

**Acting Comptroller Michael J. Hsu**  
**Remarks before the American Fintech Council**  
**Fintech Policy Summit 2021**  
**November 3, 2021**  
**“Leveling Up Banking and Finance”**

I got my first paycheck in 1989 for bagging groceries at the local supermarket near my home in Columbus, Ohio. It came on a printed check. I remember riding my bike to the Huntington Bank branch around the corner to deposit it. At the end of the summer, I had saved up enough to buy a guitar, which I would have gladly bought sooner had I had access to credit.

Today, if I were a teenager, I would be able to instruct my employer to direct deposit my paycheck straight into my PayPal, Chime, or CashApp account. No physical paper or bike ride to a bank branch would be needed. And I wouldn't need to wait to get a guitar. I would simply tap the buy now, pay later option or use one of the many credit offerings available. No bank would need to be involved, or at least not apparent to me as the app user.

The digitalization of banking has been underway for some time. Electronic payments began to dominate the landscape in the 2000s, while banks developed online services to complement their traditional brick and mortar offerings. Bitcoin launched in 2009, steadily attracting users over the next decade. By the mid-2010s, financial innovation was a prominent enough topic that agencies like the OCC and the United Kingdom's Financial Conduct Authority (FCA) began to explore ways to encourage “responsible” innovation.

Then the pandemic hit and pulled the future forward. Several years of projected growth in digitalization took place in a matter of quarters. For instance, digital payments transactions

increased by 27 percent, from \$4.1 trillion to \$5.2 trillion, from 2019 to 2020.<sup>1</sup> Similarly, the total market value of cryptocurrencies has grown to approximately \$2.5 trillion from \$200 billion in 2019.<sup>2</sup> Consumers and businesses everywhere it seemed experienced greater convenience, expanded capabilities, and an increase in opportunities, all as a result of financial innovation (notwithstanding regulators' actions or inaction).

A closer, more objective look reveals a mixed picture, however. These trends are being driven by firms that are not subject to bank rules and do not have the same controls as banks. In regulatory-speak, they sit outside of the so-called bank regulatory perimeter. The full implications of this will likely only become apparent over time. While the convenience and benefits of rapid innovation can be enjoyed immediately, the risks and harms to consumers and businesses of engaging in financial activities with fewer controls tend to emerge only later. Take, for instance, the Paycheck Protection Program (PPP). Fintech advocates proudly point to the role of fintechs in facilitating expanded access to PPP loans as evidence of their promise and value to society compared to traditional banks. More recent evidence, however, shows higher rates of customer dissatisfaction and of fraud with PPP loans facilitated by fintechs versus those facilitated by traditional banks.<sup>3</sup> In the cryptocurrency space, the rapid growth in users and total market value has only been matched by the growth in scams and consumer complaints. "Move fast and break things" is a common mantra in tech. In the financial services context, it is important to remember that those "things" are people and their money.

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<sup>1</sup> Refer to [26 Fintech Statistics Showing an Industry on the Rise \(2021\), Fortunly \(fortunly.com\)](#)

<sup>2</sup> Refer to [Seven charts that explain the current state of crypto, Morning Brew \(morningbrew.com\)](#)

<sup>3</sup> Refer to [Griffin, John M. and Kruger, Samuel and Mahajan, Prateek, Did FinTech Lenders Facilitate PPP Fraud? \(October 27, 2021\). SSRN:3906395](#)

Increasingly, the three cornerstones of banking—taking deposits, making loans, and facilitating payments—are being reassembled functionally and digitally outside of the bank regulatory perimeter by certain firms. As I will discuss in a bit, these “synthetic banking providers” (SBPs) operate out of the reach of bank regulators and free of bank rules, such as capital requirements, bank consumer protection laws, and the Community Reinvestment Act.

History and research warn us that unregulated banking ends badly. Indeed, the origins of the OCC, Federal Reserve, and FDIC, as well as of many state banking agencies, can be traced back to financial panics and destabilizing runs resulting from unregulated or poorly regulated banking.<sup>4</sup>

The ambitions of some of the larger financial services crypto firms to become “universal” (i.e., offering everything from crypto custody to retail brokerage to market making to asset management to prime brokerage) also warrant attention. (For starters, the rapid expansion and mixing of wholesale and retail activities at some crypto firms raise the question of whether there ought to be Glass-Steagall-like separation of activities in the crypto space. But I’ll leave that question for another day.)

