

Acting Comptroller of the Currency Michael J. Hsu

“Preventing the Next Great Blurring”

Vanderbilt University

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It is an honor and a pleasure to be here at Vanderbilt University. I especially want to thank Professor Morgan Ricks, the Herman O. Loewenstein Chair in Law, for hosting me.

I first met Morgan when we were both at the U.S. Treasury Department during the 2008 Global Financial Crisis. I had been at the Securities and Exchange Commission (SEC) for several years overseeing several of the largest nonbank financial institutions at the time: Bear Stearns, Goldman Sachs, Lehman Brothers, Merrill Lynch, and Morgan Stanley. I would later find myself at the Federal Reserve overseeing the global systemically important banks. For the past nearly three years, I have been Acting Comptroller of the Currency, with responsibility for the federal banking system.

These experiences have given me a unique perspective on banking and commerce, regulatory effectiveness, and financial stability—topics I will speak to today.

More specifically, I want to discuss how the blurring of the line between banking and commerce can lead to financial instability. I will focus in particular on payments and private credit/equity, where I sense the risk of blurring over the next decade is greatest.

I believe the analytic framework recently adopted by the Financial Stability Oversight Council (FSOC) has great potential to identify and address financial stability risks as they emerge. It provides space for identifying and assessing such risks before any action is taken. I will share some ideas on productive ways to approach that. In addition, in payments, I believe

the lack of a comprehensive federal money transmitter regime is a regulatory gap that if filled could better balance innovation and financial stability.

Before discussing all of that, though, I want to define banking and commerce and look to history for context.

Banking, Commerce, and Financial Stability

Banking can be defined in several ways. From an activities perspective, banks are institutions that take deposits, make loans, and facilitate payments. In practical terms, this involves the *bundling* of deposit-taking, credit intermediation, maturity transformation, and payments facilitation in single institutions. From a legal perspective, banks are the only entities authorized to take deposits.¹ From a policy perspective, banks are “special” because in holding readily transferrable demand deposits they are able both to provide back-up liquidity to all other parties in the economy and to function as a transmission belt for monetary policy.² And from a regulatory perspective, banks are chartered, regulated, and supervised by prudential authorities, like the OCC.

“Commerce” is everything else, including nonbank finance and the unbundled components of banking, both of which can be prone to blurring and can lead to instability.

The economic and banking history of the U.S. includes numerous financial crises. Three stand out, though: the Panic of 1907, the Great Crash of 1929, and the 2008 Global Financial Crisis. Each of these was preceded by a multi-decade period when the line between banking and

¹ See 12 USC 387(a)(2).

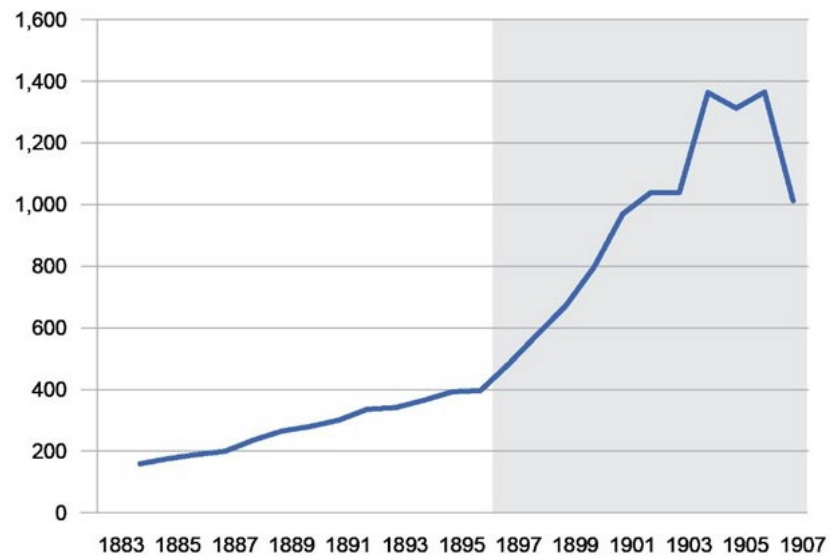
² See E. Gerald Corrigan, [*Annual Report 1982: Are Banks Special?*](#) (Minneapolis: Federal Reserve Bank of Minneapolis, 1983).

commerce was blurred. The blurring occurred narrowly and slowly at first, then expanded and accelerated rapidly—a great blurring—until each crash.

