

COINS, CROSS-BORDER PAYMENTS, AND ANTI-MONEY LAUNDERING LAW

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Financial innovation in the cryptocurrency space has prompted central bankers and financial policymakers around the world to question the future of money and payments. For many scholars and policymakers, the rise of cryptocurrencies implies significant improvements to the efficiency of making cross-border payments—and thus portends a gradual sunset on the legacy payments system. But for decades, that legacy payments system has partnered with the State to accomplish valuable foreign policy and national security goals: to combat money laundering, deter state aggression, and defend human rights and democratic institutions.

This Article examines the potential for cryptocurrency payments ecosystems to bypass the legal frameworks that today require banks to act as gatekeepers of illicit finance and enforcers of sanctions regimes. Ultimately, in light of the trade-offs implied by moving from a bank-centric to a multi-railed crypto system, this Article argues for infrastructure-building within the existing system. In particular, it proposes the introduction of a centralized verifying party, which would conduct customer due diligence on an industry-wide basis. Given the current costs and complication of banks' current legal requirements to undertake individualized due diligence, the structural reform proposed here stands to make the legacy payment system more efficient—and hence more attractive relative to crypto competitors—for making cross-border payments.

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The characteristic danger of great nations, like the Romans or the English which have a long history of continuous creation, is that they may at last fail from not comprehending the great institutions which they have created.

—Walter Bagehot, 1876

I. INTRODUCTION

In February 2022, President Joseph Biden undertook the first of a series of executive actions that would, in effect, isolate Russia from the global financial system. In particular, in response to “Putin’s war of choice against Ukraine,” which began in that month, the President quickly “imposed severe and immediate economic costs on Russia” by eliminating its ability to “access global markets, attract investment, and utilize the U.S. dollar.”¹ The linchpin of this strategy to “unplug” Russia from the global economy was to exclude it from the international payments system—the network of financial institutions and market infrastructures that facilitate cross-border commerce, trade, remittances, and investment. Cut off from the global payments system, Russia would remain awash in oil and gas money but unable to (directly) spend a ruble in the western world.²

The multilateral effort to turn Russia into a global economic pariah, in the space of a few short weeks, illustrates the power of this international payments system—a network of private banks, operating across borders, and key pieces of market infrastructure, like messaging systems and clearings houses, to support them. Since the end of World War II—and with greater intensity since 9/11—this banking network has served important public policy aims by supporting governments in their efforts to isolate—and thus punish and deter—state, state-sponsored, and nonstate actors that violate international law or undermine democratic institutions.

But today, this important institution—the international payments system—is at risk of dilution by the rapid rise of cryptocurrencies, including stablecoins, which have the potential to become mainstream.³ In contrast to the legacy payments system, many cryptocurrencies facilitate economic ac-

¹ Fact Sheet, *Joined by Allies and Partners, the United States Imposes Devastating Costs on Russia*, White House (Feb. 24, 2022), <https://www.whitehouse.gov/briefing-room/state-ments-releases/2022/02/24/fact-sheet-joined-by-allies-and-partners-the-united-states-imposes-devastating-costs-on-russia/> [https://perma.cc/ZW4R-5YAN].

² See Caitlin Ostroff & Chelsey Dulaney, *Sanctions Push Russia to First Foreign Default Since Bolshevik Revolution*, WALL ST. J. (June 27, 2022), https://www.wsj.com/articles/sanctions-push-russia-near-first-foreign-default-since-bolshevik-revolution-11656248212?mod=markets_lead_pos1 [https://perma.cc/43HC-HG4R].

³ See *infra* Part IV; see also Morten Bech & Jenny Hancock, *Innovations in Payments*, 2020 BIS Q. REV. 21, 31–34 (explaining current disruptions in the international payments system).

tivity that is agnostic to the State and unfolds outside its reach.⁴ At a minimum, the growth of cryptocurrencies stands to splinter the existing payment system into many fragments, and thus provide multiple off-ramps from the existing dollar-centric payment system. This Article develops a legal and policy rationale for strengthening the existing payments system—as a strategy for retaining the potency of the incumbent payment system as an effective national security and foreign policy tool.

Various forms of economic pressure have been used as a tool of statecraft since at least 432 B.C., when Athens and Sparta clashed in the Peloponnesian War.⁵ Over time, economic sanctions—like those recently imposed on Russia—became recognized by the international community as appealing alternatives to open and armed conflict, and were formalized in the Covenant for the League of Nations as the preferred approach to “expressing international opprobrium and attempting to change a country’s behavior.”⁶ But it was only with the development of the international payments system in the 1970s, along with the dollar’s assumed role as the world’s reserve currency, that the United States and its allies gained a truly powerful economic tool.

During this period, U.S. banks developed cross-border networks with their foreign counterparts in a newly developed business known as correspondent banking. This business in turn created the arteries that would allow dollars to be sent (and used) more easily abroad, and the veins for foreign citizens to send their currency to the United States to buy domestic goods and services.⁷ Banks became supported in their correspondent networks

⁴ As this Article will proceed to explain, cryptocurrencies are a broad bucket that encompasses coins with distinct design features that, in turn, pose distinct versions (and magnitudes of risk). There are stablecoins, for example, with value pegged to the value of a sovereign currency and which can be centralized (and backed by assets) or decentralized (and backed by algorithm). Other forms of cryptocurrencies with a value that fluctuates according to supply and demand (no peg), like Bitcoin or Ether, are quite distinct from stablecoins. The community of central bankers and financial regulators now distinguish Bitcoin-like cryptocurrencies from stablecoins as “cryptoassets.” *What Are Cryptoassets (Cryptocurrencies)?*, BANK OF ENG. (last updated May 19, 2020), <https://www.bankofengland.co.uk/knowledgebank/what-are-cryptocurrencies> [<https://perma.cc/6UKY-26W2>]. See also Joint Press Release, Bd. of Governors of the Fed. Rsrv. Sys., Fed. Deposit Ins. Corp., Off. of the Comptroller of the Currency, Agencies Issue Joint Statement on Crypto-Asset Risks to Banking Organizations (Jan. 3, 2023), <https://www.federalreserve.gov/newsevents/press-releases/bcreg20230103a.htm> [<https://perma.cc/Z6LZ-S3RN>]. The Financial Action Task Force refers to all cryptocurrencies together as “virtual assets.” See FIN. ACTION TASK FORCE, VIRTUAL ASSETS: WHAT, WHEN, HOW? 4 https://www.fatf-gafi.org/media/fatf/documents/bulletin/FATF-Booklet_VA.pdf [<https://perma.cc/HM37-L7WU>].

⁵ See JUAN C. ZARATE, *TREASURY’S WAR: THE UNLEASHING OF A NEW ERA OF FINANCIAL WARFARE* 3 (2013).

⁶ *Id.* at 4. See generally NICHOLAS MULDER, *THE ECONOMIC WEAPON* (2022) (discussing the rise of sanctions since WWI as a tool of warfare).

⁷ Justin Baer, *History: Banks Are at the Heart of Capitalism*, FIN. TIMES (Nov. 17, 2010), <https://www.ft.com/content/63e4d792-f111-11df-bb17-00144feab49a> [<https://perma.cc/5VDT-LTXP>]. See generally JOHN STEELE GORDON, *AN EMPIRE OF WEALTH: THE EPIC HISTORY OF AMERICAN ECONOMIC POWER* (2004) (analogizing the banking industry as the circulatory system of the economy).

through the creation of new market infrastructures, like an international payments messaging system (known as “SWIFT” or “Swift”), foreign exchange clearing houses (the CLS Bank and the New York-based CHIPS), and the rise of foreign exchange (“forex”) markets themselves.⁸ During this time, these financial institutions, infrastructures, and markets grew together into the international payments system we know today, and now function smoothly as the “railways, bridges, and tunnels that allow currencies to be exchanged and capital to flow between countries.”⁹

Today, thanks to this system, there is a tremendous amount of global economic activity that happens daily. Each day, trillions of dollars travel around the world via the international payments system—in 2021 alone, 152% of global GDP, totaling over \$140 trillion, flowed across borders.¹⁰ The economic activity enabled by the international payments system has been, for these past three decades, a source of human flourishing.¹¹ According to the Managing Director of the International Monetary Fund (“IMF”), this global system, and the economic integration it inspires, has “boosted productivity [and] living standards, tripling the world economy and lifting 1.3 billion people out of extreme poverty.”¹²

Precisely because participation in the international payments system is so valuable to a nation’s economic health and progress, retaining access to it is politically desirable. Accordingly, the United States now uses policed entry to the international payments system as the primary mechanism for protecting human rights, advocating for the peaceful resolution of conflict, and maintaining the rule of law and the territorial integrity of sovereign states. The international payments system, and the U.S. banks participating, thus occupy a unique role in foreign policy. Specifically, the government relies on these private institutions—mostly banks—to operationalize its national

⁸ Kristalina Georgieva, Managing Director, IMF, *Confronting Fragmentation: How to Modernize the International Payment System*, Concluding Remarks at the IMF-Swiss National Bank High-Level Conference, Zurich (May 10, 2022) (transcript available at <https://www.imf.org/en/News/Articles/2022/05/10/sp051022-md-concluding-remarks-at-the-snb-high-level-conference> [<https://perma.cc/GZ77-U5RA>]).

⁹ *Id.* (quotations omitted).

¹⁰ Projections of cross-border payments rise each year commensurate with the growing volume of international trade, e-commerce, and financial services transactions. This figure is projected to reach \$156 trillion this year. See Florian Seeh, *How New Entrants are Redefining Cross-Border Payments*, ERNST & YOUNG (Feb. 23, 2021), https://www.ey.com/en_us/banking-capital-markets/how-new-entrants-are-redefining-cross-border-payments [<https://perma.cc/2YNA-P8HT>]. The Bank of England estimates the value of cross-border payments to be over \$250 trillion by 2027. *Cross-Border Payments*, BANK OF ENG. (last updated Sept. 14, 2022), <https://www.bankofengland.co.uk/payment-and-settlement/cross-border-payments> [<https://perma.cc/E9UR-JT2D>].

¹¹ In 2016, FX turnover averaged \$5.3 trillion per day in cash exchange market and an additional \$2.3 trillion in OTRC FX and interest rate derivatives market. Daily, \$2 billion payments settle digitally. See FED. RSRV. BANK N.Y. FOREIGN EXCH. COMM., *FOREIGN EXCHANGE TRANSACTIONS: EXECUTION TO SETTLEMENT RECOMMENDATIONS FOR NON-DEALER PARTICIPANTS 2* (2016); BANK FOR INT’L SETTLEMENTS, *ANNUAL ECONOMIC REPORT 75* (2022).

¹² Georgieva, *supra* note 8.

security aims by requiring them to enforce its sanctions, anti-money laundering (“AML”), and counter-financing of terrorism (“CFT”) regimes.

In effect, a body of U.S. law—built up over nearly 100 years—shapes this partnership between the government and payments-processing banks. The International Emergency Economic Powers Act (“IEEPA”) gives the President broad authority to impose sanctions on rogue states, state-sponsored actors, or nonstate actors—the President, in turn, relies on the banking system to enforce them.¹³ Likewise, the Bank Secrecy Act (“BSA”) positions banks as surveillance mechanisms to flag suspicious activity that might suggest illicit use of the U.S. financial system. These legal arrangements—developed apace with the rise of the international payments system itself—have thus empowered the President to “ask[] the world to stop payment” to those states, groups, and actors that violate human rights, commit international crimes, denigrate populations with corruption, break treaties, or aggress against sovereign states.¹⁴

As such, the domestic payments system—which, in turn, operates on a global scale to facilitate the international flow of dollar payments—is a critical component of the United States’s national security apparatus. Yet the very legal frameworks that prescribe banks’ obligations to assist the U.S. Treasury in enforcing these laws has become slightly overgrown. Conflicting objectives between bank regulators (like the U.S. Federal Reserve) and financial intelligence units (at the Treasury) have also contributed to disharmony among banks and their legal and regulatory obligations. As a consequence, the correspondent banking system appears inefficient relative to new crypto payment options that offer people “[m]oney at internet speed.”¹⁵ Indeed, some academics and policymakers now praise stablecoins for their efficiency-enhancing potential.¹⁶

¹³ IEEPA was founded on the Trading with the Enemy Act. Pub. L. No. 65-91 (1917); see Christopher A. Casey, Ian F. Fergusson, Dianne E. Rennack & Jennifer K. Elsea, Cong. Rsch. Serv., R45618, *The International Emergency Economic Powers Act: Origins, Evolutions, and Use* 8–9 (2020).

¹⁴ David E. Sanger & Joseph Kahn, *A Nation Challenged: The Overview; Bush Freezes Assets Linked to Terror Net; Russians Offer Airspace and Arms Support*, N.Y. TIMES (Sept. 25, 2001), <https://www.nytimes.com/2001/09/25/world/nation-challenged-overview-bush-freezes-assets-linked-terror-net-russians-offer.html> [<https://perma.cc/267J-VPFN>]. See Exec. Order No. 13224, 66 Fed. Reg. 49079 (Sept. 23, 2001); ZARATE, *supra* note 5, at 28–29.

¹⁵ CIRCLE, <https://www.circle.com/en/> [<https://perma.cc/4MH3-TTAK>]. See Loretta J. Mester, President and CEO, Fed. Rsv. Bank of Cleveland, *An Update on the Federal Reserve’s Efforts to Modernize the Payments System*, Keynote Speech at the Chicago Payments Symposium (Oct. 4, 2022) (transcript available at <https://www.clevelandfed.org/collections/speeches/2022/sp-20221004-an-update-on-the-federal-reserves-efforts-to-modernize-the-payment-system> [<https://perma.cc/M37C-TDE7>] (remarking that “[n]ew technologies have shaped the public’s expectations for faster, more efficient, and broadly accessible payment serves that, at the same time, are safe and secure”); see also *Cross-Border Payments*, FIN. STABILITY BD., <https://www.fsb.org/work-of-the-fsb/financial-innovation-and-structural-change/cross-border-payments/> [<https://perma.cc/52N2-MQ2V>] (last updated Feb. 23, 2023).

¹⁶ See, e.g., Dan Awrey, *Unbundling Banking, Money, and Payments*, 110 GEO. L.J. 715, 717–19 (2022); Gordon Y. Liao, *Macprudential Considerations of Tokenized Cash*, CIRCLE

This Article urges that, while cryptocurrency might be efficient for transacting across borders, those gains are likely to come with national and economic security costs. Accordingly, the core claim of this Article is that policymakers should look for solutions to the cross-border-payments efficiency dilemma within the existing correspondent banking system—rather than through coin-based additions or, worse yet, substitutions.

To that end, this Article proceeds in three parts. Part II explains domestic and cross-border payments systems. In doing so, it describes the legal frameworks that position banks to act as gatekeepers of illicit finance and enforce the President’s sanctions regime. Part III then discusses the way that coin-based payments systems offer crypto-detours around this legal framework. Part IV argues for modernization in existing payments. Specifically, Part IV develops a plan to transition the U.S. payments system to a model of centralized customer due diligence that would be conducted by a trusted, third-party intermediary known as a centralized verifying party (“CVP”).

The CVP would centrally clear customers as legitimate users of the dollar-based payment system, providing these vetted customers with a transferable diligence passport for use throughout the United States payments system and, in participating nations, in payments intermediaries acting abroad. By consolidating due diligence in the CVP, participating financial institutions could trim inefficiency from one of the costlier aspects of their existing payments business (AML/CFT compliance) and, in turn, be held accountable for responding to calls from regulators and the public to pass those efficiencies on to consumers.

Ultimately, this Article aims to provide a descriptive account of the payments system’s role in foreign policy and national security in order to animate its proposal for a new infrastructure that would strengthen the in-

INTERNET FINANCIAL (2022); Gary Gorton & Jeffery Zhang, *Taming Wildcat Stablecoins*, 90 U. CHI. L. REV. (forthcoming 2023); George Selgin, A “Narrow” Path to Efficient Digital Currency (Cato Briefing Paper, No. 134, 2022), <https://www.cato.org/briefing-paper/narrow-path-efficient-digital-currency> [<https://perma.cc/W4CQ-C38E>]; Christopher J. Waller, Bd. of Governors of the Fed. Rsv. Bd., Reflections on Stablecoins and Payments Innovations, Speech at “Planning for Surprises, Learning from Crises” 2021 Financial Stability Conference (Nov. 17, 2021) (transcript available at <https://www.federalreserve.gov/newsevents/speech/waller20211117a.htm>) [<https://perma.cc/V92F-5MV3>]; see also Douglas Arner, Raphael Auer & Jon Frost, *Stablecoins: Risks, Potential, and Regulation*, (Bank for Int’l Settlements Working Paper No. 905, 2020); HOWELL JACKSON, TIMOTHY G. MASSAD & DAN AWREY, HOW WE CAN REGULATE STABLECOINS NOW—WITHOUT CONGRESSIONAL ACTION (2022), <https://www.brookings.edu/research/how-we-can-regulate-stablecoins-now-without-congressional-action/> [<https://perma.cc/X5KU-KZXX>]. This Article does not foreclose the possibility that a well-regulated stablecoin system, or some version of it, might make payments more efficient in due course. This, as will be explained, is contingent on legislation or regulation establishing reserve requirements of stablecoins. If stablecoins were required to be backed 1-to-1 with, for example, fiat currency or Treasury notes, an argument can be made that stablecoins would thus increase or keep steady demand for dollars and dollar denominated assets. In the absence of such requirements, however, stablecoins can be backed by any assets including (presumably) those that work at cross-purposes to U.S. economic interests, like the commercial paper of Chinese companies. A complete discussion of how best to regulate stablecoins is, however, beyond the scope of this Article’s focus: improvements to the existing payments system.

cumbent system's ability to effectuate these important goals. In the context of an expanding crypto ecosystem for making cross-border payments, the proposal herein can be viewed as complementary to ongoing central bank and financial policy discussions whether to ban, contain, or regulate such crypto payments activity.¹⁷

II. THE CROSS-BORDER PAYMENTS SYSTEM

This Part explains the incumbent cross-border payments system, which rests on networks of banks and centralized infrastructure. In setting out these institutional details, Part II advances a foreign policy and national security rationale for maintaining the system's core features: centralization and concentration.

Today, international payments—often technically, in regulatory parlance, referred to as “cross-border” payments—are voluminous and increasingly ubiquitous. Estimates suggest that in 2022, cross-border payments will settle around \$156 trillion globally.¹⁸ Indeed, almost every segment of the economy has some need for cross-border payments at one time or another—businesses (large and small) send money to other businesses (“B2B”) and consumers (“B2C”) abroad; and consumers who buy goods and services abroad necessarily send money to businesses (“C2B”) overseas as well.¹⁹ There is also a sizable flow of money from consumers in one jurisdiction to consumers in another; these retail-to-retail payments are known as “remittances.”²⁰ For many citizens living abroad in emerging market economies, remittances from citizens in developed economies are a critical source of income (and, accordingly, a mechanism of global income redistribution).²¹

But paying for goods and services outside of one's nation-state is not a straightforward process. Currency is sovereign in its legal character; there is no global currency. Final settlement is also sovereign in its nature, as it takes place on the balance sheet of the central bank with central bank reserves.

¹⁷ See generally MATTEO AQUILINA, JON FROST & ANDREAS SCHRIMPF, *BANK INT'L SETTLEMENTS, ADDRESSING THE RISKS IN CRYPTO: LAYING OUT THE OPTIONS 3* (2023).

¹⁸ See Victoria Cleland, Exec. Dir. Banking, Bank of Eng., Payments and Innovation, Bank of Eng., Rowing in Unison to Enhance Cross Border Payments, Central Bank Payments Conference (June 29, 2022) (transcript available at <https://www.bankofengland.co.uk/speech/2022/june/victoria-cleland-speech-at-the-currency-research-central-bank-payments-conference-2022> [<https://perma.cc/693G-F6RL>]). A payments system is “a network of interconnecting entities that facilitates the exchange of data required to initiate, authorize, clear, and settle cash or credit claims between payors and payees.” Hal S. Scott, *The Importance of the Retail Payment System*, RETAIL PAYMENTS SYS. CONF., HARV. L. SCH. PROGRAM FOR INT'L FIN. SYS. 5 (Feb. 26, 2015), <https://dash.harvard.edu/bitstream/handle/1/16883011/hal-scott--mastercard-retail-payment-systems.pdf?sequence=> [<https://perma.cc/2X44-BTXJ>].

