
FRBSF WEEKLY LETTER

December 16, 1988

Tax Reform and Bank Behavior

The Tax Reform Act of 1986 reduced marginal tax rates for most taxpayers. To finance these reductions in marginal rates, this legislation reduced or eliminated many tax deductions and tax preferences. Such a restructuring of the tax code reflected a concern that the old system's high marginal rates and cumbersome, differential treatment of various sources of income inhibited economic efficiency. Also, important provisions of the Tax Act were shaped by a popular perception that certain groups of taxpayers had unfairly avoided paying taxes under the old system. In particular, Congress included provisions in the Tax Act designed to eliminate certain tax preferences enjoyed by banks and thrift institutions.

The provisions in the 1986 Tax Act that affect banking firms influence banks both directly in their role as taxpayers and indirectly as lenders to other taxpayers. Changes in the tax treatment of loan losses and tax-exempt securities directly affect banks as taxpayers. At the same time, provisions that phase out the tax deductibility of consumer interest payments but maintain it for mortgages and home equity loans affect banks indirectly. These latter provisions affect bank portfolios by encouraging borrowers to shift debt from consumer loan instruments to those backed by real estate.

Following passage of the Tax Act, some analysts predicted that tax reform would significantly raise taxes paid by the banking sector and hurt bank profitability. Others argued that the effects of the new law would be quite small because banks would adjust their portfolios to minimize the law's impact. This *Letter* attempts to sort out these various claims and determine how banks have in fact responded to the new tax environment.

Loan losses

The new law governing the tax treatment of loan losses represents a significant change in the tax laws governing banking institutions. Under both the old and new tax codes, loan losses are tax-deductible expenses for banks. However, prior to the 1986 Tax Act, banks maintained a loan loss

reserve account for reporting losses in taxable income. Banks were able to deduct from taxable income additions to this loan loss reserve. Thus they could directly reduce their tax liability by diverting a portion of their earnings to this reserve. A ceiling on the size of this reserve served to limit the tax deductions banks could take without actually having to charge off bad debts. This ceiling was based on one of two calculations: either the experience method, which tied the ceiling for the loan loss reserve to the historical average value of loan losses experienced by the bank; or the percentage method, where the ceiling was set at a given percentage of the bank's outstanding loans.

This reserve approach to the tax treatment of loan losses enabled banks to spread out the losses from bad debts. It also may have given banks greater flexibility in timing the recognition of loan losses for tax purposes. For example, a bank with taxable income in a particular year might choose to add to the reserve (assuming its reserve was below the ceiling) to reduce its taxable income and tax bill, even though it did not actually charge off any loans as uncollectible that year. In this way, banks enjoyed some freedom to defer taxes as well as spread out the negative impact of loan losses.

The 1986 Tax Act eliminates this tax reserve for banks with assets over \$500 million. However, for financial and regulatory reporting purposes, all banks continue to use a loan loss reserve for charging bad debts against income. For tax purposes, bad debts are now claimed directly against taxable income when the loan is declared worthless and charged off. Rather than being charged against a loan loss reserve, loan charge-offs thus become direct items of expense in taxable income. Because loan charge-offs now have a direct impact on reported taxable income, elimination of the tax reserve method will likely increase the volatility of banks' taxable income. The volatility of *reported* income, in contrast, may not be affected on account of banks' continued use of a loss reserve.

FRBSF

In addition to the new tax treatment of bad debts, tax reform requires banks to reincorporate previously built-up tax reserves into taxable income over a period of several years. This "recapture" provision is considered particularly burdensome for banks as they must make direct additions to taxable income. Alternatively, banks can elect to deplete existing reserves through chargeoffs of problem loans and then switch to the specific charge-off method. The recapture provisions are delayed for banks with large quantities of problem loans.

Municipal bonds

A second major change in the 1986 Tax Act is in the treatment of state and local tax-exempt bonds. Under the previous law, banks were allowed to deduct from taxable income 80 percent of their interest expenses "attributable" to holding tax-exempt obligations. Consequently, banks tended to hold significant amounts of state and local debt securities. In contrast, the new tax law eliminates the tax deductibility of interest payments on debt used to purchase these securities, thus raising the effective cost to banks of holding these assets. Moreover, it includes provisions for an alternative minimum tax on all corporations equal to 20 percent of their taxable income plus preference items. For banks, preference items include interest income on certain tax-exempt securities. These two changes reduce the after-tax return on tax-exempt debt. Portfolio theory suggests that banks will reduce their holdings of these assets in response.

Consumer interest expense

A third major component of the 1986 Tax Act that affects banks is one that influences the behavior of bank customers. With the exception of mortgage interest on first and second homes, the law phases out over several years the tax deductibility of all consumer interest payments. However, it does allow consumers to borrow (with certain limitations) against real estate through home equity loans and still maintain the interest expense deduction.

These provisions affect banks by altering the relative attractiveness of bank loan products. Basic consumer loans, in particular, should become less attractive for consumer finance, while home equity lines of credit likely will become a more preferred vehicle for financing large purchases.

Households' response to these changing costs should influence the composition of bank loan portfolios.

