August 3, 2020

Chief Counsel's Office
Attention: Comment Processing
Office of the Comptroller of the Currency
400 7th Street, SW., suite 3E-218
Washington, DC 20219

<u>Via Federal eRulemaking Portal</u>

> *Re: Docket ID OCC-2019-0028*
> *National Bank and Federal Savings Association Digital Activities*

Dear Acting Comptroller Brooks,

Ketsal[1] respectfully submits this letter in response to a request by the Office of the Comptroller of the Currency (the "**OCC**") for comments regarding the above-referenced advance notice of proposed rulemaking (the "**ANPR**").[2] We appreciate the opportunity to comment and to express our support for the OCC's decision to advance the discussion on electronic banking activities as they relate to cryptocurrencies.[3] Technological advances have made new financial products and service offerings available and we hope to highlight how national banks may provide these offerings to customers under existing law and regulatory guidance.

1. Introduction

Ketsal is a boutique regulatory, litigation, and corporate law firm with attorneys practicing in New York, Washington, D.C., and Washington state. Our clients include emerging companies engaging in key innovations in financial services, with a particular focus in the domain of blockchain-based financial products and services. While our experiences advising these clients inform our comments, our comments represent our own views and are not intended to represent those of our clients.

We write in general support of the OCC's ANPR, and in particular of the OCC's desire to review existing regulation in the context of innovative financial products and services made possible by blockchain technology. With respect to the ANPR, we encourage the OCC to consider the following:

- A declaration that products and services that involve cryptocurrencies or that incorporate blockchain technology ("**Blockchain-based Offerings**"), beyond cryptocurrency

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[1] Blakemore Fallon PLLC d/b/a Ketsal.

[2] Office of the Comptroller of Currency, National Bank and Federal Savings Association Digital Activities, 85 Fed. Reg. 40827 (proposed June 4, 2020).

[3] Adopting the terminology used in OCC Interpretive Letter No. 1170 (July 22, 2020), we use the term "cryptocurrencies" to refer to "digital currencies" or "virtual currencies . . . designed to work as a medium of exchange and are created and stored electronically," and that term "encompasses digital assets that are not broadly used as currencies."

safekeeping and custody, are within the scope of permissible activities for national banks, citing authority under 12 C.F.R. Part 7, Subpart E[4] to "perform, provide, or deliver . . . any [otherwise authorized] activity, function, product, or service" through electronic means;[5]

- Codification of OCC Interpretive Letter #1170[6] (the "**Custody Letter**") in the nonexclusive, illustrative list of permissible activities in 12 C.F.R. § 7.5002(a);
- National banks are well-equipped to examine, classify and mitigate any safety and soundness risks associated with Blockchain-based Offerings;
- Stablecoins potentially offer efficiencies not available through legacy banking applications – for example, in the arena of real estate investment trusts ("**REITs**");
- A national bank charter specific to payments would be a boon to marketplace payments providers, and a national bank charter specific to lending would consolidate systemic risk for lenders focused on specific business verticals; and
- COVID-19 has highlighted fractures and inefficiencies in existing customer onboarding and branch banking requirements.

2. Blockchain-based Offerings

In its Custody Letter, the OCC explained that custody and safekeeping services for physical and electronic assets are permissible activities for national banks,[7] and restated that national banks have authority to perform via electronic means "any activity, function, product, or service [a national bank] is otherwise authorized to perform, provide, or deliver."[8] Relying on the "longstanding 'transparency doctrine,' under which the OCC looks through the means by which a product is delivered and focuses instead on the authority of the national bank to offer the underlying product or service,"[9] the OCC concluded that national banks have permission to custody cryptocurrencies.[10]

Below, we first comment on the pragmatic effect the Custody Letter may have on traditional banking activities. Second, we note national banks may seek to provide Blockchain-based Offerings (outside of cryptocurrency safekeeping or custody) by making use of the conclusion in the Custody Letter – that the OCC, in looking to the substance of authorized activities, not their form, has clarified national banks are authorized to engage in electronic activities even where those activities may involve cryptocurrencies or distributed ledger technology.

