

Research Department  
Federal Reserve  
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San Francisco

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## Monetary Policy and LDC Debt

The Federal Open Market Committee (FOMC) decided at its May 24-25 meeting to apply slightly more restraint on bank reserve positions. This move was taken against the background of narrow money (M1) growing at a more than 14 percent annual rate during the first five months of the year—far above the 8 percent upper bound of the Fed's target range at the time—and evidence of some acceleration in the rate of business recovery. While most economic indicators suggested that some modest monetary restraint was warranted at the time, there remained one major "fly in the ointment," namely, the international debt problem.

The short-term interest rate increases associated with slower money growth would directly increase the foreign debt service costs of developing countries (LDCs) and exacerbate the liquidity problems faced by several of them at a particularly vulnerable time. Some analysts have even suggested that the policy dilemma posed by the LDC debt situation was the single largest constraint on Fed policy action. This *Letter* explores the policy alternatives facing the Federal Reserve last May, and considers the implications of each for the LDC debt situation.

### Interest rates and debt service

The extent to which annual LDC debt service costs are raised by increases in U.S. interest rates depends on two factors. One factor is the relationship between U.S. interest rates and the six-month London Interbank Offer Rate (LIBOR), which is the rate to which the majority of LDC floating-interest debt is tied. The second factor is the percent of outstanding external debt tied to floating-interest loans. Also included in the latter category may be the refinancing requirements of old fixed-interest debt maturing during a given period, and the nature and size of new credits extended.

Concerning the first factor, the accompanying chart illustrates the tight link between the overnight Federal Funds rate and the six-month LIBOR. Their close correspondence suggests that a monetary tightening that causes a given rise in the Federal Funds rate will soon be reflected in an equal rise in LIBOR.

With regard to the second factor, the Organization for Economic Cooperation and Development (OECD) estimates that the total *net debt* (total foreign debt less foreign assets) tied to floating-interest loans averaged 41 percent in 1982 for the non-OPEC developing countries (excluding OECD member developing countries—Turkey, Spain, Portugal and Greece). These percentages vary greatly among the various LDCs, but generally the low income LDCs tend to rely on fixed-rate loans often subsidized by developed country governments or international agencies, while a few middle- and higher-income LDCs depend upon private bank loans at floating market interest rates.

The latter group of countries is relatively few in number but accounts for an overwhelming portion of LDC foreign debt, LDC floating-interest debt and LDC foreign debt service payments. OECD estimates put the *net floating-interest debt* on non-OECD, non-OPEC LDCs in 1982 at \$166 billion. Of this amount, four countries—Argentina, Brazil, South Korea and Mexico—account for \$140 billion, or 84 percent of the total. Individual country percentages of debt carrying floating interest rates to total debt (net) stood at 66 percent for Argentina, 62 percent for Brazil, 74 percent for Chile, 55 percent for South Korea and 78 percent for Mexico. Given the new credits extended and various foreign debt rescheduling and refinancing schemes initiated since the end of 1982, the net floating-interest debt outstanding, and hence the extra debt service costs associated with interest rate increases,

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is probably greater at this time than that suggested by OECD estimates in 1982.

#### Enter exchange rates

An additional complication is the effect of U.S. interest rate increases on the real value of the dollar in exchange markets (market value adjusted for price developments here and abroad) and, hence, the real resources that must be given up by LDCs to service their dollar-denominated foreign debt. Interest rate increases in the U.S. have generally pushed up the dollar's real value in currency markets, particularly during periods of stable inflation and when foreign interest rate increases do not match the rise in U.S. rates. The renewed strength of the dollar in recent weeks fits this pattern closely. U.S. interest rate increases may thus pose an additional burden on LDCs.

To the extent that LDCs' currencies depreciate in real terms against the dollar, additional domestic resources must be committed to earn convertible foreign exchange and meet debt service payments. (This effect will be partially offset by the degree to which LDC export earnings are based on products priced in dollars and set in world markets, e.g., Mexican oil exports. In addition, real depreciation of LDC currencies improves their international price competitiveness and tends to increase net foreign exchange earnings over a period of several years. Nevertheless, the domestic resource cost of servicing or retiring foreign debt will increase, as will the real cost of imports, with real depreciation.)

#### Current Fed policy

The M1 surge experienced during the first part of this year has slowed in recent months, growing at annual rates of 10.2 percent in June, 8.9 percent in July and 2.6 percent in August. One factor behind the recent decline is presumably the policy of modest reserve restraint followed since May, which has brought with it some upward movement in interest rates.

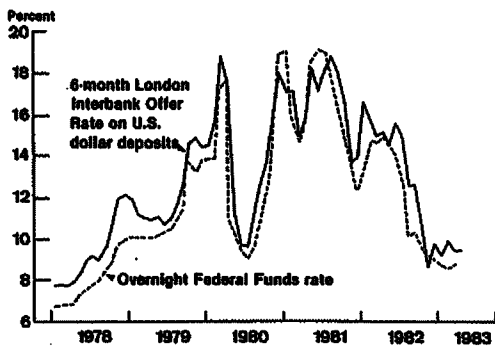
For the purpose of analysis, let's arbitrarily assume that the Federal Funds rate rise associated with slower money growth is between 100-200 basis points (the Federal Funds rate is currently only 70 basis points above the level prevailing at the end of May). The discussion above suggests then that net debt service requirements (not necessarily payments) of the non-OECD, non-OPEC LDCs would jump a minimum \$1.7-\$3.4 billion on an annual basis. To the extent that the duration of higher interest rate levels is less than a year—and the Federal Funds rate has, in fact, edged downward somewhat in recent weeks—the increase in debt service will be correspondingly less.

