



## **Big-Bank Market Power: Myth, Reality, and the Way Forward**

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- All big-bank mergers are not good big-bank mergers, but the analytics policymakers now use to pick and choose are profoundly flawed.
- Merger and deposit-pricing policy without a forward-looking understanding of market reality is policy that ensures unregulated finance that will be anything but competitive, safe, sound, or equitable.
- Most merger and deposit-pricing research reaches conclusions based on decades-old banking markets and/or focuses on traditional concentration measures that omit new competitors and products.
- Most merger and deposit-pricing research also fails to factor qualitative considerations such as economic opportunity, the difference between products backed by FDIC insurance and like-kind offerings, and/or the extent to which network effects have become a deciding factor in customer service and financial stability.
- Where there is new research, it often sharply contradicts old assumptions about big-bank market power, who is best served in banking markets, and how deposits are priced when rates rise.
- As a result, new bank merger policies and transaction reviews require substantive, structural, and immediate overhaul.

What a pleasure to be back in person to again kick off your conference. As always, you've got a formidable line-up of lawyers and key officials, and I won't even try to tread on the ground Rodge Cohen will as always lay out so clearly later this morning. Instead, let me go above the vital legal details to focus on two top-of-mind strategic challenges: whether big banks have undue market power and, if so, if this must be circumscribed by means of merger restrictions, deposit-pricing mandates, an end to banking consortia, or other market-bending policy interventions.

I don't need to tell you that many policymakers see little benefit to all but the tiniest of bank mergers or to any commingling of banks with nonbanks. Some also believe that the reason deposit rates lag interest-rate hikes is because banking has too much market power, market power that must be knocked down as quickly as possible.

There could be much to these conclusions, but none I know of is backed by any substantive, thorough, and – perhaps most importantly – current third-party research. Decisions about deals pending now and those to come are thus being made in an analytical vacuum. This may well be dangerous to a truly competitive banking market that ensures safety, soundness, and equity in a financial system heading outside the regulatory perimeter with the speed and force of one of Jeff Bezos' rocket-ships.

### ***The First Question: Is Banking Now an Oligarchy?***

A new staff study from the Federal Reserve Bank of Chicago thinks so.<sup>1</sup> I have more than a few questions about the methodology behind this model-driven study, but its conclusion is echoed – albeit in somewhat more tempered wording – in President Biden's executive order setting Administration competition policy,<sup>2</sup> the FDIC's request for comment on merger policy,<sup>3</sup> cautionary words from Vice Chairman Barr<sup>4</sup> and Acting Comptroller Hsu,<sup>5</sup> Treasury's plans to allow nonbanks into the payment system to increase competition,<sup>6</sup> and pretty much anything CFPB Director Chopra says about big banks and consumer finance. The same is of course true of comments from House Financial Services Chairwoman Waters – she wants a moratorium on mergers of banking organizations over \$100 billion – and most progressive Democrats on the Senate Banking Committee, who seem to want pretty much no bank mergers at all.

How best to deal with this powerful consensus that most of you doubtless think fails to comport with fact? As a recent speech from Fed Governor Michelle Bowman made clear,<sup>7</sup> the current measures of the banking industry "oligarchy" actually misread an industry that is a shadow of what it was when standard statistical and econometric measures of competition were derived. What's more, much of the research on which critics rely on to argue that banking markets are unduly concentrated often dates back to the 1990s during a wave of intra-industry consolidation or studies banking well before the explosion of nonbank competitors after 2010. In fact, the most recent research suggests that communities with merged banks do considerably better thereafter, judged by important measures of what I think is a more meaningful way to think about consumer and social welfare than econometric constructs: how the banking system works for its customers – especially those most in need of safe and sound financial services – and the extent to which it fosters economic growth and stable financial markets.

By some measures – i.e., who holds how many insured deposits – banking may seem concentrated; by others that also judge who takes consumer funds in deposit-like ways without the essential protections of bank regulation and FDIC insurance, the market is not only less concentrated, but also a lot riskier to savers and, indeed, pretty much everyone else. Policymakers thus cannot make sound merger calls without better market-concentration measures that judge the economic-equality and financial-stability

impact of mergers after taking into account not only who offers which products, but also whether these nonbank products enhance competition without doing the same for risk.

