

Updating Banking & Fintech Antitrust Regulation

by Isha Lele

Thesis Advisor: Jeremy Kress

A thesis submitted in fulfillment of the requirements of the Michigan Ross Senior Thesis Seminar (BA 480), 22 April 2022.

Acknowledgments

Thank you to everyone that helped make this thesis possible. With the help of the BA480 teaching team including Professor Burcu Tasoluk and Professor Tom Buchmueller, I was able to further research and explore various fields of interest I had developed a curiosity towards from my classes in Ross and SI. Thank you to my brilliant advisor, Professor Jeremy Kress, for taking the time to mentor me throughout this process. Our discussions on the news, politics, and law were the highlights of my week and I looked forward to coming by your office every Wednesday. Despite your own rigorous teaching and writing commitments, you never failed to make time for me and push me to create high quality work. You inspire me to follow in your footsteps by attending law school and becoming an accomplished lawyer that is focused on creating equal opportunity and access for everyone. I am so grateful to be able to call you a mentor. Thank you to all of the Ross alumni and industry professionals I was able to speak with including Anand Markande, Karena Schroeder, Dilyn Grabell, and Vidur Chhabra. Thank you Cecelia Nash of the Ross Development and Alumni Relations Office for connecting me. Finally thank you to my Student Interest Group, BA480 peers, teachers, classmates, family, and friends for supporting me in this endeavor. This thesis would not have been possible without all of you and I am forever grateful for your support.

Abstract

The banking industry is changing faster than ever as fintech acquisitions become more common and fundamentally change the way in which banks operate. With the fintech industry valued at over \$100 billion and bank conglomerates such as Goldman Sachs, Citigroup, and JP Morgan making fintech acquisitions almost monthly, regulators have been unable to keep up with the pace of innovation and consolidation within the financial services industry. While antitrust frameworks exist within banking including the Sherman, Clayton, Bank Merger, and Dodd-Frank Acts, they have not blocked a bank merger since 1985 and do not cover considerations that should be made in fintech acquisitions specifically. As a result, consolidation has already created severe consequences for consumers including reduced availability and increased cost of financial services since fintech acquisitions are rarely screened or questioned. Since regulators do not understand the numerous fintech acquisition types, a typology defining fintechs will be created and organized on variables such as purpose, usage, and effect on consumers. Case studies will be conducted including a deep-dive into the failed Visa/Plaid merger, an investigation on JP Morgan's fintech acquisitions and how they promote or limit competition, and international precedent set by China and India's regulatory actions. Finally, this article will recommend and defend policy changes that will enhance competition within the financial services industry, improve stakeholder welfare, and ensure financial stability for the US government to consider and adapt. This research concludes with two main findings: fintech acquisitions by banks pose a high threat to competition and consumer welfare as hypothesized and fintechs when operating independent of banks are the only true players that can lessen bank power. In addition, the article provides crucial legal research and jurisprudence that can be applied to future bank and fintech antitrust questions.

Contents

IntroductionParallel Industry Analysis	pg. 5
Inspiration	pg. 10
Purpose and Research Question	pg. 11
Conceptual Framework	pg. 12
Philosophical Theory	
A. Chicago School of Antitrust Law	
B. New Brandeis School	
Antitrust Jurisprudence	
Literature Review	pg. 20
Antitrust	
Bank Consolidation	
Fintech Consolidation	
Methodology	pg. 23
Typology	
Case Studies	
A. Visa/Plaid	
B. JP Morgan	
C. Fintech in China	
D. Fintech in India	
Policy Recommendations	pg. 42
Assumptions and Limitations	pg. 47
Conclusion	pg. 49
Dafaranaas	na 50

Introduction

It is no secret that the federal government is somewhat technologically illiterate. Politely speaking, they are under equipped to understand how technological developments work and their impacts on consumers. One industry, fintech, is just one example of this issue, but one that is rapidly growing without most federal regulators even batting an eye.

Financial technology, or fintech, is information technology developed to augment, streamline, digitize, or disrupt traditional financial services. Despite tech innovation existing within banks since the 1860s, fintech has received enormous interest and popularity both within the US and around the world. Global fintech investments hit over \$100 billion in 2021 and the market is expected to reach \$190 billion by 2026 (Ruddenklau).

Upon conception, fintech had true promise in creating competition against traditional financial service providers. However, as fintech companies continue to develop products, the lines between traditional bank products and fintech products have started to blur. The two separate worlds of banks and fintechs have begun merging into one as large bank conglomerates have spent millions buying new fintechs and investing into others. Goldman Sachs, Citigroup, and JP Morgan Chase & Co. top the list of banks with the most fintech investments, enhancing arms such as capital markets, wealth management, and small-and-medium sized business banking. GS acquired 69 fintechs from 2018-2020 with Citi close behind acquiring 51 (CBInsights). The speed of investments are largely due to the banks' investment arms such as GS Growth and Citi Ventures, dedicated to incubating and investing in new ideas to later integrate in the bank's product offerings. Since talent acquisition is competitive and particularly difficult for banks to acquire in the tech space, these venture arms help the banks gain access to the most

innovative fintech despite limited in-house innovation (Hancock). While fintech once promoted competition, banks have eaten them – losing competition and creating stronger banks.

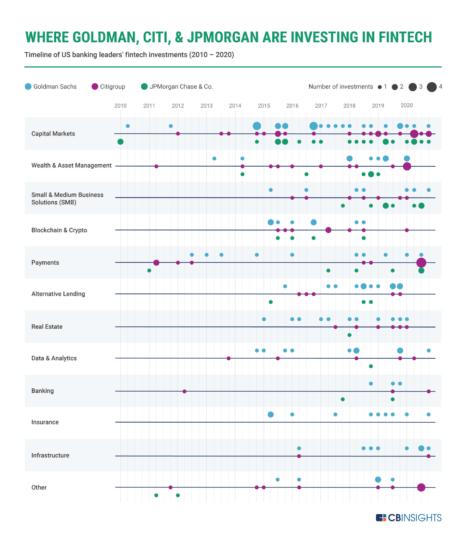


Figure 1. Investments in fintechs by Goldman Sachs, Citigroup, and JP Morgan are increasing in recent years. GS has focused on wealth management and alternative lending and capital marketing to scale its consumer offering, Marcus. Citi has focused on capital markets in order to enhance its Institutional Clients Group business. JPMorgan remains focused on supporting its capital markets and small and medium-sized business solutions arm. CBInsights.

Although banks are among the most highly regulated entities in the US, regulatory policy has not been updated to address fintech's ability to change and strengthen bank power. Since fintech's growth and prevalence within banks has increased so rapidly, the US government has no holistic fintech-specific regulatory frameworks and has struggled to develop one. As a result,

the regulatory environment is highly uncertain as regulators try to adapt their dated frameworks to keep pace with new fintech models. While a number of concerns exist within banks and fintech regulatory policy including lending authority, central bank oversight, and unfair, deceptive, or abusive acts and practices (UDAAPs) data privacy and security requirements, this paper will focus on antitrust and competition concerns.

While antitrust laws existed within the Sherman Act of 1890 and Clayton Act of 1914, they were not utilized in banking until 1961 after the Department of Justice ("DOJ") filed numerous antitrust suits against bank mergers. A few laws on bank mergers followed including the Bank Merger Act of 1966 and Dodd-Frank in 2010. While these laws provide frameworks regarding how bank mergers should be analyzed and approved, they have not forced a block since 1985. In fact, since then, the US has lost over 10,000 banks due to merger approvals including megamergers such as Bank of America and Merrill Lynch valued at \$50 billion and BB&T and SunTrust for \$66 billion. This has resulted in decreased competition between banks which has reduced the availability and increased costs of financial services to consumers. Additionally, loans have been more difficult to attain for individuals and small businesses, decreasing the amount of new entrepreneurial ventures. As a result rates of lower employment, lower wages, a higher gap in income inequality, and overall financial instability has emerged (Nylen). In addition to these issues, these Acts only cover mergers between banks - creating a significant gap within fintech oversight.

Despite stale antitrust laws and enforcement, a new era of "Trustbusters" has dominated the Biden Administration. Over 2021, Biden made three critical appointments of outspoken antitrust advocates - the most aggressive antitrust team in decades. Lina Khan, Columbia Law professor famous for her dissertation on Big Tech antitrust, was appointed to FTC Chair. Tim

Wu, another Columbia Law professor and active advocate of breaking up companies like
Facebook was appointed to the White House as an Official on technology and competition.
Finally, Jonathan Kanter, a lawyer who has fought against conglomerates in court, was appointed as lead of the DOJ antitrust division. These three are better versed in technology shifts and are expected to make significant changes to banking and technology consolidation abilities.

Additionally, Biden passed an Executive Order in July, 2021 calling for a dozen different federal agencies to take on 72 different initiatives to promote competition including making it easier for consumers to switch banks by requiring banks to give consumers their financial data when switching (Hovenkamp). These appointments and actions create urgency for this research. Right now is the most promising time over the last 70+ years for this research to be acknowledged and potentially adapted into policy.

