing banks. In more recent years, banks have been pricing both above and below the prime. Pricing below the prime gives banks additional flexibility to be competitive when the credit risks on previously negotiated commitments are higher than on new loans the banks would like to make. Again this is related to the complexities of pricing multiperiod floating rate loan commitments.

#### **The future of the prime**

Even with the tremendous amount of criticism that has been leveled at the prime over the years

it continues to be the most popular pricing index for business loans. However, in recent years it has increasingly been used in combination with other indices, providing the borrower with options to price relative to alternative indices like LIBOR and large CD rates. As for its use for large short-term loans to high quality borrowers has diminished the prime is gaining a foothold in the pricing of home-equity loans. The evidence presented here suggests its role in loan pricing is changing, but it will likely continue to be popular in loan pricing.

**James Booth**  
**Visiting Scholar and**  
**Associate Professor of Finance**  
**Arizona State University**

#### **References**

Furlong, F.T. 1991. "Is the Prime Rate Too High?" *FRBSF Weekly Letter* (July 5).

Laderman, E. 1990. "The Changing Role of the Prime Rate." *FRBSF Weekly Letter* (July 13).

Address Correction Requested

P.O. Box 7702  
San Francisco, CA 94120

Research Department  
Federal Reserve  
Bank of  
San Francisco

Index to Recent Issues of *FRBSF Weekly Letter*

DATE	NUMBER	TITLE	AUTHOR
11/19	93-40	NAFTA and the Western Economy	Schmidt/Sherwood-Call
11/26	93-41	Are World Incomes Converging?	Moreno
12/3	93-42	Monetary Policy and Long-Term Real Interest Rates	Cogley
12/17	93-43	Banks and Mutual Funds	Laderman
12/31	93-44	Inflation and Growth	Motley
1/7	94-01	Market Risk and Bank Capital: Part 1	Levonian
1/14	94-02	Market Risk and Bank Capital: Part 2	Levonian
1/21	94-03	The Real Effects of Exchange Rates	Throop
1/28	94-04	Banking Market Structure in the West	Laderman
2/4	94-05	Is There a Cost to Having an Independent Central Bank?	Walsh
2/11	94-06	Stock Prices and Bank Lending Behavior in Japan	Kim/Moreno
2/18	94-07	Taiwan at the Crossroads	Cheng
2/25	94-08	1994 District Agricultural Outlook	Dean
3/4	94-09	Monetary Policy in the 1990s	Parry
3/11	94-10	The IPO Underpricing Puzzle	Booth
3/18	94-11	New Measures of the Work Force	Motley
3/25	94-12	Industry Effects: Stock Returns of Banks and Nonfinancial Firms	Neuberger
4/1	94-13	Monetary Policy in a Low Inflation Regime	Cogley
4/8	94-14	Measuring the Gains from International Portfolio Diversification	Kasa
4/15	94-15	Interstate Banking in the West	Furlong
4/21	94-16	California Banks Playing Catch-up	Furlong/Soller
4/29	94-17	California Recession and Recovery	Cromwell
5/6	94-18	Just-In-Time Inventory Management: Has It Made a Difference?	Huh
5/13	94-19	GATS and Banking in the Pacific Basin	Moreno

The *FRBSF Weekly Letter* appears on an abbreviated schedule in June, July, August, and December.