Research as well as observation substantiate the need for revised market-concentration measures. For example, a 2021 study goes beyond past research first by analyzing virtually all U.S. bank M&A, rather than sub-samples or single products, doing so from 1998 through the great financial crisis up to 2016.<sup>8</sup> It updates much now-anachronistic research about bank-to-bank M&A. Even more importantly, this paper puts bank M&A in the context of the actual marketplaces in which M&A takes place to determine how different types of deals affect different markets with regard not only to other banks, but also to critical social-welfare considerations.

This paper concludes that larger-bank M&A “equilibrates markets”<sup>9</sup> with no clear cost-benefit impact for customers in terms of either deposit pricing or loan competition because rivals to the newly merged bank absorb market costs and supply services terminated by the new bank. Indeed, the paper finds that, on balance, bank M&A correlates with positive welfare changes when these are measured by median income, unemployment, payroll, poverty rate, and new housing.<sup>10</sup>

Another study finds more competitive banking markets (here judged only by the number of banks) are associated with more lending, but only for the larger businesses (e.g., commercial real estate) within the small-business sector.<sup>11</sup> The reason for this is that more small banks result in less risky lending because larger commercial real estate borrowers are found to be better credit risks. This study deems this a successful outcome that argues for stringent bank-merger restrictions, but another interpretation would be that the absence of banks with economies of scope and scale diminishes the ability of the banking sector to engage in the higher-risk, smaller-balance lending essential to social welfare and racial equity. The shift in small-bank lending from small businesses to larger commercial real estate loans in the absence of larger banks may well be the reason the 2021 study cited above finds that, when conventionally judged, more concentrated banking markets further an array of important social-welfare outcomes.

Further, virtually all bank-merger and, indeed, most overall merger research fails to consider the extent to which any identified, adverse merger consequences could be readily corrected by banking regulators with significant power over how many charters compete within the regulatory perimeter on what terms. Where there is research on this key differentiating point between bank and nonbank mergers, results warrant careful consideration.

For example, one study of horizontal bank mergers – i.e., when banks acquire banks rather than nonbank providers of banking services – raises important questions about the role of regulation.<sup>12</sup> Like another study,<sup>13</sup> it finds that horizontal bank mergers in highly-concentrated markets generally reduce pre-merger concentration because new banks enter the market. There has indeed been a significant drop in the number of de novo bank charters since the great financial crisis,<sup>14</sup> but is this due to mergers? This is a market change even the FDIC attributes in part to post-crisis rules only recently relaxed<sup>15</sup> that imposed costly capital requirements over the first few years of a new bank's operations. Combined with the full weight of post-crisis bank rules, it has proven difficult for start-up banks hoping to provide financial-intermediation services within the regulatory perimeter to attract investors. I know this from our practice – every investor group we've advised in recent years interested in starting a bank has decided not to. As a result, post-2008 market concentration judged only by looking at banks in the wake of bank-to bank mergers may in part be an artifact of post-crisis rules constraining new-bank entry. No wonder many smaller banks increasingly see a future only as nonbank facilitators, portals, or financiers.

It is also difficult to infer the impact of bank mergers from general antitrust literature, which focuses on sectors such as technology where there is little regulation or on telecommunications, where regulation is now generally limited to spectrum and related considerations. However, a recent study assessing the role of regulation in vertical mergers concludes that regulation is a critical factor to determine the extent to which a merger does or does not provide anticipated public-welfare benefits.<sup>16</sup> This study thus argues that competition analysis in regulated sectors cannot effectively anticipate the impact that a merged entity will have on its market unless it takes account of how the merged entity is or could be governed to prevent anti-competitive behavior.