Many of these universal crypto firms hold themselves out as regulated. But this is a half-truth.<sup>5</sup> Crypto firms today are regulated at most only partially and selectively, with no single regulator having a comprehensive view of the firm as a whole. Here, too, history contains warnings, as I will discuss in more detail later. Without comprehensive, consolidated

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<sup>4</sup> Refer to Conti-Brown, Peter, and Sean H. Vanatta, *The Banker's Thumb: A History of Bank Supervision in America* [Cambridge, MA, forthcoming], [Introduction and Chapter 1](#); Menand, Lev, “Why Supervise Banks? The Foundations of the American Monetary Settlement” (October 17, 2019). 74 *Vanderbilt Law Review* 951; Mitchener, K., & Jaremski, M. (2015). “The Evolution of Bank Supervisory Institutions: Evidence from American States.” *The Journal of Economic History*, 75(3), 819–859.

<sup>5</sup> Refer to [Regulated cryptocurrency exchanges: sign of a maturing market or oxymoron?](#), *London School of Economics Business Review* ([blogs.lse.ac.uk/businessreview](https://blogs.lse.ac.uk/businessreview/))

supervision, no single regulator can see the whole picture and understand how a firm as a whole operates and takes risk. This warrants greater attention as crypto firms, especially the universals, get bigger, engage in a wider range of activities and risk-taking, and deepen their interconnectedness within the crypto ecosystem and with traditional finance.

To address the problems of synthetic banking in payments and of fragmented supervision of crypto, and to create an environment where responsible innovation can flourish, we need to “level up” banking and finance. I am using “level up” in both senses of the term—that is, to increase something in order to remove a disparity, and to progress to the next level. We need to remove the disparity between the rights and obligations of banks and the rights and obligations of synthetic banking providers by holding SBPs to banking standards. At the same time, we need banks, fintechs, and crypto firms to step up and make the business of handling other people’s money an ultra-high trust endeavor, where the needs of all customers are met in a reliable and consistently safe, sound, and fair way. By leveling up, we can safeguard trust in money, lending, and payments, and assure the public that financial innovation and change will not hurt consumers or endanger the financial system.

Before banks get too comfortable, I feel it important to note that I am not here to defend traditional banking and finance. Banks have been slow to adapt to change. Some groups, such as the underbanked, communities of color, rural communities, and small businesses, have felt poorly served by the banking industry. And residual distrust from the 2008 financial crisis remains. These have created opportunities for fintechs and crypto firms. While banks have improved their financial conditions, risk management capabilities, and consumer practices considerably, notable gaps, mistakes, and bad behaviors remain. I want to be clear: *everybody* needs to level up, including banks.

The biggest challenge with leveling up is that it cannot be achieved by the OCC, or any regulatory agency, alone. It requires a change in how regulatory agencies, including state regulators, interact and in how we define success. It requires less regulatory competition and more cooperation, less parochialism and more teamwork, and less go-it-alone independence and more *interdependence*. It requires us to not cling to or fall back on the past, but to accept and adapt to the future. Put simply, we regulators need to level up, too.

My remarks today are focused on clarifying two key problems that need to be solved to ensure that we have a safe and sound financial system as digitalization trends continue to accelerate. As I will note in my conclusion, solving for these should help modernize the bank regulatory perimeter and provide the clarity needed to facilitate responsible innovation going forward.

### The Digital Unbundling and Functional Rebundling of Banking

The core function of banking consists of three activities: taking deposits, making loans, and facilitating payments. Banks' role in providing these services together is what makes banks "special" and thus needing supervision and regulation.<sup>6</sup> The bundling of these three activities enables banks to intermediate credit, transform liquidity, and support the economy. It also makes banks highly leveraged, highly confidence-sensitive, and highly interconnected. A run or stress at one bank can cause instability across the financial system. For these reasons, banks are subject to prudential regulations, like capital and liquidity requirements, and to supervision, which is unique among private corporations.<sup>7</sup>

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<sup>6</sup> Refer to [Annual Report of the Federal Reserve Bank of Minneapolis, Annual Report 1982 : Are Banks Special, FRASER, St. Louis Fed \(stlouisfed.org\)](#)

<sup>7</sup> Refer to [Why Are Banks Regulated?, St. Louis Fed \(stlouisfed.org\)](#)

In the early 2010s, companies like PayPal, Venmo, and Square began offering services and goods aimed at improving customers' payments experiences. Thus began the process of unbundling, by peeling away the payments leg of banking. By 2019, the fintech payments space had grown significantly, and the pandemic has only accelerated those trends.<sup>8</sup> The proportion of digital activity originating outside of traditional banks has forced banks to adapt their strategies to compete. By and large, such competition has been healthy and beneficial for consumers and small businesses.