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[4] 12 C.F.R. § 7.5000 *et seq.*
[5] 7 C.F.R. § 7.5002(a).
[6] OCC Interpretive Letter No. 1170 (July 22, 2020).
[7] Custody Letter, 6, citing OCC Conditional Approval 479 (July 27, 2001) (Conditional Approval 479).
[8] 12 C.F.R. § 7.5002(a).
[9] Custody Letter, 8, citing 67 FR 34992, 34996 (May 17, 2002).
[10] Custody Letter, 8, ("Because national banks are authorized to perform safekeeping and custody services for physical assets, national banks are likewise permitted to provide those same services via electronic means (i.e., custody of cryptocurrency).").

Pragmatic Effect of the Custody Letter on Traditional Banking Activities[11]

National banks traditionally offer demand deposit[12] and lending services[13] to customers. Licensed money transmitters already offer custodial services to retail customers, and in some cases permit customers to withdraw and deposit cryptocurrency on demand. In other words, some licensed money transmitters offer what amounts to a demand deposit account for cryptocurrencies. Further, licensed lenders are permitted to lend funds denominated in cryptocurrency, or lend fiat currency while taking cryptocurrency as collateral. In the collateralized lending scenario, the licensed lender may also custody a customer's cryptocurrency.

While the Custody Letter acknowledged a national bank may offer services ancillary to cryptocurrency safekeeping or custody,[14] it did not address the use of blockchain technology to facilitate core banking services of deposit taking and lending.

With respect to deposit taking, we note the following language from the Custody Letter:

> . . . a bank 'holding' digital currencies on behalf of a customer is actually taking possession of the cryptographic access keys to that unit of cryptocurrency. Those keys are held in a 'wallet' that protects the keys from discovery by a third party. Keys can be stored in 'hot' wallets or 'cold' wallets. Hot wallets are connected to the internet, which makes them convenient to access but more susceptible to hacking.[15]

> . . . Banks may offer different methods of providing cryptocurrency custody services, depending on their expertise, risk appetite, and business models. . . . Other banks may permit customers to transfer their cryptocurrencies directly to control of the bank, thereby generating new private keys which would be held by the institution on behalf of the customer. Such services may be more akin to traditional custody services, but as with traditional custody, would not permit the customer to maintain direct control of the cryptocurrency. Banks may also offer other custody models that may be appropriate.[16]

Based on the above language, the OCC likely understands a national bank may offer a "hot" wallet as part of its safekeeping or custodial services for cryptocurrencies. Retail customers are familiar with such wallets because that service offering exists in the market via licensed money transmitters. We contend that retail customers of national banks will likely wish to withdraw and

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[11] This section responds to Question 4 in the ANPR: "What types of activities related to cryptocurrencies or cryptoassets are financial services companies or bank customers engaged? To what extent does customer engagement in crypto-related activities impact banks and the banking industry? What are the barriers or obstacles, if any, to further adoption of crypto-related activities in the banking industry? Are there specific activities that should be addressed in regulatory guidance, including regulations?"

[12] 12 U.S.C. § 24 (Seventh) and 12 U.S.C. § 1832.

[13] 12 U.S.C. § 24 (Seventh).

[14] Custody Letter, 8 n. 37.

[15] Custody Letter, 6.

[16] Custody Letter, 8 n. 37.

deposit cryptocurrency on demand from their "hot" wallet, and as such will treat the bank's cryptocurrency custody service as, effectively, a demand deposit account for cryptocurrencies. Thus, just as "safekeeping services . . . evolved into banks providing custodial services to their customers,"[17] cryptocurrency custodial services may naturally evolve into demand deposit services for cryptocurrencies.

With respect to lending, national banks can certainly lend fiat to customers, and we believe some national banks may as a practical matter look to the practice of currently licensed lenders and consider treating cryptocurrency custodied at the national bank as collateral for fiat loans made to the bank's retail customers.