¹⁹ FIN STABILITY BD., *TARGETS FOR ADDRESSING THE FOUR CHALLENGES OF CROSS-BORDER PAYMENTS: FINAL REPORT 1* (2021).

²⁰ *Id.* at 7.

²¹ WORLD BANK GRP., *THE DECLINE IN ACCESS TO CORRESPONDENT BANKING SERVICES IN EMERGING MARKETS: TRENDS, IMPACTS, AND SOLUTIONS 8-9* (2018).

Settlement in central bank reserves makes a transaction “final” in the sense that any remaining credit risk is eliminated once settled with central bank reserves, which is presently the only form of money that completely lacks credit risk.²² But like currency, central banks are sovereign, and there is no global central bank capable of supplying a universal settlement asset.

Herein lies an intractable dilemma for those businesses and consumers wishing to make cross-border payments: Bank A operating in Country A does not have access to the balance sheet of the central bank in Country B; consequently, Bank A cannot settle payments directly with customers in Country B. But private banks long ago devised a solution to this dilemma that is inherent in the lack of a global settlement asset (i.e., central bank money) or settlement system (i.e., a global central bank account). That is, banks devised a system to network themselves together, which is known as correspondent banking.²³

The precepts of correspondent banking, as a system for enabling cross-border payments for trade, have likely existed for thousands of years. Some scholars have found evidence of financial networks as early as Mesopotamia, and in Ancient Greek and Egyptian commerce as well.²⁴ Those models, in turn, would appear to have inspired more sophisticated Roman networks of financial payments.²⁵ Later, the Crusaders would rely on similar networks to facilitate payments between their homes in Europe and the Middle East.²⁶ Eventually, Venetian and Tuscan merchants evolved the model further and developed systems of networked banking similar to the one we recognize today. When the Bank of England was created toward the end of the Renaissance period, it would be the first central bank to lean on such system to

²² See Pontus Åberg, Marco Corsi, Vincent Grossmann-Wirth, Tom Hudepohl, Yvo Mudde, Tiziana Rosolin & Franziska Schobert, *Demand for Central Bank Reserves and Monetary Policy Implementation Frameworks: The Case of the Eurosystem*, EUR. CENT. BANK EUROSYSTEM OCCASIONAL PAPER SERIES 1, 7 (Sept. 2021).

²³ In summary, as the Basel Committee on Banking Supervision (“BCBS”) defined it in 2020, “[c]orrespondent banking relationships allow banks to process cross-border payments without having a physical presence of legal domicile in other jurisdictions. This functionality provides a flexible and regulated channel with a potentially worldwide reach, thus supporting cross-border trade and investment, economic integration, and financial inclusion.” RODRIGO COELHO, JONATHAN FISHMAN, AMER HASSAN & RASTKO VRBASKI, FSI INSIGHTS ON POLICY IMPLEMENTATION NO. 28, CLOSING THE LOOP: AML/CFT SUPERVISION OF CORRESPONDENT BANKING 4 (2020).

²⁴ See Karl Buhl-Freiherr v.u.z. Guttenberg, *Agents, Bills, and Correspondents through the Ages: An Analytical Reconsideration of the Nature, Scope, and Significance of Correspondent Banking and its Application in Historical Precedence and Selected Case Studies* 175, 190 (July 2019) (Ph.D. dissertation, University of Southampton) (on file with the University of Southampton Institutional Repository), <https://eprints.soton.ac.uk/435557/> [<https://perma.cc/426W-9AZ4>].

²⁵ *Id.* at 8 (noting that the “increase of far-reaching trade and other business activities was the precondition for advanced payment and financial intermediation methods”).

²⁶ *Id.* at 214–18.

facilitate remittances from soldiers fighting throughout Continental Europe back to England.²⁷

Within the system of correspondent banking, private banks solve the problem of currency interoperability. That is, they overcome the sovereign character of money to facilitate its exchange across borders.²⁸ To do this, domestic banks in Country A develop arrangements with foreign banking institutions whereby one bank (the correspondent) holds deposits owned by the other (the respondent). As one Economist article described it, “[t]he system of correspondent banking through which cross-border payments flow works like air transport: when two faraway banks do not have a direct relationship, money travelling from one to the other stops over at banks in between.”²⁹

The correspondent bank provides financial services—especially and including payments services—to the respondent bank on an ongoing, rela-

²⁷ See Ben Norman, Rachel Shaw & George Speight, *The History of Interbank Settlement Arrangements: Exploring Central Banks' Role in the Payment System* 15–16 (Bank of Eng., Working Paper No. 412, 2011), https://www.ecb.europa.eu/home/pdf/research/Working_Paper_412.pdf [<https://perma.cc/48X3-36NE>]. Although correspondent banking would come later, at the American Founding, Alexander Hamilton recognized that banks would be key to the nation's future economic health as key institutions for fostering trade and growth. Reflecting on this early banking history, Hamilton would proclaim in 1781: “Most commercial nations have found it necessary to institute banks and they have proved to be the happiest engines that ever were invented for advancing trade.” Justin Baer, *History: Banks are at the Heart of Capitalism*, FIN. TIMES (Nov. 18, 2010), <https://www.ft.com/content/63e4d792-f111-11df-bb17-00144feab49a> [<https://perma.cc/X75J-PG6C>]. Referring to these earlier examples, Madison cited “Venice, Genoa, Hamburg, Holland and England [as] examples of their utility.” *Id.*

²⁸ Correspondent banking is also used in domestic payments systems. In the United States, correspondent banking developed around 1850, coincidental with a new form of payments instrument—the check. See John A. James & David F. Weiman, *From Drafts to Checks: The Evolution of Correspondent Banking Networks and the Formation of the Modern U.S. Payments System, 1850–1914*, 42 J. MONEY, CREDIT & BANKING 237, 238 (2010). Checks would enhance the efficiency of interregional trade; for large wholesale traders, checks were far more “convenient, secure, and verifiable payments instruments” than currency had been. *Id.* But extent restricting on bank branching made check clearing difficult and risky for banks. Banks assumed default risk on the part of the payor and had to complete several verification and authorization steps before finally settling the transaction. See Catherine R. Schenk, *The Development of International Correspondent Banking in the USA 1970–89* 7–8 (Glo. Correspondent Banking 1870–2000 Working Paper Series Vol. 1, No. 1, 2021), <https://glocobank.web.ox.ac.uk/files/schenkrcdec2021thedevelopmentofintlcorrespondentbankingintheusa1970-89workingpaperpdf> [<https://perma.cc/V8XF-3L8G>]. In this early American arrangement, so-called country banks would develop relationships with the city banks located in financial centers, thus establishing check-based payments channels between the regions. See Jeffrey M. Lacker, President, Fed. Rsrv. Bank of Richmond, *A Look Back at the History of the Federal Reserve*, Remarks at Christopher Newport University (Aug. 29, 2013) (transcript available at https://www.richmondfed.org/press_room/speeches/jeffrey_m_lacker/2013/lacker_speech_20130829) [<https://perma.cc/2LY7-5AA9>]. As Jeff Lacker describes this history, “If you multiply this picture across the nation, you end up with an intricate web of correspondent relationships linking very small country banks to larger banks in nearby cities to banks in the very largest financial centers—New York and Chicago.” *Id.*

²⁹ *The Race to Redefine Cross-Border Finance*, ECONOMIST (Oct. 21, 2021), <https://www.economist.com/finance-and-economics/the-race-to-redefine-cross-border-finance/21805736> [<https://perma.cc/44TU-VKK2>].

tional basis. These payment services include wire transfers, check clearing, and foreign exchange settlement. In addition to providing a system to make currency interoperable, correspondent banks also supply liquidity in the market for foreign currency. Again, because currency is interoperable, Currency A must be exchanged for Currency B, if Currency A is to be used to buy goods or services in Country B (or for any other reason money from A is sent to B). The forces of supply and demand for each respective currency dictate the rate at which they are exchanged.

The development of a modern market for trading currency—the market for foreign exchange—would become a key component to the correspondent banking model. The 1970s were a period of significant restructuring of the global monetary regime, as the Bretton Woods arrangement that had prevailed since the end of World War II (and required a fixed exchange rate regime anchored to gold) collapsed.³⁰ To support the new floating exchange rate regime, a market developed for buying and selling sovereign currencies, the so-called forex market, at prices set by the market forces of supply and demand.³¹

Private clearing houses also developed to clear and settle forex transactions. CHIPS, established in 1970 by eight bank members, became the dominant clearing house.³² Like its predecessors in the early nineteenth century, CHIPS would be a member-based institution; it is primarily responsible for netting foreign exchange transactions on a daily basis.³³ Today, it remains based in New York—where it was first established—and clears about \$1.8

³⁰ See Junji Nakagawa, *Reconstructing Global Monetary/Financial Governance: Beyond the Bretton Woods System*, 53 JAPANESE Y.B. INT'L L. 96, 109–10 (2010); see, e.g., Dima Waleed Hanna Alrabadi & Buthiena Alyan Kharabsheh, *Financial Deepening and Economic Growth: The Case of Jordan*, 16 J. ACCT. & FIN. 158, 158 (2016) (noting evidence that “[f]inancial deepening stimulates higher investments, faster growth and more rapidly rising living standards”); *id.* (defining financial deepening “as the increased provision of financial services with a wider choice of services geared to all levels of society”).

³¹ Under the Bretton Woods arrangement, currencies were pegged to the value of gold. Because private citizens (at least in the U.S.) could not buy and sell gold, foreign exchange transactions were necessarily intermediated by the central bank. This dampened the amount of foreign exchange transactions that took place under Bretton Woods. See Marc Bayle de Jessé, *Settlement Risk: Addressing the Key Issue in Cross-Border Payments*, CLS (Oct. 15, 2021), <https://www.cls-group.com/insights/shaping-fx-ecosystem/settlement-risk-addressing-the-key-issue-in-cross-border-payments/> [<https://perma.cc/5SAF-UJXY>].

³² Because CHIPS participants must be based in the U.S. and subject to U.S. supervisory authority, a CHIPS instruction may be just one “segment” of a cross-border payment. See FIN. CRIMES ENFT NETWORK, U.S. DEP'T OF TREASURY, FEASIBILITY OF A CROSS-BORDER ELECTRONIC FUNDS TRANSFER REPORTING SYSTEM UNDER THE BANK SECRECY ACT, APPENDIX D—FUNDAMENTALS OF THE FUNDS TRANSFER PROCESS 55 (2007).

³³ “CHIPS is a ‘netting engine’ that settles payments between banks over the course of the trading day, netting offsetting payments against one another when possible.” When CHIPS closes at the end of its trading day, the outstanding balances of participants are paid out with an actual transfer of funds over Fedwire, which closes ninety minutes later. Fedwire is the Federal Reserve’s real-time gross settlement system. These practices finalize transactions while also limiting the need for actual transfers of funds. BARRY EICHENGREEN, SANCTIONS, SWIFT, AND CHINA’S CROSS-BORDER INTERBANK PAYMENTS SYSTEM, CTR. STRATEGIC & INT’L STUD. BRIEFS 4 (2022).

trillion in domestic and international payments daily for its fifty participating financial institutions.³⁴

When foreign exchange markets first developed in the 1970s, foreign exchange transactions largely cleared bilaterally.³⁵ CLS Bank, another payments market infrastructure, developed to improve the efficiency of this process. It clears forex via a so-called payment versus payment model.³⁶ Only when both legs of a transaction are sent to CLS will CLS make an irrevocable payment to each party.³⁷ And because, in practice, CLS also commits to standby lines of credit with major banks in the currencies that it settles, if one bank fails in the midst of a transaction, CLS is still able to perform the transaction. The practice of bilateral netting that CLS performs provides further efficiency gains in the market; by CLS's estimates, netting efficiency is around ninety-five percent, so for every trillion dollars of gross value settled, only fifty billion dollars is required to be paid in.³⁸

If correspondent banking is like air transport, then the payments-passengers are almost all flying on one airline—Swift. Swift is a messaging system—the participating financial institutions agree to certain character strings to denote payments transactions—the terms of the transaction, the flight route (the path to which banks connect), and so on.³⁹ Swift also then provides the secure network along which these messages can be sent between participating financial institutions.

Developed in 1977, the Swift system revolutionized cross-border payments. Before Swift, banks wiring money overseas would use phone lines (not secure) and manual entry, which was slow and led to significant error. Now, over 500 banks participate in Swift and, according to best estimates, around ninety percent of cross-border payments flow through Swift.⁴⁰ Although Swift is decades old, it is still modernizing. As of 2017, Swift has rolled out a global payments initiative, Swift gpi, which aims to improve the

³⁴ “Direct participants hold shares in the parent company, the Clearing House Payments Company LLC.” *Id.*

³⁵ See Richard Levich, *Why Foreign Exchange Transactions Did Not Freeze Up During the Global Financial Crisis: The Role of the CLS Bank*, VoxEU (July 10, 2009), <https://voxeu.org/article/clearinghouse-saved-foreign-exchange-trading-crisis> [<https://perma.cc/TEC8-KCJU>].

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

³⁹ Eichengreen, *supra* note 33 (“SWIFT’s components are its messaging platform, computers to validate and route messages, and a set of messaging standards”).

⁴⁰ There are other payment rails available to banks for transmitting cross-border payments. ACH offers some limited cross-border services, as well as the Federal Reserve Banks. FedNow, the Fed’s real-time payments network due to launch soon, will be domestic only initially. Cross-border payments can also be made via card transactions, through Visa, Mastercard, and American Express, though most of these cards are ultimately sponsored by banks which participate in the Swift network.

speed and transparency of these cross-border transactions—aiming to settle payments within one day.⁴¹

Correspondent banking networks have been important for economic growth, domestically and globally. In the United States, correspondent banking began to operate as an infrastructure mechanism for channeling savings to productive investment between far-flung regions by the middle of the nineteenth century. These bank networks thus enabled entrepreneurs and industrialists to access a wider capital base than would otherwise have been available to them locally, in turn giving these industrial leaders the leverage they required to scale their entrepreneurial endeavors.⁴² The banks' ability to do this innovative payments work—i.e., to innovate efficient payments instruments (like checks) and provide the rails for exchanging them between cities and between rural areas (the networks)—would thus be critical to the economic growth that would transpire in America between 1870 and 1970.⁴³

By the end of this “special century,” the U.S. banks that had experienced the benefits of this network domestically would be primed for international expansion, just as globalization was beginning to quicken. Indeed, the 1970s was a period of “rapid growth in international banking” for U.S. banks.⁴⁴ As one Federal Reserve history explains, during this time existing global banks “refined their networks and penetrated foreign markets more deeply,” while smaller regional banks “began to recognize the benefits of a foreign presence . . . to accommodate and retain domestic customers whose activities were beginning to extend beyond U.S. borders.”⁴⁵

The international expansion was significant. Whereas in 1965, only thirteen U.S. banks had foreign branches (with assets totaling less than ten billion dollars), by 1980 nearly every large U.S. bank (159 to be precise) had at least one foreign branch, with combined assets of \$340 billion.⁴⁶ Although European banks had engaged in international banking for hundreds of years, as earlier noted, they had still “trailed” U.S. banks in creating the more modernized “worldwide branch networks.”⁴⁷ Yet that gap also began to close in the 1970s, creating more channels for correspondent relationships between U.S. and foreign banks to form.⁴⁸ As was the case in “Gilded Age” America, these internationalized correspondent banking networks fueled a

⁴¹ SOCIETY FOR WORLDWIDE INTERBANK FIN. TELECOMM., SWIFT INFO PAPER, SWIFT GPI DRIVING A PAYMENTS REVOLUTION 3 (Oct. 2020).

⁴² See *id.* at 6.

⁴³ ROBERT J. GORDON, *THE RISE AND FALL OF AMERICAN GROWTH: THE U.S. STANDARD OF LIVING SINCE THE CIVIL WAR 2* (2016) (referring to this period as the “special century,” one that was “more important to economic progress than [had] been all other centuries” before).

⁴⁴ James V. Houpt, *International Activities of U.S. Banks and in U.S. Banking Markets*, FED. RESRV. BULL. 599, 599 (1999), <https://www.federalreserve.gov/pubs/bulletin/1999/0999lead.pdf> [<https://perma.cc/LL9W-LYUE>].

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ *Id.* at 600.

⁴⁸ *Id.*

globalized growth spurt by supporting international trade, remittances, and cross-border financial flows.⁴⁹ On balance, bank-fueled global capitalism spurred significant human and social progress.⁵⁰ What is more, this growth enabled social mobility in societies and made redistribution possible and politically desirable.⁵¹

As such, it was not only the United States and the West that gained from correspondent banking and the global growth it underpinned.⁵² Emerging market economies also benefited from the correspondent banking relationships that enabled financial “deepening” in their economies, which implied a growing maturity of their domestic financial markets. Correspondent banking relationships also drove financial “integration,” linking the emerging market economies to pools of capital flowing from the developed world.⁵³ Increasing the depth of and external access to financing—via these networks of global banks—has been empirically associated with increased prosperity in emerging market economies.⁵⁴ Tellingly, correspondent banking services were specifically protected in the 1994 World Trade Organization (“WTO”) Agreements—evidencing multilateral recognition of these networks’ value in supporting global trade and socially-beneficial growth.⁵⁵

⁴⁹ See WORLD BANK GRP., *supra* note 21, at VII.

⁵⁰ See, e.g., Sajid Javid, Member of Parliament, U.K. Dep’t for Bus., Innovation & Skills, In Defence of the C-Word: Why Capitalism Is a Force for Good, Speech at Legatum Institute (Nov. 16, 2015) (transcript available at <https://www.gov.uk/government/speeches/in-defence-of-the-c-word-why-capitalism-is-a-force-for-good/>) [<https://perma.cc/A5NY-Y544>]; Max Roser, *Twice as Long—Life Expectancy Around the World*, OXFORD MARTIN SCHOOL (Oct. 8, 2018), <https://ourworldindata.org/life-expectancy-globally> [<https://perma.cc/4NYF-CH6U>]. For a foundational treaty on the economic advantages of global trade, see ADAM SMITH, WEALTH OF NATIONS (1776).

⁵¹ See, e.g., Timothy R. Mahoney, *Middle-Class Experience in the United States in the Gilded Age, 1865–1900*, 31 J. URB. HIST. 356, 359 (2005).

⁵² There is a vast literature on the gains and costs of globalization. While this Article adopts the view that the gains have far exceeded the costs, the literature discussing the trade-offs of globalization indicates that environmental degradation and increased wealth inequality have accompanied globalization. See, e.g., Philipp Heimberger, *Does Economic Globalisation Affect Income Inequality? A Meta-Analysis* (Vienna Inst. for Int’l Econ. Studs., Working Paper No. 165, 2019) (providing a literature review of the econometric analyses of the impact of globalization in inequality around the world), <https://wiiw.ac.at/does-economic-globalisation-affect-income-inequality-a-meta-analysis-dlp-5044.pdf> [<https://perma.cc/JS94-L5WR>]; Brian R. Copeland, Joseph S. Shapiro & M. Scott Taylor, *Globalization and the Environment* (Nat’l Bureau of Econ. Rsch., Working Paper No. 28797, 2021), <https://www.nber.org/papers/w28797> [<https://perma.cc/FTX7-9VZD>] (presenting a review of the issues pertaining to whether and how international economic policy should address climate change).

⁵³ See IMF, RECENT TRENDS IN CORRESPONDENT BANKING RELATIONSHIPS—FURTHER CONSIDERATIONS (2017); WORLD BANK GRP., *supra* note 21.

⁵⁴ In the economics literature, this is referred to as the financial-growth nexus. See, e.g., Nicholas Apergis, Ioannis Filippidis & Claire Economidou, *Financial Deepening and Economic Growth Linkages: A Panel Data Analysis*, 143 REV. WORLD ECON. 179, 182 (2007) (providing econometric data from a panel of OECD countries to show “that there is clearly a positive association between financial deepening and economic growth” and concluding that “policies aiming at improving financial markets (economic growth) will have, in the long-run, a significant effect on economic growth (financial development)”).

