
FRBSF WEEKLY LETTER

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S&L Accounting

After five years teetering on the brink, the savings and loan (S&L) industry finally appears to be regaining its health. Yet a number of recent articles in the financial press have implied that the apparent improvement is not as substantial as the records might indicate. These articles attribute distortions to special accounting techniques used by the S&L industry. This *Letter* examines those accounting techniques and, more importantly, the use of standard book value accounting. On the basis of a market valuation of S&L portfolios, the industry remains in an extremely weak financial condition despite the considerable progress it has made since the darkest days of 1981-82.

Hard times

The S&L industry as a whole has fared poorly over the last five years. Standard indicators of the industry's condition such as profitability and recorded net worth position reveal a pronounced and dramatic deterioration between 1979 and 1982. The industry's profitability, as measured by the ratio of net income to total assets, stood at a near-postwar-high of 0.82 percent in 1978. By 1980 that ratio had fallen to 0.13 percent. Then, in 1981 and 1982, the industry recorded major losses; it just barely returned to profitability in 1983. The results for the first half of 1984 were still poor as net income amounted to 0.24 percent of assets and more than 20 percent of all S&Ls actually reported losses for the period.

The reason for the industry's exceptionally low profitability over the last five years is its large exposure to interest rate risk. Traditionally, S&Ls have relied on short-term liabilities to fund long-term, fixed-rate assets consisting primarily of mortgages. For example, in 1982, well over 50 percent of the industry's liabilities paid market-determined rates and matured in less than one year while only about 20 percent of assets had similar characteristics. The mismatch between the maturities (technically, repricing periods) of the industry's assets and liabilities left S&Ls vulnerable to the high level of interest rates that has prevailed since 1979.

The industry's average cost of funds increased with the rise in the overall level of interest rates,

while the average yield on earning assets rose much more sluggishly. The resulting pressure on S&Ls' net interest margins had a devastating effect on earnings, particularly in 1981 and 1982. The subsequent decline in interest rates and the resultant increase in mortgage loan demand in 1983 provided substantial relief for net interest margins, but was not sufficient to restore financial health.

Rapid growth in loan loss expense, in particular, began to plague the industry in 1982-83. Delinquent payments on existing loans soared and the default rate more than doubled between 1981 and 1983. Poor economic conditions in general, and sagging housing prices in particular, caused much of this deterioration in asset quality. The high growth strategy followed by perhaps 5 to 10 percent (according to the Federal Home Loan Bank Board) of S&Ls compounded the problem. These S&Ls, including some of the largest in the industry, sought to overcome pressure on interest margins through rapid growth in an attempt to "swamp" the low average yield on existing mortgages with much higher yields on new mortgages. In many cases, interest margins improved dramatically but because underwriting standards were relaxed, asset quality deteriorated substantially and contributed to reduced profitability.

Five years of low or negative profitability caused a serious deterioration in the industry's net worth position. In 1979, the industry's overall recorded net worth stood at 6.1 percent of liabilities—a level regulators considered to be a comfortable buffer against adverse circumstances. By the end of 1982 that level had shrunk to 3.8 percent of liabilities. Since then, some improvement in profitability has boosted net worth to 4.1 percent of liabilities as of June 30, 1984, but the industry's rapid growth in 1983-84 has limited the extent to which recorded capital ratios can be increased.

The industry's recorded net worth position, weak as it is, does not reveal the full extent of S&Ls' vulnerability. Included in that net worth figure is a sizeable proportion of "intangible" assets and other bookkeeping items, the inclusion of which is not in accordance with generally accepted accounting principles (GAAP). These principles

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require that claims (net worth) against assets be recorded only if the underlying assets have "bookable" value (i.e., marketable value). Moreover, recorded net worth also is overstated because it excludes a serious deterioration in the market value of the industry's net long-term asset position.

Accounting techniques

Under regulatory accounting principles (RAP), S&Ls have been permitted to count as net worth such items as net-worth certificates, "appraised equity capital," and intangible assets arising from deferral and purchase accounting.

Net-worth certificates were authorized by the Garn-St Germain Depository Institutions Act of 1982 to provide weak institutions with capital assistance to keep them from failing. Targeted institutions issue capital instruments, called "net worth certificates," that are purchased by the Federal Savings and Loan Insurance Corporation (FSLIC). The FSLIC, in turn, gives the issuing institution a promissory note having the same face value. Since no new funds are generated, this transaction amounts essentially to an exchange of paper. If an issuing institution fails, however, the FSLIC's promissory note is available as an asset to satisfy the claims against that institution. As of December 31, 1983, these certificates had been used by a relatively small number of institutions and accounted for \$1 billion of the industry's \$31 billion net worth. According to GAAP, however, this figure should be excluded from net worth calculations since the FSLIC's promissory notes held by the industry only have bookable value in the event of an institution's failure and forced liquidation.

Appraised equity capital, the difference between the book value (historical cost) and appraised value of S&Ls' land and office buildings, is another component of regulatory net worth. The Federal Home Loan Bank Board (FHLBB) requires those institutions participating in the FSLIC's net worth certificate program to add appraised equity capital to their net worth calculations, and consequently, more than \$1 billion of S&Ls' recorded net worth is generated by this item. However, appraised equity capital is not recognized under GAAP. The accounting profession does not recognize real property appreciation until the property is actually sold because, it is felt, appraised value is extremely subjective and its selective use can lead to deliberate misrepresentations.

