VISA | This Week in Fintech

What lies ahead for bank and fintech partnerships?

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INTRODUCTION

Coming off a decade of innovation

Over the past decade, financial technology companies ("fintechs") have transformed the pace of innovation in the financial services sector.

As of October 2023, there were 5.3 billion Internet users - amounting to around 66% of the world's population. Increasingly, consumers are choosing to interact, shop, and engage with their primary service providers online, and banks are no exception. The growth of web and mobile as primary delivery channels is pushing the banking sector to modernize customer experiences in line with fintechs'. Correspondingly, there has been a notable drop in the global population of "unbanked consumers" (individuals without a formal account at a financial institution or with a mobile money provider). A 2021 survey by the US Census Bureau reports that the percentage of unbanked households has declined to 4.5%, its lowest level since the survey began in 2009.

The digital transformation doesn't stop at the user experience; banks are overhauling virtually every aspect of their technological strategy to comply with emerging regulations, cyber threats, and macroeconomic shifts. New technology standards beg the need for partners adept at navigating the digital landscape– for banks, partnering with fintechs will be key to staying ahead of the technological curve.

Whereas fintechs have been in longstanding competition with the banking sector, evolving market conditions are increasingly driving banks to forge mutually beneficial alliances with fintechs. Partnerships between banks and fintechs take many forms, not least M&A; JP Morgan Chase (the largest bank in the world by market capitalization) has acquired over 30 fintechs since 2021, underscoring the potential for banks to pursue M&A in upgrading in-house technological capabilities. Many banks and fintechs are also working to jointly offer products– HSBC's partnership with Tradeshift to deliver a working capital solution, Cross River's with Revolut in personal credit, and [Citi's with Intrafi](#) to facilitate deposit sweeps are a few such examples.

Bank-fintech partnerships are unlocking capabilities historically unseen in commercial banking. [Algorithmic decisioning](#) is enabling real-time decisioning on credit and account opening applications; [modern fraud and risk management](#) tools are curbing banks' fraud losses; [personalized banking experiences enhance customer](#) experiences and further upsell opportunities; bleeding-edge technologies like [cryptocurrencies](#) or [artificial intelligence are fundamentally shifting how the banking sector does business.](#)

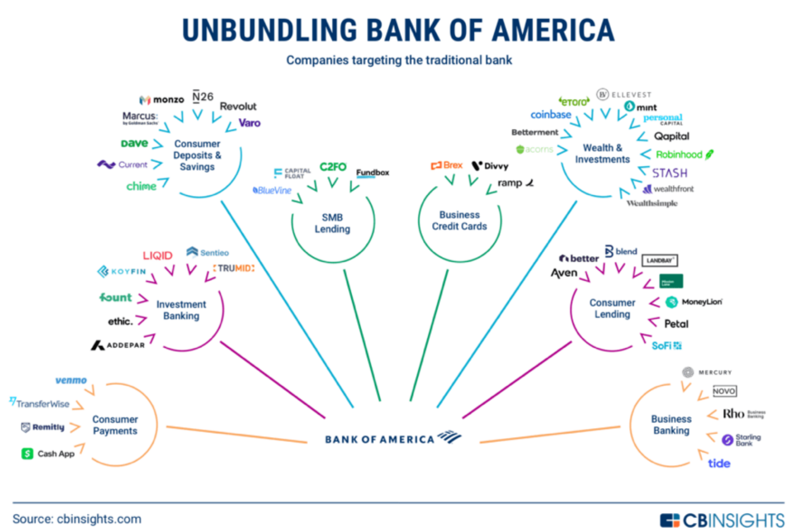
In spite of these advancements, banks and fintechs both face headwinds that will continue to shape their relationship over the coming decade.

In the context of ever-changing market conditions, what does the next decade look like for bank-fintech partnerships? How can 1 + 1 really equal 3 when it comes to "coopetition" between these historically unaligned players?

What are the challenges banks face this decade?

[Commercial banking is one of the most well-established industries in the modern world, estimated to value $1.2 trillion](#) in the US alone.

Despite this long-standing history, today's rapidly evolving technological, regulatory, and economic landscapes drive a unique set of challenges for commercial banks.



Source: [*CB Insights*](#)

New Competition

Banks face ever-growing competition from incumbents, as well as a global fintech market that's projected to grow at a 16.8% CAGR and reach $917.17 billion in value by 2032. Netscape CEO Jim Barksdale famously quipped that the only way to make money is bundling and unbundling; in line with this, fintechs have unbundled a significant portion of bank services over the past decade. By capitalizing on leaner cost structures and nimble distribution, these fintechs can offer tailored (and often, lower-cost) solutions direct-to-consumer.

Digitization

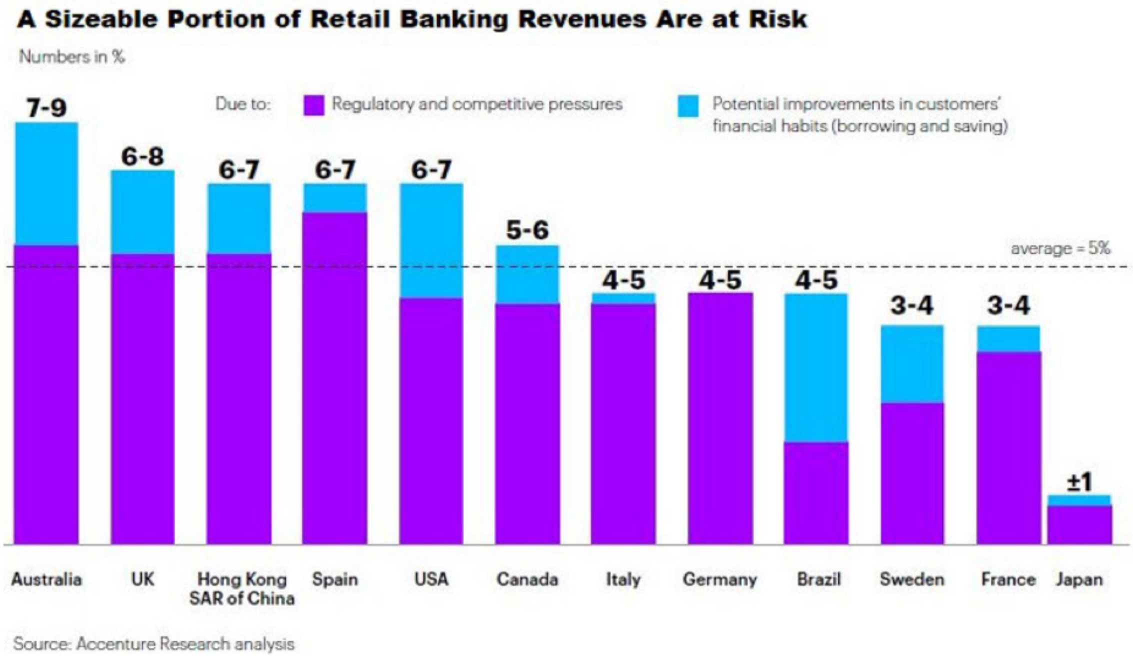
Fintechs are fueling increasing demand for digital-first financial product experiences, with 87% of Americans having used a mobile device to check their bank balances in 2020. Banks must be agile in their response, but much of the industry now recognizes that legacy banking cores restrict banks' flexibility and pace of innovation. On-premise core banking software isn't just costly to maintain in-house, it's highly rigid, preventing banks from integrating modern third-party capabilities and keeping pace with shifting industry norms.

