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# **Expanding the Economic Analysis in Banking Merger Review: Potential Lessons from the Economics Literature and Merger Review in Other Industries**

#### Christopher V. Lau, Ana McDowall, Andrew Sfekas

Bank mergers in the United States have historically been reviewed by four agencies: the Federal Reserve, the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), and the Department of Justice (DOJ). Each agency must take a variety of considerations into account, some of which overlap across agencies. Preservation of competition and the prevention of undue aggregation of market power are concerns shared by all agencies responsible for reviewing a given bank merger.

On September 17, 2024, the FDIC, OCC, and DOJ issued revised guidance on how each agency will review bank mergers, including (in the case of the FDIC and DOJ) how they will approach assessment of competitive effects.<sup>1</sup>

Perhaps the most significant departure from past approaches was the DOJ's withdrawal of its 1995 Bank Merger Guidelines (Bank Merger Guidelines)<sup>2</sup> in favor of evaluating bank mergers under the 2023 DOJ/FTC Merger Guidelines (2023 Merger Guidelines). The DOJ published a Banking Addendum noting its withdrawal of the Bank Merger Guidelines and explaining how the 2023 Merger Guidelines might be applied and the different statutory framework under which the DOJ has authority to review bank mergers.<sup>3</sup>

The DOJ's policy shift in withdrawing the nearly 30-year-old guidelines may have signaled that the DOJ intended to take a more assertive role in bank merger review going forward. While the recent re-election of Donald Trump leaves in question whether further policy changes will soon follow, both the Biden administration and the first Trump administration showed interest in revising

Christopher V. Lau is a Principal, Ana McDowall is a Principal, and Andrew Sfekas is a Senior Manager at Cornerstone Research. The views expressed herein are those of the authors and do not necessarily represent the views of Cornerstone Research.

Final Statement of Policy on Bank Merger Transactions, 89 Fed. Reg. 79125 (Sep. 27, 2024), https://fdic.gov/system/files/2024-09/final-statement-of-policy-on-bank-merger-transactions.pdf; Business Combinations Under the Bank Merger Act, 89 Fed. Reg. 78207 (Sep. 25, 2024), https://www.occ.gov/news-issuances/federal-register/2024/89fr78207.pdf; Justice Department Withdraws from 1995 Bank Merger Guidelines, U.S. Dept. of Justice (Sep. 17, 2024), https://www.justice.gov/opa/pr/justice-department-withdraws-1995-bank-merger-guidelines. The DOJ/FTC 2023 Merger Guidelines, issued December 18, 2023, are available at https://www.justice.gov/atr/merger-guidelines.

Bank Merger Competitive Review—Introduction and Overview (1995), U.S. DEPT. OF JUSTICE, https://www.justice.gov/sites/default/files/atr/legacy/2007/08/14/6472.pdf.

<sup>&</sup>lt;sup>3</sup> See 2024 Banking Addendum to 2023 Merger Guidelines, U.S. DEPT. OF JUSTICE, https://www.justice.gov/atr/media/1368576/dl [here-inafter "2024 Banking Addendum"].

The Bank Merger Guidelines laid out a formulaic approach to screening for competitive effects in bank mergers that was considerably less flexible but more predictable (and potentially much faster) than the competitive effects review generally applied to other

industries.

the Bank Merger Guidelines.<sup>4</sup> Thus, while the new administration could revert back to the Bank Merger Guidelines, it is reasonable to expect that the DOJ will not follow those guidelines for long (if at all). We therefore consider the following question: given the advances in the economic literature on banking since 1995, and the DOJ's and FTC's approaches to evaluating mergers in similar industries, what could the DOJ's economic analysis look like for future bank mergers? We further ask how the 2023 Merger Guidelines might be applied to bank mergers.

## The Bank Merger Guidelines provided a rigid but predictable and expeditious regime for bank merger assessment

The Bank Merger Guidelines, and the review process that developed under them, took a straight-forward and predictable approach that aligned the DOJ with the competition review process performed by the Federal Reserve, the FDIC, and the OCC. That alignment, including a substantially simplified competitive review relative to other mergers, made it unlikely that the DOJ would challenge a merger that other agencies had approved, if the merger adhered to the clear standards set forth in the Bank Merger Guidelines.

The Bank Merger Guidelines laid out a formulaic approach to screening for competitive effects in bank mergers that was considerably less flexible but more predictable (and potentially much faster) than the competitive effects review generally applied to other industries. This approach was valuable in an industry where four different agencies would review a merger.<sup>5</sup> Evaluation would begin with a market concentration screen based on the Herfindahl-Hirschman Index (HHI). The HHI, a measure frequently used by the antitrust agencies to screen for potential competitive effects, is described in every set of merger guidelines issued by the U.S. agencies since 1982. The HHI is measured as the sum of the squared market shares of all firms in a market. A monopoly market would have an HHI of 10,000 (100 percent of the market, squared), while a market with five equally-sized firms (20 percent share each) would have an HHI of 2,000.

In a typical merger, there could be considerable disagreement between agencies and merging parties about market definition—what products should be included in the market for which the HHI is calculated and what geographic boundaries should be used. More expansive market definitions would favor the merging parties if they brought in additional firms or areas where the merging parties do not have a presence. Narrower market definitions (perhaps focused on a limited geography and set of products) could favor a view that the merger should be blocked.<sup>6</sup>

The Bank Merger Guidelines substantially simplified the screening process by predefining both the product and the geographic markets. The geographic markets to be reviewed were defined by Federal Reserve banking markets, counties, and Metropolitan Statistical Areas. Product markets were proxied for using bank deposits and, in some cases, a defined fraction of the deposits in nonbank institutions such as thrifts. HHIs were then calculated using shares of the deposits in the

See, e.g., Assistant Attorney General Makan Delrahim Delivers Remarks at the Rock Center for Corporate Governance at Stanford University, U.S. DEPT. OF JUSTICE (Aug. 20, 2020), https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-remarks-rock-center-corporate. Additionally, as discussed below, the DOJ opened a public comment period in September of 2020. See, Antitrust Division Seeks Public Comments On Updating Bank Merger Review Analysis, September 1, 2020, https://www.justice.gov/opa/pr/antitrust-division-seeks-public-comments-updating-bank-merger-review-analysis.