Not only does loose regulation and merger oversight pose a challenge to consumer welfare, but now the issue of fintech acquisitions could make banks even bigger and more powerful. Drastic updates in antitrust legislation are required in order to prevent further bank conglomeration and further isolating consumers. Additionally, given the current "trustbusting" environment of the Biden Administration and appointed regulators, this topic will likely be considered and addressed over the next few years. This paper, when finished, will provide three key components: firstly, case study analyses including a parallel industry coverage looking at Big Tech's acquisitions of small digital players and how regulation or the lack of regulation further strengthened the technology industry. Additionally, a case study covering JP Morgan's fintech acquisitions will examine how certain acquisitions promoted competition and others limited it. Secondly, a typology will be created that organizes different acquisition types based on key variables such as purpose, usage, impact on consumer, and impact on bank. This way, future

fintech acquisitions can be categorized by type and better measured. Utilizing these two outputs will create rational and justification around policy proposals that will be recommended at the end of this paper.

I. Parallel Industry Analysis

Big Tech firms, specifically Amazon, Apple, Facebook, and Google, have monopolized over time due to lack of regulation. Given their position in the market, their technologies and acquisitions have allowed them to "pick winners and losers, destroy small businesses, raise prices consumers, and put folks out of work" (Kang). Despite fast growth and "kill zone acquisitions" (acquisitions that are completed just to end operations in order to eliminate players from an industry), only recently did the government double down on the companies for anticompetitive practices (Rajan). In 2020, the DOJ and FTC accused Google and Facebook of squashing competition through features such as app marketplaces and buying rivals, and filed lawsuits that are currently being fought (Kang, Isaac). Some proposals to improve competition are hoping to create overarching laws instead of company-specific attacks. Those gaining widespread support include collecting more funding for antitrust agencies through higher merger fees and giving consumers the ability to take their digital history to other websites to weaken stranglehold companies have over personal data (Kang).

Similar antitrust investigations are underway in Europe as the European Union tries to evolve as the leader in tech regulation. In March, 2022, The Digital Markets Act became one of the most sweeping pieces of digital policy focused on stopping large tech platforms from using interlocking services that box in users and squash emerging rivals in order to create room for new entrants and foster competition. European standards are often adopted worldwide such as

international adaption of the EU General Data Protection Regulation. Australia, India, and Brazil are just a few following suit and debating new regulations (Satariano).

While issues in antitrust differ between Big Tech and financial services, Congress's focus on Big Tech's competitive practices can highlight how companies are being regulated and what products such as consumer data are a target of those regulations. Additionally, analyzing the global response and identifying any patterns can help predict and better plan future regulation. If one industry receives strong antitrust-related criticism, there may be a higher likelihood to apply those principles on another.

Inspiration

This thesis was inspired by my interest in business law and technology. As a student in Ross and the School of Information, I have seeked opportunities to combine these two interests both in my education and in my career. Having worked on fintech banking transactions over my summer internship at The Raine Group and modeling financial projections using machine learning and other major fintech concepts in SI classes, I had some exposure but wanted to learn more about the space. Additionally, with key appointees in the current Biden Administration including Lina Khan as FTC Chair, Tim Wu as White House Official on technology and competition, and Jonathan Kanter the DOJ's Assistant Attorney General for Antitrust, I believe this research is incredibly timely and valuable given the positioning of the Administration on antitrust. While I am intrigued by research and believe antitrust is a topic I will continue pursuing through law school, I am most excited to submit this thesis as a piece of advocacy work.

Purpose and Research Question

The purpose of this research is to analyze how bank conglomerates' acquisitions of financial technology companies should be considered in antitrust legislation. Since current antitrust law is dated and only considers acquisitions of similar entities such as bank-on-bank mergers, the true effects of alternative acquisitions such as financial technology companies has not been measured on consumer welfare.

Given the recent emergence of financial technology and its incredibly high growth pace over the last decade, regulators have had limited opportunity to understand how banking will change due to these disruptions. With that in mind, I will research how banking will change from the lens of the banks themselves and also the consumers who utilize them. I will compare how fintech acquisitions have and will change the landscape compared to classic bank-on-bank mergers that have also been common over the past few decades. Additionally, I will explore why the banking sector is continuing to consolidate despite other industries, specifically industrial companies, breaking up. I hypothesize that this consolidation of banking and fintech will increase bank power and isolate consumers further.

This research is vital in order to develop holistic policy recommendations that understand the technology, its implications, and weigh its effects on consumer welfare. US politicians and regulators have notoriously misunderstood technological innovation and implications and as a result, have fallen behind on updating regulatory policies such as antitrust. The gap between the government and private companies' understanding of technology continues to expand, and until both views are synced, corporations will continue to and further exploit consumers.

Conceptual Framework

I. Philosophical Theory

This research examines antitrust law from two distinct paradigms. The two doctrines provide background on existing theories that will serve as options for how case studies and policy proposals will be evaluated and compared. One paradigm may serve more purposefully in guiding this research and proposal than the other; or, a middle ground/other alternative may arise.

A. Chicago School of Antitrust Law

Developed through the 1970-1980s, top economists collaborated at the University of Chicago to create what is now a more conservative approach to antitrust regulation theory.

Named the Chicago School of Antitrust Law, the theory centers around serving consumer interests and protecting competition as a whole, rather than individual competitors (Hovenkamp, Morton). Their approach was meant to differ from much of the actions of the US government during the 1950s and 60s when the government was intervention-friendly and regulation occurred more often. These actions followed the first Brandeis movement which looked to utilize regulation to distribute power and opportunity. Named after Supreme Court Justice Louis Brandeis, one of the original trustbusters during his tenure from 1916-1939, the Brandeis vision is what dominated antitrust policy from the 1920s-1960s (Kovacic). The Chicago School differentiated itself by arguing that all of the government actions during this era actually made the business landscape convoluted for players. This created the foundation for the conservative Chicago approach - faith in efficient markets and suspicion around artificial intervention to correct anticompetitive processes (Crane).

Robert Bork's *Antitrust Paradox* is often considered the key framework under the Chicago School. Bork offers 3 key proposals regulators must consider (Bork):

- 1. Adoption of consumer-oriented welfare standard: Bork thought the courts pre-Chicago era had unwisely sought to foster an egalitarian business environment that preserved large firms suspiciously and artificially preserved opportunities for small firms to prosper. Bork argued that instead of arbitrary and convoluted regulation, implementing a consumer-oriented standard can actually determine whether a legal challenge is actually necessary.
- 2. Antitrust program that intervenes only to ban collusive arrangements within horizontal mergers (no focus on vertical mergers or market extensions) that left three or fewer firms in an industry: Bork attacked previous doctrine that encouraged strict scrutiny of dominant firm conduct. He believed much of the regulation sacrificed important efficiencies that actually served consumer interests.
- 3. Consolidated oversight: Bork criticized the sheer number of institutions that oversaw antitrust policy including Congress, the courts, and federal enforcement agencies such as the DOJ and FTC. He noted that each were reckless and created destructive policies that overlooked key economic justifications for businesses' behavior.

Bork believed that by creating a more standardized framework through his proposals, antitrust questions could be evaluated on quantifiable metrics instead of arbitrary assumptions.

B. New Brandeis School

Nicknamed the "hipster antitrust movement", the New Brandies Movement signals a break in the Chicago School's 40+ year dominance. Advocates within this school want to shift the focus from short-term price effects of mergers to improving the market conditions on the

long-term. Notably, many suggest that monopolies naturally concentrate power among several individuals and regulation must follow that pattern. Reclaiming Brandeis's original vision, the movement named themselves after the pre-Chicago school of thought, looking to bring back Brandeis's focus on a distributed power and opportunity landscape (Khan). Whereas Chicago focused narrowly on consumer welfare, New Brandeis broadens stakeholder evaluation in antitrust scenarios to also consider suppliers, laborers, political implications, the stability of the economy, and overall democratic values.

Numerous researchers have built out proposals for regulators to implement. The framework this research will follow is a consolidation of work conducted by Ganesh Sitaraman, Director of Policy and Co-Founder of the Great Democracy Initiative, Marshall Steinbaum and Maurice E. Stucke of the Roosevelt Institute and University of Tennessee, and Tim Wu, Columbia Law professor and White House Official. The framework includes:

- 1. Protecting competition among all stakeholders from, *The Effective Competition Standard:*A New Standard for Antitrust (Steinbaum & Stucke, 2018):
 - a. to protect individuals, purchasers, consumers, and producers;
 - b. to preserve opportunities for competitors;
 - c. to promote individual autonomy and well-being; and
 - d. to disperse and de-concentrate private power.
- 2. Better implementation and enforcement from *Taking Antitrust Away From the Courts: A Structural Approach to Reversing the Second Age of Monopoly Power* (Sitaram, 2018):
 - a. Introduce independent antitrust agency within the government that addresses issues promptly instead of convoluted system between courts, agencies, and Congress
 - b. New standards and practices for merger evaluation

c. Expanded third party enforcement

New Brandeisians call for larger, more structural reform given the sheer number of stakeholders analyzed (Wu). While this paradigm will be utilized, it is still undergoing many improvements and adaptations given its novelness.

II. Antitrust Jurisprudence

The first antitrust laws passed in the US were broad and non-specific to banking. The Sherman Act of 1890 specified that proposed mergers, regardless of industry, "in restraint of trade or commerce" is illegal (Sherman Act of 1890). The Clayton Act of 1914 followed, giving more specific guidelines by saying no business engaged in commerce shall participate in a merger that "substantially lessens competition, or restrains such commerce" (Clayton Act of 1914). Since these Acts were more focused towards commerce business, many believed banks were exempt from these laws. In order to create oversight over banks though, The National Bank Consolidation and Merger Act of 1918 became the first bank-specific regulation and designated the Office of the Controller of the Currency (OCC) to be the supervising body over mergers between state and national banks. It's important to note the OCC was in charge of licensed bank-to-bank mergers. The Banking Act of 1933 delegated authority over non-bank players to the Board of Governors of the Federal Reserve System (Federal Reserve Board) and the Federal Deposit Insurance Corporation (FDIC) (Rhodes).

