TOWARD A GLOBAL SOLUTION FOR EMERGENCY DOLLAR LIQUIDITY PROVISION: THE ROLE OF THE U.S. FEDERAL RESERVE, CENTRAL BANK COORDINATION, AND THE IMF

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Given the status of the United States dollar (USD) as the world's de facto international currency, USD shortages during international financial crises pose significant risks to global financial stability. The existing institutional architecture for emergency dollar liquidity provisions prominently features the U.S. Federal Reserve's (the Fed) swap lines with 14 central banks, USD-for-local currency swaps outside of the Fed's framework, and liquidity support from the International Monetary Fund (the IMF). This framework largely succeeded in averting deeper liquidity crises during the Global Financial Crisis and COVID-19 pandemic. However, further institutionalizing these policy tools and arrangements and placing them on a more secure legal foundation will help to mitigate financial risks and panic, particularly for emerging and developing economies, when the next crisis emerges. Considering central banks' high degree of legal autonomy, as well as the existing channels for central bank coordination, a more enduring global solution for emergency dollar liquidity provision should capitalize on the unique "firefighting" role that central banks fulfill by rapidly and decisively responding to financial crises. More specifically, a USD multilateral swap network backstopped by the Fed at the Bank for International Settlements and created under Section 13(3), rather than Section 14 of the Federal Reserve Act, is one mechanism to effectively provide countries without access to USD swap lines with dollar liquidity, and to reinforce the dollar's status as the de facto international currency. Recasting the Fed's swap line authority as a 13(3) power would also raise democratic accountability over an important aspect of its international activities and would provide greater predictability to emerging and developing economies during times of severe market disruption.

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I. INTRODUCTION

During the early days of the COVID-19 pandemic, the U.S. Federal Reserve (the Fed) took swift and decisive action to contain dollar liquidity risks and to avert a global financial crisis. The Fed provided U.S. dollar (USD) liquidity through bilateral swap lines to 14 foreign central banks (five of which enjoy standing swap arrangements with the Fed) and allowed roughly 170 foreign central banks and monetary authorities with accounts at the Federal Reserve Bank of New York (the New York Fed) to temporarily exchange U.S. Treasury bonds for dollars as part of the Temporary Foreign and International Monetary Authorities (FIMA) Repo Facility.[1]

Similarly, in April 2020, the International Monetary Fund (the IMF) created a new short-term liquidity line to assist members facing liquidity challenges,[2] as well as a flexible credit line instrument to mitigate balance of payments pressures, both of which do not include ex-post conditionality requirements.[3] These measures quickly helped stabilize the global economy amidst record capital outflows from emerging markets and an accompanying private sector dollar cash flow crunch.[4]

While this institutional framework appears to have performed reasonably well in steadying the global economy and staving off a deeper dollar liquidity crisis, uncertainties surrounding the re-emergence of dollar shortages persist. This is particularly so within emerging economies and the developing world and may lead to insolvencies if these policy tools and arrangements are not placed on sounder legal footing and further institutionalized. Additionally, neither the Fed nor the IMF possess the statutory authority or political will to assume the role of a de facto global lender of last resort.[5] In what follows, this paper examines precisely how the existing policy tools and multilateral arrangements have been employed by international financial crisis responders and their effectiveness. This paper also proposes a legal design—based on central bank coordination and the use of swap lines—intended to more effectively mitigate uncertainty and panic when the next financial crisis emerges.

This paper first examines the role of the USD as the de facto international currency and surveys the challenges posed to the global economy by USD shortages. Second, this paper argues that central banks' statutory independence and agility are defining features that make them uniquely positioned to respond during times of financial crisis, while the IMF, which serves an important complementary liquidity function and can provide critical debt relief to developing countries, is constrained by political realities and is less suited to take on a leading emergency

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1 Nick Timiraos, *Fed Launches New Lending Facility for Foreign Central Banks*, THE WALL ST. J. (Mar. 31, 2020), https://www.wsj.com/articles/fed-will-launch-new-lending-facility-for-foreign-central-banks-11585657885.

2 *Short-Term Liquidity Line*, INT'L MONETARY FUND (Feb. 17, 2020), https://www.imf.org/en/About/Factsheets/Sheets/2020/04/17/ short-term-liquidity-line.

3 *Flexible Credit Line*, INT'L MONETARY FUND (Mar. 2, 2021), https://www.imf.org/en/About/Factsheets/Sheets/2016/08/01/20/40/Flexible-Credit-Line.

4 *See Sudden Stop in Emerging Markets,* INST. OF INT'L FIN. (Apr. 9, 2020), https://www.iif.com/Portals/0/Files/content/2_IIF2020_April_CFR.pdf; Ruth Carson, Greg Ritchie, and Hooyeon Kim, *Dollar Soars with Funds Liquidating to Withstand Virus Siege*, BLOOMBERG (Mar. 18, 2020), www.bloomberg.com/news/articles/2020-03-19/dollar-soars-to-record-as-funds-dump-everything-in-risk-exodus?sref=8sS6pqfy.

5 Collen Baker, *The Federal Reserve's Use of International Swap Lines,* 55 ARIZ. L. REV. 603, 622 (2013).

liquidity provision role. Third, this paper weighs the pros and cons of the existing institutional frameworks—namely, the Fed's dollar liquidity swap lines, a regional monetary arrangement known as the Chiang Mai Initiative Multilateralization (CMIM), and the IMF facilities and Special Drawing Right (SDR) allocations—and assesses each framework's legal design and relative effectiveness.

Finally, this paper considers two potential paths forward. The first path involves making minor but important improvements to the existing system, including clarifying eligibility criteria for a Fed swap line and maintaining a list of the ultimate recipient institutions of dollar liquidity. The second path involves a more significant change: rather than basing its legal justification for its swap lines on its authority under Section 14 of the Federal Reserve Act, the Fed would critically examine its activities that carry a clear foreign policy element and base its legal justification for its swap lines on its authority to act under "unusual and exigent circumstances," as outlined in Section 13(3). This path also involves the creation of a network of bilateral swaps managed by the Bank for International Settlements (BIS), an international financial institution owned by 63 central banks that promotes monetary and financial cooperation, which could enhance the international financial safety architecture and allow emerging markets greater access to emergency U.S. dollar liquidity assistance.

II. The Role of the U.S. Dollar in the Global Economy and During Financial Crises

The USD plays a dominant role in facilitating international commerce and finance, and countries rely on USD reserves maintained by their central banks to absorb economic shocks, pay for imports, meet debt-service obligations, and manage their own exchange rate regimes.[6] As a consequence, countries require steady USD access to stem liquidity and sovereign debt crises, and the USD is the world's most widely held foreign exchange currency.[7] For example, in the event of deep capital outflows, central banks may sell their foreign reserves—often in the form of the U.S. dollar—or buy up their own currency to try and counteract domestic currency depreciation and support the countries' ability to service external USD-denominated debt. Successful foreign exchange management that stabilizes the countries' currency can prevent the freeze-up of credit within their

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6 *See* Matthew Higgins and Thomas Klitgaard, *The U.S. Dollar's Global Roles: Where Do Things Stand?,* LIBERTY ST. ECON. (Feb. 11, 2019), https://libertystreeteconomics.newyorkfed.org/2019/02/the-us-dollars-global-roles-where-do-things-stand.html; *see also* Anshu Siripaurapu, *The Dollar: The World's Currency*, COUNCIL ON FOREIGN RELATIONS (Sep. 29, 2020), https://www.cfr.org/backgrounder/dollar-worlds-currency.

7 *Currency Composition of Official Foreign Exchange Reserves,* INT'L MONETARY FUND, https://data.imf.org/?sk=E6A5F467-C14B-4AA8-9F6D-5A09EC4E62A4 (Dec. 23, 2021).

financial system and maintain the confidence of creditors.[8] According to the IMF, emerging markets that rely on cross-border USD lending are particularly susceptible to tightening USD funding conditions and often require the backing of central banks with "deep pockets."[9]

Similarly, foreign exchange interventions take on heightened importance for private entities during times of economic distress when the USD rises in relative value because of its status as a safe-haven asset and because businesses with insufficient dollars tend to hoard USD. As companies' exports decline due to rapidly declining global demand, a major source of USD flows that corporations rely on to purchase imports and goods from global supply chains depletes.[10] Indeed, recent research from the BIS reflects that the unexpected strengthening of USD results in USD becoming scarcer in emerging market economies and depressed international trade growth by adversely impacting the ability of firms participating in the global supply chain to meet capital financing requirements.[11] By some estimates, approximately half of all international trade is "invoiced and settled" in USD, leaving firms outside of the U.S. to rely on short-term USD trade financing provided by foreign banks and financial institutions.[12]

This reliance on USD financing and the USD's dominant status as the de facto international currency has led to its constant high demand, even when markets are functioning smoothly. Private financial institutions outside of the United States—that are neither subject to the oversight of U.S. financial regulators nor eligible for the Federal Reserve's emergency liquidity facilities—regularly create "Eurodollars," short-term USD-denominated liabilities of banks located outside of the United States.[13] The Eurodollar market allows banks, for example, to provide trade financing by issuing letters of credit that represent commitments to pay for goods in USD upon evidentiary confirmation that the goods have been delivered

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8 *See* Kathryn Dominguez, Yuko Hashimoto, and Takatoshi Ito, *International Reserves and the Global Financial Crisis*, NAT'L BUREAU ECON. RSCH. 21. (Aug. 2011) https://www.nber.org/system/files/working_papers/w17362/w17362.pdf.