<sup>&</sup>lt;sup>5</sup> See, e.g., Michelle Bowman, Bank Mergers and Acquisitions, and De Novo Bank Formation: Implications for the Future of the Banking System, Board of Governors of the Federal Reserve System (Apr. 2, 2024), https://www.federalreserve.gov/newsevents/speech/bowman20240402a.htm.

Market Definition in the DOJ/FTC Horizontal Merger Guidelines can be determined using the Hypothetical Monopolist Test, discussed later in this article. See, infra, text accompanying note 44.

bank branches and fractions of shares in nonbank branches (when included) within the predefined geographic markets.<sup>7</sup> The Bank Merger Guidelines' restriction to deposits in banks and thrifts (and potentially credit unions) thus further simplified the product market definition.

The Bank Merger Guidelines suggested that mergers resulting in an HHI of less than 1,800 or causing an HHI increase of less than 200 would generally be allowed to proceed, while mergers above those thresholds would require additional scrutiny and potentially divestiture of bank branches in some geographic areas. When mergers did not pass the initial screen, the Bank Merger Guidelines provided a list of additional evidence the merging parties could introduce, such as evidence on mortgage markets or small business loans, or that could suggest the inclusion of other depository institutions such as credit unions.<sup>8</sup> In principle, the DOJ could take a closer look at a merger below the threshold if it saw the potential for anticompetitive effects in specific areas (e.g., small business loans).

The Bank Merger Guidelines did not tie the DOJ's hands—the DOJ could still pursue remedies such as divestitures when conditions indicated the potential for decreased competition post-merger. However, as a practical matter, the Bank Merger Guidelines provided an equilibrium in which bank mergers were not generally proposed in a form that would breach the HHI thresholds of deposits.

As the banking industry evolved, questions began to arise regarding whether the Bank Merger Guidelines needed revision to address industry changes. In 2020, the DOJ sought public comments on whether and how the Bank Merger Guidelines should be updated, with Assistant Attorney General Makan Delrahim noting the role of Fintech as one significant change in the commercial banking industry since 1995. The DOJ received a relatively small number of comments, largely from banks and bank associations, bank regulators, elected officials, and a handful of antitrust-oriented nonprofits. Commenters generally favored retaining a separate set of guidelines for the banking industry, and in many cases did not recommend a substantial change in approach. Commenters from the banking industry, for example, stated that the HHI threshold should be raised to account for increased competition from online banking and other sources, and that data on the deposits and activities of these institutions should be more expressly considered. However, they did not recommend a departure from the use of deposits as a screen, or the reversion to the then-active 2010 Horizontal Merger Guidelines. Even commenters recommending a more stringent approach did not propose a wholesale departure from the existing guidelines or a switch to

<sup>&</sup>lt;sup>7</sup> Bank Merger Guidelines, *supra* note 2, Screen A at 4-7.

<sup>&</sup>lt;sup>8</sup> Bank Merger Guidelines, *supra* note 2, Section 2 at 3-4.

As an example, the DOJ ordered divestiture of 28 local branches and their associated deposits and loans in the BB&T/SunTrust merger. See Justice Department Requires Divestitures in Order for BB&T and SunTrust to Proceed with Merger, U.S. Dept. of Justice (Nov. 8, 2019), https://www.justice.gov/opa/pr/justice-department-requires-divestitures-order-bbt-and-suntrust-proceed-merger.

Assistant Attorney General Makan Delrahim Delivers Remarks at the Rock Center for Corporate Governance at Stanford University, U.S. Dept. of Justice (Aug. 20, 2020), https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-remarks-rock-center-corporate

<sup>11</sup> See, e.g., Letter from American Bankers Association to U.S. Dept. of Justice, Re: Request for Public Comment, U.S. Department of Justice Antitrust Division Bank Merger Guidelines Review (Request), U.S. Dept. of Justice (Oct. 16, 2020), https://www.justice.gov/atr/page/file/1330356/dl?inline; Letter from Bank Policy Institute to U.S. Dept. of Justice, Re: Department of Justice Enforcement Policy Respecting Bank Mergers, U.S. Dept. of Justice (Oct. 15, 2020), https://www.justice.gov/atr/page/file/1330306/dl?inline.

Notably, the American
Bar Association
Antitrust Law Section
argued for evaluating
bank mergers using
the existing Horizontal
Merger Guidelines,
rather than a separate
set of guidelines.

review under the Horizontal Merger Guidelines, instead suggesting revisions such as lower HHI thresholds and adjustments to market definition.<sup>12</sup>

The DOJ opened a second public comment period in late 2021, shortly before the DOJ and FTC jointly published a Request for Information (RFI) seeking comments on how to revise the agencies' approach to mergers more broadly. <sup>13</sup> As with the 2020 comment period, the 2021 request for comments again attracted a small set of industry, agency, and other interested commenters. <sup>14</sup> Here, again, a common theme from the industry was that the Bank Merger Guidelines were too stringent (largely because they failed to account for additional sources of competition such as online banking), but that the industry continued to warrant separate consideration. <sup>15</sup> However, several commenters in this round stated that a wholesale reconsideration of the Bank Merger Guidelines was necessary, beyond simply tweaking HHI thresholds or considering additional depository institutions. Notably, the American Bar Association Antitrust Law Section argued for evaluating bank mergers using the existing Horizontal Merger Guidelines, rather than a separate set of guidelines. <sup>16</sup> Similarly, FTC Chair Lina Khan advocated for both a tightening of the HHI threshold and a departure from the deposit-based calculation of market shares. <sup>17</sup>

