
FRBSF WEEKLY LETTER

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Standby Letters of Credit

Over the last few years, the trend in bank regulation toward more stringent capital adequacy standards has constrained asset growth at the nation's largest banks. At the same time, standby letters of credit (SLCs) and other so-called off balance sheet activities at these banks have grown by leaps and bounds. Such activities are not affected by the current capital-to-assets measures of capital adequacy because they are contingent obligations and therefore not assets. Nonetheless, these activities do expose bank capital to varying degrees and kinds of risk.

Moreover, because the potential for leverage is so great for these activities, regulators worry that off balance sheet exposure in general, and SLC exposure in particular, actually may increase capital risk even as banks strengthen their capital ratios. This *Letter* examines the growth of SLCs as well as the nature of the risks involved. It concludes that, although banks apparently are managing SLC risk carefully, some form of capital regulation of this activity is appropriate to protect the assets of the federal deposit insurance fund.

SLCs and guarantees

An SLC, like the more familiar commercial letter of credit, is a contractual arrangement involving three parties. The bank, as "issuer" of the letter of credit, guarantees that the bank's customer (the "account party") will meet an underlying contractual obligation to the "beneficiary" or else the bank will suffer the loss. However, unlike the commercial letter of credit, which is used to finance the shipment and storage of goods, the SLC underwrites the beneficiary's risk of loss should the account party fail to repay a debt obligation or to complete a construction project as required in the underlying contract. Under the typical SLC, the bank makes payment to the beneficiary only if the account party *fails* to perform.

In general, the account party will choose to arrange an SLC whenever the bank's fee is less than the value of the guarantee to the beneficiary (as measured by the premium the beneficiary is willing to pay for the account party's debt or

services with the SLC backing). In many cases, the issuing bank has a comparative advantage over the beneficiary in underwriting the risk of default on the part of the account party. The bank's costs usually are substantially lower because the bank is better able to diversify the risk associated with a given transaction and because the bank enjoys certain economies in credit evaluation. For example, because the bank frequently has an ongoing relationship with the account party, the marginal cost of obtaining information is lower. As a result, particularly for the larger, top-rated banks, the beneficiary generally is willing to pay a premium in excess of the bank's fee for the value of the SLC backing.

A growing market

SLCs outstanding have grown almost exponentially over the last several years, from less than \$50 billion at year-end 1980 to more than \$155 billion as of September 1985. At the 25 largest banks, SLCs now total more than \$120 billion, up from less than \$40 billion in 1980. This growth is just one manifestation of a rapidly growing general market for guarantee-type products.

In addition to the SLCs that banks offer, surety and insurance companies are now offering such guarantees as credit-risk coverages (which guarantee repayment of principal and interest on debt obligations) and asset-risk coverages, such as residual value insurance and systems performance guarantees. This expansion in the types of coverages offered has given insurance companies a rapidly growing source of premium income. Between 1980 and 1984, the insurance industry's net premiums from such surety operations nearly doubled, rising from \$900 million to \$1.6 billion.

Financial guarantees offered by other, specialized providers have grown rapidly as well. Municipal bond insurance, for example, was rare prior to 1981 but now supports an estimated 29 percent, or \$6.4 billion, of new issues of long-term municipal bonds.

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Two factors account for the tremendous growth in the market for financial guarantees in general, and SLCs in particular. First, the growth over the last ten to 15 years of direct-finance markets has increased the credit-risk exposure of investors who may prefer not to bear such risk. Such direct-finance markets as the commercial paper market have grown rapidly since the late 1960s because borrowers are able to obtain funds more cheaply from them than through intermediaries such as banks.

The resulting decline in financial intermediation has also meant that undiversified investors in such markets must bear more credit risk than if they were to invest in the deposit liabilities of commercial banks. Apparently, such an increase in credit-risk exposure is unpalatable to at least some portion of these investors because ~~at least~~ ²⁵⁻³⁵ percent of all dealer-placed taxable commercial paper is supported by some sort of legally binding guarantee, and nearly all rated commercial paper also is backed by a bank loan commitment.

The second reason that financial guarantees have grown rapidly over the last several years is that overall economic risk has increased over the same period. The rampant inflation of the late 1970s, the increased volatility of interest rates and business activity of the early 1980s, and the unexpectedly sharp deceleration in the rate of inflation in the middle 1980s have caused wide swings in asset prices and returns on investment. This increased variability, in turn, implies an increase in credit, or default, risk since investors are now less certain of a borrower's ability to meet maturing obligations. Consequently, the demand for instruments like SLCs and other guarantees that reduce the risk to the beneficiary has increased tremendously.

Bank involvement

Banks' involvement in this market is at once an extension of their traditional lending business and, because SLCs are not funded, a significant departure from it. Like their lending business, banks' issuance of SLCs entails the underwriting of credit risk. In this area, banks enjoy certain economies of specialization that make them lower cost issuers of financial guarantees.

Moreover, in contrast to insurance companies, banks do not generally secure their guarantees

with a formal collateral arrangement with the account party since they usually have the right to debit the account party's deposit accounts. This lack of a formal collateral arrangement makes SLCs more attractive, but it also increases the bank's risk somewhat.

Given the enormous increase in the demand for guarantees, being low-cost issuers may be sufficient explanation for the rapid growth of bank-issued SLCs over the last several years. However, banks also may have an incentive to respond to this demand since they can overcome binding regulatory constraints on their lending activities by doing so. Because SLCs are not funded and are therefore unaffected by reserve requirements, they represent a less costly way of assuming a given level of credit risk.