9 *See* Adolfo Barajas et al., *Banks' Dollar Funding,* GLOB. FIN. STABILITY REP.: LOWER FOR LONGER, 77-78 (2019).

10 Council on Foreign Relations, *supra* note 6; Liliana Rojaz-Suarez, *Emerging Market Macroeconomic Resilience to External Shocks: Today versus Pre-Global Crisis,* CTR. FOR GLOB. DEV. (Feb. 2015), https://www.cgdev.org/sites/default/files/CGD-Essay-Rojas-Suarez-Emerging-Market-Macroeconomic-Stability_0.pdf.

11 Burcu Erik et al., *The Dollar, Bank Leverage and Real Economic Activity: An Evolving Relationship,* BANK FOR INT'L SETTLEMENTS (Mar. 2020), https://www.bis.org/publ/work847.pdf, 9.

12 Dan Awrey, *Brother, Can You Spare a Dollar? Designing an Effective Framework for Foreign Currency Liquidity Assistance,* 2017 COLUM. BUS. L. REV. 934, 951, 990 (Jan. 30, 2018).

13 Marvin Goodfriend, *Eurodollars*, *in* INSTRUMENTS OF THE MONEY MARKET 12 (Fed. Reserve Bank of Richmond, 5th ed. 1998); The precise size of the Eurodollar market is difficult to estimate, but the Bank for International Settlements measured foreign currency liabilities at $25 trillion on the eve of the global financial crisis, with more than half consisting of liabilities denominated in U.S. dollars. Awrey, *supra* note 12, at 954.

or to engage in market-making activities without necessarily having a commensurate USD deposit base.[14] These foreign banks often meet their short-term liabilities by obtaining USD from other financial institutions in the international wholesale funding markets or through the foreign exchange swap markets.[15]

Such a system in which private creation of dollars occurs outside of the United States remains viable so long as a large number of depositors or other short-term creditors do not withdraw their money all at once during times of significant market disruption.[16] However, foreign banks that conduct sizable Eurodollar business and engage in significant dollar-denominated financial intermediation face heightened susceptibility to bank runs on USD by depositors and other short-term creditors during times of economic distress, in large measure because of concerns regarding the Eurodollar issuer's creditworthiness, as well as other creditors' perceptions of the issuer's creditworthiness.[17]

To further complicate matters, while foreign central banks may provide emergency liquidity assistance or serve as lenders of last resort to financial institutions issuing Eurodollar liabilities within their country, the central banks may not hold a sufficient stock of foreign exchange reserves to provide liquidity assistance to their domestic banking systems.[18] Indeed, central banks can only print money denominated in their own currency, rather than USD, the currency that their economies actually require. Thus, during times of financial turmoil, rapid and large-scale provision of USD liquidity is often critical to prevent financial contagion and for financial institutions to avoid having to conduct "fire sales," where they are forced to sell their assets at heavily discounted prices to maintain their balance sheets.[19]

III. Central Banks as Financial Crisis "Firefighters"

Since the global financial crisis, central banks have assumed significantly more responsibility in formulating rapid responses to financial crises and coordinating emergency liquidity provision. In particular, the authority of the Fed

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[14] The growth of the Eurodollar market in the 1960s and 1970s was attributed to a desire by financial institutions to move dollar financial intermediation outside of the jurisdiction of U.S. regulators and to avoid regulatory burdens such as reserve requirements. Goodfriend, *supra* note 13, at 17-18; Awrey similarly recognizes the origins of the Eurodollar market as driven by opportunities for regulatory arbitrage, but attributes the importance of the Eurodollar today to its role in supporting global firms' international operations, international trade, and financial institutions' general financing and market-making activities. Awrey, *supra* note 12, at 948-53.

[15] Awrey, *supra* note 12, at 990.

[16] *Id.* at 958.

[17] *Id.* at 959, 968-69.

[18] *Id.* at 944.

[19] Baker, *supra* note 5, at 615-16.

to act domestically as a financial crisis "firefighter"—derived in part from Section 13(3) of the Federal Reserve Act—has been the subject of much examination and recent scholarship.[20] Indeed, during both the global financial crisis and COVID-19 pandemic, the Fed created emergency liquidity facilities to free up frozen markets and inject confidence into the financial system. In response to dollar liquidity crises abroad, the Fed also created currency swap arrangements under Section 14 of the Federal Reserve Act with a limited number of central banks to help backstop foreign banks, including those in emerging economies that deal USD through the Eurodollar market.[21]

While other central banks may not possess similarly potent policy tools such as dollar creation and provision, and while there are variations with respect to central banks' precise mandates, they are generally given the statutory independence and discretion necessary to rapidly shape their responses to major financial events.[22] Due to central banks' relative legal autonomy and ability to perform rapid crisis management, a global financial safety architecture centered around central bank coordination has steadily emerged over the last five decades and will likely play the most effective role in emergency dollar liquidity provision during future financial panics.[23]

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[20] Ben Bernanke, Timothy Geithner, and Hank Paulsen's collective memoir on the global financial crisis, *Firefighting: The Financial Crisis and its Lessons*, details the frenzied yet innovative crisis management performed by these three policymakers, including, in particular, the Fed's rapid liquidity provision through conventional banks to non-bank financial institutions, as well as the injection of unprecedented levels of monetary stimulus into the financial system. Some observers have described these actions under Section 13(3) as legally "creative," and indeed, former Fed and Treasury Department lawyers have reflected upon how their innovations were shaped by the available legal authorities and how drawing broadly from legal authority is necessary for policymakers to respond effectively to crises. *See* Ben Bernanke, Timothy Geithner & Hank Paulsen, *Firefighting: The Financial Crisis and its Lessons* (Penguin Books 2019); *see also* Scott Alvarez, Thomas Baxter & Robert Hoyt, *The Legal Authorities Framing the Government's Response to the Global Financial Crisis*, 2 J. OF FIN. CRISES 3 (2020), https://elischolar.library.yale.edu/cgi/viewcontent.cgi?article =1035&context=journal-of-financial-crises.

[21] Lev Menand, *Unappropriated Dollars: The Fed's Ad Hoc Lending Facilities and the Rules That Govern Them*, Law Working Paper No. 518/2020, 19 (May 2020).

[22] Robert Kahn & Ellen Meade, *International Aspects of Central Banking: Diplomacy and Coordination,* Finance and Economics Discussion Series, BD. OF GOVERNORS OF THE FED. RES. SYS., 1.

[23] Robert Kahn and Ellen Meade trace the evolution of central bank coordination to the early 1970s after the breakdown of Bretton Woods' managed exchange-rate system and suggest that central bank interactions occur both during normal times and during times of crisis, focusing on "monitoring and regulating the international financial system, global financial institutions, and cross-border capital flows." *Id. See also* PETER CONTI-BROWN, THE POWER AND INDEPENDENCE OF THE FEDERAL RESERVE 136-39 (Princeton University Press 2016).

1. The Legal Status of Central Banks

Most central banks are granted a relatively high degree of legal autonomy to resist political pressure that may undermine their ability to fulfill their mandates and implement appropriate monetary and financial policy decisions.[24] While the specific legal frameworks vary across jurisdictions—with some central banks structured as state-owned corporations and others as autonomous or self-administered government institutions—many constitutions and central bank statutes state that the central bank is independent in carrying out its functions.[25] Some laws, including those of the Mexican Constitution and European System of Central Banks, even contain "explicit prohibitions on central bank decision-makers from taking instructions from anyone, outside of the mechanisms and processes that are contained in law."[26]

The Federal Reserve Act, conversely, does not go this far. Indeed, at its inception, the Fed was characterized by a distinct lack ofs independence, with the Treasury Department effectively determining the monetary base and the Treasury Secretary presiding over all Federal Reserve Board meetings as an ex officio member until 1935.[27] Even without explicit statutory protections, however, historical practice and certain institutional designs such as the Fed's budgetary autonomy and its appointment and removal process have cemented operational and political independence as a pillar of U.S. central banking.[28]

These institutional designs have allowed central banks to secure their positions as the principal national actors for financial crisis response. Additionally, these designs have granted central banks the capacity to move ahead of their governments and ministries of finance to act more quickly and decisively during times of severe market disruption.[29] Indeed, these legal features grant central banks a high degree of autonomy, and when paired with established coordinating mechanisms between central banks and their control over foreign reserves, render central banks uniquely well-placed to disseminate emergency dollar liquidity. It should be noted, however, that conceptions of the Fed's independence must also account for a high level of legislative oversight and Congress's ability to alter its

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24 Ellen P. Meade, *Political Framework and Legal Status, in* ISSUES IN THE GOVERNANCE OF CENTRAL BANKS, BANK FOR INT'L SETTLEMENTS 57-58 (2009), https://www.bis.org/publ/othp04_3.pdf.

