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Banking's Capital Shortage:
The Malaise and the Myth

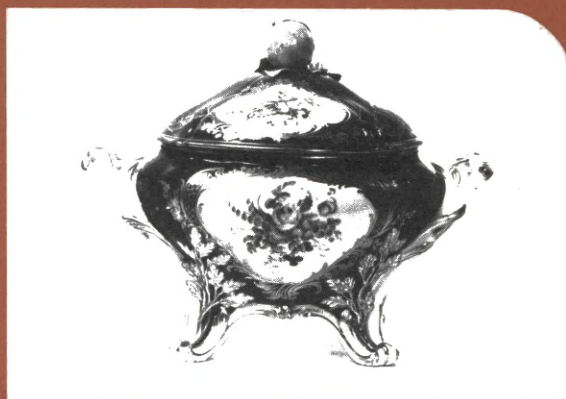
The Dollar at Home and Abroad

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business review



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On our cover: The Campbell Museum, located in Camden, New Jersey, is the only museum of its kind in existence. The museum's collection consists of objects pertaining to the service of soup and its equipage. It is international in scope with examples from 24 countries and not limited to any one period. Although the first purchase was a rare American silver soup tureen made circa 1795 (upper left), other objects of high quality as examples of popular and individual choice are a Vincennes tureen of soft-paste porcelain (upper right), a Chelsea tureen (soft-paste) made in 1762-63 (lower left), and a Russian silver tureen bearing the monogram of Catherine the Great (lower right). (Photographs courtesy of The Campbell Museum, Camden, N. J.)

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Banking's Capital Shortage: The Malaise and The Myth

By Ronald D. Watson

Is it possible that bank capital—like oil—is a scarce resource whose supply is in danger of being exhausted? To read the financial industry's trade journals a person might conclude that capital is a rare substance whose supply can grow only at a strictly limited rate. However, the current presumption that banks can't raise the funds they want for strengthening their capital positions and expanding deposits needs a lot of rethinking. Banks must have capital to inspire public confidence and absorb losses.¹ If they can't get the capital required to support their operations, maybe banks aren't serving the economy as effectively as is generally assumed.

Clearly, the banking industry must raise additional capital if it is to grow. Growth without

new capital is possible, but only if bank regulators are willing to allow risks to increase, and that isn't likely. The "shortage" is occurring because banks are expanding their assets more rapidly than reinvested profits can boost capital. The obvious supplement to retained earnings is new capital from public issues of long-term debt and equity securities. But bankers claim that declining stock prices and higher interest rates have made the cost of this new money (especially the equity) too high. The problem is compounded by generally weak markets for bank securities, especially in the wake of several failures of large banks in 1974. Most banks resort to outside financing only when other sources of funds are no longer readily available.

Restricting the industry's growth to the rate at which it can generate capital internally has been suggested, but most banks are reluctant to accept a policy that might mean losing ground to other financial intermediaries or

¹Ronald D. Watson, "Insuring Some Progress in the Bank Capital Hassle," *Business Review of the Federal Reserve Bank of Philadelphia*, July-August 1974, pp. 3-18

even slowing the whole economy's growth. Yet, further growth for banking appears to be stymied. Internal generation of new capital is too slow, outside capital seems too costly, and the regulators are closing off the alternative of expanding without additional capital.

This should not—and need not—be an impasse. If the problem looks insurmountable, it may be that we are zeroing in on the wrong target. The issue should not be one of “how to get capital for future expansion,” but “are the profit opportunities of this expansion great enough to justify raising new capital at today's prices?” If the profits are there, banks can afford to pay the going rate for capital. If they aren't, then the capital should go to industries that have better opportunities to use it. Bank capital markets may be in poor shape, but that alone shouldn't change the way the decision to expand is made.

THE CAPITAL CHASM

The bank capital “shortage” has been brewing for several years, but recent projections of enormous capital shortfalls over the next decade have significantly pepped up discussions of the problem. There have been prophecies of a capital “gap” (differences between probable capital accumulations and capital demands of the industry) of \$16.7 billion² by 1978 or \$32.0 billion³ by 1979. These projections have intensified the industry's awareness that the methods used for financing growth in the '60s may not be equal to the task in the '70s.

Bankers have normally considered it impractical to try to close this gap with outside sources of funds. Data on bank financing is very sketchy, but the industry has a long history of depending heavily on earnings retention for additional long-term funds (as

have most corporations). Of the new securities issued by banks the bulk has been debt (subordinated notes and debentures) rather than common or preferred stock.⁴ In general, internal funds are more appealing as a source of capital than external funds because their cost seems very low. Retained earnings almost always look cheaper than new common stock. A new stock issue may dilute the earnings of current shareholders, but retaining earnings never will. Furthermore, there are substantial transaction costs associated with floating new debt or equity issues publicly. Retained earnings may also seem less costly than long-term debt which carries an explicit obligation to pay interest.

Raising money through new issues of common stock has become even more expensive in the last few years because bank stock prices have declined dramatically even though earnings have been growing. Bankers accustomed to seeing their shares sell for 15 to 20 times earnings in the early 1960s were dismayed to see those prices drift into the 10 to 15 times earnings range in the late 1960s and early 1970s and then plummet to the 5 to 10 times earnings range in 1974.⁵ As stock prices decline, the number of shares that must be sold to raise a fixed amount of new capital increases. When this occurs, the current stockholder's control of the bank is diluted and his future dividends diminish relative to what he would have received if the stock had been sold at a higher price. And each jump in equity cost has strengthened management's resolve to avoid paying the cost of raising

⁴“Report of Securities Issued by Commercial Banks and Holding Companies,” Report #67, Corporate Financial Counseling Department of Irving Trust Company, New York, February 28, 1975.

⁵*Keefe Bank Stock Manual* (New York: Keefe, Bruyette, and Woods Inc., 1974). Inflation and riskier bank portfolios have been important reasons for the rising cost of new debt and equity capital. However, many bankers claim that public statements by regulators warning of capital inadequacy problems have increased the cost of funds even to very conservative banks by making investors wary of all bank securities—not just banks that had been aggressive in using leverage.

²*The Capital Adequacy Problem in Commercial Banks, 1974-1978* (Princeton, N.J.: The Institute for Financial Education, 1974), p. 8.

³Warren R. Marcus, *The Challenge to Banking: Capital Formation in the Seventies* (New York: Salomon Brothers, 1974), p. 6.

funds with new stock issues.

Even debt capital has become more expensive in the last few years. Not long ago sound banks were able to sell their long-term obligations at an interest rate of 5 to 6 percent. However, an upward drift in rates and recent concern about bank soundness have made the going rate 8½ to 10 percent these days.

CURRENT REMEDIES FOR SPANNING THE GAP: A WEAK BRIDGE

Even though there is no universally accepted response to this problem, there have been any number of suggestions. Some have been directed toward loosening the regulatory constraint on expansion while other plans have been designed to reduce the industry's cost of capital. All of these proposals have some merit, but none constitutes a lasting solution to the problem.

Lower Capital Standards. Some effort has gone into convincing the regulatory agencies that banks don't really need all the capital that supervisors currently consider prudent. If capital standards were lowered, still more expansion could take place. Bankers point to the willingness of investors in the capital markets (until very recently) to advance debt funds to banks at interest rates nearly on a par with other high-quality corporate borrowers. This is interpreted as evidence that investors (who are the first to lose their money if banks fail) have considered banks to be good risks. If regulatory standards on capital are too conservative, reducing them would alleviate the current bind on growth. Reducing capital requirements might also enable banks to maintain the lower standard through retention of earnings. However, such a hope might be overly optimistic. A key reason that banks haven't maintained capital at the current standard through internal generation of profits is that they have been willing to sacrifice profits to achieve asset growth. If the regulator's capital constraint is relaxed without a simultaneous reexamination of the impor-

tance of maintaining profitability, the problem will just reappear in a couple of years. Asset growth will again be halted by the capital adequacy barrier, but this time it will be at an even lower standard.

More Debt. The second type of suggestion for closing the capital gap consists of plans for lowering the price that banks must pay for their capital funds. The most common proposal is that banks use more long-term debt as a substitute for equity capital. As long as debt hasn't been overused, it has a cost below that of equity and appears to be the cheapest way to raise outside capital. Debt is a particularly attractive form of capital in that it is the one form of long-term funds whose cost is a tax-deductible expense.⁶

Yet, substituting long-term debt for new equity is also only a partial solution. Long-term debt is an inadequate substitute for equity because it has legal characteristics which are different from those of common stock. Its claim to interest is secondary to that of depositors, so it backstops their claims. But interest and principal must be repaid on time if the bank is to avoid default, and operating losses cannot be charged against debt "capital" (except in liquidation) as they can against equity capital.

Accordingly, if bank's asset growth is financed with debt capital rather than equity, the chance of incurring a large loss that would wipe out the remaining cushion of equity capital grows. The greater the amount by which the growth of risky assets exceeds expansion of the equity cushion, the greater the risk of failure. Bondholders are also wary of this heightened risk of failure. As the investors' risks grow, the yield they demand on their investment also climbs. As a result, heavy use of "cheap" debt capital will eventually

⁶There have recently been legislative proposals that all dividend payments be treated as tax-deductible expenses in the same way that interest payments are now deductible. If this change in the tax codes were enacted, it would make stock a relatively more attractive way to finance corporations.

raise the cost of new equity and debt (both new and refinanced) by causing the market price of these securities to decline. This risk "spillover" reduces the cost advantage of new debt. It also hurts the financial position of the current shareholders whose investment has now dropped in value. If a bank's debt position becomes excessive by market standards, management will find that by cutting back on the use of debt the shareholders' risk will be reduced, the stock's price will tend to rise, and the overall cost of funds will be lower (even new equity issues become relatively less costly than additional debt).