Despite three pieces of key legislation, bank mergers proliferated until the 1950s. The Sherman Act and Clayton Act were unable to check the mergers due to their broadness. Congress rexamined the Clayton Act in 1950 as a result, amending it with the Celler-Kefauver Anti-Merger Act in order to clarify that no business could engage in asset acquisition that would substantially lessen competition (Celler-Kefauver Anti-Merger Act). This was particularly

relevant for banks for scenarios such as stock acquisition. So, even though Congress had been groomed to deal with banks through legislation separate from general antitrust legislation such as the Bank Consolidation and Merger Act, Congress ruled that the Clayton Act still had power to guide bank merger decisions. Essentially, banking would be considered commerce under the purview of antitrust regulation. After a decade with this oversight model, the Clayton Act nevertheless struggled to prevent anticompetitive bank mergers as it could only be applied to corporations subject to the Federal Trade Commission's (FTC) jurisdiction. So, the DOJ could not conclude that the Clayton Act applied to bank mergers since many operated outside the FTC. The Bank Merger Act of 1960 aimed to resolve these issues by giving the three federal banking regulatory agencies (OCC, Federal Reserve, FDIC) authority to consider two main factors in a merger: banking and competitivness. Banking included considering financial history and condition of each bank, the adequacy of the resulting bank's structure, the merged bank's future earnings prospects, the general character of the merged bank's management, the convenience and the needs of the community served, and whether the bank's corporate powers were consistent with the purpose of the Act. Competitiveness meanwhile focused on whether the effect of the transaction would substantially lessen competition or create monopolistic characteristics (Bank Merger Act of 1960). While The Bank Merger Act created clear guidelines and empowered specific agencies to review mergers, it provided no guidance on how to weigh different anticompetitive factors (Rhodes).

The current legal standard for reviewing bank mergers is the Bank Merger Act of 1966. The main change from 1960 is its specific coordination of four federal agencies to oversee and enforce all steps of the application process. The OCC reviews the merger application if the acquiring, assuming, or resulting bank will become a national bank. The Federal Reserve Board

reviewed applications pertaining to banks that will become a state member bank. The FDIC reviews if the resulting bank will become a state nonmember insured bank. Finally, the DOJ creates an overall report regarding the competitive factors arising from any proposed merger regardless of resulting bank type. While the number of regulatory bodies involved may feel convoluted, each stakeholder holds different interests and protects different aspects of American consumers. Whereas the DOJ aims to defend the law, the OCC ensures safety and soundness of fair access to financial services. The FDIC then is more focused on the impact of the merged bank on surrounding banks. The Federal Reserve then is charged with the most broad task to promote effective cooperation of the overall US economy (Rhodes).

The Dodd-Frank Act of 2010 is the most recent update to bank regulation policy, however, does not specifically focus on antitrust. It does force mergers to consider the greater financial stability of the US economy though and ensure that any merger does not create a company that is "too big to fail". If this does become the case, the law provides for liquidations and restructurings in order to dismantle companies that pose a systemic risk. Additionally, the Act provided new policies on conflicts of interests and gave specific outlines on how banks should avoid participating in risky activity (White).

Banks have strong incentives to merge including increasing assets, acquiring talent, geographic reach, and customer base, and diversifying deposits and services. Given this incentive, the government aimed to make robust legislation to consider every interest under a merger proposal. However, due to the legislation's inability to prioritize interests or provide specific metric standards, the blocking of bank mergers has been nonexistent since 1985. As banks start to diversify which types of companies they acquire (non-banks such as fintechs),

bank merger laws cannot be applied and dated, weak, and broad laws on competition such as the Clayton Act may fail to recognize true consequences of fintech acquisitions.

Literature Review

I. Antitrust

Antitrust scholars fall across a wide spectrum of beliefs regarding how competition should be promoted in the economy and how regulation can ensure competition. As mentioned in the philosophical theory, two main schools of thought exist in antitrust policy. Since the 1970s, the conservative Chicago School approach has reigned supreme regardless of political party affiliation. Their goal is to free business from constraints of antitrust law in order to grow productivity and benefit consumers through lower costs and new products. This approach still has massive support, specifically from companies looking to grow unconstrained by antitrust enforcement. However, given this approach has dictated the markets for over 50 years, critics have been able to consolidate research and evidence that shows opposite outcomes. Followers of the newly developed liberal approach, the New Brandeis School, claim the conservative approach has exercised undue market power in dimensions of price, quality, innovation, and marketplace exclusion (Morton). This theory "signals a break with the Chicago School" and hopes to broaden the debate of antitrust beyond Chicago School's focus on consumer welfare (Khan). While this movement is new, politicians and the public are starting to consider the decline of competition caused by Chicago and consider solutions such as New Brandeis to break up concentrated market power. With these two main schools of thought, academics and policymakers alike have almost "joined a side" ahead of the big decision to come: should the US continue down the Chicago approach or try the liberal New Brandeis approach?

II. Bank Consolidation

Debates around bank consolidation can be seen from both the Chicago and New Brandeis approach. Under Chicago, decades of ignoring bank mergers have passed in the name of

consumer welfare. Whereas over 30,000 banks served communities 100 years ago, only six institutions control half of the entire US banking system (Kress). Proponents argue this has created low prices and ease of availability for customers. However, new thought leaders argue that is truly not the case as bank mergers have actually increased costs and reduced the availability of financial services. Additionally, the focus on consumer welfare has ignored non-price harms such as product quality, entry barriers for new firms, and greater macroeconomic instability (Kress). Others even go as far to say the whole banking system has become more unstable due to monitoring problems over a small number of these "national champions", lower money market liquidity, and lack of market discipline (Allen).

As critics of the Chicago School in the banking sector start to gain political and public support, it will be interesting to see whether crackdowns on bank mergers revitalize or if stricter contingencies or regulations are applied to those that are approved. However, a likely, but disappointing, theory is that banks will continue to consolidate and theoretical antitrust regulation remains unchanged due to large corporate lobbying power. In 2018, the financial service sector spent close to \$2 billion on lobbying and campaign contributions, 36% more than the last non-presidential campaign year, 2014 (Stein). As banks receive growing public criticism, it is no surprise that more is being spent on lobbying to prevent efforts such as blocking mergers.

III. Fintech Consolidation

Over the past few years, fintech growth was almost unstoppable. New companies came out with new products often as innovators hoped to enter and dominate the space before others. However, according to Anand Markande, Director of Business Development, APAC, Fintech, and Grypto Partnerships at Mastercard, that trend is coming to an end as the fintech space is consolidating within itself. For over a decade, venture capital investors were investing into

anything and everything hoping something will turn into a successful story. Even if a startup's product didn't achieve success, investors hoped to acquire the technology or the talent. Now that many fintechs have huge amounts of investment, investment firms are pushing companies to merge with each other in order to increase market share and broaden capabilities.

As the industry consolidates, little research or discussion exists around how exactly the industry is consolidating. While there are patterns of fintech consolidating among themselves, there is also a huge trend in fintechs being acquired by banks. This theme sparks the idea of financial services industry consolidation - a concept even more broad than bank consolidation. Since little literature exists discussing this trend, the true effects on consumer welfare, competitive entrance abilities, and macroeconomic stability has not been considered. The following research hopes to begin the conversation.

Methodology

I. Typology

As Gary Stern, former President and CEO of the Federal Reserve Bank of Minneapolis, explains, regulators are often "a half step behind". Especially in a fast-paced and growing industry like fintech, it is difficult for government regulators to anticipate new technology and how it might affect consumers as well as how products actually work. While institutions devote resources to understand fintech developments such as hiring outside experts or attending attending conferences, the Securities and Exchange Commission (SEC), Financial Industry Regulatory Authority (FINRA), Consumer Financial Protection Bureau, and Financial Stability Oversight Council (FSOC) - bodies responsible for regulating fintech - are all under equipped in understanding the technology and as a result, do not truly understand its impacts on consumers and other financial service providers.