Is this a selective study of bank mergers? To be sure, it's abbreviated, but I've pointed to studies that counter conventional wisdom because they point to the importance of carefully considering bank mergers on each transaction's benefits before condemning them all. I would cite research surveys to suggest broad conclusions, but I've found only one. It dates to 2009 and thus looks principally at the period of wildfire of intra-industry consolidation, but still reaches no conclusions about the impact of mergers on market competition or consumer welfare because, it says, no clear trend was found.<sup>17</sup> A 2021 Congressional Research Service study of bank mergers also finds significant intra-industry competition, suggesting benefits of mid-sized mergers without taking a stand on still-larger ones.<sup>18</sup>

### ***Second Question: Does This Research Mean Bank Mergers are All to the Good?***

Of course not. There is no question that concentrated markets are malfunctioning markets.<sup>19</sup> We also know that over-concentrated markets adversely affect economic equality.<sup>20</sup> Given this and the vital importance of a functioning banking market for a functioning, equitable economy, any merger, acquisition, consortium, or affiliation that increases market power judged by modern quantitative and qualitative analytics should be modified or barred.

This is easier to say than to do. As even my brief research summary makes clear, the quantitative thresholds used to judge banking-sector transactions are at least a decade out of date. Sectors that have long been the exclusive province of regulated banks – mortgages, mid-market corporate finance, and small business lending to take just a few – have moved outside the regulatory perimeter to nonbank originators, fintech, and even bigtech platforms. A recent Federal Reserve study finds that there are now hundreds of ways around the safety-and-soundness regulatory perimeter,<sup>21</sup> concluding not only that skillful firms can “choose some forms of regulation over others,” but also that the perimeter fails to keep firms outside of it from engaging in bank-like activities without like-kind regulation and supervision. Further, products within at least some regulatory perimeters – money-market and mutual funds, for example – are not covered by most safety-and-soundness rules yet offer deposit-equivalent products as is increasingly recognized as regulators grapple with “cash equivalent” investment funds.<sup>22</sup> Many entities now counted as service providers – payment processors, for example – also directly compete with banks, leaving them only slivers of market sectors banks once dominated, such as mortgages<sup>23</sup> even though the HHI, “Lerner Index,” and other concentration measures never consider them at all when computing bank market power.

Clearly, the best criterion in judging a bank merger is the extent to which it actually concentrates a market as that market exists now and is likely to come. No quantitative measure of market concentration of which I am aware has yet to do so. The Fed does take some qualitative factors into consideration – e.g., CRA performance and, to a lesser extent at least so far – managerial competence, but no transaction that

hits current quantitative thresholds is approved even though these thresholds measure little if anything of meaning to the market as it is now configured.

The Department of Justice and Federal Trade Commission recently sought and then received extensive comment on how to incorporate qualitative factors into merger analytics.<sup>24</sup> I believe the Fed is taking these considerations increasingly into account, but I'm not so sure about that nor do I think the OCC and FDIC have yet done so. The CFPB plays no de jure role in merger approval, but Rohit Chopra's seat on the FDIC board and his tremendous de facto impact on financial policy means that his views matter. Again, these seem influenced more by old-school measures than by qualitative criteria judging critical equality and stability considerations.

The only current exception to the current "quant-plus-CRA" construct is financial stability. The furor over the ouster of Jelena McWilliams at the FDIC drowned out an important contribution Mr. Chopra and now-Acting Chairman Gruenberg made to merger analytics: an express and modern focus on financial stability.<sup>25</sup> The Fed is also now keenly focused on financial stability, with all of the agencies recently deciding to heed Acting Comptroller Hsu's worries about super-regional bank resolvability.<sup>26</sup>

This is a vital development not only because bank mergers can and indeed must be judged by resolvability, but because it's also critical to ensure that resolvability comes at the expense of bank management and shareholders – not just depositors, vulnerable counterparties, consumers, or the economy. The FDIC wasn't ready for WaMu in 2008 even though signs of risk were as evident for it as for Countrywide. The shotgun marriages that "resolved" these companies turned out to be far costlier than timely resolution, as indeed was the case across the banking sector in the great financial crisis, but the FDIC and Fed thought they had no choice but to encourage these deals as well as quickly to rescue nonbanks that could somehow be squeezed into BHC charters to get them ASAP access to Fed liquidity support.

