COMMENTARIES

A MEETING OF MINDS ON CENTRAL BANK DIGITAL CURRENCIES FOR THE UNITED STATES: COMMENTARIES FROM PARTICIPANTS IN THE *HARVARD NATIONAL SECURITY JOURNAL*'S OCTOBER 14, 2022 SYMPOSIUM ON DIGITAL CURRENCIES AND NATIONAL SECURITY

Commentary by Howell Jackson[*]

In the Article that launched today's symposium, *The Orkney Slew and Central Bank Digital Currencies*,[1] Professors Gorton and Zhang spin a whimsical tale of trading across a North Sea archipelago into a trenchant essay exploring the economic benefits of a U.S. central bank digital currency (CBDC) and the challenges such a currency might pose for this country's national security. In a luncheon debate, the symposium audience was treated to a lively exchange between two individuals uniquely suited to weigh into these issues: former Deputy National Security Adviser Daleep Singh, who previously served as a senior official at the New York Federal Reserve responsible for coordinating with foreign central banks, and Federal Reserve Board Governor Christopher Waller, who has for many years been a leading academic expert on macroeconomics and monetary policy as well as head of research at the Federal Reserve Bank of St. Louis. One could not hope for a better qualified pair of sparring partners.

Having served as the moderator of their engaging conversation, I will focus my remarks on what I understand to be the principal sources of agreement and disagreement between these two experts and share a few thoughts on next steps.

Without a doubt, the speakers' assessments of the risks that a Chinese CBDC poses to U.S. dollar dominance is their most striking point of disagreement. The core of the national security threat is that the rise of foreign CBDCs could threaten dollar dominance and substantially weaken this country's ability to deploy economic sanctions as an effective tool of foreign policy in the future. Within policy circles, the People's Republic of China (PRC) is thought to be the foreign country best positioned to exploit the emergence of CBDCs in this way, were it inclined to do so.[2] Both speakers agree that the PRC's recently-launched CBDC—the e-CNY—lacks critical privacy protections and an underlying legal structure that would be necessary

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[1] *See* Gary B. Gorton & Jeffery Y. Zhang, *The Orkney Slew and Central Bank Digital Currencies*, 14 HARV. NAT'L SEC. J. 1 (2022).
[2] Some commentators posit, however, that China's development of a CBDC is better understood as a response to domestic priorities as opposed to foreign policy considerations. *See, e.g.*, Jake Laband, *Existential Threat or Digital Yawn: Evaluating China's Central Bank Digital Currency*, 63 HARV. INT'L L.J. (forthcoming 2023).

to provide the most formidable challenge to dollar dominance. And both also agree that, as of 2022, the dollar still retains substantial advantages over any other currency seeking to supplant the dollar's position in global finance.

Where the speakers differ is in their assessment of the risk that China's CBDC might pose. Most notably, and harkening back to the path whereby the dollar surpassed the British pound in the first half of the twentieth century, Mr. Singh emphasizes the possibility that China could leverage its increasing importance in international trade to shift a greater share of global flows of goods and services to transactions denominated in its currency, the renminbi (RMB). Singh suggests that, by requiring its trading partners to accept RMB-denominated contracts, the PRC could shift global financial power away from the United States and towards China. As firms in developing countries incurred more RMB-denominated liabilities, their central bankers would likely increase their balances in RMB-denominated reserves in order to hedge shifting foreign currency exposures, thereby pulling reserve balances out of U.S. Treasury holdings. This shift in reserve balances from dollars to RMB would increase the role for RMB-denominated debt and for the e-CNY in global finance. Where Governor Waller is skeptical as to the magnitude of such a shift, especially given network effects of existing payment systems and the privacy and rule-of-law concerns that accompany the e-CNY, Singh is less sanguine that the "exorbitant privilege" of dollar dominance will necessarily persist decades into the twenty-first century.

One source of this divergence of views relates to the speakers' different assessments of the technological capabilities of a CBDC. At several points in the exchanges that followed their formal presentations, Governor Waller questioned how global finance could be transformed simply by allowing businesses and individuals to have "checking accounts" at the Federal Reserve[3] or, by implication, at the People's Bank of China. As Mr. Singh noted in his remarks and as came up at several points in comments from other panelists at the symposium, a well-designed CBDC could settle transactions in real time—whether domestic or international—at staggering volumes. As one panelist noted, the e-CNY reportedly can handle 300,000 transactions per second,