Effect of the Custody Letter on Other Banking Activities[18]

In addition to the traditional banking activities referenced above, national banks have authority to engage in a range of activities or services, including identity verification,[19] credit underwriting,[20] payments processing,[21] trade finance[22] and letters of credit,[23] records management,[24] data processing and management,[25] escrow,[26] clearing and execution,[27] asset securitization,[28] securities lending,[29] certificates of deposit,[30] insurance,[31] rewards programs,[32] and providing access to an electronic marketplace as a finder.[33]

We ask the OCC to consider a declaration that products and services that involve Blockchain-based Offerings, beyond cryptocurrency safekeeping and custody, are within the scope of permissible activities for national banks. 12 C.F.R. Part 7, Subpart E grants national banks the authority to perform via electronic means any activity they are otherwise authorized to perform;

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[17] Custody Letter, 6 n.23.

[18] This section responds to Question 5 in the ANPR: "How is distributed ledger technology used, or potentially used, in banking activities (e.g., identity verification, credit underwriting or monitoring, payments processing, trade finance, and records management)? Are there specific matters on this topic that should be clarified in regulatory guidance, including regulations?"

[19] 12 U.S.C. § 24 (Seventh); 12 C.F.R. § 7.5005; and OCC Conditional Approval 267 (Jan. 12, 1998) (Conditional Approval 267).

[20] _See, e.g._, 12 C.F.R. § 34.62.

[21] 12 U.S.C. § 24 (Seventh); 12 C.F.R. § 7.5002; and Conditional Approval No. 361 (Mar. 3, 2000).

[22] Corporate Decision No. 2005-02 (March 24, 2005).

[23] 12 C.F.R. § 7.1016.

[24] Conditional Approval No. 361 (March 3, 2000); and OCC Interpretive Letter No. 944 (Aug. 12, 2002).

[25] 12 C.F.R. § 7.5006; and Conditional Approval No. 479 (July 27, 2001).

[26] 12 U.S.C. § 24 (Seventh); 12 C.F.R. § 7.5001, 7.5002; and Letter from Thomas G. DeShazo, Deputy Comptroller (May 6, 1968).

[27] OCC Interpretive Letter No. 494 (Dec. 20, 1989); and OCC Interpretive Letter No. 1014 (Jan. 10, 2005).

[28] 12 C.F.R. § 1.3(g).

[29] OCC Interpretive Letter No. 1026 (Apr. 27, 2005).

[30] OCC Interpretive Letter No. 385, reprinted in 1988-1989 Transfer Binder, Fed. Banking L. Rep. (CCH) ¶ 85,609 (June 19, 1987).

[31] 12 U.S.C. § 92, 12 C.F.R. § 7.1001; 12 U.S.C. § 24 (Seventh); 12 U.S.C. § 6712; 12 C.F.R. Part 2; 12 C.F.R. § 5.34(e)(5)(v)(L).

[32] OCC Corporate Decision 2003-10 (July 27, 2003).

[33] 12 C.F.R. § 7.5002(a)(1); Conditional Approval No. 369 (February 25, 2000); and OCC Interpretive Letter No. 875 (October 31, 1999).

national banks have authority to engage in each of these activities via electronic means.[34] This grant of authority is technology agnostic.[35] However, a national bank's risk management obligations are ultimately *not* technology agnostic in that they require serious consideration of the risks specific to electronic services offered by a national bank.[36] Further, electronic activities that are part of, or incidental to, the above activities – whether they involve cryptocurrencies or distributed ledger technology – may fall within existing grants of authority to national banks.[37] A broad declaration by the OCC acknowledging Blockchain-based Offerings as permissible electronic activities could further innovation among national banks.