Deposit Flight

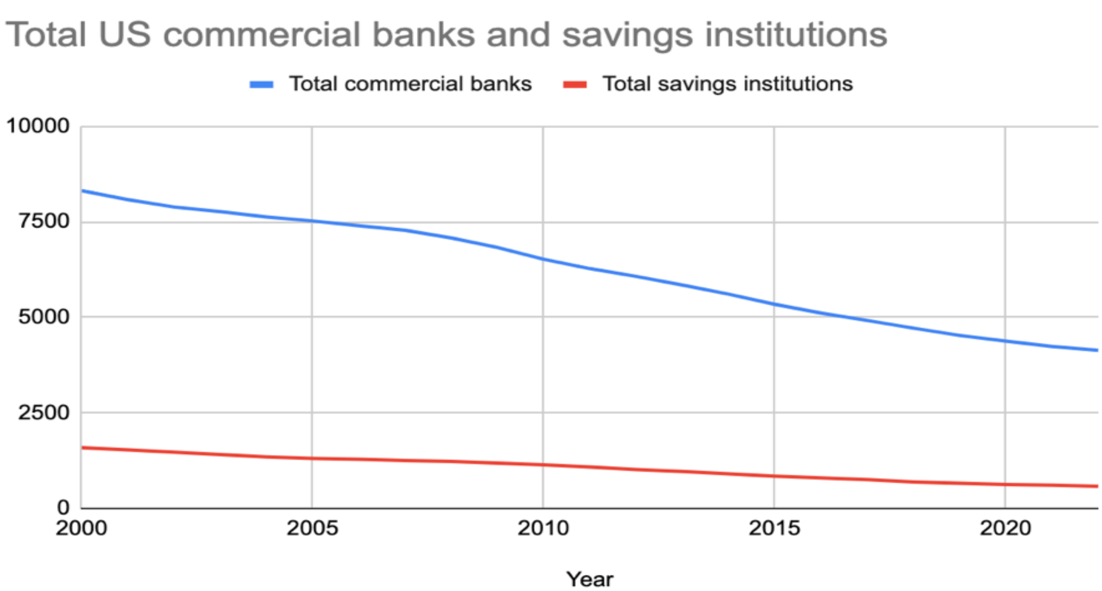
Increased digital competition has caused "slippery deposits" to become a major threat for banks. The traditional model of relationship banking is receding, so local, branch-driven loyalty between depositors and account managers no longer drives stickiness for customers. Not only are nimble fintechs able to quickly adjust account benefits to lure new customers, but perceived instability in US retail banking drove a "flight to safety" this year that spurred customers to withdraw trillions in deposits from major banks like PacWest, Western Alliance, and Charles Schwab. Higher interest rates have introduced a new incentive for customers to migrate deposits, pushing banks to offer higher APY on interest-bearing accounts as well as on non-savings products, such as money-market funds and treasuries.

Regulatory Costs

Financial firms are coming under heightened regulatory pressure globally as a result of major legislation coming into force (Basel III, Dodd-Frank, CECL, and ALLL, as examples), along with the proliferation of new regulatory bodies and higher fines for non-compliance. The cost of financial compliance has increased by 60% over the past decade– as a portion of total revenues, estimated to represent 5% of retail banks' top line. Unsurprisingly, these costs are squeezing bank margins and increasing banks' exposure to regulatory risk across a number of business activities.



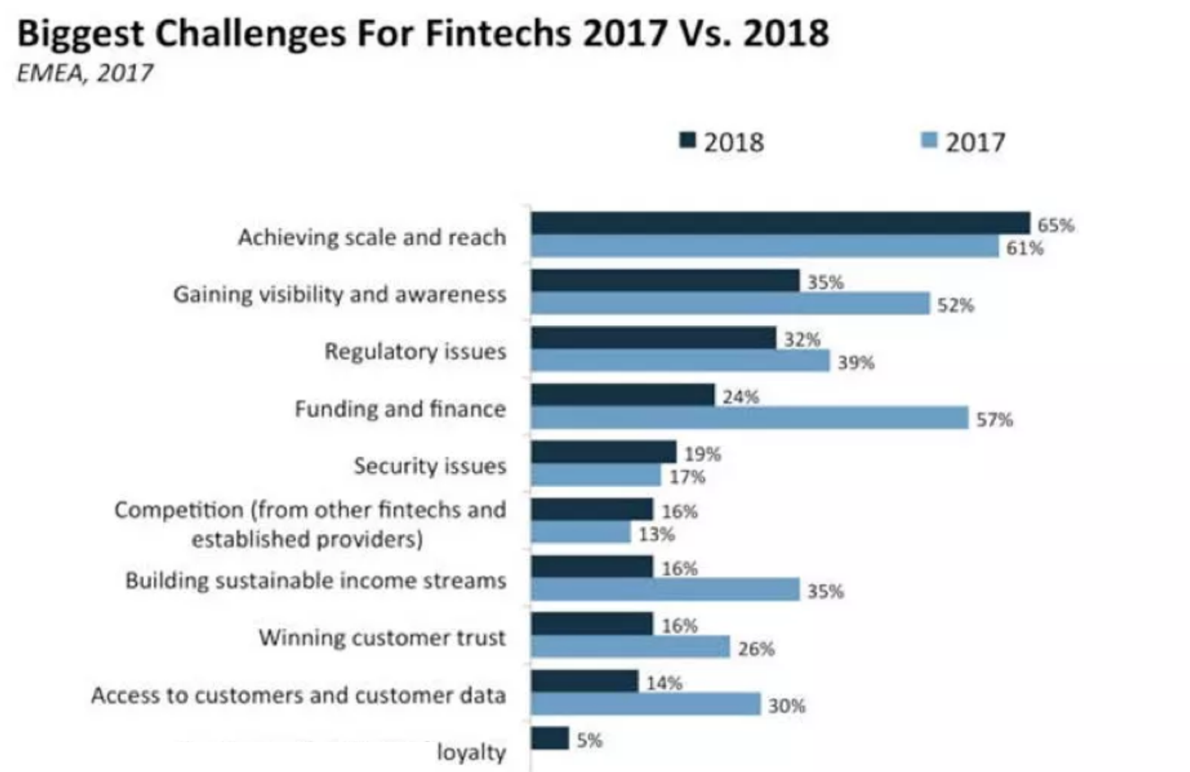
Altogether, these headwinds have caused a steady decline in the number of financial institutions operating in the US over the past few decades. Branch closures reflect this; since 2009, the number of bank branches opened has tumbled from 100,000 to 80,000 new locations yearly. Banks are positioning themselves to tackle a slew of changes that could further exacerbate these challenges: **interest rate fluctuations** driving up credit risk, **macroeconomic instability** hindering firms' ability to forecast financial positions, **demographic shifts** in the customer base driving new preferences, **cybersecurity threats** increasing the potential cost of hacks and data breaches, and **ESG/sustainability requirements** expanding reporting requirements for the financial sector.