In 2023, the DOJ and FTC issued updated Merger Guidelines to replace the 2010 Horizontal Merger Guidelines, but they did not explicitly address bank mergers until the DOJ's recent withdrawal of the Bank Merger Guidelines. With that withdrawal, the DOJ has shifted enforcement of bank mergers into the model used for other industries, although it remains to be seen how the DOJ will approach bank mergers in practice – or whether additional shifts in bank merger enforcement will occur in the new administration.

Review of the extensive economic literature on banking competition developed since 1995, and on merger enforcement in other industries that have some commonalities with banking, suggests

<sup>&</sup>lt;sup>12</sup> See, e.g., Comments of FTC Commissioner Rohit Chopra and Professor Jeremy C. Kress, U.S. Dept. of Justice, https://www.justice.gov/atr/page/file/1330326/dl?inline; Letter from Senator Elizabeth Warren to U.S. Dept. of Justice, U.S. Dept. of Justice (Oct. 16, 2020), https://www.justice.gov/atr/page/file/1330251/dl?inline.

Antitrust Division Seeks Additional Public Comments on Bank Merger Competitive Analysis, U.S. Dept. of Justice (Dec. 17, 2021), https://www.justice.gov/opa/pr/antitrust-division-seeks-additional-public-comments-bank-merger-competitive-analysis; Request for Information on Merger Enforcement, U.S. Dept. of Justice and Federal Trade Commission (Jan. 18, 2022).

While the broad Merger Guidelines RFI issued in early 2022 yielded almost 2,000 comment submissions (including many comments from members of the general public), the DOJ's 2021 request for comments yielded only 23 comments. See Comments in Request for Information on Merger Enforcement, Regulations.gov, https://www.regulations.gov/docket/FTC-2022-0003/comments; 2022 Antitrust Division Banking Guidelines Review: Public Comments, U.S. Dept. of Justice (Feb. 18, 2022), https://www.justice.gov/atr/antitrust-division-banking-guidelines-review-public-comments-topics-issues-guide/2022-Bank-Guideline-Review.

<sup>&</sup>lt;sup>15</sup> For example, the American Bankers Association, in a February 15, 2022 comment, argued for raising the HHI threshold and taking into account online options for financial services. See Letter Re: Request for Public Comment: US Department of Justice Antitrust Division Bank Merger Guidelines Review (Request), U.S. Dept. of Justice (Feb. 15, 2022), at 2, https://www.justice.gov/atr/page/file/1474316/dl?inline.

<sup>16 2022</sup> Antitrust Division Banking Guidelines Review: Public Comments, U.S. Dept. of Justice (Feb. 18, 2022), https://www.justice.gov/atr/antitrust-division-banking-guidelines-review-public-comments-topics-issues-guide/2022-Bank-Guideline-Review; Comments of the American Bar Association Antitrust Law Section on Bank Merger Competitive Analysis, U.S. Dept of Justice (Feb. 15, 2022), https://www.justice.gov/atr/page/file/1474306/dl?inline.

<sup>17</sup> Comment of Federal Trade Commission Chair Lina M. Khan, U.S. DEPT. OF JUSTICE, https://www.justice.gov/atr/page/file/1474356/dl?inline.

possible economic frameworks and analyses that could be applied in banking merger review under the DOJ's new policy. 18

### The toolkit for regulatory review of bank mergers

In the 30 years since the DOJ introduced the Bank Merger Guidelines, the economics literature has developed empirical techniques and explored economic effects in banking that could expand the toolkit for regulatory review of bank mergers. This literature coincided with deregulation in the sector, which allowed researchers to conduct quasi-experimental studies of how bank conduct and consumer outcomes changed in response to the changing regulatory and competitive land-scape. The literature also developed tools to model consumers' choices and simulate the effects of mergers, similar to merger evaluation techniques frequently used in other industries.

**Evaluating competitive effects.** The empirical literature supports, generally, that more competition leads to higher interest rates for depositors and lower loan rates for borrowers. <sup>19</sup> However, some studies suggest that higher concentration may benefit some groups. For example, some papers indicate that, due to information asymmetry, competition can reduce incentives for banks to lend to younger firms with more uncertain future cashflows. These studies find that younger firms obtain lower loan rates (and easier access to credit) in more concentrated banking markets. A long-standing literature also proposes that more vigorous competition may increase the fragility of the banking system. <sup>20</sup> Many of these studies followed the structure-conduct-performance paradigm of the early industrial organization literature and measured competition using simple structural measures, such as HHIs and n-bank concentration ratios. <sup>21</sup>

However, other literature suggests that the nature of competition relevant for assessing merger effects may not be well captured by the formulaic approach of the Bank Merger Guidelines. For example, some papers find that the geographic areas over which consumers search for services (and hence the set of relevant competitors) may vary by banking product, including within the category of deposits that is the focus of the default approach in the Banking Merger Guidelines.<sup>22</sup> In addition, banking competition may be affected by multimarket contact, an interrelation between different markets that would also not be captured by the analysis of local HHIs.<sup>23</sup>

A more complex but flexible methodology than HHI-based analysis involves using a wider range of information to estimate models for merger simulation. These allow for industry features such as

The DOJ's approach may affect other agencies' approaches as well. For example, the FDIC notes that its analysis "is also informed by the Department of Justice's approach to evaluating competitive effects." See, Final Statement of Policy on Bank Merger Transactions, supra note 1, 89 Fed. Reg. at 79136.