By defining different types of fintech companies and categorizing them based on function, regulatory bodies can better understand the differences between products. A typology is provided below aiming to explain a fintech's purpose, impact on the bank acquiring the fintech type, impact on the consumer utilizing it, and select precedent transactions banks have participated in within that fintech space:

Fintech Type	Purpose	Potential Impact on Bank	Potential Impact on Consumer	Select Precedent Transactions/Key Players
Lending	Simplifies borrowing through automated approval and underwriting processes, and software accessibility to creditworthiness	Upside: Offer loans through online automated systems that speed up approval Downside: Higher risk since	Upside: Faster and easier access to loans Downside: Higher risk due to less personalized financial	MVB Bank, Inc investment into Credit Karma LendingClub acquires Radius Bank (\$185mm)

		accessing borrower creditworthiness is not as thorough	assistance; inability to compare rates	
Payments	Send money to others without passing through banks, usually peer-to-peer	Upside: Avoid fintechs removing banks as middlemen on payment platforms	Upside: Less fees means reduced cost passed on to the end customer	PNC acquisition of Tempus Technologies
		Downside: Reduction in payment processing fees		
International Money Transfers	More immediate and lower exchange cost abilities to transfer money abroad	Upside: Offer faster speeds than other peer commercial banks Downside: Loss of significant transfer fees	Upside: Makes international banking much cheaper and more accessible Downside: Potential for fees to be increased after completed acquisition	PayPal's acquisition of Xoom (\$890m)
Personal Finance	Allows virtual budgeting and saving, avoiding need for financial advising/planning	Upside: One stop shop value proposition for retail banking customers	Upside: Access to personal finance tools directly integrated with accounts	MVB Bank, Inc investment into Credit Karma
		Downside: Potential reduction in financial advisory or planning fees	Downside: Reduced human interaction for significant financial choices	
Robo-Advising and Stock-Trading	Data consolidation and analysis builds smart recommendations regarding asset management; mobile features allow asset changes such as stock purchases to be	Upside: Quicker, diversified trading abilities; variation from classic value investing Downside: For consumer-focused solutions, less	Upside: More accessible and tech-powered trading abilities; increased ownership of portfolio performance; speed, low cost	Axos Financial acquisition of E*TRADE Advisor Services (\$55mm) Bank of Montreal acquisition of Clearpool Group

	made immediately instead of long, expensive brokerage process	dependency on bank to make trades & seek advice	Downside: Higher risk/exposure to markets; less professional help; difficulty in accessing funds from bank to trade on other platforms	(\$147mm)
Consumer/ Commercial Banking	Alternative to banks for people and businesses, usually those who struggle getting approved, to get credit/debit cards and other banking solutions	Upside: New customer base in unsaturated markets Downside: Higher risk servicing lower income customers	Upside: Access to lending/other solutions typically hard to recieve Downside: Higher rates, unreasonable terms	Goldman Sachs acquires fintech lender GreenSky (\$2.24 bn) Fifth Third Bankcorp acquisition of Provide
Insurance (Insurtech)	Insurance processes pairing with fintechs redefine customer experience in insurance, create flexible products, and speed up underwriting and claims process	Upside: Ability to offer micro-duration policies profitability, more robust customer data collection via online shopping portal Downside: Makes cross shopping easier	Upside: Increased access to high quality policies through online distribution Downside: Rates increases due for certain customers due to more granular data collection	Travelers Companies acquisition of Simply Business (\$490 mn) Travelers acquisition of Trōv's tech assets

This typology highlights precedent transactions that have been both beneficial and problematic to bank competition. Some acquisitions were actually fintech companies buying banks. For example, LendingClub, a fintech lending platform, purchased Radius Bank for \$185 million in 2020. As a result, the fintech company has access to Radius's \$2.4 billion AUM and even more importantly, their licensing to operate as a retail bank. This is not the only example of fintechs purchasing traditional banks. SoFi Technologies, another personal finance fintech, acquired Golden Pacific Bank, a Sacramento-based community bank. This became a key

strategic step in SoFi's path to obtain a national bank charter approved by the OCC and Federal Reserve (Rosenzweig). Other transactions that tend to promote competition was fintech acquisitions made from regional banks. Although the larger deals were conducted by the large national players, smaller bank acquisitions were able to increase capabilities for banks to compete with larger ones. For example, Cleveland, Ohio-based regional bank, KeyCorp, made multiple fintech acquisitions in the last few years including XUP Payments, a B2B digital platform and AON Strategies, a data analytics company. After the acquisitions, KeyCorp posted months of higher revenues, EPS, and stock price. The company even logged a three-year dividend growth of over 32% (Markoch). While these are not the only indicators of growth, they are impressive as KeyCorp has a significantly smaller AUM and geographical reach compared to national players.

Other fintech transactions raised issues typical bank-to-bank mergers created - too much market power. Famously, Morgan Stanley's acquisition of E*Trade in October, 2020 grew MS's AUM to over \$3.3 trillion - an industry high. Additionally, despite MS already having robust capabilities within their wealth management practice, E*Trade made them even more powerful in the space. That's especially important to note since E*Trade could have potentially been one of the few players to actually take market share away from MS's wealth management division. Additionally, this transaction was an example of a pattern seen in fintech transactions in the last decade - acquiring talent alongside product. Michael Pizzi, CEO of E*Trade joined MS's Operating and Management Committees to continue oversight over E*Trade's direct-to-consumer, digital self-directed business (Fitzgerald).

While acquisitions are happening within every category of fintech, certain subcategories of fintech affect consumers and competition more than others. For example, acquisition of

lending platforms, payment platforms, and personal finance platforms tend to have a more direct effect on consumers and play fundamental roles in the business functions of bank in their client-facing products. While acquisitions do occur in spaces such as data analytics, they do not have as obvious of an effect on consumer pricing or access.

II. Case Studies

Case Study #1 - Visa/Plaid

A. Overview

In January, 2020, Visa announced its intended purchase of Plaid for \$5.3 billion. Plaid, a software service that allows fintechs to connect with users' bank accounts, integrates with more than 11,000 banks and has grown rapidly since its founding in 2013. Visa, a well-established payments technology company provides digital payments, controlling 70% of the total market with only Mastercard as a major competitor (Department of Justice).

B. Visa's Motivation for Purchasing Plaid

Although Plaid was only valued at \$2.65 billion during its last fundraise in 2019, Visa was willing to purchase the company for 2x the previous valuation due to numerous reasons including Plaid's relationship with fintech giants such as Coinbase, Robinhood, Venmo, and Chime. These relationships are critical as Plaid provides the digital infrastructure for the fintechs to succeed by connecting players like Venmo and Chime with financial institutions, encrypting the data that transfers, and creating an ongoing connection between the app and bank (Kauflin). These companies are the very ones chipping away at Visa's digital transaction market share (Bursztynsky). Additionally, Plaid had plans to leverage its technology to create a "pay-by-bank" platform that would allow merchants to directly transact with personal bank accounts. This would eliminate the need for a middleman payment system such as Visa and save both merchants

and consumers millions in debit fees (Kauflin). So, many, including Visa's own CEO, Alfred Kelly, viewed Visa's acquisition bid of Plaid as an "insurance policy" to protect Visa's dominant market share and strike against emerging threats to their core markets. In fact, in an announcement to Visa's Board of Directors regarding the acquisition, Kelly calls the transaction "strategic, not financial" as he feared that Plaid "on their own or owned by a competitor [was] going to create some threat" with a "potential downside risk of \$300-500M in our US debit business" by 2024 (Department of Justice).



Figure 2. Visa's public statement to investors regarding their motivations to acquire Plaid. No explicit mention of advantages aside from new fintech relationships and international expansion.

Another potential asset Visa may have hoped to acquire from Plaid was the consumer data it has been able to aggregate. The data includes real-time sensitive information about individuals, fintech apps, banks, and Visa's closest rivals including other credit and debit cards. However, Plaid has built its brand as a software option that does not sell or monetize user data beyond the core service they provide to connect fintech apps and banks. Whereas competitors of Plaid such as Yodlee and Finicity have long sold consumer behavior data to hedge funds,

marketers, and credit reporting agencies, Plaid has stood out with its trustworthy reputation (Cyphers). Critics raised concern that Visa could utilize this once protected data to observe and monetize the personal information that flows in and out of the financial institutions. Visa already operates in the targeted-advertising sector by collecting consumer transaction data, categorizing them into certain behaviors, and selling the analytics to marketers. Already offering 200 pre-configured behavior categories that break down what people bought, where people bought it, and how much they spent, Visa could easily further build out their targeted-advertising offerings with the additional data Plaid would provide. Additionally, the same data can also be used to build financial profiles. Instead of selling to advertisers, these profiles can be used for credit underwriting and better match people to Visa's credit card offerings and other services for lenders. Although Plaid had no history of selling the data they aggregated, their own privacy policy clearly admits that this sames policy is not guaranteed if a change in ownership or control of the Plaid business were to occur under something such as a merger or acquisition (ie. Visa). By acquiring Plaid, Visa could leverage the Plaid data that has never been utilized or monetized before (Cyphers).

Build your custom audiences

Design your custom audience to your precise specifications. Reach out to your Visa Ad Solutions representative to discuss the best data points for your needs, including:



Figure 3. Visa Ad Solutions advertisement published in the Visa Audiences Catalog in July, 2020.

C. Critics Response

Given Visa's existing dominant market position, critics such as the Department of Justice feared this acquisition would further empower their monopolistic practices (Department of Justice). The acquisition combines three different acquisition types:

- Gaining foothold in new/emerging markets: In previous deals, large, monopolistic
 companies like Google bought a new market such as Youtube to further their
 reach on consumers by diversifying product type. With the acquisition of Plaid,
 Visa could have offered a new product digital infrastructure to new customers the growing fintech space.
- 2. Surveilling users and competitors: Visa's access to Plaid's massive data aggregation would help it better understand competing products as well as significantly harm their growth by halting their digital infrastructure. Other data-focused companies such as Facebook have squashed threats in competition

- thanks to data-aggregating focused acquisitions such as Onavo which collected analytics for mobile publishers that Facebook was able to exploit to better understand competing apps.
- 3. Acquisition of new personal data that can be integrated into existing databases and products: Even if Visa does not generate much new revenue from the acquisition of Plaid, it does give the company access to incredibly large amounts of data that can be monetized to third parties and utilized to better target new customers. When Google acquired Fitbit, the tech conglomerate was not looking for a new revenue line; rather, all the personal health data Fitbit collected and Google could capitalize on.
- D. Department of Justice's Antitrust Division Lawsuit & Deal Termination

In January 2021, about one year after Visa announced its acquisition of Plaid, Visa publicly announced their decision to abandon the merger. While the deal was originally supposed to take three to four months to complete, legal filings quickly halted after the Department of Justice filed a civil antitrust lawsuit on November 5, 2020 to stop the merger (Department of Justice). The Department alleged that Plaid is a successful fintech firm that can actually challenge Visa's monopolist presence in online debt. Assistant Attorney General, Makan Delrahim states,

American consumers and business owners increasingly buy and sell goods and services online, and Visa – a monopolist in online debit services – has extracted billions of dollars from those transactions. Now, Visa is attempting to acquire Plaid, a nascent competitor developing a disruptive, lower-cost option for online debit payments. If allowed to proceed, the acquisition would deprive American merchants and consumers of this

innovative alternative to Visa and increase entry barriers for future innovators. (Delrahim, Department of Justice Office of Public Affairs)

By acquiring the company, Visa eliminates a competitive threat before it has a true chance to grow. The DOJ's complaint focuses on this idea by mentioning how their monopolistic and exclusionary tactics have prevented rivals like Mastercard from expanding or entering. Since this would be Visa's second largest acquisition of all time, the DOJ cited the proposed acquisition as a violation of both Section 2 of the Sherman Act and Section 7 of the Clayton Act.

