

DI VESTI TURE AS AN ANTI TRUST REMEDY I N BANK MERGERS

by

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I. Introduction

Utilization of divestiture as an antitrust remedy in bank mergers grew out of the merger movement of the 1970s. One of the more disturbing aspects of that merger movement, from the standpoint of the banking community, was the high degree of uncertainty regarding regulatory views as to which mergers would constitute antitrust violations. During the early 1980's, the bank regulatory agencies began to take measures to eliminate the high degree of uncertainty regarding the acceptability of merger proposals under the antitrust laws. The first step was adoption of the numerical merger guidelines published by the Department of Justice. It thus became possible for applicants to identify mergers that would likely raise competitive issues or precipitate a lawsuit by the Department.

Once the banking community had attained the means to identify problematic mergers, some device more certain than the use of generally accepted mitigating factors was needed to reduce, if not eliminate, any uncertainty regarding approval of proposed mergers. It soon became evident that relatively modest divestitures could, in most instances, be used to modify merger proposals so that the structural effects would conform with the levels specified in the guidelines. For well over a decade, bank regulatory agencies have accepted divestitures as an antitrust remedy. In recent years, the Department of Justice has questioned the acceptability of certain divestitures proposed by acquiring firms, particularly in some of the so-called megamergers. In some cases, the Department selected specific branches and specified other terms and conditions for divestitures. There is, however, no evidence regarding the effectiveness of the divestiture remedy.

This study describes the evolution of the divestiture remedy, and provides some evidence regarding the efficacy of divestitures as a remedy for otherwise anticompetitive mergers. The findings are based upon an examination of the post-divestiture survival and market shares of entities (banks or offices as the case may be) divested because of competitive concerns. A statistical analysis is conducted to determine whether there is a relationship between market share performance and the size of buyers, the size of sellers, and whether the divested offices were owned by the acquiring or the acquired firm. Some evidence on the effectiveness of divestitures accepted by the Department of Justice vis a vis those accepted by the Federal Reserve is also presented. The sample includes most of the mergers that were approved between 1985 and 1992 with the condition that certain divestitures be completed.

II. Background and Evolution of the Divestiture Device

The merger movement of the 1970s was characterized by extensive intrastate acquisition activity by bank holding companies, especially in states such as Florida, Texas, and Colorado that had restrictive branching laws. Following passage of the Bank Holding Company Act amendments of 1970, bank holding companies sought to expand intrastate via bank acquisitions and interstate through the acquisition of nonbanking firms. The Federal Reserve Board, as regulator of bank holding companies, viewed this ambitious merger movement with caution.¹ Indeed, between 1972 and 1982, the Federal

1. During this period of extensive acquisition activity by bank holding companies, the Federal Reserve Board was often concerned with factors such as the evolution of statewide structure. For example, in 1973, the Board denied the application of New England Merchants

Reserve Board denied over sixty-five bank acquisition proposals on strictly competitive grounds. Some of the proposals that were denied were later determined by the courts to not constitute antitrust law violations.

Three court decisions in 1981 made it clear that bank regulatory agencies did not have the latitude to deny proposed mergers that did not result in antitrust violations. First, the Eighth Circuit Court of Appeals (St. Louis) rendered an opinion similar to a 1973 Ninth Circuit (San Francisco) decision that had curtailed the discretionary authority of the federal banking agencies to deny mergers. That is, it required the agencies to apply standards identical to those embodied in the antitrust laws.² Two other

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 Company, Inc., Boston, to acquire Hancock Bank and Trust Company, Quincy (the latter had deposits of \$66.7 million, and the market shares were 10.0 percent and 0.8 percent respectively). The Board reasoned that Hancock was of sufficient size to anchor an additional holding company capable of competing with the five dominant institutions in Massachusetts. See Federal Reserve Bulletin, vol. 59 (June 1973), p. 459. Even many market extension mergers involving sizable banks that operated in separate markets were denied on grounds that they would eliminate potential competition. See, for example, First International, Dallas, to acquire Bank of Tyler, Federal Reserve Bulletin, vol. 60 (January 1974), p. 43; and First City Bancorporation, Houston, to acquire Lufkin National Bank, Federal Reserve Bulletin, vol. 60 (June 1974), p. 450. A total of fifteen such proposals were denied by the Federal Reserve between 1973 and 1980.