New Securities. One of the problems preventing banks from using more debt capital is the poor marketability of these securities. Major banks that have market recognition are able to sell large amounts of debt at relatively low interest rates. However, smaller banks that lack this reputation aren't so fortunate. The market for their securities is normally restricted to their operating region, and borrowing costs may be higher than those of a large bank of the same risk. To overcome these disadvantages some smaller banks have borrowed debt capital from their big-city correspondents.⁷ There have also been suggestions that smaller institutions use investment trusts (like mutual funds) to pool their securities. This device is intended to simplify the investor's diversification problems while providing a wider market for the securities of these banks.

Weakness in the stock and bond markets has prompted some authors to suggest that banks turn to convertible bonds for new capital. These are securities that can be converted into common stock if stock prices rise. Convertible bonds usually have an interest rate below that of nonconvertible debt. What's more, the price at which holders are allowed to convert their bonds into common

stock can be set above the current market price of the stock. This type of security is supposed to give the issuer a cheap source of debt which will eventually be turned into equity at a better price than new stock issued right now—in a sense, the best of both worlds for the bank.

Investment trusts and convertible debt securities might be useful to a bank, but they won't make the cost of new capital *substantially* lower. Such a trust may improve the overall marketability of a bank's securities, making it easier for the institution to tap new sources of capital. However, an investor should be able to diversify his or her investments without the trust and has little reason other than convenience to accept a significantly lower return on pooled securities than for the individual issues.

Convertible bonds (and convertible preferred stocks) are also useful, but again they don't solve the problem. On the surface they look like a very cheap way to raise money. But this is not the case. If a bank offers a convertible bond, it may sell the securities at a low interest rate and attractive conversion price. However, it has still sold a debt issue, and debt is riskier for the bank than new equity. Holders of these bonds will only convert them to stock if the price of the bank's stock rises to a level *above* its conversion price in the future. If a bank really wants debt capital now and equity capital sometime in the future, it might be better off to float a bond issue initially, and then refinance it with a common stock issue later at the stock's higher price. In principle, there's no reason to expect a bank to be able to raise capital substantially more cheaply in the long run with convertible securities than with ordinary debt and stock.

Cut Dividend Payout. The high cost of new external capital has also prompted the suggestion that banks boost earnings retention by gradually cutting the proportion of earnings paid out as dividends. Retained earnings are an appealing way to build equity capital because the process doesn't create

⁷This may make the smaller bank's capital position look more sound, but it hardly enhances the stability of the banking system.

new shares which dilute earnings. The internal funds also increase the likelihood that there will be higher earnings in subsequent years.

But the suggestion that higher earnings retention be used when equity capital costs are high skips over some basic economics. If the cost of new equity is prohibitive, the cost of retained earnings should be treated as only “a bit less” than prohibitive. The cost of retained earnings is closely linked to the cost of new equity in the long run. In a world without taxes these costs would be identical except for the cost of underwriting new stock issues. Taxes make retained earnings slightly cheaper because investors whose profits are retained for reinvestment by the bank will avoid income taxes—at least until the reinvested profits produce higher dividends or until stockholders realize a capital gain on their investment. Realizing a capital gain would reduce the effective tax rate on the profits from reinvestment.

The connection between the cost of retained earnings and that of new common stock becomes clearer if we think of retained earnings as bank profits that are being reinvested within the organization for the *benefit of the shareholders* rather than being paid out to them in the form of dividends. Those same investors who want a very high return for investing in a new stock issue aren’t likely to be happy to have their profits reinvested for them at significantly lower expected returns. If investors currently expect 15 percent as a return for investing in a bank’s stock, they must feel that 15 percent is a competitive return given the risks of bank investment and the alternative uses they have for their money. If the bank can’t earn enough profit on these retained earnings to give the shareholders that 15 percent return, it would make the investors better off by giving them the money as a dividend to invest as they see fit. In the long run, reinvestment of retained earnings at substandard rates will lower the bank’s overall rate of return, and investors will bid down the price of the bank’s stock. Therefore, reinvesting retained earnings

when profit prospects don’t warrant doing so is no solution to the capital problem.

Boost Earnings. The final proposal for closing the capital gap is one of speeding internal equity creation by increasing earnings margins. Greater profits would allow earnings to grow faster, equity to expand faster, and asset growth to be less impeded by capital. The proposal that banks raise their profit margins is the soundest and the most important of this crop of “solutions.” It comes the closest to confronting the fundamental reason that the industry finds itself “unable” to raise adequate capital. It is also the basic component of a real solution.

THE FUNDAMENTAL PROBLEM

The problem that banks face isn’t a *shortage* of capital but an *unwillingness or inability* to pay the “going rate.” There is no question that capital costs are high right now. By the historical standard of the last three decades, the only time they were higher was in the latter part of 1974 when long-term interest rates were above their present levels and stock prices were extremely depressed. Adjusting to these rising capital costs is difficult for all businessmen—and the reaction is likely to be slow. Many bankers have delayed raising capital hoping that a future drop in market rates will reduce these capital costs.

Beyond the argument that rates may soon drop, many bank managers are simply unwilling to tolerate the dilution of earnings per share that could accompany a new stock issue (spreading the existing earnings pool over a larger number of shares). Retained earnings may have a high implicit cost, but it’s a difficult cost to pinpoint. Diluted earnings, however, suggest that management may have made some errors somewhere along the line. That makes dilution a difficult path to accept (see Box).

Bankers may also be unwilling to pay the high cost of new capital for the sound economic reason that they cannot reinvest it at a sufficiently high return. They may know

WHEN WILL DILUTION OCCUR?

A common argument advanced against sell new stock issues is the concern that the stock's earnings per share (E.P.S.) will be diluted by an increase in the number of shares outstanding. This is true, and to the extent that a bank's ability to pay dividends is tied to its E.P.S., it is undesirable to dilute earnings. However, this isn't the whole story.

New equity capital does more than simply dilute the current earnings of the existing shares. The new money can be invested profitably and used as a base for expanding other liabilities. It also reduces the risk of the bank's capital structure. It is quite possible that shareholders of a bank that sells new common stock can experience a mild dilution of their earnings but be better off. They have a sounder investment because their risk is lower and the bank now has a better equity base on which to expand in the future. As a practical matter, new stock issues *almost require* dilution in the short run. Stock must be sold in large enough blocks that the flotation and underwriting cost aren't too large a proportion of the total funds raised. But the new equity will then be sufficient for further expansion of fixed-cost liabilities and the bank can re-leverage the earnings to their former level.

Stock Price Dip. It's almost an article of faith that new stock can't be issued after a fall in the bank's stock price without diluting earnings. Dilution may well occur, but it isn't a foregone conclusion. Suppose the Ninth National Bank's balance sheet is the following.

Cash (0%)*	\$ 100	Deposits (6%)	\$ 600
Bonds (7%)	500	Borrowing (7%)	500
Loans (11%)	600	Capital (20 shares @ \$5 per)	100
Total	\$1200	Total	\$1200

Assuming the bank's tax rate is 50 percent, its earnings per share would then be

$$\begin{array}{rclclclcl}
 \text{revenues} & - & \text{expenses} & = & \text{income} & - & \text{taxes} & = & \text{profit} \\
 (0 + 35 + 66) & - & (36 + 35) & = & 30 & - & 15 & = & 15/20 = \$.75 \text{ E.P.S.}
 \end{array}$$

Assuming that the stock's market price is equal to its par value, this is a 15-percent return on the stockholders' investment.

*The numbers in parentheses denote the effective *yield* on assets or the net *cost* of funds raised. Economic theory suggests that a firm should utilize a source of funds until the marginal cost of the next dollar raised from that source is exactly equal to the marginal cost of a dollar from any alternative source. If the bank described above really found that its cost of obtaining new deposits was below the cost of new short-term borrowings, it should tap that source until the marginal cost of deposits rises to the level of the cost of new borrowings.

Suppose this bank had some attractive investment and lending opportunities but needed additional money to expand its assets. A total of \$200 could be invested as follows:

$$\begin{array}{r}
 20\% \text{ in bonds at } 7\% = .014 \\
 80\% \text{ in loans at } 11\% = \underline{.088} \\
 \hline
 .102 = 10.2\% \text{ before-tax yield} \\
 \qquad 5.1\% \text{ after-tax yield}
 \end{array}$$

Suppose, also, that the bank would have to rely heavily on purchased funds and new stock to raise this money but could get it in the following way:

- 20% from new deposits
- 70% from borrowings
- 10% from new common stock (4 new shares).

The average cost of these marginal sources of funds (adjusted for the tax deductibility of interest) would be

Proportion	x	Tax-Adjusted Cost	=	
.2	x	(.06 x .5 = .03)	=	.0060
.7	x	(.07 x .5 = .035)	=	.0245
.1	x	(.15)	=	<u>.0150</u>
				.0455 = 4.55% tax-adjusted cost of funds.