The largest payments fintechs have not stopped there, however. While they started off with a focused service or product, for example, facilitating peer-to-peer payments or connecting a credit card reader to a mobile phone, many have augmented their platforms and expanded into adjacent areas, such as extending various forms of credit and offering interest on cash held.<sup>9</sup> Today, a range of fintechs provide seemingly the full suite of banking and investment services, including in cryptocurrencies, with the convenience of tech. These synthetic banking providers are reassembling the three legs of banking, but outside of the bank regulatory perimeter.

One may be tempted to ask: So what? If fintechs can do banking better than traditional banks, shouldn't we encourage or at least allow such competition? Why is synthetic banking a concern? Two reasons come to mind: run risk and regulatory arbitrage. Run risk is the risk of customers withdrawing their money *en masse* from an institution out of fear that their money is not safe or they may not be able to access it when needed. The 2008 financial crisis is notable, in part, because runs on non-banks, such as money market mutual funds and structured investment vehicles (SIVs), caused as much financial instability as runs on banks. Today, with the

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<sup>8</sup> Refer to [How the COVID-19 Pandemic May Reshape the Digital Payments Landscape, Kansas City Fed \(kansascityfed.org\)](https://www.kansascityfed.org/news-articles-and-publications/press-releases/2020/04/08-how-the-covid-19-pandemic-may-reshape-the-digital-payments-landscape)

<sup>9</sup> Refer to [The Battle For Your Deposits Intensifies And That's Good News For Savers, Bankrate.com \(bankrate.com\)](https://www.bankrate.com/news/the-battle-for-your-deposits-intensifies-and-thats-good-news-for-savers/)

rebundling of banking by SBPs, the money held by payments platforms looks less like the spare cash in one's wallet and more like the cash one holds in a bank deposit. At the same time, those platforms are now extending material amounts of credit. On demand, par liabilities mixed with credit risky assets: these are the ingredients that can lead to runs. Deposit insurance, Federal Reserve discount window access, and the associated capital, liquidity, and other prudential requirements that have been developed for banks over the years have been designed to mitigate run risk. But those measures can only be effective when the institution is within the bank regulatory perimeter, which synthetic banking providers are not.

Regulatory arbitrage is a second concern. In addition to prudential requirements to guard against runs, banks are subject to robust supervision for safety and soundness as well as compliance with a host of consumer protection requirements. While fintechs generally are subject to most of the same consumer protection regulations if they offer covered products or services, we have seen some fintechs make technical, and questionable, arguments that their products or services fall outside the existing regulatory framework. In addition, fintechs are not subject to the same type of regular, direct supervision as banks, and the enforcement authority for applicable consumer protection requirements on fintech activities is scattered among various federal and state regulators. These differences create an unfair business advantage for SBPs, which supports their growth and puts pressure on banks to compete.

This all leads to a second question: If SBPs are essentially in the business of banking, why don't they just become banks? While a handful have, most have not. I believe this is for three reasons. First, it is easier and cheaper not to. Today, SBPs can offer bank-like services to their customers through bank partnerships, typically with smaller banks, at a fraction of the cost of becoming a bank. To some, these "banking-as-a-service" (BaaS) arrangements are a harbinger

of the future, where the comparative advantage of technology firms to amass users shifts the bank business model away from consumer interaction and towards facilitation.<sup>10</sup> To others, these are simply “rent-a-charter” arrangements, which allow fintechs to skirt a host of rules at the expense of customer protection and bank safety and soundness.<sup>11</sup>

The second, and perhaps more important, reason why SBPs are not seeking to become banks is because the technology business model is quite different from the bank business model. Fintechs are not aiming to earn net interest margin or fee-based income like banks. Rather, they are focused on creating large networks of users and capturing data, which can be monetized later. This model follows in the footsteps of big tech firms like Facebook, Google, Netflix, and Amazon, and reflects the orientation of the venture capital investors in fintechs. High quality earnings is the hallmark of a safe and sound bank. The fintech business model turns that on its head. Some of the most highly valued technology companies generate minimal earnings or even operate at significant losses for multiple years before becoming profitable. Increasingly, we are finding that we have to consider how to reconcile these business model differences with safety and soundness.