⁵⁵ See IMF, *supra* note 53, at 7. To be sure, there have certainly been social movements against globalization in the developing world, often indicative of political preferences or

Correspondent banking networks have also, since the 1970s, supported an international role for the dollar as their reserve currency.⁵⁶ Generally, the catchphrase “dollar dominance” refers to the fact that, since the 1970s era, the dollar has become widely “used as a reserve currency and the currency of denomination for a large fraction of global trade and financial transactions.”⁵⁷ The dollar functions as a reserve currency as it does because, thanks to U.S. monetary and political institutions, it generally retains a stable value.⁵⁸ More specifically, the institutional infrastructure that couriers the dollar around the world—the U.S. banks participating in this global system—generally remain safe and stable, thanks to the Fed’s stringent supervisory and regulatory standards.⁵⁹ The United States also has a stable rule of law, which protects private property and contract rights, thus supporting trust in the dollar-based ecosystem.

Over time, network effects have perpetuated the dollar’s incumbent role.⁶⁰ Recent data from the Federal Reserve shows that sixty percent of international and foreign currency liabilities (primarily deposits) and claims (primarily loans) are denominated in U.S. dollars.⁶¹ Issuance of foreign cur-

popular perceptions at a given time. See Carol Graham, *Winners and Losers: Perspectives on Globalization from the Emerging Market Economies*, BROOKINGS (Sept. 1, 2001), <https://www.brookings.edu/articles/winners-and-losers-perspectives-on-globalization-from-the-emerging-market-economies/> [<https://perma.cc/FVM4-LFU2>].

⁵⁶ Carol C. Bertaut, Bastian von Beschwitz & Stephanie E. Curcuru, *The International Role of the U.S. Dollar*, BD. GOVERNORS FED. RSRV. SYS. (Oct. 6, 2021), <https://www.federalreserve.gov/econres/notes/feds-notes/the-international-role-of-the-u-s-dollar-20211006.html> [<https://perma.cc/G28P-LKB2>].

⁵⁷ Ricardo Correa, Linda S. Goldberg, Robert Lerman & Bo Sun, *The Fed’s Inaugural Conference on the Internal Roles of the U.S. Dollar*, BD. GOVERNORS FED. RSRV. SYS. (July 5, 2022), <https://www.federalreserve.gov/econres/notes/feds-notes/the-feds-inaugural-conference-on-the-international-roles-of-the-us-dollar-20220705.html> [<https://perma.cc/7BVH-92F2>]. As the Bank for International Settlements explains, the “centrality of the dollar” means that it is the most widely sovereign currency for payments and investment around the world. See Jerome H. Powell, Chair, Bd. Governors Fed. Rsr. Sys., Remarks at the Inaugural Conference on the International Roles of the U.S. Dollar (June 17, 2022) (transcript available at <https://www.bis.org/review/r220620i.pdf>) [<https://perma.cc/LA2A-JCK9>].

⁵⁸ From the vantage of 1960s era geopolitics, U.S. policy appeared less likely to make the dollar subject to exchange depreciation or exchange controls relative to other sovereign currencies and monetary policies. See Robert Z. Aliber, *The Costs and Benefits of the U.S. Role as a Reserve Currency Country*, 78 Q. J. ECON. 442, 443 (1964).

⁵⁹ Indeed, in notable recognition of the importance surrounding the ongoing stability of the payments infrastructure, correspondent banks long ago developed private sector norms that made them resilient (i.e., able to continue processing cross-border payments) to severe exogenous shocks from sources such as war, financial crisis, and pandemic. See, e.g., Laura Panza & David Merrett, *Hidden in Plain Sight: Correspondent Banking in the 1930s*, 61 BUS. HIST. 1300, 1306, 1317 (2019) (noting how, during the interwar period, correspondent banks—to the extent they existed—carried on “the transfer of credits and debits within the international economy,” thereby sustaining the global “economy’s substantial flows of trade, remittances of profits from multinationals and interest payments on sovereign debt in different countries [that] required the services of banks at either end of the transaction”).

⁶⁰ See, e.g., Gita Gopinath, *Dollar Dominance in Trade and Finance*, in CURRENCIES, CAP. & CENT. BANK BALANCES 53, 76–77 (John H. Cochrane, Kyle Palermo & John B. Taylor eds., 2019).

⁶¹ Bertaut et al., *supra* note 56.

rency debt, when issued by firms in a currency other than that of their home country, is also around sixty percent.⁶² For context, this makes the dollar far more widely used in cross-border transactions than the second most frequently used currency, the euro, which is used in just twenty-three percent of these transactions.⁶³ The dollar is also an “anchor currency,” which means that around fifty percent of world GDP is produced in countries whose currency is anchored to the U.S. dollar, not counting the United States.⁶⁴ Again, for a point of reference, only about five percent of global GDP is anchored to the euro.⁶⁵

At least in part, the existing structure of the global payments system perpetuates the dollar’s international role.⁶⁶ The fact that New York offers “financial facilities”—i.e., institutions and market infrastructure—to invest in dollars on a short-term basis for reserve management purposes, and to make such trades on a large scale without much price volatility, has always made the dollar a relatively attractive choice.⁶⁷ Meanwhile, CHIPS still denominates all transactions in dollars and, accordingly, “[t]hrough its convenience and scope . . . encourages use of the dollar.”⁶⁸

The dollar’s central role in the global economy benefits the United States. Most importantly, it keeps United States’s debt financing costs lower than that of other countries that do not supply the world’s “safe asset.”⁶⁹ There is also an “income advantage” to the dollar’s reserve currency role insofar as it “has enabled the United States to purchase more foreign goods, services and investments, and extend more foreign aid than would otherwise have been possible,” because the United States “earns a seigniorage profit from this role.”⁷⁰

⁶² *Id.*

⁶³ *Id.*

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ Though there are myriad reasons, economic, political, and institutional, that also account for the dollar’s continued status as a reserve currency.

⁶⁷ Aliber, *supra* note 58, at 443.

⁶⁸ Eichengreen, *supra* note 33; see also Gita Gopinath & Jeremy C. Stein, *Banking, Trade, and the Making of a Dominant Currency*, 136 Q. J. ECON. 783 (2020).

⁶⁹ As former Federal Reserve Chair Ben Bernanke explained it, “the interest rates that the U.S. pays on safe assets, such as government debt, are generally no lower (and are currently higher) than those paid by other creditworthy industrial countries.” Ben S. Bernanke, *The Dollar’s International Role: An “Exorbitant Privilege”?*, BROOKINGS (Jan. 7, 2016), <https://www.brookings.edu/blog/ben-bernanke/2016/01/07/the-dollars-international-role-an-exorbitant-privilege-2/> [<https://perma.cc/6Z4R-2HS4>]. In decades past, some referred to this as the United States’s “exorbitant privilege,” though with the rise of other currencies, that privilege may be on the decline.” *Id.* For a discussion of this topic see, for example, BARRY EICHENGREEN, *EXORBITANT PRIVILEGE: THE RISE AND FALL OF THE DOLLAR AND THE FUTURE OF THE INTERNATIONAL MONETARY SYSTEM* (2012). It bears noting, however, that maintaining a reserve currency is not costless—in particular, it may constrain U.S. policy’s ability to reduce the payments deficit which would impact the policy choices aimed at full employment. See Aliber, *supra* note 58, at 445 (“The major advantage of the U.S. reserve currency role has been in financing U.S. payments deficits.”).

⁷⁰ Aliber, *supra* note 58, at 446.

The dollar's status arguably benefits foreign economies, too. For one, foreign investors reap a trade-financing efficiency gain from the dollar's role because it "allows borrowers to have access to a broad pool of lenders and investors, which reduces their funding and transaction costs."⁷¹ The dollar's role also appears to confer stability on the global economy overall, at least in some respects.⁷² To the extent the dollar holds its value throughout economic turmoil, its safeness acts as a liquidity buffer to the economies of its foreign holders.⁷³ Relatedly, the Fed works intentionally to reinforce the dollar's stabilizing force by extending dollar-denominated loans (currency swap lines) to other central banks around the world to support these foreign economies during periods of worldwide economic stress.⁷⁴ In summary, the dollar fulfills global demand for safe assets in good times and in bad.

For all of these reasons, access to the international payments system (along with the dollar) is politically desirable.

III. GATES AND DETOURS

Precisely because U.S. banks had become globally operative by the 1970s, and the dollar so widely used, their correspondent banking relationships became the main channels through which the bulk of international payments flowed. Banks therefore had the financial transaction information necessary to detect transactions that violated domestic or international law.

⁷¹ See Powell, *supra* note 57, at 157.

⁷² In addition to the reasons discussed above, some have argued that dollarization—denominating all prices and transactions in U.S. dollars—in emerging market and transition economies has helped to stabilize their economies through political transition or unrest. See, e.g., ANNE-MARIE GULDE, DAVID HOELSCHER, ALAIN IZE, DAVID MARSTON & GIANNI DE NICOLÒ, IMF, FINANCIAL STABILITY IN DOLLARIZED ECONOMIES (2004), <https://www.imf.org/external/pubs/nft/op/230/op230.pdf> [<https://perma.cc/X8J7-69ZR>]; see also Ross Levine, *Financial Development and Economic Growth: Views and Agenda*, 35 J. ECON. LIT. 688 (1997); Dima Waleed Hanna Arabadi & Buthiena Alyan Kharabsheh, *Financial Deepening and Economic Growth: The Case of Jordan*, 16 J. ACCT. & FIN. 158, 158 (2016) (noting the general consensus in theoretical and empirical literature that “[f]inancial deepening stimulates higher investments, faster growth and more rapidly rising living standards”). However, it remains a debated proposition because, in turn, these economies have also imported the ramifications of U.S. monetary policy which could also be destabilizing. For a general discussion of the costs and benefits of dollarization, see IMF, MONETARY POLICY IN DOLLARIZED ECONOMIES, OCCASIONAL PAPER SERIES NO. 171 (1999), <https://www.imf.org/external/pubs/nft/op/171/> [<https://perma.cc/9X5J-CDAF>]; Patricia Alvarez-Plata & Alicia Garcia-Herrero, *To Dollarize or De-Dollarize: Consequences for Monetary Policy*, (Asian Dev. Bank, Working Paper, 2007), <https://www.bis.org/repofficepubl/arpresearch200709.1.pdf> [<https://perma.cc/H8QV-H2Q2>].

⁷³ Hiro Ito & Robert N. McCauley, *The Currency Composition of Foreign Exchange Reserves* (Bank Int’l Settlements, Working Paper No. 828, 2019), <https://www.bis.org/publ/work828.pdf> [<https://perma.cc/LH8X-HDNZ>].

⁷⁴ With the facilities, the U.S. Federal Reserve effectively extends unsecured loans of U.S. dollars to foreign central banks in a quasi-global lender of last resort role. See Sungki Hong & Devin Werner, *What Are The Fed’s Dollar Swap Lines and FIMA Repos, and Why Do They Matter?*, FED. RESRV. BANK OF ST. LOUIS: ON THE ECONOMY BLOG (Oct. 8, 2020), <https://www.stlouisfed.org/on-the-economy/2020/october/fed-dollar-swap-lines-fima-repos> [<https://perma.cc/BJ9S-5A8U>].

Moreover, because access to the global payments system confers significant economic benefits to society, the ability to regulate access to the system has become an effective tool for foreign policy. Section III.A first explains how existing legal frameworks require banks and other financial institutions to act as gatekeepers of illicit finance. Section III.B then explains why two distinct forms of cryptocurrencies—unbacked crypto assets and stablecoins—threaten to dilute the foreign policy power behind the incumbent payment system.

A. *Banks as Gatekeepers*

Today, U.S. banks have become central to the government's ability to operationalize and enforce economic sanctions and AML controls, as part of its ongoing effort to combat state aggression, corruption, human rights abuses, and other obstructions of international security. Although some of these tools of economic isolation have existed in the international community's repertoire since World War I, the concerted use of AML and sanctions to accomplish foreign policy and global governance objectives proliferated after the Cold War—banks, for their part, were drawn to the center of these regimes in earnest after the terrorist attacks of 9/11.⁷⁵

1. *Sanctions*

After 9/11, the U.S. government wanted to capitalize on banks' unique position in the international payments system.⁷⁶ Precisely, as one former senior Treasury official wrote, “[i]n Treasury, we realized that private sector actors—most importantly, the banks—could drive the isolation of rogue entities more effectively than governments. . . .”⁷⁷ Happily, Congress had created the legal foundation for this public-private partnership several years, if not decades, before.⁷⁸ These statutory arrangements generally authorized the President to impose sanctions on certain states or groups, and allow the President to delegate that work to the Secretary of the Treasury. Congress also, in designing these sanctions-related statutes, required the financial system to cooperate in effectuating the regime and imposed severe penalties for non-compliance.

⁷⁵ See MULDER, *supra* note 6, at 2–3; ZARATE, *supra* note 5, at 8 (noting that the post-9/11 “approach worked by focusing squarely on the behavior of financial institutions rather than on the class sanctions framework of the past”).

⁷⁶ See ZARATE, *supra* note 5, at 110 (noting that because banks act within a regulatory framework they are positioned to be gatekeepers). For a broad discussion of gatekeepers, see generally JOHN COFFEE, *GATEKEEPERS: THE PROFESSIONS AND CORPORATE GOVERNANCE* (2006).

⁷⁷ ZARATE, *supra* note 5, at 10.

⁷⁸ See Jonathan Masters, *U.S. Foreign Policy Powers: Congress and the President*, COUNCIL ON FOREIGN RELS. (Mar. 2, 2017), <https://www.cfr.org/backgrounder/us-foreign-policy-powers-congress-and-president> [<https://perma.cc/YRJ2-26DT>].

The primary piece of legislation authorizing the executive branch to impose sanctions on states, state-sponsored and non-state actors, and criminal activities is IEEPA.⁷⁹ That statute grants the President broad authority to respond to “unusual and extraordinary threat[s]” to national security, foreign policy, or the U.S. economy.⁸⁰ In order to promulgate sanctions, the President must formally declare a national emergency via executive order.⁸¹ The President’s ability to choke payments—or cordon off access to the international payments rails—is a centerpiece of IEEPA.

Namely, section 1702(A) empowers the President, acting through the Secretary of the Treasury, to “investigate, regulate, or prohibit”—

- (i) any transaction in foreign exchange,
- (ii) transfers of credit or payments between, by, through, or to any banking institution . . .
- (iii) the importing or exporting of currency or securities.⁸²

Section 1702(A)(ii) expressly identifies banking institutions as the intermediaries of credit and payments. Meanwhile, sections 1702(A)(i) and (iii) imply a necessary role for banks insofar as the government’s ability to identify targeted property (i.e., foreign exchange, currency, or securities) in the first place, and then hold it in abeyance for eventual seizure, depends entirely on banks’ cooperation. As an additional stick for full cooperation, IEEPA imposes substantial civil and criminal penalties on banks that do not comply.⁸³

Congress extended the IEEPA-like sanctions regime in two subsequent pieces of legislation—the Foreign Narcotics Kingpin Designation Act of 1999 (“Kingpin Act”) and the Antiterrorism and Effective Death Penalty Act of 1996 (“AEDPA”)—which empower the President to impose sanctions against foreign narcotics traffickers⁸⁴ and state sponsors of terrorism,⁸⁵ respectively. In the Kingpin Act, the relevant language regarding the Treasury Secretary’s “authority” is nearly identical to that found in IEEPA and noted above—banks may not process foreign exchange, currency, or any

⁷⁹ The Act, first passed in 1977, has been amended eight times since and, most significantly, by the Patriot Act in 2001. See CAREY ET AL., *supra* note 13. That post-9/11 amendment expanded the President’s power to block assets and enabled the vesting of confiscated property with the U.S. Treasury. *Id.*; see International Emergency Economic Powers Act (“IEEPA”), 50 U.S.C. §§ 1701–1708.

⁸⁰ IEEPA § 1701.

⁸¹ *Id.* The National Emergencies Act requires that any emergency proclaimed under IEEPA is reviewed annually by Congress. 50 U.S.C. § 1622(b).

⁸² IEEPA § 1702.

⁸³ IEEPA § 1705. Office of Foreign Assets Control (“OFAC”) frequently adjusts the amount of the fines for inflation. See OFAC, 87 Fed. Reg. 7369 (Feb. 9, 2022).

⁸⁴ 21 U.S.C. § 1901.

⁸⁵ AEDPA, Pub. L. No. 104–132, 110 Stat. 1255 (1996).

other payments transactions for sanctioned drug traffickers.⁸⁶ And, like IEEPA, violations carry the possibility of criminal fines and civil penalties.⁸⁷

Meanwhile, AEDPA specifically designates the provision of “financial services” as a kind of “material support” to a “foreign terrorist organization” and thus a criminal offense.⁸⁸ Section 2339B of AEDPA further calls on financial institutions as responsible gatekeepers.⁸⁹ It provides that:

Except as authorized by the [Treasury] Secretary, any financial institution that becomes aware that it has possession of, or control over, any funds in which a foreign terrorist organization, or its agent, has an interest, shall—

- (A) retain possession of, or maintain control over, such funds; and
- (B) report to the [Treasury] Secretary the existence of such funds in accordance with regulations issued by the Secretary.⁹⁰

Notably, section 2339B is a strict liability offense. It appears that Congress intentionally chose to forgo mens rea in this provision in an effort to prevent “even well-intentioned support” to terrorist organizations.⁹¹ The civil penalties under the statute are also quite severe.⁹²

Much of Treasury’s sanctions work is implemented by the Office of Foreign Assets Control (“OFAC”).⁹³ In addition to administering sanctions, OFAC also maintains a list of “specially designated nationals,” or the SDN list.⁹⁴ The effect of the SDN list is to amplify the impact of any given sanc-

⁸⁶ 21 U.S.C. § 1905; see also *Fact Sheet: Overview of the Foreign Narcotics Kingpin Designation Act*, WHITE HOUSE (Apr. 15, 2009), <https://obamawhitehouse.archives.gov/the-press-office/fact-sheet-overview-foreign-narcotics-kingpin-designation-act> [<https://perma.cc/SA46-4APU>] (noting that the purpose of the Kingpin Act “is to deny significant foreign narcotics traffickers, their related businesses, and their operatives access to the U.S. financial system and to prohibit all trade and transactions between the traffickers and U.S. companies and individuals”).

⁸⁷ 21 U.S.C. § 1906.

⁸⁸ See 18 U.S.C. § 2339A.

⁸⁹ 18 U.S.C. § 2339B.

⁹⁰ 18 U.S.C. § 2339B(a)(2).

⁹¹ Robert Chesney, *The Preventive Dilemma: A Reply to David Cole*, 1 CAL. L. REV. CIR. 7, 9 (2010).

⁹² 18 U.S.C. § 2399B(b).

⁹³ *Office of Foreign Assets Control - Sanctions Programs Information*, U.S. DEP’T OF TREAS., <https://home.treasury.gov/policy-issues/office-of-foreign-assets-control-sanctions-programs-and-information> [<https://perma.cc/U9FW-XLB7>]. OFAC was created in 1950, after China’s entry into the Korean War and President Truman’s declaration of a national emergency to block all Chinese and North Korean assets subject to U.S. jurisdiction. The Treasury performed a similar function between WWII and 1950, and the office was simply known as “The Control.”

⁹⁴ See 31 C.F.R. § 515.306. The Treasury issues press releases explaining the SDN list. *Frequently Asked Questions*, U.S. DEP’T OF TREAS., <https://home.treasury.gov/policy-issues/financial-sanctions/faqs/topic/1631> [<https://perma.cc/75Y4-W6KR>]. Reliance on the SDN list, and the notion of targeting individuals rather than states, became popularized in the Clinton Administration, earning it the nickname “la lista Clinton.” ZARATE, *supra* note 5, at 25.

tions target.⁹⁵ U.S. persons—especially and including banks—are prohibited from “engaging in any transactions” with those on this list, and banks are required to “block any property in their possession or under their control in which an SDN has an interest.”⁹⁶ Clearly, the requirement to “block property” in one’s “possession” will naturally apply almost exclusively to intermediaries in possession of funds for processing payments.

U.S. Presidents have, over the decades, used their statutory powers to impose sanctions routinely, and they resort to IEEPA most frequently.⁹⁷ The most recent use of IEEPA involved the suite of sanctions imposed against Russia for its unprovoked invasion of Ukraine—aggression that began in 2014 but escalated in 2022. Exploring these Russia-specific sanctions in some detail illustrates the breadth of IEEPA and—importantly—the Treasury’s dependence on the international payments system to operationalize and enforce them.