As long as funds can be raised at 4.55 percent and invested at 5.1 percent, the bank should expand.** In fact, if the bank makes this expansion its new balance sheet would be

Cash (0%)	\$ 100		Deposits (6%)	\$ 640
Bonds (7%)	540		Borrowings (7%)	640
Loans (11%)	760		Capital (24 shares @ \$5 par)	120
Total	<u>\$1400</u>		Total	<u>\$1400</u>

and the E.P.S. of the bank's stock (including the new shares) would jump to

$$\begin{array}{r}
 \text{revenues} \quad - \quad \text{expenses} \quad = \quad \text{income} \quad - \quad \text{taxes} \quad = \quad \text{profit} \\
 (0 + 37.80 + 83.60) \quad - \quad (38.40 + 44.80) \quad = \quad 38.20 \quad - \quad 19.10 \quad = \quad 19.10/24 = \$.796 \text{ E.P.S.}
 \end{array}$$

**Bankers continually confront choices between greater return with higher risk or lesser returns with lesser risks. This analysis assumes that the bank's overall risk has not been altered by the expansion. The proportion of risk assets is up, but so is the bank's capital position. Therefore, the return expected by investors will not change.

Now suppose that inflation picks up or investors become worried about the long-run profitability of banks. The price of Ninth National's stock might drop from \$5 to \$4 a share. That represents a significant increase in the cost of new equity capital to the bank (15 percent to 18¾ percent), and it will now take five new shares rather than four to raise the \$20 of new equity. However, the fact that these costs have risen is not sufficient reason to abandon the expansion. If profits from the new investments are high enough to cover the jump in equity costs, the bank should go ahead with its plans. If overall profits are unchanged the new E.P.S. will be ...

$$\$19.10/25 \text{ shares} = \$.764 \text{ E.P.S.}$$

This is far less attractive than the 79.6¢ E.P.S. that the bank's shareholders would have received had the stock price remained \$5 a share. But both new and old shareholders are still better off with the expansion than they would have been without it (76.4¢ versus 75¢).

In summary, an expansion that earns enough to benefit the new shareholders will automatically make the old ones better off. It's only when the new capital investment isn't profitable by the market's current standard of returns that expansion shouldn't be undertaken. Dilution will occur *only* when the wrong financial decision has been made or when the bank has exceeded the bounds of prudent leverage and has to sell more equity to get back to a safe capital structure.

that they need greater earnings to justify raising additional funds yet may be unable to increase their margins because competitive pressures are too strong. Any move to raise earnings will be hard to sustain if other financial institutions don't consider themselves to be under the same pressures. If only one bank in an area raises its loan rate, its competitors will have an advantage in selling their services. In all probability the first bank will lose some of its share of the market. It's only when all banks feel the pressure to build their capital (and no one has a clear cost advantage) that profit margins can be raised successfully. Even then, banks may lose some business to other nonbank financial organizations unless those firms are under equivalent pressure to boost earnings.⁸

⁸This should not be interpreted as an approval of collusion to raise prices. Even though the entire industry has profits that are insufficient to attract new capital, each bank must respond to the problem individually. However, the more widespread the profits squeeze, the more likely that individual banks will follow a move to raise prices rather than try to increase their market share by maintaining current prices for loans and services. In the long run, competitive markets will generate equal prices from all suppliers, but at a level which covers the cost of all factors of production including equity capital.

In the long run, the banking industry can only pay a higher price for capital if it can pass these costs along to customers in the form of higher effective interest rates or higher fees for other services provided. The ability to pass costs along depends in great part on whether the industry can preserve its cost advantage over (or, at least, parity with) competing suppliers of financial services. If bank loan prices can't be competitive, profit opportunities will shrink and maintaining the industry's recent growth rate will be impossible.

THE FUNDAMENTAL SOLUTION

The industry *can* pay the going rate for capital if it is careful to use sound methods in analyzing its costs of funds and return available on new investments. In the long run, solid financial analysis will be more effective in loosening the industry's growth constraints than plans to make bank securities more marketable. Management will also find that its own long-run interests are served by making sound financial decisions. Asset growth may be one measure of accomplishment, but consistent profitability over the long haul makes a banker's position more secure.

The Cost of Funds. One of the most basic problems that industry must confront is estimating the costs of its own sources of funds. Bank management must determine where new money is coming from, what its full cost is, and what effect decisions to change the bank's capital structure (and, thereby, its risk) will have on the cost of these funds. The cost of funds to a bank depends in part on the riskiness of its capital structure—the proportions in which it raises long-term versus short-term funds and debt capital versus equity. A bank may raise its *next* dollar of funds from any of several specific sources, but it must carefully maintain a balance of debt and equity as it grows over time. If this week's funds come from debt sources, they will soon have to be balanced with new equity. Since increasing risk makes it impractical to expand indefinitely using only short-term borrowings, bankers must include the cost of funds from all of the sources that will eventually be tapped when they estimate the real cost of additional funds.⁹ To be profitable, any investment made by the bank should earn enough profit to pay for all the funds used to finance it.

Lending money at rates which cover only the cost of funds borrowed to make the loan will quickly lead to profit problems. The cost of the new equity that must be raised to keep risk exposure constant must also be covered in the rate charged on the loan. Otherwise, the cost of the bank's funds will rise even further. If the cost of new capital is increasing, the signal to management should be clear:

either reduce the bank's overall risk or be prepared to earn a high enough return on assets to pay for this capital. Successful operation over a long period requires that investors be given an expected return on their funds that is as high as returns available from other comparable securities. The fact that markets for the capital of smaller banks are especially imperfect doesn't alter the fact that those banks must have equity to expand and must pay whatever the "going market rate" is for that equity.

A Minimum Return. Once a bank has estimated the price it must pay for new funds it has a benchmark for judging alternative investments. A bank should only invest in loans or securities (or combinations of them) whose expected return is above the cost of the new funds required to finance them. That seems obvious. But the decision must be made on the basis of the current cost of *all funds* that will be raised during the next planning period rather than just the cost of a block of short-term debt which might be raised next week. It should also consider the full effect that any change in the bank's asset or liability risks will have on the cost of any funds raised. Furthermore, if the bank expects to have more funds than it needs to meet loan demand and liquidity requirements for an extended period, simply investing them in the highest yielding asset available may not be the best strategy. The investment must still yield enough to pay the full cost of these funds, or they should be returned to those who have loaned to or invested in the bank. This might be done by not replacing maturing debt issues or by paying extra dividends. In the long run, capital markets should eventually force a bank in the direction of managing its funds efficiently. (Limitations on entry into banking and imperfections in the market for bank securities may make market discipline less effective than it is in unregulated industries.)

Shrink, If Necessary. If investment prospects don't justify raising new funds, the institution shouldn't try to expand. Doing so

⁹A common technique for estimating a corporation's cost of new funds is the weighted average method. A business evaluates the net cost of raising additional funds from debt and equity sources by estimating the cost of each source and weighting the cost according to the proportion that those funds will represent of any new money raised. If a bank expects to finance 80 percent of its growth with short-term debt costing 4 percent after taxes and the other 20 percent of the expansion with new stock costing 12 percent, its weighted average cost of funds is $.8 \times .04 + .2 \times .12 = .032 + .024 = .056$ (5.6 percent). See Box for a more thorough explanation of this process.

isn't in the best interests of either shareholders or management. When the cost of funds exceeds the returns available to a bank, capital markets are giving management a signal that alternative uses for its shareholders' fund are relatively attractive. If the bank can't earn a competitive return on its equity, its stockholders can use the money for other investments. A bank that reinvests shareholder earnings when its return isn't on a par with other securities of similar risk is preventing shareholders from making better use of their own money. Eventually, the shareholders will sense this and try to sell their stock. The falling stock price will put pressure on management to correct the problem or answer to the stockholders.

The market is also signaling the bank that consumers and borrowers aren't sufficiently interested in its banking services to pay the prices that make the bank able to give investors a competitive return. Either another financial organization can provide that service at a lower cost or tastes have changed and people don't really want the service at all. Banks that can't afford to pay the going rate for funds (because they can't pass their higher costs on to their customers) should not expect to get additional money.

The Regulatory Constraint. If banks were unregulated and absolutely free to buy money and sell services in a competitive business environment, these market forces could resolve the "capital shortage" automatically. But the fact is, they're not free and, therefore, they do not work perfectly. The industry, in fact, is tightly regulated, and the regulations influence bank profits. Exclusive rights to issue demand deposits and limitations on entry into the industry are examples of implicit subsidies from Government to commercial banks. Conversely, capital adequacy constraints, reserve requirements, and portfolio limitations tend to lower bank profits. The point is not that these constraints are "wrong" or "unjust," but that they influence the profitability and com-

petitiveness of banks *vis-à-vis* other financial service organizations.

Firms operating in an unregulated world have the right to raise their prices enough to compete for the higher cost equity funds—as long as their customers are willing to pay those higher prices. Banks are free to make some price adjustments, but they may not be able to pass on higher money costs as effectively as unregulated financial corporations. If banking agency regulations or state usury statutes inadvertently hold earnings below the level needed to raise new capital, the industry's growth would be unnecessarily curtailed.¹⁰

There is no way to know, right now, whether this will be an important problem or not. Bank regulators must be vigilant in assuring that only the constraints that are necessary to promoting the financial system's stability are enforced. This problem becomes especially important as regulators weigh the pros and cons of changes in capital requirements and of expanded powers for both banks and thrift institutions.