Other provisions

The Tax Reform Act of 1986 also includes a number of more general provisions that affect all corporations, including banks. First, the maximum corporate tax rate is now 34 percent, down from the previous maximum of 46 percent. This lower marginal corporate tax rate is consistent with Administration goals of increasing economic efficiency by lowering marginal rates for all taxpayers. This lower marginal tax rate, however, also reduces the value of corporate tax deductions and thus may help to offset some of the negative impacts associated with the other provisions of the law. Second, the tax bill eliminates the investment tax credit on equipment investment and lengthens tax depreciation schedules for most capital equipment and structures. Banks, like all corporations, thus face reduced incentives for new capital expenditures.

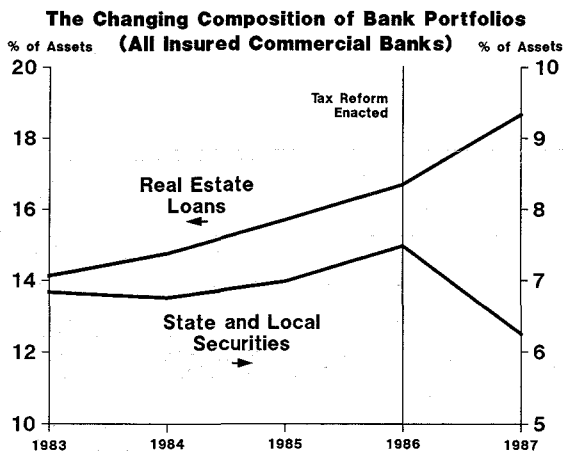
Third, the tax bill aligns commercial banks with other corporations in their ability to carry back and carry forward net operating losses. The old tax code allowed banks a 10-year carryback and 5-year carryforward; the new law calls for a 3-year carryback and a 15-year carryforward for all corporations. This provision reduces the extra flexibility banks once enjoyed to realize net operating losses selectively over several tax years.

How have banks responded?

These changes in the tax law should affect both the composition of banks' portfolios and their overall tax burden and profits. The portfolio effects of the Tax Act are fairly straightforward. As noted earlier, the new law reduces the after-tax return to banks on tax-exempt debt obligations. For borrowers, it also raises the cost of using consumer loan instruments relative to that of home mortgage instruments. As a result of these two changes, we should see a decline in the shares of banks' portfolios taken up by tax-exempt bonds and consumer loans and a rise in the share held by real estate loans.

Of course, one difficulty with inferring tax-induced responses from the data on bank assets and liabilities is the need to control for other influences. Changes in bank behavior may be

caused by new tax policies as well as by any number of non-tax related factors, such as changes in interest rates, market risk, etc. Nonetheless, the trends in the data are roughly consistent with the expected changes in the composition of bank portfolios.



Perhaps the most obvious change since the Tax Act was passed is a significant decline in bank holdings of state and local government securities, a large percentage of which are tax-exempt. As a proportion of assets, holdings of these obligations declined from 7.5 percent in 1986 to 6.3 percent in 1987, a drop of almost 17 percent. This represents the lowest share for state and local government securities recorded any time in the last ten years. Data for the first half of 1988 indicate that bank holdings of these assets continue to decline.

Changes in the tax law have also had noticeable effects on bank real estate lending. Real estate loans grew from about 15 percent of bank assets in 1984 and 1985 to almost 19 percent in 1987. Revolving home equity loans have grown from virtually nothing in 1985 to \$25 billion by mid-1987 and over \$36 billion by August 1988. Surprisingly, consumer loans have maintained their pre-1986 share of total bank lending, despite the diminishing deductibility of interest

payments on such indebtedness. Nonetheless, on balance, bank portfolios appear to be responding to the change in the tax treatment of particular classes of assets.

The bottom line

The bottom-line effects of tax reform are more difficult to predict and analyze on the basis of available data. Bank tax burdens represent a complicated interaction of several years' results for earnings and total taxes paid. Temporary events can disrupt any of these numbers and obscure longer-term trends. For 1987, taxes paid by all commercial banks as a percent of total assets were 0.18 percent, roughly the same as in other years in the 1980s. Total bank income relative to assets, however, fell quite dramatically in 1987. As a result, taxes relative to income increased significantly in 1987, perhaps indicating a rising tax burden for banks.

It is unlikely, however, that this sharp drop in bank income was due primarily to tax reform since the decline was spread unevenly among banks. The decline was concentrated in large banks, many of which have sizable exposures to developing country debt. These banks reported reserving large sums of money in 1987 against the declining value of their LDC loans, a procedure which significantly reduced reported income in 1987. These actions probably have distorted the tax/income relationship for banks in the aggregate. Among smaller banks, income relative to assets was down only slightly in 1987, indicating a tax burden—on the basis of income or assets—similar to previous years.

It is clear that tax reform has induced significant changes in the composition of bank portfolios. While insufficient time has passed to assess its impact on the total tax burden of the banking sector, apparently tax reform *per se* has not had a major effect on the net incomes of banks.

Jonathan A. Neuberger
 Economist

Research Department
Federal Reserve
Bank of
San Francisco

Alaska Arizona California Hawaii Idaho
Nevada Oregon Utah Washington