The central players in the Panic of 1907 were New York City trust companies. While these nonbank financial institutions did not engage in check clearing (payments), they competed with banks for deposits and lending. In 1907 the sudden failure of the Knickerbocker Trust prompted a broader panic, which enveloped the entire banking system.³

Total Assets of New York State Trust Companies

Millions of Dollars



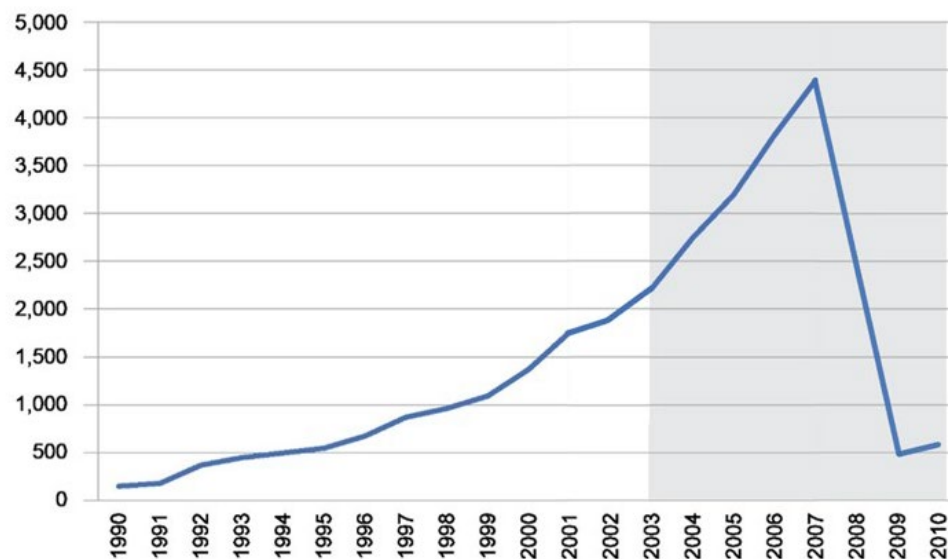
Note: The gray shading represents a period during which a "great blurring" occurred.
Source: New York State, *Superintendent of Banks Relative to Savings Banks*

³ Partly in response to the Panic of 1907, Congress created the Pujo Committee in 1912. The committee's final report cited rapidly growing concentration in financial markets and interconnections between banking firms and commercial firms, and thus influenced major legislation. This included the Federal Reserve Act of 1913, as well as the Federal Trade Commission Act of 1914 and the Clayton Antitrust Act of 1914, pillars of U.S. antitrust law. See Federal Reserve Bank of St. Louis, ["Uncurrent Events: The Pujo Committee,"](#) August 14, 2019.

Some have drawn parallels between the Panic of 1907 and the 2008 Global Financial Crisis, comparing the large independent investment banks of the 1990s and 2000s to the New York City trust companies of the early 1900s. After the passage of the Gramm-Leach-Bliley Act in 1999, the growth of investment banks and capital markets activities accelerated, along with the emergence of numerous other nonbank entities. Together they formed what would eventually be called the “shadow banking system,” which unraveled in 2008.⁴

Total Assets of Independent Broker-Dealers

Billions of Dollars



Note: The gray shading represents a period during which a "great blurring" occurred.

Source: S&P Global Market Intelligence

⁴ Following the crisis, Congress passed the Dodd-Frank Act. That act included many provisions, such as the Volcker Rule's prohibition on proprietary trading, tightened restrictions on affiliate transactions, and limitations on emergency lending to nonbank borrowers, which were intended to maintain stricter boundaries between banking and the associated public safety net.

The Great Crash of 1929 also involved the blurring of banking and commerce but was driven by excessive expansions from within the banking system. In the 1920s banks went beyond their three core functions of deposit-taking, payments, and traditional lending, and engaged in speculative and manipulative financial practices, including margin lending against securities and underwriting securities of companies to help them pay off bad bank loans.⁵

Each of these episodes showed a similar pattern of steady growth of blurred entities and activities over many years, followed by a period of rapid growth—a great blurring—leading up to each crash. This pattern is useful to bear in mind as we consider the present. How do we prevent the next great blurring from happening?

Payments and Private Credit/Equity

Over the next decade I believe the risk of blurring is highest in two areas: payments and private credit/equity.

Payments

Let me start with payments, which has been dominated by banks for most of the country's history and the major credit card networks and payments processors since the 1970s.