25 *Id.* at 66.

26 *Id.*

27 *See* Stephen Slivinski, *The Evolution of Fed Independence,* FED RES. BANK RICHMOND: REGION FOCUS, Fall 2009, at 5, available at https://www.richmondfed.org/-/media/richmondfedorg/publications/research /econ_focus/2009/fall/pdf/federal_reserve.pdf.

28 *See generally* Peter Conti-Brown, *The Institutions of Federal Reserve Independence*, 32 YALE J. ON REG. 257 (2015), available at https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1412&context=yjreg.

29 Meade, *supra* note 24, at 63-64; Kahn, *supra* note 22, at 32.

authority and governance.[30] As a result, the Fed requires a degree of legislative and political support for its actions, as well as a clear legal basis for its international currency stabilization activities.

2. An International Financial Safety Architecture Based Around Central Banks and Swap Lines

Today, the global financial safety architecture prominently features central bank coordinating mechanisms and institutionalized forms of cooperation mostly between wealthy countries, notably through the Bank of International Settlements, the Group of Seven (G7), and Group of Twenty (G20). Emerging market central banks were given a greater voice in policymaking and engaged more closely in central bank diplomacy in the aftermath of the Asian Financial Crisis, particularly with the creation of the Chiang Mai Initiative (CMI), the regional swap network among the Association of Southeast Asian Nations Plus Three (ASEAN+3) countries.[31] Nevertheless, because the Fed is the only entity that can create dollars and sits at the center of a network of foreign central banks connected by swap lines, the prevailing framework for emergency dollar liquidity provision necessarily relies on the Fed's willingness and ability to take action.

A. Defining Central Bank Liquidity Swaps

Bilateral central bank swap lines have a distinct legal structure.[32] They are generally contracts in which two central banks agree to exchange, or "swap," their respective currencies at a specific exchange rate—either at a non-commercial "policy" rate or at the prevailing market rate—in a two-part transaction.[33] Using the Fed's swap line with the Bank of Japan (BOJ) to illustrate the mechanics, let's assume that the Fed deposits $10 in the BOJ's account held at the NY Fed in the first leg of the transaction. At the same time, the BOJ deposits its currency of an equal value (for simplicity, let's suppose ¥1000 at a 1 USD to 100 JPY exchange rate) into the Fed's account held at the BOJ.[34] At a predetermined future date, with maturities ranging from overnight to eighty-eight days, the swap is reversed at the same initial exchange rate, and the BOJ buys back its ¥1000 with the $10 it borrowed. At maturity, the BOJ will also pay USD interest at a market-based rate

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[30] SARAH BINDER & MARK SPINDEL, THE MYTH OF INDEPENDENCE: HOW CONGRESS GOVERNS THE FEDERAL RESERVE 86 (Princeton Univ. Press 2017).

[31] Kahn, *supra* note 22, at 24.

[32] *See* Baker, *supra* note 5, at 622 n. 114; *see also* Camila V. Duran, *The International Lender of Last Resort for Emerging Countries: A Bilateral Currency Swap?*, GLOB. ECON. GOVERNANCE WORKING PAPER 2015/108, 10 (July 2015).

[33] Baker, *supra* note 5, at 623.

[34] *U.S. Dollar and Foreign Currency Liquidity Swaps*, BD. OF GOVERNORS OF THE FED. RESERVE SYS., https://www.federalreserve.gov/monetarypolicy/bst_liquidity swaps.htm.

to the Fed. Notably, during the global financial crisis, the interest paid to the Fed was an amount equal to the interest the foreign central bank earned on its tender operations.[35]

The Fed has set the repurchase price for its swaps at the same exchange rate as in the first leg of the transaction to recuperate the same nominal amount of dollars that it provided, which eliminates any exchange rate risk.[36] Additionally, the Fed is not exposed to the credit risk associated with lending to foreign financial institutions because the foreign central bank that obtains USD funding assumes the risk.[37] If a foreign central bank fails to repurchase its currency on or before the maturity date, the swap automatically rolls over into a new overnight swap transaction, and thus, these swap transactions can technically roll over in perpetuity.[38] In the extremely unlikely event that the borrowing central bank defaults, the borrowing central bank's currency, in theory, serves as collateral, but the swap contracts do not contain a provision outlining any specific penalty. As Professor Colleen Baker argues, seizing the loan collateral would be "difficult if not impossible because [the collateral] is kept in an account at the foreign central bank."[39] Thus, the Fed bears exposure to the credit risk of the foreign central banks that enter into its swap contracts. Although central banks theoretically cannot go bankrupt because of their ability to print currency, and the risk of a sovereign default by any one of the 14 central banks with swap lines is minimal, the credit risk cannot entirely be discounted.

The growing popularity of international swap contracts between central banks underscores banks' institutional preference for using such "flexible yet formalized" contracts for monetary cooperation and preserving their control over financial transactions.[40] It also reflects central banks' desire—particularly those in East and Southeast Asia, as well as Latin America—to avoid political stigmas and loan conditionalities, such as domestic economic reform requirements previously associated with obtaining liquidity support from the IMF.[41]

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35 *Id.*; *Frequently Asked Questions: U.S. Dollar and Foreign Currency Liquidity Swaps*, BD. OF GOVERNORS OF THE FED. RESERVE SYS., https://www.federalreserve.gov/monetarypolicy/bst_swapfaqs.htm.

36 Baker, *supra* note 5, at 623-25.

37 *See* Press Release, Swap Line FAQs (Mar. 19, 2020), https://www.federalreserve.gov/newsevents/pressreleases/swap-lines-faqs.htm.

38 U.S. Dollar-Yen Swap Agreement (May 17, 2010), https://www.newyorkfed.org/medialibrary/media/markets/FRBNY_BOJ_Swap_Agreement.pdf; *see also* Awrey, *supra* note 12, at 1004.

39 Baker, *supra* note 5, at 624.

40 Duran, *supra* note 32, at 7.

41 *Id.* at 15.

B. Central Bank Swaps as a Defining Feature of the Dollar Liquidity Provision Framework

In the aftermath of the global financial crisis, the Fed entered into standing swap arrangements with the C5 central banks (the Bank of England, the European Central Bank, the Bank of Japan, the Bank of Canada, and the Swiss National Bank). However, developing country and emerging market central banks had to largely rely on ad hoc bilateral swap arrangements for rapid liquidity provision. Sitting in a "hub" position at the center of a network of foreign central banks connected by swap lines, the Fed has provided direct dollar access to "elite" central banks and emerging market central banks with track records of "prudent decision-making," including Mexico, Brazil, Korea, and Singapore.[42] These swap lines provided central banks with a "power—and very visible—mechanism for working together," as Fed officials and their foreign counterparts engaged in unified messaging in describing dollar-liquidity challenges and the policy responses that were taken.[43] This measured and coordinated response by central banks injected confidence into the economy and helped to "soothe" market stresses.[44]

Notably, however, the Fed has not provided clear ex ante criteria for access to dollars by other foreign central banks. For example, in 2008, Indonesia was denied a swap line with the Fed and instead established one with the BOJ. In early 2020, Turkey provided another prominent example of a central bank that sought USD support but was apparently denied a swap line by the Fed, though the Fed did not publicly state its position.[45] Thus, the increased use of international swaps capitalizes upon central banks' autonomy and preference for a flexible model of international monetary cooperation. However, the lack of robust dollar liquidity safeguards for the majority of emerging and developing economies, in addition to the lack of clarity regarding how the Fed determines ex ante central bank eligibility for a swap line, stand as challenges within the global financial safety architecture and should be addressed in designing a more cohesive institutional framework.[46]

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[42] Kahn, *supra* note 22, at 28.

[43] Chairman Bernanke expressed that the optics of central bank coordination would likely be well-received by the markets and that it was important for the Fed to give [the swap lines] a try and "see what happens." *See* Conference Call of the Federal Open Market Committee (Dec. 6, 2007), https://www.federalreserve.gov/monetarypolicy/files/FOMC20071206confcall.pdf; Nathan Sheets, Edwin Truman & Clay Lowery, *Responding to the Global Financial Crisis: What We Did and Why We Did It*, BROOKINGS INST./YALE PROGRAM ON FIN. STABILITY (Sept. 11-12, 2018), https://ypfsresourcelibrary.blob.core.windows.net/fcic/YPFS/14%20B%20International%20Swaps%20Prelim%20Disc%20Draft%202018.09.11.pdf.

[44] Sheets, *supra* note 43, at 18.

[45] Laura Pitel & James Politi, *Top US Official Plays down Turkey's Prospects of Securing Dollar Finance,* FIN. TIMES (May 1, 2020), https://www.ft.com/content/4d93df16-9c86-4420-8a8d-4311a952f93c.

[46] Awrey, *supra* note 12, at 946.