However, the sorry events of the great financial crisis aren't the result of undue market concentration, but rather the fault of the FDIC and the other supervisory agencies to see trouble coming. I know this because I warned Sheila Bair about both WaMu and Countrywide in late 2006 and she saw no worry because, she said, neither did any primary supervisors. These supervisors looked the other way as companies got away with what truly turned out to be financial-system murder. Although the Office of Thrift Supervision was the worst regulator by far and maybe ever, the banking agencies pretty much all missed clear signs of looming danger. This was the era of "light-touch" supervision and devout belief in market discipline's power to ensure good behavior – huge mistakes to be sure, but mistakes that had little to do with merger policy.

But that was 2008 and now it's of course fourteen years later. Many of you have kids that you didn't then and those of you that did, do no longer. Of course, regulatory and supervisory policy is wholly more scrupulous. However, the FDIC's rules for handling a troubled insured depository are no better than they were. Over-arching resolution plans now make a single-point-of-entry resolution far more likely for all of your banks, but the fate of the insured depository is still all too uncertain. One reason for this is the statutory "least-cost" test that forced the FDIC to bail out bad banks in 2008 and could mandate this all over again in 2022 and beyond.<sup>27</sup> The FDIC's request for views on bank mergers suggested revisions to the least-cost test, but it should have brought this up long ago. That the Fed and FDIC in 2008 handled troubled IDIs via consolidation isn't the fault of merger policy – it's the fault of resolution law and the agencies not to spot this soon enough to do something to fix it.

### ***Third Question: Are Mergers All That's the Matter?***

I mentioned a moment ago that ill-designed judgements of market concentration may well capture more than bank mergers. As a result, a proper understanding of financial-market competition has implications also for several other charters and strategic relationships. In the interest of time, I'll run quickly through these, but let me anticipate a point I know you'll raise: that all of these industry structures have so far been blessed under current antitrust law. Yes, I know – the issue here is “so far” and thus the strategic factor is not what is, but what might be when the next as transactions arise or related decisions are made. As you know, a lot that was once blessed under antitrust law has become anathema to those now determining absolution.

As you all also know, affiliations with significant cross-ownership may not constitute “control” under rules revised in 2020 to provide a more flexible definition of control<sup>28</sup> and thus of when a transaction requires Fed review and might come under antitrust scrutiny by other agencies. The Fed has too much on its hands now to rewrite rules so far below Sen. Warren or Rohit Chopra's radar, but the nonbank parties to these transactions may well be within the Federal Trade Commission's ambit even if a transaction doesn't appear now to rise to the level of a merger or acquisition. Innovative alliances between banks and nonbank firms, and most especially tech-platform companies, that gain public attention could quickly attract public notoriety.

I also think banking-industry consortia could face renewed antitrust scrutiny. Zelle is the first with its head on this chopping block because it is indeed notorious at least as far as Sen. Warren and her Democratic colleagues, Rohit Chopra, and a good deal of the media are concerned. In a recent request for information on mortgage banking,<sup>29</sup> the CFPB argued that “transparent and competitive” markets ensure certain rights with regard to refinancings. I am positive that competition will be cited when the CFPB tackles bank liability for scam transactions, but it might well go farther and press not just for consumer redress, but also for payment-system redesign. If it does, count on the FTC to back him up.

Could The Clearing House be next? I doubt it because it has many small-bank customers even though it's big-bank owned. It's also a financial-market utility under Fed regulation and thus an entity about which it's hard to cast safety-and-soundness aspersions. However, the Treasury Department in its recent crypto policy pronouncements said that it wants nonbanks in the payment system because it believes this, likely along with a CBDC, will cut big banks down to what it thinks is a more desirable size. FedNow is the obvious answer to challenges to TCH – and so Treasury also says – but who knows where this will go if Treasury takes the President's competition mandate still more seriously.