The practice of including in net worth the value of intangible assets arising from the purchase of other S&Ls (purchasing accounting) and from deferred losses on securities transactions (deferral accounting) has also been criticized as distortionary. Under purchase accounting, the acquirer of a (failing) S&L records the acquired assets at their purchased price. Because the average contract interest rate on the acquired portfolio is less than prevailing market rates, however, the market value of the acquired assets is generally substantially less than their recorded values. Thus, to balance the accounting records, it would seem proper to record this capital depreciation as a decrease in the acquired institution's capital (net worth) accounts. Purchase accounting, by contrast, permits the acquirer to treat this depreciation as "goodwill," an intangible asset, that until recently could be amortized over a period of up to forty years. Clearly, this practice enabled the acquirer of a failing S&L to overstate its net worth position, although accounting rules have been changed to reduce the attractiveness of purchase accounting, particularly in cases where failing institutions are involved.

In the same way that purchase accounting has enabled S&Ls to defer capital losses on acquired loans, deferral accounting permits S&Ls to defer the recognition of losses on the sale of existing loans and securities. Under deferral accounting, which is permissible under RAP but not under GAAP, an S&L can sell existing loans and securities that have depreciated in value relative to their recorded values and record this depreciation as an intangible asset amortized over a period of several years. Such a practice clearly enables the S&L to overstate its net worth position. Because of apparent abuses, however, the FHLBB recently proposed that deferral accounting be limited to loans and securities that were acquired prior to November 1984.

Although exact figures are not available, these two categories of intangible assets amounted to more than \$20 billion as of December 31, 1983. Netting this figure and the \$2 billion in net worth certificates and appraised equity capital yields a net worth position equal to 1.2 percent (as opposed to the recorded 4.1 percent) of liabilities at the end of 1983. It may be hard to understand why the industry's regulators have allowed and even encouraged this sort of misrepresentation of financial condition. However, the FHLBB has deemed

these sorts of implicit and explicit capital assistance programs necessary to give the industry time to work through its problems and to restructure its portfolio. Deferral accounting, for example, enables an S&L to sell low-yielding assets without having to recognize immediate capital loss which could otherwise wipe out its net worth.

Market value net worth

Actually, had the industry been valuing its portfolio at market values instead of book values, its financial condition would have appeared weaker still. Given the large proportion of low-yielding fixed rate assets held in S&Ls' portfolios at par value — an amount that far exceeds similar long-term liabilities — it is likely that recorded net worth (even after adjusting for RAP distortions) seriously overstates the market value of the industry's net worth position.

A number of economists have attempted to estimate the extent of this overstatement. In articles published by the Federal Reserve Bank of Boston, Kopcke estimated that at the peak in interest rates (mid-1981), the industry's net worth to asset ratio was possibly as low as -10 percent when the present value of the industry's assets and liabilities was taken into consideration. Using a slightly different approach, Kane (*Housing Finance Review*, July 1982) calculated the proportionate shortfall in the yield on the industry's mortgages relative to the prevailing mortgage rate. This he interpreted as an estimate of the percentage decline in the value of the industry's mortgage portfolio relative to its book value. He found that at the end of 1980, the

industry's unrealized losses amounted to 20 percent of the book value of total assets.

Thus, using Kane's approach to estimate the current market value of S&Ls' net worth yields a net worth ratio of -3.7 percent as of December 31, 1983. Although still negative, this figure represents a significant improvement over the industry's condition in 1980, since in 1983, unrealized losses amounted to 7.5 percent of assets, compared to 20 percent in 1980.

Admittedly, Kane's approach tends to overstate unrealized losses because it does not take into consideration gains on the industry's other assets (e.g., real property) or liabilities (the value of fixed-term liabilities also falls as interest rates rise), nor does it take into account differences in the prepayment characteristics of seasoned versus new mortgages. These factors, however, are not likely to create too serious a bias.

The difference between the industry's recorded net worth position (4.1 percent) and Kane's estimated market value net worth position (-3.7 percent) represents an enormous distortion. It suggests that the outlook for S&Ls remains clouded at best without a further sizeable drop in interest rates. It is likely that the industry, which has already lost more than 700 of its number through mergers and liquidations, will continue to experience large-scale consolidation. The process of restructuring S&L portfolios, for which the regulators have tried to buy time, will likewise continue to be a slow and painful one.

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Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, or of the Board of Governors of the Federal Reserve System.

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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 12/28/83	
	Outstanding 12/05/84	from 11/28/84	Dollar	Percent ⁷
Loans, Leases and Investments ^{1 2}	187,457	724	11,432	6.8
Loans and Leases ^{1 6}	168,821	824	13,466	09.1
Commercial and Industrial	52,809	223	6,846	15.8
Real estate	61,564	59	2,665	4.8
Loans to Individuals	31,212	210	4,561	18.1
Leases	5,050	- 1	- 13	- 0.2
U.S. Treasury and Agency Securities ²	11,603	- 28	- 904	- 7.6
Other Securities ²	7,033	- 72	- 1,130	- 14.6
Total Deposits	194,509	5,440	3,512	1.9
Demand Deposits	46,946	4,141	- 2,291	- 4.9
Demand Deposits Adjusted ³	30,735	1,843	- 596	- 2.0
Other Transaction Balances ⁴	13,065	865	290	2.4
Total Non-Transaction Balances ⁶	134,498	434	5,513	4.5
Money Market Deposit Accounts—Total	40,506	499	909	2.4
Time Deposits in Amounts of \$100,000 or more	40,424	- 160	2,259	6.2
Other Liabilities for Borrowed Money ⁵	22,299	397	- 708	- 3.2
Two Week Averages of Daily Figures	Period ended 12/03/84	Period ended 11/19/84		
Reserve Position, All Reporting Banks				
Excess Reserves (+)/Deficiency (-)	65	18		
Borrowings	51	21		
Net free reserves (+)/Net borrowed(-)	13	- 2		

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