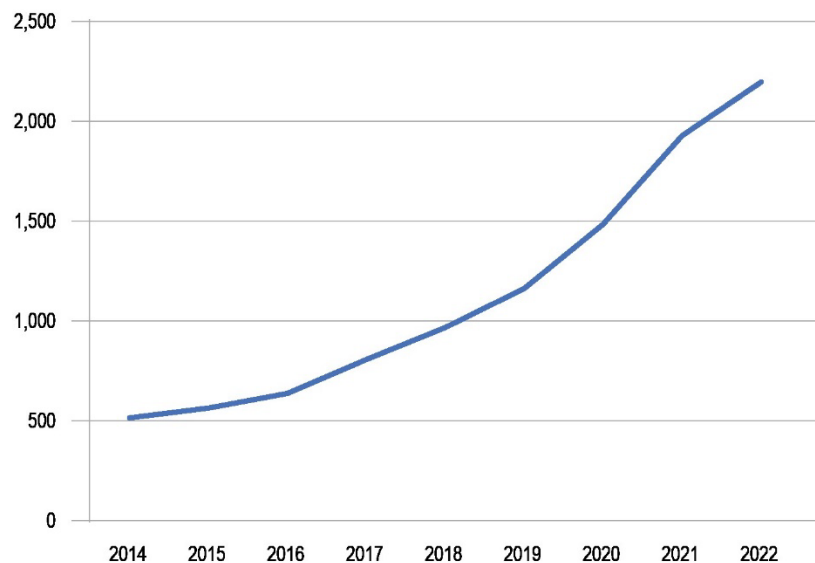
⁵ The Great Crash led to Congress creating what ultimately became known as the Pecora Commission. The commission's hearings, much like the work of the Pujo Committee, went on to influence major legislation, including the Glass-Steagall Banking Act of 1933, which separated commercial from investment banking and created the Federal Deposit Insurance Corporation (FDIC); the Securities Act of 1933, which required registration of stock issuances and the provision of accurate information to investors; and the Securities Exchange Act of 1934, which established the SEC. See Federal Reserve Bank of St. Louis, [*Stock Exchange Practices: Hearings before the Committee on Banking and Currency, U.S. Senate, \(1932-1934\)*](#).

In the past 10 years, a wide range of nonbanks have been able to innovate and use technology to compete in the payments arena, leveraging and fueling the rapid growth of the digital economy.

Take, for instance, peer-to-peer (P2P) payments. P2P was fairly nascent a decade ago but has grown steadily and significantly, though publicly available data are sparse.

Aggregate Volume of Payment Transactions at Select Companies

Payment Volume, Billions of Dollars



Sources: Company press releases and filings for Block, PayPal, and Zelle; Bloomberg; Statista

Similarly, 10 years ago, point-of-sale (POS) terminals at retail businesses were fairly rudimentary, difficult to set up, and separate from business operating systems. Today, most POS terminals are “smart,” compatible with tap-and-pay, and integrated with business operating

systems.⁶ Business-to-business payments were similarly highly manual a decade ago and relied on basic ACH and SWIFT services and limited real-time payments systems globally. Today, a range of nonbank fintechs offer automated ways of tying together businesses' payments, accounting, and finance needs.

Driving these trends has been the rise of the digital economy, especially e-commerce. In 2014 e-commerce comprised only 6 percent of total U.S. retail sales. By the third quarter of 2023, it was 15.6 percent, or \$1.1 trillion annually.⁷

As the digitalization of more and more parts of the economy continues, open banking and real-time payments are likely to further accelerate digitalization trends in banking.⁸ In short, we are likely going to see even *more* change in the payments space in the next 10 years.

From a bank regulatory, micro-prudential perspective, our focus during this period must be to ensure that bank safety and soundness is maintained, consumers are protected, and the playing field is level. I have spoken frequently on these imperatives.⁹

⁶ For example, of all Payment Card Industry Data Security Standard (PCI DSS) approved POS terminals shipped worldwide last year, 41.7 million (28.15 percent) were mobile (mPOS) devices that could communicate with tablets and other terminals via Bluetooth or USB. See *Nilson Report*, 1250 (October 2023): 9.