IV. Existing Institutional Frameworks for Providing Foreign Currency Liquidity

As discussed above, central bank coordination and bilateral swap arrangements, as well as formal institutions such as the Chiang Mai Initiative and IMF, all fulfill distinct roles within the global liquidity provision architecture. Before this paper can consider a legal design that unifies their discrete features into a more cohesive framework, however, it is important to engage in a closer examination of each existing mechanism and its relative effectiveness.

1. The Fed's Central Bank Liquidity Swaps

Some notable commentators have observed that the Fed's central bank liquidity swaps in 2008 and 2009 played a critical role in averting a larger crisis within the international banking system.[47] Despite the expansion of central bank diplomacy and the use of bilateral swaps, the Fed's legal authority to enter into liquidity swaps—derived from section 14 of the Federal Reserve Act—must strike a careful balance between sound economic policy and political feasibility.

Section 14 governs "Open-Market Operations" and provides each of the twelve regional Federal Reserve banks the authority to "purchase and sell in the open market, at home and abroad, either from or to domestic or foreign banks . . . cable transfers." In particular, Section 14(e) provides the basis for the Fed to open and maintain accounts at foreign central banks. Fed officials and lawmakers have long understood "cable transfers" as claims to foreign currency.[48]

While Section 14 has historically provided the basis for the Fed's use of central bank liquidity swaps, at first blush, the swaps appear to promote monetary or financial stability *in other countries*.[49] Indeed, eligible central banks—which

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47 *See* ADAM TOOZE, CRASHED: HOW A DECADE OF FINANCIAL CRISIS CHANGED THE WORLD 210-15 (Viking 2018); Sheets, *supra* note 43, at 15.

48 *See* ALLAN H. MELTZER, A HISTORY OF THE FEDERAL RESERVE, BK. 1: 1951-1969 349 n.136 (2009). Cable transfers is also defined in subchapter V of title 31 of the U.S. Code as instruments "payable in the currency of a foreign country." 31 U.S.C. § 5151(a)(1).

49 Former Fed general counsel Howard Hackley justified the use of central bank swap lines based on both Sections 14 and 12 of the Federal Reserve Act. Section 14 grants Federal Reserve banks the authority to "open and maintain accounts in foreign countries," as well as to hold foreign currency in those accounts as a result of "open market purchases." Section 12 grants the Federal Open Market Committee authority over open market operations. Hackley noted that "no provision of present law . . . specifically refers to foreign currency or foreign exchange operations by the Federal Reserve System," as well as the accompanying lack of explicit legal authority for the Fed's swap operations. See Baker*, supra* note 5, at 627-28, for a more in-depth analysis of Hackley's memorandum on the legal authority for Federal Reserve foreign exchange operations; *see also Bretton Woods Agreement Act Amendment: Hearing on H.R. 10162 Before the Comm. on Banking & Currency*, 87th Cong. (1962) (including Memorandum of Howard Hackley, General Counsel, Bd. Of Governors of the

seem to be selected based on a combination of U.S. political considerations, the economic importance of the given country, and interconnectedness to the U.S. banking system—are under no ex-post obligation to report to the Fed the financial institutions that are recipients of the foreign central bank's dollar funding, raising concerns from Congress.[50]

Despite these concerns, however, the liquidity swaps have proven to be a highly effective Fed policy tool, and thus as it currently stands, Fed officials are unlikely to alter the status quo. Indeed, the Fed's arrangements with 14 foreign central banks during the global financial crisis and COVID-19 arguably reflects the Fed's swap lines' peak level of expansion. To demonstrate the benefits and importance of the Fed's role in preventing a currency crisis abroad and making the current swap arrangements politically tenable, the Fed has publicly promoted the swap lines as squarely within the U.S. national interest by emphasizing that, as the issuer of the world's primary reserve currency, Fed inaction would allow for financial instabilities that would lead to contagion or feedback into the U.S. economy.[51] In other words, the Fed has argued that the foreign swap lines promote *domestic* financial stability. The Fed has also been keen to point out that it does not assume exchange rate risk or credit risk associated with lending to individual financial institutions through the swaps.[52] Indeed, during the global financial crisis, the Fed even turned a profit on its swap operations.[53]

Notwithstanding its legal status as an independent government agency, the Fed is accountable to the public and Congress, which makes it unlikely that it will

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Fed. Reserve), https://fraser.stlouisfed.org/title/federal-open-market-committee-meeting-minutes-transcripts-documents-677/meeting-march-6-1962-22849/content/pdf/FOMC19620219Memo01.

[50] *See, e.g.*, Meeting of the Federal Open Market Committee on October 28-29, 2008, Fed. Res. Bank N.Y. 10-11, 32-35 (Oct. 28-29 2008), https://www.federalreserve.gov/monetarypolicy/files/FOMC20081029meeting.pdf; *see also* Joshua Aizenman, Hiro Ito & Gurnain K. Pasricha, *Central Bank Swap Arrangements in the COVID-19 Crisis,* NAT'L BUREAU OF ECON. RESEARCH (Mar. 2021), https://www.nber.org/system/files/working_papers/w28585/w28585.pdf; *see also* Awrey, *supra* note 12, at 1002; Members of Congress discussed the need to impose heightened transparency to reveal the identities of the commercial bank recipients of foreign central bank lending funded by the Fed's currency swaps, which had peaked at $586 billion in December 2008. Scott Lanman and Bradley Keoun, *No One Says Who Took $586 Billion in Fed Swaps Done in Anonymity,* BLOOMBERG (Dec. 11, 2011), https://www.bloomberg.com/news/articles/2011-12-11/no-one-says-who-took-586-billion-in-fed-swaps-done-in-anonymity.

[51] The Federal Reserve website's central bank swap FAQ page states that the swaps are "helping to maintain the flow of credit to U.S. households and businesses by reducing risks to U.S. financial markets caused by financial stresses abroad." *See* Awrey, *supra* note 12, at 937 n. 5; *see also* Press Release, Swap Line FAQs (Mar. 19, 2020), https://www.federalreserve.gov/newsevents/pressreleases/swap-lines-faqs.htm; Sheets, *supra* note 43, at 7, 14.

[52] *See* Press Release, Swap Line FAQs (Mar. 19, 2020), https://www.federalreserve.gov/newsevents/pressreleases/swap-lines-faqs.htm.

[53] *Frequently asked questions: U.S. Dollar and Foreign Currency Liquidity Swaps*, Bd. of Governors of the Fed. Reserve Sys., https://www.federalreserve.gov/monetarypolicy/bst_swapfaqs.htm.

make its swap lines more widely available. Assuming that the Fed fails to allay Congress's concerns over the lack of transparency regarding the identities of the ultimate bank borrowers, swap line expansion would conceivably be politically costly, especially if the country requesting dollar liquidity assistance is viewed unfavorably.[54] Expansion of dollar liquidity provision also engenders moral hazard problems because a financial safety net provided by the U.S. encourages foreign financial institutions to potentially engage in undisciplined risk-taking and assume that USD will remain available even in the face of their own ineffective liquidity risk management.[55] Considering the possibility of Congressional disapproval and Fed officials' own reluctance to provide dollar liquidity "as a permanent service" for financial markets, it may be reasonable for any global emergency dollar liquidity solution to assume that the size and scale of the Fed's bilateral swaps lines in their current form have already reached their zenith and to rely on other mechanisms.[56]

2. Bilateral USD-for-Local Currency Swaps Outside of the Federal Reserve Framework

There are also a few notable examples of central banks obtaining dollar liquidity through swap lines outside of the Federal Reserve's swap arrangements. For example, in 2008, the Bank of Japan acted as a USD lender of last resort to countries in Asia facing dollar shortages, including Indonesia and India.[57] The BOJ also extended a $10 billion swap line to South Korea after initial hesitation by the Fed to provide dollar liquidity support.[58] Additionally, in 2018, the BOJ established a two-way "enhanced bilateral swap arrangement" with the Bank of Thailand, where both authorities could swap their local currencies for USD.[59]

Such flexible USD-for-local-currency swaps by the BOJ helped provide an additional source of USD flows for emerging Asian economies that enjoy robust relationships with the BOJ. With unlimited swap lines and having at times assumed the role of regional lender of last resort, the BOJ, in certain respects, acts as an

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54 *What does it mean that the Federal Reserve is "independent within the government"?*, Bd. of Governors of the Fed. Res. Sys., https://www.federalreserve.gov/faqs/about_12799.htm.

55 Professor Awrey succinctly identifies one of the major challenges of the current structure of swap lines as failing to "establish truly credible international commitments or constrain moral hazard problems stemming from ambitious state-sponsored liquidity insurance." Awrey, *supra* note 12, at 982; *see also* Baker, *supra* note 5, at 629-31.

56 Jeff Black, *Central Banks Make Swaps Permanent as Crisis Backstop,* BLOOMBERG (Oct. 31, 2013), https://www.bloomberg.com/news/articles/2013-10-31/ecb-makes-crisis-cash-lines-at-central-banks-permanent.

