

# Holding company affiliation and scale economies in banking

Dale S. Drum

How affiliation with a holding company affects the cost structure of banks has been a controversial subject in banking for some time. In support of their applications to acquire banks, holding companies argue that economies in the operation of banks can be achieved through affiliation. If these opportunities for economies do exist and if these economies are passed on to the public, then it may be argued that the resulting public benefits can be presumed to offset, in part or perhaps in whole, any anticompetitive effects present in the application.

While holding company applicants and their advocates cite scale economies as an argument for acquisitions, they seldom support their position with concrete data. On the other hand, opponents rarely support their views either. Empirical studies examining this issue also have reached mixed conclusions.

A study of 208 Seventh District banks was undertaken to explore the impact of affiliation on the cost structure of banks. These banks ranged from \$6 million to \$650 million in asset size. The effect of branching on the efficiency of these banks was also examined.

**Results of the Study.** The results of the study indicate that independent banks—banks not affiliated with either a one-bank or a multibank holding company—are subject to at least moderate economies of scale. That is, the percentage increase in total cost is less than the percentage increase in output.<sup>1</sup> For

NOTE: A copy of the more technical working paper entitled "The Effect of Holding Company Affiliation Upon the Scale Economies of Banks," Research Paper No. 79-2, is available from the Public Information Center, Federal Reserve Bank of Chicago.

<sup>1</sup>As employed in this study, output is estimated as loan revenue plus revenue from securities plus income from other sources. Thus bank output is viewed as the value of credit extended plus the value of other services performed by the bank. Total cost is defined as total operating cost less all service charges received by the bank.

independent banks, an increase in output of 10 percent increases total cost about 9.5 percent. Since cost rises more slowly than output, per unit cost declines.

Banks in SMSAs typically incur slightly higher costs than do comparable non-SMSA banks. Competitive pressures may force SMSA banks to engage in more advertising or to offer comparable services either free or at reduced prices. Higher costs can also be associated with an urban environment as, for example, higher taxes or real estate prices.

In addition, banks with branches appear to have slightly higher costs than banks without branches. This cost difference does not become particularly significant, however, until the bank has at least three branches.

Overall, affiliation with a one-bank holding company has no significant effect on scale economies. In fact, in most cases, the one-bank holding company is an organizational shell that merely transfers ownership of the bank from individuals to a corporation. Operating efficiency is probably not affected by this change in the form of ownership, although it may affect net income due to the difference in the tax status accorded a corporate entity.

Multibank affiliates, on the other hand, are slightly less efficient than banks not affiliated with holding companies. Although of marginal statistical significance, a 10 percent increase in the output of these affiliate banks increases total cost about 9.7 percent. There seems to be no empirical justification, then, for the assertion that affiliation with a multibank holding company will produce scale economies not otherwise available to independent banks.

**Other findings.** Additional information can be gleaned by grouping the banks into different size classes. Scale economies show up predominantly in medium and medium-

large banks. Banks having assets from \$50 million to \$100 million are considered medium-sized, while banks with assets from \$100 million to \$200 million are considered medium-large.

For medium-sized independent banks, a 10 percent increase in output will increase total cost approximately 8.8 percent. A similar increase in output for a medium-large independent bank increases total cost 9 percent.

Branching affects medium-large and large banks more than the other groups. In both groups, banks with branches incur slightly higher costs than comparable banks without branches.

Affiliation with a one-bank holding company has a negligible impact on the scale economies of all but medium-sized banks. These affiliates are somewhat more efficient than independent banks of the same size, with a 10 percent increase in output increasing total cost only 8.5 percent. This compares to an 8.8 percent increase in total cost for medium-sized independent banks.

Affiliation with a multibank holding company tends to reduce the efficiency of all banks except medium and medium-large banks. These banks share the same scale economies as their independent counterparts of the same size.

**Policy implications.** The Bank Holding Company Act provides the Board of Governors of the Federal Reserve System with guidelines for evaluating applications to establish a holding company or to acquire a bank in the case of an existing holding company. One of the principal concerns of the act is the probable effect such a holding company will have upon competition in the relevant market. An application that, if approved, would result in adverse competitive effects will be denied unless there is evidence of sufficient public benefits to clearly outweigh the anticompetitive effects.

In making its decision, one of the criteria the Board considers is whether an acquisition will result in gains in efficiency which will benefit the public. Section 4(c)(8) of the Act, which deals with the acquisition of *nonbank*

firms, requires the Board to consider gains in efficiency as one of the factors that could potentially offset adverse effects. No such specific requirement exists in section 3, however, which applies to *bank* acquisitions.

Together with the convenience and needs of the community, the Board is obligated to consider the financial and managerial resources and future prospects of the company. Since these will be affected if economies are realized, this serves as the springboard allowing the Board to consider gains in efficiency as a separate factor in assessing whether the public benefits will outweigh the anticompetitive effects of a bank acquisition.

Gains in efficiency resulting in reduced prices or better service are additional benefits falling within the competitive or convenience and needs criteria. Gains in efficiency do not have to be passed on to customers but can instead be held as higher retained earnings, thereby improving the capitalization of the acquired bank. The resulting increase in financial strength and soundness of the bank could be a factor weighing favorably for approval of the application.

**Conclusion.** The results of this study indicate that banks affiliated with holding companies do not achieve economies of scale beyond those available to independent banks of the same size. Therefore, considering economies of scale as a factor that can be relied upon to outweigh the anticompetitive effects of a proposed acquisition has little merit. The argument simply lacks firm empirical support.

Affiliation does seem to have a positive effect on scale economies in the case of medium-sized banks affiliated with one-bank holding companies. Competitive issues, however, are seldom a significant factor in these cases. They are more important in applications of multibank holding companies, where affiliation appears detrimental to scale economies of affiliated banks. Only among medium and medium-large banks do affiliates of multibank holding companies manage even to match the scale economies of independent banks.