See Anthony W. Cyrnak & Timothy H. Hannan, Is the Cluster Still Valid in Defining Banking Markets? Evidence from a New Data Source, 44 ANTITRUST BULL. 313, 327, 330–331 (1999); Itamar Drechsler et al., The Deposits Channel of Monetary Policy, 132 Q. J. Econ. 1819 1873-74 (2017).

<sup>&</sup>lt;sup>20</sup> See Allen N. Berger et al., Bank Competition and Financial Stability, 35 J. Fin. Serv. Rsch. 99, 100 (2009)

<sup>&</sup>lt;sup>21</sup> N-bank concentration ratios look at the share of the largest n-banks in the local market; for example, the share of the largest three banks in the market is often shorthanded as CR3.

Erik Heitfield & Robin A. Prager, *The Geographic Scope of Retail Deposit Markets*, 25 J. Fin. Serv. Rsch. 37, 46 (2004). Another paper looks at European national banking markets and finds a negative relationship between local market HHIs and demand deposit rates but a positive relationship between local market HHIs and rates for time and savings deposits. *See* Sandrine Corvoisier & Reint E. Gropp, *Bank Concentration and Retail Interest Rates*, 26 J. Banking & Fin. 2155, 2180 (2002). The authors argue that consumers are more likely to shop around beyond locally available banks for time and savings deposits. *Id.* at 2187.

<sup>&</sup>lt;sup>23</sup> Timothy H. Hannan & Robin A. Prager, *The Competitive Implications of Multimarket Bank Branching*, 28 J. Banking & Fin. 1889, 1891 (2004); Jozsef Molnar et al., *Multimarket Contact in Italian Retail Banking: Competition and Welfare*, 31 Int'l J. Indus. Org. 368, 374-375 (2013) [hereinafter "Molnar et al." (2013)].

product differentiation.<sup>24</sup> In the broader economics literature on mergers, these models can rely on assumptions about the structure of the market in combination with information on shares and margins or prices, or (if data are available) more data-driven models that allow for more flexible assumptions about consumers' choices.<sup>25</sup>

The academic literature on banking competition has developed demand models for the banking sector that follow the standard methodology for estimating demand in markets with differentiated products (i.e., the models capture differentiation among banks), and are able to incorporate specific factors that the Banking Merger Guidelines' default screens were not flexible enough to accomodate.

For example, in these models, consumer preferences may depend on their own characteristics (e.g., older consumers versus younger ones, smaller borrower firms versus larger firms); on banks' characteristics, such as deposit rates and account fees; and on measures of convenience, such as customer proximity to a branch.<sup>26</sup> This approach is similar to the estimation of demand models used in evaluating hospital mergers, where patient preferences are allowed to vary by hospital characteristics (e.g., patient's distance to hospital, hospital quality, brand reputation etc.), and used to measure substitution through diversion ratios, or changes in bargaining leverage that may be attributed to the merger.<sup>27</sup> Other bank characteristics sometimes included in the banking models are age, size, and geographic diversification.<sup>28</sup> These models do not rely on how relevant markets are defined; they let consumers' observed choices identify the degree to which banking products are differentiated and compete, and they allow for consumers to choose options outside those modeled.<sup>29</sup> Demand modeling can also capture consumers' search costs or limited attention, which could affect banks' market power even when markets are unconcentrated.30 A recent working paper further shows how demand modeling can be used to explore the welfare effects of banking mergers on both price (deposit and small business loan rates) and non-price effects (branch closures or expansions and perceived quality of service).31

Finally, a large literature explores how digitalization of banking services has disrupted competition in banking. For example, on the depositor side, empirical evidence suggests that consumers vary based on factors such as age or income level in their adoption rates for online banking, and some papers study the competitive incentives this has created for banks to innovate, and how the

<sup>&</sup>lt;sup>24</sup> Astrid A. Dick, *Demand Estimation and Consumer Welfare in the Banking Industry*, 32 J. Banking & Fin. 1661, 1662 (2008) [hereinafter "Dick (2008)"]; Molnar et al. (2013), *supra* note 23, at 368–369.

<sup>&</sup>lt;sup>25</sup> Aviv Nevo, Mergers with Differentiated Products: The Case of the Ready-to-Eat Cereal Industry, 31 RAND J. Econ. 395, 404 (2000).

See Katherine Ho & Joy Ishii, Location and Competition in Retail Banking, 29 Int'l J. Indus. Ord. 537, 545–546 (2011) [hereinafter "Ho & Ishii (2011)"]; Molnar et al. (2013), supra note 23, at 370. Different models vary in how they capture spatial competition and the effect of branch proximity to consumers on demand: some simply include the number of branches in the consumer's local area, while others consider the distance from the consumer to the nearest branch (or nearest two branches).

<sup>&</sup>lt;sup>27</sup> See Joseph Farrell et al., Economics at the FTC: Hospital Mergers, Authorized Generic Drugs, and Consumer Credit Markets, 39 Rev. INDUS. ORG. 271, 273–276 (2011).

<sup>&</sup>lt;sup>28</sup> Dick (2008), *supra* note 24, at 1663.

<sup>&</sup>lt;sup>29</sup> Ho & Ishii (2011), *supra* note 26, at 537; Molnar et al. (2013), *supra* note 23, at 370.