As will be recalled, IEEPA requires a presidential declaration of a national emergency to underpin a sanctions order. In 2014, President Obama issued Executive Order 13660, in regard to the threat posed by the “actions and policies of certain persons who had undermined democratic processes and institutions in Ukraine; threatened the peace, security, stability, sovereignty, and territorial integrity of Ukraine; and contributed to the misappropriation of Ukraine’s assets,” and Order 13662, which specifically authorized sanctions on certain sectors of the Russian economy.⁹⁸ These executive orders served as the basis for sectoral sanctions—one of which, Directive 1, aimed to cripple Russian financial institutions by seizing up the market for these institutions’ debt.⁹⁹

⁹⁵ As the Obama White House previously explained, the Treasury Secretary’s ability to “make derivative designations of foreign individuals and entities that provide specified types of support or assistance to designated traffickers, or that are owned or controlled by such traffickers, or that act on their behalf . . . broadens the scope of application” of the primary sanctions. WHITE HOUSE, *supra* note 86.

⁹⁶ U.S. DEP’T OF TREAS., *supra* note 93.

⁹⁷ Between 1977 and March 2022, Presidents have invoked IEEPA in 67 of the 75 declared emergencies under the National Emergencies Act. See Andrew Boyle & Tim Lau, *The President’s Extraordinary Sanctions Powers*, BRENNAN CTR. (July 20, 2021), <https://www.brennancenter.org/our-work/research-reports/presidents-extraordinary-sanctions-powers> [<https://perma.cc/4PMA-DU9D>].

⁹⁸ President Biden later declared a national emergency in April 2021 in regard to “specified harmful foreign activities of the Government of the Russian Federation”—citing interference in democratic processes and institutions in the United States and its allies, the facilitation of cyber-attacks, and the use of corruption to undermine governments around the world. Exec. Order No. 14024, 31 C.F.R. 587 (2023). A second Biden Executive Order in February 2022 reaffirmed the emergency, declaring that “[t]he scale of Putin’s aggression and the threat it poses to the international order require a resolute response,” committing the United States to “imposing severe costs if he does not change course.” Exec. Order No. 14065, 87 Fed. Reg. 12387 (Mar. 3, 2022). However, these Biden Orders were not the basis for the 2022 sanctions.

⁹⁹ Directive 1, as later amended in 2017 in accordance with the Countering America’s Adversaries Through Sanctions Act, 22 U.S.C. § 9527, prohibited any U.S. persons from buying or dealing in any new issuances of debt or equity by a Russian financial institution. In

In 2017, Congress passed legislation that expanded and codified the gist of the 2014 Directives. The Countering Russian Influence in Europe and Eurasia Act (“CRIEEA”) of 2017 enlisted banks a bit more explicitly. Section 235, in particular, authorized the President to prohibit banks from making loans to Russian sanctioned parties and, importantly, to prohibit banks from facilitating the transfer of credit or payments between financial institutions if those payments involve any interest of a (Russian) sanctioned party.¹⁰⁰

In 2018, the President used the authority granted in CRIEEA to justify Executive Order 13849, which, again, leaned heavily on banks.¹⁰¹ Reflecting the approach in CRIEEA, section 3(a)(i) of the executive order prohibited payments involving sanctioned parties and required banks to terminate correspondent and payable-through accounts for any foreign financial institutions that “knowingly” engaged in “significant” transactions on behalf of Russian persons who were designated on the SDN list or in connection with any of the sanctioned sectors of the Russian economy.¹⁰²

By 2022, when Russia invaded Ukraine, the playbook was at the ready. The President imposed a host of sanctions on the basis of an earlier April 15, 2021 Executive Order, No. 14024.¹⁰³ Specifically, the executive order authorized OFAC to impose sanctions against Russian persons connected with these activities. The 2022 sanctions that followed relied on banks’ place in the international payments system more so than ever. In particular, Directive 1A prohibited U.S. banks from buying rubles or ruble-denominated bonds.¹⁰⁴ Directive 2 focused on correspondent banking networks specifically.¹⁰⁵ It aimed squarely at the ten largest financial institutions in Russia and included full blocking and correspondent and payable-through account sanctions and

short, this would make it extremely difficult for Russian banks to obtain U.S. sources of funding for their operations.

¹⁰⁰ 22 U.S.C. § 9529.

¹⁰¹ Exec. Order 13849, 83 Fed. Reg. 48195 (Sept. 20, 2018), <https://www.state.gov/wp-content/uploads/2019/05/Executive-Order-13849-.pdf> [<https://perma.cc/9T5T-3RRL>].

¹⁰² For a discussion of CAATSA, including Title II, see Peter Jeydel, Meredith Rathbone, Zhu (Judy) Wang, Jack R. Hayes & Alexandra Baj, *A Detailed Look at Countering America’s Adversaries Through Sanctions Act*, STEPTOE (Aug. 10, 2017), <https://www.steptoe.com/en/news-publications/a-detailed-look-at-the-countering-america-s-adversaries-through-sanctions-act.html> [<https://perma.cc/VY4H-WX68>].

¹⁰³ In that order, President Biden had declared a national emergency in regard to “specified harmful foreign activities of the Government of the Russian Federation”—citing interference in democratic processes and institutions in the United States and its allies, the facilitation of cyber-attacks, and the use of corruption to undermine governments around the world. Exec. Order No. 14024, 86 Fed. Reg. 20249 (Apr. 19, 2021).

¹⁰⁴ U.S. DEPT OF TREAS., OFF. OF FOREIGN ASSETS CONTROL, DIRECTIVE 1A UNDER EXECUTIVE ORDER 14024: PROHIBITIONS RELATED TO CERTAIN SOVEREIGN DEBT OF THE RUSSIAN FEDERATION (2022), https://home.treasury.gov/system/files/126/russia_directive_1a.pdf [<https://perma.cc/77YL-HK5J>].

¹⁰⁵ U.S. DEPT OF TREAS., OFF. OF FOREIGN ASSETS CONTROL, DIRECTIVE 2 UNDER EXECUTIVE ORDER 14024: PROHIBITIONS RELATED TO CORRESPONDENT OR PAYABLE-THROUGH ACCOUNTS AND PROCESSING OF TRANSACTIONS INVOLVING CERTAIN FOREIGN FINANCIAL INSTITUTIONS (2022) https://home.treasury.gov/system/files/126/correspondent_accounts_directive_2.pdf [<https://perma.cc/5HRM-6765>].

the aforementioned debt and equity restrictions.¹⁰⁶ Effectively, none of these financial institutions would be permitted to clear transactions through the U.S. financial system which, thanks to CHIPS hegemony, is a required step for most interbank transfers of U.S. dollars even between two foreign banks. Directive 3 placed more restrictions on buying the debt and equity of Russian state-owned enterprises and private entities.¹⁰⁷ And Directive 4 banned all United States persons from engaging with the central bank of Russia.¹⁰⁸

Although the ultimate impact of these sanctions is still unfolding, they illustrate how the executive depends on the banking system as the enforcer of sanctions. The example also underscores how much the President depends on centralization and concentration in the international payments system—specifically, on the existence of one main highway system through which all international payments are flowing, so that restricting access to this freeway and imposing choke points at its off-ramps will have its intended punitive effect.

The efficacy of U.S. sanctions also depends on a shared set of norms between allied sovereign governments. The case of sanctions evasion by Huawei's CFO, Meng Wanzhou, is a case in point.¹⁰⁹ Chinese telecom giant Huawei had long engaged in business practices that undermined U.S. sanctions. For example, in 2011, Huawei pledged not to conduct business in Iran; yet it continued to maintain 1,000 employees in Iran and operate substantial business selling equipment that allowed the Iranian government to track dissidents.¹¹⁰ Huawei also used a Hong Kong company known as "Skycom" to conduct business with and export U.S. computer equipment to Iran.¹¹¹ Meng served on the board of Skycom¹¹² and, as Huawei CFO, tried to hide Huawei's control and ownership of Skycom to the international banks that

¹⁰⁶ *Fact Sheet: Joined by Allies and Partners, the United States Imposes Devastating Costs on Russia*, WHITE HOUSE (Feb. 22, 2022), <https://www.whitehouse.gov/briefing-room/state-ments-releases/2022/02/24/fact-sheet-joined-by-allies-and-partners-the-united-states-imposes-devastating-costs-on-russia/> [https://perma.cc/5BRP-RUM9].

¹⁰⁷ *Id.*

¹⁰⁸ Press Release, U.S. Dep't of the Treasury, Treasury Prohibits Transactions with Central Bank of Russia and Imposes Sanctions on Key Sources of Russia's Wealth (Feb. 28, 2022), <https://home.treasury.gov/news/press-releases/jy0612> [https://perma.cc/RCG4-UY24].

¹⁰⁹ Kate Conger, *Huawei Executive Took Part in Sanctions Fraud, Prosecutors Say*, N.Y. TIMES (Dec. 7, 2018), <https://www.nytimes.com/2018/12/07/technology/huawei-meng-wanzhou-fraud.html> [https://perma.cc/LJ79-7L6F].

¹¹⁰ Kathrin Hille & Geoff Dyer, *Huawei Vows Not to Pursue Business in Iran*, FIN. TIMES (Dec. 9, 2011), <https://www.ft.com/content/d244cf16-2276-11e1-923d-00144feabdc0> [https://perma.cc/97V7-QBNV].

¹¹¹ Conger, *supra* note 109.

¹¹² *Chinese Telecommunications Conglomerate Huawei and Huawei CFO Wanzhou Meng Charged With Financial Fraud*, U.S. DEP'T OF JUST. (Jan. 28, 2019), <https://www.justice.gov/opa/pr/chinese-telecommunications-conglomerate-huawei-and-huawei-cfo-wanzhou-meng-charged-financial> [https://perma.cc/4WXB-PPPH].

she used to process U.S. dollar transactions to Iran in violation of OFAC's Iranian Transactions and Sanctions Regulations ("ITSR").¹¹³

Although Meng avoided traveling through the United States after investigation into her conduct had commenced, she was arrested by Canadian authorities on an extradition request. Meng challenged the extradition on the ground that Canada had not sanctioned Iran itself. But the Supreme Court of British Columbia rejected that argument, reasoning that the existence of U.S. sanctions created the factual conditions necessary to satisfy the elements of fraud under Canada's criminal code—that is, intentionally false statements to HSBC that put the bank at legal (and hence pecuniary) risk.¹¹⁴ The point, here, is that sovereign allies have formal and informal understandings that the efficacy of one nation's domestic sanctions require extraterritorial enforcement.

2. *Anti-Money Laundering*

Banks are also used as gatekeepers of "money laundering"—the act of using the financial system to sanitize illegally obtained funds; i.e., those which may be obtained from narcotics trafficking, corruption, plundering state resources, and (in reverse) to fund terrorism or state aggression.¹¹⁵ Naturally, correspondent banking is the key battleground for the governmental fight against it. Inasmuch as banks are proscribed from processing payments (or providing other financial services) to bad actors, it is also responsible for detecting funds flowing through the system that derive from illicit sources (as well as from or on behalf of sanctioned parties).

The Bank Secrecy Act ("BSA") is the primary piece of legislation setting out banks' (and money service businesses') obligations to ensure that their services are not used for illicit purposes.¹¹⁶ When enacted in 1970, the BSA's initial purpose was to ensure that banks would have information about their customers (and their customers' transactions) that would enable them to provide law enforcement with information that would have a "high degree of usefulness" in detecting financial crime and sanctions evasion.¹¹⁷

¹¹³ *Id.*; Conger, *supra* note 109. ITSR prohibited U.S. dollar-clearing services to Iran or the Iranian government. See Jean Galbraith, *United States Seeks Extradition of Huawei Official Charged with Violating Sanctions Against Iran*, AM. J. INT'L L. 388, 388–93 (2019).

¹¹⁴ Pursuant to the principle of double criminality, extradition to another state is only possible where, if the situation were reversed, the requesting state would have also made the extradition. This is an internationally recognized principle in extradition law. See *United States v. Meng*, 2020 B.C.S.C. 785 (Can. B.C.S.C.).

¹¹⁵ The UN Office on Drugs and Crime estimates that the amount of money laundered globally each year is about 2-5% of global GDP—according to IMF estimates this is about \$1.6-\$4 trillion annually. UNITED NATIONS OFF. ON DRUGS AND CRIME, ESTIMATING ILLICIT FINANCIAL FLOWS RESULTING FROM DRUG TRAFFICKING AND OTHER TRANSNATIONAL ORGANIZED CRIMES (Oct. 2011), https://www.unodc.org/documents/data-and-analysis/Studies/Illicit_financial_flows_2011_web.pdf [<https://perma.cc/MSM9-XJ9E>].

¹¹⁶ Note, *The 1970 Bank Secrecy Act and the Right to Privacy*, 14 WM. & MARY L. REV. 929, 929 (1973).

¹¹⁷ *Id.* at 929 n.2.

The BSA, like the sanctions statutes just discussed, was later expanded by Patriot Act.¹¹⁸

The BSA broadly establishes reporting and recordkeeping requirements for any businesses covered by the statute. In particular, it requires covered institutions (especially banks) to file suspicious activity reports (“SARs”) with FinCen—another office within Treasury that processes financial intelligence.¹¹⁹ Banks are required to file a SAR with FinCen regarding any transactions of \$10,000 or more if the financial institution knows, suspects, or has reason to suspect that the transaction might involve money laundering; is designed to evade the BSA; or has no business or apparent lawful purpose or is not the type in which the customer would be expected to engage.¹²⁰

Ultimately, the efficacy of this public-private partnership depends on banks’ ability to be good financial watchdogs.¹²¹ Accordingly, the BSA also requires banks develop and maintain adequate monitoring and detection systems specific to illicit finance and sanctions. Again, Patriot Act amendments to the BSA created these requirements for covered firms to develop bespoke customer identification programs for the purposes of completing initial and, if needed, ongoing due diligence, referred to in the United States as “KYC” (“know your customer”).¹²² KYC rules bind whenever a bank or payments processor establishes a new business relationship or whenever carrying out new kinds of transactions that could carry AML risk.¹²³ Given the cross-border, intermediated nature of their business, correspondent banking networks are scrutinized particularly heavily by financial crime units like FinCen.

¹¹⁸ See Steven A. Meyerowitz, *Due Diligence Under the Patriot Act*, 2 J. PAYMENT SYS. L. 85, 85 (2006); Financial Crimes Enforcement Network; Anti-Money Laundering Programs; Special Due Diligence Programs for Certain Foreign Accounts, 72 Fed. Reg. 44768 (Aug. 9, 2007) (codified at 31 C.F.R. Chapter X).

¹¹⁹ FinCen’s mandate, set out in the Patriot Act, provides that it should “support law enforcement efforts and foster interagency and global cooperation against domestic and international financial crimes, and . . . provide U.S. policy makers with strategic analyses of domestic and worldwide trends and patterns.” Treas. Order 180–01, 67 Fed. Reg. 64697 (Oct. 21, 2002). FinCen has broad rulemaking authority to implement and administer the Bank Secrecy Act.

¹²⁰ U.S. DEP’T OF TREAS., OFF. OF THE COMPTROLLER OF THE CURRENCY, *Suspicious Activity Report (SAR) Program*, <https://www.occ.treas.gov/publications-and-resources/forms/sar-program/index-sar-program.html> [https://perma.cc/2LY4-P97Y].

¹²¹ As FinCen’s Acting Director affirmed in April 2022, “Financial institutions play a crucial role in identifying corrupt activity and associated money laundering on the part of foreign public officials and should remain vigilant and promptly report suspicious financial activity.” Press Release, Himamauli Das, Acting Director, FinCen, FinCEN Issues Advisory on Kleptocracy and Foreign Public Corruption (Apr. 14, 2022), <https://www.fincen.gov/news/news-releases/fincen-issues-advisory-kleptocracy-and-foreign-public-corruption> [https://perma.cc/9KNV-LJH].

¹²² 31 C.F.R. § 1020.220 (2013); see generally U.S. DEP’T OF TREAS., OFF. OF THE COMPTROLLER OF THE CURRENCY, BANK SECRECY ACT (BSA), <https://www.occ.treas.gov/topics/supervision-and-examination/bsa/index-bsa.html> [https://perma.cc/BM9Q-T3H4].

¹²³ 31 C.F.R. § 1020.220 (2013).

While there is no particular program for KYC prescribed by U.S. law, there are international best practices established by the Financial Action Task Force (“FATF”), an international networking body of financial intelligence units, like FinCen and its foreign counterparts.¹²⁴ They suggest that KYC programs should enable robust risk management and that correspondent institutions should identify and verify the identity of respondent institutions using any and all reliable independent sources of information.¹²⁵ Financial institutions are also recommended to fully understand the purpose and intended nature of the correspondent banking relationship, including, for example, what types of customers it serves, how robust the related bank’s internal supervision is, whether it has ever been the subject of investigations for money laundering or sanctions evasion, and whether the countries to whom correspondent banks are offering their services have adequate financial supervisory oversight in place.¹²⁶

The international community of central banks, through the Basel Committee for Bank Supervision (“BCBS”), also provides some guidance on AML risk-management in the context of correspondent banking services.¹²⁷ It urges banks to consider risks created where banking services are used by another bank’s affiliates, third parties, or through pass-through accounts.¹²⁸ It recommends that correspondent banks gather ample information about the characteristics, activities, markets, management, governance, and ownership of respondent banks.¹²⁹ Beneficial ownership—shell companies—has come into particular focus of late. Correspondent banks need to take particular care that they have taken sufficient steps to identify the true ownership of any respondent institutions.¹³⁰

The BCBS and FATF have also issued supervisory guidance on transparency in cross-border wires.¹³¹ According to this guidance, originating banks are “responsible” for requiring that full information on the originator and beneficiary accompanies all wires, and it also “encourages all banks to apply high transparency standards.”¹³² Further, these established best practices require that “the quality of information provided in payment messages

¹²⁴ See FIN. ACTION TASK FORCE, INTERNATIONAL STANDARDS ON COMBATING MONEY LAUNDERING AND THE FINANCING OF TERRORISM & PROLIFERATION: THE FATF RECOMMENDATIONS 7 (2022), <https://www.fatf-gafi.org/content/dam/recommendations/pdf/FATF%20Recommendations%202012.pdf.coredownload.inline.pdf> [https://perma.cc/3H5E-SY92].

¹²⁵ *Id.* at 14–15.

¹²⁶ *Id.* at 16–17.

¹²⁷ BANK FOR INT’L SETTLEMENTS, GUIDELINES: SOUND MANAGEMENT OF RISKS RELATED TO MONEY LAUNDERING AND FINANCING OF TERRORISM 2 (2020), <https://www.bis.org/bcbis/publ/d505.pdf> [https://perma.cc/4HJ9-4RE4].

¹²⁸ *Id.* at 25–26.

¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ See, e.g., BANK FOR INT’L SETTLEMENTS, DUE DILIGENCE AND TRANSPARENCY REGARDING COVER PAYMENT MESSAGES RELATED TO CROSS-BORDER WIRE TRANSFERS (2009), <https://www.bis.org/publ/bcbis154.pdf> [https://perma.cc/PFA6-KGPF].

¹³² *Id.* at 5.

[is] part of ongoing monitoring. . . . [T]he correspondent bank as an intermediary should monitor the payment messages transmitted by the respondent bank for the purpose of detecting those which lack required originator and/or beneficiary information, including meaningless fields”¹³³

FinCen, like OFAC, asks banks to engage in a cooperative partnership by agreeing to voluntarily share information upon request. Though styled as voluntary, likely to skirt anti-privacy related charges, the law contemplates that financial institutions will supply information when asked. Section 314(a) of the Patriot Act requires the Secretary of the Treasury to adopt regulations to encourage law enforcement to share information with financial institutions about suspected cases of AML. It also requires FinCen to promulgate rules requiring institutions to search their records to identify whether they have information that would be relevant to a subject under investigation.¹³⁴ In turn, the law provides safe harbors for sharing this otherwise confidential information.¹³⁵ Section 314(b) of the Patriot Act mirrors this approach between institutions—it allows two or more financial institutions to share information between themselves regarding customers or transactions suspected of AML, without risk of liability.¹³⁶

It bears noting that other pieces of the cross-border payments infrastructure also facilitate national security. Although Swift is a privately owned institution, with members across the globe, as others have noted, “SWIFT is also a vehicle through which the U.S. government can monitor third-party compliance with sanctions” and, in theory, “make SWIFT’s compliance with its sanctions a condition for its continued dealings with U.S. banks.”¹³⁷ Quite often there is multilateral interest in using Swift to add another layer of blockade to economic sanctions. In 2012, for example, as part of U.S.-led sanctions against the Islamic Republic, the EU members stopped Swift services to Iranian banks, which blocked foreign funds transfers to Iran until 2016.¹³⁸ Most recently, in 2022, Swift’s membership all agreed to deny Russian banks access to its systems.¹³⁹

¹³³ BANK FOR INT’L SETTLEMENTS, *supra* note 127, at 30.