57 Duran, *supra* note 32, at 11.

58 *Id.* at 21.

59 Rosalind Z. Wiggins, *Central Banks use Swap Lines to Maintain the Flow of US Dollar*, Yale School of Mgmt. Program on Fin. Stability (Mar. 26, 2020), https://som.yale.edu/blog/central-banks-use-swap-lines-to-maintain-the-flow-of-us-dollar.

overseas "branch" of the Fed and can on-lend USD to third-party countries. In doing so, the BOJ provides, in essence, a backdoor to access the Fed's liquidity provision measures.[60] The other four central banks with access to unlimited amounts of dollar liquidity, given their deep technical expertise and disciplined liquidity management, can similarly provide USD to other central banks that have strong track records of prudent decision-making and strong debt sustainability. Such ad hoc arrangements nevertheless suffer from a lack of predictability, and indeed, most of the BOJ's swap lines with its neighboring central banks from the global financial crisis had expired prior to the start of the COVID-19 pandemic. Thus, bilateral swaps cannot alone be a substitute for a more cohesive institutional framework for providing emergency dollar liquidity.

3. Regional Institutional Arrangements – the Chiang Mai Initiative

The Chiang Mai Initiative (CMI) is perhaps the most prominent example of an emergency dollar liquidity arrangement established at the regional level. In the aftermath of the Asian Financial Crisis, the ASEAN+3 countries founded the CMI in 2000, which originally consisted of a network of bilateral currency swaps denominated in USD.[61] During the global financial crisis, however, emerging market economies did not draw upon the CMI, even though it was created specifically to supplement the availability of lending at the multilateral level. At the time, the existing funding of $40 billion was insufficient for emerging market economies' needs, and only 20 percent of a member country's quota could be accessed without having to be part of an IMF program.[62] Thus, many emerging market economies had to deplete their foreign currency reserves to try to stem financial panic, but their currencies nonetheless depreciated.[63]

In 2010, the CMI became the Chiang Mai Initiative Multilateralization (CMIM), evolving from a network of bilateral swap arrangements into a collectively managed fund governed by a single multilateral swap contract that

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60 Steffen Murau, Joe Rini & Armin Haas, The evolution of the Offshore US-Dollar System: past, present and four possible futures, 16 J. OF INST. ECON. 767, https://www.cambridge.org/core/journals/journal-of-institutional-economics/article/evolution-of-the-offshore-usdollar-system-past-present-and-four-possible-futures/B36ED9082CECE54F3F5B8E8F40D15148#fndtn-information.

61 Chalongphob Sussangkarn, The Chiang Mai Initiative Multilateralization: Origin, Development and Outlook,
ADBI Working Paper No. 230 (July 2010), https://www.adb.org/sites/default/files/publication/156085/adbi-wp230.pdf.

62 Duran, *supra* note 32, at 7; *see* Hal Hill & Jayant Menon, *Asia's new financial safety net: Is the Chiang Mai Initiative designed not to be used?*, VOXEU (July 25, 2012), https://voxeu.org/article/chiang-mai-initiative-designed-not-be-used; *see also* William W. Grimes & William N. Kring, *Institutionalizing Financial Cooperation in East Asia: AMRO and the Future of the Chiang Mai Initiative Multilateralization,* 26 GLOBAL GOVERNANCE 428, 430 (2020), https://www.bu.edu/pardeeschool/files/2020/09/Grimes-Kring_proof-final9.2020.pdf.

63 Dominguez, *supra* note 8, at 22.

applies to all of its members and facilitates "prompt and simultaneous currency swap transactions."[64] Though it enjoyed strong political support from its member states' sovereigns, the CMIM was primarily a central bank-led effort toward greater regional cooperation.[65] In 2014, the CMIM was further strengthened when the size of its total commitment (in the form of USD contributions from its member states) increased to $240 billion and when the CMIM allowed members to draw 30 percent of their quota, rather than 20 percent, without triggering IMF involvement. Despite these reforms, however, the CMIM continues to be "functionally subordinate to IMF decisions" and remains largely untested; in fact, some observers view the CMIM as merely an example of an "early exercise in creating a swap network."[66]

In 2011, the ASEAN+3 Macroeconomic Research Office (AMRO), a formal international organization tasked with regional economic surveillance and designing CMIM lending programs, was established by treaty and registered as an international organization.[67] The creation of AMRO was an important step forward for the CMIM in developing the surveillance and lending capabilities, as well as the institutional autonomy necessary to potentially delink from the IMF and to establish independent legitimacy as a regional actor. Even as the CMIM experiences deeper institutionalization, however, member countries have continued to turn elsewhere for dollar liquidity funding during the COVID-19 pandemic, and the CMIM's true value as an "insurance policy" for its members is yet to be determined. Developing surveillance and lending expertise that is indigenous to AMRO is likely a precondition for autonomy from the IMF, particularly because the member countries would otherwise likely engage in political jockeying and impose political pressure on decisions to approve or deny swaps to member economies. Thus, the CMIM and AMRO will likely have to invest heavily in developing robust procedures and expertise over a long period of time before the CMIM can realize its potential as an instrument of emergency dollar liquidity provision.

4. IMF Facilities and SDR Allocations

As an international financial organization created by international treaty and with 190 members, the IMF plays a critical role in any global effort to promote international monetary and financial stability. The IMF possesses significant legal

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64 Agreement Establishing the ASEAN+3 Macroeconomic Research Office, *AMRO,* April 16, 2016, https://amro-asia.org/wp-content/uploads/2016/09/amro-agreement.pdf; *Japan's Financial Cooperation in Asia – Chiang Mai Initiative Multilateralization*, Ministry of Finance of Japan, https://www.mof.go.jp/english/international_policy/financial_cooperation_in_asia/index.html#:~:text=The%20CMIM%2C%20a%20multilateral%20currency,mechanism%20under%20a%20single%20contract.

65 Kahn, *supra* note 22, at 25.

66 Grimes, *supra* note 62, at 428; *id.* at 25.

67 Grimes, *supra* note 62, at 438.

authority to monitor the state of the global economy and the economies of member countries, to lend to countries with balance of payment difficulties, and to provide advisory and technical services to its members.[68] These powers closely align with the purposes of the Fund, outlined in Article I of the IMF Charter, which are, in relevant part:

> (i) To promote international monetary cooperation through a permanent institution which provides the machinery for consultation and collaboration on international monetary problems; and
> (v) To give confidence to members by making the general resources of the Fund temporarily available to them under adequate safeguards, thus providing them with opportunity to correct maladjustments in their balance of payments without resorting to measures destructive of national or international prosperity."[69]

An important source of financing for IMF members facing balance of payments deficits or seeking to supplement their foreign exchange reserves is the Special Drawing Right (SDR), an international reserve asset and unit of account based on a basket of key currencies, notably USD, Japanese yen, euro, pound sterling, and Chinese renminbi.[70]

SDR allocations are granted based on member countries' existing IMF quotas, which are calculated according to a formula that measures a given countries' relative position in the world economy, accounting for: GDP, openness, variability (measures the volatility of current receipts and net capital flows to the economy), and international reserves.[71] SDRs can supplement countries' foreign exchange reserves by allowing them to voluntarily exchange SDR holdings for hard currencies from other members, which provides another mechanism that countries can draw upon for dollar liquidity.[72] More precisely, when a country sells

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[68] *The IMF at a Glance*, IMF (Mar. 22, 2019), https://www.imf.org/en/About/Factsheets/IMF-at-a-Glance.

[69] Articles of agreement of the International Monetary Fund, *effective* Dec. 27, 1945, *as amended* Jan. 26, 2016, 2 U.N.T.S. 39.

[70] *Questions and Answers on Special Drawing Rights,* IMF (Aug. 23, 2021), https://www.imf.org/en/About/FAQ/special-drawing-right#Q1.%20What%20is%20an%20SDR?.

[71] *IMF Quotas,* Int'l Monetary Fund (Mar. 4, 2021), https://www.imf.org/en/About/Factsheets/Sheets/2016/07/14/12/21/IMF-Quotas.

[72] Such exchanges can also take place either as loans between IMF members or as part of a mandatory designation mechanism, whereby the IMF calls on members with sufficiently strong external positions to purchase SDRs from members with weak external positions, though this has not been activated since 1987. *Questions and Answers on Special Drawing Rights, supra* note 70; *see also* Christopher G. Collins & Edwin M. Truman, *IMF's Special Drawing Rights to the Rescue,* Peterson Inst. for Int'l Econ. (Apr. 10, 2020), https://www.piie.com/blogs/realtime-economic-issues-watch/imfs-special-drawing-rights-rescue#_ftn1.

SDRs in exchange for USD, its SDR holdings fall, while its foreign exchange reserves rise; conversely, if the country sells USD for SDRs, it depletes its foreign exchange reserves, and its SDR holdings go up.