⁷ See U.S. Census Bureau, [“Quarterly Retail E-Commerce Sales, 3rd Quarter 2023,”](#) November 17, 2023. Digital payment growth trends are even more pronounced in several emerging markets like China and Brazil. For example, China's e-commerce sales were \$1.8 trillion in 2019 and are forecasted to reach almost \$3.6 trillion by the end of 2024. See International Trade Administration, [“China – Country Commercial Guide,”](#) April 7, 2023. State-sponsored digital payments platforms have also accelerated digital payments trends. Brazil's Pix system, for example, which launched in 2020, today accounts for over a third of the country's electronic payments. See Banco Central do Brasil, [“Pix Statistics”](#) (last accessed February 12, 2024).

⁸ As of early 2023, almost 80 countries had at least one real-time payment system. See PYMNTS and the Clearing House, [“The Real-Time Payments World Map,”](#) January 2023.

⁹ See Michael J. Hsu, [“Don't Chase,”](#) Remarks to the Harvard Law School and Program on International Financial Systems Roundtable on Institutional Investors and Crypto Assets, October 11, 2022; [“A Conversation with Acting Comptroller Mike Hsu,”](#) Seventh Annual DC Fintech Week, moderated by Romaine Bostick, November 7, 2023;

As importantly, from a macro-prudential perspective, the prospect of banking being rebundled by nonbank entities outside of the bank regulatory perimeter bears careful monitoring because of the financial stability implications. By rebundling I mean the recombination of payments, lending, and deposit-taking by a single firm. Arguably, some fintechs are already doing this, blurring the line between banks and nonbanks (and raising concerns about level playing fields). Companies that started off simply facilitating payments now offer customers the ability to deposit paychecks directly into their accounts, earn yield on the cash held there, and access credit, all with a few clicks of a mouse or taps on a phone.

From a financial stability perspective, the deposit-taking-like activity warrants the most scrutiny because of the vulnerability it creates to runs. Any entity managing money on behalf of customers can face a run if those customers have doubts about the safety of their money.¹⁰ (Money market mutual funds learned this the hard way in 2008 after the Reserve Fund “broke the buck.”) Significant data gaps exist, however. The lack of standardized data makes it challenging to aggregate and compare the amount of money nonbank companies manage on behalf of their customers.

Notably, many of these players started by focusing on facilitating payments—e.g., P2P, digital wallets, or embedded finance—then moved over time into adjacent activities, such as extending credit to customers and managing their cash. This trajectory loosely mirrors the path

Aashna Shah, Tracy Alloway, and Joe Weiesenthal, [“The OCC’s Michael Hsu on the Changing U.S. Banking System.”](#) November 9, 2023, in *Bloomberg Odd Lots* podcast.

¹⁰ See Douglas W. Diamond and Philip H. Dybvig, “Bank Runs, Deposit Insurance, and Liquidity,” *Journal of Political Economy*, 91, 3 (June 1983).

of brokerage firms, which started facilitating trading, then expanded to margin lending to meet client demand for leverage and to sweep deposits to handle their cash.

Like fintechs, broker-dealers are *not* banks. Trading today, which is subject to a mature regulatory framework, is “commerce,” not banking.¹¹ But, as the Panic of 1907, Great Crash of 1929, and 2008 Global Financial Crisis have shown, the blurring of that line warrants scrutiny and monitoring.

Private credit/equity

The growth of private equity (PE) and private credit is also notable from a blurring and financial stability perspective.

PE has been around for some time. Historically, the proposition has been straightforward. PE firms raise money from investors to seed a fund and invest the proceeds in the equity of privately held companies. The money from investors is typically locked up for a long period of time, as the investments tend to be illiquid. PE funds’ customary focus on equity, not debt, means that they have traditionally been several steps removed from banking.

Things are changing, however. First, PE has grown significantly. As of June 2023, the PE industry had roughly \$10 trillion of assets under management, compared with just under \$2 trillion in 2012.¹² Second, bank interactions with and exposures to PE firms have increased, for instance through capital call facilities. Third, PE firms have expanded aggressively into private