¹³⁴ USA PATRIOT Act of 2001, Pub. L. No. 107-56, 115 Stat. 307 (2001).

¹³⁵ *Id.* at 308.

¹³⁶ *Id.*

¹³⁷ Eichengreen, *supra* note 33. There is some precedent for this. In the 1990s, OFAC expressed concern to the National ACH Association regarding misuse of payments rails and the Association addressed OFAC’s concerns by developing new, more secure codes that could flag incoming international ACH transmission for potential sanctions violations. *See* U.S. Dep’t of the Treasury, Opinion Letter on Applicability of Changes in Cross-Border Standard Entry Class Codes to NACHA (Nov. 9, 2004), <https://home.treasury.gov/system/files/126/gn121404.pdf> [<https://perma.cc/AM3H-XUAP>].

¹³⁸ Eichengreen, *supra* note 33.

¹³⁹ *See* Nicholas Comfort & Natalia Drozdiak, *Why SWIFT Ban is Such a Potent Sanction on Russia*, WASH. POST (June 3, 2022), https://www.washingtonpost.com/business/why-swift-ban-is-such-a-potent-sanction-on-russia/2022/06/03/a6809b30-e340-11ec-ae64-6b23e5155b62_story.html [<https://perma.cc/PTX2-JDLY>].

Overall, as this Section has urged, the international payments system that has developed since the 1970s serves U.S. national security interests, many of which are shared by other sovereign states. This partnership has been carefully constructed through law—through IEEPA and the BSA. Importantly, both statutes depend on a centralized and unitary (i.e., nonporous) payment system that can be gated to illicit actors if and as the Executive (or Congress) needs.

B. *Crypto Detours*

Until this point, this Article has argued that the existing international payments system—with internationally active banks at the core—helps government accomplish key foreign policy and national security objectives. But the landscape of payments today looks quite different—and could change further—thanks to the rise and proliferation of cryptocurrencies. According to one market research group CoinMarketCap, at the end of 2022, there were approximately 21,910 different cryptocurrencies in the market, with a total market capitalization of \$850 billion.¹⁴⁰

This Section explains how detours around the incumbent payments system, offered by various of these cryptocurrency options, can undermine the strategic benefits of the legacy payments system. It focuses on the two forms of cryptocurrency most commonly used to make payments—unbacked crypto assets and stablecoins.¹⁴¹

1. *Unbacked Crypto Assets*

As researchers at the IMF have noted, “unbacked crypto assets are the oldest and most popular type of crypto assets.”¹⁴² These coins have value that fluctuates based on supply and demand in a fashion similar to that of other precious commodities, like gold. This category of coins is called “unbacked” crypto assets because, unlike other kinds of financial assets (like shares in investment funds, for example) or other coins (like stablecoins), their value is not related or in reference to a pool of other financial assets.

¹⁴⁰ Coryanne Hicks, *Different Types of Cryptocurrencies*, FORBES ADVISOR (Dec. 7, 2022), <https://www.forbes.com/advisor/investing/cryptocurrency/different-types-of-cryptocurrencies/> [https://perma.cc/LGA8-CALB]. However, estimates vary. According to a September 2022 IMF report, the crypto assets market reached about \$3 trillion in November 2021 before falling to \$1 trillion in July 2022. The largest proportion of the market are unbacked crypto assets; stablecoins account for roughly \$150 billion. PARMA BAINS, ARIF ISMAIL, FABIANA MELO & NOBUYASU SUGIMOTO, REGULATING THE CRYPTO ECOSYSTEM: THE CASE OF UNBACKED CRYPTO ASSETS 13 (2022), <https://www.imf.org/en/Publications/fintech-notes/Issues/2022/09/26/Regulating-the-Crypto-Ecosystem-The-Case-of-Unbacked-Crypto-Assets-523715> [https://perma.cc/8BV4-NJ55].

¹⁴¹ Utility tokens and securities tokens function more akin to securities and invite a different sort of regulatory scrutiny; in any case, they are not routinely used for payments.

¹⁴² BAINS ET AL., *supra* note 141, at 4 (noting that “[c]rypto assets were originally developed to democratize payments but are [today] mostly used for speculation . . .”).

Perhaps one of the most well-known unbacked crypto assets is Bitcoin; though today, there are a multitude of smaller cap coins in circulation.¹⁴³

Early on, unbacked crypto assets were intended to function primarily for making payments in a way that could avoid the prying eyes of central banks and other financial institutions.¹⁴⁴ As Eswar Prasad has noted, there was considerable popular support for such an anti-financial institution movement; Bitcoin was, after all, launched “amid the global financial crisis [that] shook trust in banks and even governments.”¹⁴⁵ Nevertheless, as a mechanism for making payments (transmitting money) the BSA and OFAC sanctions do apply to Bitcoin and other forms of unbacked crypto assets that are used to make payments, as a matter of formal law.

There is now widespread agreement on the stance that crypto assets should be subject to AML/CFT compliance. In June 2019, the Financial Action Task Force established the so-called Travel Rule to improve the traceability of funds by extending its pre-existing rules for wire transfers to what it refers to as virtual assets (“VAs”) and virtual asset service providers (“VASPs”).¹⁴⁶ Accordingly, the Travel Rule now requires VASPs (like exchanges and wallets) to identify the originators and beneficiaries of transactions above a certain value. And a number of jurisdictions—including the United States and Europe—have implemented the Travel Rule into national legislation.¹⁴⁷ However, while the de jure extension of the AML/CFT/sanctions frameworks to the unbacked crypto-asset ecosystem is important, in practice, enforcing it as such may be chimerical.¹⁴⁸

¹⁴³ Igor Makarov & Antoinette Schoar, *Blockchain Analysis of the Bitcoin Market 1* (Nat’l Bureau of Econ. Rsch., Working Paper No. 29396, 2021) https://www.nber.org/system/files/working_papers/w29396/w29396.pdf [<https://perma.cc/FJ9G-E74V>] (noting that “Bitcoin, the original cryptocurrency, is still the largest and most popular coin, with a market cap that is larger than all the other coins combined.”)

¹⁴⁴ See Eswar Prasad, *The Brutal Truth About Bitcoin*, BROOKINGS (July 20, 2021) <https://www.brookings.edu/opinions/the-brutal-truth-about-bitcoin/> [<https://perma.cc/7ARQ-KL73>].

¹⁴⁵ *Id.*

¹⁴⁶ Formally, the travel rule appears as FATF Recommendation 15. See FIN. ACTION TASK FORCE, *supra* note 124, at 76.

¹⁴⁷ In the United States, some version of the travel rule has existed since 1995; in May 2019, it clarified its application to virtual asset services providers. Fin. Crimes Enf’t Network, Interpretive Guidance on Application of FinCEN’s Regulations to Certain Business Models Involving Convertible Virtual Currencies (May 9, 2019), as reprinted in FinCEN Guidance at FIN-2019-G001, <https://www.fincen.gov/sites/default/files/2019-05/FinCEN%20Guidance%20CVC%20FINAL%20508.pdf> [<https://perma.cc/UC4Y-YHF7>]. In Europe, the Markets in Crypto-Assets Rules (MiCA) passed in 2022, also extends the travel rule to cover transfers in crypto assets. 2015 O.J. (L. 847), <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R0847&from=EN> [<https://perma.cc/4CDP-MJ6Y>].

¹⁴⁸ ML/CT risks appear in various segments of the crypto universe. For example, according to one senior UN official, around 20 percent of terrorist attacks in recent years were crypto-financed or otherwise linked to digital assets. Amitoj Singh, *Crypto-Linked Terror Attacks Probably Quadrupled, UN Official Says: Report*, COINDESK (Oct. 31, 2022), <https://www.coindesk.com/policy/2022/10/31/crypto-linked-terror-attacks-probably-quadrupled-un-official-says-report/> [<https://perma.cc/N7C9-WVC6>]; see also CHAINANALYSIS, THE 2022 CRYPTO CRIME REPORT (2022), <https://go.chainalysis.com/2022-Crypto-Crime-Report.html> [<https://perma.cc/KS95-P4Q2>]; Iwa Salami, *Challenges and Approaches to Regulating*

One set of challenges relates to the fact that most unbacked crypto assets are decentralized—the coins are transferred on a blockchain and not issued by an intermediary. Yet the BSA and IEEPA depend on the government’s ability to require an intermediary—human beings at a tangible entity—to perform due diligence on a customer and accordingly, where necessary, to identify and stop potentially unlawful payment transactions. The lack of an intermediary “issuing” the crypto currency thus makes enforcement of these legislative frameworks within this universe considerably more challenging.

In principle, enforcement authorities have tried to adapt their approaches, alongside FATF guidance, to address the decentralization challenge. In particular, the Travel Rule and enforcement authorities could (and likely do) focus their scrutiny on other entities in the blockchain, such as exchanges, wallets, mixers, or payment processors.¹⁴⁹ Even so, it is much more difficult for the state to require these various entities on the blockchain to install gates against illegal payments in the same way that banks are expected to do.

For one, market structure makes it difficult to detect and then halt the flow of illegitimate funds entering into legitimate entities. As other researchers have pointed out, unbacked cryptocurrency markets have “many non-integrated and independent exchanges”—some of which claim to observe KYC practices and others that do not.¹⁵⁰ Because the market for crypto exchanges tends to be cross-border, laxities in supervision and enforcement of AML rules in some jurisdictions raise challenges in others given the difficulty of gating these cross-border cross-exchange flows.¹⁵¹ Studying the Hydra Market (one of the largest dark net market places), these researchers found that because the highest volume entities that interact with this market are non-KYC exchanges, “[o]nce flow arrives at these exchanges, they get mixed with other flows and become virtually untraceable, and so can be sent anywhere afterwards, even to exchanges that enforce KYC norms.”¹⁵²

And of course, even for those exchanges that claim to implement KYC, verifying those claims also still proves difficult to do. The November 2022 unraveling of erstwhile highly respected crypto exchange FTX makes plain

Decentralized Finance, 115 AM. J. INT’L L. UNBOUND 425 (2021). Although money laundering through stablecoins seems less prevalent, the Financial Action Task Force has highlighted the potential for ML/CT risk given their potential for widespread adoption. FIN. ACTION TASK FORCE, TWELVE MONTH REVIEW OF THE REVISED FATF STANDARDS ON VIRTUAL ASSETS AND VIRTUAL ASSET SERVICE PROVIDERS 15 (2020), https://www.fatf-gafi.org/en/publications/Fatf_recommendations/12-month-review-virtual-assets-vasps.html [<https://perma.cc/JQ5J-FAGP>].

¹⁴⁹ Makarov & Schoar, *supra* note 143, at 10.

¹⁵⁰ *Id.* at 2.

¹⁵¹ See BAINS ET AL., *supra* note 140, at 20, 29.

¹⁵² Makarov & Schoar, *supra* note 143, at 3, 18–20. They further note, “[e]ven if KYC entities were restricted to deal exclusively with other KYC entities, preventing inflows of tainted funds would still be nearly impossible, unless one was willing to put severe restrictions on who can transact with whom and make every transaction subject to the approval of a blockchain ‘monitoring entity.’” *Id.* at 3.

that even those exchanges that present themselves as complying with existing rules for customer due diligence, as a matter of self-regulation, are often operating without any transparency to participants, investors, or financial regulators.¹⁵³

In addition, there is considerable opacity and obfuscation in the unbacked crypto asset ecosystem. Generally, the service-providing entities may be ill-equipped to collect and store transaction-related information.¹⁵⁴ In the first instance, this opacity stems from the fact that the crypto assets are themselves pseudonymous and therefore information-blind by design.¹⁵⁵ As the BIS explains the consensus process, “[r]ather than relying on trusted intermediaries (such as banks), record-keeping on the blockchain is performed by a multitude of anonymous, self-interested validators.”¹⁵⁶ The BIS also notes:

If a seller wants to transfer cryptocurrencies to a buyer, the buyer (whose identity is hidden behind their cryptographic digital signature) broadcasts the transaction details, eg transacting parties, amount or fees. Validators (in some networks called “miners”) compete to verify the transaction, and whoever is selected to verify then appends the transaction to the blockchain. The updated blockchain is then shared among all miners and users. The history

¹⁵³ In November 2022, crypto exchange FTX collapsed when investors became aware that it had been diverting customer funds toward its owner, Sam Bankman-Fried’s separate crypto research/hedge fund entity, Alameda. Patricia Kowsmann, Vicky Ge Huang, Caitlin Ostroff & Gregory Zuckerman, *Troubles at Sam Bankman-Fried’s Alameda Began Well Before Crypto Crash*, WALL ST. J. (Dec. 31, 2022), <https://www.wsj.com/articles/alameda-sam-bankman-fried-ftx-crypto-crash-11672434101> [https://perma.cc/3S5G-SZ3Z]; Carolina Mandl, *Sam Bankman-Fried Says He ‘Didn’t Ever Try to Commit Fraud’*, REUTERS (Nov. 30, 2022), <https://www.reuters.com/technology/sam-bankman-fried-says-he-didnt-ever-try-commit-fraud-2022-11-30/> [https://perma.cc/7YNU-4E8R]. It bears noting, however, that the situation of AML/BSA enforcement could possibly improve alongside increasing reliance in the ecosystem on “points of centralization” that are in fact capable for the State’s reach. As researchers at the IMF have noted, “a third of hosted nodes on the Ethereum Network are hosted on Amazon Web Services, 60 percent of all Bitcoin traffic runs through three internet service providers, and Tor routes traffic for roughly half of Bitcoin nodes.” BAINS ET AL., *supra* note 140, at 26.

¹⁵⁴ The crypto ecosystem generally refers to issuers (who create or “mint” the coins) and service providing entities; exchanges (that facilitate the exchange of crypto assets but also can offer related services, relating to, for example, lending and investment); wallet providers (that store crypto assets, but can also perform functions similar to exchanges, like transfer and clearing); validators (ensuring the accuracy of the ledger) and the underlying DLT on which the crypto assets are transferred. See BAINS ET AL., *supra* note 140, at 15.

¹⁵⁵ See DONG HE, ANNAMARIA KOKENYNE, XAVIER LAVAYSSIÈRE, INUTU LUKONGA, NADINE SCHWARZ, NOBUYASU SUGIMOTO & JEANNE VERRIER, CAPITAL FLOW MANAGEMENT MEASURES IN THE DIGITAL AGE: CHALLENGES OF CRYPTO ASSETS 9–10 (2022) (“Available data on crypto assets is inadequate for countries to monitor transactions that might be relevant for CFMs. Countries that monitor crypto assets often rely on publicly available third-party aggregated data, but the data are not sufficiently granular for CFM purposes, which may require very detailed data at the individual transaction level.”).

¹⁵⁶ BANK FOR INT’L SETTLEMENTS, BIS ANNUAL ECONOMIC REPORT 2022: THE FUTURE MONETARY SYSTEM 79–80 (2022), <https://www.bis.org/publ/arpdf/ar2022e3.pdf> [https://perma.cc/CR3Z-VTRC].

of all transactions is hence publicly observable and tied to specific wallets, while the true identities of the parties behind transactions (ie the owners of the wallets) remain undisclosed.¹⁵⁷

Often, further opacity is layered in throughout the transaction process. Currency mixers, for example, operate within the ecosystem to blend (mix) batches of crypto asset transactions together.

2. *Stablecoins*

Stablecoins are a relatively new kind of cryptocurrency, first created in 2014 with the stablecoin known as BitUSD.¹⁵⁸ While other well-known cryptocurrencies, like Bitcoin, function like a commodity or now, perhaps more accurately, as a speculative investment, stablecoins are designed to replicate currency as markers of value that are used principally for payments and as a settlement asset.¹⁵⁹

To equip stablecoins for use as payments—as a real medium-of-exchange—stablecoins have at least one but often two key characteristics. The sine qua non of stablecoins is that their value is pegged to a stable reference asset, often (but not always) a fiat currency.¹⁶⁰ Today, the vast majority of stablecoins are denominated in U.S. dollars.¹⁶¹ Sometimes, but not always, stablecoins are redeemable in fiat currency at par; which is to say one stablecoin would be redeemed by the stablecoin issuer for one U.S. dollar.¹⁶²

The mechanics of how stablecoins maintain that peg vary depending on the type of stablecoin at issue.¹⁶³ The most conservative stablecoins (i.e., those with least run-risk and most similar to traditional financial instruments) are those issued by a centralized entity and are backed by pools of

¹⁵⁷ *Id.* at 80.

¹⁵⁸ See BITMEX RESEARCH, A BRIEF HISTORY OF STABLECOINS (PART 1) 4 (2018), <https://blog.bitmex.com/wp-content/uploads/2018/07/2018.07.02-A-brief-history-of-Stablecoins-Part-1.pdf> [<https://perma.cc/5WY3-77BT>].

¹⁵⁹ In essence, a stablecoin collapses money and payments rail into one—the coin. See Jon Cunliffe, *Is 'Crypto' a Financial Stability Risk*, BANK OF ENG. (Oct. 13, 2021), <https://www.bankofengland.co.uk/speech/2021/october/jon-cunliffe-swifts-sibos-2021> [<https://perma.cc/48FR-JKWY>].

¹⁶⁰ As will be discussed below, there are some global stablecoins that would be pegged to a basket of currencies (like Facebook's Libra/Diem) and there have also been proposals for stablecoins pegged to specie (e.g., gold, silver) or purchasing power indices. See *infra* notes 188, 189 and accompanying text.

¹⁶¹ According to Forkast, USD-denominated stablecoins make up for about 98% of all the stablecoin volume. Pascal Hügli, *Why Are Stablecoins Overwhelmingly Backed by the US Dollar?*, FORKAST (Apr. 5, 2022), <https://forkast.news/why-stablecoins-overwhelmingly-backed-by-us-dollar/> [<https://perma.cc/TN5J-GETC>].

¹⁶² Many of these features, including the question of redeemability, are the subject of pending bills in Congress.

¹⁶³ See generally DEUTSCHE BANK, STABLECOINS: DEFI, LIBRA AND BEYOND (2022), https://www.dbresearch.com/PROD/RPS_EN-PROD/PROD000000000522496/Stablecoins%3A_DeFi%2C_Libra_and_beyond.PDF [<https://perma.cc/8V4H-6JHK>].

traditional financial assets, like Treasuries, commercial paper, or other forms of short term debt.¹⁶⁴

In many ways, centralized stablecoins (also referred to as custodial stablecoins) are economically similar to money market funds, insofar as MMFs maintain a peg of each share to one dollar by managing the value of the pool of assets backing each fund.¹⁶⁵ The collective value of those assets, divided among the shares outstanding, should be \$1—as such, if investors “run” to redeem shares for the equivalent amount of U.S. dollars, the fund should in theory be able to convert the assets into fiat currency and honor those redemptions. Asset-backed stablecoins should then, in theory, work the same.¹⁶⁶ Tether, Binance USD (issued by the Binance exchange in partnership with Paxos), and USD Coin (issued by Circle) are examples of asset-backed stablecoins.¹⁶⁷ USD Coin and Binance are 100% reserve-backed with cash and cash equivalents (i.e., Treasury bills), leading some scholars to refer to these particular two coins—and any others that might be developed with the same fully backed feature—as “tokenized cash.”¹⁶⁸

A second major category of stablecoin does not have a central issuer and is decentralized instead. A bundle of smart contracts—the “protocol”—creates and manages such coins.¹⁶⁹ Decentralized stablecoins are endogenously collateralized in reference to a secondary coin. The stabilization mechanism works either by buying and selling the secondary coin in exchange for the primary stablecoin, thus expanding or contracting the supply of the stablecoin to maintain its peg; or by allowing the price of the secondary coin to float based on demand and allowing holders of the stablecoin to exchange it for \$1 worth of the secondary coin anytime and vice versa (in this system, arbitrageurs will, in theory, ensure that the peg remains intact by acting on any profit opportunity that arises from instances when the value of the primary coin dips below \$1).¹⁷⁰ In yet a third version of a decentralized stabilization mechanism, stablecoins retain their peg with algorithms that adjust the number of coins outstanding depending on their demand. If the price of the stablecoin deviates above the peg, the algorithm makes and sells new

¹⁶⁴ PRESIDENT’S WORKING GRP. ON FIN. MKTS, REPORT ON STABLECOINS 4 (2021), https://home.treasury.gov/system/files/136/StableCoinReport_Nov1_508.pdf [<https://perma.cc/3GBM-TH3QJ>] [hereinafter PWG REPORT].