Clearly, additional costs of this magnitude place greater burdens on certain LDCs, particularly those already experiencing difficulties in negotiations with commercial banks on rolling over existing foreign credits. It is hardly surprising that international bankers are uneasy about monetary tightening, even modest restraint. They suspect that even small interest rate increases will strain the current delicate situation.

#### Policy alternatives?

Although a policy of modest monetary restraint may exacerbate the LDC debt service burden in the short-run, it is difficult to identify credible policy alternatives at this time. If money growth had been allowed to continue at the rapid clip experienced during the first half of this year—one possible alternative to immediate tightening—inflationary expectations would have inevitably reignited and rightfully so: most research suggests that the average lag between excess money growth and accelerating inflation is between one and two years. Although such a policy may initially lower interest rates and ease LDC debt service costs through the extra liquidity created in the economy, the temporary respite would most likely be replaced by even higher interest costs for an extended period. The higher rates, incorporating a higher "inflation premium," would further drain LDC resources and greatly in-

## 6-MONTH LIBOR/FED FUNDS RATE



crease the worrisome prospect of outright loan defaults.\*

Another possible alternative to modest reserve restraint would have been for the Fed to allow money to grow unabated above its target for a limited period, with the intent of future tightening once inflationary pressures had begun to mount. The difficulty with this approach, however, is that the degree of monetary restraint needed to meet given inflation goals would inevitably be much more stringent and involve a longer period of time than the present strategy. As recent experience has demonstrated, a period of rapid money growth and accelerating inflation followed by severe monetary restraint usually results in a boom and bust cycle for the economy.

The problem is that it is much more difficult to slow inflation, or to reverse the course of accelerating inflation, than it is to avoid inflationary pressures at the outset. Once inflationary expectations are established among producers and consumers (and Fed credibility to withstand inflationary forces is called into question), they are hard to change. The degree of monetary restraint needed to slow this inflationary momentum, once begun, often brings with it high real interest rates for an extended period.

The Federal Funds rate climbed to very high levels under similar circumstances in 1979 and again in the latter part of 1980. Interest rate increases of that magnitude (5-8 percentage points) in the present environment would have potentially disastrous consequences for certain LDC debtor nations. The net debt service requirements of non-OECD, non-OPEC nations would jump a minimum \$8.3-\$13.3 billion on an annual basis—an enormous increase. It is doubtful whether

commercial banks would consider extending new credits or rolling over old credits under these circumstances. And it is doubtful whether debtor countries could institute the austerity measures that would be necessary to bring about the real transfer of resources to repay or even service the loans.

If, in addition, an economic slump were to follow, LDC debtor nations would also face an erosion of their debt service capacity as falling export sales to the recession-ridden industrial countries would cut into their foreign exchange earnings. This point deserves some emphasis. The ability of LDC nations to service their debt depends on both debt service requirements as well as debt service capacity, that is, foreign exchange earnings. Because the U.S. economy is an important market for many of the major LDC debtor nations, a period of sustained growth in the U.S. facilitates an increase in their debt service capacity. The U.S. market, for example, accounted for 55.1 percent of Mexico's merchandise exports and 20.5 percent of Brazil's in 1982.

### Conclusion

The course charted in May to tighten reserve positions slightly in order to keep money aggregates on track probably has the best chance of maintaining a sustained non-inflationary economic expansion in the U.S., and, in turn, of helping to lay the groundwork for a long-term solution to the LDC debt problem. It does the latter by expanding the LDC debt service capacity through export growth. Viewed this way, the probability of a credible long-term solution to the debt problem is enhanced, while only the short-term liquidity problem of debt financing is worsened. This should give confidence to commercial bank lenders and LDC borrowers that an orderly and timely solution to the debt problem is possible and that major LDC loan defaults can be averted.

\*This discussion considers only the first round effects of an upturn in inflation. Countries with a high percentage of fixed-interest rate debt may conceivably be better off in an inflationary environment, for example, as the real cost of servicing these loans would decline.

Michael Hutchison

**BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT**  
 (Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 9/7/83	Change from 8/31/83	Change from year ago	
			Dollar	Percent
Loans (gross, adjusted) and investments*	161,834	800	— 52	0.0
Loans (gross, adjusted) — total#	141,506	808	97	0.1
Commercial and industrial	43,063	— 60	— 1,981	— 4.4
Real estate	56,881	177	— 662	— 1.2
Loans to individuals	24,424	— 6	969	4.1
Securities loans	2,798	617	419	17.6
U.S. Treasury securities*	7,541	7	1,068	16.5
Other securities*	12,786	— 16	— 1,217	— 8.7
Demand deposits — total#	43,080	882	1,278	3.1
Demand deposits — adjusted	29,557	— 109	1,515	5.4
Savings deposits — total†	66,450	773	34,703	109.3
Time deposits — total#	67,201	105	— 32,355	— 32.5
Individuals, part. & corp.	61,419	83	— 28,330	— 31.6
(Large negotiable CD's)	17,656	— 38	— 19,443	— 52.4
<b>Weekly Averages of Daily Figures</b>	<b>Week ended 9/7/83</b>	<b>Week ended 8/31/83</b>	<b>Comparable year-ago period</b>	
<b>Member Bank Reserve Position</b>				
Excess Reserves (+)/Deficiency (-)	138	148	141	
Borrowings	64	136	14	
Net free reserves (+)/Net borrowed(-)	74	13	128	

\* Excludes trading account securities.

# Includes items not shown separately.

† Includes Money Market Deposit Accounts, Super-NOW accounts, and NOW accounts.

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