Source: FDIC

What are the challenges fintechs face this decade?

While banks face the characteristic challenges of any incumbent in a newly-disrupted industry, fintechs also face their own difficulties. By partnering together, banks and fintechs can leverage each other's unique strengths to overcome many of these challenges.



Source: [Finextra]

The biggest challenges confronting fintechs haven't changed significantly since 2018; if anything, they've only intensified. Fintechs face ongoing uncertainty in their regulatory positioning, difficulties in gaining scale and visibility, and challenges in accessing regular or cost-effective funding.

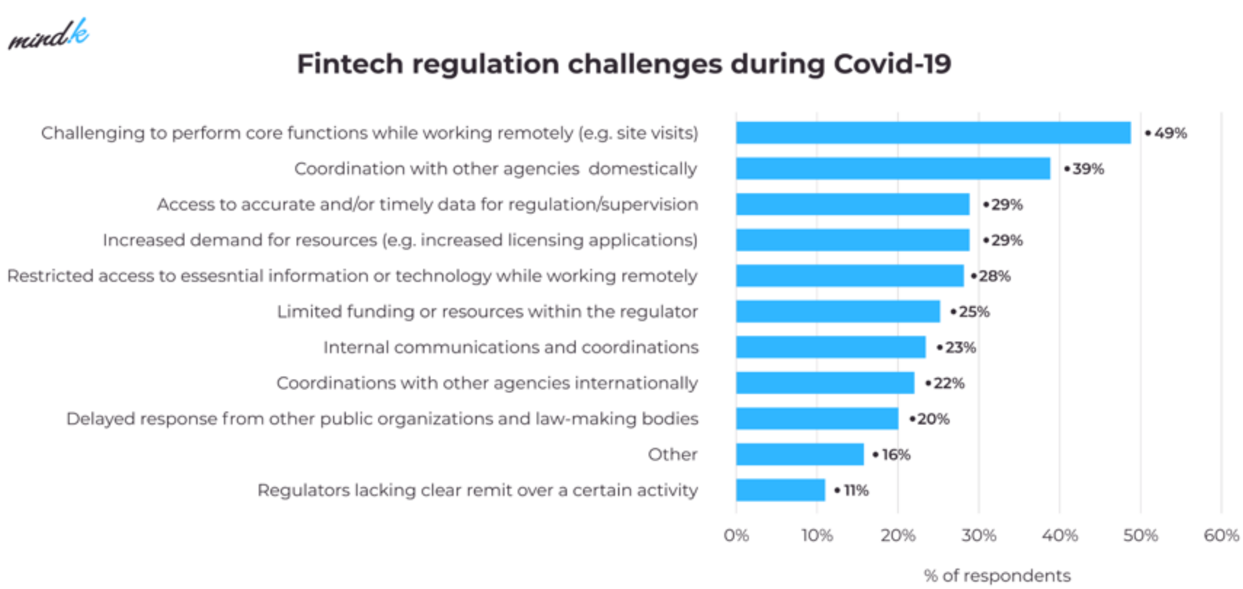
The resilience of incumbent banks, in contrast, highlights the advantages banks have in overcoming these challenges relative to fintechs, including:

1) **Regulatory approval and licensing**
2) **Broad-based distribution and established branch networks**
3) **Extremely low cost of capital sourced from customer deposits**

Fintechs' positions as often untested, thinly-resourced, venture-backed upstarts only weakens their ability to cope with these challenges.

Building in a heavily-regulated industry

Fintechs, like traditional financial institutions, are subject to a labyrinth of complex, regionally-fragmented financial regulations. **Fintechs may also have thinner compliance staffing than banks, little track record to reference in licensing applications, and exotic business models that make it difficult to scale in a tightly-regulated industry. As a result, many fintechs will opt to partner with bank "sponsors" to offer financial products through the banks' existing licenses and compliance programs.**



Source: MindK

Lack of industry experience and expertise

Fintechs, as the new entrants to banking, have an uphill battle to establish credibility and trust among consumers, especially when handling sensitive financial information. Developing trust while launching new products requires fintechs to commandeer expertise from the legacy financial sector, which takes time and significant capital buffers from venture investors to achieve.

Unit economics and profitability challenges

Lastly, finding sustainable revenue models and achieving profitability while offering lowcost or free services can be a significant challenge for fintechs. One of the major selling points of fintechs is the ability to more accurately price products for customers or undercut incumbents' prices entirely, as Robinhood did through its commission-free investing platform. Balancing growth and monetization is difficult for fintechs, which, as venture-backed companies prioritizing market share and return on investment, often prioritize account growth at the expense of profitability. It was estimated in 2022, for instance, that only 5% of neobanks were profitable, due to acquisition and account maintenance costs creating negative percustomer unit economics.

High cost of capital and debt

Licensed banks tend to have access to the cheapest possible source of capital available: customer deposits. In high-rate environments, banks are able to realize higher revenues on net interest margin– which accounted for $70.8 billion in net income among FDIC-insured banks in the second quarter of 2023. Fintechs that provide depository banking services often do so through banking partners, reducing the interest, if any, that they can collect from deposits, and limiting the types of loans and credit products into which they can channel those deposits. Most fintechs*offering credit solutions* must source capital from private markets and will typically incur high hurdle rates on debt facilities offered by venture capital firms, private equity funds, or bank credit desks. And the fintechs that look to capture deposits via checking or savings accounts (often linked to debit cards) must lure consumers or businesses away from trusted financial institutions, which can come at a high acquisition and retention costs, often in the form of offer, rewards, or cash back programs which erode operating margins. For fintechs, customer lifetime value projections depend on winning the primary business– known as "top of wallet"– away from banks, but often fintechs only become a secondary or tertiary consumer choice.

tech eu

	Revolut	monzo	Starling Bank	N26	bunq	vivid	LUNAR
Profits	€29.5 million	- €123 million	€39.7 million	- €172 million	- €13.5 million	NA	- €69.2 million
Revenues	€721 million	€174.7 million	€213.2 million	€182 million	€22 million	NA	NA
Customer numbers	27+ million	7+ million	3.5 million	8+ million	NA	500,000	~ 630,000
Funding	€1.6 billion	€1 billion	€793.8 million	~ €1.7 billion	€238 million	€175 million	€400+ million
Active in how many countries	36	2	1	24	Available all across Europe	4	3

Source: [Tech.eu]

The relationship between banks and fintechs

Thankfully, banks and fintechs are finding ways to leverage each other's strengths in overcoming these challenges. Gone are the days when banks and fintechs simply viewed each other as competitors; these firms are finding mutual success by partnering in 3 principal ways.