2. The U.S. Court of Appeals for the Eighth Circuit (St. Louis) invalidated the Federal Reserve Board's August 1979 order denying the application of County National Bancorp., St. Louis, to acquire TG Bancshares Company, St. Louis. County National Bancorporation v. Federal Reserve Board, 654 F.2d 1253 (8th Cir. 1981) (en banc). The merger involved the sixth and tenth largest banking organizations in the St. Louis banking market. The two firms, which had market shares of 3.2 and 2.3 percent respectively, held deposits of \$333.7 million and \$225.6 million respectively. The Board reasoned that the two

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court decisions in 1981 specified a demanding list of criteria that had to be met before regulators could deny merger proposals under the controversial doctrine of potential competition.³ Since 1982, no bank merger has been denied on grounds of potential competition despite the fact that mergers of steadily increasing size have occurred over the past fourteen years.

Following the important court decisions of 1981, the Federal Reserve Board took measures to provide the banking community with some guidance as to what constituted a breach of the antitrust laws. Thus, in 1982, the Federal Reserve began to make frequent reference to the horizontal merger guidelines developed by the Department of Justice.⁴ Since that time, the routine use of the guidelines as a screening device has significantly reduced the uncertainty surrounding the outcome of horizontal merger proposals. In 1986, the Federal Reserve further streamlined the merger applications process by revising its rules regarding delegation of authority to include the

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organizations were direct competitors of similar orientation, both were of sufficient size to have achieved economies of scale, and both had capable management.

In the 1973 decision, the Ninth Circuit overturned an FDIC order denying a merger under the Bank Merger Act (which contains a standard identical to that in the Bank Holding Company Act) on grounds of anticompetitive effects that the FDIC conceded did not rise to the level of an antitrust violation. Washington Mutual Savings Bank v. FDIC, 482 F.2d 459 (9th Cir. 1973).

3. The Fifth Circuit Court (New Orleans) vacated two Federal Reserve Board orders denying mergers among large bank holding companies in Texas. See Mercantile Texas Corp. v. Board of Governors, 638 F.2d 1255 (Fifth Circuit, 1981), and Republic of Texas Corp. v. Board of Governors, 649 F.2d 1026 (Fifth Circuit, 1981).

4. These guidelines have been updated on a number of occasions since their original publication in 1968. The Department of Justice and the Federal Trade Commission jointly issued 1992 horizontal merger guidelines that modified the department's 1982 and 1984 versions.

structural levels specified in the Department of Justice guidelines.⁵ Proposals that meet the specified delegation criteria are virtually assured approval and are expeditiously processed under authority delegated to the District Federal Reserve Banks. Proposals that involve structural effects more serious than the levels specified in the delegation criteria are subjected to additional scrutiny by the Reserve Banks and the Federal Reserve Board as well.

Today, use of the merger guidelines, coupled with commitments to make appropriate divestitures, has enabled the banking community to eliminate virtually all uncertainty regarding the acceptability of proposed bank mergers under the antitrust laws. (Indeed, only five merger applications were denied on competition grounds by the Federal Reserve Board between 1987 and 1997.)

In recent years, divestitures have provided a vehicle for bankers to consummate mergers that otherwise might not have been feasible under the antitrust laws. Many of the so-called mega-mergers of the early 1990s that only a few years ago would not have been contemplated, have become realities, in large part, because of the divestiture device.⁶ Although in most cases, the divested offices have comprised a relatively small percentage of the deposits of the merging entities, some of the very recent mega-mergers have involved rather substantial divestitures. For example, the divested deposits

5. Delegation rules specify criteria which, if met, allow merger applications to be delegated to a district Federal Reserve Bank for approval.

