

# Chicago Fed Letter

## Keeping banking competitive: Evaluating proposed bank mergers and acquisitions

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All bank mergers and acquisitions (M&A) require the approval of regulators. This article describes the methods used by the Federal Reserve to evaluate whether a bank merger or acquisition is acceptable under federal antitrust laws and its Board of Governors' bank competition policy.

**Like** M&A in other industries, proposed bank M&A transactions are evaluated by regulators for whether they would raise antitrust concerns. In this *Chicago Fed Letter*, I describe the legal background for this approach to assessing potential bank M&A, as well as the analytical framework for the way it is currently implemented by the Federal Reserve.

### Legal background

In the United States, the first two major restrictions on M&A—and still the two main laws that govern the legality of such transactions—are the Sherman Act of 1890 and the Clayton Act of 1914. The Sherman Act states that “every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize ... shall be deemed guilty of a felony.”<sup>1</sup> The Clayton Act added on to the Sherman Act by more clearly forbidding price discrimination, director interlocks, and M&A<sup>2</sup> where the effect “may be substantially to lessen competition, or to tend to create a monopoly.”<sup>3</sup> These two statutes serve as the basis for the banking antitrust laws that followed.

The laws that directly address bank M&A are the Bank Holding Company (BHC) Act of 1956 and the Bank Merger Act of 1960, including their amendments of 1966. These acts set the general standards

for assessing the probable competitive effect of a bank merger or acquisition in a market and also designated the regulatory agencies responsible for evaluating M&A proposals.<sup>4</sup> However, they did not give any specific standards the regulatory agencies could go by in defining the relevant market dimensions. It was not until 1963 that the U.S. Supreme Court made rulings that established legal precedents still used today in determining what the appropriate product market and geographic market would be for banking antitrust analysis;<sup>5</sup> I discuss these market parameters in more detail in subsequent sections.

For BHCs and banks regulated by the Fed, the initial analysis of a proposed merger or acquisition is submitted to the Reserve Bank in whose District the resulting firm would be headquartered.<sup>6</sup> The Reserve Banks are delegated authority by the Board of Governors of the Federal Reserve System to approve transactions that do not raise any significant anticompetitive concerns. For transactions that do raise such concerns, the Board determines whether the proposal should be approved or denied.<sup>7</sup>

### Defining product market

In line with the 1963 case, the Supreme Court determined in a 1970 case that the relevant product market for banking is

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“the cluster of products and services that full-service banks offer that as a matter of trade reality makes commercial banking a distinct line of commerce.”<sup>8</sup> Mainly because of cost advantages and settled consumer preferences in banking, the Supreme Court argued that banks did not compete with other financial institutions that supply one or more, but not all, of the same products and services. That said, while the entire set of products

the relevant geographic market for banking. In the 1963 case mentioned before, the Supreme Court stated:

The proper question to be asked in this case is not where the parties to the merger do business or even where they compete, but where, within the area of competitive overlap, the effect of the merger on competition will be direct and immediate. ... In banking, as in most service industries,

Market determination is based on the assumption that customers will most likely bank where they live, work, or obtain goods and services on a regular basis. For this reason, the Fed assesses several factors and indicators of economic integration. The Fed examines a region’s commuting data to determine where residents live and work. To determine where residents are likely to shop for their basic goods and services, the Fed gathers data on the variety and amount of retail businesses and major service providers available in the region. Combined, these data essentially reveal the areas of convenience for banking customers, allowing the Fed to delineate a banking market.

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and services is considered to determine which firms are competitors, total deposits are typically used to measure concentration among the competitors by the Fed (which I explain in more detail later).

Given the 1963 and 1970 Supreme Court rulings, when evaluating proposed M&A, the Fed must identify institutions that offer products and services similar to those provided by the parties to a merger or acquisition. These institutions have traditionally been banks located in proximity to the parties. However, thrift institutions (or thrifts) and credit unions provide many similar products and, thus, are considered in the competitive analyses of banking M&A proposals.<sup>9</sup> In analyzing a proposed merger or acquisition, the Fed takes into account competition from thrifts. For example, depending on how active thrifts are in commercial lending in a market, the Fed gives their deposits 50% or 100% weight when calculating that market’s concentration.<sup>10</sup> Because credit unions usually do not offer the full cluster of banking products and services, have restrictions on memberships, and may not be easily accessible, credit union deposits are typically excluded from the market analysis. If, however, credit unions in a market have open membership, their deposits could be included when analyzing that market.<sup>11</sup>

### Defining geographic market

Just as the Supreme Court did with the product market, it gave guidance in setting

convenience of location is essential to effective competition. Individuals and corporations typically confer the bulk of their patronage on banks in their local community; they find it impractical to conduct their banking business at a distance. ... The factor of inconvenience localizes banking competition.<sup>12</sup>

It concluded that banking markets are local in nature and limited in their geographic scope.

The Supreme Court’s decision to consider a bank’s geographic market to be its local area remains the foundation of the Fed’s delineation of banking markets. The Board delegates responsibility for defining banking markets to the Reserve Banks. Although these markets tend to be stable, the Fed at times revises its published market definitions to reflect their current realities.