The third reason why SBPs have not sought to become banks is because regulators have been unpredictable with regards to chartering new banks and approving fintech acquisitions of banks. I believe that having a clear, shared approach to the bank regulatory perimeter, and

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<sup>10</sup> Refer to [Forging Fintech Partnerships Through Banking as a Service, Bank Business News \(bankbusiness.us\)](#); [How community banks can thrive in a post-pandemic world, Finextra \(finextra.com\)](#)

<sup>11</sup> Refer to [Fintech and Consumer Protection: A Snapshot \(March 2019\), National Consumer Law Center \(nclc.org\)](#); [CBA Urges CFPB to Address Growing Consumer Risk in Under-Regulated Fintech Lending Market, Consumer Bankers Association \(consumerbankers.org\)](#); [Regulatory Inaction on Digital Asset Rules Could Leave Consumers with Few Options in Regulated Banking Sector, Bank Policy Institute \(bpi.com\)](#)

leveling up our understanding, policies, and staffing related to emerging technologies can help address this challenge.

### Partial and Selectively Regulated Crypto Firms

Today no crypto firm is subject to comprehensive consolidated supervision. This means that there are gaps in supervision, and risks can build out of the sight and reach of regulators. A typical corporate structure will have a holding company over a number of subsidiaries. One subsidiary may have a trust bank charter or special purpose license to enable custody of crypto (for example, New York's BitLicense or Wyoming's special purpose depository institution charter or an OCC national trust bank charter), while another subsidiary may be an SEC-registered broker-dealer to enable trading. While each of these legal entities is regulated, there will be additional *unregulated* affiliates under the same holding company, part of the same overall enterprise, in which a wide range of activities and risk-taking can take place. Without a consolidated, holding company supervisor—that is, an agency able to see the big picture and empowered to oversee all subsidiaries, including the unregulated ones—no one outside of the firm can understand how the group operates and how much risk it is taking.

In banking, the need for consolidated supervision was learned the hard way in 1991 when global authorities closed the Bank of Credit and Commerce International—better known to generations of bank regulators by its acronym, BCCI. At its height, BCCI was a \$20 billion global bank operating in over 70 countries. It was seized by regulators for money laundering and covering up over \$10 billion of losses, which were borne primarily by its depositors. Although it had two licensed bank subsidiaries, one in Luxembourg, one in the Cayman Islands, it did not have a consolidated supervisor, and as a result was able to engage in interaffiliate transactions to facilitate money laundering and obscure the true financial condition of the group for years. As

Comptroller John Heimann testified at the time: “Early on in my government service, I learned one very important and fundamental lesson; namely, that those so inclined to manipulate banks for their own benefit find it easiest to do so if they operate between different supervisory regimes.” In short, fragmented supervision enables obfuscation and harm.

In the aftermath of BCCI’s failure, Congress passed the Foreign Bank Supervision Enhancement Act (FBSEA), which barred entry of any foreign bank into the United States unless it was subject to comprehensive, consolidated supervision by a home country agency. Foreign jurisdictions did the same,<sup>12</sup> effectively “leveling up” global banking standards by requiring comprehensive, consolidated supervision for all internationally-active banking groups. Today, consolidated supervision for banking groups is taken for granted, and the global banking system is safer for it.

In addition to fraud, fragmented supervision can obscure excessive risk taking. Over the course of 2008, AIG lost \$99 billion, \$62 billion in the fourth quarter alone after Lehman failed. I was covering AIG for the Treasury Department at the time and know the losses well. They were driven by a host of factors, but the common thread was their origin: an unregulated subsidiary called AIG Financial Products. Although AIG, the conglomerate, had many regulators—including state and international insurance regulators, functional financial regulators, and the Office of Thrift Supervision—there was no consolidated, holding company supervisor. No one had responsibility for overseeing AIG as a group. This allowed AIG Financial Products to build up massively risky positions out of the sight of regulators. The resulting bailout of AIG was

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<sup>12</sup> Refer to [Banking Act Report for 1992/93, Bank of England \(bankofengland.co.uk\)](#). FBSEA was enacted at the same time as the Basel Committee on Banking Supervision (BCBS) was working to address the problems revealed by BCCI. In 1992, the BCBS issued, "[Minimum Standards for the Supervision of International Banking Groups and Their Cross-Border Establishments](#)," establishing minimum standards for the supervision of international banking groups.

arguably one of the most controversial steps taken by the U.S. government during the 2008 financial crisis.