6. Of course, other factors such as the explicit inclusion of thrift institution deposits in the calculation of structural indexes (since 1985) and the consideration of economic evidence beyond concentration and market shares (such as potential competition) have, for many years, also served to lessen antitrust concerns with bank mergers. In analyzing any particular proposal, many mitigating factors may be considered, but the ultimate remedy, if needed, is divestiture.

in the Society-AmeriTrust merger in 1992 amounted to approximately 13 percent of the deposits that were acquired. Because of the great deal of office overlap in California, Nevada, Arizona, and Washington, some \$9 billion, or some 12 percent of the acquired deposits were divested by BankAmerica and Security Pacific in 1992. In the 1996 acquisition of First Interstate by Wells Fargo, the required divestiture of \$2.5 billion in deposits was approximately 5 percent of the deposits acquired. Similarly, the divestiture required in the 1997 acquisition of Barnett Banks by NationsBank amounted to some \$3.1 billion, or 9 percent of the deposits acquired.

III. Regulatory Views Regarding Divestitures

Federal Reserve Board

The Federal Reserve Board's divestiture policy was formally articulated in the public statement approving the acquisition of First Marine Banks, Inc. by Barnett Banks of Florida, Inc. in 1982.⁷ In subsequent Board orders, it was stated that the divestiture of a banking office in a highly concentrated market, prior to or concurrent with consummation of a proposal was an effective means of eliminating significantly adverse effects on existing competition.⁸ In general, the Federal Reserve has not attempted to dictate specific

7. Federal Reserve Bulletin, vol. 68 (March 1982), p. 190. Barnett was given up to nine months following consummation to complete the divestiture of nine branches which held 40 percent of Marine's assets. However, the order stated that:

"The Board wishes to emphasize that a divestiture, such as the one proposed by Applicant, should be completed prior to or concurrent with consummation of the proposal so as to avoid the existence of significant anticompetitive effects for even a short period of time. The Board expects that future bank holding company applicants will make every effort to arrange their proposals to comply with this policy."

8. For example, see Pennbancorp to merge with First Seneca Corporation, Federal Reserve Bulletin, vol. 69 (July 1983), p. 548.

terms or conditions relating to a divestiture and has not selected particular facilities or resources to be sold.

The Federal Reserve has generally viewed divestitures as sufficient if the assets and liabilities of viable full-service offices were sold. It has been assumed that the divested branches would constitute a viable entity that would provide a full range of banking services to all customers in a particular vicinity. In some instances, a "branch-offering" prospectus is made a part of the official record in merger applications to the Federal Reserve. Therein the seller may specify which assets and liabilities are expected to convey to the purchaser. The sales price negotiated by the parties is presumably based upon some anticipated amount of "core deposits" that are expected to be retained by the buyer. In some instances, it is agreed that deposit and loan relationships of specific customers will not convey to the buyer. Other special conditions such as a seller's commitment not to solicit deposits or loan business of the offices being sold, and agreements not to establish new branches nearby for some specified time period may also be incorporated into agreements between buyers and sellers. Stipulations regarding the retention and future employment of various branch personnel may also be agreed upon by the buyer and seller.

Although the Federal Reserve recognizes that all deposit and loan relationships may not convey along with the physical structure and the employees, it is anticipated that divested branches will retain sufficient business to constitute a viable competitive entity in the market. This expectation is based in large part on empirical evidence showing that location is a principal consideration of both individuals and small businesses in selecting convenient suppliers of

banking services.⁹ The Federal Reserve has often expressed a preference for out-of-market buyers for divested offices, but has focused primarily upon the magnitude of the divestiture and its effects on structural indexes and resulting competitive conditions. Usually, terms and conditions, including specific offices to be divested, are left to the discretion of buyers and sellers.¹⁰ In most instances, the divestiture involves offices of the firm being acquired, but it is not unusual for some branches of the applicant to be sold.