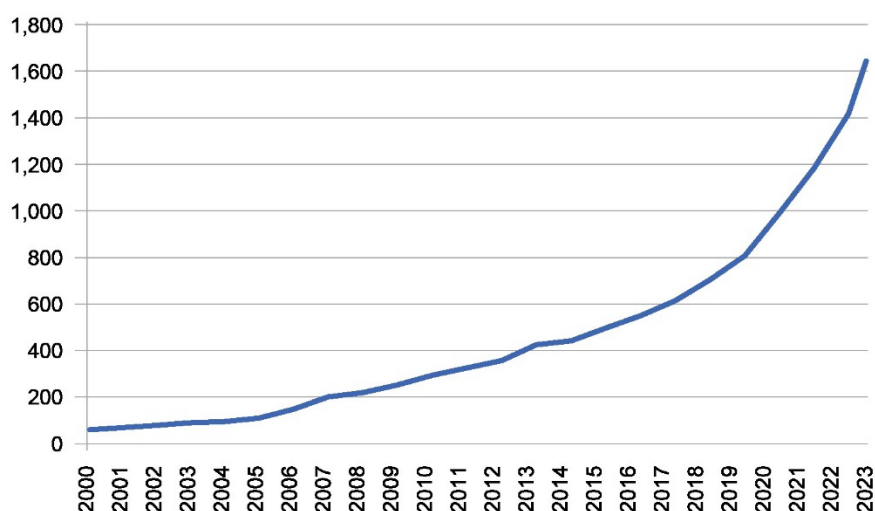
¹¹ For instance, U.S. broker-dealers are subject to a net capital rule, which requires all client assets to be covered in case of the need to liquidate the broker-dealer. This requirement effectively prohibits a broker-dealer from engaging in fractional reserve banking and money creation as a bank would.

¹² National Association of Insurance Commissioners, [“Private Equity”](#) (last updated June 28, 2023).

credit, which, as of 2022, exceeded \$1.5 trillion globally—rivaling the U.S. high yield bond market.¹³ Some expect it to grow two- or three-fold in the next several years.

Global Private Credit Market

Assets Under Management, Billions of Dollars



Note: Data aggregates dry powder and unrealized value and is as of year-end (except for 2023, which is as of June).
Source: Preqin

The move by PE into private credit is notable because it involves nonbanks originating loans at scale and holding on to them—an activity traditionally done by banks. One of the largest PE firms in the world, for instance, is now operating 16 loan origination platforms, ranging from middle market lending to equipment finance to trade finance.¹⁴

¹³ See Preqin, “Private Credit—Assets Under Management” (last accessed February 3, 2024); Federal Reserve Bank of St. Louis, [“Commercial and Industrial Loans, All Commercial Banks.”](#) (last accessed February 2, 2024).

¹⁴ See Marc Rubinstein, [“Slicing and Dicing: How Apollo Is Creating a Deconstructed Bank.”](#) *Net Interest* November 17, 2023.

The closed-end fund structure of PE funds is also evolving. Typically, investors' funds are locked up for eight to 10 years, while investments take four to five years to harvest. Rapid growth and competition have led to the search for more efficient investment structures, such as evergreen funds, which can reduce the idleness of money between capital calls, investments, and distributions, and provide investors opportunities to exit early. These structures, however, can introduce new risks, including redemption risks similar to those faced by open-end bond funds, which have been cited as a financial stability concern by the FSOC and the SEC.¹⁵

Finally, PE firms have increased their holdings of insurance companies, which can provide a steady supply of premiums to invest, including in private credit. The International Monetary Fund's recent *Global Financial Stability Report* notes that some PE firms have also established offshore reinsurance companies to support their insurance activities and to serve as holding companies for affiliates.¹⁶ The intermingling of funds and opacity of inter-affiliate risk transfers is reminiscent of practices at AIG before it collapsed in 2008. Since PE firms are not subject to consolidated supervision, it is not possible for regulators and other outsiders to assess how risky and interdependent these activities are.

Thus, with PE moving into private credit and insurance and adapting its funding vehicles to compete and accommodate further growth, one can see an evolution akin to the case of

¹⁵ See, e.g., Silas Brown and Kat Hidalgo, [“Private Credit Pivots to Funds Giving More Access to Client Cash,”](#) *Bloomberg News*, January 8, 2024. See also FSOC, [Annual Report 2023](#), section. 3.2.2, “Investment Funds”; SEC, [“Open-End Fund Liquidity Risk Management Programs and Swing Pricing; Form N-PORT Reporting,”](#) 87 Fed. Reg. 77172, December 16, 2022; and [“Money Market Fund Reforms; Form PF Reporting Requirements for Large Liquidity Fund Advisers; Technical Amendments to Form N-CSR and Form N-1A,”](#) 88 Fed. Reg. 51404, August 3, 2023.

¹⁶ See International Monetary Fund, [Global Financial Stability Report: Financial and Climate Policies for a High-Interest-Rate Era](#), October 2023, p. 49.

payments. Each pivot and change makes economic sense on its own, leading to a new opportunity or set of adjustments, which in turn leads to others.