CONCLUSION

Any projection of historical trends in bank growth, profits, and dividend payout practices suggests that the banking system's demand for external capital will expand rapidly in the years immediately ahead. Yet the capital "gap" will probably sow the seeds of its own resolution. If banks curtail their growth because of an inability to find profitable new investments (or to circumvent the regulator's capital constraints), the least attractive investments can gradually be culled

¹⁰It is also possible that their regulated environment gives banks an advantage as money costs rise. In that instance, regulations are giving banks an unearned competitive edge and allowing them to increase their market shares at the expense of nonbank businesses. This results in just as great a misallocation of society's resources as occurs when bank profits and growth are unnecessarily restricted.

from their portfolios. By concentrating available resources on the more profitable business that remains, banks will be taking steps to build capital internally. Better profits and stronger capital positions will cut risks, and banks will then be more able to compete for new external capital. Competition from the nonbank financial sector will remain, but these organizations must also pay high prices for additional capital. The key, however, is astute use by banks of the money available to them and prudence in raising only those funds that can be reinvested profitably. As long as the profit opportunities exist, banks will have the opportunity and the justification for raising whatever funds they need. When expected profitability is insufficient, the

desire to expand must be held in check.

Regulators also face a challenge in the years ahead. They must not only protect the public's interest in its financial system but also try to keep the game "fair." The regulatory agencies can alter the competitive viability of the industries they regulate. If these industries are to serve society and their shareholders efficiently, they must be free to respond to their changing economic environment. The desire to expand banking's capital base rapidly is one development which can only be accomplished successfully if regulation doesn't prevent the industry from competing for funds, investing rationally, and passing rising costs along to customers who are willing to bear them. 

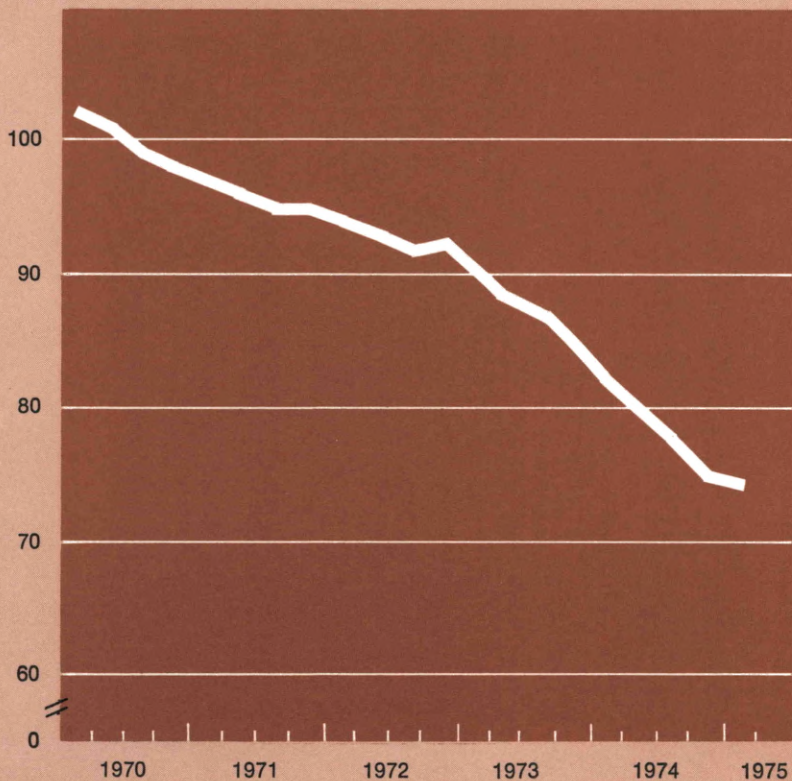
The Dollar at Home and Abroad

By John G. Bell

CHART 1

BECAUSE OF STEADY INFLATION IN THE U. S. OVER THE LAST FIVE YEARS, THE DOLLAR TODAY BUYS FEWER GOODS IN THIS COUNTRY THAN IT DID IN 1970.

Index of Purchasing Power of the Dollar* (1970 = 100)



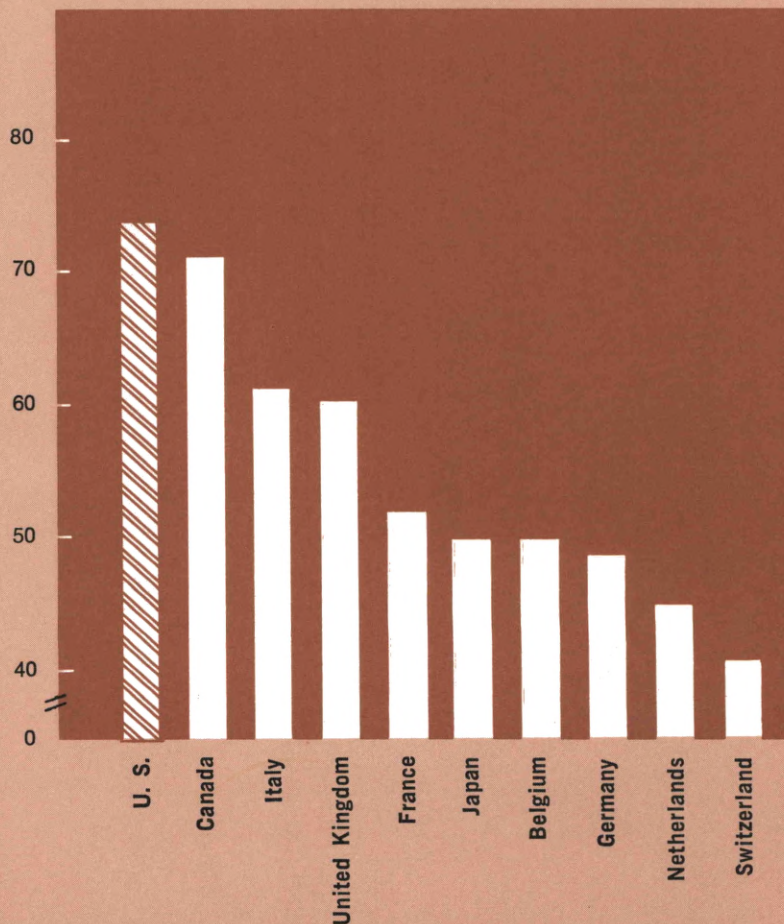
* $\frac{100}{\text{CPI}}$

SOURCE: U. S. Department of Labor, Bureau of Labor Statistics.

CHART 2

YET THE DEPRECIATED DOLLAR HAS STILL HELD ITS PURCHASING POWER FAR BETTER AT HOME THAN IT HAS OVERSEAS . . .

Index of Purchasing Power of U. S. Dollar*
 In Selected Counties—1st Quarter, 1975
 (1970 = 100)



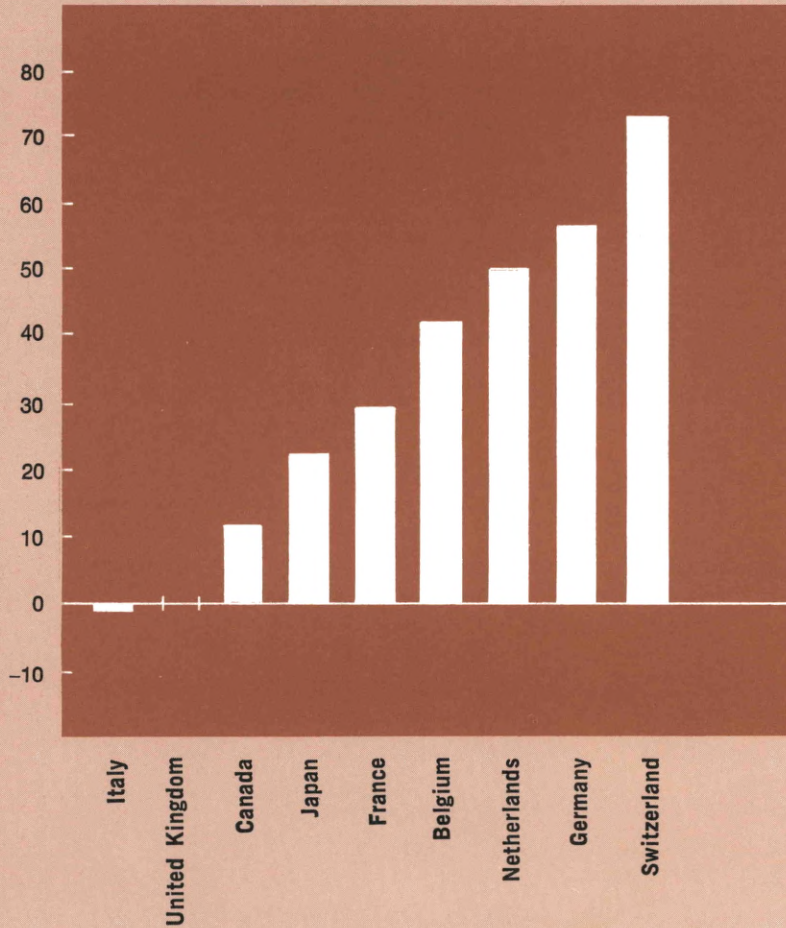
* This index is computed by multiplying the exchange rate in terms of dollars per unit of foreign currency by the CPI for the country and converting to an index with 1970 = 100

SOURCE OF COMPONENT FIGURES: International Monetary Fund

CHART 3

... BECAUSE IT TAKES MORE DOLLARS TO BUY FOREIGN MONEY ...