Department of Justice

Recent actions make it apparent that in the judgment of the Department of Justice, the terms and conditions incorporated into divestiture agreements cannot be left entirely to the discretion of applicants if viable competitors are to emerge from the divested entities. This initially became evident following the Federal Reserve Board's approval of First Hawaiian Inc.'s acquisition of First Interstate of Hawaii in 1991.¹¹ The divestitures accepted by the Federal Reserve were considered by the Department to be insufficient to mitigate competitive concerns in certain business loan markets. The Department filed a lawsuit, and later agreed upon a settlement

9. For example, see Gregory Elliehausen and John Wolken, "Banking Markets and the Use of Financial Services by Small and Medium-Sized Businesses" (Staff Studies No. 160, Federal Reserve Board, 1990); Timothy Hannan and Stephen A. Rhoades, "Future U.S. Banking Structure: 1990 to 2010," The Antitrust Bulletin, Fall 1992; and Myron L. Kwast, Martha Starr-McCluer, and John D. Wolken, "Market Definition and the Analysis of Antitrust in Banking," The Antitrust Bulletin, Winter 1997.

10. One notable exception to this policy occurred in the recent Wells Fargo-First Interstate acquisition. In the public statement, it was noted that the Board paid special attention to the size and quality of the proposed divestitures (Federal Reserve Bulletin, vol. 82 [May 1996], p. 445).

11. Federal Reserve Bulletin, vol. 77 (January 1991), p. 52.

which required that the parties divest one additional branch in the Honolulu banking market.¹² Stipulations were also made regarding the retention of certain personnel at the branches being sold. In addition, specific buyers to whom the divested assets could be sold were selected.

In a second instance, after the Federal Reserve Board approved the 1991 merger of Fleet/Norstar and Bank of New England without requiring divestitures, the Department of Justice again filed suit.¹³ The consent decree ultimately reached by the parties required the divestiture of specific assets and branches which were selected by the Department.¹⁴ There was another instance in 1992 in which the Department of Justice found that proposed divestitures that were acceptable to the Federal Reserve were insufficient to fully address competitive concerns. After the Federal Reserve's approval of the Society-Ameritrust merger¹⁵, the Department of Justice filed suit, stating that the divestitures proposed were insufficient in scope and did not appear to meet the test of introducing a viable supplier of banking services to the market's business enterprises.¹⁶

Today, especially in large mergers, it is not uncommon for the Department of Justice to reach acceptable divestiture agreements with applicants prior to the time the application is filed with the

12. United States v. First Hawaiian, Inc., Civil No. 90-00904 DAE (D. Ha. filed March 7, 1991).

13. Federal Reserve Bulletin, vol. 77 (September 1991), p. 750.

14. Janusz A. Ordover and Margaret E. Guerin-Calvert, "Bank Merger Analysis and the New Merger Guidelines: The View from the Department of Justice," in Proceedings of a Conference on Bank Structure and Competition (Federal Reserve Bank of Chicago, 1992), p. 5.

15. Federal Reserve Bulletin, vol. 78 (April 1992), p. 302.

16. American Banker, March 16, 1992, page 1.

Federal Reserve. The department reached such an agreement with BankAmerica prior to its filing of an application to acquire Security Pacific. BankAmerica agreed to make divestitures beyond those that were originally proposed. Similarly, the divestitures required in the Wells Fargo-First Interstate merger exceeded the amount originally proposed by the applicant.

The view of the Department of Justice regarding divestitures stems largely from a concern with the ability of a divested entity to provide services, especially loans, to small businesses. The findings of this study do not directly address this concern, that is, no attempt is made to analyze specific components of the asset portfolios of, or the range of services provided by, divested entities. Nevertheless, the findings of this study are relevant to the small business issue if it is assumed that the divested entities continue, or have the capacity, to provide the full range of banking services for which there exists a demand in their local areas. This assumption is, of course, inherent in the position taken by the Federal Reserve regarding divestitures, but is at odds with the position of the Department of Justice.

IV. Divestiture Sample and Data

The sample examined here consists of most of the bank holding company acquisitions completed between 1985 and 1992 in which the divestiture of offices was required as a condition of approval. Data were obtained for twenty-one mergers that involved divestitures of 210 offices in eighty-three local geographic areas.¹⁷ The post-

¹⁷ Branch data could not be obtained in instances where the buyers closed the divested branches or transferred some or all of their deposits to other market area branches or to other banks that they owned.

divestiture "market share" of the divested offices in the eighty-three markets where divestitures occurred is the focal point of the analysis. In forty-six of the eighty-three markets, a single office was divested. The number of offices divested in the other thirty-seven markets ranged from two to twenty-six. The divested facilities in all instances were treated as a single combined entity within each market where divestitures were made. In most cases, the divested entities (one or more offices) were acquired by firms that were not previously represented in the market, as is usually preferred by the Federal Reserve and the Department of Justice. In those instances where the buyers of divested branches were already represented in the market, any previous market shares of the old branches were not commingled with those of the divested branches being analyzed.