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[3] To be fair, many of the early discussions of a CBDC for the United States have focused on retail access to accounts at the Federal Reserve. *See, e.g.*, Morgan Ricks, John Crawford & Lev Menand, *FedAccounts: Digital Dollars*, 89 WASH. L. REV. 113 (2021). In that context, focusing on the value of accounts at the Federal Reserve is a helpful construct, and in an earlier speech, Governor Waller raised probing questions as to whether a retail CBDC would actually solve any legitimate market failures in the retail market. *See* Christopher J. Waller, CBDC: A Solution in Search of a Problem?, Speech at the American Enterprise Institute (Aug. 5, 2021), https://www.federalreserve.gov/newsevents/speech/waller20210805a.htm [https://perma.cc/4FTV-P5JK]; Howell Jackson & Timothy G. Massad, *The Treasury Option*, BROOKINGS INST. (Mar. 2022), https://www.brookings.edu/research/the-treasury-option-how-the-us-can-achieve-the-financial-inclusion-benefits-of-a-cbdc-now [https://perma.cc/KYZ3-U69Y] (discussing other approaches to expanding retail access).

which is significantly more transactions per second than the Visa and Mastercard networks can handle. And work being done at MIT has suggested that a U.S. CBDC could plausibly exceed 1 million transaction a second.[4] While the latency and transactional volumes of cross-border exchanges across different CBDCs may not achieve these levels, ongoing work into cross-border CBDC transactions may well produce an exchange system that obviates current practices of routing most foreign exchange transactions through U.S. dollars, which Governor Waller describes in his remarks as one important current source of dollar dominance.[5] Moreover, if these cross-border exchange systems are created and the U.S. dollar does not have a CBDC to incorporate, U.S. dollar dominance could be further eroded. Accordingly, weakness in the PRC's legal and privacy protections may be offset by the technological advantages of a Chinese CBDC linked into a new international payments system that is built for CBDCs and supported by a well-designed system of exchanges that, as Mr. Singh explains, are currently being developed.[6]

Another important divergence in the two speakers' perspectives concerns the role that international organizations, most especially the Bank of International Settlements (BIS), will play in this area. As Governor Waller rightly notes, the United States has worked closely with the BIS over the years and is currently engaged in a number of potentially promising refinements of the current system of international payments.[7] To Governor Waller, the work of these international organizations remains an important bulwark of Pax Americana and its financial cousin, U.S. dollar dominance.

Here too, Mr. Singh is less sanguine, noting the increasingly important role that the PRC is playing with international standard setting bodies[8] and the possibility that the PRC will attempt to have the same influence at the BIS (and elsewhere) as the architecture for cross-border CBDC transactions is developed and critical decisions are made about privacy protections and mechanisms for anti-money laundering (AML), counterterrorism, and financial sanctions. As Professor Giulia Fanti's symposium contribution nicely

[4] Mr. Singh refers to some of these capabilities in his remarks. Daleep Singh, *It's Not Just the Economics: Why U.S. Leadership on CBDCs is a National Security Imperative*, 14 HARV. NAT'L SEC. J. 49, 57–58 (2022); *see also* James Lovejoy et al., *A High Performance Payment Processing System Designed for Central Bank Digital Currencies*, MIT MEDIA LAB (Feb. 3, 2022), https://www.media.mit.edu/publications/a-high-performance-payment-processing-system-designed-for-central-bank-digital-currencies [https://perma.cc/5CQS-XMM8].
[5] *See* Governor Christopher J. Waller, *The U.S. Dollar and Central Bank Digital Currencies*, 14 HARV. NAT'L SEC. J. 60, 61 (2022).
[6] *See* Singh, *supra* note 4, at 52 (citing survey by the Atlantic Council).
[7] *See* Waller, *supra* note 5, at 64 (citing report of the Financial Stability Board).
[8] *See* Singh, *supra* note 4, at 55 (analogizing to Chinese efforts with respect to 5G network infrastructure).

illustrates,[9] many technical decisions regarding the design of CBDCs and their cross-border exchange will determine the efficacy of privacy protections and law enforcement in the future. What Mr. Singh fears—and really the core of his thesis—is that unless the United States is an active participant with a bona fide CBDC program of its own at the table with BIS and other international fora, the design of cross-border CBDCs will not reflect U.S. values and security concerns. Rather, cross-border CBDCs will reflect the priorities and values of China and other geopolitical rivals.

To be sure, Mr. Singh's concerns here presuppose that U.S. allies who are already in the process of developing CBDCs will not themselves safeguard our shared interests at BIS and elsewhere even if the United States is not an active participant in these conversations. On this point, other symposium panelists offered a different perspective, recalling past trans-Atlantic conflicts over U.S. policy. At least with respect to the imposition of U.S. financial sanctions, it was not that long ago that the primary objections came from European allies aggravated by substantial U.S. sanctions imposed on, among others, French and Swiss banks, for AML and sanctions violations.[10] One might reasonably wonder how zealously countries that previously objected to U.S. sanctions and AML restrictions will work to safeguard dollar dominance in negotiations at which the United States is not sitting at, or at least close to, the head of the table.

