How Should Banking Markets Be Delineated?

by Paul R. Watro

The Bank Merger Act and Bank Holding Company Act require regulatory agencies to assess the competitive impact of a proposed merger or acquisition of a bank or a bank holding company. Any merger or acquisition that would tend to lessen competition substantially or create a monopoly in any section of the country must be denied by these agencies. The delineation of a geographic banking market is usually an important factor in the assessment of competition. Yet, it is often a very difficult task to determine the extent of a geographic market area, as indicated by a recent statement of Governor Henry C. Wallich of the Federal Reserve Board: "In this case an array of alternative market delineations has been presented for the Board's consideration. Each of them, with the exception of Applicant's ten-county market, has some merit, reflecting recognized economic and competitive relationships, but no one of them is entirely satisfactory."[1]

Commercial banks provide a variety of services, and the geographic boundaries of their markets vary from service to service.

1. Dissenting Statement of Governor Wallich, Order Denying Acquisition by Independent Bank Corporation, Ionia, Michigan, to acquire The Old State Bank of Fremont, Fremont, Michigan, *Federal Reserve Bulletin*, October 1979, pp. 867-70.

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The market area for large corporate loans and deposits, for example, is national and, in many instances, international in scope. The courts and regulators, however, have been concerned primarily with the competitive impact of a merger or acquisition on locally limited customers, such as consumers and small businesses.

After the product line and the geographic market are identified, it must be determined whether the banks involved in the merger are existing competitors and whether the merger would eliminate competition for locally limited banking services in the relevant market area or areas. To assist in the competitive evaluation, the Justice Department has established guidelines indicating those acquisitions and mergers that, if approved by the regulators, would be likely candidates for court challenges.[2] These guidelines are based on the presumption that market structure would affect bank performance in a systematic and predictable fashion. It is presumed that the ability of a bank to influence the market is directly related to the bank's size relative to other competitors in the market area. Proceeding along this line of reasoning, the larger the market share held by a bank, the more discretion the institution may exercise in terms of pricing and output decisions.

2. These guidelines depend on whether the market area is highly concentrated (the four largest firms have a combined share of 75 percent or more) or less highly concentrated (the share of the four largest firms is less than 75 percent). The Justice Department may challenge mergers between firms approximating the following percentages of the market area:

Highly concentrated		Less highly concentrated	
Acquiring firm	Acquired firm	Acquiring firm	Acquired firm
4%	⩾4%	5%	⩾5%
10%	⩾2%	10%	⩾4%
⩾15%	⩾1%	15%	⩾3%
		20%	⩾2%
		⩾25%	⩾1%

This *Economic Commentary* discusses the theory of banking markets and examines the two basic approaches in delineating market areas. The analysis indicates that the supply-and-demand approach is preferable to the service-area approach, from both theoretical and practical standpoints.

Market Theory

A market area is defined as a geographic area containing all economic units that react to a change in price or quality of a good or service by any supplier. Transaction costs, such as transportation and inconvenience, normally limit a market to a geographic area that includes all alternative sellers to whom buyers can turn for supplies. Consequently, two institutions are considered to be in the same market area if one reacts relatively quickly to changes in pricing or quality of a product supplied by the other.

While buyers and sellers in a market area are in such free interaction with one another that prices of the same products or services are interrelated, it is not necessarily true that prices are identical within a market area. The theoretical concept of a market area assumes that sellers supply a homogeneous product. When competing sellers provide many types of products or services, however, specialization and product differentiation tend to occur. To the degree that individual sellers are successful in differentiating their services from those of their competitors, individual prices may vary among sellers competing for a common group of buyers.

Because regulation traditionally has limited price competition, specialization and product differentiation are in fact common in the banking industry. Office location, banking hours, quality, and complimentary services are common examples of non-price competition. While a checking account may seem to be a homogeneous product among banks, checking accounts differ in complimentary services, such as overdraft protection, direct payroll deposit, automatic bill paying, drive-in facilities, or automatic teller machines. In addition, transaction time involved with cashing checks or making deposits varies among banks. These differences may explain variations in service charges among banks in the same market area.