Percentage Change in Dollars Needed to Buy One Unit
Of Foreign Currency—1970 to 1st Quarter, 1975

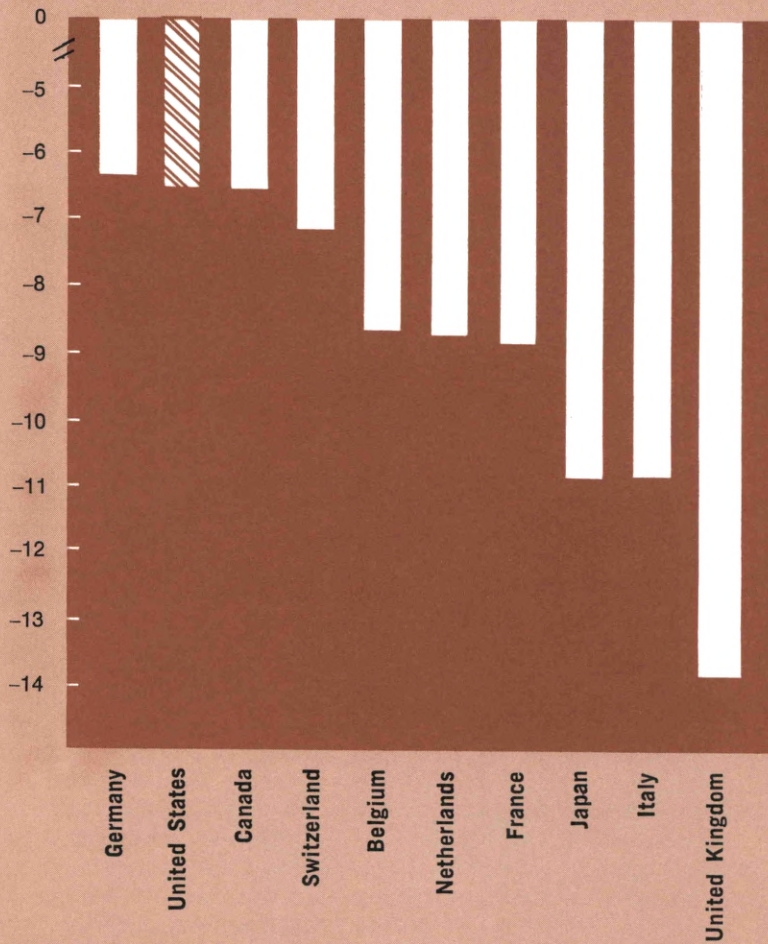


SOURCE: International Monetary Fund

CHART 4

... AND FOREIGN MONEY BUYS FEWER FOREIGN GOODS.

Average Decline in Purchasing Power of Selected Currencies in Their Home Countries
Percentage Change from 1970 to 1975



SOURCE: International Monetary Fund

Bank Loan Losses: A Fresh Perspective

*By Stuart A. Schweitzer**

Nobody likes to be in default on a loan. Yet, even the best-intentioned borrowers are sometimes unable to pay their debts. And when they have difficulty paying their debts, their troubles fall right into the laps of their creditors. No wonder, then, that analysts of banks and the banking system pay particular attention to bank loan losses.

Loan loss rates at commercial banks have been on the rise for some time. And some bank experts say there's apt to be a record volume of loan defaults this year, as reces-

sion brings financial misfortune to many. That brings to the fore the issue of bank defenses against potential loan losses.

Analysts generally focus on a bank's "reserves for possible loan losses" as its principal defense against uncollectable loans. Yet, over the past five years banks haven't built up their loss reserves as rapidly as they have increased their vulnerability to loan losses. While this has distressed some observers, there is a line of reasoning which leads to the conclusion that there probably isn't that much real cause for concern. The logic goes something like this: Until recently, bank loan loss reserves have been unnecessarily large. In addition, most banks have substantial earnings streams and capital resources which can also be used to cover

*Dr. Schweitzer, formerly a Senior Economist at the Federal Reserve Bank of Philadelphia, is now Assistant Economist at Morgan Guaranty Trust Company of New York. This article was prepared while the author was associated with the Bank.

potential loan losses. Thus, according to this reasoning, loan losses themselves pose much less of a threat to bank soundness than the danger of public overreaction to those losses.

BANK LOAN LOSSES: BACKGROUND AND FOREGROUND

When the record books are finally closed on 1975, the year's loan losses just may set some records. Many bank watchers expect the dollar volume of bank losses to hit an all-time high in 1975. And some argue that the rate of such loan losses, as a fraction of bank loans outstanding, will be higher than at any time since the 1930s. These analysts could turn out to be right. But it's important to place the current situation in perspective. The rate of bank loan losses is nowhere near its high water mark, set in 1934. At the depths of the Depression, commercial banks "charged off" over \$3.40 of every \$100 of bank loans as uncollectable. In 1974, by contrast, about 38 cents of every \$100 of loans met a similar fate. Whatever may happen to loss rates in 1975, they have little chance of approaching their 1930s levels.

Upward Pressure on Loan Losses. In the context of the postwar period, those predictions of record loan losses for 1975 have a lot going for them. Loan loss rates have been on the rise for about 25 years now. And the recession of 1974-75 is quite likely to accentuate this trend.

An upward path of loan losses since 1950 is unmistakable. While loan losses in the 1950s amounted to less than 7 cents per \$100 of bank loans, the loss rate rose to just above 16 cents in the 1960s and to about 31 cents for the 1970-74 period (Chart 1). A trend as strong and as longstanding as that is not quickly reversed. While the renewed emphasis on conservatism in banking which emerged in 1974 may eventually lower the loss rate, that won't happen overnight.

On top of this longstanding trend is the 1974-75 recession. As a downturn cumulatively worsens, the profitability of the

business community can seriously erode, forcing many firms to absorb operating losses out of stockholders' equity. The next step for such firms may be bankruptcy, since some of them may become unable to pay their outstanding debts. Bank loan losses would then rise accordingly. Likewise, as unemployment grows during a downturn, personal borrowers may also fail to meet their debt-repayment obligations.

No one, of course, can be sure about the impact of a recession on bank loan losses. Conventional wisdom dictates that recession and a higher rate of loan losses ought to go together, although that hasn't been true in all postwar recessions. Nonetheless, the latest recession has been more severe than other postwar downturns. Problems with loans for real estate development, for example, are particularly severe this time around. These forces could mean that loan losses will surge upward this year, as many Wall Streeters say, but this will be known for sure only in hindsight.

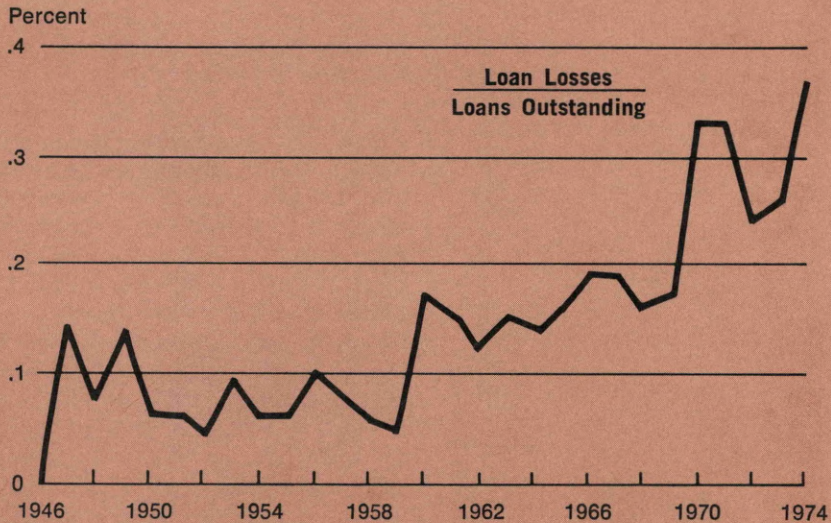
Loan Losses in the Public Eye. It is only natural, therefore, that public attention is now sharply focused on the loan loss problem. Even banks are forewarning their shareholders about higher losses in 1975. Eyebrows are thus now raised over the question of adequacy of bank defenses against high loan losses. And most of the questioners are concerned with the volume of funds banks have set aside as reserves for possible loan losses.

SETTING AND SUBDIVIDING THE LOSS RESERVE

Most firms and individuals maintain reserves of some sort to assist them in managing their financial affairs. These reserves may be only a few dollars set aside in a cookie jar or millions of dollars invested in income-producing assets. But, in either case, they help tide the household or business over any financial rough spots that may occur. Since banks are forever advising the

CHART 1

LOAN LOSS RATES HAVE BEEN ON AN UPWARD TREND.



Note: Data are for insured commercial banks.

SOURCE: Federal Deposit Insurance Corporation.

general public to “put something aside for a rainy day,” it is only fitting that most banks do the same. Loss reserves are the device that most banks use to build protection against normal variation in loan losses. Banks usually plan to rely on their earnings and capital accounts to cover extraordinary loan losses.