### ***Fourth: Will Deposit-Pricing Decisions Prove Problematic?***

As interest rates increase, so too do questions about why deposit rates have yet to meaningfully do so at most of the nation's banks. Typically, deposit “sluggishness” is a sign of market power, and don't think the CFPB doesn't know this. Rohit Chopra has said that the U.S. banking market is neither fair nor competitive because families must “pay large banks for the privilege of holding their money,”<sup>30</sup> also arguing that banks short-change consumers on their savings accounts.<sup>31</sup>

And no wonder. As with much about the construct of U.S. banking in 2022 and beyond, academic and governmental research on how banks set deposits is often premised on data and/or models made inapplicable by the rapid pace of regulatory change and/or market evolution. Although so far ignored by

policymakers, the most recent research is happily beginning to deal with this, showing considerable evidence of the trade-off between deposit pricing and loan costs, the risks depositors may run, and the impact of new competitors. This research makes it still clearer that a one-size-fits-all conclusion about the social- and public-welfare benefits of bank consolidation is at best outdated.

I'll return to a fundamental question in a moment, but let me raise it here: if not banks, then who should be allowed to compete for consumer funds and thus for the financial fuel of economic growth? Market-power analytics seeking to maximize social and public welfare by allowing nonbanks to take deposits or offer deposit-like products need to consider qualitative factors such as the extent to which seemingly sticky deposits are also very safe deposits compared to other market offerings. Some competitors may well pay higher rates for these funds, but does the depositor now turned into an investor get the same product?

Importantly and so far omitted from merger policy, market reality is also no longer confined to mergers in which banks buy other banks; now, nonbanks acquire insured depositories in increasingly large transactions such as the 2022 acquisition allowing SoFi to become a \$5.3 billion bank.<sup>32</sup> There is also a sharp increase in the pace at which credit unions are acquiring small to mid-sized banks in order to realize greater profitability under the credit-union charter, which does not mandate the same safety-and-soundness rules applicable under banking law.<sup>33, 34</sup>

Further, many assertions about market power assume that large banks use the clout they are presumed to have by virtue of market concentration always to lag rising deposit rates. However, during the great financial crisis of 2008, bank rates generally also lagged behind the sharp drop in market rates resulting from ultra-accommodative Federal Reserve policy.<sup>35</sup> This remained the case over the last decade or so on savings deposits given the operational cost of managing deposits, regulatory requirements, and low loan demand.

Interestingly, European banks generally continued to pay retail depositors a small nominal rate throughout the 2010s and the early years of this decade even though interest rates in their countries fell below zero in both nominal and real terms.<sup>36</sup> Although many of these national-champion banks truly have oligopolistic market power, it is clear that, at least in these nations, concentration does not necessarily align with harm to small depositors. Broader interests, such as ensuring continuing financial intermediation and franchise value, may instead prevail.

Happily, the latest bank-merger research increasingly adopts an important perspective: that of the depositor and his or her community, not just that of banks or the quantitative measurement tools which economists use to measure the degree of market competition. In the past, this approach was necessitated to at least some extent by the lack of account-level data. Now, it isn't.

Adding to the community-focused research cited above noting community-development benefits following bank mergers,<sup>37</sup> a 2022 paper adds a quantitative element to these and other findings that runs counter to older, conventional thinking. It is authored in part by researchers within the Federal Deposit Insurance Corporation and is thus able unlike any other paper to date to base its findings on over 800,000 individual insured savings deposits at over 500 community banks over the past two decades.<sup>38</sup> Its findings are that bank mergers have no demonstrable adverse competition impact judged by deposit pricing, with lower rates instead linked to better bank safety and soundness.

Unlike most prior research, this paper is also careful with regard to the deposits it studies – insured certificates of deposit (CDs). This is a homogeneous product with few variations due to a bank's size or market and the paper is thus able to isolate findings about interest-rate spreads from offsetting pricing factors (e.g., low or high fees, minimum-balance requirements). It also validates its findings about this deposit class with data runs on transaction and uninsured accounts, providing robustness checks as well as often-tantalizing findings that conflict with prior research without this methodological rigor. It also targets its focus to banks with less than \$10 billion to reflect concern that these institutions and their depositors are the most at risk due to increasing banking-sector consolidation.<sup>39, 40</sup>

Unlike virtually all other studies, these FDIC researchers also recognize that big banks have non-deposit funding sources and thus may need deposits less than community banks. In fact, when big banks lower rates, community banks are able to hold on to their funding at lower spreads than when community banks compete only with each other, making big-bank competition a net positive when it comes to deposit pricing from a community-bank perspective. The study attributes lower spreads in the presence of credit unions to member and public perception of these institutions.