To build long-term trust with the public and avoid BCCI/AIG-type events in the future, large, universal crypto firms—especially issuers of highly-circulated stablecoins<sup>13</sup>—should embrace comprehensive, consolidated supervision. At the same time, federal and state bank regulators should prioritize the development of policies, staff, and supervisory approaches to bring such firms safely into the bank regulatory perimeter. This would clearly differentiate safe and sound crypto firms from those that are regulated only partially and have a history of control lapses, such as Binance and Tether.<sup>14</sup>

## Conclusion

In the mid-2010s, the problem that regulators wanted to solve with regards to financial innovation was how to promote responsible innovation. The UK created a “regulatory sandbox.” Other jurisdictions followed with initiatives to increase regulators’ knowledge about innovations and the opportunities and risks they presented. The OCC, for its part, created the Office of Innovation and adopted a responsible innovation framework. These initiatives were broadly motivated by a fear that an inability to bring responsible innovation into the regulatory perimeter would result in widespread irresponsible innovation taking place outside of it.

Today, the problem has sharpened, due in part to the pandemic’s impact on digital adoption. The rebundling of banking services by fintechs and the fragmented supervision of universal crypto firms pose significant medium- to long-term risks to consumers, businesses, and

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<sup>13</sup> Refer to President’s Working Group on Financial Markets, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency, “[Report on Stablecoins](#)” (November 2021).

<sup>14</sup> Refer to [Binance’s regulatory and legal issues in the U.S., EU and China, Protocol \(protocol.com\)](#); [The Tether controversy, explained, The Verge \(theverge.com\)](#)

financial stability. My remarks have been geared toward defining these two problems, and in doing so laying out a vision for modernizing the bank regulatory perimeter.

Clarifying this vision is important for several reasons.

First, it provides a roadmap for our chartering decisions. Shortly after I took office in May, I initiated a review of OCC bank charter applications and cryptocurrency-related interpretive letters. I indicated at the time that I would be seeking a holistic strategy regarding the bank regulatory perimeter, so that individual chartering decisions and interpretive letters would align with and support the broader strategic approach. That review has concluded. In the coming weeks, OCC determinations and feedback to bank charter applicants will be communicated. In addition, the OCC has been working with the Federal Reserve and the FDIC on a “crypto sprint.” This has also concluded and the results will be communicated shortly. The content of these communications—on the chartering decisions, interpretive letters, and the crypto sprint—will be broadly aligned with the vision for the bank regulatory perimeter laid out here today.

Second, clarifying the regulatory perimeter helps focus attention on the most salient questions that we must address. How should “synthetic banking” be defined? What constitutes “universal” activity for a crypto firm? (Should certain crypto activities even be allowed to mix?) What adjustments to bank prudential standards and supervisory approaches are needed to ensure that such firms operate safely, soundly, and fairly? To answer these and other critical questions meaningfully, federal and state regulators will need to engage technology and crypto firms, academics, community groups, banks, trade associations, and other stakeholders.

Third, greater clarity about the bank regulatory perimeter should lead to healthier bank-fintech partnerships. Currently, there is an extremely wide range of practice, giving rise to

concerns about regulatory arbitrage being facilitated by certain BaaS or rent-a-charter arrangements. At the OCC, we have begun to increase our focus on the banks that provide services to large fintechs and facilitate synthetic banking outside of the bank regulatory perimeter. This dovetails with the CFPB's recently announced order requesting data from big tech companies to assess the adequacy of their consumer protections.<sup>15</sup> We are also working with the Federal Reserve and FDIC in reviewing public comments and finalizing the interagency guidance on third party relationships, which includes fintech partnerships. And we are deepening our working relationship with state regulators like New York's Department of Financial Services, and the Conference of State Bank Supervisors.

An unlevel playing field contributed to the financial crisis of 2008. By leveling up banking and finance today, we can help avert repeating that mistake and create the conditions for responsible innovation to flourish.

Thank you.

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<sup>15</sup> Refer to [CFPB Orders Tech Giants to Turn Over Information on their Payment System Plans, Consumer Financial Protection Bureau \(consumerfinance.gov\)](https://www.consumerfinance.gov/press-releases/2018/07/2018-07-13-cfpb-orders-tech-giants-to-turn-over-information-on-their-payment-system-plans)