A bank that adopts the “reserve method” for covering its loan losses makes an addition each year to its loan loss reserve.¹ The bank doesn’t earmark particular assets as part of its loss reserve. Rather, the loss reserve becomes a claim upon the assets of the bank

generally, as are the bank’s liabilities and capital accounts. When a loan held by the bank proves uncollectable, the decline in the value of the bank’s loan assets can be “charged off” against the loss reserve. That way, as long as losses don’t exceed reserves, the bank’s earnings do not have to absorb loan losses directly. Earnings are buffered from the potentially wide swings in loan losses from year to year. And the reserve helps to cushion the bank against insolvency as well.

Taxes and Accounting for the Loss Reserve.

Besides offering smoother earnings and an insolvency cushion, the reserve method also offers banks smaller tax bills. A bank may take tax deductions for the funds it transfers to its loss reserves instead of for its actual

¹Banks aren’t required to use the reserve method for covering their loan losses. They are also permitted to be on the “direct charge-off method,” whereby they use current earnings to meet loan losses as they occur.

BOX 1

THE TAX ADVANTAGES OF BUILDING LOSS RESERVES

U.S. tax laws give recognition to the fact that a portion of the interest received by a bank eventually will be needed to cover its losses on uncollectable loans. Ever since 1921, banks have been permitted to deduct from taxable income a "reasonable" volume of transfers to a reserve for loan losses. Of course, since these tax deductions reduce a bank's taxes, it has always proven difficult for banks and the Government to agree as to what is reasonable. For a long while banks were permitted to build a reserve consistent with bank loss experiences during the 1930s. The last vestige of this was a U.S. Treasury ruling in 1965 permitting banks to maintain reserves in an amount up to 2.4 percent of their "eligible loans."* Tax reform has since sent this percentage lower.

The U.S. tax system is heading toward application of the principle that a bank should be able to shelter from income tax only those contributions to a loan loss reserve which are consistent with its recent loss experience. That principle is a part of the Tax Reform Act of 1969, but will not be fully effective until 1988. In the meantime, banks are permitted to shelter a reserve whose ratio to eligible loans is either based on the bank's loss experience or else is subject to a stipulated maximum.** The maximum ratio currently is 1.8 percent, but will drop down to 1.2 percent in 1976. It will drop further to 0.6 percent in 1982. Not until 1988 will banks be required to be on an "experience basis" for their loan loss reserves. Beginning in 1988, under current law, banks will be limited to a tax-free reserve no larger, as a fraction of their eligible loans, than the ratio of uncollected loans to eligible loans on an average basis over the prior six years.

Thus, under current law, the tax benefit to a bank from handling its loan losses via the reserve method will gradually decline. For a time, however, the size of the tax saving will continue to be substantial. The U.S. Treasury estimates that over one billion dollars of tax receipts will be lost to the Government in fiscal 1975 because of the generous allowance for loan loss reserves at banks and savings and loan associations combined. The tax loss is expected to remain close to that level in fiscal 1976. But it should decline after that, as the maximum ratio of the reserve to eligible loans drops to 1.2 percent on January 1, 1976. That reduction will have its impact in fiscal 1977.

*According to IRS rules, not all bank loans are eligible to serve as a basis for the reserve computation. The loans which are ineligible include Federal funds sold, loans backed by U.S. Government securities or bank deposit balances, and loans guaranteed by the U.S. Government.

**Regulations limit the size of the deduction for a transfer to the loss reserve during any single year to 0.6 percent of eligible loans.

loan losses. And the tax law's generous standard regarding the size of the loss reserve permits banks thereby to reduce their tax payments (Box 1).

The tax deduction gives banks the incentive to transfer the maximum amount allowed by law to their loan loss reserves, and most do just that. But they usually don't report all of those tax deductions as

operating expenses in their published financial reports. Although it may seem unusual, it's quite legal for a bank to report larger expenses to the Government than to its shareholders. The tax authorities permit a bank to "pay" for a transfer to its loss reserve partly by provisions from operating expenses and partly by provisions from retained earnings. Either way, the bank's transfer to its

loss reserve is tax-deductible. But the bank's operating earnings aren't reduced when retained earnings are used to build the reserve.

The Three Parts of the Loss Reserve. In actual practice, most banks charge both retained earnings and operating expenses for transfers to their loss reserves. This leads to a loss reserve which has three components—a valuation reserve, a contingency reserve, and a deferred tax reserve. But the bank can't cover loan losses out of all of these components.

When a bank charges its operating expenses to provide for estimated loan losses, accountants record the result as an addition to the bank's *valuation reserve*. When a transfer is made from retained earnings to the bank's loss reserve, that's recorded as an addition to the bank's *contingency reserve*. When the bank cuts its tax bill by taking tax deductions for additions to its contingency reserve, its tax saving is recorded in the bank's *deferred tax reserve* (see Box 2 for a numerical example). In principle, this account is used only for holding funds that will eventually be paid to the Government as taxes.

Of the three reserve components, accounting principles permit loan losses to be charged only against the valuation portion. While the contingency and deferred tax items are part of the bank's total loan loss reserve, they represent transfers made for Federal income tax purposes only. If a bank's loan losses should exhaust its valuation reserve, the bank's next resource would be its earnings rather than the other loss reserve elements.²

The 1969 Agreement on Valuation Reserves. The principle that the valuation reserve be the only reserve element available

to cover a bank's loan losses is a long-standing accounting axiom. It became a banking rule, however, only after a 1969 agreement among the Securities and Exchange Commission, the Federal banking agencies, and the accounting profession. Under that agreement, the *entirety* of each bank's loan loss reserve as of January 1, 1969 became a valuation reserve. Additions to the valuation reserve had to be charged to the bank's income statement as expenses only beginning with 1969. And only since 1969 have the other elements of the valuation reserve been ineligible to cover loan losses.

Choosing the Size of the Valuation Reserve. The success of the reserve method as a device for handling loan losses depends on a bank's ability to anticipate its losses. Ideally, a bank should set aside funds which, over time, will just equal the loan amounts that end up being uncollectable. To do this, the bank must accurately assess the risk of loss on each loan it holds. This is quite simple for some kinds of loans—consumer loans, for example, generate highly predictable loss experiences. But some kinds of lending, often involving large loans to business, generate a more erratic flow of loan losses. It's quite difficult to compute a proper addition to the valuation reserve for such loans.

How large do a bank's valuation reserves need to be? Obviously, they need to be large enough to cover the normal losses which may be expected on the basis of actuarial principles. In addition, the valuation reserve might include a cushion against unusual losses which may occur irregularly over time. But it would be impractical and unnecessary to make the valuation reserve large enough to cover all the bank's unusual losses. Current earnings and equity capital are always available to backstop the loss reserve. Translating these principles into action isn't

²A bank could regain use of its contingency reserve by restoring that reserve to retained earnings and making a tax payment in the amount of the deferred tax reserve.

But this would only be useful if the bank had exhausted both its valuation reserve and its earnings and was charging retained earnings to cover further loan losses.

BOX 2

THE THREE PARTS OF A LOSS RESERVE

All of the dollars in a bank's loan loss reserve are not created equally. Instead, each dollar comes from one of three sources—the bank's revenues, its retained earnings, or the taxes that it owes to the U.S. Government. An example will clarify just how this all happens. But first, it may be useful to know why things need be so complicated.

The answer is our tax laws. It's already been noted that banks are allowed to accumulate, free of corporate income taxes, more loan loss reserves than can be supported by loan loss experience. While banks are entirely willing to save on their taxes, they want to do so in a way which doesn't reduce the profits that they report to their shareholders. This requires some financial gymnastics, but it can be done. What it requires is that banks sort their loss reserves into three segments—the valuation, contingency, and deferred tax portions of the overall loss reserve.

An example will help clarify this. Consider the status of the mythical Small-Loss National Bank. Small-Loss National had revenues last year of \$1000. Its operating expenses, before any provision for loan losses, were \$700. Its loan portfolio equals \$10,000, and its average annual loan-loss ratio equals 0.2 percent.

Small-Loss National has decided to "charge" its revenues with a \$20 addition to its bad debt reserve (\$20 equals 0.2 percent of \$10,000). This \$20 represents an addition to the bank's *valuation reserve*—it meets the test of being "charged" against revenue as a bank expense, and that's what's required of funds added to the valuation reserve. The bank thus reports its net income before taxes as \$280 (\$1000 minus \$700 minus \$20).

This \$280 figure is what Small-Loss National tells its shareholders and the public generally that it actually earned last year. In an effort to use legal means to reduce its tax liability, however, it tells Uncle Sam something else. Remember, the U.S. Government usually permits a bank to add more to its loss reserves—and therefore shelter more income from current taxation—than the bank may need to cover loan losses. Suppose that in Small-Loss National's case, the Government will permit it a \$50 deduction for transfers to its loss reserve this year. Since it's only willing to take \$20 for its loss reserve out of revenues, but it can shelter a total of \$50 if it wants to, the bank looks elsewhere for the other \$30.

Here's how the bank does it. Whereas shareholders were told that the bank actually earned \$280, the Government hears a different story. Taxable income is reported to the Government as \$250 (\$280 less \$30). That reduces Small-Loss National's tax obligation by \$15 (assuming, for simplicity, that the bank's tax rate is 50 percent). This \$15 tax saving is an addition to the *deferred tax* portion of the bank's loan reserve.