Given the very broad scope of traditional banking services that could be enhanced by, or improved upon, through the use blockchain technology by national banks, in what follows we provide further detail regarding a selection of Blockchain-based Offerings. Generally, we note that Blockchain-based Offerings have evolved over the past decade and continue to iterate on existing financial products and services. We are optimistic that these iterations will become more common. Over time, we expect national banks to take the view that permissible Blockchain-based Offerings encompass a wide range of activities beyond simple cryptocurrency safekeeping and custody. We do not believe, however, that national banks are likely to develop and offer a wide range of Blockchain-based Offerings *directly* to retail customers. Historically, innovative financial services have been offered *indirectly* by state banks (e.g., "challenger" banks) that work with an affiliate, bank partner, or third-party service provider.[38] We expect national banks, for the most part, to follow suit.

- **Identity Verification.** A number of distributed ledger technology solutions have been proposed and implemented[39] that allow individuals to create a digital identity and to prove the authenticity of their credentials or other personal information linked to their digital identity. The identity verification system may involve multiple parties providing verification services or it may be operated by a single party, such as a governmental agency or private corporation. In many cases, the personal data is stored off-chain, and the only data stored on the blockchain is a hash, pointer, or other information that simply references the personal data.

- **Credit Underwriting.** Where relevant data (history, background checks, digital identities, property ownership) has been digitized, the data can be verified automatically and may facilitate the underwriting process. It is possible for such automatic verification to occur within the domain of distributed ledger technology and smart contracts. For instance, a

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[34] 12 C.F.R. § 7.5002.

[35] *See supra* note 9.

[36] *See generally* Custody Letter, 9-10 (discussing how the safety and soundness requirements of a national bank might be viewed in light of the new service offering of cryptocurrency safekeeping and custody).

[37] 12 C.F.R. § 7.5001.

[38] *See, e.g.,* Larry Dignan, *Goldman Sachs banking-as-service plans accelerate with Amazon, Apple partnerships* (July 16, 2020), https://www.zdnet.com/article/goldman-sachs-banking-as-service-plans-accelerate-with-amazon-apple-partnerships/.

[39] *See, e.g.,* Uport, https://www.uport.me/ (last visited Aug. 3, 2020); and Evernym, https://www.evernym.com/ (last visited Aug. 3, 2020).

national bank tasked with verifying the ability of a customer to repay a loan may simply reference the cash value of the amount of cryptocurrency held in safekeeping by the national bank, and may compare that with on-chain data such as transaction history and off-chain data such as the typical price volatility of the asset used to verify ability to repay.

- **Payments Processing.** A typical blockchain network acts effectively as a payment network that settles peer-to-peer transactions. Some companies have developed "sidechains" that allow for alternate payments rails for legacy blockchain networks that take too long to settle, and such sidechains often require third parties to host nodes in order to support the faster processing of payments on legacy blockchain networks.[40]

- **Trade Finance and Letters of Credit**. Banks have used distributed ledger technology to attempt to streamline the trade finance process by automating manual processes used by the issuing bank, facilitating the issuance and exchange of letters of credit, and providing a verifiable record of transactions maintained and updated by the relevant parties.[41]

- **Records Management**. One state has recognized blockchain-based maintenance of corporate records as a valid means of recordkeeping provided certain conditions were met.[42] Further, a number of solutions have been proposed to use distributed ledger technology as a trusted public record keeping tool,[43] including as an alternative to land registries[44] or corporate ownership registries.[45]

- **Data Processing and Management.** Distributed ledger technology may allow individuals greater controls over data stored on a blockchain network, including the ability to grant

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[40] *What Is Lightning Network And How It Works*, Cointelegraph, https://cointelegraph.com/lightning-network-101/what-is-lightning-network-and-how-it-works (last visited Aug. 3, 2020).

[41] *See, e.g.,* Georgina Lee, *Bank-backed blockchain keeps trade finance flowing in virus choked supply chain, HSBC says* (Mar. 5, 2020), https://www.scmp.com/business/banking-finance/article/3065089/bank-backed-blockchain-keeps-trade-finance-flowing-virus; and Alun John, *HSBC processes first blockchain letter of credit using Chinese yuan* (Sep. 2, 2019), https://www.reuters.com/article/us-hsbc-hldg-blockchain/hsbc-processes-first-blockchain-letter-of-credit-using-chinese-yuan-idUSKCN1VN1QL.