Another important regulatory constraint that may have given banks incentive to issue SLCs is the trend in bank regulation in recent years toward tougher capital standards. For most firms, theory suggests that stiffer capital regulation should not affect behavior since firm value does not vary with changes in leverage. Accordingly, any decline in the return on equity associated with tougher capital standards should be largely offset by the reduced cost of debt resulting from decreased leverage risk. For banks, however, the existence of (underpriced) federal deposit insurance means that a decline in leverage will not reduce the risk to bank debt-holders, and therefore the cost of bank debt, by as much as it will reduce the return on bank equity. The imposition of more stringent capital standards, then, may induce banks to seek other ways to increase leverage and to reduce the negative effects of such regulation on share value.

Because SLCs and other off balance sheet activities are contingent claims, much like insurance contracts, they can be thought of as liabilities even though they are not counted as such on bank balance sheets. Thus, the presence of these unbooked liabilities effectively increases capital leverage. Moreover, because current capital adequacy standards do not formally account for this off balance sheet exposure, banks may have special incentive to shift toward the fee income generated by SLCs and other off balance sheet activities that do not "use up" capital.

SLC risk

At the 25 largest banks, SLCs outstanding now exceed capital by an average of 66 percent — a sizeable exposure particularly if SLC risk is positively correlated with these banks' loan risk. Some observers, however, have suggested that banks' SLC exposure may not be increasing bank risk significantly. They argue that since SLC fees are considerably lower than the fees banks charge for loans with comparable terms, SLCs must pose less risk to bank capital than loans. They also point to substantially lower losses on SLCs than loans and the widespread practice in the banking industry of imposing generally higher underwriting standards for SLCs than for loans.

These findings must be interpreted with caution. First, fees do not provide a measure of the expected return on equity. To a large extent, loan fees are higher than SLC fees because loans entail higher administrative and other expenses than SLCs. After netting out these higher expenses, loan and SLC fees probably would be nearly equal, suggesting that the expected return on, and the risk of, SLCs is at least as high as that for loans.

Second, loss experience can be a misleading measure of credit risk. For example, the extremely low loss experience on SLCs backing real estate investment trusts prior to 1974 may have given bankers misleading signals about the riskiness of such investments.

Instead, there are several reasons to believe that SLCs pose significant capital risk. First, as noted above, banks' SLC exposure may be partly the result of an attempt to circumvent capital regulation and increase effective leverage. Second, unlike most term loans, SLCs do not have a formal collateral agreement and, as such, provide less contractual protection against loss in the event of default than loans.

Finally, evidence from debt markets also seems to suggest that the growth in SLCs over the last

several years has not reduced capital risk. In a study of the determinants of large bank CD rates, Goldberg and Lloyd-Davies found that the market tended to require higher CD rates in compensation for increasing SLC-related leverage. At the same time, these researchers found that SLCs tended to be higher quality credits than loans, suggesting that, on balance, SLCs pose about as much risk to bank capital as loans.

Regulating SLCs

Currently, bank regulators place only limited restrictions on banks' SLC activities. They require that banks treat SLCs as loans for the purposes of evaluating credit quality and calculating loan concentrations. However, because of the inherent riskiness of the SLC instrument as well as the greater potential for capital leverage with SLCs than with loans, some form of capital-regulation of SLCs is appropriate.

The Federal Reserve Board has proposed that its current capital regulation be supplemented by risk-based capital guidelines that would explicitly take into account the relative riskiness of broad categories of bank assets and certain off balance sheet items, including SLCs. These guidelines would assign the same risk weight to most SLCs as to loans. Under these supplemental guidelines, a bank with a large portfolio of SLCs might be required either to raise additional capital or reduce leverage by changing the composition of its asset and off balance sheet portfolios.

The advantage of these guidelines is that they reduce banks' incentive to issue SLCs merely as a means of increasing effective leverage and circumventing capital regulation. Although bankers and their regulators will no doubt argue about the appropriate risk weight to assign SLCs, in concept, this approach does provide additional guidance to bank examiners and stock analysts as they evaluate capital adequacy and bank risk.

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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount	Change	Change from 5/1/85	
	Outstanding 4/30/86	from 4/23/86	Dollar	Percent ⁷
Loans, Leases and Investments ^{1 2}	203,343	1,063	12,304	6.4
Loans and Leases ^{1 6}	184,786	758	11,950	6.9
Commercial and Industrial	53,139	473	694	1.3
Real estate	66,552	65	3,675	5.8
Loans to Individuals	39,138	93	5,169	15.2
Leases	5,649	1	285	5.3
U.S. Treasury and Agency Securities ²	10,686	297	— 538	— 4.7
Other Securities ²	7,871	9	891	12.7
Total Deposits	204,662	3,029	8,324	4.2
Demand Deposits	52,498	3,589	4,355	9.0
Demand Deposits Adjusted ³	34,971	1,206	5,750	19.6
Other Transaction Balances ⁴	15,785	— 428	2,563	19.3
Total Non-Transaction Balances ⁶	136,379	— 131	1,407	1.0
Money Market Deposit				
Accounts—Total	46,196	21	3,330	7.7
Time Deposits in Amounts of				
\$100,000 or more	36,453	— 207	— 1,796	— 4.6
Other Liabilities for Borrowed Money ⁵	27,581	— 342	4,997	22.1
Two Week Averages of Daily Figures	Period ended 4/21/86	Period ended 4/7/86		
Reserve Position, All Reporting Banks				
Excess Reserves (+)/Deficiency (—)	96	— 3		
Borrowings	43	17		
Net free reserves (+)/Net borrowed(—)	53	— 20		

¹ Includes loss reserves, unearned income, excludes interbank loans

² Excludes trading account securities

³ Excludes U.S. government and depository institution deposits and cash items

⁴ ATS, NOW, Super NOW and savings accounts with telephone transfers

⁵ Includes borrowing via FRB, TT&L notes, Fed Funds, RPs and other sources

⁶ Includes items not shown separately

⁷ Annualized percent change