Partner Bank Logo	State	Assets	Fintech Partners
$10B+ in assets			
Wells Fargo	Nationwide	$2T	Blast (FBO account)
Goldman Sachs	Nationwide	$1T	Apple (credit card)
Bank of the West BNP Paribas	Nationwide	$90B	Brex (credit card)
BBVA Open Platform	Nationwide	$90B	Azlo (SMB banking), Wise (SMB banking), Simple (debit card and deposits), Digit (savings), Catch (savings), Modo (pooled FBO accounts and ACH)
First Horizon	Tennessee	$43B	Synapse Partner
UMB	Florida	$24.1B	Personal Capital (high yield), Unifimoney (high yield and deposits)
comenity	Ohio	$13.9B	PayPal Credit (formerly Bill Me Later)
axos Bank	California	11.5B	N26 (debit card and deposits), H&R Block (tax refund processing), NetSpend (debit card)

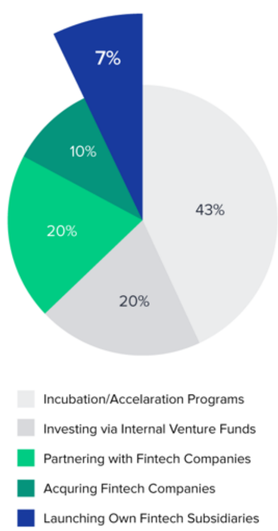
Source: [a16z]

Mergers & acquisitions

In the build / buy / partner framework of corporate decision-making, there are three fundamental ways to offset the Innovator's Dilemma that incumbents face: build the disruptive solution yourself, buy the competitor building the disruptive solution, or partner with them. Acquisition is often viewed as one of the most attractive options. If banks' primary advantages include deep balance sheets, scale, distribution, and low costs of capital, a natural conclusion when they are losing market share to small and nimble innovators is that they can easily regain that market-share by acquiring the innovators.

And in fact, many banks do pursue the M&A route in a variety of ways:

Chart 2: How Banks are Currently Responding to the Fintech Movement



Source: Statista

Table 1: Fintech Startup Investments by Sector for US Banks

	Blockchain	Data Analytics	Insurance	Personal Finance	WealthManagement	Financial Services Software	Lending	Payment & Settlement	Real Estate	Regulatory Tech	Total
Citi	5	5		2	1	5	3	2		2	25
Goldman Sachs	2	3	1	1	1	2	2	6	2	2	22
JPMorgan Chase & Co	2	1			1	4	1	2		1	12
Morgan Stanley		2	1			3	1			1	8
Wells Fargo	2	2		1		1	1	1		1	9
Bank of America Merrill Lynch	1	2				1		1		1	6
TD Bank	1							1		1	3
Capital One	1							1			2
US Bancorp	1							1			2
PNC	1							1			2
Total	**16**	**15**	**2**	**4**	**3**	**16**	**8**	**16**		**9**	**91**

Source: CB Insights

Source: TopTal

As an example, JP Morgan, one of the world's largest banks made over 30 acquisitions in 2021 alone. These included acquiring British digital wealth management platform Nutmeg and student lending platform Frank, and taking a majority ownership position in Greek payments provider and digital wallet Viva Wallets, and Brazilian digital bank C6.

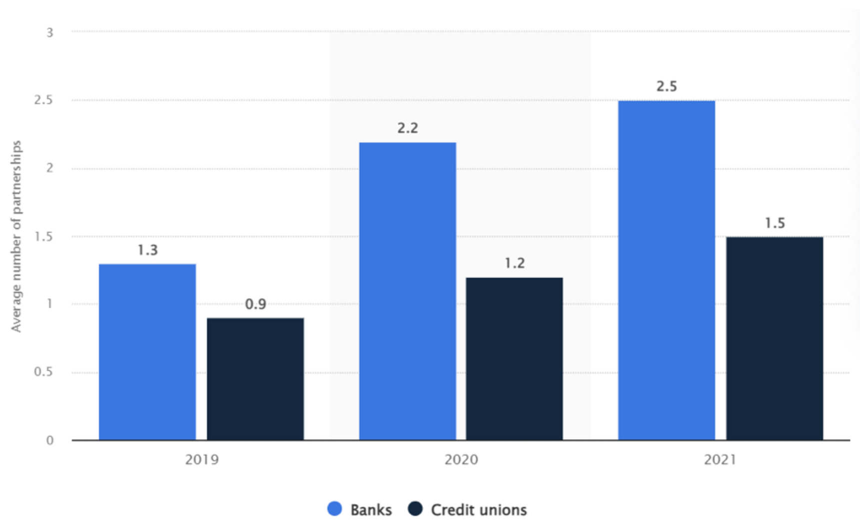
But M&A does not always imply acquisitions by default: many banks choose instead to invest in fintechs, taking minority positions and benefitting from the startups' growth, as well as partnering with them to help drive their growth. Partner and investor banks may provide marketing budget, compliance expertise, cross-selling, legal review, or other operational advantages to the fintechs they partner with.

Some banks take bank-fintech partnership a step further by building in-house accelerator and incubator programs to build and then spin-out their own standalone fintech companies, which in turn drive revenues and customers back to the parent bank.

This is also not one-directional: while rare, fintechs themselves occasionally acquire banks, such as peer-to-peer lending platform Lending Club, which in 2021 acquired Radius Bank as a means to garner its own deposit base that could, in turn, unlock higher net interest income.

Joint offerings

Banks that don't want to invest the balance sheet and operational capacity in acquisitions and investments may opt instead to work with fintechs in order to leverage each others' respective advantages. As of 2021, the average bank was partnered with 2.5 fintechs, as self-reported via survey, and this number has been increasing over time:



Banks and fintechs may partner for a variety of reasons:

Revenue growth / referral partnerships

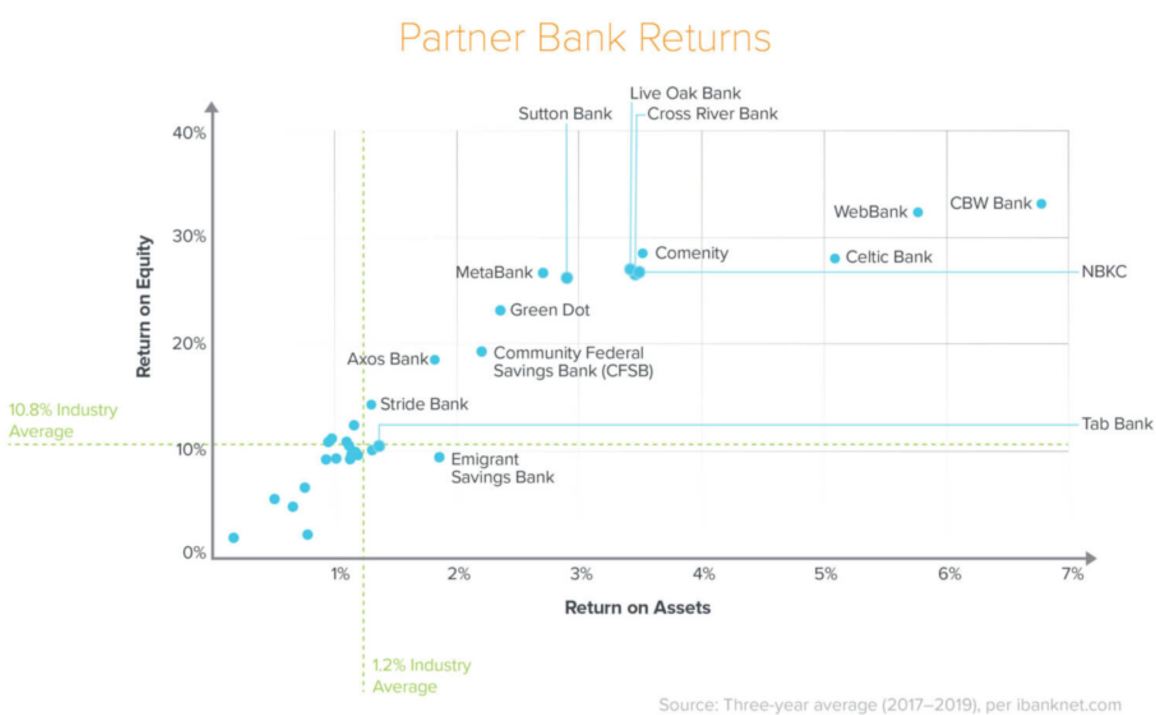
In this type of partnership, banks refer their customers to a preferred fintech to supplement features the bank does not offer. The fintech, in turn, shares some of its customer revenue with the bank. Examples include loan waterfall partnerships in which banks– which each have unique criteria for loan pre-approval– review applications submitted to a fintech loan aggregator.

Fintech vendors

One of the rising bank / fintech partnership models is the use of fintech vendors by banks to perform specific functions ordinarily managed by the bank. For instance, a bank may move some of its core banking processes to a more digitally-native and responsive core provider like Thought Machine or nCino's cloud banking platform. Or the bank may choose to outsource a few of its core capabilities such as vendor management and compliance review via providers like governance platform Themis or account-holder case review platform Hummingbird. The most ingrained fintech vendors may also be incorporated into the bank's own user interface and processes, such as implementing KYC / AML tool suites like Minerva in account onboarding.

White-labeling and licensing

When people refer to bank-fintech partnerships, they are most frequently referring to the fintechs that leverage bank licenses in order to provide their own services. The fintechs "white label" the underlying banks' accounts and leverage their regulatory certification in order to act as program managers and provide direct end-user services to their own customers. The banks, in turn, act as the de-facto regulator overseeing these fintechs. The benefit to banks is that they can collect rent on the account growth of fintech programs, without having to invest in the growth of those programs themselves, and diversify between multiple fintech partners.



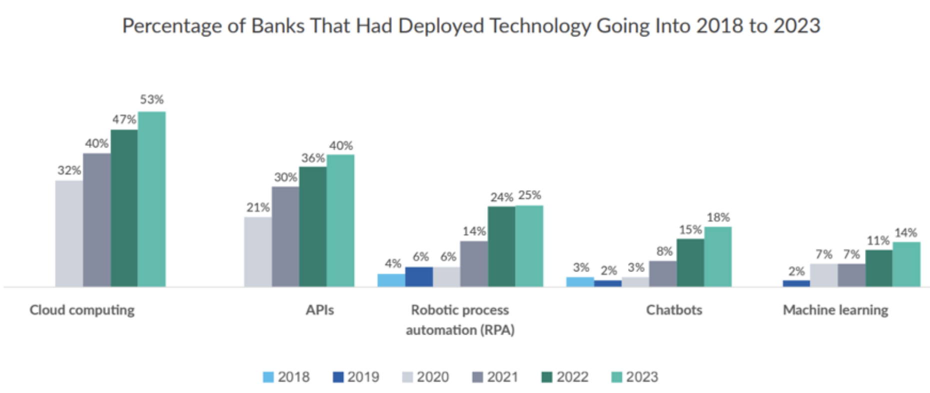
Source: a16z

Procurement

Banks are leveraging procured fintech solutions to address a number of sector-wide challenges, adapt to shifts in market demand, and gain competitive advantages relative to their peers.

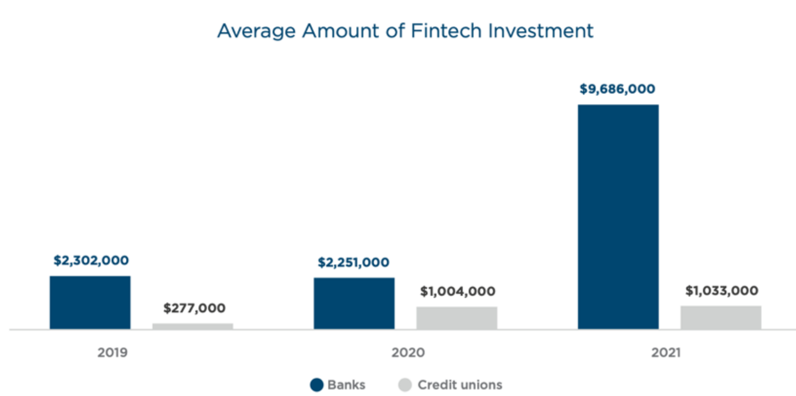
A survey by Cornerstone Advisors highlights that a growing percentage of banks and credit unions are deploying emerging technologies each year, and third-party fintech solutions are accelerating these deployments across 3 aspects of the banking tech stack: core banking operations, compliance, and customer experience.

Figure 21: Banks' Deployment of Emerging Technologies



Source: Cornerstone Advisors surveys of bank and credit union senior executives, 2017 to 2022

And these emerging bank technologies are increasingly coming from fintech partners. New research from Finastra shows that 75% of banks plan to engage with at least 3 fintechs over the next 12 months. Based on a survey of 290 US banks, the budget for bank-fintech partnerships has continued to grow from $2.3 million in 2019 to $10 million in 2021:



Source: Cornerstone Advisors survey of 290 U.S.-based bank and credit union executives, Q3 2021

Core banking operations

Core banking systems are the central software banks use to manage operations, including account ledgering, transaction processing, and loan management. Traditionally, this technology was entirely housed on-premise, but today many banks are working with core providers to migrate capabilities to cloud-based cores. By migrating to the cloud, these banks gain real-time insight on their businesses and the flexibility to respond to new technological demands. Cloud-based banking cores also unlock a more modular approach to core banking by allowing banks to seamlessly integrate third-party services and data, accelerating the pace at which banks can deploy features to better serve customers.

Notably, cloud-based banking also enables banks to deploy their own API-based third-party services. Fintechs critically rely on banks' APIs to offer joint solutions like Banking-as-a-Service and card issuing. Visa's pending acquisition of Pismo, a fintech offering cloud-based and bank-grade core and card issuing APIs, exemplifies how APIs can further alignment between banks, ecosystem partners, and create new product channels for banks to serve their customers.