Section 2, Sherman Act: Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony, and, on conviction thereof, shall be punished by fine not exceeding \$100,000,000 if a corporation, or, if any other person, \$1,000,000, or by imprisonment not exceeding 10 years, or by both said punishments, in the discretion of the court. (July 2, 1890, ch. 647, § 2, 26 Stat. 209; July 7, 1955, ch. 281, 69 Stat. 282; Pub. L. 93–528, § 3, Dec. 21, 1974, 88 Stat. 1708; Pub. L. 101–588, § 4(b), Nov. 16, 1990, 104 Stat. 2880; Pub. L. 108–237, title II, § 215(b), June 22, 2004, 118 Stat. 668.)

Section 7, Clayton Act: No person engaged in commerce or in any activity affecting commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital and noperson subject to the jurisdiction of the Federal Trade Commission shall acquire the whole or any part of the assets of another person engaged also in commerce or in any activity affecting commerce, where in any line of commerce or in any activity affecting commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.

(Oct. 15, 1914, ch. 323, § 7, 38 Stat. 731; Dec. 29, 1950, ch. 1184, 64 Stat. 1125; Pub. L. 96–349, § 6(a), Sept. 12, 1980, 94 Stat. 1157; Pub. L. 98–443, § 9(*l*), Oct. 4, 1984, 98 Stat. 1708; Pub. L. 104–88, title III, § 318(1), Dec. 29, 1995, 109 Stat. 949; Pub. L. 104–104, title VI, § 601(b)(3), Feb. 8, 1996, 110 Stat. 143.)

While Visa could have disputed the lawsuit in a trial scheduled for June 28, 2021, the company likely stepped away from the merger plan due to the unlikelihood of receiving approval. Although critics of the merger pointed out numerous reasons to block as listed previously, it is important to note that the DOJ only cited Visa inhibiting Plaid's ability to grow as a competitive threat to Visa as its reasoning for the complaint. They never cited surveillance of competitors, acquisition of personal data, or other threats.

With the termination of the deal, experts from the Justice Department's Antitrust Division including Assistant Attorney General Makan Delrahim say that Plaid and other fintech innovators can continue to create and grow alternatives to Visa that will create more competition in the online debit service space. This would positively affect consumers who can now expect better services and more cost variation. Additionally, critics like Delrahim hope Visa will mitigate harm to consumers now that more competition exists in the market and consumers will have more opportunity to choose services.

E. Future of Plaid

Despite being in the middle of one of the largest merger blocks of 2021, Plaid has seen incredible growth. In fact, many, including the company itself, would argue that not selling themselves to Visa was the best outcome they could have asked for. In just a few months after the deal was canceled, the company announced a Series D fundraise that valued the company at \$13.4 billion - more than \$8 billion more than Visa was going to purchase the company for.

Additionally, the company has been able to diversify its product offerings and more directly compete with Visa. A new software unveiled in October makes it easier and cheaper for consumers and businesses to utilize their bank accounts to make digital payments. These lower price offerings are exactly what the DoJ had hoped for by blocking the merger.

The global context, specifically the COVID-19 Pandemic, furthered Plaid's growth as shutdowns and online work accelerated the public's demand for digital finance options.

Additionally, as other fintech partners grew during this time, Plaid did as well. Plaid also was able to create partnerships that would have otherwise been unlikely under Visa. In a partnership with Excel, Plaid technology will help users sync their financial accounts with Excel.

Additionally, a new partnership with Jack Henry & Associates, allows Plaid to access hundreds of regional and community banks and connect them with digital finance apps and services.

Most recently, in March, 2022, Plaid announced a partnership with Green Dot - a fintech and registered bank holding company. Users of Green Dot's flagship digital bank, GO2bank, now have access to Plaid's API and token-based solutions to quickly and securely facilitate data connectivity on over 6,000 Plaid-partnered apps. This move is strategic for Plaid as it exposes themselves to over 33 million customers of Green Dot in one of their first direct-to-consumer facing partnerships. Additionally, Plaid builds new business with an underserved demographic they did not have previous exposure to as most GO2bank users include low-income families, gig workers, and small business owners (Chapman).

While the blocking may have been unexpected and slightly derailing for Plaid, the company has managed impressive growth and forged a competitive bid against legacy players.

As a result, consumers will likely continue to see benefits such as product and price variation.

For now, Plaid intends to be an independent player as it realizes it does not need to be acquired to compete.

Case Study #2 - JP Morgan's Acquisition of Fintechs

A. Overview

JP Morgan, one of the large national banks in the US, has been on a fintech buying spree. In 2021, the bank acquired over 30 companies aimed at diversifying their product offerings. After COVID-19, banks posted lower revenues at times and faced uncertainty when it came to business growth. In order to boost revenues in the low-interest rate environment during the time, companies such as JP Morgan turned to acquisitions. In December 2021, CEO Jamie Dimon put out a public call for merger-and-acquisition ideas and released an annual letter to shareholders saying, "acquisitions are in our future", pointing specifically to deals for fintech companies (Kline).

B. The Broadening Competitive Landscape

Dimon has been very public in stating that JP Morgan's competition has broadened beyond the traditional banks such as Goldman Sachs and Bank of America. Instead, he has called startups, "very tough, brutal competition" saying, "I think we are now facing a whole generation of newer, tougher, faster competitors who, if they don't ride the rails of JPMorgan, they can ride the rails of someone else". Dimon has also named larger Big Tech firms such as Apple, Google, and Amazon as competitors as they start to unravel financial service-focused products (Johnson, Ungarino).

C. Acquisition Types

The bank has aimed to acquire a number of fintechs across the ecosystem. They are one of few to focus on all fintech types instead of just one. Within the portfolio management space,

JP Morgan purchased OpenInvest, a platform that helps financial advisors report and customize holdings/portfolios in environmental, social and governance (ESG) investing. On another end, the firm purchased Nutmeg, a robo-adviser based in the United Kingdom that enhances digital banking initiative and 55ip, a firm helping create tax-efficient investment portfolios. Within the consumer products space, Chase acquired cxLoyalty, a credit card rewards business that provides a full-service travel agency, giftcard and merchandise, and points-back operations. Looking to crease a more enhanced experience for Chase customers, the platform will help create a more comfortable and easy booking process for card holders. Digital banking investment also increased with JP Morgan acquiring a 40% ownership stake in C6 - a digital bank in Brazil. With over 7 million customers and products including multicurrency checking and savings accounts, JP Morgan is using international investment to strengthen their international customer base.

Many companies don't fall into traditional buckets of JP's offerings. In June, 2021, JP purchased Campbell Global, a forest management and timberland investment company that invests in timberland on behalf of institutional and high net worth individuals. Prior to this technology, this was an untapped investment market but Campbell now holds over 1.7 million acres and \$5.3 billion in AUM. Additionally, JP Morgan invested into Volkswagen Payments, a unit of the automaker. The allure of the partnership is to broaden access to the auto industry while simultaneously increasing digital payment capabilities (Kline).

D. Investment Methods

As JP Morgan continues to stake out fintech investments, it's important to note how they are investing. While some investments are full on acquisitions, others are majority and minority stakes. This way, JP Morgan can have decision making power in fast-growing fintechs but leave autonomy to talent developing products. Whereas most of the investments are likely not made

for financial returns purposes, early investments increase likelihood of being able to acquire the fintech faster than other banks if proven successful. Additionally, as banks already struggle with acquiring and retaining talent within tech, acquiring startups gives JP Morgan access to innovative entrepreneurs and technologists.

E. Looking Forward

As other banks continue to follow JP Morgan in investing in fintech, it will become even more competitive to gain a stake in some companies. Additionally, investment from banks and venture investors will continue to overvalue the companies while they are still young. With acquisitions though, JP Morgan is sure to offer a much more diverse product offering to all types of customers from institutional investors to individual Chase users.

Case Study #3 - Fintech in China

A. Overview

Whereas the fintech industry may be seen as new in most of the world, fintech solutions are anything but new to Chinese citizens. Investment in the space is near constant - in the first half of 2021 alone, Chinese fintechs raised over \$1.3 billion in fundraising (Huang). Not only has innovation rapidly grown, but application rates are the highest in the world. 87% of small and 61% of medium-sized enterprises have implemented at least one fintech solution and over 86% of all Chinese citizens use online payments (Dongrong). While the global average of digitally active fintech users only sits at 64%, Chinese fintechs have made their solutions almost impossible to avoid for people seeking payment options, insurance, investing, and even commerce (Pu).