Another point where the speakers held overlapping, but ultimately divergent, views concerns the role of private stablecoins. Both speakers acknowledged that the money-like features of private stablecoins warranted serious public oversight, with Mr. Singh alluding to the potential risks of unregulated stablecoins[11] and Governor Waller focusing on the benefits of effective stablecoin regulation.[12] While Governor Waller did not envision private stablecoins to have a major role to play in global finance, he did—at the margin—see them as likely to extend dollar dominance as most of the major stablecoins today are denominated in dollars and operate, if adopted in foreign markets, in a manner similar to dollar-pegged currencies, thereby extending the influence of U.S. monetary policy.[13]

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[9] Giulia Fanti, *An Apparent Trilemma for Cross-Border Central Bank Digital Currencies*, 14 HARV. NAT'L SEC. J. 75 (2022).

[10] This history is nicely recounted in Pierre-Hugues Verdier, GLOBAL BANKS ON TRIAL: U.S. PROSECUTIONS AND THE REMAKING OF INTERNATIONAL FINANCE (Oxford Univ. Press, 2020).

[11] *See* Singh, *supra* note 4, at 55.

[12] *See* Waller, *supra* note 5, at 65–66.

[13] *Id.* at 66.

As Mr. Singh noted in passing and as other analysts have also speculated,[14] private stablecoins—most notably the unsuccessful launch of Libra/Diem— stimulate countries like China to push ahead their own plans for a CBDC, exacerbating the concerns raised by Mr. Singh. But for purposes of the national security issues central to the luncheon debate, the more important question may be whether the rise of private stablecoins would weaken U.S. national security interests in the same way that Mr. Singh fears that foreign CBDCs might. To a degree, the answer to that question depends on how well U.S. law enforcement agencies—most especially the Financial Crimes Enforcement Network (FinCEN) and Office of Foreign Assets Control (OFAC)—can police and interdict illicit stablecoin transactions on private blockchains, digital wallets, and DeFi arrangements.[15] Judging from discussions during the symposium's afternoon panels, where precisely these issues were explored, one cannot but be sympathetic to the challenges government officials face in designing and implementing effective, but practical, requirements for this rapidly evolving area of finance. From a national security perspective, perhaps the appropriate question is whether an international payments system, built around cross-border CBDC arrangements that are negotiated with an active U.S. presence, is a better way to police international finance than one designed in the first instance by private parties reflecting private values, subject to *ex post* oversight by regulatory and law enforcement agencies. As is often the case with difficult questions, there are tradeoffs that must be made between the virtues of private enterprise and the value of public leadership. The benefit of today's symposium is that it made the nature and import of these tradeoffs a bit clearer.

Finally, let me say a few words about institutional roles. One of the most fascinating aspects of the luncheon debate was the identity of the speakers themselves. Mr. Singh was speaking as a former senior official with the National Security Council (NSC), a body not typically associated with financial regulation. Governor Waller spoke as the leader of the Federal Reserve, an organization with a much-discussed dual mandate—pursuing the economic goals of maximum employment and price stability—that does not explicitly include national security matters and that rightly prizes its independence. While our system of financial regulation has some mechanisms to facilitate coordination, most notably the Financial Stability Oversight Council, neither the NSC or even the White House has a formal role in these arrangements and so one is left to wonder how exactly the NSC and the Federal

[14] *See* Singh, *supra* note 4, at 55; *see also* Timothy G. Massad, *Facebook's Libra 2.0*, BROOKINGS INST. (June 22, 2020), https://www.brookings.edu/research/facebooks-libra-2-0 [https://perma.cc/M7M4-KMUZ].
[15] The role that the Financial Action Task Force has played in an attempt to articulate and promote international standards in this area is recounted in Shlomit Wagman, *Cryptocurrencies and National Security: The Case of Money Laundering and Terrorism Financing*, 14 HARV. NAT'L SEC. J. 87 (2022).

Reserve are supposed to work out an appropriate response to the challenges of CBDCs, which quite clearly implicate both financial stability and national security concerns. One possibility, of course, would be to await congressional action, which Governor Waller suggested as a path forward towards the end of our discussion. But the capacity of Congress—especially a closely divided Congress—to devise a sensible and expert resolution of such challenging and technical questions is, to say the least, open to question. One would hope that both the Federal Reserve and the national security establishment would play a critical role in shaping our national response to the challenge posed by CBDCs. Thus, a more likely path forward is collaboration between the White House and the Federal Reserve, along with other key government agencies, precisely the kind of initiative contemplated in a report written in response to the Biden administration's March 2022 Executive Order.[16]

That initiative could, indeed, be a springboard for the kind of CBDC experimentation for which Professors Gorton and Zhang advocate in *The Orkney Slew*.[17] Embarking on a robust pilot program could also give the United States a seat at the table in shaping the development of global CBDC networks, thereby safeguarding the national security interests about which Mr. Singh is concerned. In the end, Governor Waller may be proven right that CBDCs, whether foreign or domestic, will not disrupt the shape of global finance or threaten the dollar's dominance. But, on the other hand, if Governor Waller turns out to be wrong, United States investment in CBDC technology, design, and international standards may prove critical to advancing U.S. national security and economic interests in the coming decades.