Global open banking regulations may drive cloud-based banking cores to become a necessity in the coming years. Banks in Europe and the UK are already required to make customers' financial data available to third parties through open APIs under PSD2, with additional requirements to be specified under PSD3. In the US, similar requirements are coming into force under the CFPB's proposed API-based open banking initiative. It's no wonder that cloud computing and APIs have emerged as the two biggest areas of investment for banks procuring emerging technology solutions today.

Risk & Compliance

Compliance-focused fintechs are equipping banks to meet regulatory requirements and defend themselves against a range of technological threats, including:

Fraud

Third-party fintechs can give banks specialized tools to better detect suspicious activity, verify customers' identities, process documents, manage internal risk, and automate regulatory reports.

Data protection

Solutions to ensure that banks' core systems maintain information security and data privacy, in compliance with statutes like GDPR in Europe and CCPA in California.

Capital requirements
Tools helping banks monitor their capital levels and ensure they meet regulatory requirements for capital adequacy.

Regulatory reporting
Certain platforms give banks the ability to maintain detailed audit trails and automatically generate reports for regulators on transaction volumes and suspicious activity.

Customer experience

Fintechs are also helping banks improve customer experiences throughout every step of the client journey, notably through:

Digital interfaces
User-friendly, intuitive UIs banks can configure to help their customers manage accounts, cards, and payments from their desktop or mobile devices.

Financial tools
Modules that enhance value for customers with solutions like spend analysis and financial goal-setting.

Customer relationship management
Back-end platforms helping banks understand customers' behaviors, preferences, and enabling them to tailor products and communication accordingly.

Customer support
Live support resources and chatbot assistants allow banks to assist customers more effectively, around the clock.

Looking ahead: The next decade of bank-fintech partnerships

So what are banks looking for when they partner with fintech companies?
Per the 2022 U.S. Banking Strategic Partnership survey conducted by EY-Parthenon,

95%

of banks use partnerships to enhance their digital products and reach.

86%

of banks use partners to save money and accelerate implementation times.

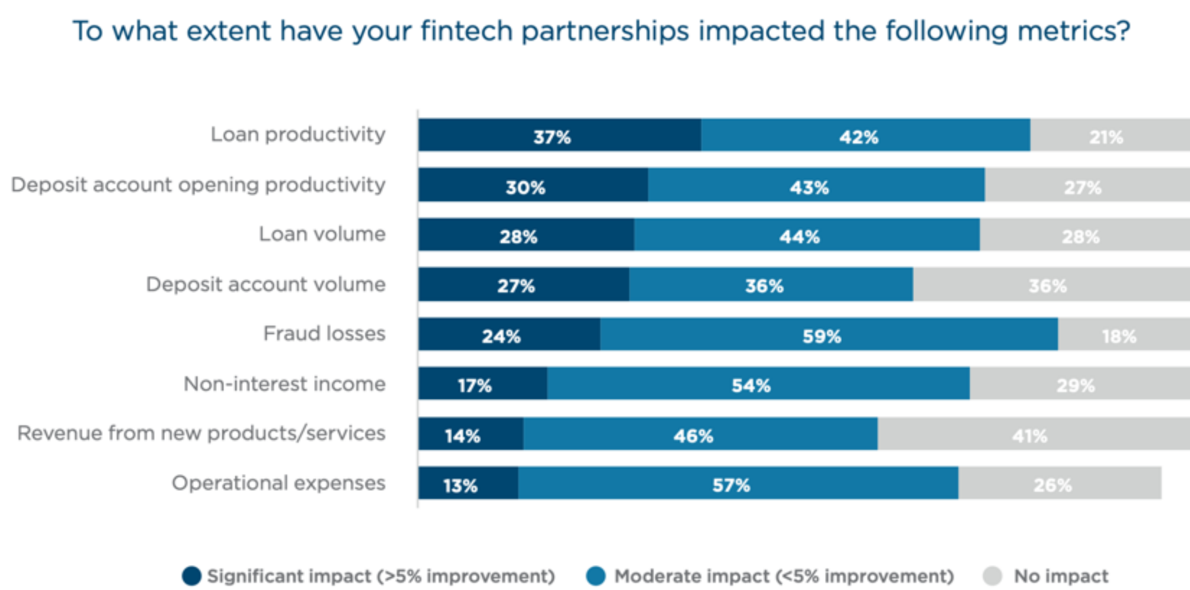
87%

of banks use a partner to manage critical processes.

64%

of banks view digital banking and data analytics as areas ripe for future partnership.

Do expectations map to the reality of bank-fintech partnerships? Evaluating Synctera's survey of 290 bank executives, the areas in which fintech partnerships have had the greatest impact are loan productivity, new deposit account growth, and loan volume:



Source: Cornerstone Advisors survey of 290 U.S.-based bank and credit union executives, Q3 2021

Artificial intelligence & data insights

Bank-fintech partnerships present a unique opportunity to consolidate data across organizations and gain deeper insights on activity. The potential for this data could even grow exponentially as fintechs partner with more banks to garner data and refine insights that, in turn, could help banks better attract and retain customers. The subsequent customer growth results in a data flywheel that benefits banks, fintechs, and customers alike.

The emergence of artificial intelligence is already having a transformative impact on a number of banking-related activities:

Compliance

AI could be a boon for banks in the face of globally rising compliance costs. Of the $274.1 billion banks spent on compliance in 2022, 60% went towards labor (salary, training, and outsourcing) costs. AI can automate much of the manual work that compliance entails today, and improve risk outcomes through enhanced identity verification, watchlist screenings, transaction monitoring, and document processing.

Customer support

Firms are already leveraging AI at various points in the customer journey, notably deploying chatbots and virtual assistants in customer support. These text- and voice-based solutions can assist customers with questions, balance inquiries, and payments, among other banking-related tasks.

Marketing

Marketers can leverage AI to better understand customers' preferences and analyze customer behavior in light of broader market trends. These insights can then be used to personalize campaigns and surface product offers that customers would find most relevant.

Investing

Investment-focused AI models can give investors powerful, real-time market analysis, insight on portfolio performance, automate trading decisions, and can even generate new investment ideas. On the retail side, firms are also using AI-based robo-advisors to help clients manage investments more efficiently.

Operations

Firms can use AI to gain real-time insights on operational performance that can, in turn, drive process improvements, automate risk management, and predict events like ATM failures so teams can allocate resources accordingly.

Credit underwriting

Lenders can use AI to gain a more sophisticated understanding of customers' creditworthiness and parse new insights from greater volumes of financial data. These models could also incorporate non-traditional data points in credit scoring, which could be particularly powerful for banks serving customers with little credit history.

Artificial intelligence is still early in its financial sector journey. In 2020, the market for banking AI applications was valued at $3.88 billion; by 2030, the market is projected to reach $64.03 billion in value. US and Canadian firms account for 60% of investment in financial services AI, with global investment set to compound yearly.