Since allocations are granted in accordance with members' IMF quotas, SDR allocations primarily go to wealthy countries with stronger external positions and sound reserve management; however, IMF members considered to be U.S. adversaries, such as Iran, China, and Russia, also receive new allocations in proportion with their quotas. As of March 2021, the Fund has allocated SDR 204.2 billion (equivalent to about $318 billion), while its current lending capacity is SDR 705 billion (equivalent to about $1 trillion).[73] The current weighting used to determine the amount of the five currencies is 41.73 percent USD, 30.93 percent Euro, 10.92 percent Chinese renminbi, 8.33 percent Japanese yen, and 8.90 percent Pound sterling.[74] Based on current SDR allocations, only $50 billion can be deployed to emerging markets and $10 billion to low-income members.[75]

Many experts and policymakers, including Janet Yellen, the current U.S. Treasury Secretary, have expressed support for the IMF boosting international liquidity by supporting an additional $650 billion in SDR reserves that would help, in particular, developing economies better combat the economic effects of the COVID-19 pandemic.[76] While expanding SDR allocations would expand the availability of USD to emerging and developing economies, at present, many experts argue that the IMF's lendable resources remain insufficient and that its primary added value is in its debt service relief and technical expertise, rather than liquidity, to low-income countries.[77]

Expanding allocations is also politically fraught, and the lengthy approval process for a new allocation of SDRs underscores that, while the IMF can act primarily in a supportive emergency liquidity provision capacity, developing countries cannot rely too heavily on the IMF for rapid liquidity support. Although the IMF's Board of Governors is considering a proposal to create $650 billion in additional reserve assets, passage of such an allocation requires an 85 percent

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73 Eric Martin & Saleha Mohsin, *IMF Mulls Creating $650 Billion in Reserves After Yellen Nod*, BLOOMBERG (Mar. 23, 2021), https://www.bloomberg.com/news/articles/2021-03-23/imf-considers-plan-to-issue-as-much-as-650-billion-in-reserves; *Questions and Answers on Special Drawing Rights, supra* note 70; *Where the IMF Gets its Money,* Int'l Monetary Fund (Feb. 17, 2021), https://www.imf.org/en/About/Factsheets/Where-the-IMF-Gets-Its-Money#:~:text=The%20IMF's%20current%20total%20resources,position%20are%20used%20for%20lending.

74 *Special Drawing Rights (SDR)*, Int'l Monetary Fund (Aug. 5, 2021), https://www.imf.org/en/About/Factsheets/Sheets/2016/08/01/14/51/Special-Drawing-Right-SDR.

75 Marcos Buscaglia, *The IMF should inject liquidity through SDRs and fast*, FIN. TIMES (Mar. 17, 2020), https://www.ft.com/content/3375da16-f739-4d09-981b-67de10ad5ba2.

76 *IMF Mulls Creating $650 Billion in Reserves After Yellen Nod, supra* note 73.

77 Thomas Stubbs et al., *Whatever it takes? The global financial safety net, Covid-19, and developing countries*, 137 WORLD DEV. 1, 2 (2021), available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7462525/pdf/main.pdf.

weighted majority vote, and the United States, with a 16.51 percent voting share, can block the proposal.[78] Secretary Yellen has expressed support for the additional allocation, but strong Congressional opposition for an allocation of the size needed to effectively support developing countries' liquidity needs stands as a potential hurdle that may affect her calculus.[79]

The IMF's two liquidity facilities—the short-term liquidity line (STLL) and the flexible credit line (FCL) instrument—have been made available to countries "with very strong economic fundamentals and policy frameworks" since April 2020 but have not seen much take-up. This dynamic perhaps reflects the facilities' overly stringent ex ante eligibility criteria, or alternatively, the perceived stigma by some countries of relying on the Fund.[80] For example, as of March 2021, the IMF has not approved lending under the STLL, while it has approved lending under the FCL to Chile, Colombia, Mexico, Peru, and Poland, yet disbursements stand only at SDR 5.2 billion, or $5.3 billion.[81]

Emerging and developing countries' hesitancy to accept IMF assistance also occurred during the Great Recession. Many observers perceived the IMF as moving too slowly, as its most important board decisions on conditionality were made six months after the collapse of Lehman Brothers.[82] Additionally, some Latin American and Asian countries, including Brazil, Mexico, and South Korea, avoided the IMF "even after the introduction of new lending instruments without or with limited ex post conditionality" because of their experiences with the IMF during debt crises in the 1980s and 1990s.[83] Thus, instead of turning to the IMF's lending facilities to obtain USD, many emerging countries chose to rely on ad hoc bilateral arrangements during the global financial crisis. Notably, since the start of the COVID-19 pandemic, the IMF has provided emergency assistance with limited conditionalities to dozens of low-income countries facing urgent balance of payments needs through the concessional Rapid Credit Facility and Rapid Financing Instrument. According to some observers, however, these instruments take the form of IMF loans that may undermine countries' debt sustainability in the long-term, as the extension of emergency loans operates "under assumptions of a bounce-back in economic growth and expenditure-reducing fiscal consolidation"

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[78] Articles of Agreement, art. XVIII §§ 3, 4(a), 4(d).

[79] Saleha Mohsin, *Yellen Spars with GOP Senator over Expansion of IMF Funding,* BLOOMBERG (Mar. 24, 2021), https://www.bloomberg.com/news/articles/2021-03-24/yellen-gets-testy-with-gop-senator-questioning-over-imf-funding.

[80] Stubbs, *supra* note 77, at 6; *Short-term Liquidity Line (SLL)*, Int'l Monetary Fund (Feb. 17, 2021), https://www.imf.org/en/About/Factsheets/Sheets/2020/04/17/short-term-liquidity-line.

[81] *Weekly Report on Key Financial Statistics*, Int'l Monetary Fund (Mar. 26, 2021), https://www.imf.org/external/np/tre/activity/2021/032621.pdf.

[82] Duran, *supra* note 32, at 10; *see IMF implements major lending policy improvements*, Int'l Monetary Fund (Mar. 24, 2009), https://www.imf.org/external/np/pdr/fac/2009/032409.htm.

[83] Duran, *supra* note 32, at 18.

that might force additional financing under the IMF's regular programs, which include strict conditionalities that can have adverse socio-economic effects.[84]

Ultimately, countries' hesitancy in relying on the IMF during financial crises may reflect the perception that international monetary responses and financial crisis firefighting falls primarily within the purview of central banks, while the IMF is viewed—especially by the biggest emerging market economies—as the domain of finance ministers. For example, India, Brazil, South Korea, Mexico, and Russia are represented at the Fund by their finance ministers, while their central bank governors serve as alternate representatives.[85] Additionally, when the IMF was founded, the idea of serving as an international lender of last resort was "deliberately rejected" due to "concerns about excessive currency creation."[86] Thus, the IMF will likely continue to play an important role in providing financing and debt-service relief during times of economic distress, as well as in supporting the provision of dollar liquidity. However, its bureaucratic constraints make central bank coordination and swaps more effective for rapid and large-scale emergency dollar liquidity provision.

V. Designing a Global Framework for Dollar Liquidity Provision

The most crucial aspect of designing a global framework for dollar liquidity provision is to ensure that countries facing emergency dollar liquidity shortages are provided with predictable and reliable funding. This paper will consider two distinct paths. The first path involves bringing to bear elements from each of the arrangements outlined above: bilateral swap lines as established by the Fed and the five central banks with unlimited access to USD liquidity, the IMF providing debt relief and liquidity to low-income and developing countries, as well as the further institutionalization of USD swap networks at the regional level. The second and more ambitious path involves the Fed critically examining its role as a "financial State Department," establishing its statutory authority for creating central bank swap lines as a Section 13(3) power and creating a USD swap network at the Bank for International Settlements.[87] The second path importantly moderates the Fed's foreign policy activities and reinforces the USD's role as the de facto global currency, particularly in the face of new central bank digital currencies (CBDCs).

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84 Stubbs, *supra* note 78, at 6.
85 *Id*. at 14.
86 Baker *supra* note 5 at 620 n.97.
87 *See* Peter Conti-Brown & David Zaring, *Shining a Light on the Fed's Foreign Affairs*, 1 Wharton Pub. Pol'y Initiative Issue Briefs (2019); *see also* Peter Conti-Brown & David Zaring, *The Foreign Affairs of the Federal Reserve*, 44 J. CORP. L. 665 (2019).

1. Reinforcing the Existing Institutional Design

After the series of debt and currency crises in the 1980s and 1990s across Latin America and Asia, the central bank-led international financial crisis firefighting model has largely proven effective. While one can make a compelling argument that the architecture as it currently stands need not be dramatically altered because it works and has served the international financial system well, a few critical opportunities for improvement that do not require significant modification of the existing system nevertheless warrant some attention.

First, as Professor Daniel Awrey argues, the absence of clear ex ante criteria for access to the Fed's swap lines, as well as the "politically contingent nature" of swap line access, allow for the possibility that decisions surrounding dollar liquidity provision turn on domestic political considerations rather than the "objective of promoting global financial stability."[88] Rather than grant swap lines based on an imprecise set of factors that ostensibly includes whether the country enjoys a robust defense relationship with the U.S.,[89] the Fed could introduce formal ex ante eligibility criteria and qualifications that consider the size of the country's domestic economy, its potential for market disruption, and its interconnectedness to the global financial system.[90] The Fed's application of objective criteria enables it to more effectively target financial stability risks presented by dollar liquidity shortages. However, it may also result in countries that do not enjoy strong diplomatic relations with the U.S. receiving swap line access.