¹⁶⁵ Gary B. Gorton & Susie Allen, *How ‘Stablecoins’ Could Unleash Chaos*, YALE INSIGHTS (Oct. 7, 2021), <https://insights.som.yale.edu/insights/how-stablecoins-could-unleash-chaos> [<https://perma.cc/5MGF-HVW3>].

¹⁶⁶ These coins are sometimes referred to as off-chain collateralized stablecoins because reserves are not on the blockchain therefore a custodian-intermediary is required.

¹⁶⁷ For an overview, see COINBASE, STABLECOINS 10 (July 2022), <https://assets.ctfassets.net/c5bd0wqjc7v0/79db1PxjBTv1JbL574fFvA/dc38c8c96dc97c3752fd81a61d0f134a/CBI-StablecoinWhitepaper-July-2022.pdf> [<https://perma.cc/NQV2-KUDD>].

¹⁶⁸ Liao, *supra* note 16, at 1.

¹⁶⁹ See Kara Bruce, Christopher K. Odinet & Andrea Tosato, *The Private Law of Stablecoins*, 54 ARIZ. STATE L.J. (forthcoming 2023) (manuscript at 14-15, 24), <https://ssrn.com/abstract=4191646> [<https://perma.cc/VFG7-PBRF>].

¹⁷⁰ See *id.* at 18.

coins to push the price to fall; if prices fall under the peg, the issuer buys back stablecoins with a form of bond, causing the supply to shrink and price to rise.¹⁷¹ Sometimes the coin issuers buy back coins using their own funds for this sort of open market operation to re-stabilize the coin's peg.

From a financial stability standpoint, these coins are considered to be the riskiest given the high likelihood of a “death spiral” that results from this arrangement where the value of the stablecoin is entirely contingent on the ability of the secondary coin to retain its value—and, as such, contingent on the market's expectations about the coin.¹⁷² Terra USD was an example of an algorithmic stablecoin that relied on the dual-coin structure (its secondary coin was called Luna). The Terra coin collapse in May 2022 subsequently called into question the viability of these decentralized dual-coin stablecoin systems.¹⁷³

Finally, there are some stablecoins that combine elements of both the asset-backed and algorithmic design. MakerDAO's DAI is a stablecoin that relies on decentralized protocols, like Ethereum smart contracts and its governance community, to maintain its peg. But DAI is also asset-backed; meaning, rather than relying purely on an algorithm to maintain its value, the coin is collateralized by an asset pool comprised of both unbacked crypto assets (like Ether's ETH) and centralized U.S. dollar stablecoins (like USDC).¹⁷⁴ Notably, coins that rely on unbacked crypto assets as reserve assets generally must over-collateralize their coins to deal with the volatility of those reserve assets.¹⁷⁵

The size of the stablecoin market is rising quickly. The aggregate value of stablecoins grew rapidly in 2022—in March 2022, stablecoins' collective value was \$180 billion, indicating around \$100 billion of market growth since 2021, and a whopping \$174.4 billion increase from March 2020, when

¹⁷¹ DEUTSCHE BANK, *supra* note 163.

¹⁷² See Christian Catalina & Alonso de Gortari, *On the Economic Design of Stablecoins*, 8, 10 (2021) (MIT Sloan Rsch. Paper No. 6610-21), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3899499 [<https://perma.cc/ST4M-3N94>].

¹⁷³ See Russell Wong, *Why Stablecoins Fail: An Economist's Post-Mortem on Terra*, FED. RESRV. BANK OF RICHMOND (July 2022), https://www.richmondfed.org/publications/research/economic_brief/2022/eb_22-24 [<https://perma.cc/V7YD-KE48>]; Steven Ehrlich, *Unstable Stablecoin: How Crypto's Crash Broke the Buck for TerraUSD*, FORBES (May 10, 2022), <https://www.forbes.com/sites/stevenehrlich/2022/05/10/unstable-stablecoin-how-cryptos-crash-broke-the-buck-for-terrausd/?sh=322d8dfc6ff4> [<https://perma.cc/8CD6-C8KT>]. Terra's collapse has prompted attention to what is referred to as the stablecoin trilemma: at present, it appears that stablecoins can have two but not three of the following features—decentralization (which lack off-chain assets collateralizing the coin); efficiency (the coin is *not* having to over-collateralize); or stability (the peg is maintained vis-à-vis its reference asset); Catalina & Gortari, *supra* note 172, at 1; COINBASE, *supra* note 167, at 10.

¹⁷⁴ Robert Stevens, *How Does MakerDAO Work? Understanding the 'Central Bank of Crypto'*, COINDESK (Aug. 10, 2022), <https://www.coindesk.com/learn/how-does-makerdao-work-understanding-the-central-bank-of-crypto/> [<https://perma.cc/4QAT-R85R>]; *Busting MakerDAO Myths: Seven Misconceptions About Dai*, MAKER BLOG (Nov. 11, 2020), <https://blog.makerdao.com/busting-makerdao-myths-seven-misconceptions-about-dai/> [<https://perma.cc/49F3-PANN>].

¹⁷⁵ See CATALINA & GORTARI, *supra* note 172, at 4.

the total market capitalization was only \$5.6 billion.¹⁷⁶ Presently, the market is highly concentrated among a few key coins—Tether (which has about half of the market’s capitalization), USD Coin, and Binance USD.¹⁷⁷ In contrast, there are nearly 8,000 unbacked crypto assets.¹⁷⁸

Today, stablecoins are mainly used to buy other unbacked crypto assets, provide cross-exchange liquidity, or to transact in the DeFi universe.¹⁷⁹ But some policymakers and academics view stablecoins as promising additions to the mainstream cross-border payment market.¹⁸⁰ These proponents view

¹⁷⁶ See FIN. STABILITY BD., ASSESSMENT OF RISKS TO THE FINANCIAL SYSTEM FROM CRYPTO-ASSETS 12 (2022), <https://www.fsb.org/wp-content/uploads/P160222.pdf> [<https://perma.cc/6AXU-WKLU>]; see also BD. OF GOVERNORS OF THE FED. RESRV. SYS., FINANCIAL STABILITY REPORT 42–45 (May 2022), <https://www.federalreserve.gov/publications/files/financial-stability-report-20220509.pdf> [<https://perma.cc/NJ27-WRPZ>] (discussing size and risks of stablecoin market). That figure seemed to decrease somewhat by August 2022, likely due to volatility in the crypto market more generally. See Howell Jackson, Timonth G. Massad & Dan Awrey, *How We Can Regulate Stablecoins Now—Without Congressional Action*, BROOKINGS (Aug. 16, 2022), <https://www.brookings.edu/research/how-we-can-regulate-stablecoins-now-without-congressional-action/> [<https://perma.cc/6PSH-S2BG>]. Notably, given the fluctuations in the markets and data-gathering difficulty, industry figures and reports vary. CoinMarketCap tracks stablecoin market cap, which is at just over \$133B on March 22, 2023. *Top Stablecoin Tokens by Market Capitalizations*, COINMARKETCAP, <https://coinmarketcap.com/view/stablecoin/> [<https://perma.cc/56DW-H6ZD>].

¹⁷⁷ That being said, some big tech firms seem poised to enter the market. See, e.g., *PayPal Explores Launch of Own Stablecoin in Crypto Push*, BLOOMBERG LAW (Jan. 7, 2022) <https://www.bloomberg.com/news/articles/2022-01-07/paypal-is-exploring-launch-of-own-stablecoin-in-crypto-push> [<https://perma.cc/5FBR-QT9U>]; DEUTSCHE BANK, *supra* note 163.

¹⁷⁸ See Cunliffe, *supra* note 159.

¹⁷⁹ See Catalina & de Gortari, *supra* note 172, at 5–6. DeFi protocols are not payments pathways themselves; essentially, they are services that aim to replicate the *services* banks provide—lending, insurance, and trading—but by using smart contracts on the blockchain. For a basic explanation of DeFi, see, for example, EVA SU, CONG. RSCH. SERV., IN11709, DECENTRALIZED FINANCE (DeFi) AND FINANCIAL SERVICES DISINTERMEDIATION: POLICY CHALLENGES (2021). See also SUMEDHA DESHMUKH, ANDRÉ GEEST, DAVID GOGEL, DANIEL RESAS & CHRISTIAN SILLABER, DECENTRALIZED FINANCE (DeFi) POLICYMAKER TOOL KIT 4 (Kevin Werbach ed., 2021), https://www3.weforum.org/docs/WEF_DeFi_Policy_Maker_Toolkit_2021.pdf [<https://perma.cc/RZZ3-CCS6>] (noting that “Decentralized finance (“DeFi”) is a broad term for financial services that build on top of the decentralized foundations of blockchain technology.”); Stephen Cecchetti & Kermit Schoenholtz, *Crypto-Assets and Decentralized Finance: A Primer*, MONEY & BANKING (May 13, 2022), <https://www.moneyandbanking.com/commentary/2022/5/13/crypto-assets-and-decentralized-finance-a-primer> [<https://perma.cc/U2DQ-LC7J>]. In the language of DeFi, its protocols offer banking-like services that are “internet native”—cutting out the role of an intermediary and replacing it with a smartphone wallet. But stablecoins certainly have the potential—and are anticipated by some—to become full-fledged substitutes to the existing international payments system.

¹⁸⁰ See Caitlin Long, *Ten Stablecoin Predictions and Their Monetary Policy Implications*, CATO J. 307, 309 (Spring/Summer 2022) (“The key characteristics of stablecoins are fast settlement; settlement finality; traceability on a blockchain; public, open-source protocols; and, probably most importantly, programmability—in other words, faster, better, cheaper technology.”). According to the U.S. Treasury, a “well-designed and *appropriately regulated* stablecoin could potentially support faster, more efficient, and more inclusive payment options.” Press Release, U.S. Dep’t of the Treasury, Fact Sheet: President’s Working Group on Financial Markets (PWG), the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency (Nov. 1, 2021), <https://home.treasury.gov/news/press-releases/jy0456> [<https://perma.cc/Q6TZ-HSPZ>].

stablecoins as a needed source of competition to banks, pressure from which could in theory crimp banks' ability to extract what they see as unjustified (or inefficient) rents in the cross-border payment space.¹⁸¹ As such, central banks around the world now recognize and contemplate stablecoins' future role in global payments, and national legislatures continue to discuss how best to incorporate stablecoins into existing legal frameworks.¹⁸² Insofar as stablecoins are often perceived as a more legitimate mechanism for payments than unbacked crypto, this Article's overview should highlight the diverse flora that is the stablecoin marketplace, which introduces potential for significant optionality in making domestic and cross-border payments.

But fragmenting the cross-border payment system with a proliferation of competing stablecoins could carry certain costs, particularly to the U.S. dollar and its strength.¹⁸³ For example, and perhaps most obviously, amplifying the unbacked crypto ecosystem discussed above will concomitantly expand the opportunity for illicit finance to run through that system and further strain AML-related supervision and enforcement.¹⁸⁴ More directly, there is at least some evidence from China that stablecoin technology is equally effective at evading even the most stringent restrictions and regulation.¹⁸⁵

The proliferation of stablecoin alternatives to the dollar would certainly, it would seem, undermine the bite of U.S. sanctions. Consider the example that this Article began with—the case of sanctions against Russia in regard to its invasion of Ukraine. Russian actors are likely using digital assets to evade U.S.-led sanctions.¹⁸⁶ According to one crypto industry report issued

¹⁸¹ See, e.g., Dan Awrey, *Unbundling Banking, Money, and Payments*, 110 GEO. L.J. 715, 719 (2022); GEORGE SELGIN, CATO BRIEFING PAPER NO. 134, A “NARROW” PATH TO EFFICIENT DIGITAL CURRENCY (Feb. 9, 2022), <https://www.cato.org/briefing-paper/narrow-path-efficient-digital-currency> [<https://perma.cc/Q2PG-HZBR>].

¹⁸² As various bills continue to circulate through Congress, the Crypto Council for Innovation provides a useful tracker. Amanda Russo, *US Crypto Policy Tracker*, CRYPTO COUNCIL FOR INNOVATION (Sept. 24, 2022), <https://cryptoforinnovation.org/us-crypto-policy-tracker/> [<https://perma.cc/F7F6-TM4S>].

¹⁸³ Fragmentation seems inevitable alongside an expansion of stablecoin. Many stablecoins, and all other crypto assets, definitionally operate separate non-interoperable payments railways—distinct blockchains—with the opportunity for comingling only through highly risky so-called “bridges.”

¹⁸⁴ According to the industry, “Stablecoins have been crucial in DeFi history. If Tether’s USDT and MakerDAO’s DAI had not worked, it is hard to imagine there would be billions of dollars locked up in all these financial smart contracts today.” Brady Dale, *The Quest for a Truly Decentralized Stablecoin*, COINDESK (Dec. 10, 2022), <https://www.coindesk.com/tech/2021/07/06/the-quest-for-a-truly-decentralized-stablecoin/> [<https://perma.cc/B5YA-FGCP>].

¹⁸⁵ Catalina and Gortari note that much Chinese stablecoin activity is in fact capital flight. See Catalina & Gortari, *supra* note 172, at 6 n.2.

¹⁸⁶ See KRISTEN E. BUSCH & PAUL TIerno, CONG. RSCH. SERV., IN11920, RUSSIAN SANCTIONS AND CRYPTOCURRENCY (May 4, 2022), <https://crsreports.congress.gov/product/pdf/IN/IN11920> [<https://perma.cc/P3QH-5CUH>]; Allyson Versprille, *IMF Warns of Crypto Mining as Possible Dodge on Russia Sanctions*, BLOOMBERG (Apr. 19, 2022), <https://www.bloomberg.com/news/articles/2022-04-19/crypto-mining-can-be-used-to-evade-russia-sanctions-imf-warns#xj4y7vzkg> [<https://perma.cc/JV8Y-C8SP>]; Press Release, U.S. Dep’t of Treasury, U.S. Treasury Designates Facilitators of Russian Sanctions Evasion (Apr. 20, 2022), <https://home.treasury.gov/news/press-releases/jy0731> [<https://perma.cc/853Y-3BHQ>].

in October 2022, “Russia’s removal from the cross-border system SWIFT is likely to see crypto being utilized for cross-border transactions, with stablecoins likely to be the preferred medium of exchange due to their price stability.”¹⁸⁷

Additionally, there may be implications for the strength and status of the dollar.¹⁸⁸ While stablecoins could in theory strengthen the dollar by increasing demand for U.S. dollar-denominated assets, that outcome will depend on whether the current trajectory of stablecoin innovation remains constant—that is, that the stablecoin market continues to concentrate around centralized issuers that both use the U.S. dollar as the reference asset and elect to back their coins with U.S. dollar denominated assets.

Somewhat relatedly, if market structure were to shift to, for example, a market where global stablecoins were more prominent, that shift could considerably weaken the dollar. Global stablecoins are in many ways the cross-border payments ideal; these coins are readily interoperable across international jurisdictions and accepted directly by merchants globally for payment in exchange for goods and services (i.e., without need for conversion or exchange). This is essentially what Facebook’s Libra aimed to be. Therefore, the rise of a dominant global stablecoin would arguably not support the dollar’s current hegemonic role because it would circulate within a closed loop and not necessarily depend on, or require convertibility with, actual U.S. dollars. In such a scenario, the use of a stablecoin as a settlement asset could come to rival if not replace the U.S. dollar-denominated stablecoins that dominate today, or diminish the dollar itself.¹⁸⁹ A dilution of the U.S. dollar would have global repercussions. Specifically, an amalgam of stablecoins that provide alternatives to the dollar might not use the power of their network effects to defend those policy goals which are shared among western democratic states to the extent that banks have been willing and able to defend them.¹⁹⁰

¹⁸⁷ Luke Huigsloot, *Russian Stablecoin Usage Surged After Ukraine Invasion: Report*, COINTELEGRAPH (Oct. 13, 2022), <https://cointelegraph.com/news/russian-stablecoin-usage-surged-after-ukraine-invasion-report> [https://perma.cc/29ZU-7J3Y].

¹⁸⁸ Some maintain that, because most stablecoins are denominated in U.S. dollars, their growth stands only to increase the dollar’s hegemonic role. See, e.g., Christopher J. Waller, Governor, Bd. of Governors of the Federal Rsv. Sys., Speech at Harvard National Security Journal Symposium: The U.S. Dollar and Central Bank Digital Currencies (Oct. 14, 2022), <https://www.federalreserve.gov/newsevents/speech/waller20221014a.htm> [https://perma.cc/R52Z-DDAD]; Felipe Erazo, *The Ongoing Battle Between Stablecoins and the US Dollar*, FIN. MAGNATES (June 21, 2022), <https://www.financemagnates.com/cryptocurrency/the-ongoing-battle-between-stablecoins-and-the-us-dollar/> [https://perma.cc/AM66-9R8A]; see also Larry White, *Should We Fear Stablecoins*, ALT-M (June 24, 2021), <https://www.alt-m.org/2021/06/24/should-we-fear-stablecoins/> [https://perma.cc/D5Q5-PCCL] (arguing that stablecoins are an alternative payment pathway but not a new unit of account or base money).

¹⁸⁹ For a very basic overview, see BANK INT’L SETTLEMENTS, G7 WORKING GROUP ON STABLECOINS, INVESTIGATING THE IMPACT OF GLOBAL STABLECOINS (Oct. 2019), <https://www.bis.org/cpmi/publ/d187.pdf> [https://perma.cc/6WGU-2WNU].

¹⁹⁰ See Cunliffe, *supra* note 159 (observing that “[s]tablecoin arrangements can be decentralized on public networks, with no overarching entity responsible for their operation”);

In summary, although historically the fragmentation of money and payments has occasionally succeeded—in the so-called free banking model—those models depended on a non-digital, largely domestic payments network. They also did not face either the pervasive international crime that exists today or the need to support the United States government’s modern role in curbing reprehensible State-led action through the application of sanctions.¹⁹¹

IV. TOWARD NEW PAYMENTS INFRASTRUCTURE

The foregoing has argued that detours around the bank-based payment system impede national and economic security. In addition to imposing well-tailored regulation on unbacked crypto assets and stablecoins, the balance of this Article urges the importance of well-designed legislative support for the existing payments system. In particular, this Part proposes that Congress should create statutory incentives within the BSA to encourage private financial institutions to centralize their AML/sanctions compliance systems. A “centralized verifying party” would improve the efficiency of cross-border payments and also, of key importance, create a central node through which all payments-related due diligence could pass, thus offering governments a better way to police AML/sanctions compliance against existing centralized stablecoins.

A. *The Payments Efficiency Dilemma*

To be sure, cross-border payments are inefficient and have justifiably invited central bankers’ attention. In 2020, the G20 made cross-border payments a policy priority, with emphasis on the “cost, speed, access, and [lack of] transparency” in legacy systems.¹⁹² In turn, the Financial Stability Board (“FSB”)—an international network of central banks—moved this forward by commissioning three stages of work to study the limitations presented by existing cross-border payments infrastructure and opportunities for reform.¹⁹³

see, e.g., Olga Kharif, *Stablecoin Tether Disregards Ukraine’s Pleas to Halt Russia Use*, BLOOMBERG (Mar. 11, 2022), <https://www.bloomberg.com/news/articles/2022-03-11/stablecoin-tether-disregards-ukraine-s-plea-to-halt-russian-use> [<https://perma.cc/2MBW-LJ25>].

¹⁹¹ *See generally* GEORGE SELGIN, *THE THEORY OF FREE BANKING: MONEY SUPPLY UNDER COMPETITIVE NOTE ISSUE 147* (1988) (explaining that fraud and counterfeiting is a substantive argument against free banking).

¹⁹² *See* FINANCIAL STABILITY BD., *G20 ROADMAP FOR ENHANCING CROSS-BORDER PAYMENTS: FIRST CONSOLIDATED PROGRESS REPORT 1* (2021), <https://www.fsb.org/2021/10/g20-roadmap-for-enhancing-cross-border-payments-first-consolidated-progress-report/> [<https://perma.cc/GU6T-UE8S>].