On the other hand, similar prices do not necessarily denote a single market area. Some banking organizations compete in more than one market area, thereby tending to equalize prices among markets. If the price of consumer loans rises in one market, other things being equal, organizations would tend to channel additional funds into the market until the rate of return is the same in all its market areas. Moreover, interest-rate ceilings and usury laws often produce uniform prices among banks in different market areas. Therefore, the homogeneity of non-price factors, such as types of services, branching patterns, and banking hours, may be more useful than price variables in identifying market areas for locally limited banking services.

Service Area

Banking markets traditionally have been defined as the geographic area in which banks involved in a proposed merger or acquisition derive the vast majority of their existing business. Regulators generally define a bank's service area as an area from which a bank generates 80 percent of its deposits. When banks have overlapping service areas, they are competing for a common group of customers. Therefore, the competitive linkage is direct, and these institutions are indeed competing in the same market area.

Service areas, however, do not represent markets in the economic sense, but merely areas that vary according to the marketing effort of the banks involved in a proposed merger or acquisition. In order to be a true market, an area must include most of the demand-and-supply forces that are present for a particular product or service. Although regulators generally have utilized supply-and-demand factors in defining market areas in the past decade, service areas are still used to assess the anticompetitive effects of mergers and acquisitions in some cases. In a recent decision involving a proposed consolidation between two small banks in Mississippi, for example, an appeals court upheld a lower court's opinion that the relevant market area for assessing competition was defined too broadly.[3] The court's decision appeared to be based on a demand-deposit study indicating that the two banks did not have overlapping service areas and that they derived only a minimal amount of business from each other's service areas. The Federal Deposit Insurance Corporation (FDIC) initially denied the proposed consolidation; the two banks were considered to compete in the same market area, and the consolidation would have had a substantially adverse effect on competition. Competitive reports submitted by the Comptroller of the Currency and the Board of Governors of the Federal Reserve System concurred with the FDIC's assessment.

3. *Southwest Mississippi Bank and Bank of McComb v. Federal Deposit Insurance Corporation*, U.S. District Court, Southern District of Mississippi, Jackson Division, August 1979. In a verbal opinion in August 1980, the U.S. Fifth Circuit Court of Appeals in New Orleans upheld the lower court's ruling permitting the consolidation.

The difficulty with using the service-area approach is that geographic markets generally are larger than service areas. A service area includes only a portion of existing customers for whom the institutions are the most convenient source of supply. In addition, the service-area approach fails to take into account potential customers who are not presently banking at the institution, but who could and would switch institutions in response to changes in services or prices. The underlying force in a market area is the actual or potential threat that households and businesses would substitute lower-priced, higher-quality, or different banking services offered at one bank for higher-priced, lower-quality services at another. The prospect of gain and fear of loss of a meaningful amount of business provide strong competitive inducements in a market area.

Banks may operate in a common market area without having overlapping service areas. Consider the following example: county X has three banks with deposits of $100 million, $75 million, and $25 million, respectively; county Y has one bank with deposits of $20 million. Each bank derives 80 percent of its deposits from the county in which it is located. In addition, each of the three banks in county X draws 10 percent of its deposits from county Y. Are the banks deriving business in two counties in the same banking market? Based on the service-area approach, the answer is obviously no! However, it is quite clear that the banks in county X are indeed a significant competitive force in county Y. The county X banks collectively are generating deposits of $20 million from county Y, which is equivalent to the total deposits of county Y's bank.

Another example of the service-area approach that could lead to an inappropriate market definition occurs when competitive forces are transmitted indirectly through a third or intervening bank. Assume, for example, that bank A competes with bank B and that bank B competes with bank C. Although bank A does not compete directly with bank C, any significant competitive action taken by bank A would be transmitted to bank C through the competitive reaction of bank B. Such a situation is quite common in metropolitan areas, where banks operating in the suburban communities are linked indirectly to each other through large banks that seek and serve customers both within the central city and the suburbs.