The Fed could also require that foreign central banks with swap lines maintain a list of the ultimate recipient institutions of dollar liquidity and the terms under which the loans were extended as an initial step toward enhancing accountability and addressing moral hazard challenges. In the absence of such ex-post conditions and the apparent permanence of USD liquidity support, the Fed runs the risk that foreign central banks will have less incentive to strictly regulate the issuance of short-term USD liabilities and that foreign financial institutions that benefit from the central bank swap lines will in turn increase risky borrowing behavior.[91]

Finally, the third-party provision of dollar liquidity is an important dimension of the existing system that could be strengthened. After consulting with the Fed and receiving either the Fed's acknowledgment (and thus tacit approval), or explicit authorization, the five central banks with unlimited access to USD liquidity via Fed swap lines should expand their swap lines with third party countries after applying their own careful judgments. The BOJ's provision of dollar liquidity to Indonesia and South Korea during the global financial crisis are

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88 Awrey, *supra* note 12, at 1005-06.
89 Aizenman, *supra* note 50, at 8.
90 Awrey, *supra* note 12, at 1006.
91 *Id.* at 1004-05.

examples of third-party dollar liquidity provision that promoted financial stability without the Fed having to enter into a contract with the ultimate recipient central bank and assume its credit risk. The ECB could similarly assume such a regional dollar liquidity provision role.

As this paper is being authored, the IMF is leaning toward expanding SDR allocations and the United States, the IMF's largest shareholder, has prepared to approve a $650 billion increase in reserves, an amount just below the threshold that triggers the requirement of Congressional approval. This move is indeed a welcome development that can play an important complementary role to the existing swap lines. While SDR allocations provide part of the solution, perhaps more importantly, the IMF is uniquely well-positioned to serve developing countries that have thus far been unable to access dollar liquidity through providing debt relief without onerous conditionalities, expanding access to its facilities, and leveraging its technical expertise to identify financial risks. A more targeted policy response by the IMF, coupled with the above clarifications to the Fed's liquidity swap lines, could immediately relieve some of the uncertainties surrounding the re-emergence of dollar shortages.

2. Increasing Democratic Accountability over the Fed's International Activities and Enhancing the Framework

Behind the Fed's decisive and effective actions during financial crises, as well as its robust engagement in central bank diplomacy, lies an obvious tension. In certain respects, the Fed, led by unelected officials, now maintains a foreign affairs agenda. Some observers, such as Professors Peter Conti-Brown and David Zaring, argue this poses a threat to the "traditionally executive role in foreign policy."[92] The growing area of Federal Reserve-led foreign affairs likely requires moderation through some degree of legislative and executive oversight. Indeed, central bank independence has been so fervently protected over the years, primarily because of concerns surrounding political influence in the implementation of monetary policy and the achievement of domestic policy goals (i.e., financial stability), rather than concern with emergency financial crisis response.[93]

In an increasingly interconnected monetary and financial system, the Fed necessarily engages in international coordination with other central banks and international organizations to fulfill its domestic mandate. However, it is also important that its diplomacy does not come into conflict with State Department and

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[92] *Shining a Light on the Fed's Foreign Affairs*, *supra* note 87, at 2.

[93] *See generally,* Slivinski, *supra* note 27; *What does it mean that the Federal Reserve is "independent within the government"? Bd. of Governors of the Fed. Rsrv. Sys. (Jan. 10, 2017),* https://www.federalreserve.gov/faqs/about_12799.htm; *see also* Renee Haltom & John A. Weinberg, *Does the Fed Have a Financial Stability Mandate?*, 6 Fed. Rsrv. Bank of Richmond Econ. Brief 2 (2017).

White House agendas. One sensible and even-handed way to perform oversight over the Fed's international activities, as Professors Conti-Brown and Zaring argue, is to require enhanced disclosure in the form of testimony to Congress twice a year on its foreign policies. Such a reform is consistent with the Fed's practice of providing testimony to Congress on its monetary and regulatory policy, while preserving central bank independence for monetary policy.[94] A less moderate path for increasing democratic accountability, considered in the next section, involves directly tempering one of the Fed's most potent international policy tools: its swap lines.

A. Swap Lines Established Pursuant to Section 13(3)?

Placing the Fed's swap lines on sounder legal footing has been the subject of much recent scholarship. In particular, both Professors Baker and Lev Menand argue that the Fed's swap lines should be operated under Section 13(3) of the Federal Reserve Act. The liquidity swap lines, if understood as the functional equivalent of loans, arguably already satisfy the obligations of Section 13(3) with the exception of two procedural requirements: the determination of "unusual and exigent circumstances" by a supermajority of the Federal Reserve Board and the Treasury Secretary's approval.[95] Indeed, the swaps with foreign central banks (excluding the standing swap arrangements) have been extended concurrently with the Fed's other emergency lending facilities created under "unusual and exigent circumstances," the swap lines have been made "broadly eligible" to more than a dozen central banks, and the swaps are created specifically "for the purpose of providing liquidity to the financial system."[96] Additionally, recasting the statutory

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94 *Shining a Light on the Fed's Foreign Affairs*, *supra* note 87, at 2.

95 Professor Menand argues that a likely reason why the Fed chooses to base its statutory authority for the swap lines on Section 14, despite the swaps' purpose being to lend dollars to foreign central banks to on-lend to domestic banks and shadow banks, is path dependence. He cites former Fed general counsel Howard Hackley's 1961 memo reflecting on how central bank swap lines under Section 14 were a "stretch" but nevertheless "blessing" the practice. Menand also suggests Section 14 gives the Fed the flexibility to depict the swaps as "routine monetary policy management" and to reduce awareness of foreign lending activities. *See* Menand, *supra* note 21 at 53-54.

96 *Id.*; Section 13(3) of the Federal Reserve Act states, in relevant part:

> (A) In unusual and exigent circumstances, the Board of Governors of the Federal Reserve System, by the affirmative vote of not less than five members, may authorize any Federal reserve bank, during such periods as the said board may determine . . . to discount for any participant in any program or facility with broad-based eligibility, notes, drafts, and bills of exchange when such notes, drafts, and bills of exchange are indorsed or otherwise secured to the satisfaction of the Federal Reserve bank: *Provided*, That before discounting any such note, draft, or bill of exchange, the Federal reserve bank shall obtain evidence that such participant in any program or facility with broad-based eligibility is unable to secure adequate credit accommodations from other banking institutions.

authority for the swap lines as derived from Section 13(3) would immediately impose a modest political check (U.S. Treasury Secretary sign-off) on the Fed's swap lines and increase political accountability (the Federal Reserve Board Governors are appointed by the President and confirmed by the Senate).[97] The Fed would also have to include the swap lines in its relevant 13(3) reporting obligations to Congress.

While recasting the Fed's swap line authority as a 13(3) power would indeed effectively temper one important aspect of the Fed's international activities, measures to increase formalized oversight should not unduly constrain the Fed's ability to rapidly respond to global financial emergencies. Professor Baker convincingly argues that restricting swap line activation to emergency circumstances helps limit moral hazard and moderate systemic risk. However, Professor Baker also favors allowing Congress to select the foreign central banks eligible to receive swap lines and place quotas on the arrangements, reinforcing the notion that swap lines are granted based on political considerations rather than financial stability concerns.[98] There may be two unintended consequences of such a limitation to the Fed's provision of dollar liquidity. First, it can undermine the USD's status as the world's de facto international currency by preventing the expansion of the Fed's swap lines beyond a limited number of closely aligned countries. Second, developing and emerging economies that are denied emergency access to USD may, over the long-term, look to viable alternatives for settling international financial and trade transactions. Thus, the Fed might simply notify Congress the foreign central banks it plans to extend swap lines with and provide an opportunity for members of Congress to give comments or express concerns. Ultimately, a framework that not only increases democratic accountability over the Fed's international activities, but also capitalizes on central bank cooperation during financial crises could serve as the basis for an effective and enduring solution for resolving global dollar shortages.

> (B) As soon as is practicable after the date of enactment of this subparagraph, the Board shall establish, by regulation, in consultation with the Secretary of the Treasury, the policies and procedures governing emergency lending under this paragraph. Such policies and procedures shall be designed to ensure that any emergency lending program or facility is for the purpose of providing liquidity to the financial system, and not to aid a failing financial company, and that the security for emergency loans is sufficient to protect taxpayers from losses and that any such program is terminated in a timely and orderly fashion.

12 U.S.C. § 343(3).

[97] The swap lines are currently authorized by the Federal Open Markets Committee (FOMC), which is comprised of the Board Governors, in addition to five of the regional Federal Reserve Bank Presidents who are selected by the regional Reserve Bank's Board of Directors and who serve on the FOMC on a rotating basis. Baker, *supra* note 5, at 644.