### ***Finally, What If There Are No Big-Bank Mergers?***

We know that big mergers can be bad mergers from our everyday experience in an array of economically critical sectors, but none of these sectors is as regulated as banking in terms of charter and licensing opportunity, the cost of doing business, and community obligation. As a result, great care needs to be taken when extrapolating overall merger analysis about the “curse of bigness” to regulated banks.<sup>41</sup>

We also think we know that very big bank mergers are super bad mergers because it seems that market concentration created hegemonic banks that toppled the global financial system in 2008. But we don't actually even know that. Banking-system risk then was at least as much an artifact of ill-advised supervisory and regulatory policy combined with the FDIC's unwillingness and then inability to force resolutions early enough and painful enough to reinstate meaningful market discipline. The great financial crisis also wasn't all the fault of very big banks and their really bad supervisors – you all know this as do American taxpayers.

I think it's likely still a bad idea to let JP Morgan acquire Bank of America or vice versa, whether this is due to undue market power – only a maybe even for these behemoths given giant nonbanks – or more likely because banks that big are fiendishly hard to manage and resolve under acute stress. It's a lot harder to make this gut call, though, when it comes to “super-regionals” and all of the banks above the \$100 billion tailoring threshold.<sup>42</sup>

I haven't the time this morning to prove my next point – modern financial services depend on network effects – but I think you and most others will easily acknowledge this as digitalization takes over so much of our daily lives and most financial-system infrastructure. The very biggest banks can likely muster these network effects even in the face of the bigtech network-effect masters, but this is less certain for mid-sized regional banks.

Small banks may need fewer network effects to thrive, perhaps allowing them to be masters of the “relationship banking” Rohit Chopra believes critical to banking-system equity.<sup>43</sup> However, it's far from clear that small banks can provide relationship banking to everyone who wants it nor that their ability to offer relationship banking will translate into low-cost service options for all the financial products with

minimal need for hands-on customer contact – e.g., deposit-taking and bill payment. Indeed, banks that focus on relationship banking may do so because their business model targets wealth management and business customers, not the lower-income households who for whom essential, sound banking services are a vital economic safety net.

If bank-merger policy automatically sanctions all but the smallest transactions, then it is likely that the biggest banks will grow still bigger via organic growth in an increasingly narrow range of activities in which the cost of regulation is not a new curse of bank bigness in the face of bigtech goliaths. Well-managed smaller banks with true relationship-banking competence and the ability to serve markets that need these hands-on offerings will also do well, but a huge gap will emerge in the middle of a small number of big charters at one end of a barbell and a lot of small charters at the other. This gap will surely be filled by agile nonbank firms that can run rings around regulated banks not only because regulated companies have cautious cultures, but also because regulated companies should have cautious cultures and these firms aren't regulated so they don't. All firms should be cautious when operating with an increasing implicit guarantee of Federal Reserve support under market stress along with the ability to exploit explicit taxpayer subsidies via opportunistic "partnerships" with regulated banks, but they don't – at least not yet.

Merger policy without a forward-looking understanding of market reality is merger policy that ensures unregulated finance that will be anything but competitive, safe, sound, or equitable. Merger analytics that defend deals in the old context of HHIs and CRA have yet to tackle the new market and thus may founder under determined efforts to cut big banks down to some sort of size, throttling the transactions your banks need to generate network effects and make relationship banking not just an ideal, but also part of a profitable company with a wide range of services across communities as a true whole.

Research shows the need for new merger analytics. My suggestion today is that banks that seek to expand the need to persuade policymakers to do the same.

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<sup>2</sup> Executive Order 14036 of July 9, 2021, "Promoting Competition in the American Economy" *Federal Register* 86 no. 132, <https://www.govinfo.gov/content/pkg/FR-2021-07-14/pdf/2021-15069.pdf>.

<sup>3</sup> Federal Deposit Insurance Corporation (FDIC), "Request for Information and Comment on Rules, Regulations, Guidance, and Statements of Policy Regarding Bank Merger Transactions," 12 C.F.R. § 225 (2022) <https://www.govinfo.gov/content/pkg/FR-2022-03-31/pdf/2022-06720.pdf>.