Almost all of the geographic markets in this study are non-metropolitan counties that are identical to the actual markets used in the competitive analysis of the mergers. In a few instances, however, such as in the Cleveland, Ohio, and the Jacksonville, Florida, MSAs, the geographic areas used in this study are smaller than the market areas that were used by the Federal Reserve. Even though prices of services may be transmitted throughout large metropolitan areas by factors such as commuting, suburban residents and small businesses generally use banking facilities to which they have convenient access in their immediate vicinities. Moreover, in this particular study, where the focus is on the relative success of divested offices, other competitors in the immediate vicinity would be the ones most likely to take customers away from the divested offices. Thus, in large metropolitan areas, a smaller geographic area is more appropriate for analyzing year-to-year changes in deposit shares held by the divested entities. Therefore, in the few large MSAs in our sample, the

component counties rather than multi-county areas are used to construct measures of post-divestiture market share changes. Usually, these smaller areas were the ones used by the Department of Justice in their analysis of the mergers.

The percentage changes in deposits and market shares of the divested entities are traced annually (using June 30 data) from the year of sale to 1995. The sample includes divestitures completed between 1985 and 1992. Obviously, all of the firms that made divestitures had a substantial pre-merger presence in the market and, in all cases, retained a sizable post-divestiture share of the market. The post-divestiture percentage changes in market shares of the sellers of divested branches are also examined. In addition, the changes in market shares of both the buyers and sellers a year after the divestiture are examined to provide information on deposit runoff from the divested entities.

V. Post-Merger Deposit Runoff at Divested Offices

An implicit assumption made by regulators in accepting certain levels of divestiture is that all of the deposits will convey to the purchasers of divested offices. However, it is reasonable to question whether the deposits of the divested entities will actually remain with the buyers, rather than revert to the sellers, during the period shortly following the sale. One obvious reason for this is that the banking organizations that divest offices do so because they have or will have (following the merger), a sizable pro forma market share. Furthermore, they will usually retain some offices that are within reasonable proximity to those being sold. For any number of reasons, some customers may choose to retain their banking relationship with the organization from which they had previously been

obtaining banking services. Thus, deposits of such customers would likely flow from the divested branches to some of the market area branches retained by the sellers.

Bank regulatory and antitrust authorities would achieve very little from a public policy standpoint if sellers of divested offices regained most of their original market shares at the expense of the divested offices. It may also be the case that buyers and sellers have negotiated specific terms and conditions that would have an impact upon the anticipated competitive viability of divested entities.¹⁸ Even if the buyers, for example, purchase the divested offices at a discount because it is known that there will be substantial deposit run-off, the buyers and sellers, through compensation, may reach a satisfactory agreement, but public policy goals of the divestiture may not be achieved. Regulators, in most instances, have no knowledge of anticipated runoff, whereas the buyers and sellers may have reasonably accurate estimates.

Analysis of the data indicates that sixty, or 72.3 percent, of the eighty-three divested entities lost some market share during the first year after being purchased. Because the sellers of the branches in these markets retained sizable market shares, it might be expected that a good deal of the runoff would flow back to the sellers. Consequently, the sellers would be expected to gain market share during this same time period. However, analysis indicates that gains in market share by the sellers occurred in only nineteen of the sixty markets where the divested entities lost market share. In the other forty-one markets, both the buyers and the sellers lost market

¹⁸ This process of negotiation by buyers and sellers is discussed in John J. Mingo and William F. Spinard, "Branch Divestitures: Valuation and Sales Strategies," Banking Expansion Reporter, vol. 3, no. 2 (January 16, 1984).

share, suggesting that runoff does not always flow back to the sellers, but may go to other banks in the market. Another conclusion that can be reached is that not all, or not even the vast majority of divested entities experience significant deposit runoff. Indeed twenty-three, or 27.7 percent, of the eighty-three divested entities gained market share in the first year after sale.