B. Monopolistic Consolidation

Prior to the last few years, Chinese tech companies were largely immune to regulation. CEOs like Jack Ma and Daniel Zhang were idolized and the strongest young talent wanted to follow in their footsteps by joining major conglomerates like Tencent and Didi. In fact, much of these companies' growth was due to policies the Chinese government had passed. Players faced no major competition from abroad since China blocked American conglomerates like Google and Facebook from being used inside the country. As a result, the tech giants' growth paralleled those of similar tech entities in the US.

C. Government Response

In 2015, China's financial regulators were met with a rude awakening after years of letting the fintech sector remain unregulated. The stock market crash was politically embarrassing for the country that was once perceived as unstoppable and exposed the weaknesses of China's financial system due to major risks of capital outflow. Moreso, it showed the failure in how China's regulatory bodies were able to prevent it (Au).

Similar to the United States, the Chinese government has had major issues with the quick consolidation of large companies as it took control of the country's financial system. However, unlike the US, China has enforced punitive measures on numerous large tech companies over the past few years as a response. One affected is the Ant Group, a fintech company valued at over \$200 billion. Despite having numerous subsidiaries such as the e-commerce platform Alibaba, 90% of Ant's revenue is generated from a wide range of financial products. With tools ranging from traditional banking services to payment interfaces used by over one billion users, the majority of China has become reliant on at least one of their offerings. Like other tech companies, this power was accumulated through invasive practices such as hijacking user traffic, forcing merchants into exclusive deals, and tarnishing reputations of growing competitors

(Zhong). Frustrated by this as well a growing concern that Ant was encroaching onto the power of state-owned banks, the central bank and other Chinese regulators announced in September, 2021 plans to break up Ant's Alipay superapp. Specifically, regulators ordered Ant to separate from their major lending businesses: Huabei, a credit card service provider, and Jiebei, a small loans platform. Doing so would create a new entity that operates on an independent app and brings in outside shareholders (Yu, McMorrow).

The government is not only cracking down on specific fintech companies, but also on high level policy that affects the way in which fintechs operate. Guo Shuqing, Chairman of the China Banking Regulatory Commission, summarizes the country's views explaining, "Fintech is a winner-take-all industry with advantage of data monopoly, big tech firms tend to hinder fair competition and seek excessive profits" (Zhu). In fact, regulators have accused fintechs of promoting irrational spending through overlending. In summer, 2021, the Chinese central bank announced that lending decisions by fintechs must be based on data collected from approved credit scoring companies instead of the fintechs' own proprietary data. This impedes on a competitive advantage fintechs have been able to garner in which they are able to accumulate more data and approve faster than state-affiliated banks. Other regulations being considered is stricter operating licenses, increased firewalls between different business segments to prevent cross-sector risks, and blocking off data sharing between banking and non-banking solutions (Xin).

Case Study #4 - Fintech in India

A. Overview

As in the United States and China, more government officials are calling on India to regulate its fast-growing fintech market. Deputy Governor, T Rabi Sankar, stated in September,

2021, "The differences between financial and non-financial firms are increasingly getting blurred and they no longer conform to boundaries. It is virtually impossible for legislation to catch up with the fast mutating fintech landscape, but in the interim, regulation must adapt, so that the financial system absorbs digital innovation in a non-disruptive manner" (Roy).

B. Licensing

Unlike the US which has struggled to create a national licensing system for fintechs, India has been able to set up a Nonbank Financial Companies (NBFCs) scheme for fintechs to maintain their own loan books. Industry experts say this will lead to the reduction in cost of capital, accelerate the loan disbursal process, and lead to improved detection of frauds. Broadly, it will also be key in helping fintechs scale up operations.

Various fintech brands such as RazorPay, Instamojo, ENkash, BharatPe, and Patym have all had to partner with banks prior to these licensing schemes and many are now considering stepping out of these partnerships.

While some critics think that loser licensing could pose greater system risk to the financial sector, Naveen Surya, Chairman of the Fintech Convergence Council reminds people that compliance standards will remain high as licenses can be canceled and re-application is always necessary.

C. Indian Banks' Investment in Fintech

Similar to the United States, Indian banks have been trying to learn how to collaborate with fintech companies as they take up market share. Similar to JP Morgan, banks such as Kotak Mahindra Bank and ICICI Bank Ltd have been making a number of minority investments into fintech companies for potential future acquisition. Kotak acquired a 9.99% equity stake in KFinTechnologies, one of India's largest integrated solutions and service providers for investor

services. HDFC Bank purchased a 5.2% stake in Mintoak Innovations, a digital payments platform. The bank with the most investments is ICICI, purchasing stakes in CityCash, Thillais and numerous more (Shah).

As Indian banks continue to make investments, it will be interesting to see how often they are acquired by banks and for what purposes. While the fintech industry is growing rapidly, similar concerns around antitrust are in question.

Policy Recommendations

1. Facilitate Licensing for Fintechs to Better Compete

Under the current model, banks are licensed either by state or federal governments.

Approximately 820 banks are state-licensed and 5,177 hold national licenses. However, nonbank, usually fintech, consumer lending approval has only occurred at the state level. Critics, usually fintech stakeholders, argue that this creates a sort of byzantine labyrinth of multiple state laws and regulations. Compliance standards become confusing to navigate and limits fintech's ability to serve customers nationwide (Jackson).

This issue of state versus national regulation is not new. In the 1950s and 60s, credit card companies were introduced to the financial ecosystem and federal and state regulators competed for control. To address this, Congress passed modernizing systems including the Fair Credit Reporting Act, the Unsolicited Credit Card Act, the Truth in Lending Act, the Equal Credit Opportunity Act, and the Fair Debt Collection Practices Act - all of which applied to all lenders no matter their state location (Loo).

The little action the federal government has done to assist fintechs with this issue has actually worsened antitrust issues. In the 2018 US Treasury report, the government encouraged fintech companies to partner with banks in order to advance capabilities of consumer financial offerings such as Apple Pay, Venmo, and PayPal. While payment platforms were the original bank partners, credit product companies are following this model as well. This has given banks even more power as they have become critical for fintechs to operate. In essence, fintechs cannot be a true competitor to banks when their business model so heavily relies on them (Jackson).

Since fintechs have struggled to obtain licensing to operate as a bank, companies such as SoFi have taken approaches such as acquiring banks that already have licenses. SoFi's

acquisition of Golden Pacific Bank proves that fintechs are looking for ways to operate nationally and are forced to look into consolidation in order to do so. The OCC had to approve this application but allowed the merged bank to continue offering loans and deposits products. Few conditions were imposed such as not engaging in crypto-asset activities or services (Coleman). This is just one example of the OCC trying to facilitate licensing for fintechs. However while the OCC is trying to approve more special purpose bank charters, states such as the New York Department of Financial Services argue that the OCC is overstepping its jurisdiction since non-banks are subject to state regulation (Post). As a result, fintechs are not applying for national licenses because they know it would cause costly and elongated litigation they are likely to lose.

The complications created by state jurisdiction can be avoided if a federal charter is passed by Congress that licenses fintechs to approve and operate across state lines. This would help fintechs act independently of banks and give them a true chance to compete. If fintechs are federally licensed, correctly supervised, and coordinated between federal and state governments as credit card companies were, there is no reason that a federal charter would not be successful.

2. Facilitate Licensing for Fintechs to Better Compete

The FTC reviews mergers per the Hart-Scott-Rodino Act in which companies are required to provide advance notice of planned mergers. The HSR form is brief though and only requires a general framework for transactions. Once the filing is completed, the FTC or DOJ may file another request to seek additional information to better understand the deal and potential implications. Once the information is provided, the FTC and DOJ have a limited time to identify illegal matters prior to the consummation. While both institutions can challenge terms post-merger, this is more difficult and less likely. Given the sheer number of HSR filings, and a

"tidal wave" in recent years, it's difficult for institutions to investigate each merger and really study its effects. Since the HSR method is not imposing strict standards for fintech acquisitions, a few options of better policy are provided.

Firstly, when acquiring fintechs, banks should file separately from the HSR. Currently, bank-to-bank acquisitions don't need HSR filings and go directly to the DOJ as well as the FTC, FDIC, or OCC. In the same vein, banks when acquiring any company, even if not another bank, should go directly to the DOJ. While this may create a longer docket for the DOJ, banks' impacts on consumers and their wide reach in product offering should be treated more carefully and closely than other industries.

Secondly, more focus should be emphasized on the purchasing company's size and market cap. Right now, the HSR filing focuses on the acquisition price. However, often times bank conglomerates acquire small companies for a small size on paper, but the purchase's upside is much larger than revenue. For example, with Visa/Plaid, Visa was looking for Plaid's partnerships, consumer data collection, and guarantee that middlemen like Visa won't be phased out. Since those upsides are hard to account for in purchase price, deals may not be as closely scrutinized. If regulators start to look at the pure size of the acquiring company and question where and why they are trying to achieve growth with a small purchase, concerns over monopolization or product tying would probably be more likely.