Without clear guardrails, the line between commerce and banking tends to blur. The more incremental and rational the blurring, the harder it is to detect and to address. Taking these as axiomatic can help guide financial stability policymaking and monitoring.

Authorities and Tools

Fortunately, regulatory agencies have a variety of tools to mitigate the micro- and macro-prudential risks from a blurring of the line between banking and commerce.

Micro-prudential tools

First, most roads lead back to banks eventually, giving bank regulators some visibility and influence over nonbank activities. For instance, nonbank technology firms generally cannot offer bank-like services without relying on so-called “sponsor banks.” Sometimes the reliance is direct through a bank-fintech partnership. Other times it is indirect and intermediated through another party, such as a banking-as-a-service (BaaS) platform or middleware firm. In either case, somewhere in the supply chain is a bank with a federal regulator.

This nexus between nonbanks and banks presents opportunities and risks for banks. The OCC expects banks to manage those risks prudently, whether credit and liquidity risks from lending or compliance and operational risks from third-party arrangements.¹⁷ In this way, micro-prudential supervision and regulation have a role to play in mitigating some of the macro-prudential risks from nonbanks.

¹⁷ [“Interagency Guidance on Third-Party Relationships: Risk Management,”](#) 88 Fed. Reg. 37920, June 9, 2023.

Second, many nonbanks are subject to varying degrees of direct oversight by functional regulators. The Consumer Financial Protection Bureau, for instance, supervises nondepository institutions participating in certain markets for consumer financial products and services.¹⁸ And the federal banking agencies have examination and regulatory authority over certain third-party service providers under the Bank Service Company Act.

There are gaps, however. The absence of federal money transmitter licensing standards and a comprehensive federal oversight regime means that nonbank payments-related regulation and supervision in the U.S. comprises a patchwork of varying state-by-state standards and practices. In addition, as noted earlier, PE firms are not subject to consolidated supervision, which contributes to knowledge gaps and opportunities for arbitrage.

Third, the law limits deposit taking to only banks. The Glass-Steagall prohibition on nonbanks receiving deposits, which is administered by the Department of Justice, remains good law. As Professor Ricks and other academics have pointed out, however, it generally has not been used as a key tool in regulating innovative deposit-like products.¹⁹

Fourth, bank regulators' licensing decisions can play a role. Various fintechs have explored the possibility of obtaining a bank charter, seeking the benefits of a charter, such as cheaper funding and access to a Federal Reserve master account, while seeking to avoid its burdens, like consolidated supervision and the full panoply of regulatory requirements and supervisory expectations borne by traditional, full-service banks. To accommodate novel

¹⁸ 12 USC 5514.

¹⁹ 12 USC 387(a)(2). See Gary B. Gorton and Jeffery Y. Zhang, "[Taming Wildcat Stablecoins](#)," *University of Chicago Law Review* 90, 3 (2023): 909, 920–21, 950; and Morgan Ricks, *The Money Problem: Rethinking Financial Regulation* (Chicago: University of Chicago Press, 2016).

activities, like crypto, or to support nonbank payments businesses, different banking regulators at different times have considered creating new charters, such as Wyoming’s Special Purpose Depository Institution (SPDI) and New York’s BitLicense, or expanding the use of limited purpose banks or special purpose charters, such as the industrial loan company.²⁰

As Acting Comptroller, my approach to national bank charters has been clear: We don’t chase.²¹ If a fintech wants a national bank charter, we welcome that and will review the application on its merits. Several fintechs have filed charter applications and received OCC approval.²² We will not, however, lower our standards, create a special regime, or take an overly expansive view of banking to entice new entrants or in the hope of bringing a particular activity into the bank regulatory perimeter.

As I noted earlier, the U.S. lacks a federal money transmitter licensing standard and authority, in stark contrast to most peer countries.²³ This fact has likely contributed to the explorations by fintechs for the specialized “bank-lite” charters noted previously. Rather than contort bank charters and blur banking and commerce (à la 1929), a better solution would be for Congress to create a federal framework for payments regulation, as recommended by the U.S.

²⁰ See FDIC, [“Application for Federal Deposit Insurance, Order Re: Square Financial Services Inc.,”](#) March 17, 2020; and [“Application for Federal Deposit Insurance, Order in Re: Nelnet Bank,”](#) March 17, 2020.

²¹ See note 9.