<sup>4</sup> Vice Chair for Supervision Michael S. Barr, "Making the Financial System Safer and Fairer," (speech, Washington, D.C., September 7, 2022), *Board of Governors of the Federal Reserve System (FRB)*, <https://www.federalreserve.gov/newsevents/speech/barr20220907a.htm>.

<sup>5</sup> Acting Comptroller of the Currency Michael J. Hsu, "Remarks Before the Wharton Financial Regulation Conference 2022: Financial Stability and Large Bank Resolvability." *OCC*, (speech, April 1, 2022), <https://occ.gov/news-issuances/speeches/2022/pub-speech-2022-33.pdf>.

<sup>6</sup> U.S. Department of the Treasury, "The Future of Money and Payments: Report Pursuant to Section 4(b) of Executive Order 14067," (September 2022) <https://home.treasury.gov/system/files/136/Future-of-Money-and-Payments.pdf>.

<sup>7</sup> Governor Michelle W. Bowman, "Large Bank Supervision and Regulation," (speech, Washington, D.C., September 30, 2022), *FRB*, <https://www.federalreserve.gov/newsevents/speech/bowman20220930a.htm>.

<sup>8</sup> Leonid Pugachev, "Market Deposit-Loan Imbalances and Bank M&A Outcomes," *Rochester Institute of Technology*, (August 31, 2021), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3916274](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3916274).

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<sup>9</sup> *Ibid.*

<sup>10</sup> *Ibid.*

<sup>11</sup> Jack Liebersohn, "How Does Competition Affect Bank Lending? Quasi-Experimental Evidence from Bank Mergers," *MIT Sloan School of Management*, (December 2, 2017), [http://web.mit.edu/liebers/www/liebersohn\\_jmp.pdf](http://web.mit.edu/liebers/www/liebersohn_jmp.pdf).

<sup>12</sup> Robert M. Adams, Richard L. Johnson, and Steven J. Pilloff, "Market Structure after Horizontal Mergers: Evidence from the Banking Industry," *Review of Industrial Organization* 35(3), 217-231 (November 2009), available at <https://www.jstor.org/stable/41799519>.

<sup>13</sup> Allen N. Berger, Seth D. Bonime, Lawrence G. Goldberg, and Lawrence J. White, "The Dynamics of Market Entry: The Effects of Mergers and Acquisitions on Entry in the Banking Industry," *Journal of Business* 77(4), 797-834 (October 2004), available at [https://scholarcommons.sc.edu/cgi/viewcontent.cgi?article=1007&context=fin\\_facpub](https://scholarcommons.sc.edu/cgi/viewcontent.cgi?article=1007&context=fin_facpub).

<sup>14</sup> Roisin McCord, Edward Simpson Prescott, and Tim Sablik, "Explaining the Decline in the Number of Banks since the Great Recession," *Federal Reserve Bank of Richmond Economic Brief* 15(3), 1-5 (March 2015), available at [https://www.richmondfed.org/~media/richmondfedorg/publications/research/economic\\_brief/2015/pdf/eb\\_15-03.pdf](https://www.richmondfed.org/~media/richmondfedorg/publications/research/economic_brief/2015/pdf/eb_15-03.pdf).

<sup>15</sup> FDIC, "FDIC Issues Procedures for Deposit Insurance Applications from Applicants that are Not Traditional Community Banks," *FDIC Financial Institution Letter (FIL) 08-2020*, (February 10, 2020), <https://www.fdic.gov/news/financial-institution-letters/2020/fil20008.html>.

<sup>16</sup> David E.M. Sappington and Dennis L. Weisman, "Vertical Merger Policy: Special Considerations in Regulated Industries," *Review of Industrial Organization* 59, 393-407 (August 12, 2021), <https://link.springer.com/article/10.1007/s11151-021-09835-w>.

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<sup>18</sup> Congressional Research Service (CRS), "Bank Mergers and Acquisitions," (October 28, 2021), *CRS In Focus* 11956, <https://crsreports.congress.gov/product/pdf/IF/IF11956>.

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