3. Attach More Stringent Conditions When Merger is Approved

If fintech acquisitions by banks are approved, more stringent conditions should be attached to the merger. Precedent has been set for this specifically focusing on geographic presence. In the BB&T Corp and Suntrust merger in 2019, the Federal Reserve required the deal be approved only if the condition of divesting in 28 branches across three states was met (PR

Newswire). Since the merger would create the sixth largest US commercial bank and serve over 10 million households and a range of business clients, the bank would have monopolized certain regional markets. This would have significantly weakened customer optionality in North Carolina, Virginia, and Georgia.

Since one of fintech's competitive advantages is its ability to operate without physical locations such as bank branches, creating conditions based on location is not as effective. However, creating restrictions on product types would prevent banks from operating in too many conflicting areas of interest. Just as the Volcker Rule in Dodd-Frank restricted how banks could invest and limited speculative and proprietary trading, regulations can be placed on products that could benefit multiple fields of a bank's business. Current anti-tying provisions of 12 U.S.C 1972(1) act as a guide, prohibiting banks from extending credit, leasing or selling property, furnishing services, and varying prices on certain customer conditions (OCC). Standards in fintech transactions have already begun doing this; for example, SoFi was restricted by the OCC not to operate in crypto-asset transactions due to their conflicting interests in consumer product management.

One of the biggest achievements in fintech is the ability for companies to create a diversity of new products offered to more populations increasing optionality and access for consumers. However, as banks acquire these companies, it can give even more power to the banks given the breadth of these products. Stricter anti-tying laws specific to fintech products would help ensure that banks do not become "even bigger to fail".

4. Consider Financial Stability During Acquisition Approval

During the passing of Dodd-Frank, the "too big too fail" argument only fell on bank-to-bank mergers. However, with fintech acquisitions, the industry is becoming far too

interconnected to only consider bank-to-bank mergers. While Dodd-Frank forces consideration of macroeconomic stability when analyzing bank growth, the DOJ has yet to consider financial stability as a reason for blocking or approving mergers (Kress). If the finance industry remains unchecked and impairs competition, then banks will undoubtedly become too big and incredibly risky (Allen). The products fintech offers such as robo-investing, marketplace lending, high frequency trading, and token offerings also render the financial systems more fragile than before. Until macroeconomic stability is considered under merger considerations, the US economy will continue to risk deep economic downturn like that in 2008.

Assumptions and Limitations

Given the fast-changing environment of fintech and its effects on the banking sector, there are limitations to the analysis and policy recommendations provided.

Firstly, numerous governing bodies oversee antitrust issues and bank-specific issues. Whereas the DOJ usually handles antitrust cases regardless of industry, the SEC, OCC, Senate Banking Committee, US House Committee on Financial Services, FDIC, FINRA, and FSOC are just a handful of the many governing bodies that oversee the financial services industry. Since fintech is relatively new, there is still considerable uncertainty over which governing body has jurisdiction to examine mergers or attach conditions to approved mergers. While the recommendations provided may be sound, it's important that the correct government branch oversees it in order to avoid power struggles like those that exist between states and the OCC.

Secondly, utilizing a framework or guideline for government entities to consider when examining fintech acquisitions lacks longevity. Since many antitrust positions are appointed by the president at the time such as the leader of the Antitrust Division of the DOJ, high variability exists in how mergers are examined and approved. Creating overarching guidelines likely would not satisfy politicians that subscribe to different schools of thoughts. For example, a follower of the Chicago School is likely to disagree with many of the recommendations. As a result, high variability may exist between different presidential terms which creates inconsistency for fintechs and banks operating in the space.

Finally, much of the policies and research around antitrust discussed in this paper are still untested in the judiciary. Since The Chicago School has been the dominant framework, there has been a lack of merger cases questioned by the DOJ. As a result, future questioning of mergers and acquisitions are subject to a great deal of litigation with little legal precedent to follow.

Additionally, with a fast-changing judiciary including multiple new members of the Supreme Court, it is highly uncertain how cases will be read and voted upon.

Conclusion

Understanding fintechs and how acquisitions of fintech within banking is crucial in order to prevent banks from garnering too much power. The US Government is responsible for protecting consumer welfare and creating an environment for businesses to grow, however, is unequipped to do so if they do not consider or understand how the technology works and how it changes banking services.

This research concludes with two main findings: fintech acquisitions by banks pose a high threat to competition and consumer welfare as hypothesized and fintechs when operating independent of banks are the only true players that can lessen bank power. Oversight committees must consider systemic policy changes such as those discussed before banks become "even bigger to fail".

References

Allen, F and D Gale (2000): "Financial contagion", Journal of Political Economy, 108(1), 1-29.

Allen, Hilary J.. Driverless Finance: Fintech's Impact on Financial Stability. United States, Oxford University Press, Incorporated, 2022.

Bank Merger Act of 1960, 12 U.S.C. § 1828(c)(6).

Barton, Jimmy F. "Tying Restrictions: Guidance on Tying." *OCC*, 14 Apr. 1995, https://www.occ.treas.gov/news-issuances/bulletins/1995/bulletin-1995-20.html.

Bork, Robert H. The Antitrust Paradox: A Policy at War with Itself(Basic Books 1978).

Bursztynsky, Jessica. "Visa Abandons Takeover of Plaid after DOJ Raises Antitrust Concerns." *CNBC*, 12 Jan. 2021,

https://www.cnbc.com/2021/01/12/visa-abandons-takeover-of-plaid-after-doj-raises-antitrust-concerns.html.

CB Insights. "Where the Top 3 US Banks Are Betting on the Future of Fin Services." *CB Insights Research*, CB Insights, 26 Apr. 2021,

https://www.cbinsights.com/research/goldman-citi-jpm-fintech-investments/.

Chapman, Whit. "Green Dot and Plaid Partner to Give Customers Seamless Access to Their Money through Secure Open Finance Solutions." *Business Wire*, 15 Mar. 2022, https://www.businesswire.com/news/home/20220315005400/en/Green-Dot-and-Plaid-Partner-to-Give-Customers-Seamless-Access-to-Their-Money-Through-Secure-Open-Finance-Solutions.

Christopher E. Rhodes Jr., Back to Basics: The Principles of Bank Merger Review, 25 N.C. BANKING INST. 273 (2020).

Coleman, Scott. "OCC Approves National Bank Charter Applications of Fintech Company." *Consumer Finance Monitor*, 24 Jan. 2022,

https://www.consumerfinancemonitor.com/2022/01/24/occ-approves-national-bank-charter-applications-of-fintech-company/.

Crane, Daniel A. " e Tempting of Antitrust: Robert Bork and the Goals of Antitrust Policy." Antitrust L. J. 79, no. 3 (2014): 835-53.

Cyphers, Bennett. "Visa Wants to Buy Plaid, and With It, Transaction Data for Millions of People." *Electronic Frontier Foundation*, 25 Nov. 2020,

https://www.eff.org/deeplinks/2020/11/visa-wants-buy-plaid-and-it-transaction-data-millions-people.

Feng, Coco. "China's Tech Crackdown: Surveying the Aftermath a Year On." *South China Morning Post*, 22 Dec. 2021,

https://www.scmp.com/tech/big-tech/article/3160529/china-tech-crackdown-2021-technology-gi ants-came-under-intense.

Fitzgerald, Maggie. "Morgan Stanley to Buy E-Trade for \$13 Billion in Latest Deal for Online Brokerage Industry." *CNBC*, 20 Feb. 2020,

https://www.cnbc.com/2020/02/20/morgan-stanley-reportedly-to-buy-e-trade-for-13-billion.html.

Hovenkamp, Herbert J. and Scott Morton, Fiona, "Framing the Chicago School of Antitrust Analysis" (2020). Faculty Scholarship at Penn Law. 2113.

Hancock, Nicola. "Attracting Tech Talent for the New Digital Banking World." *BAI*, 13 Oct. 2021,https://www.bai.org/banking-strategies/article-detail/attracting-tech-talent-for-the-new-digit al-banking-world/.

Hovenkamp, H. (2021). President Biden's Executive Order on Promoting Competition: an Antitrust Analysis. *SSRN Electronic Journal*. doi: 10.2139/ssrn.3887776

Jackson, Mary. "Banks Have Federal and State Licensing – Why Can't Fintech?" *Morning Consult*, 19 Jan. 2021,

https://morningconsult.com/opinions/banks-have-federal-and-state-licensing-why-cant-fintech/.

Jeffery, Christopher. "The Irreversible Rise of Fintech in China - Central Banking." *Central Banking*, 22 June 2021, https://www.centralbanking.com/node/7835346.

Kang, Cecilia. "Lawmakers, Taking Aim at Big Tech, Push Sweeping Overhaul of Antitrust." *The New York Times*, The New York Times, 11 June 2021,

https://www.nytimes.com/2021/06/11/technology/big-tech-antitrust-bills.html.

Kang, Cecilia, and Mike Isaac. "U.S. and States Say Facebook Illegally Crushed Competition." *The New York Times*, The New York Times, 9 Dec. 2020,

https://www.nytimes.com/2020/12/09/technology/facebook-antitrust-monopoly.html.

Kauflin, Jeff. "Why Visa Is Buying Fintech Startup Plaid For \$5.3 Billion." *Forbes*, 13 Jan. 2020,

https://www.forbes.com/sites/jeffkauflin/2020/01/13/why-visa-is-buying-fintech-startup-plaid-for-53-billion/.