²² See OCC, [“Preliminary Conditional Approval of the De Novo Charter Application for the Proposed Varo Bank, National Association,”](#) August 31, 2018; [“Conditional Approval to Charter SoFi Interim Bank, National Association,”](#) January 18, 2022; and [“Application by Radius Bank, Boston, Massachusetts, to Convert to a National Banking Association, Application to Charter Interim LendingClub Bank, National Association,”](#) December 30, 2020.

²³ See, e.g., [“Directive \(EU\) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on Payment Services in the Internal Market,”](#) *Official Journal of the European Parliament* 337 (December 23, 2015).

Treasury in its report on the future of finance.²⁴ Doing so would provide a clearer path for innovation and growth in payments with less risk of blurring and to financial stability.

Macro-prudential tools

Even if the micro-prudential tools noted previously are fully effective, financial stability risks may still emerge. The FSOC has macro-prudential tools that can be used to address that risk: namely, designation of nonbanks,²⁵ payment, clearing, and settlement activities,²⁶ and financial market utilities²⁷ as systemically important or likely to become systemically important.

To facilitate and support such determinations, the FSOC recently updated its approach to addressing potential and emerging financial stability risks.²⁸ The FSOC analytic framework has three distinct parts: the *identification* of potential systemic risks, the *assessment* of such identified risks, and *responses* to the risks assessed that pose a threat to financial stability. I want to focus on the identification component of the framework.

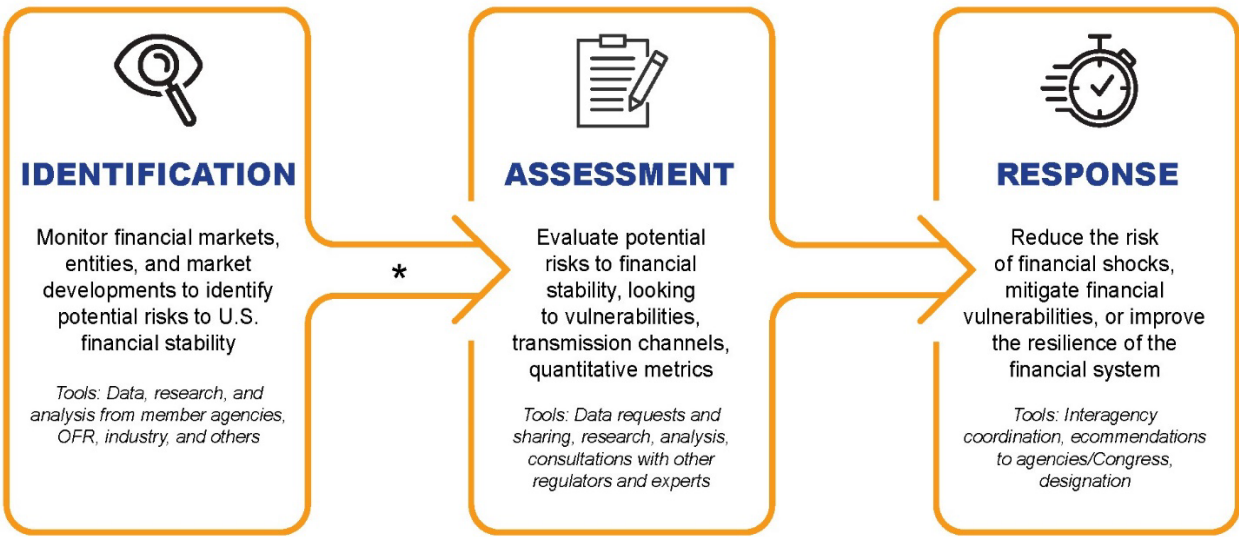
²⁴ See U.S. Department of the Treasury, [The Future of Money and Payments](#), September 2022, p. 47.

²⁵ See 12 USC 113. See also 88 Fed. Reg. 80110, November 17, 2023.

²⁶ 12 USC 805.

²⁷ Ibid.

²⁸ 88 Fed. Reg. 78026, November 14, 2023.



* Proposed trip wire, based on metrics and thresholds

More specifically, I believe a “trip wire approach” to the identification of potential financial stability risks could be effective.²⁹ Under this approach, the FSOC would establish a set of metrics and thresholds, which if exceeded would trigger the *assessment* of systemic risk. The trip wires could complement other modes of analysis and would not have to be the exclusive means of prompting an assessment.