Vladimir Yankov, In Search of a Risk-Free Asset: Search Costs and Sticky Deposit Rates, 56 J. Money, Credit & Fin. 1053, 1095-96 (2024); Eliot Abrams, Assessing Bank Deposit Market Power Given Limited Consumer Consideration (Working Paper, Oct. 2019) at 38, https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3431374.

<sup>&</sup>lt;sup>31</sup> Ariel Pakes et al., *The Consumer Welfare Effects of Bank Merger*s (Working Paper, Oct. 2024) at 2, https://www.tse-fr.eu/sites/default/files/ TSE/documents/sem2024/department/whinston.pdf.

different groups have been affected by the banks' responses to shifting preferences.<sup>32</sup> Overall, these articles tend to find that the "digital revolution" has led to more intense competition among banks, although the welfare gains may not be evenly distributed among consumers.<sup>33</sup> The growth of Fintech (and nonbank lenders more generally) has also been studied, and is considered to be an important new force in the competition for lending.<sup>34</sup>

**Special features of banking: the importance of scale and information asymmetries.**While all of the above studies apply the standard industrial organization toolkit that economists have used for decades to evaluate mergers in any industry to the banking sector, the literature has also highlighted many ways in which the banking sector is different, such that standard competitive effects analyses may not fully capture the effects of a bank merger.

At its core, banking is driven by scale economies: banks diversify risks from many different loans and provide a return on retail with reduced risk to depositors. Deposit insurance provided by the government further reduces risk exposure for consumers, a feature that is not present in other sectors. Banking is also characterized by severe information asymmetries: banks lending to business and retail customers have limited information on their risk of defaulting on loans, and banks differ in the quality of their information on the risk profile of loan applicants. For example, banks with local branches may have relationships with local businesses that result in better information.<sup>35</sup> Banking is also vulnerable to bank runs, which may be transmitted across institutions.<sup>36</sup>

A rich literature has emerged to explain how banks generate value for depositors and borrowers, and how this value depends on scale. Theoretical literature has proposed that larger banks can spread fixed costs over more borrowers,<sup>37</sup> diversify risks,<sup>38</sup> issue large loans without the information issues that arise under loan syndication,<sup>39</sup> and generate operational synergies.<sup>40</sup> But demonstrating these scale efficiencies empirically has been challenging. Variation in scale

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A rich literature has

Erica Jiang et al., Bank Competition Amid Digital Disruption: Implications for Financial Inclusion (Working Paper, Aug. 2022) at 37, https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=4178420; Charlotte Haendler, Keeping Up in the Digital Era: How Mobile Technology Is Reshaping the Banking Sector (Working Paper, Nov. 2023) at 38, https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=4287985; Kosha Modi et al., The Anatomy of Banks' IT Investments: Drivers and Implications (IMF Working Papers, No. 2022/244, Dec. 2022) at 14, https://doi.org/10.5089/9798400226076.001; Xavier Vives, Digital Disruption in Banking, 11 Ann. Rev. Fin. Econ. 243, 267 (2019).

<sup>33</sup> Naz Koont, The Digital Banking Revolution: Effects on Competition and Stability (Working Paper, Nov. 2023) at 4–5, https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=4624751.

<sup>&</sup>lt;sup>34</sup> Greg Buchak et al., Fintech, Regulatory Arbitrage, and the Rise of Shadow Banks, 130 J. FIN. Econ. 453, 454 (2018); Erica X. Jiang, Financing Competitors: Shadow Banks' Funding and Mortgage Market Competition, 36 Rev. FIN. Stud. 3861, 3862 (2023)

There is a literature documenting the "local lending" phenomenon—banks tend to offer more credit, and on better terms, to businesses closer to their bank branches. See Sumit Agarwal & Robert Hauswald, Distance and Private Information in Lending, 23 Rev. Fin. Stud. 2757, 2759 (2010); Hans Degryse & Steven Ongena, Distance, Lending Relationships, and Competition, 60 J. Fin. 231, 232 (2005). One explanation for the phenomenon is that information asymmetry is less severe as the distance between the bank and the borrower decreases. See Robert Hauswald & Robert Marquez, Competition and Strategic Information Acquisition in Credit Markets, 19 Rev. Fin. Stud. 967, 968 (2006); Andrea Bellucci et al., Do Banks Price Discriminate Spatially? Evidence from Small Business Lending in Local Credit Markets, 37 J. Banking & Fin. 4183, 4185 (2013).

One paper provides a model of bank competition that explains this transmission of shocks across the financial sector. The authors estimate a structural model in which differentiated banks compete for uninsured and insured deposits. These banks may default, and financial distress of banks affects their ability to attract uninsured deposits. The authors use this model to show that competition for deposits among banks transmits shocks from one bank to the system. See Mark Egan et al., Deposit Competition and Financial Fragility: Evidence from the US Banking Sector, 107 Am. Econ. Rev. 169, 173, 175 (2017).

<sup>37</sup> David B. Humphrey, Cost and Technical Change: Effects from Bank Deregulation, 4 J. Prod. Analysis 9, 24-25 (1993).

<sup>&</sup>lt;sup>38</sup> Douglas W. Diamond, *Financial Intermediation and Delegated Monitoring*, 51 Rev. Econ. Stud. 393, 401-03 (1984).

<sup>&</sup>lt;sup>39</sup> Victoria Ivashina, Asymmetric Information Effects on Loan Spreads, 92 J. Fin. Econ. 300, 301 (2009).

<sup>&</sup>lt;sup>40</sup> George Kanatas & Jianping Qi, Integration of Lending and Underwriting: Implications of Scope Economies, 58 J. Fin. 1167, 1168 (2003).

tends to coincide with variation in the intensity of competition (larger firms tend to be part of more concentrated and less competitive markets), and making it difficult to disentangle the size effect from the competition effect.