¹⁹³ Payments tend to fall under the remit of the central bank, both because central banks provide the final settlement asset (reserves) and because central banks are usually the regulator and supervisor of payments systems and the financial institutions that supply payments services.

The FSB focused both on the inefficiencies in cross-border payments and also on the quality of the consumer, as end-user, experience.¹⁹⁴

In Stage 1, the FSB scoped existing cross-border payment arrangements and identified challenges inherent in these transactions; in Stage 2 (together with the Committee on Payments and Market Infrastructure, a group subsumed within the Bank for International Settlements) the FSB identified various roadblocks to improving cross-border payments; and in Stage 3, the FSB laid out its official roadmap for overcoming the obstacles identified and moving the international community forward. Meanwhile, the Bank of England moved forward in parallel with its own study of cross-border payments and discussion of the existing “frictions” related to the problems of high cost, slow speed, limited access, and low transparency.¹⁹⁵ These various workstreams and reports identified several frictions that contributed to the problems with the speed, cost, access, and transparency of the cross-border payments process.

Legal friction associated with domestic AML regimes was highlighted as one of the four main contributors to cross-border payments inefficiency. Compliance with the AML and sanctions regimes is complicated for an internationally active financial institution providing correspondent banking services across multiple jurisdictions. For one, most of these institutions are bank holding companies organized as a group.¹⁹⁶ At the group level, the c-suite managers and board are obligated to ensure that AML and sanctions assessments are properly carried out at each of the institution’s subsidiaries. But whether information from subsidiaries is missing or incomplete may be difficult to know. Correspondent banks may have legal or practical difficulty obtaining fulsome information about a respondent bank’s customers and the range of their transactions.

¹⁹⁴ See FIN. STABILITY BD., G20 ROADMAP FOR ENHANCING CROSS-BORDER PAYMENTS: FIRST CONSOLIDATED PROGRESS REPORT 1 (2021), <https://www.fsb.org/2021/10/g20-roadmap-for-enhancing-cross-border-payments-first-consolidated-progress-report/> [<https://perma.cc/GU6T-UE8S>].

¹⁹⁵ See *Cross-Border Payments*, BANK OF ENG. (last updated Sept. 14, 2022) <https://www.bankofengland.co.uk/payment-and-settlement/cross-border-payments> [<https://perma.cc/25KT-CQSC>].

¹⁹⁶ Using a bank holding company structure has numerous benefits, including flexibility in growth and acquisition strategy, the ability to improve the capital position or liquidity of a subsidiary bank, and the diversification of activities. Joseph E. Silva, *The Value of a Bank Holding Company*, AM. BAR ASS’N (Nov. 1, 2019), https://www.americanbar.org/groups/business_law/publications/committee_newsletters/banking/2019/201911/fa_1/ [<https://perma.cc/NHU4-8HMS>]. In 1956, Congress passed the Bank Holding Company Act, which gave the Federal Reserve broader regulatory powers over bank holding companies. Notably, it provided that any bank holding company wishing to expand had to apply to the Federal Reserve Board to do so; it also required all bank holding companies to divest themselves of ownership in any firms that were involved in nonbank activities, i.e. commercial and industrial businesses. Bank Holding Company Act, 12 U.S.C. §§ 1841–1844 (1956); Joe Mahon, *Bank Holding Company Act of 1956*, FED. RSRV. HIST. (Nov. 22, 2013), <https://www.federalreservehistory.org/essays/bank-holding-company-act-of-1956> [<https://perma.cc/WE69-4PPG>].

Moreover, AML rules and regulations are not globally harmonized despite efforts at convergence by the FATF. Each domestic jurisdiction still has its own framework for enforcing AML, and sanctions regimes may vary according to country. Yet internationally active banks must remain compliant with the specific rules in each jurisdiction where they offer services. Navigating conflicts among and nuance between these differing regimes is challenging for banks to manage. So is the redundancy required under existing FATF standards.¹⁹⁷ This belt-and-suspenders approach gives rise to duplicative KYC checks and overlapping monitoring of in-process payment transactions.

Meanwhile, the cost of error is high.¹⁹⁸ Since the high-profile enforcement action and fine against Riggs Bank in 2005—for the failure to properly “know its customers”—money laundering scandals have ricocheted throughout the correspondent banking industry. Consider just two recent examples. In 2018, Danske Bank was discovered to have inadvertently laundered large amounts of illicit funds, a scandal that ensnared J.P. Morgan, Bank of America, and Deutsche Bank—all of which had served to some degree as correspondent banks for Danske Bank of Estonia, who had in turn used that relationship to access Fedwire to make laundering transfers of U.S. dollars between 2007 and 2015.¹⁹⁹ And at least one sanctioned Russian oligarch used a U.S. bank’s correspondent banking services to transfer funds from abroad into shell companies in order to conduct U.S. dollar transactions in 2022.²⁰⁰

Statutes of limitations either do not exist or are extremely long. In June 2022, for example, Credit Suisse was found guilty of money laundering in connection with a Bulgarian drug ring in a Swiss federal criminal court. The court determined that the bank had not taken sufficient steps to prevent the money laundering. In this case, the offense happened over fourteen years ago.²⁰¹

Similar to the AML context, courts treat sanctions lapses quite severely. In one civil action, *Linde v. Arab Bank*,²⁰² the plaintiffs alleged that various

¹⁹⁷ FIN. ACTION TASK FORCE, *supra* note 4.

¹⁹⁸ The exception may be with centralized stablecoin issuers, like Circle, and related entities, like Ripple, that do see public support and the imprimatur of the state.

¹⁹⁹ See Olaf Storbeck, *German Authorities Raid Deutsche Bank in Money Laundering Investigation*, FIN. TIMES (Apr. 29, 2022), <https://www.ft.com/content/9fd8a476-d023-4cc7-9598-32b3b4654162> [<https://perma.cc/KXD9-Y75G>]. See also Press Release, U.S. Securities and Exchange Commission, SEC Charges Danske Bank with Fraud for Misleading Investors about its anti-Money Laundering Compliance Failures in Estonia (Dec. 13, 2022), <https://www.sec.gov/news/press-release/2022-220> [<https://perma.cc/4MW9-MTD6>].

²⁰⁰ See Appl. for a Warrant to Seize Property Subject to Forfeiture, In the Matter of the Seizure and Search of the Motor Yacht Tango, No. 22-SZ-5 at 3 (D.D.C. 2022).

²⁰¹ See Margot Patrick, *Credit Suisse Found Guilty in Money Laundering Case Tied to Cocaine Ring*, WALL ST. J. (June 27, 2022), <https://www.wsj.com/articles/credit-suisse-found-guilty-in-money-laundering-case-tied-to-cocaine-ring-11656342724?mod=djemRiskCompliance> [<https://perma.cc/M2FQ-FLEC>].

²⁰² *Linde v. Arab Bank, PLC*, 384 F. Supp. 2d 571, 572 (E.D.N.Y. 2005).

charitable organizations were Hamas fronts. The defendant bank provided these charities with financial services, such as receiving deposits and processing wire transfers. The bank also administered insurance death benefits for families of terrorists who were killed in the Intifada. The plaintiffs allege that these benefits incentivized terrorism. The bank was charged under both §§ 2339A and 2339B of AEDPA. The court's holding as it pertained to the mens rea element was broad. It found it "not necessary that [the plaintiffs] allege that Arab Bank either planned, or intended, or even knew about the particular act which injured a plaintiff."²⁰³ Rather, "[t]he Bank's active participation in creating such an incentive is a sufficient basis for liability under the broad scope of the ATA, which imposes secondary liability on those who substantially assist acts of terrorism."²⁰⁴ In light of these and other historic examples, banks are incentivized to heavily manage their AML risk by investing in illicit payment detection resources.

In view of the complicated thicket of differing jurisdictional laws, and the accompanying legal and reputational risk, banks' AML/sanctions risk-management has become quite costly. As respondents to the FATF's recent survey of firms in 173 jurisdictions reported, a culture of expensive over-compliance among correspondent banks is now the norm.²⁰⁵ That FATF survey reported an average cost of financial crime compliance of nearly fifty billion dollars for the 115 mid-size and large firms surveyed.²⁰⁶ Inevitably, some of the costs attendant to the bank's cross-border payments business are passed on to consumers and result in the fees now labeled as inefficiency.²⁰⁷

Managing these legal risks contributes to other forms of inefficiency that were identified by the FSB. The manual work of conducting customer due diligence checks can be slow and thus introduces settlement risk—that is, the risk that the payor will become insolvent before the transaction becomes final, leaving the intermediary financially responsible for completing the second leg of the transaction.²⁰⁸ To address this settlement risk, banks report that they overcapitalize (overfund) anticipated payments transac-

²⁰³ *Id.* at 584 (discussing the scope of aiding and abetting civil liability).

²⁰⁴ *Id.* at 585.

²⁰⁵ See FIN. ACTION TASK FORCE, CROSS BORDER PAYMENTS - SURVEY RESULTS ON IMPLEMENTATION OF THE FATF STANDARDS 19 (2022), <https://www.fatf-gafi.org/content/fatf-gafi/en/publications/Fatfrecommendations/Cross-border-payments.html> [https://perma.cc/Q5SF-BASK].

²⁰⁶ See *id.* at 4.

²⁰⁷ In a similar vein, a June 2021 statement from the Wolfsberg Group on "Demonstrating Effectiveness" explained that "[l]argely in response to supervisory expectations, AML/CFT risk assessments are focused on technical compliance requirements rather than the effectiveness of the [financial institutions'] efforts to prevent and detect financial crime." WOLFSBERG GRP., DEMONSTRATING EFFECTIVENESS 1–2 (2021), https://www.wolfsberg-principles.com/sites/default/files/wb/Wolfsberg%20Group_Demonstrating_%20Effectiveness_JUN21.pdf [https://perma.cc/NW5P-SQJK].

²⁰⁸ This liability structure has existed, at least for U.S. banks, since the mid-nineteenth century and the advent of check and checkable deposits. See James & Weiman, *supra* note 28, at 238–39. Checks are integrated into the U.S. payments space as a contingent liability of the

tions.²⁰⁹ The length of time required to conduct proper due diligence also explains, at least in part, the time-lag typically associated with cross-border payments that are routed through the banking system.

The international thicket of AML rules also incentivizes banks to engage in “de-risking,” which reduces global financial inclusion. De-risking refers to banks’ retreat from providing correspondent banking services in geographies with a high incidence of illicit finance. Most international banking regulatory organizations—including the BCBS and FATF—have documented de-risking by banks since 2008.²¹⁰ In particular, the BIS noted a twenty percent reduction in cross-border payments between 2011 and 2018—assessed by the volume and frequency of Swift messages between banks. This Swift data also showed that the number of corridors between countries had fallen.²¹¹ Increasingly today, even the prospect of geopolitical uncertainty, and a potential for ensuing economic sanctions, would be likely to prompt a bank to retreat from a geographic region prophylactically.

This is a socially and strategically suboptimal outcome. De-risking may well make sense to the bank from a legal risk-management perspective, but it leaves certain populations with little or no access to cross-border payments services. It thus creates space for other nonbank payment systems—particularly those that are coin-based—to take root. As discussed, those alternative coin-based pathways are much more likely to facilitate illicit finance or problematically fragment the payments system.²¹²

On the whole, it appears that one major—if not the major—driver of inefficiency in the cross-border payment market stems from the legal frictions attendant to BSA compliance. Accordingly, reducing these legal frictions could be likely to improve the correspondent banking system’s ability

payor’s bank, thereby exposing the bank to risk of liquidity shortfalls of the payor. James & Weiman, *supra* note 28, at 239.

²⁰⁹ Payments related black swan events do happen. With perhaps greatest notoriety, in 1974, a privately owned bank in Germany—Herstatt Bank—received Deutsche Marks from banks around the world as part of transactions pursuant to which Herstatt would pay out U.S. dollars during U.S. business hours. But before doing so, Herstatt declared bankruptcy and did not fulfill its U.S. Dollar transactions, leaving the counterpart institutions with significant losses to bear. See Eur. Central Bank, *The Euro Area Financial System* 149–52 (Dec. 2007), https://www.ecb.europa.eu/pub/financial-stability/fsr/focus/2007/pdf/ecb-ccda416def.fsrbox200712_19.pdf [<https://perma.cc/4NN2-7856>].

²¹⁰ See, e.g., Rena S. Miller, *Overview of Correspondent Banking and “De-Risking” Issues*, CONG. RSCH. SERV., IF10873 (Apr. 8, 2022), <https://crsreports.congress.gov/product/pdf/IF/IF10873> [<https://perma.cc/AVU9-SJPY>].

²¹¹ See BANK FOR INT’L SETTLEMENTS, SWIFT GPI DATA INDICATE DRIVERS OF FAST CROSS-BORDER PAYMENTS (2022), https://www.bis.org/cpmi/publ/swift_gpi.pdf [<https://perma.cc/FHQ8-ALH9>].

²¹² According to the 2021 Basel AML Index, 2021 trends indicate significant rise in ML threats from fintech and DeFi. They estimate that there are presently about 106 million cryptocurrency users globally and of the industry’s \$21.4 billion value, criminal activity represented about 2.1 percent (\$450 million). BASEL INST. ON GOVERNANCE, *BASEL AML INDEX 2021: 10TH PUBLIC EDITION: RANKING MONEY LAUNDERING AND TERRORIST FINANCING RISKS AROUND THE WORLD 7* (2021), https://baselgovernance.org/sites/default/files/2021-09/Basel_AML_Index_2021_10th%20Edition.pdf [<https://perma.cc/ZVT6-ZTH2>].

to reduce cost and improve speed of executing cross-border payments, rendering much of the stablecoin debate relatively moot. It could also, in the same vein, reduce migration of payments activity to the broader crypto ecosystem, thus alleviating resource strain on law enforcement, allowing them to focus their attention on the illicit aspects that remain. Accordingly, the remainder of this Article sets out a proposal for enhancing the efficiency of the existing, centralized payments system through a system of centralized customer due diligence.²¹³

B. A Centralized Verifying Party

The proposal here is to move toward a system of central verifying parties, or “CVPs.” A CVP is a private institution that exists solely to engage in centralized ‘clearing’—that is, verification—of customer due diligence. In some quarters, the notion of a KYC utility has been discussed in various forms—as a repository or a black list that all payments institutions might consult by modernizing the sharing of transaction-level data, or in hiring third-party service providers (vendors) to effectively outsource an institution’s AML.²¹⁴ Yet none of these models suggests a true utility that would centralize the due diligence of individuals—not transactions—in a way that could meaningfully reduce global redundancy in compliance while also supplying a mechanism to better reach stablecoins.

In its basic outline, the idea is straightforward—a CVP is a privately owned and operated financial infrastructure that performs due diligence on prospective bank customers, thereby centralizing the process of KYC. The CVP would also perform KYC on respondent banks and their downstream customers as necessary. In terms of the rigor of due diligence, that standard would be maintained at current, if not higher, levels mapping on to international best practices and current supervisory expectations for individual banks and bank holding companies. Upon satisfying the CVP’s due diligence, the CVP would verify the party (i.e., the individual or respondent bank) with a blue check that can serve as the customer’s transferable AML clearance—akin to a passport stamp that a payment-processing bank may safely rely on to supply payments services consistent with BSA and U.S. sanctions-related rules.²¹⁵

²¹³ Because no law can be meaningfully enforced against a decentralized application, including the Bank Secrecy Act, at best, the next section suggests a way to reduce the demand for such decentralized payments options.

²¹⁴ See Matthew Steinert & Dan Williams, *A KYC-AML Utility: Driving Scale, Efficiency, and Effectiveness*, MCKINSEY (Jan. 14, 2020), <https://www.mckinsey.com/industries/financial-services/our-insights/banking-matters/a-kyc-aml-utility-driving-scale-efficiency-and-effectiveness> [<https://perma.cc/L862-K9GH>].

²¹⁵ One fledging proposal to address the inefficiency in KYC, and the widespread lack of KYC in the crypto space, is referred to as a decentralized identity, or DID. The DID implies that individuals would aggregate various identity-related data points about themselves which would compile into a user-owned DID that could be used for, among other things, proving

The introduction of clearing infrastructure has brought efficiency gains in several other financial markets. For example, in both the market for foreign exchange and for tri-party repo, shifts from bilateralism to centralization decreased risk and increased transparency, and generally improved operational efficiency. Clear CLS Bank, discussed above, is one such shining-star example.²¹⁶ Initially, when it emerged, the market for foreign exchange (much like the over-the-counter derivatives markets that would emerge later) was rife with counterparty risk. One bank failure could impact many others, creating a significant risk to financial stability. While regulatory reforms aimed to mitigate exposure and operational risk, it was ultimately the formation of the CLS Bank, launched in 2002, that succeeded in reducing risk and increasing efficiency.²¹⁷

CLS Bank also impresses from a stability perspective. It proved remarkably resilient in the 2008 global financial crisis. As one commentator described it, at the peak of the crisis, “the CLS Bank handled more than 1.5 million instructions and settled transactions with a gross value of \$8.6 trillion. In other words, near the peak of the freeze in interbank lending, the CLS Bank was handling a record volume of FX trades for thousands of counterparties.”²¹⁸ Essentially, the presence of a central clearing party avoided the kind of credit freeze that plagued other financial markets during that time. This kind of stability is also important from a financial institution cost perspective, as it suggests less need to over-capitalize positions and generally reduces inefficient counterparty risk aversion.²¹⁹ It bears mention that ICE Clear is an almost identical piece of market infrastructure that centrally clears a range of derivative products.

Innovations in centralized clearing also brought efficiency gains to the repo market. In a repo transaction, collateral (a security) is pledged for cash—in effect, repo is a way for holders of securities to get cash and for cash holders to invest their cash for a return.²²⁰ A “haircut” reflects some-

oneself as a legitimate user of the financial system. *See, e.g.,* MICROSOFT SEC., DECENTRALIZED IDENTITY AND VERIFIABLE CREDENTIALS (2022), <https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RE5ce2K?culture=en-us&country=US> [<https://perma.cc/HYLS-SE56>]. Yet the introduction of decentralized identity, while not necessarily inconsistent with the introduction of a CVP largely misses the mark. For one, a DID falls short of the efficiency and accuracy goals desired here, as there is still a vetting process that must be done to aggregate the data that would presumably serve as inputs to the DID. Certainly, depending on which entities are responsible for ensuring the veracity of data once input into the DID, accuracy could not be guaranteed particularly assuming a lack of holistic government oversight. Finally, a DID would not address the fragmentation problem posed by the proliferation of stablecoin and crypto assets payments rails.

²¹⁶ *See* CLS Settlement, CLS, <https://www.cls-group.com/products/settlement/clssettlement/> [<https://perma.cc/J7HL-4YUX>].

²¹⁷ *Id.*

²¹⁸ Levich, *supra* note 35.

²¹⁹ *Id.*

²²⁰ Christian Julliard, Gábor Pintér, Karamfil Todorov and Kathy Yuan, *What Drives Repo Haircuts? Evidence from the UK Market* 5 (Bank of Eng., Working Paper No. 985, 2022), <https://www.bankofengland.co.uk/-/media/boe/files/working-paper/2022/what-drives-repo->

thing like an interest rate for the cash on loan, such that when the transaction is unwound, the cash provider has made some profit on the difference between the cash and the value of the collateral.²²¹ The repo market generally is one of the largest short-term funding markets globally; its volume creates the necessary liquidity and price transparency for U.S. government debt (Treasury securities) and corporate debt.²²²

Tri-party repo is a kind of repo in which a third party—a clearing bank, usually, BNY Mellon—provides intermediation services to the cash investor and the collateral provider. In this role, the clearing bank takes custody of the securities collateralizing the transaction, values the securities, then settles the transaction on their books.²²³ They may also help dealers make optimal use of their securities, i.e., reinvesting them or rehypothecating them to hedge fund investors that may use them for short sales.²²⁴ Overall, BNY Mellon’s role in taking custody of the securities (so that the parties do not have to) and dealing with the clearing and settling greatly reduces legal and economic risk for the participants and thus encourages many parties to participate in the tri-party repo market. According to researchers at the New York Fed, “the efficiency of the tri-party repo market, and the fact that so many institutions use it, are among the reasons the Federal Reserve uses this instrument to implement monetary policy.”²²⁵

Arguably, very similar efficiency gains could accompany centralized “clearing” of bank customers and respondent banks. Centralized clearing could reduce the legal risk associated with cross-border payments and accidental errors in KYC, as well as the economic risk—if it is true that one centralized party would over time become more adept at customer due diligence and monitoring than would individual financial institutions acting on an ad hoc basis. Further, to the extent centralizing KYC would also lead to more streamlined, accurate, holistic due diligence, general transparency in the cross-border payments market could also be expected.