VI. Survival of Divested Branches

From an antitrust or public policy standpoint, a question even more important than the degree of short-term deposit run-off experienced by divested offices is the longer-term competitive viability of these offices. If, indeed, convenience is the most important consideration to users of retail banking services, the divested branches can be expected to retain most of the original customers and perhaps eventually gain new ones. In the final analysis, the critical questions from an antitrust standpoint are first, whether divested branches continue to compete in their markets and second, whether they maintain their market shares. This section examines the survival of the divested branches.

The sample includes 210 offices that were divested between 1985 and 1992. The analysis is focused on divested entities, that is, one or more offices located in a particular local market. As shown in table 1, in forty-six instances, the divested entity was a single branch office and in twenty markets two offices were sold. In seventeen other markets more than two branches were divested.

An impressive finding from a competitive standpoint is that virtually all of the divested offices continued to operate throughout the entire observation period. Each of the forty-six single offices divested remained in operation over the entire period, which ranged

Table 1

Number of Branches Divested and Number of Markets

<u>Number of branches in divested entity</u>	<u>Number of markets</u>	<u>Total branches divested</u>
1	46	46
2	20	40
3	4	12
4	2	8
5	4	20
6	1	6
8	2	16
9	2	18
18	1	18
26	1	26
Total	<u>83</u>	<u>210</u>

from three to ten years. In those twenty markets where two branches were originally divested, only one of the forty branches was subsequently closed. However, two additional branches were opened, resulting in a net increase of one branch in that group. Overall, there were originally 210 branches divested in the eighty-three markets in the sample. At the end of the period, there was a net increase of ten branches in operation by the buyers. Branch closings occurred in only three of the eighty-three markets. In addition to the market noted above where one of two divested branches was closed, three branches in a twenty-six branch divested entity were closed, and two branches in an eight branch divested entity were closed. Thus, in all, sixteen new branches were opened and six were closed by the buyers of the 210 divested branches.

The evidence on branch survival strongly suggests that from an antitrust standpoint, divestitures have proven to be an effective device for dealing with the possible anticompetitive effects of bank mergers. Even if sellers had disposed of the least desirable offices from their own standpoint, the divested offices apparently remain

competitively viable. In the next section, the competitive viability of the divested branches is further explored by examining their market share performance over the years following their purchase.

VII. Market Share Performance of Divested Entities

In the final analysis, the critical questions from an antitrust standpoint are first, whether buyers of divested branches continue to compete in their markets and second, whether they tend to maintain their market shares. The answer to the first question is very clear. Only six, or 2.9 percent of the 210 divested branches were subsequently closed, and those few closings occurred in markets where the buyers continued to operate other branches.

In this section, we analyze market share performance as measured by the average annual post-divestiture change in market share as a percent of the market share at the time of divestiture.¹⁹ Analysis of the data revealed that, on average, the market shares of the eighty-three divested entities increased by 2.5 percent. The percentage changes in market shares ranged from a negative 31.68 percent to 111.76 percent. Despite the positive average percentage change in market share, somewhat fewer than one-half (35, or 42.2 percent) of the eighty-three divested entities gained market share over the period following the divestitures. That is, there were thirty-five markets where the average post-divestiture market share of the divested entity was higher than the market share in the year of divestiture. However, several of the negative percentage changes were

¹⁹ Use of a firm's average post-purchase market share over a number of years more accurately reflects its longer-run competitive viability than would any single year's market share. Market shares are somewhat volatile and can be affected by any number of events that result in year-to-year fluctuation of individual market shares.

quite minimal. For example, there were seven divested entities that had a negative percentage change in market share of less than 3 percent.²⁰ Such changes would usually not suggest that a material change in the competitive viability of the divested entities occurred. If these seven observations with effectively no change in share were added to the thirty-five with positive percentage changes, it could be concluded that in a majority of cases, divested entities either increased their market shares or there was essentially no change in their competitive position. This is basically what one would expect to find with any randomly selected group of competitors.