[98] *Id.* at 647.

B. Leveraging the Bank for International Settlements and Reinforcing Dollar Dominance

A USD swap network, backstopped by the Fed during "unusual and exigent circumstances" and established at the Bank for International Settlements is one way to expand access to USD without requiring the Fed to make country-specific political calculations and to assume the credit risk of non-major central banks. The BIS is a 63-member international financial institution that seeks to promote "monetary and financial stability, to foster international cooperation . . . and act as a bank for central banks."[99] BIS membership accounts for roughly 95 percent of global GDP and is the most established forum for central bank deliberation and coordination. Additionally, the BIS already provides banking services, including reserve management, to a wide range of central banks.[100]

The BIS has also historically performed important crisis management functions. In particular, it has provided bridge financing to countries experiencing financial difficulties (often backed and guaranteed by G10 central banks), capitalizing on its "comparative advantage in speedy execution based on the mutual trust among governors honed by regular meetings."[101] Additionally, the BIS already holds an entrenched position in the global financial safety architecture. Although the BIS does not possess binding legal authority like the IMF, its ability to create soft law through central bank coordination and with the support of market forces—as with the Basel Accords which sets prudential regulatory standards—demonstrates that the BIS strikes the ideal balance between the agility that is required of central bank financial crisis firefighting and a more institutionalized framework that can create predictability for emerging economies.[102]

Under a BIS USD swap network, the BIS would serve as the Fed's counterparty, while member countries would contribute a mix of local currency,[103] global reserve currencies (e.g., euro, Japanese yen, pound sterling, and Swiss franc), USD, and USD-denominated assets such as Treasury securities, to a general

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99 *BIS Mission Statement*, BANK FOR INT'L SETTLEMENTS, https://www.bis.org/about/mission.htm (last visited Apr. 16, 2021).

100 *See generally* Davi A. O. Pinto, *The Quiet Central Bank Diplomacy at the Bank for International Settlements (BIS): Who Gets Voice and Vote?*, INST. OF APPLIED ECON. RES. (2020).

101 Claudio Borio & Gianni Toniolo, *One hundred and thirty years of central bank cooperation: a BIS perspective* 20 (BIS, Working Paper No. 197, 2006).

102 *Id.* at 21-22.

103 Eligibility for local currency contributions would likely have to be determined on a case-specific basis, because some members' currencies are unlikely to be used in international transactions. A feasibility study conducted by AMRO suggests relative size of GDP, foreign trade, foreign financial transactions, and foreign exchange reserves could be adopted as relevant criteria for determining local currency contribution eligibility. *See* Feng Lu, *Possible Modality of Local Currency Contribution to East Asia's Regional Financing Arrangement*, ASEAN+3 Macroeconomic Research Office (Jan. 31, 2019), https://www.amro-asia.org/possible-modality-of-local-currency-contribution-to-east-asias-regional-financing-arrangement/.

pool of funds and in turn be permitted to draw USD based on their specific allotment during dollar liquidity shortages. All BIS members would be eligible to access the swap network after making their required contributions, provided that they satisfy specific criteria that might include metrics such as the given country's debt sustainability as of a date before the relevant crisis event. While the BIS's highly sophisticated but limited research staff and budget likely preclude it from performing its own country surveillance and risk identification, such functions may be unnecessary, as the research could be readily obtained from the IMF, with which the BIS already enjoys a close working relationship.[104]

A USD swap network at the BIS that is broadly available to its membership, activated upon the determination of unusual and exigent circumstances by a supermajority vote of the Federal Reserve Board, and receives sign-off from the Treasury Secretary, would also likely fulfill the other requirements of Section 13(3). The swap network would be operationalized "for the purpose of providing liquidity to the financial system," the member countries' contributions could be made to ensure security "sufficient to protect taxpayers from losses," and a finding of unusual and exigent circumstances would likely be made only when the Fed is able to "obtain evidence" that participants are "unable to secure adequate credit accommodations from other banking institutions."[105] The Fed could also require, as stated above, that foreign central banks with swap lines maintain a list of the ultimate recipient institutions of dollar liquidity and the terms under which the loans were extended as both an accountability-enhancing measure and a method of containment for moral hazard risks. A USD swap network at the BIS also would not have to preclude the Fed from establishing bilateral swap lines with individual central banks as it deems appropriate.

It should be noted that the Fed is unlikely to be willing to cede full control over its swap lines because the BIS's shareholding structure is not favorable to the United States. The United States holds 7 percent of the BIS's voting power at BIS General Meetings, lower than that of the other five founding members, each of which hold 8.5 percent.[106] The Fed, despite a history of deep engagement with the BIS beginning in 1994, is likely to be wary of an unfavorable voting structure. Nevertheless, there are a few notable mitigating factors.

First, the BIS is in practice a European-owned international financial institution, with European central banks (including nearly all the NATO member countries) holding roughly three-quarters of the BIS's voting capital.[107]

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[104] *Policy development and implementation review,* BANK FOR INT'L SETTLEMENTS, https://www.bis.org /bcbs/review_process.htm (last visited Apr. 16, 2021).
[105] 12 U.S.C. § 343(3).
[106] The six founding members—Belgium, the United Kingdom, United States, Japan, Germany, and Italy—were initially granted most shares, and the BIS statutes ensured that their voting power was not diluted even as other members joined. Pinto, *supra* note 100, at 359-60.
[107] *Id.* at 361.

Conversely, countries that the U.S. considers strategic competitors or adversaries, such as Russia and China, each hold only 0.5 percent of the BIS's voting power. Second, General Meetings, one of three levels of BIS governance, are held for "relatively limited and bureaucratic tasks," such as determining the distribution of profits, approving the annual report, and determining remuneration to Board members.[108] Third, the Fed Chairman and New York Fed President are ex officio permanent members, along with the representatives from the five other founding members of the BIS's powerful 17-member Board of Directors, which determines the "strategic and policy direction of the Bank" and makes decisions in pursuit of fulfilling the BIS's statutory objectives.[109] The United States is the only country with two central bank representatives on the BIS Board of Directors, which is in theory the decision-making body best suited to determine swap line criteria, approve access, and impose accountability measures. Finally, the six founding central banks effectively enjoy a veto on critical decisions that include inviting new members, issuing shares, and amending the statutes. Specifically, a simple majority is required of the six ex officio members, in addition to two-thirds of the Board votes.[110]

Ultimately, the U.S. has an interest in both developing an efficient but more globalized framework for dollar liquidity and safeguarding financial stability through the BIS because it reinforces the USD as the de facto international currency by providing ready access to dollars during times of severe economic distress. If emerging markets and developing economies are unable to obtain dollar liquidity, they may turn to alternatives, with the People's Bank of China arguably seeking to position digital Yuan as a potential competitor to USD dominance.[111] While the threat to the dominance of the USD, posed by central bank digital currencies, is unlikely to be significant in the near-term, the Fed is nonetheless researching the creation of a U.S. central bank digital currency and appears to be aware of the challenges posed by falling behind.[112] This research is in its nascent stages, however, and expanding the availability of USD in a sustained and predictable fashion is a way to further safeguard global financial stability, reinforce the role of the dollar in global trade and finance, and preserve the dominance of the U.S. financial system.

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108 *Id.*

109 Statutes of the Bank for Int'l Settlements Ch. IV, art. 26.

110 *Id.* at art. 27(5).

111 Michael Hasenstab, *China's digital currency is a threat to dollar dominance,* FIN. TIMES (Apr. 13, 2021), https://www.ft.com/content/3fe905e7-8b9b-4782-bf2d-fc4f45496915.

112 Lael Brainard, *Digital Currencies, Stablecoins, and the Evolving Payments Landscape*, remarks at the "Future of Money in the Digital Age" sponsored by the Peterson Inst. for Int'l Economics and Princeton University's Bendheim Center for Finance (Oct. 16, 2019); Saleha Mohsin, *Biden Team Eyes Potential Threat from China's Digital Yuan,* BLOOMBERG (Apr. 11, 2021), https://www.sbloomberg.com/news/articles/2021-04-11/biden-team-eyes-potential-threat-from-china-s-digital-yuan-plans.

VI. Conclusion

This paper has evaluated the prevailing framework for emergency dollar liquidity provision that is currently based on a combination of the Fed's foreign liquidity swap lines, ad hoc arrangements between central banks, formalized central bank coordination, and IMF support. Without developing a more cohesive global framework that provides predictable and reliable funding to emerging and developing countries or placing the Fed's swap line authority on a stronger legal foundation, the possibility of global liquidity and currency crises continues to loom.

An enduring solution may involve recasting the Fed's swap line authority as a 13(3) power, capitalizing on central banks' ability to respond swiftly and effectively to financial crises, and leveraging the Bank for International Settlements. Achieving such a framework will not only likely reinforce the dollar's status as the de facto international currency while raising democratic accountability over the Fed's international activities, but will also importantly strengthen the international financial safety architecture and allow for countries to be better prepared when the next international financial crisis inevitably arises.