In general, a banking market comprises a central city or large town and the surrounding areas economically tied to it.<sup>13</sup> As a starting point, metropolitan statistical areas (MSAs)<sup>14</sup> are used to delineate urban markets, while counties are used to define rural markets. However, the Fed recognizes that an MSA or county may not accurately describe a banking market; in order to delineate a banking market properly, the Fed gathers information on the commercial and banking activity of an area and the ease with which customers there could shift their banking relationships.

For example, suppose a merger proposal involves two banks that compete in the same banking market as currently defined by the Fed. The market’s borders are currently consistent with those of a county. To verify that the data still reflect the true nature of banking competition in that market, analysts study the commuting data in the townships of this county as well as the neighboring counties. Assume it is discovered that the majority of residents in a town in an adjacent county work in a nearby city in the county that is also the currently defined banking market. In addition, assume that the residents in that town are limited with respect to basic goods and services and the nearest place to obtain them is also the place they are commuting to for work—the city within the banking market. Advertising patterns of financial institutions and interviews by Reserve Bank staff with bankers in the city and town indicate that banks in each advertise and solicit in both locales. Banks in the city report they have substantial numbers of customers who live in the town, and the same is true in the reverse. Bankers in both locales also monitor the loan and deposit rates of banks in the city and town. All of these ties suggest that the banking market as currently defined would need to be expanded to include this small town just outside the existing banking market.

To keep the public informed, the Chicago Fed has published the most current definitions of its District's banking markets on its website; market definitions for other Districts are also available online.<sup>15</sup> As I mentioned, while banking market definitions tend to be stable, they can evolve over time if there are significant changes in an area, such as shifts in commuting patterns resulting from substantial economic development or decline.

### Measuring market concentration

The basic tool of competitive analysis is the Herfindahl–Hirschman Index (HHI) measure of market concentration.<sup>16</sup> The HHI is the sum of the squared market shares of all banks in the market. It can range from 0 (a perfectly competitive market) to 10,000 (a pure monopoly). If four firms are in a market and each has a 25% market share, the HHI would be 2,500 ( $25^2 + 25^2 + 25^2 + 25^2$ ). If two of these banks merge, then the HHI would be 3,750 ( $50^2 + 25^2 + 25^2$ ). HHI then is a reflection of both the number of firms in a market and their relative size.<sup>17</sup>

According to the U.S. Department of Justice's (DOJ) current screening guidelines for bank M&A, a geographic market is considered unconcentrated if the HHI is below 1,000 after the merger or acquisition, moderately concentrated if the HHI is between 1,000 and 1,800, and highly concentrated if the HHI is above 1,800. A transaction that neither raises the HHI to a level over 1,800 in any local market nor increases its HHI by more than 200 points is not challenged by the DOJ on competition grounds.<sup>18</sup> For the Fed, a merger or acquisition that does not breach the 1,800/200 screening threshold and results in a pro forma market share of 35% or less is presumed to have no anti-competitive effects.

It is important to note that these DOJ screening guidelines are just that—guidelines. The HHI measures are the first step of a more detailed analysis, not the final arbiters. If a merger or acquisition proposal does exceed the 1,800/200 screening threshold, the proposal is not necessarily denied. Instead, the Fed conducts a more thorough analysis of the

market to determine if there are factors to consider that may lessen the effect of the transaction on market competition.<sup>19</sup>

The Fed might consider two related mitigating factors when evaluating a proposed merger or acquisition that exceeds the screening threshold: the attractiveness of a banking market for entry and the ease of entry into the market. A banking market's attractiveness for entry is often measured by the growth rates of deposits and population and the population per banking office (if the population per office is relatively high, new entry is likely). A market's attractiveness is also indicated by recent entries of banks—including entries by newly formed banks and acquisitions by out-of-market organizations—and, of course, favorable economic conditions. Typically, such a market has low barriers to entry for new players, who are willing to compete there despite any initial advantages the established players may have. If many banks are being drawn to a particular banking market and they can easily enter it and compete, the banks that are trying to access it early via a merger or acquisition may get regulatory approval even if their presence may increase that market's HHI to over 1,800 or increase its HHI by more than 200 points.

An equally important mitigating factor is the competitive significance of a bank involved in a potential merger or acquisition to a particular banking market. For example, if the target bank in a merger is failing in the market because of its current financial condition, then even if the proposal to merge with that institution breaches the screening guidelines, approval of the transaction might still be granted because that target bank would otherwise fail (hurting the convenience and needs of the community).

If the increase in market concentration is too large to be justified by the mitigating factors, the Fed may require one or more parties to a merger or acquisition to divest bank branches in the relevant market as a condition of approval. The goal of reducing the market share of the merged or acquiring firm is to limit the

bank's ability to exercise anticompetitive behavior in the market. Divestitures usually bring the concentration under or very close to the screening threshold and allow the transaction to be approved.<sup>20</sup>

### Concluding remarks

The Federal Reserve examines the competitive effects of bank M&A on a case-by-case basis. Over the years, few bank M&A have officially been denied on competition grounds. One reason for this is that M&A applications that might raise anticompetitive concerns are rarely filed. In many instances, banks seek a preliminary analysis from the Fed before submitting an official application. From the informal feedback, the bank is able to determine the probable outcome of the proposal and does not submit its application if the proposal is likely to be deemed highly anticompetitive. Further, since there are resources available to bankers or their legal advisors to produce an initial competitive screening for a particular proposal, some banks forgo their M&A plans before ever discussing them with the Fed. As a result, the process seems to be effective in discouraging official proposals that would raise antitrust concerns.