VIII. Regression Model

In this section, we conduct a simple statistical analysis to study the relationships between some characteristics of divestiture and the post-divestiture success of the divested entities. The following equation is estimated using ordinary least squares (OLS) regression analysis:

$$\%DMS = a + bX + e,$$

where %DMS is the same variable as discussed in the previous section-- the post-divestiture average annual change in market share as a percentage of the market share at the time of divestiture.

The vector X includes some of the independent variables which might have some influence on competitive success, and e is the error term. The following independent variables are included in the analysis:

²⁰ Such a percentage change would mean that a firm which began with a 5 percent market share would lose 0.15 percent on average over the post-divestiture period. Its average annual post-divestiture market share would thus be 4.85 percent.

AM = Average market share of the divested entity over the post-divestiture period.

SB = State market share of the buyer of the divested branches.

MS = The remaining market share of the seller of the divested branches.

AD = 1 if the divested branches were owned by the firm being acquired.
= 0 if the divested branches were owned by the acquiring firm.

DJ = 1 if the Department of Justice was involved in the selection of branches to be divested.

= 0 if the divested branches were those chosen by the applicant without Department of Justice intervention.

The variable AM is included to control for the absolute size of the market share of the divested entity over the period under analysis. This is done because there is a higher likelihood that a small banking office or one with a small market share will experience a greater percentage change in deposit growth than a larger institution.

It is logical to assume that branches acquired by large banking organizations may be in a position to receive more financial and managerial support from the parent institution than would branches acquired by a small organization. Although there is generally a lack of empirical support for this notion in banking, it continues to receive the attention of the banking community and bank regulatory agencies. Large banking organizations are generally considered to be more formidable competitors than small organizations. To provide a test of this notion in the special case of divested entities, we include the variable, SB, which is the state market share of the buyer of the divested branches.

The variable MS, the remaining market share of the firm making the divestiture, is included to test whether the presence of the seller has a material effect on the success of the divested

entities. As noted previously, the sellers in this study usually retained a significant presence in the markets where they were required to divest offices because of antitrust concerns. The magnitude of the seller's presence may be related to its ability to regain customers from the divested entities.

Although the regulatory agencies generally prefer that branches of the acquired firm be divested, applicants often choose to divest their own branches.²¹ The dummy variable, AD, is included to test whether divested branches that were owned by the acquired firm experience greater success than divested branches that were owned by the applicant. Since, unlike the acquired firm, the applicant always continues to operate in the market, it seems plausible that if its own offices are sold, some effort might be made to continue to service customers of the divested branches. In addition, some of the customers themselves may prefer to continue dealing with the same bank if there is another branch within reasonable proximity. Although there is no existing evidence regarding the performance of divested branches, the Department of Justice clearly prefers, and in some instances insists, that branches of the acquired or target firm, rather than those of the applicant, be divested. As noted previously, the Federal Reserve usually leaves the matter of branch selection to the discretion of the applicants. The dummy variable, DJ, is included to test whether branches selected by the DOJ have better post-divestiture deposit market share performance than those selected by applicants.

21. In the sample examined in this study, fifty of the divested entities were those of the acquired firm and thirty-three were those owned by the applicant.

IX. Regression Results

The following regression equation was estimated for the sample of eighty-three divested entities (t statistics are in parentheses).

$$\begin{aligned} \%DMS = & - 3.400 - 0.253 AM + 1.542 SB \\ & (-0.92) \quad (3.63)** \\ & + 0.264 MS + 11.470 AD - 25.091 DJ \\ & (1.20) \quad (2.04)* \quad (-4.70)** \end{aligned}$$

$$\bar{R}^2 = .2482$$

* statistically significant at the 5 percent level.

** statistically significant at the 1 percent level.

The control variable for market share size, AM, has a negative coefficient as expected, but is not statistically significant. Thus, entities with relatively large (small) market shares do not necessarily have smaller (larger) percentage changes in their market shares over time.²²

Apparently, the size of the organization purchasing the divested branches can have a material effect on the competitive success of those branches. The SB variable, state market share of the buyer, has a positive and statistically significant coefficient. Regulatory agencies might thus consider the enhanced future prospects of branches sold to large firms as a mitigating factor when determining the magnitude of divestiture required.