One recent paper uses a policy change to isolate the effects of bank size on firm performance, removing the competition channel (although the study is historical and may not reflect current conditions).<sup>41</sup> This paper focuses on relatively large banking firms in Germany in the 1950s. Banking reforms in postwar Germany, in 1952 and 1957, determined when banks across the country were allowed to consolidate from state-level banks into national banks. The study finds that consolidation did not make banks more cost efficient or result in higher profitability or growth.<sup>42</sup> Further, it finds evidence that bigger banks were less likely to lend to opaque (small, young, and low-collateral) firms—even though there is no evidence that they are riskier—and that these firms then saw lower growth. The paper notes that this is consistent with big banks failure to adequately process soft information to assess loan risk, at least in the paper's temporal and geographic setting.<sup>43</sup>

How these unique features of the banking sector come into play as merger review moves away from the formulaic approach of the Banking Merger Guidelines is unclear. The agencies will have to contend with the evidence that there are more sources of competition than there were in 1995, for example, with the emergence of digital services and nonbank lenders. In addition, it is possible that efficiency arguments will play a bigger role if the agencies challenge more mergers based on the 2023 Merger Guidelines. Because the literature is generally inconclusive on this subject, the agencies will need to evaluate efficiency arguments on a merger-by-merger basis.

## Agency approaches in other industries suggest the DOJ's potential toolkit for bank mergers

With the shift away from the structured approach of the Bank Merger Guidelines to the 2023 Merger Guidelines, the DOJ's approach to evaluating potential competitive effects could go in several different directions.

One significant change could be be the agencies' approach to market definition. Unlike the Bank Merger Guidelines, relevant markets in the 2023 Merger Guidelines (as well as previous Horizontal Merger Guidelines) can be determined by the Hypothetical Monopolist Test (HMT). The HMT proposes that a relevant market can be defined based on whether a hypothetical monopolist of all goods and services in a candidate market can impose a small but significant non-transitory increase in price (SSNIP). If it can, the HMT suggests that the candidate market can be considered a relevant antitrust market.<sup>44</sup>

Because application of the HMT is industry-specific, examples of how the DOJ may implement the HMT to bank mergers are not immediately available. However, there are industries with similarities to the banking industry that how this framework is applied.

**Overview of competitive environments of banking.** Banks provide a range of services to a variety of different consumers. Broadly speaking, these can be grouped into two categories: retail deposits, including services like savings accounts; and loans, including mortgages, car loans, and commercial loans. Banks seek deposits from consumers by, among other things,

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on a merger-by-

merger basis.

<sup>&</sup>lt;sup>41</sup> Kilian Huber, Are Bigger Banks Better? Firm-Level Evidence from Germany, 129 J. Pol. Econ. 2023, 2025 (2021).

<sup>42</sup> Id., at 2026-2027.

<sup>&</sup>lt;sup>43</sup> *Id.*, at 2027.

<sup>44 2023</sup> Merger Guidelines, supra note 1, Section 4.3.

paying customers interest (net of other fees and charges) on their deposited money. Banks lend the deposited money to borrowers, who can be individuals or commercial institutions.

Each side of a bank's business has its own idiosyncratic features, but there are several features of each service that can be used to compare banking to other industries that the agencies have reviewed under the current and past merger guidelines.

**Retail deposits.** The DOJ may consider competition for retail deposits to resemble other retail settings, such as grocery stores, office supplies, etc. In particular, retail competition in the United States is often characterized by competition based on price, quality, and convenience, such as being geographically close to customers, although the availability of online options factors into the consideration of geography. If the DOJ considers the effect of a merger on brick-and-mortar bank competition, then it could take an approach similar to how it has approached brick-and-mortar retail mergers, which also has been subject to online alternatives like Amazon.

Two retail cases in different time periods suggest how the DOJ's competitive analysis could evolve with industry trends. When challenging the merger between Staples and Office Depot in 1997, the FTC alleged that the product market was the sale of office supplies through office supply superstores. However, in allowing the merger between Office Depot and Office Max in 2010, the FTC stated that the "competitive dynamics [were] very different" compared to 1997, such that office supply superstores were losing sales to mass merchants (e.g., Target) and club stores (e.g., Costco), as well as online retailers (notably, Amazon). Amazon). Amazon of the 2023 Merger Guidelines may suggest more competition in a given market than the Bank Merger Guidelines.

Lending. In lending, application of the HMT could lead to changes in market definition relative to the default geographies and products considered by the Bank Merger Guidelines—and these definitions are likely to evolve over time. The Bank Merger Guidelines outlined a procedure approximating many different banking services using a single default product market (deposits) and predefined geographic regions. However, the DOJ may now need to address how evolving industry features affect product and geographic boundaries differently for different services. Further, the DOJ could do so separately for each bank merger based on contemporary industry dynamics, as other sources of competition (such as Fintech or online banking) become more or less important in different service lines over time.

One way in which this complexity could manifest is in the geographic extent of different lending markets. In past bank mergers, the DOJ has taken the view that lending markets tend to be local, as some factors that affect risk (such as the likelihood of success of certain types of business) may be more observable to local lenders than to lenders outside the local area. Additionally, local banks may be incentivized by laws such as the Community Reinvestment Act to focus on local lending—and, potentially, to have a better understanding of local risks as a result.<sup>47</sup>

While the DOJ is likely to continue focusing on local lending, it may face greater complexity in defining how local different types of loans are—or challenges to the assumption that nonlocal

First Amended Complaint, Federal Trade Commission v. Staples, Inc. et al., Case No. 1:97-CV-00701 (D.D.C. Apr. 10, 1997), https://www.ftc.gov/sites/default/files/documents/cases/1997/04/staples2.pdf. See also FTC v. Staples, Inc., 970 F.Supp. 1066 (D.D.C. 1997).