Deep learning and generative AI will be a major area of focus for AI developers. Early iterations of AI relied on hard-coded algorithms and, subsequently, machine learning to perform routine tasks, but deep learning introduce a more robust set of capabilities based on neural networks and larger sets of training data. Deep learning models could become dominant in the industry, particularly in applications like fraud detection– where deeper pattern recognition is needed– and customer experience, where natural language processing (NLP) and generative AI can create more human-like outputs. An important caveat to consider is how regulation, privacy, and ethical concerns will affect AI development. Regulators are paying close attention to potential bias and discrimination in AI-generated credit scores or customer onboarding decisions. Deep learning is of particular concern here, as certain DL models create a "black box" that makes it impossible to ascertain how outputs were generated. Firms developing AI will need to balance its vast potential in each of these applications with the industry's needs for accuracy, transparency, and interpretability. Banks could partner with fintechs to mitigate these risks, leveraging specialized fintechs' expertise to safely harness the power of artificial intelligence.

Interoperability with payment systems

As financial services have proliferated over the last decade, so has the variety of payment systems leveraged by those fintechs. In a [previous whitepaper co-written by This Week in Fintech and Visa](), multi-rail payments and interoperability was a central recommendation for banks building in a resilient, technology-enabled payments ecosystem. Banks in the US have conventionally used [ACH, which can be slow](), or [wire transactions, which can be expensive](), to move money amongst each other. The complexity, cost, and latency increase significantly when money moves across borders due to globally disjointed regulatory frameworks, varying payment standards, mandatory manual reviews, and inconsistent transaction messaging.

Payment rails also differ in the features they make available, which can further exacerbate interoperability challenges. For instance, India's UPI and Brazil's Pix are available for real-time transactions 24/7, whereas bank wires in the US typically settle the following day and don't clear on weekends. Credit card transactions carry customer and merchant protections which allow transactions to be reversed in instances of chargebacks and disputes, whereas payment methods made over decentralized rails, such as crypto and stablecoins, can be irreversible.

Variations between payment rails and standards underscore the role that payment networks and financial services facilitators like Visa play in the ecosystem. By providing a rail-agnostic central clearinghouse for transactions, Visa can either route payments intelligently via the most efficient rail or allow customers to choose their own rail (without requiring customers to be familiar with rails whatsoever), based on the specific features that matter to them (all without requiring customers to be familiar with payment rails whatsoever).

By working with fintechs and facilitators like Visa on payments, banks can deliver new forms of value to their customers. For instance, by partnering with payroll API providers like Argyle or Atomic Financial, banks can accrue deposits by switching the destination account of payroll direct deposits. By partnering with payment orchestration providers like Astra, banks can enable automated cross-rail transactions such as mobile top-ups, digital wallet drawdowns, and peer to peer payments.

Securing deposits

Rising interest rates, near-instant funds transfers, and the rapid spread of information via social media mean that customers are more inclined than ever to consider migrating deposits to other institutions. As of 2023, interest rates and the cost of funds were cited as the two "top concerns" for banks and credit unions.

Concerns about deposit fragility came to the fore when a run on Silicon Valley Bank's deposits in early 2023 triggered a larger series of bank collapses and stoked public fears about the stability of the banking system. For banks, these events underscored the heightened threat that low-cost capital is under, and the regulatory exposure that results if banks fail to meet capital adequacy requirements. Conversely, these events also highlighted how banks can partner with fintechs to combat the risk of slippery deposits.

Capital monitoring

Core banking systems and fintech vendors offer real-time visibility on balance sheet liquidity, asset & liability performance, and agile stress testing tools banks can use to make timely capital allocation adjustments. Many of these tools integrate artificial intelligence to offer predictive insights– empowering banks to make proactive decisions in light of broader macroeconomic trends.

Liquidity management

Inter-bank networks respond to banks' real-time liquidity needs by creating marketplaces for institutional capital. Deposit sweep networks, for example, broker deposits between banks looking to earn interest on excess liquidity, and banks in need of immediate funding to cover short-term obligations. Secondary loan markets perform a similar function on the asset side of the balance sheet, supporting the transfer of loans between banks– freeing up liquidity and helping maintain capital ratios.

Embedded banking

Joint fintech solutions are an opportunity for banks to diversify their deposit bases. Silicon Valley Bank's collapse showcased the danger of deposit concentration leading to a bank run, as like-minded customers may decide to withdraw funds in unison. Fintechs can act as distribution channels for banks, expanding their reach in new industries and geographies.

CONCLUSIONS

Where do we go from here?

The future of banking and fintech will be significantly shaped by partnerships.
In a macro environment characterized by higher interest rates, headwinds to consumer finances, and a slower pace of investing, banks and fintechs can be more resilient and unlock new growth opportunities when they work together. Now that consumers have entered the era of digital financial services, banks are focused on their digitization strategies to meet customers where they are. In order to win in this new era, banks must be:

- **Willing to invest in their established product offerings by adapting them to digital interfaces and customer acquisition channels.**
- **Learning from how fintechs improve the distribution of new products and services.**
- **Partnering with fintechs to improve their own product offerings, and to move faster to stay on the cutting edge of services and experiences for their clients.**

Leveraging their compliance and regulatory advantages, scale, and lower cost of capital, banks still have many advantages when it comes to providing financial services, but in the face of increasing innovation over the last decade, the time is now to reinvent their service offerings. The era of monoline fintech providers in the US has passed its first peak. Per Fintech Nexus, "Instead of further challenging specific service areas, some organizations go back to the original idea of the bank as a convenient financial "supermarket" for consumers." This transition to rebundling refocuses fintechs on the natural place that consumers turn to first in order to access financial services: their banks. The fintechs that win in the next decade will be those that:

- **Continue innovating and building net-new products & services quickly, shifting to meet consumer preferences.**
- **Solve pressing financial problems with app experiences that consumers love.**
- **Work *with* regulators instead of against them to meet compliance standards and offset risk from bad actors.**
- **Find the right banking partners that are bought into their mission and can help them grow their products' reach.**

The next decade of the bank-fintech relationship will be characterized by increased collaboration, from which all parties can win.

Annex 1: Text descriptions of figures

Figure 1. This figure, sourced from CB Insights, shows an infographic of the companies that are unbundling Bank of America's business units. The companies are grouped into 8 categories: Consumer Payments, Investment Banking, Consumer Deposits & Savings, SMB Lending, Business Credit Cards, Wealth & Investments, Consumer Lending, and Business Banking.

Figure 2. This figure, sourced from Accenture Research, shows a bar graph depicting that on average 5% of retail banking revenues are at risk due to regulatory and competitive pressures from across 12 different countries, and that there are potential improvement in customers' financial habits in terms of borrowing and saving. The 12 countries shown are: Australia, UK, Hong Kong SAR of China, Spain, USA, Canada, Italy, Germany, Brazil, Sweden, France, and Japan. In particular, Australia, UK, Hong Kong SAR of China, and Spain exceed the 5% average threshold of retail banking revenue that might be at risk due to regulatory and competitive pressures.