22. There is substantial variation in the market shares of the divested entities. The average market share divested was 10.24 percent with a range from 1.21 to 48.56 percent and standard deviation of 9.14 percent.

The MS variable, the retained market share of the seller, has a positive coefficient which is not statistically significant. Apparently, sellers that retained large market positions are no more likely to successfully seek to gain back the customers of the divested branches than are firms with smaller retained market shares. This finding is consistent with the importance of switching costs for retail customers and with the importance of branch locations and convenience when customers choose providers of banking services.

The findings also show that the divested entities experienced greater competitive success if they were branches of the target firm rather than if they were those of the applicant. The AD variable was positive and statistically significant. This is not surprising when one considers that, after a merger, the target firm no longer exists and thus customers of its branches would not be able to migrate to a branch of their former bank. Such customers would have no real reason to switch branches unless they were very dissatisfied with the buyer of the branches because of the costs associated with switching, one of which would be some loss of convenience, which was probably a factor in the customers' original choice. In contrast, if an applicant divests its own branches, there would appear to be at least some customers who would choose to continue the relationship with their bank and would switch to another branch of that bank. This could be completely voluntary on the part of customer, or could be due to efforts made by the applicant.

The DJ variable, the dummy for divested entities in cases where the Department of Justice was involved in negotiating the divestiture agreement, is negative and statistically significant. This suggests that leaving the choice of branches to be divested to the discretion of applicants may be suitable from an antitrust

standpoint.²³ This finding may seem somewhat inconsistent with our earlier finding that divested target firm branches fared better than applicants' divested branches, given the DOJ preference for the former. However, not all branches selected for divestiture by the DOJ belonged to the target firms, and many divested branches in cases where the DOJ did not become involved in negotiations, belonged to the target firms.²⁴

X. Summary and Conclusions

To reduce uncertainty regarding the acceptability of bank mergers under the antitrust laws, the Federal Reserve Board, in the early 1980s, adopted the Department of Justice merger guidelines as the basis for providing the banking community with a merger screening device. After guidelines for identifying likely unacceptable mergers were established, the divestiture evolved as a mechanism through which denials of bank mergers based on competitive grounds could be virtually eliminated. The purpose of this study is to examine whether, from a public policy standpoint, divestitures have constituted an effective antitrust remedy. The analysis is based on a sample that includes most of the proposals approved subject to divestiture by the Federal Reserve between 1985 and 1992.

A number of findings emerge from the study. First, the divested branches have a remarkable survival record. Over 97 percent of the divested offices remained in operation over the entire period

23. It is important to note, however, that deposits alone are not the primary concern of the DOJ, which focuses on the volume of services provided to small businesses. Branch selection by the DOJ may well be preferable from the standpoint of small business services, but that issue is not explored in this study.

24. Although the two variables, AD and DJ, are positively correlated, the correlation coefficient is only .441.

studied. Moreover, some of the buyers of the divested branches opened additional offices in the same markets. This alone suggests that divestitures have generally provided an effective public policy remedy with respect to bank mergers.

An examination of the post-divestiture changes in the market shares of divested offices provides further support for the view that divestitures are an effective antitrust remedy. That is, the structural changes effected by divestitures tend to persist over time. Although many of the buyers did experience some deposit run-off during the first year following purchase, approximately one-half appeared to regain and maintain their market shares in subsequent years. A statistical analysis also revealed that larger buyers of divested branches tended to improve their performance more than smaller buyers. It was also found that divestiture of the target institutions' branches rather than those of applicants proved preferable from an antitrust standpoint. Divested branches in cases where the Department of Justice was involved in the negotiation of branch sales were, on average, not as successful as other divested branches. Thus, based on the retention of deposits, it appears that leaving most of the terms and conditions surrounding purchase agreements to the discretion of buyers and sellers has not impaired the competitive viability of divested entities.