Statement of the Federal Trade Commission Concerning the Proposed Merger of Office Depot, Inc. and OfficeMax, Inc., FTC File No. 131-0104, Nov. 1, 2013, https://www.ftc.gov/sites/default/files/documents/closing\_letters/office-depot-inc./officemax-inc./131101officedepotofficemaxstatement.pdf.

<sup>&</sup>lt;sup>47</sup> 12 USC Ch. 30, § 2901.

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loan options are only a limited substitute for local bank branches. For example, Fintech firms may play a greater or lesser role in certain types of loans, or even in loans to different types of customers, in some cases potentially placing a strong competitive constraint on banks. To capture that complexity, the DOJ may decide to examine factors such as geography, type of loan, or borrower characteristics when investigating how consumers might differ in their ability to access substitutes for services provided by both of the merging parties.

Delineation by type of loan product has been conducted internationally and may provide insight into how the U.S. antitrust agencies may begin to think about relevant markets for banking mergers outside the Bank Merger Guidelines. The Australian Competition and Consumer Commission (ACCC), which does not have separate guidelines for banking mergers, published a public competition assessment for the merger between two Australian banks, Westpac Banking and St. George Bank (which the ACCC decided not to oppose). In the Public Competition Assessment explaining its decision, the ACCC alleged separate markets for different loan products, and sometimes different loan products in different geographies: alleged relevant markets included credit cards, home loans, personal loans, hybrid personal loans, equipment finance, small to medium enterprise (SME) banking in New South Wales, SME banking in South Australia, agribusiness banking in New South Wales, and agribusiness banking in South Australia. The DOJ could take a similar approach in seeking to define markets based on product type, geography, and type of customer.

The DOJ may also consider banks' ability to individualize interest rates and other loan terms. Specifically, the 2023 Merger Guidelines suggest that "if prices are . . . set individually . . . there may be relevant markets that are as narrow as an individual customer" (although, for analytic convenience, the agencies often define relevant markets around broader groups of targeted customers for whom competitive conditions are similar).<sup>50</sup>

The DOJ has defined markets based on the ability to price discriminate in past merger reviews. For example, when the DOJ challenged the merger between Dairy Farmers of America and Dean Foods, it alleged that fluid milk producers can engage in price discrimination, such that the "relevant geographic market for the processing and sale of fluid milk is a region within which customers can be targeted for a price increase." <sup>51</sup> The DOJ alleged two relevant markets based on the ability to target price increases: (1) Northeastern Illinois and Wisconsin; and (2) New England, which included Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. <sup>52</sup> Ultimately, the DOJ and the merging parties agreed to a divestiture of assets that allowed the merger to proceed. <sup>53</sup>

The agencies may also consider delineating relevant markets by types of customers. For example, the FTC has differentiated between types of buyers in markets for healthcare services, where firms selling commercial insurance (usually to employers) negotiate prices separately from firms providing insurance through government programs like Medicare, where pricing negotiations are

Westpac Banking Corporation—Proposed Acquisition of St. George Bank Limited, Australian Competition & Consumer Commission (Aug. 13, 2008), https://www.accc.gov.au/system/files/public-registers/documents/D08%2B80554.pdf.

<sup>&</sup>lt;sup>49</sup> *Id.* at 5–10.

<sup>&</sup>lt;sup>50</sup> 2023 Merger Guidelines, *supra* note 1, at 44.

<sup>&</sup>lt;sup>51</sup> Complaint, *United States of America et al. v. Dairy Farmers of America, Inc. et al.*, Case No. 1:20-cv-02658 (N.D. III. May 1, 2020), https://www.justice.gov/atr/case-document/file/1279226/dl.

<sup>&</sup>lt;sup>52</sup> Id

Final Judgment, *United States of America et al. v. Dairy Farmers of America, Inc. et al.*, Case No. 1:20-cv-02658 (N.D. III. Oct. 6, 2020), https://www.justice.gov/atr/case-document/file/1326186/dl?inline.

subject to different rules.<sup>54</sup> The FTC has frequently alleged product markets consisting of the sale and provision of inpatient general acute care services to commercial insurers and their enrollees when challenging hospital mergers.<sup>55</sup> The DOJ could similarly define relevant markets for bank mergers around specific types of loans for different types of customers.

**Application of Guidelines 2, 3, and 8.** The 2023 Merger Guidelines also go beyond the definition of relevant markets and the calculation of market shares to assess competition. They offer 11 non-mutually exclusive Guidelines (increase in concentration in highly concentrated market is addressed in Guideline 1) that the agencies may use to evaluate whether a merger is anticompetitive. The 2024 Banking Addendum to the 2023 Merger Guidelines lists several Guidelines in addition to Guideline 1 that could be relevant to a bank merger. This section explores how the DOJ may apply Guidelines 2, 3, and 8 to banking mergers.

Guideline 2 is similar to the analysis proposed in Section 2 of the Banking Merger Guidelines. Analyzing past mergers in other industries may inform how the agencies, particularly the economists, could look at this. For example, in Whole Foods/Wild Oats (2007), the FTC's expert used store entries and exits to understand whether competition between the merging parties, as well as other potential competitors, such as traditional grocery stores, had an effect on prices, margins, or quantity.<sup>56</sup> In a similar manner, the DOJ may consider conducting an analogous exercise based on branch openings and closures and examine the effect on interest rates or deposits, which can be used to evaluate the extent to which the merging banks compete.<sup>57</sup> The DOJ may also need to grapple with evidence the merging parties may produce using entry and exit to demonstrate greater competition from rivals or broader markets than those proposed by the DOJ.