Figure 3. This figure, sourced from the FDIC, shows a line graph of total number of commercial banks and savings institutions in the US from 2000 to 2023. The line trends downwards for US commercial banks, showing a decline from about 85,000 in 2000 to less than 5,000 after 2020. Similarly, the line graph trends downwards for US savings institutions as well, but showing a significantly slower decline with less than 2,500 US savings institutions in 2000 and at about 1,000 after 2020.

Figure 4. This figure, sourced from Finextra, shows the 10 challenges facing fintechs in the EMEA region from 2017 to 2018. The ten challenges, listed in order of most challenging to least, are: 1) Achieving scale and reach, 2) Gaining visibility and awareness, 3) Regulatory issues, 4) Funding and finance, 5) Security issues, 6) Competition (from other fintechs and established providers, 7) Building sustainable income streams, 8) Winning customer trust, 9) Access to customers and customer data, 10) Loyalty.

Figure 5. This figure, sourced from Mindk, shows the 11 fintech regulation challenges that fintechs faced during Covid-19. The 11 challenges, listed in order of most challenging to least, are: 1) Challenging to perform core functions while working remotely (e.g. site visits) – 49%, 2) Coordination with other agencies domestically – 39%, 3) Access to accurate and/or timely data for regulation/supervision – 29%, 4) Increased demand for resources (e.g. increased licensing applications) – 29%, 5) Restricted access to essential information or technology while working remotely – 28%, 6) Limited funding or resources within the regulator – 25%, 7) Internal communications and coordinations – 23%, 8) Coordinations with other agencies internationally – 22%, 9) Delayed response from other public organizations and law-making bodies – 20%, 10) Other – 16%, 11) Regulators lack clear remit over a certain activity – 11%

Figure 6. This figure, sourced from Tech.eu, shows the profits, revenues, customer numbers, funding, and countries operated in for 7 neobanks. These neobanks are: Revolut, Monzo,

Starling Bank, N26, bunq, vivid, and Lunar. Revolut and Starling Bank have shown profitability, while the other neobanks in the list are currently operating at a loss.

Figure 7. This figure, sourced from a16z, shows banks with greater than $10 billion in assets and what fintechs they partner with. The partnership can be either nationwide in the US or specific to operations in one state: 1) Wells Fargos partners with Blast for FBO accounts and they are partnered up nationwide, 2) Goldman Sachs partners with Apple to issue credit cards nationwide, 3) BNP Paribas partners with Brex to issue credit cards nationwide, 4) BBVA partners with Azlo for SMB banking, Simple for debit cards and deposits, Digit for savings, Catch for savings, and Modo for FBO accounts and ACH, nationwide 5) First Horizon partners with Synapse Partner in Tennessee, 6) UMB partners with Personal Capital for high yield products, and Unifimoney for high yield products and deposits in Florida, 7) Comenity partners with Paypal for credit products in Ohio, and 8) Paxos partners with N26 to issue debit cards and deposits, HR & Block for tax refund processing, and NetSpend for debit cards, in California.

Figure 8. This figure, sourced from TopTal, shows a chart of the 5 different tactics that banks are taking to respond to the risk of fintechs. The tactics, listed in order of most to least common, are: 1) Incubation/Acceleration Programs – 43%, 2) Investing via Internal Venture Funds – 20%, 3) Partnering with Fintech Companies – 20%, 4) Acquiring Fintech Companies – 10%, and 5) Launching Own Fintech Subsidiaries – 7%

Figure 9. This figure, sourced from TopTal, shows a table depicting fintech startup investments by business function for US banks. The banks analyzed are: Citi, Goldman Sachs, JPMorgan Chase & Co., Morgan Stanley, Wells Fargo, Bank of America Merrill Lynch, TD Bank, Capital One, US Bancorp, and PNC. The functions that these banks have fintech startup investments in are: Blockchain, Data Analytics, Insurance, Personal Finance, Wealth Management, Financial Services Software, Lending, Payment & Settlement, Real Estate, and Regulatory Tech. Citi and Goldman are the top two banks that have invested in the most number of fintech startups at 25 and 22, respectively.

Figure 10. This figure depicts a bar graph showing that on average, the number of fintech partnerships for Banks and Credit Unions, have been increasing from 2019 to 2021. In 2019, the average number of fintech partnerships for banks was 1.3 and 0.9 for credit unions. In 2020, the average number of fintech partnerships for banks was 2.2 and 1.2 for credit unions. In 2021, the average number of fintech partnerships for banks was 2.5 and 1.5 for credit unions.

Figure 11. This figure, sourced from a16z, shows the 3-year average (2017-2019) return on assets and return on equity for bank investments and partnerships with fintechs. The banks featured in the plot are: Axos Bank, Stride Bank, Emigrant Savings Bank, MetaBank, Green Dot, Community Federal Savings Bank, Comenity, Live Oak Bank, Cross River Bank, WebBank, Celtic Bank, CBW Bank, NBKC, and Tab Bank. Average industry return on equity is 10.8%, and almost all of the banks featured exceeded this benchmark with the exception of Emigrant Savings Bank who fell just short with a return of around 10%. Average industry return on assets is 1.2%, and all the banks featured exceeded this benchmark with CBW Bank having generated the most return on assets and equity in the plot.

Figure 12. This figure, sourced from Cornerstone Advisors, shows the percentage of banks that had deployed new technologies from 2018 to 2023. The 5 new technologies that banks are deploying are: Cloud Computing, APIs, Robotic process automations (RPA), chatbots, and machine learning. For cloud computing, 53% of banks had deployed this technology in 2023 compared to 32% in 2018. For APIs, 40% of banks had deployed this technology in 2023 compared to 21% in 2018. For robotic process automations, 25% of banks had deployed this technology in 2023 compared to 4% in 2018. For chatbots, 18% of banks had deployed this technology in 2023 compared to 3% in 2018. For machine learning, 14% of banks had deployed this technology in 2023 compared to 2% in 2018.

Figure 13. This figure, sourced from Cornerstone Advisors, shows that on average, banks and credit unions have increased their dollar investment in fintechs from 2019 to 2021. For banks, average dollar investment in fintechs was $9,686,000 in 2021 compared to $2,302,000 in 2019. For credit unions, average dollar investment in fintechs was $1,033,000 in 2021 compared to $277,000 in 2019.

Figure 14. This figure, sourced from Cornerstone Advisors, shows 8 different metrics that fintech partnerships have impacted for banks. The following lists the metrics that have had the most significant impact, i.e. a 5% improvement, in order of most impactful to least for a percentage of banks: 1) Loan productivity – 37%, 2) Deposit account opening productivity – 30%, 3) Loan Volume – 28%, 4) Deposit account volume – 27%, 5) Fraud losses – 24%, 6) Non-interest income – 17%, 7) Revenue from new products/services – 14%, and 8) Operational expenses – 13%.