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<sup>1</sup> Sherman Act, 15 U.S.C. § 2.

<sup>2</sup> For details, see the Clayton Act, 15 U.S.C. §§ 13–19. Price discrimination is a pricing strategy where (nearly) identical goods or services are sold at different prices by the same provider in different markets or to different buyers; director interlocks occur when members of a company’s board of directors also serve on another company’s board or within its management.

<sup>3</sup> Clayton Act, 15 U.S.C. § 18.

<sup>4</sup> BHC Act, 12 U.S.C. §§ 1841–1850; Bank Merger Act, 12 U.S.C. § 1828(c). The Office of the Comptroller of the Currency (OCC) reviews transactions for nationally chartered banks and banks headquartered in the District of Columbia. For state-chartered banks, the Federal Deposit Insurance Corporation (FDIC) reviews transactions in which the resulting bank is not a member of the Fed, and the Fed is responsible when the resulting bank is a Fed member.

<sup>5</sup> United States v. Philadelphia National Bank et al., 83 S. Ct. 1715 (1963).

<sup>6</sup> For details on the 12 Federal Reserve Districts and their Reserve Banks, see [www.federalreserve.gov/otherfrb.htm](http://www.federalreserve.gov/otherfrb.htm).

<sup>7</sup> The Board publishes its determination in such cases in its orders on banking applications (Board orders): [www.federalreserve.gov/newsevents/press/orders/2014orders.htm](http://www.federalreserve.gov/newsevents/press/orders/2014orders.htm).

<sup>8</sup> United States v. Phillipsburg National Bank & Trust Co. et al., 90 S. Ct. 2035 (1970).

<sup>9</sup> Thrifts tend to focus on savings deposits and home mortgage originations. Credit unions are member-owned financial cooperatives. Over the years, both have expanded their range of product and service offerings, becoming competitive with commercial banks.

<sup>10</sup> If a thrift’s commercial and industrial lending relative to its total assets is similar to that of banks, then that thrift would be considered a direct competitor with the banks and would get a deposit weighting of 100%. Otherwise, it would get a deposit weighting of 50%.

<sup>11</sup> Credit unions with open membership are treated like thrifts in a competitive analysis: Deposits are weighted at 50% if such credit unions serve only households and at 100% if they are also active lenders to small businesses.

<sup>12</sup> United States v. Philadelphia National Bank et al., 83 S. Ct. 1715 (1963).

<sup>13</sup> As noted in most Board orders addressing competition issues, a local banking market area is an area within which competitive forces ensure that prices charged by suppliers of banking products and services are quickly and materially influenced by the actions of other suppliers in that area. At a minimum, it is an area within which banking customers can practicably turn for alternative sources of banking products and services when faced with unfavorable prices.

<sup>14</sup> See <https://www.census.gov/population/metro/>.

<sup>15</sup> The Seventh District banking market definitions are available at [www.chicagofed.org/webpages/banking/banking\\_markets\\_definitions/index.cfm](http://www.chicagofed.org/webpages/banking/banking_markets_definitions/index.cfm). Each Federal Reserve District’s preliminary market definitions can be found on its respective Reserve Bank’s website.

<sup>16</sup> The U.S. Department of Justice (DOJ) and regulatory agencies rely on the structure–conduct–performance (SCP) paradigm from the industrial organization field of economics. This paradigm predicts an inverse relationship between market concentration and competition and a positive relationship between market concentration and market power. For an overview, see Stephen A. Rhoades, 1982, “Structure–performance studies in banking: An updated summary and evaluation,” Staff Studies, Board of Governors of the Federal Reserve System, No. 119.

<sup>17</sup> For a detailed example of how the HHI is calculated in practice, see box 2 in [www.frbatlanta.org/filelegacydocs/holder\\_janfeb93.pdf](http://www.frbatlanta.org/filelegacydocs/holder_janfeb93.pdf).

<sup>18</sup> See the DOJ’s bank merger competitive review guidelines at [www.justice.gov/atr/public/guidelines/6472.htm](http://www.justice.gov/atr/public/guidelines/6472.htm).

<sup>19</sup> For a review of mitigating factors, see [www.frbatlanta.org/filelegacydocs/holder\\_marapr93.pdf](http://www.frbatlanta.org/filelegacydocs/holder_marapr93.pdf).

<sup>20</sup> For a discussion on the evolution and efficacy of divestitures as a solution for otherwise anticompetitive mergers, see [www.federalreserve.gov/pubs/feds/1998/199814/199814pap.pdf](http://www.federalreserve.gov/pubs/feds/1998/199814/199814pap.pdf).