Now, only another \$15 is needed to make the bank's total addition to its loss reserve equal to \$50. That final \$15 is the other half of the \$30 the bank is looking for. It represents the shareholder's half of the difference between the bank's reported profit of \$280 and its taxable profit of \$250. This \$15 would have gone into the bank's retained earnings if it hadn't been added to the loan loss reserve. It is assigned by accountants to the *contingency portion* of the loss reserve.

simple, of course. And critics have been quite vocal in criticizing the quality of bank judgments about the size of their valuation reserves.

VALUATION RESERVES FAIL TO KEEP PACE

Current regulatory rules require each bank on the "reserve method" to make a minimum addition to its valuation reserve during each year, equal to its average rate of loan losses for the last five years, applied to its volume of loans outstanding on average during the current year.³ This is only a minimum addition to the bank's loan loss reserve, however. Banks are instructed to reserve more than the minimum amounts if they anticipate loan charge-off rates significantly higher than their five-year average. That is where bank judgment comes into play. And critics quickly point out that bank judgment has produced declining loan loss coverage by valuation reserves over the past several years.

After 1969, when the agreement on expensing of the valuation reserve was reached, and through 1973, most banks provided only the minimum amounts required as an addition to their valuation reserves. In 1974, many banks altered this pattern and provided extra amounts above and beyond the minimum set by bank regulators. Evidence from quarterly earnings reports indicates many banks are continuing to provide extra amounts for loan losses in 1975. In fact, the formula for loan loss provisions seems to be playing a small part in banks' decisions about how much to provide for their loss reserves this year.

Between 1969 and 1974, while they were reliant on the formula, banks charged off nearly as much in uncollectable loans as they added to their valuation reserves. Hence, the

valuation reserve as of year-end 1974 was only about 1 percent larger than it was at the start of 1969 (see Table). This relative constancy of bank valuation reserves contrasts sharply with the rapid growth of bank loans and loan losses. Bank loans have nearly doubled since the start of 1969 while the dollar volume of bank loan losses has risen nearly fourfold (see Chart 2).

How could valuation reserves have fallen relatively so far behind? It's principally because banks' entire loan loss reserves were defined as valuation reserves when the accounting rules were changed in 1969. That change left the average bank with valuation reserves of nearly 2 percent of loans outstanding, which was enough to cover ten years of loan losses at the rate at which such losses occurred in the 1960s. Thus, even as loans and loan losses grew substantially after January 1969, few banks felt the need to charge their revenues with more than the minimum required amounts. The valuation reserve cushion that banks had when the '69 rules change was enacted left them comfortable with the small contributions made from '69 through '73.

It is notable that even during 1974, when many banks for the first time reserved more than the minimum amounts required under the '69 rules, the ratio of valuation reserves to loans continued to decline. And the ratio of these reserves to new loan charge-offs fell off even more. It is thus important to focus on the relative protection against loan losses afforded by valuation reserves and banks' other defenses, and to assess whether there's been a material weakening of banking soundness in this area.

LOSSES OUTPACE LOSS RESERVES: WHAT ARE THE IMPLICATIONS?

The failure of bank valuation reserves to keep pace with bank loans and loan losses since 1968 is indeed striking. But this development may say more about the meaningfulness of banks' prior earnings reports than it does about any changes in the

³Regulations do permit banks to be only partially on the reserve method. That is, it would appear that banks can build a tax shelter from some of their income but still be on a direct charge-off basis for covering actual loan losses. Banks doing this will be considered *not* to be on the reserve method for the purposes of this article.

**LOAN CHARGE-OFFS HAVE NEARLY OFFSET PROVISIONS
FOR THE LOSS RESERVE BY INSURED BANKS.
THUS, THE VALUATION RESERVE HASN'T RISEN
APPRECIABLY SINCE 1969**

(In Billions of Dollars)

Year	Valuation Reserves At Start of Year	Loan Charge-offs During Year	Provision for Loan Losses during Year	Valuation Reserves At Year-end
1969	\$5.22	\$.49	\$.52	\$5.25
1970	5.25	.98	.70	4.97
1971	4.97	1.09	.87	4.75
1972	4.75	.89	.97	4.84
1973	4.84	1.16	1.26	4.94
1974	4.94	1.95	2.29	5.28

TECHNICAL NOTE: The valuation reserve as of January 1, 1969 is the total loan loss reserves of all banks as of December 31, 1968. This is pursuant to the regulatory assignment of all loan loss reserves to the valuation reserve in 1969. Data on the valuation reserve as of successive year-end dates have not previously been published. These data have been computed for the purposes of this article as follows:

$$\begin{aligned} \text{Year-end Valuation Reserve} &= \text{Start-of-Year Valuation Reserve} \\ &+ \text{Provision for Loan Losses during Year} \\ &- \text{Loan Charge-offs during year} \end{aligned}$$

DATA SOURCE: All data from columns (2) and (3) and for the first entry in column (1) are from the FDIC

industry's vulnerability. Bank valuation reserves smooth out a bank's earnings record and make that record more meaningful to investors in the face of irregular loan losses. But, as guarantors of bank solvency, they are quite limited. A bank's earnings and equity capital are more significant defenses against unusual loan losses.

Effects on Earnings. When a bank employs the reserve method, its earnings in any year are considerably insulated from its actual loan loss experience during that year. The bank's reported earnings in each year are reduced by that year's contributions out of revenues to its valuation reserve. As long as the bank follows the regulatory formula to compute its current minimum provision for loan losses—that is, if the bank bases its loan

loss provision upon its latest five-year rate of charge-offs—a given year's loan loss will have an effect only 20 percent as large on the bank's earnings in that year.⁴ Actual losses in

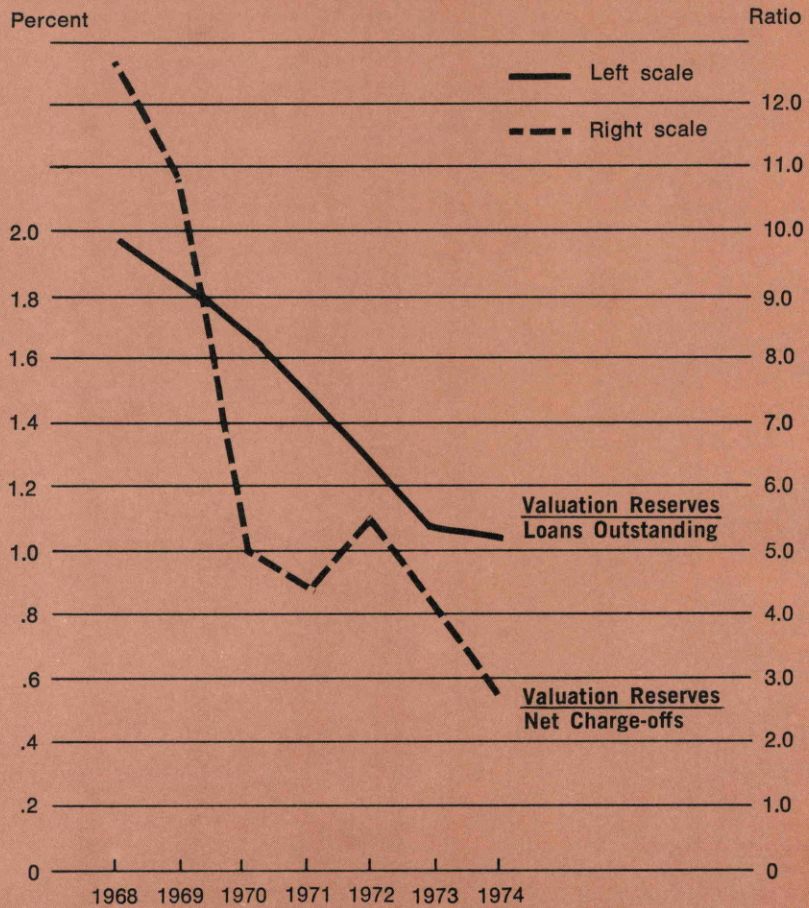
⁴An example may help here. Suppose a bank has had loan charge-offs equal to 20¢ per \$100 of loans during each of the past five years. Imagine that its current year charge-off rate was \$1 per \$100. Then its latest five-year average would equal

$$\frac{4 \times 0.20 + 1 \times 1.00}{5} = .36.$$

The bank would have to boost its valuation reserves this year by 36¢ for every \$100 of loans outstanding. That's only 16¢ per \$100 higher than last year's requirement of 20¢ per \$100. And it's only 20 percent of the 80¢ per \$100 runup in this year's loss ratio.

CHART 2

VALUATION RESERVE "COVERAGE" OF RISK EXPOSURES HAS FALLEN SHARPLY SINCE 1969 RULES CHANGE.



Note: Year-end data; insured commercial banks.

SOURCE: FDIC Annual Reports and previous Table.

a given year may be above or below the year's addition to the valuation reserve; if so, the valuation reserve will absorb the difference between the year's loss provision and the year's actual losses.⁵ In this way, annual variations in a bank's loan loss experience which will end up offsetting one another within a five-year period have their biggest impact on the valuation reserve rather than on earnings.