Khan, L. The New Brandeis Movement: America's Antimonopoly Debate, *Journal of European Competition Law & Practice*, Volume 9, Issue 3, March 2018, Pages 131–132, https://doi.org/10.1093/jeclap/lpy020

Kovacic, W. The Chicago Obsession in the Interpretation of US Antitrust History. *The University of Chicago Law Review*, Vol. 87, No. 2 (March 2020), pp. 459-494

Kress, Jeremy C., Reviving Bank Antitrust (February 20, 2022). Duke Law Journal, Forthcoming, Available at SSRN: https://ssrn.com/abstract=4039197or http://dx.doi.org/10.2139/ssrn.4039197

KPMG. "China Attracts \$1.3 Billion in Fintech Investment in Best Result since H2'19, Finds KPMG Analysis." *KPMG*, 23 Aug. 2021,

https://home.kpmg/cn/en/home/news-media/press-releases/2021/08/china-attracts-1-3-billion-in-fintech-investment-in-best-result-since-h2-19.html.

Loo, Rory Van, Making Innovation More Competitive: The Case of Fintech, 65 UCLA Law Review 232 (2018).

Available at: https://scholarship.law.bu.edu/faculty scholarship/50

Marshall, Elizabeth. "Analysis: JPMorgan's 2021 Deal Spree Aims to Fill the Few Holes Left in Its Global Operations." *Reuters*, 22 Sept. 2022,

https://www.reuters.com/business/finance/jpmorgans-2021-deal-spree-aims-fill-few-holes-left-its-global-operations-2021-09-22/.

Markoch, Chris. "3 Super Regional Banks That Look Super Charged After Earnings." *Entrepreneur*, 21 Jan. 2022, https://www.entrepreneur.com/article/414375.

Milovidova, Hanna. "Types of Fintech Companies - Ein-Des-Ein Blog." *Ein-Des-Ein*, 17 Dec. 2021, https://ein-des-ein.com/blog/types-of-fintech-companies/.

Morton, Fiona. "Modern U.S. Antitrust Theory and Evidence amid Rising Concerns of Market Power and Its Effects." *Equitable Growth*, 25 Sept. 2019,

https://equitablegrowth.org/research-paper/modern-u-s-antitrust-theory-and-evidence-amid-rising -concerns-of-market-power-and-its-effects/.

Nylen, Leah. "Bank Mergers Come into Democrats' Antitrust Crosshairs." *POLITICO*, https://www.politico.com/news/2021/04/19/progressives-biden-bank-merger-threat-483183.

OCC Bulletin. "Tying Restrictions: Guidance on Tying | OCC." *OCC*, 14 Apr. 1995, https://www.occ.treas.gov/news-issuances/bulletins/1995/bulletin-1995-20.html.

Office of Public Affairs. "Justice Department Sues to Block Visa's Proposed Acquisition of Plaid." *Email Icon*, 5 Nov. 2020,

https://www.justice.gov/opa/pr/justice-department-sues-block-visas-proposed-acquisition-plaid.

Office of Public Affairs. "Visa and Plaid Abandon Merger After Antitrust Division's Suit to Block." *Email Icon*, 12 Jan. 2021,

https://www.justice.gov/opa/pr/visa-and-plaid-abandon-merger-after-antitrust-division-s-suit-blo ck.

Pymnts. "JPMorgan Shows Investing Belongs To The Young." *PYMNTS.Com*, 29 June 2021, https://www.pymnts.com/news/investment-tracker/2021/jpmorgan-fintech-spree-investing-belongs-to-young/.

Post, Kollen. "A Storm Is Brewing between State Regulators and the OCC over Fintech Licensing." *Cointelegraph*, 23 Dec. 2020,

https://cointelegraph.com/news/a-storm-is-brewing-between-state-regulators-and-the-occ-over-fintech-licensing.

Pu, Chris. "The Rise of Fintech in China." APAC Outlook,

https://www.apacoutlookmag.com/industry-insights/article/828-the-rise-of-fintech-in-china. Accessed 22 Apr. 2022.

Raghuram Rajan, Sai Krishna Kamepalli & Luigi Zingales, Kill Zone (Becker Friedman Inst. Working Paper No. 2020- 19), https://ssrn.com/abstract=3555915.

Reserve Bank of India. "Reserve Bank of India - Frequently Asked Questions." *Reserve Bank of India*, https://www.rbi.org.in/Scripts/FAQView.aspx?Id=92. Accessed 22 Apr. 2022.

Rhodes, Christopher E, Back to Basics: The Principles of Bank Merger Review, 25 N.C. BANKING INST. 273 (2020). Available at: https://scholarship.law.unc.edu/ncbi/vol25/iss1/10

Roy, Anup. "Fintech Regulations Must Be Based on Entity, Not Activity: RBI Dy Governor." *Logo*, 28 Sept. 2021,

https://www.business-standard.com/article/finance/fintech-regulation-must-be-entity-based-rbi-deputy-governor-rabi-sankar-121092800472 1.html.

Ruddenklau, Anton. *Pulse of Fintech H2 21 - Assets.kpmg*. https://assets.kpmg/content/dam/kpmg/xx/pdf/2022/02/pulse-of-fintech-h2-21.pdf.

Satariano, Adam. "Big Fines and Strict Rules Unveiled against 'Big Tech' in Europe." *The New York Times*, The New York Times, 15 Dec. 2020,

https://www.nytimes.com/2020/12/15/technology/big-tech-regulation-europe.html.

Satariano, Adam. "E.U. Takes Aim at Big Tech's Power with Landmark Digital Act." *The New York Times*, The New York Times, 24 Mar. 2022,

https://www.nytimes.com/2022/03/24/technology/eu-regulation-apple-meta-google.html.

Shevlin, Ron. "JPMorgan Chase To Spend \$12 Billion On Technology...And Why Other Banks Can't Keep Up." *Forbes*, 18 Jan. 2022,

https://www.forbes.com/sites/ronshevlin/2022/01/18/jpmorgan-chase-to-spend-12-billion-on-tec hnologyand-why-other-banks-cant-keep-up/.

Shah, Ishan. "Indian Banks, Fintech Firms Upgrade Collaboration to Acquisition of Equity Stakes." *Moneycontrol*,

https://www.moneycontrol.com/news/business/companies/indian-banks-fintech-firms-upgrade-c ollaboration-to-acquisition-of-equity-stakes-7529461.html. Accessed 22 Apr. 2022.

Sitaram, G. (2018). Taking Antitrust Away from the Courts. *Roosevelt Institute*. Retrieved from https://rooseveltinstitute.org/wp-content/uploads/2021/08/GDI_Taking-Antitrust-Away-from-the-Courts_201809.pdf

SoFi. "SoFi Completes Acquisition of Golden Pacific Bancorp, Inc. | SoFi." *SoFi*, 2 Feb. 2022, https://www.sofi.com/press/sofi-completes-acquisition-of-gpb.

Stein, Jeff. "As Bank Profits Soar, Wall Street's Political Spending Hits New High." *The Washington Post*, 30 Apr. 2019,

https://www.washingtonpost.com/business/2019/04/30/bank-profits-soar-wall-streets-political-spending-hits-new-high/.

Steinbaum, M., & Stucke, M. (2018). The Effective Competition Standard: A New Standard for Antitrust - Roosevelt Institute. Retrieved 18 December 2021, from https://rooseveltinstitute.org/publications/the-effective-competition-standard-a-new-standard-for-antitrust/

Stern, Gary. "Can Regulators Keep up with Fintech?" *Yale Insights*, 13 Dec. 2017, https://insights.som.yale.edu/insights/can-regulators-keep-up-with-fintech.

Subcommittee on Antitrust, Commercial and Administrative Law of the Committee on the Judiciary. (2021). Investigation of competition in digital markets: majority staff report and recommendations. *US House of Representatives*

Tarullo, Daniel. "Regulators Should Rethink the Way They Assess Bank Mergers." *Brookings*, 16 Mar. 2022,

https://www.brookings.edu/opinions/regulators-should-rethink-the-way-they-assess-bank-merger s/.

The biggest bank merger since the crisis may herald more. (2019). The Economist.

Vats, Surbhi. "NBFC License Is the New Goal of Fintech Startups - Enterslice." *Enterslice*, 6 Feb. 2020, https://enterslice.com/learning/nbfc-license-is-the-new-goal-of-fintech-startups/.

White, Lawrence J. "ANTITRUST AND FINANCIAL REGULATION IN THE WAKE OF PHILADELPHIA NATIONAL BANK: COMPLEMENTS, NOT SUBSTITUTES." *Antitrust Law Journal*, vol. 80, no. 2, 2015, pp. 413–30, https://www.jstor.org/stable/26411543. Accessed 22 Apr. 2022.

WIRED Editorial Staff. "Why China Crushed Its Tech Giants." *WIRED UK*, 27 Sept. 2021, https://www.wired.co.uk/article/china-tech-giants-policy.

Wu, T. (2018). *The Curse of Bigness: Antitrust in the New Gilded Age*. Columbia Global Reports.

Xin, Leo. "China's Central Bank Continues to Tighten Regulation of Fintech." *Pinsent Masons*, 21 Apr. 2022,

https://www.pinsentmasons.com/out-law/news/china_s-central-bank-continues-to-tighten-regulat ion-of-fintech.

Zhong, Raymond. "China Fines Alibaba \$2.8 Billion in Landmark Antitrust Case (Published 2021)." *NYTimes*, 10 Apr. 2021,

https://www.nytimes.com/2021/04/09/technology/china-alibaba-monopoly-fine.html.

Zhu, Viviana. "China's FinTech: The End of the Wild West." *Institut Montaigne*, Apr. 2021, https://www.institutmontaigne.org/en/publications/chinas-fintech-end-wild-west.