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[16] *See, e.g.*, U.S. DEP'T OF THE TREAS., THE FUTURE OF MONEY AND PAYMENTS: REPORT PURSUANT TO SECTION 4(B) OF EXECUTIVE ORDER 14067 (2022), https://home.treasury.gov/system/files/136/Future-of-Money-and-Payments.pdf [https://perma.cc/G2ZQ-VZWG]; WHITE HOUSE OFF. OF SCI. AND TECH. POLICY, TECHNICAL EVALUATION FOR A U.S. CENTRAL BANK DIGITAL CURRENCY SYSTEM (2022), https://www.whitehouse.gov/wp-content/uploads/2022/09/09-2022-Technical-Evaluation-US-CBDC-System.pdf [https://perma.cc/WF46-9YKL].

[17] *See* Gorton & Zhang, *supra* note 1, at 36 ("Experiments between central banks are helpful for learning about the costs and benefits of a proposed policy. This is an essential part of the policymaking process.").

Commentary by Antoinette Schoar[*]

Both speakers raise important and very valid points. While at first blush it seems that they are diametrically opposed, I find myself agreeing with both of them in parts.

Governor Waller observes that a CBDC, by merely replacing private bank accounts with central bank accounts, does not change the appeal of the dollar as a reserve currency nor as a means of payment. He rightfully points out that the underlying economic forces that determine the attractiveness of the dollar—for example, the strength of the U.S. economy, central bank independence, and the rule of law—are not necessarily changed by CBDC adoption. In fact, one might even go further to say that any country considering adopting a CBDC would have to be very careful to avoid creating systemic risks for the banking system, as a CBDC could make it easier for citizens to cause a bank run by withdrawing deposits from private bank accounts and transferring them to the CBDC at the slightest rumor that anything is wrong with a bank.

But Daleep Singh raises the important point that CBDC adoption may do more than only establish bank accounts at the central bank. Central banks might use discussions on CBDC adoption to set new standards for international money transfers, as well as for CBDC privacy and security protocols. In this case, the United States should have a seat at the table from the beginning. Given the importance of network externalities within payment systems, once a critical mass of people outside the United States adopt certain CBDC protocols, it might be more difficult to switch to new protocols. And as a result, U.S. citizens might be forced to accept CBDC standards that are suboptimal when transacting with people outside the United States. In such a scenario, U.S. citizens would likely seek to use efficient or convenient alternatives that are interoperable with the rest of the world, such as a U.S. CBDC or other payment rails. As we see currently, international payment transfers, including those to and from the United States, are often cumbersome and expensive and thus there is clear demand for better solutions. A recent whitepaper from the Hoover Institution lays out many of these issues in a very thoughtful way.[1]

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[1] *See generally* HOOVER INST., DIGITAL CURRENCIES: THE US, CHINA, AND THE WORLD AT A CROSSROADS (Darrell Duffie & Elizabeth Economy eds., 2022), https://www.hoover.org/sites/default/files/research/docs/duffie-economy_digitalcurrencies_web_revised.pdf [https://perma.cc/WP4C-MZ9R].

Commentary by Timothy Massad[*]

Like Professor Schoar, I agree with Governor Waller's comments that there are a variety of factors that affect the attractiveness of the dollar including the strength of the U.S. economy, central bank independence, and the rule of law. But in the discussion, I suggested that there is a difference between the dollar being attractive as a reserve currency (and dollar investments being attractive as safe assets) versus dollar payment systems being attractive. Market participants may regard dollar-denominated assets, particularly U.S. Treasuries and cash, as the safest of assets because of the factors Governor Waller cites as well as others, such as the depth and liquidity of the U.S. Treasury market and the ease of transferability. But market participants could maintain dollar-denominated investments and still move away from dollar-based payment systems if viable and attractive alternatives to the latter are developed. The exploration of CBDCs by other countries appears to be motivated in part by a desire to be less dependent on dollar-based payment systems, not necessarily to reduce dollar-denominated investments. This seems to be true not just of China, but also of Europe. The United States could be adversely affected—in terms of both economic and potentially foreign policy interests—if alternatives to dollar-based payment systems are developed that have greater speed, efficiency, functionality, or other advantages. Development of foreign CBDCs that are interoperable across national borders might lead to such adverse effects. Daleep Singh recognized this risk and recognized that the United States needs to engage in research and development of CBDCs in part to be an effective voice at the table as countries discuss CBDC interoperability and modernization of cross-border payment systems.

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