The valuation reserve does more than just smooth out a bank's earnings record. The reserve also helps make that earnings record more meaningful as a statement of the bank's underlying profitability. That is, the buffering function of valuation reserves helps to prevent erroneous signals about bank profitability from being conveyed to the public because of a one-time change in the charge-off rate. But this only holds when banks adhere rigidly to the principle of the reserve method. Suppose a bank boosted its interest revenue by extending more risky loans. Since the loans are riskier than those the bank had been issuing, the fraction of those loans likely to prove uncollectable a year or two hence is higher than the bank has been charging off recently. If the bank takes proper account of this, it will provide extra amounts for its valuation reserve concurrent with its receipt of higher interest payments. That is, it will reduce its reported net income to reflect more meaningfully the profitability of its current operations.

Has this feature of the reserve method actually worked in the past few years? Apparently not. Until recently, banks have not felt compelled to build up their valuation reserves in order to handle their growing loan losses. The 1969 rule change left them with plenty of loan loss coverage. Now, to

the extent that many banks have since used up the valuation reserve cushion that the rule change gave them, income statements will now begin to reflect relatively larger charges for the loan loss reserve than in the past. That is, banks' net operating earnings apparently have been somewhat overstated since 1969 because funds that might ordinarily have been "spent" to build loan loss reserves have not been expended.⁶ Crude estimation suggests that during 1969-74, banks were spared enough loan loss expense to boost their net earnings after-tax by nearly 8 percent (Box 3). Now that valuation reserves seem no longer to be inflated, bank profits will no longer contain this bonus.

This may hold some implications for the success that banks will have in raising funds in both the debt and equity markets. While lenders and shareholders are, of course, concerned with bank soundness per se, they are also keenly interested in bank profitability. For one thing, sustained profitability is itself an indicator of bank soundness. For another, bank profits are a measure of the bank's ability to make additional interest or dividend payments. Thus, to the extent that banks lose the profits advantage they held in the years after 1969, they may also now lose some of their attractiveness to investors. Of course, investors may have previously recognized any overstatement of bank earnings and entered that into their analyses. If so, elimination of the artificial boost to profits from loss reserve provisions won't significantly affect bank fund-raising efforts.

Loss Reserves as Solvency Insurance. While there is no substitute for loss reserves as an earnings stabilizer, earnings and equity capital are effective substitutes for loss reserves as solvency insurance. A bank with uncollectable loans runs the risk of insolvency. But if a bank should "run out of" valua-

⁵Continuing with the above example, suppose the bank has \$1000 in loans outstanding. Its charge-offs this year are 1 percent of \$1000, or \$10. Its contribution to the valuation reserve is 0.36 percent of \$1000, or \$3.60. Thus, the valuation reserve will decline this year by \$6.40.

⁶Bank profits were overstated before 1969 as well. The focus here is on considerations following the 1969 rule change, however.

BOX 3

**1969 RULING ON VALUATION RESERVES
BOOSTED BANK PROFITS**

Computing the “right” volume of loan loss reserves for a bank to maintain is a very tricky procedure. But let’s take an intellectual “giant step.” Suppose that, for the banking system as a whole, valuation reserves ought to equal—as they did at year-end 1974—about 1 percent of loans outstanding. Many banking observers think a valuation reserve ratio of 1 percent is about right for the industry as a whole, so the assumption may be all right. We’ll come back to this assumption shortly.

The valuation reserve ratio which the banking system held as of the start of 1969 was just under 2 percent. This high ratio was attained because banks were permitted to classify their entire loan loss reserve as a valuation reserve on January 1, 1969. This gave them \$5.22 billion of valuation reserves as of that date.

Over the years since 1969, banks have added a net of only \$.06 billion to their valuation reserves. That is, additions to bank valuation reserves have exceeded loan charge-offs against these reserves by only \$.06 billion. This small addition to bank valuation reserves was concurrent, of course, with substantially increased loan and loan loss volumes. Banks got away with so small a net increase only because they had so much in valuation reserves to start with.

Now, back to that assumption. Imagine that banks had been assigned the “right” volume of valuation reserves back in 1969. Instead of \$5.22 billion, they would have had only \$2.65 (1 percent of \$265 billion in loans) billion at that time. Then, banks would have had to work harder in order to reach the “correct” level of valuation reserves by year-end 1974. The banks would have had to charge their earnings with—and reduce their profits by—a total of \$2.57 billion more than they actually did over the 1969-74 period. This amounts to nearly 6 percent of bank operating earnings, pre-tax, and nearly 8 percent of bank net earnings, after-tax, during 1969-74. If valuation reserves are now at the “right” ratio to loans, then this profit bonus will no longer be available to banks.

tion reserves in meeting a calamitous loan loss, its earnings and capital accounts could still absorb the loss.

A bank’s net operating earnings would be its next line of defense should its valuation reserves be exhausted. And, for the banking system as a whole, there’s a lot of room to cover loan losses out of earnings. Earnings, before tax, in 1974 were over four times as great as charge-offs. This meant that valuation reserves and earnings together were over 7.5 times as great as charge-offs. Furthermore, the banking system’s equity capital represents an amount 30 times as

great as 1974 charge-offs. And equity capital is what a bank turns to if its earnings are exhausted. While each of these multiples is substantially less than their values of a few years ago, it’s difficult to argue that they aren’t now high enough.

Thus, the combination of loan loss reserves, operating earnings, and equity capital appears sufficient to protect most banks from loan losses well above those they’ve been experiencing. Of course, those defenses may not be adequate to keep all banks afloat, should loan losses jump. But judgments about the adequacy of reserve


provisions shouldn't rest solely on whether each individual bank is sound. A more important issue is whether the *banking system* as a *whole* is safe. If too many individual banks got into trouble from loan losses, that could endanger the entire system. But the dimensions of the capital, earnings, and loss reserve protection now existing render this most improbable.

Capital as the Ultimate Insurance against Loan Losses. It's good to know that the banking system is well buffered from loan losses. But it's troublesome to consider all of the attention that's been placed upon loss reserves by students of this issue. Loss reserves are one of the guarantors of bank solvency, but their role is small in comparison to that played by bank capital. The real issue surrounding the industry's ability to withstand higher loan losses is the same as that surrounding its ability to withstand higher losses in other areas—the adequacy of bank equity capital. True, there's lots of controversy over how much bank capital is needed. But that's where there ought to be controversy, for loss reserves are just a variation on the bank capital theme.

APPEARANCES ARE DECEIVING

As banks have expanded their roles as department stores of finance, their exposures to the risk of loan losses have also grown. With a severe recession on the books for 1975, the likelihood of particularly high loan losses at banks this year has raised questions about the ability of the industry to handle such losses.

While a recession needn't necessarily bring higher loan losses to commercial banks, the issue of adequate loan loss coverage is still meaningful at this juncture. Valuation reserves—the loan loss reserves out of which a bank normally “covers” loan losses—have grown very little over the past five or six years. Meanwhile, the volume of bank loans and loan losses has risen substantially. Thus, the degree of loan loss coverage which valuation reserves can provide has fallen substantially.

Banks are aware that they must have the resources to absorb loan losses internally. Otherwise, they realize, they can get into the same kind of financial hot water as their defaulting borrowers. Do banks need to cover more than three years' worth of losses with valuation reserves? That's how much coverage they had at year-end 1974, and it may be enough for all but a few institutions. Besides, loan loss reserves may not be the best measure of a bank's ability to remain solvent in the face of unusual losses. Loan loss reserves help stabilize a bank's earnings and are the bank's first line of defense when faced with loan losses. But the bank's earnings and equity capital are typically far more meaningful than loss reserves as resources in the battle against unforeseen loan losses. These resources must be available to cover a wider set of contingencies than just a bank's loan losses. But their sheer size relative to the historical experience which commercial banks have had with loan losses is reassuring indeed. Potential loan losses don't appear as overwhelming when viewed in the perspective as they would if loan loss reserves were a bank's principal defense. 

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Business Review Topics First and Second Quarters 1975 Selected by Doris Zimmermann

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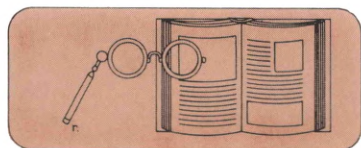
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Federal Reserve System
Washington, D. C. 20551

Federal Reserve Bank of Atlanta
Federal Reserve Station
Atlanta, Georgia 30303

Federal Reserve Bank of Boston
30 Pearl Street
Boston, Massachusetts 02106

Federal Reserve Bank of Chicago
Box 834
Chicago, Illinois 60690

Federal Reserve Bank of Cleveland
P.O. Box 6387
Cleveland, Ohio 44101

Federal Reserve Bank of Dallas
Station K
Dallas, Texas 75222

Federal Reserve Bank of Kansas City
Federal Reserve Station
Kansas City, Missouri 64198

Federal Reserve Bank of Minneapolis
Minneapolis, Minnesota 55440

Federal Reserve Bank of New York
Federal Reserve P.O. Station
New York, New York 10045

Federal Reserve Bank of Philadelphia
925 Chestnut Street
Philadelphia, Pennsylvania 19105

Federal Reserve Bank of Richmond
P.O. Box 27622
Richmond, Virginia 23261

Federal Reserve Bank of St. Louis
P.O. Box 442
St. Louis, Missouri 63166

Federal Reserve Bank of San Francisco
San Francisco, California 94120



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PHILADELPHIA, PENNSYLVANIA 19105**

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PHILADELPHIA, PA. 19105**