Guideline 3 considers the possibility that decreased competition may encourage the remaining market participants to collude in ways that harm consumers. The ACCC considered coordination as a possible competitive effect in its denial of the ANZ/Suncorp merger,<sup>58</sup> although its denial was reversed by the Australian Competition Tribunal.<sup>59</sup> The ACCC's view was that the acquisition would create parity between the four largest banks in Australia (ANZ, Commonwealth Bank, NAB, and Westpac) in home loans and reduce product differentiation through ANZ's funding base, which, in combination with the high barriers to entry and the cost and scale advantages of the four largest

<sup>&</sup>lt;sup>54</sup> Cory Capps et al., *The Continuing Saga of Hospital Merger Enforcement*, 82 ANTITRUST L. J. 441-496 (2019).

<sup>55</sup> Overview of FTC Actions in Health Care Services and Products, FEDERAL TRADE COMMISSION (July 2024) at 51-61, https://www.ftc.gov/system/files/ftc\_gov/pdf/Overview-Healthcare.pdf.

Expert Report of Kevin M. Murphy, Federal Trade Commission v. Whole Foods Market, Inc. and Wild Oats Markets, Inc., United States District Court for the District of Columbia, Civ. No. 1:07-CV-01021 (D.D.C. July 9, 2007), https://www.ftc.gov/sites/default/files/documents/cases/2007/08/070823murphy.pdf. The district court initially denied the FTC's motion for a preliminary injunction, but the U.S. Court of Appeals for the D.C. Circuit reversed the district court's opinion. The FTC and the merging parties eventually settled through divestiture. See "FTC Consent Order Settles Charges that Whole Foods Acquisition of Rival Wild Oats was Anticompetitive," Federal Trade Commission Press Release (Mar. 6, 2009), https://www.ftc.gov/news-events/news/press-releases/2009/03/ftc-consent-order-settles-charges-whole-foods-acquisition-rival-wild-oats-was-anticompetitive.

<sup>&</sup>lt;sup>57</sup> Other exercises using detailed customer-level information from all potential market participants can potentially be used in a full-fledged investigation. *See* Daniel Hosken & Steven Tenn, *Horizontal Merger Analysis in Retail Markets*, in Handbook on the Economics of Retailing and Distribution (2016). *See also* Paul B. Ellickson et al., *Measuring Competition in Spatial Retail*, 51 RAND J. Econ. 189–232 (2020).

Reasons for Determination: Application for Merger Authorisation, Australian Competition & Consumer Commission (Aug. 4, 2023), https://www.accc.gov.au/system/files/public-registers/documents/Reasons%20for%20determination%20-%2007.08.23%20-%20 PR%20-%20MA1000023%20ANZ%20Suncorp.pdf.

Australian Competition Tribunal, Applications by Australia and New Zealand Banking Group Limited and Suncorp Group Limited, Feb. 20, 2024, at ¶ 1-2.

banks over other smaller banks, could reduce competition in home loans through coordinated effects. 60 However, the parties' appeal to the Australian Competition Tribunal was successful in part because the Tribunal determined that greater use of brokers in home loans made it easier for customers to switch lenders and lowered the barriers to entry, reducing the potential for coordinated effects. 61 Similar facts may arise in the analysis of coordinated effects in the United States, as, for example, the availability of online services that assist in finding loans may reduce opportunities for coordination.

Guideline 8 could also apply to bank mergers that would have been cleared under the Bank Merger Guidelines, should circumstances arise in which a bank makes multiple acquisitions in the same region. For example, the FTC's complaint in its recent challenge of U.S. Anesthesia Partners' (USAP's) consolidation of anesthesia practices throughout Texas alleges that USAP's "roll-up" resulted in high concentration, such that its "cumulative acquisitions in Dallas . . . resulted in a post-transaction HHI exceeding 2,500, with an increase in HHI of more than 200,"62 which were the thresholds for a presumptive increase in market power in the 2010 Horizontal Merger Guidelines.

#### Conclusion

The DOJ's retraction of the 1995 Bank Merger Guidelines and adoption of the 2023 Merger Guidelines gives the DOJ more flexibility to move in new directions when considering bank mergers. Even if the new administration chooses to go in a different direction from the 2023 Merger Guidelines, the DOJ may still choose to make use of a more varied economic toolkit in evaluating bank mergers, supported by the academic literature since 1995 and the DOJ's and FTC's past dealings with mergers in industries with similar characteristics. However, there remains substantial uncertainty over whether this will lead to in-depth review of, challenges to, or requests for remedies in more or fewer transactions, especially since the change in administration may lead to a shift in policy direction and, conceivably, a new set of merger guidelines.

Reasons for Determination: Application for Merger Authorisation, Australian Competition & Consumer Commission (Aug. 4, 2023) at, 7-9, https://www.accc.gov.au/system/files/public-registers/documents/Reasons%20for%20determination%20-%2007.08.23%20-%20 PR%20-%20MA1000023%20ANZ%20Suncorp.pdf.

<sup>&</sup>lt;sup>61</sup> Australian Competition Tribunal, Applications by Australia and New Zealand Banking Group Limited and Suncorp Group Limited, Feb. 20, 2024. at ¶¶ 546–551.

<sup>&</sup>lt;sup>62</sup> Complaint for Injunctive and Other Equitable Relief, Federal Trade Commission v. U.S. Anesthesia Partners, Inc. et al. (S.D. Tex. Sep. 21, 2023) ¶ 278, https://www.ftc.gov/system/files/ftc\_gov/pdf/2010031usapcomplaintpublic.pdf.