Some may well question whether a private institution—analogue to CLS Bank or BNY Mellon—is better suited to the task of performing centralized verification than a public body would be at maintaining a registry of cleared parties. There are at least two compelling reasons to prefer a private institution to a public body for this purpose. For one, it is not clear the public sector has the financial or human capital resources (or the political will) to

haircuts-evidence-from-the-uk-market.pdf?la=EN&hash=4DE73527013E1B7CDEDBD3FE4B0EA4F82AC67665 [https://perma.cc/BZR7-RZZF].

²²¹ *Id.* at 5 n.6.

²²² *See id.* at 1, 1 n.1, 1 n.2; *see also* Jeffrey Cheng & David Wessel, *What is the Repo Market, and Why Does it Matter?*, BROOKINGS (Jan. 28, 2020), <https://www.brookings.edu/blog/up-front/2020/01/28/what-is-the-repo-market-and-why-does-it-matter/> [https://perma.cc/367R-CVSY].

²²³ Julliard et al., *supra* note 220.

²²⁴ ADAM COPELAND, DARRELL DUFFIE, ANTOINE MARTIN & SUSAN McLAUGHLIN, *KEY MECHANICS OF THE U.S. TRI-PARTY REPO MARKET 3* (2012), <https://www.newyorkfed.org/media/mediabrary/media/research/epr/2012/1210cope.pdf> [https://perma.cc/6P94-VEHS].

²²⁵ *Id.* at 4.

perform this central verifying task. The most recent effort at reform, the AML reform bill enacted in 2020 (effective in January 2021) tried to take steps in this direction. It required that Treasury and FinCen provide more transparency into their supervision priorities, for DOJ to provide feedback on SARs, and for FinCen to create a national registry of beneficial ownership (i.e., to ferret out shell companies).²²⁶

But neither of these reforms within the AML Act, even once implemented, will reduce redundancy among the correspondent banking institutions' KYC compliance. Nor will the beneficial ownership registry provide a comprehensive customer due diligence database. It seems unlikely the government could assemble and maintain such a database—either because government lacks the budgetary bandwidth to supply this service to the banking sector or because doing so would be politically costly. That is to say that the choice to insert the Treasury so directly into matters of customer privacy and banks' discretion about whom to serve might not be perceived as a legitimate function of government. On the other hand, customers may perceive less risk that a private institution would be susceptible to political capture and the accompanying temptation to make customer due diligence decisions for reasons unrelated to national security, such as to advance political preferences.²²⁷ A private institution may also be more targeted in its information gathering and assessment than the government is (or could be).²²⁸

To be sure, one may well have privacy-related concerns about gathering so much bank customer data within one private financial institution. Privacy in financial transactions is often a legitimate concern. However, it bears emphasis that private institutions—not the Treasury—already do this screening work; the question is how to make the collection, digestion, and verification of this information happen faster and more reliably within the industry that

²²⁶ Anti-Money Laundering Act of 2020, Pub. L. No. 116-283 (codified as amended in scattered sections of 31 U.S.C.).

²²⁷ In September 2022, FinCen published the final Beneficial Ownership Information Reporting Rule, that requires some legal entities to submit a report to FinCen with information relating to the beneficial owner of the reporting company. Beneficial Ownership Information Reporting Rule, 87 Fed. Reg. 59498 (to be codified at 31 C.F.R. § 1010) (2022) (effective Jan. 1, 2024). In December 2022, FinCen published a proposal for the so-called Access Rule, which will govern access to and safeguarding of this information that is reported to FinCen. Beneficial Ownership Information Access and Safeguards, and Use of FinCEN Identifiers for Entities, 87 Fed. Reg. 77404 (proposed Dec. 16, 2022) (to be codified at 31 C.F.R. § 1010). Recently, the subject of whether the public can access a beneficial ownership registry was the subject of some controversy in Europe, where the European Court of Justice ruled in November 2022 that public access to the registries would violate fundamental individual rights protected in the EU Charter of Fundamental Rights. Joined Cases C-37/20 & C-601/20, WM and Sovim SA v. Lux. Bus. Regs., ECLI:EU:C:2022:912 (Nov. 22, 2022).

²²⁸ In any case, the federal government already has a variety of programs to monitor financial transaction data, often by collecting transaction data in bulk. For journalistic reporting on one such program, TRAC, see Dustin Volz & Byron Tau, *Little-Known Surveillance Program Captures Money Transfers Between U.S. and More Than 20 Countries*, WALL ST. J. (Jan. 18, 2023), https://www.wsj.com/articles/little-known-surveillance-program-captures-money-transfers-between-u-s-and-more-than-20-countries-11674019904?modHP_lead_pos3 [<https://perma.cc/P4RJ-HQHD>].

is already legally required to make diligence decisions. Assigning this job to the federal government is not obviously better from a privacy standpoint. Nonetheless, the CVP, as part of its supervisory exam, should be expected to demonstrate commitment to the maximum of privacy-protective technology, such as cryptographic techniques like zero knowledge proofs and verifiable credentials.²²⁹

A final element of a CVP design concerns incentives. Under what conditions would a CVP form organically within the private sector without a regulatory mandate? Again, the experience of CLS Bank, BNY Mellon's tri-party repo business, and ICE Clear, all suggest there is a natural market demand for centralizing clearing-type services where there are efficiency and risk mitigation gains to be had. And such efficiencies would in theory be possible, yielding from time saved in conducting compliance and the reduction of legal risk. But participating financial institutions would need strong incentives to use the CVP system. Ideally, most if not all financial institutions participating in the correspondent banking network would use the blue check system in order to achieve maximum efficiency gains from a CVP infrastructure.

At the same time, no financial institution would have the incentive to use—let alone form and govern—this institution without assurance that relying on the CVP clearance process would be legally permissible. The most direct route to such assurance is a safe harbor legislated into the BSA. Section 326 already provides that the minimum requirements for KYC are set by regulation promulgated by the Treasury; section 326(5) allows exemptions made by the Secretary of the Treasury for any reason.²³⁰ So conceiva-

²²⁹ Zero-knowledge proof is a technique to limit the amount of information shared from the “prover”, trying to prove a claim, and the “verifier”, responsible for validating the claim. Essentially, the prover can prove validity to the verifier by sharing no additional knowledge other than the correctness of the proposition in question. This can be achieved using highly sophisticated interactive and non-interactive proof systems technology. See Shafi Goldwasser, Silvio Micali & Charles Rackoff, *The Knowledge Complexity of Interactive Proof Systems*, 18 SOC'Y FOR INDUS. AND APPLIED MATHEMATICS 186, 186-87 (1989); *What Are Zero-Knowledge Proofs?*, ETHEREUM (Last updated Feb. 10, 2023), <https://ethereum.org/en/zero-knowledge-proofs/> [<https://perma.cc/A74E-VWEH>]. Verifiable credentials are digital cryptographically-secure versions of both paper and digital credentials that people can present to organizations that need them for verification. UNITED NATIONS CTR. FOR TRADE FACILITATION AND ELEC. BUS., *eDATA VERIFIABLE CREDENTIALS FOR CROSS BORDER TRADE 12* (2022), https://unece.org/sites/default/files/2022-07/WhitePaper_VerifiableCredentials-CBT.pdf [<https://perma.cc/JCK6-7YT4>]. I wish also to acknowledge the concern that a CVP could be weaponized politically to blacklist putative bank customers that are assigned national security threats merely because they disagree with a political faction's agenda in power. Weaponizing financial services in this manner is a problem to take seriously. Michael Bresnickat, Executive Director, Fin. Fraud Enf't Task Force, Address at the Exchequer Club of Washington D.C. (Mar. 20, 2013), <https://www.justice.gov/opa/speech/financial-fraud-enforcement-task-force-executive-director-michael-j-bresnick-exchequer> [<https://perma.cc/2KY2-STY7>]. Buffering the CVP against political co-option would require the same sort of public and academic scrutiny as has, for example, the use of the banking system to curtail capital to politically disfavored sectors, like guns, payday lenders, or fossil fuel producers.

²³⁰ See USA PATRIOT Act, 31 U.S.C. § 5318 (2001).

bly, even absent legislation, the Treasury Secretary could issue new regulations, interpretive guidance, or no action letters to a similar, albeit perhaps less permanent, effect than a statutory safe harbor.

International standards and their implementation through oversight would also need adjusting. Currently, FATF recommendation 17 discourages reliance on third parties for customer due diligence—it notes that “ultimate responsibility remains with the financial institution relying on the third party.”²³¹ So long as that remains the regulatory stance, it is highly improbable that market demand for a CVP would be sufficient to incentivize any such institution to form for the purpose of performing centralized verification services.

A legal safe harbor is necessary but not sufficient for the successful uptake of a CVP payments infrastructure. Financial institutions would also need to trust the CVP’s services sufficiently to rely on its due diligence and not replicate their own. How might such trust come about? In principle, a private institution that is member-owned and governed could develop and maintain a governance structure capable of attracting that kind of intra-market trust. CLS Bank is member-owned as is ICE Clear U.S. In fact, ICE Clear refers to its strict membership criteria (including robust capitalization, sterling regulatory compliance, among other things) as one of the principal reasons its clearing services hedge systemic risk for its members.²³²

The ideal market for CVP infrastructure likely consists of one institution. It seems sub-optimal to have more than one party conducting due diligence—potentially producing conflicting records. And unlike the case with the pre-2009 tri-party repo market where both JP Morgan Chase and BNY Mellon provided clearing services, there is no benefit to diffusing clearing exposure in the way that one might consider in the repo market—there is no risk of concentration when it comes to KYC analysis. Information sharing with law enforcement would also be much more streamlined from one CVP institution. Moreover, there are information-security downsides to sharing customer data with more than one institution.

It is noteworthy in this regard that centralized clearing has settled around one major market infrastructure in the other financial markets discussed—CLS Clear for forex and BNY Mellon for tri-party repo (indeed, JP Morgan left the market because its 15% or so market share was paltry compared to BNY Mellon’s 85%+).²³³ Similar concentration exists in the over-the-counter derivatives market—LCH Clearnet handles around ninety-five

²³¹ FIN. ACTION TASK FORCE, INTERNATIONAL STANDARDS ON COMBATING MONEY LAUNDERING AND THE FINANCING OF TERRORISM & PROLIFERATION: THE FATF RECOMMENDATIONS 18 (2022), <https://www.fatf-gafi.org/content/dam/recommendations/FATF%20Recommendations%202012.pdf.coredownload.inline.pdf> [https://perma.cc/XX2W-35S5].

²³² See ICE Clear US, Inc., Membership Rules (2017), <https://www.cftc.gov/sites/default/files/filings/orgrules/17/10/rule100317iclrusdco002.pdf> [https://perma.cc/6T53-4D4J].

²³³ See Levich, *supra* note 35; see also Ben Edwards, *JPMorgan Repo Retreat Shows Cost of Rule Changes*, EUROMONEY (Sept. 23, 2016), <https://www.euromoney.com/article/>

percent of derivatives clearing and ICE clears about ninety-eight percent of global credit default swaps.²³⁴

Finally, the role of the public sector would be key to a successful CVP design, and it would be important to include CVPs within the regulatory perimeter. Given the concentration of private information in a CVP, the risk of operational-risk-related events—like a cyber theft of personal data—would be high. Additionally, just as KYC programs are the subject of supervision presently, within banks, so too should be the process and governance of the CVP's central KYC. Although CLS Bank and ICE Clear initially formed outside the regulatory perimeter, both were eventually brought into the Fed's supervisory perimeter on the basis of designation as a "financial market utility" ("FMU") by the Financial Stability Oversight Council ("FSOC").²³⁵

Section 804 of the Dodd-Frank Act empowers the FSOC to designate clearing houses as systemically important pieces of market infrastructure, hence ICE Clear Credit (formerly ICE Trust) and CLS Bank are now FMUs.²³⁶ Unlike the FSOC's designations of systemically important non-banks, the FMU designation has never been controversial or contested by the institutions themselves. Were the CVP to become a new business line within an existing systemically important bank—just as BNY Mellon performs tri-party repo clearing—then this component of the bank's business model would be subject to the Fed's heightened supervision pursuant to its status as a U.S. G-SIB. Again, the key components of the supervisory regime for a CVP would focus on cyber risk (the risk of data loss), the rigor of the KYC diligence procedures (compliance with FinCen rules and with FATF best practices), and customer privacy protections.

In terms of the location of the CVP, the institution could be U.S.-located, operated, and supervised but broadly serve the international community's goals in improving the efficiency of cross-border payments. For decades, the international community has attempted to harmonize AML rules by standard setting among networks of financial crime intelligence units (like FATF) or central banks (BIS, BCBS, FSB). The private sector has tried similar voluntary private governance arrangements through organizations like the Wolfsberg Group, a group of thirteen global banks that develop

b12kprb8yrj6dd/jpmorgan-repo-retreat-shows-cost-of-rule-changes [https://perma.cc/3FT4-TFHU].

²³⁴ See *Volumes*, LCH, <https://www.lch.com/services/swapclear/volumes> [https://perma.cc/RG4R-BRGJ]; see also Amir Khwaja, *Swaps Data: Cleared Volumes and CCP Market Share*, RISK.NET (Apr. 8, 2019), <https://www.risk.net/derivatives/6546501/swaps-data-cleared-volumes-and-ccp-market-share> [https://perma.cc/KSY5-7RRK].

²³⁵ The CFTC is the primary supervisor of ICE Clear, but the Fed has additional supervision of ICE Clear from a financial stability perspective thanks to powers granted to the Fed in Title VIII of the Dodd-Frank Act.

²³⁶ See Dodd-Frank Act, Pub. L. No. 111-203, 124 Stat 1807-09; U.S. Dep't of the Treasury, Appendix A: Designation of Systemically Important Financial Market Utilities 145, 172 (2012), <https://home.treasury.gov/system/files/261/2012-Appendix-A-Designation-of-Systemically-Important-Market-Utilities.pdf> [https://perma.cc/475Q-ZPKX].

frameworks and guidance for the management of AML risks and KYC best practices.²³⁷ Notwithstanding these concerted efforts, standards are not harmonized and there is little if any substituted compliance by which one jurisdiction will credit a firm's compliance with another's AML scheme.

Introducing a CVP as a new kind of payments infrastructure has promise for quieting this cacophony of global standards. Although the CVP would at least initially verify parties against U.S. standards (BSA, FinCen rules, OFAC SDN list, etc.), the efficiency that it offers could create the incentives needed to drive global convergence around U.S. AML standards, which themselves mirror internationally agreed best practice. If a U.S. CVP were to develop capacity to blue-check verify customers for compliance with domestic AML rules and sanctions compliance, that clearing service could act like a centripetal force. Responding to this convenience, banks in other jurisdictions may well decide to offer payment services for only those customers with the blue check to avoid undertaking the (same) due diligence work at their own expense.

Foreign banks will thus have strong incentives to pressure their home governments to adopt U.S.-mirror standards which, in turn, a U.S. CVP might recognize as substituted compliance with U.S. law. In such schema, a foreign citizen complying with foreign AML law could still be vetted for the U.S. blue check. An example helps to illustrate. If French citizen Jane Smith has a CVP blue check, and wants to borrow from Société Générale, over time, SocGen will want the French authorities to adopt a regime sufficiently like that in the United States so that the U.S. CVP will be willing to offer blue checks that satisfy French rules as well. Customers like Jane Smith will press government for this convergence as well, so that their blue checks can gain them entry to both U.S. and French banking services. These incentives and dynamics may well generate a private market mechanism that functions as if all jurisdictions had agreed to harmonization or substituted compliance, which—in the absence of such private sector initiatives—currently seems unlikely to materialize from multilateral efforts.

In time, if the CVP were sufficiently global in its reach, the Fed might explore a cooperative oversight arrangement similar to that which applies to CLS bank. Pursuant to a “Protocol for the Cooperative Oversight Arrangement of CLS,” the central banks of issues that CLS settles are able to “fulfill their responsibilities to promote safety, efficiency, and stability in the local markets and payment systems in which CLS participates.”²³⁸ At the same time, these central banks ensure that the cooperative mechanism minimizes potential burden on CLS and duplication of effort by the participating central

²³⁷ See *Wolfsberg Principles*, THE WOLFSBERG GRP., <https://www.wolfsberg-principles.com/> [<https://perma.cc/47ZU-NWMS>].

²³⁸ *Protocol for the Cooperative Oversight Arrangement of CLS*, FED. RESRV. (Sept. 2, 2009), https://www.federalreserve.gov/paymentsystems/cls_about.htm [<https://perma.cc/74MX-64AE>].

banks” and maximizes transparency among the central banks and between CLS and these supervisory authorities.²³⁹

To be sure, a CVP could also be owned and governed by a consortium of internationally active banks with various domiciles and look something more like Swift. If the CVP were to provide multi-jurisdictional blue checks, the end result might be similar to that proposed above; however, the incentives for states to move towards convergence would likely be much more muted in a multipolar verifying clearing system. If all countries can continue to secure a bespoke blue check, the impetus toward harmonization will be missing. Moreover, in the absence of one jurisdiction taking the initiative to provide a legislative safe harbor, it is difficult to see how the incentive to form, and then rely on, such a CVP would organically arise from the private banking firms themselves.

In summary, a new payments infrastructure that provides centralized verification for KYC purposes and that is privately owned and operated while being subject to Fed oversight, has significant potential—both in theory and in reference to close institutional and market precedents—to enhance the efficiency and reduce the risks in correspondent banking. These gains should directly translate into a better experience for the users of, and service-providing institutions in, the cross-border payments system. For these reasons, as discussed above, the United States should consider prioritizing legal reform that would create the space for the private market to form a CVP. Such reforms would be consistent with, and substantially further, the overarching goal of the G20 and FSB to take action to lower the cost and increase the speed, transparency, and ease of access across the cross-border payments system.

Also, by centralizing KYC, such infrastructure makes it much more difficult for stablecoins (or any digital currency) to avoid regulation.²⁴⁰ Once a CVP were functionally in place, Congress could amend existing stablecoin legislation to require that any holder of stablecoin must have a blue-check in order to redeem it with an issuer or through an exchange for U.S. dollars (i.e., fiat currency or bank deposits). This legislative add-on would pair well with current legislative initiative to require stablecoin issuers to be licensed.²⁴¹ As for decentralized stablecoin and other unbacked crypto assets that lurk outside the regulated perimeter, if the CVP system were to enhance the efficiency of the centralized payments system generally, that could also help drive demand for decentralized and unregulated stablecoin considerably lower. Ultimately, then, this proposal complements ongoing efforts to pull stablecoin within the regulatory perimeter in one form or another. Address-

²³⁹ *Id.*

²⁴⁰ Although this Article focuses specifically on stablecoins, certainly the same could be said of any non-bank money services business or crypto currency.

²⁴¹ See Cravath, Swaine & Moore, *Summary of the Stablecoin TRUST Act of 2022* (Apr. 18, 2022), <https://www.cravath.com/a/web/ntZMTgpggeL5Xn3qoSd377U/summary-of-the-stablecoin-trust-act-of-2022.pdf> [<https://perma.cc/8PG2-FFQ5>].

ing the “demand-side” of the problem, as this proposal does, would provide tailwinds to any future statutory efforts to curtail the supply of unregulated stablecoin. If users (and more of them) are able to access the existing payments system more easily and affordably, there would likely be considerably less demand for unregulated digital alternatives. Together, these initiatives could recentralize finance in a way that benefits, on balance, public welfare in the United States and abroad.

V. CONCLUSION

This Article sheds renewed light on the benefits that the incumbent international payments system offers to society—delivering growth and supporting international security. From that vantage point, this Article urges a reassessment of the costs associated with the rise of stablecoin and its role in fueling unbacked cryptoassets and DeFi protocols more generally. It recommends that existing legislative proposals to regulate stablecoin be complemented by private sector efforts to restore efficiency in correspondent banking. Specifically, such proposals should facilitate the creation of a new payments market infrastructure for AML and sanctions compliance which will be incorporated into existing banking law. Overall, this Article offers a fresh look at the stablecoin and unbacked crypto asset debate by underscoring the importance of maintaining one central system for effectuating cross-border payments.