The FSOC would publish the trip wires and seek public comment on their appropriateness and calibration before finalizing them. The proposal and finalization would be transparent to the public. Notably, *the only consequence of crossing a trip wire would be to move from the identification phase to the assessment phase of the analytic framework*. Each assessment would then be conducted on its own merits, irrespective of the trip wire, which would inform the need for an FSOC response (if any), ranging from interagency coordination and

²⁹ This is inspired by the approach suggested by Matthew J. Eichner, Donald L. Kohn, and Michael G. Palumbo, [*Financial Statistics for the United States and the Crisis: What Did They Get Right, What Did They Miss, and How Should They Change?*](#) Federal Reserve Board, April 15, 2010.

information-sharing to initiating the process to consider a designation. By design, the trip wires would be several steps removed from any formal action by the FSOC. The sole purpose and consequence of the trip wires would be to prompt an assessment.

An example may help illustrate how this might work.

Earlier, I described the risks of blurring payments and banking, noting that the cash managed by nonbanks on behalf of customers is rising. That metric—cash managed by a nonbank on behalf of its customers—could serve as a trip wire for payments-focused fintechs and other nonbank companies. The FSOC could work to standardize how this metric would be measured and could apply a scalar based on how a company manages its customers' cash. For instance, a simple pass-through arrangement of customers' cash to a bank where all funds are segregated would have a much lower scalar than an arrangement where the company commingled those funds with its own and could use it for whatever purpose it chose. The standardization, scalars, and level at which an FSOC assessment would be triggered would be informed by public comment.

A similar thought experiment could be done for private credit/equity. As discussed earlier, PE's pivot to private credit, expansion into insurance, and innovation with funding structures could raise financial stability questions. A PE tripwire, based on a standardized metric worked out by the FSOC, could be complemented by a scalar for fund structures and affiliated insurance activities. Closed-end funds with long lock-up periods would have a lower scalar than innovative, non-closed-end fund structures, such as evergreen funds. Private credit funds with no links or affiliations with PE-influenced insurers or reinsurers would have a lower scalar than

those with links and affiliations. The public comment process could help inform the metric, scalars, and level at which the trip wire would be set for an FSOC assessment.

The trip wire approach could be used in a host of areas. I am focusing on payments and PE/credit because of the blurring between banking and commerce discussed today. Other areas of risk that could benefit from this approach include the risks the FSOC has identified in mortgage servicing and hedge funds.

The key benefit of a trip wire approach is that it combines transparency with awareness before a systemic risk becomes too big to mitigate. The objective is to use the space created by the analytic framework to enable focused analysis and escalation as warranted. Instead of going straight to the process of designation and under- or over-reacting to potential systemic risks, a trip wire approach would help operationalize the progressive scrutiny and action inherent in the analytic framework. The transparency it affords would provide clarity ex ante to companies or industries as to when they might be blurring banking and commerce. No gotcha. And no ex post cleanup, as had to be done with AIG.

A trip wire approach would also be self-regulating. A parsimonious approach would be most effective. Too many trip wires set at too low a level would result in a battery of “false positives,” diffusing assessment resources and hurting the credibility of the identification process, ultimately rendering the trip wires ineffective and meaningless. With trip wires, less is more.

Conclusion

Innovation, growth, and change are critical to solving problems and making the world a better place. When those forces spin out of control, however, people, communities, and the

broader economy can get hurt.³⁰ The great financial crises of U.S. history—the Panic of 1907, the Great Crash of 1929, and the 2008 Global Financial Crisis—share common roots: a great blurring of the line between banking and commerce leading to rapid growth, then fragility, and eventually collapse. When that occurs, the negative impacts on people and the loss of trust in banking and the government take years to recover from.

Today, I believe the risk of a great blurring taking place over the next decade is greatest in payments and in private credit/equity. Other areas, such as mortgage servicing and hedge funds, may warrant similar, or even more urgent, attention.

The FSOC’s recently adopted analytic framework establishes a clear process for identifying, assessing, and responding to risks to financial stability. Embedding a trip wire approach in the identification stage could help prevent great blurrings in the future in a transparent manner that allows for innovation and growth, while addressing emerging financial stability risks.

³⁰ Others have recognized that growth of nonbank financial intermediation warrants analytical attention. See, e.g., Randall S. Kroszner, [“Interconnectedness, Innovation, and Unintended Consequences: What Macroprudential Policy Can Do to Assess Fragilities Outside of the Banking Sector,”](#) Remarks to the Federal Reserve Bank of Cleveland and Office of Financial Research’s 2023 Financial Stability Conference, November 16, 2023.