Supply and Demand

The U.S. Supreme Court addressed the issue of delineation of banking markets in 1963. While recognizing the judgmental nature of defining a geographic market, the court indicated that a market area is an area in which "the seller operates, and to which the purchaser can practicably turn for supplies."[4] This statement was an underlying force behind the development of a supply-and-demand approach to delineating banking markets. Inclusion of demand considerations for locally limited banking services generally causes market areas to extend beyond the boundaries of the area serviced by the individual banks.

4. *United States* v. *Philadelphia National Bank,* 374, U.S. 321, 1963.

Although service areas of individual banks are important in the delineation of market areas, other supply factors and demand conditions must be examined. Prices, terms, hours, and branching patterns tend to be similar among banks competing in a common market area.[5] In addition, demand variables that might influence the economic interaction between communities must be analyzed to identify the boundaries of market areas; these include commuting for employment and shopping, mode and extent of advertising, transportation networks, and the existence of possible natural, political, and legal barriers.[6]

Geographic markets for locally limited customers generally contain a community that is the hub of the area's economic activity. A determination must be made as to whether surrounding communities are sufficiently economically integrated with the hub community to be included within the market boundaries. Many factors affect the economic interaction between two communities, including the absolute and relative sizes of the communities, the distance or traveling time between them, population density, economic growth in the intervening area, and commonality of media coverage. Smaller communities with a limited economic base are more likely to depend on other communities for retail and financial services. The greater the size difference and the shorter the distance or traveling time between two communities, the greater the probability that these areas would be linked. The population density and residential and business development in the intervening area also tend to be directly related to the degree of economic interdependence between two communities.

5. Supply-side data are generally provided in bank acquisition and merger applications.
6. Demand information is obtained from published sources and local firms, banks, chambers of commerce, and city or regional planners. On occasion, a household survey in an area may be necessary to ascertain the relevant market area.

The transmittal of economic information via advertising is another factor that can help link two areas. Retail establishments, including financial institutions, are quite active in advertising their goods and services in the media. Consequently, when households of a particular community are significantly exposed to the media of another community, they are likely to be familiar with the range of prices and commodities available at these retailers.

When a significant amount of economic integration exists between two areas, residents of one community generally view institutions located in another community as viable alternatives for purchasing goods and services. An important factor in a consumer's choice of a financial institution is the proximity of its office to residence, employment, or shopping areas. If there is extensive commuting for employment and shopping from one community to the other, customers would have additional sources for banking services conveniently available to them.[7] Such commuting forces banks in one community to charge similar prices and provide comparable services to the banks in the other community or risk a decline in business.

7. If approximately 20 percent of the employed residents of one area commutes for employment to another community, experience suggests that banks in at least one of the communities usually would react to competitive actions of the banks in the other community. The probability of this occurring is higher when there is a larger percentage of commuting for shopping on a regular basis and a larger percentage of the households are subscribing to the other community's daily newspaper.

Concluding Comments

Delineating geographic banking markets is a complex and difficult task that requires analysis of both supply and demand for banking services in a given area. While service areas and other supply factors should be taken into consideration, emphasis should be placed on demand factors, such as commuting for employment and shopping and media coverage, when defining market areas for locally limited customers.

In the past few decades, market areas generally have expanded. Customers have become increasingly mobile and have enjoyed easier access to a greater number of alternative sources of banking services. Economic growth, liberalization of branching laws, and increased competition have promoted the establishment of branch offices in new locations and the extension of banking hours. Advertising among financial institutions has increased in intensity and geographic scope over the years. In addition, the Depository Institutions Deregulation and Monetary Control Act of 1980 will intensify competition between thrift institutions and banks.[8] After December 31, 1980, thrifts are permitted to offer third-party payment accounts and interest-rate ceilings on time and savings deposits at banks, and savings and loan associations gradually will be phased out. Because of these factors, the trend toward more competitive banking markets is likely to continue and even to accelerate in the future.

8. For a discussion of nonbank competition, see Paul R. Watro, "Competition between Thrift Institutions and Banks in Ohio," *Economic Commentary,* Federal Reserve Bank of Cleveland, July 14, 1980.

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