[42] *See* Dorval et al, *Delaware provides legal clarification for blockchain maintenance of corporate records – the view from Canada* (Sep. 2017), https://www.nortonrosefulbright.com/en/knowledge/publications/82a6366f/delaware-provides-legal-clarification-for-blockchain-maintenance-of-corporate-records---the-view-from-canada.

[43] *See, e.g.,* Rachel Davidson Raycraft et al, *Blockchain alone can't prevent crime, but these 5 use cases can help tackle government corruption* (July 13, 2020), https://www.weforum.org/agenda/2020/07/5-ways-blockchain-could-help-tackle-government-corruption/.

[44] *See, e.g.,* Christine Kim, *Sweden's Land Registry Demos Live Transaction on a Blockchain* (June 15, 2018), https://www.coindesk.com/sweden-demos-live-land-registry-transaction-on-a-blockchain; Press Release, Overstock.com, Inc., *Overstock.com Subsidiary Medici Land Governance Signs MOU with Zambian Ministry of Land and Natural Resources to Build Blockchain Land Titling Program* (July 31, 2018), https://www.globenewswire.com/news-release/2018/07/31/1544696/0/en/Overstock-com-Subsidiary-Medici-Land-Governance-Signs-MOU-with-Zambian-Ministry-of-Land-and-Natural-Resources-to-Build-Blockchain-Land-Titling-Program.html.

[45] *See, e.g.,* Press Release, IBM, *French National Council of Clerks of Commercial Courts announce the deployment of a blockchain network developed by IBM, to streamline the management of commercial and corporate registry* (Mar. 14, 2019), https://newsroom.ibm.com/2019-03-14-French-National-Council-of-Clerks-of-Commercial-Courts-announce-the-deployment-of-a-blockchain-network-developed-by-IBM-to-streamline-the-management-of-commercial-and-corporate-registry.

access to certain data, to monitor time stamped events concerning the data, and to track their consent to provide data to companies.[46]

- **Escrow.** Distributed ledger technology and smart contracts are being used to provide escrow services for a variety of digital and digitized assets from real estate[47] to over-the-counter trading of digital currencies.[48]

- **Clearing and Execution.** Distributed ledger technology is being used as a tool for clearing and executing trades for various digital assets, including the settlement of equity securities trades in the United States.[49] The Australian Securities Exchange is in the process of replacing its clearing and settlement system for the cash equity market with a layer operating on distributed ledger technology.[50]

- **Asset Securitization.** A Swiss bank has announced plans to offer asset securitization services using a distributed ledger, services which would include issuance, transfer, portfolio management, asset servicing, and clearing and settlement.[51]

- **Securities Lending.** More than 15 banks are engaged in different phases of onboarding to HQLAx, a securities lending platform that enables market participants to redistribute collateral by facilitating the exchange of tokenized securities.[52]

- **Certificates of Deposit.** At least one bank has tested the issuance of a certificate of deposit on a blockchain network.[53]

- **Insurance.** One insurance company – for a short period – used the Ethereum blockchain and smart contracts to automate the compensation scheme payment process for passengers whose flights had been delayed.[54]

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[46] See, e.g., Gina Clarke, *How To Use Blockchain As A MarketPlace To Sell Your Own Data* (Sep. 17, 2018), https://www.forbes.com/sites/ginaclarke/2018/09/17/how-to-use-blockchain-as-a-marketplace-to-sell-your-own-data/#365f564b2a77; and Greg Milner, *Is My Personal Data Worth Anything? I Turn To Blockchain To Find Out* (Oct. 1, 2018), https://breakermag.com/is-my-personal-data-worth-anything-i-turned-to-blockchain-to-find-out/.

[47] *See, e.g.,* Press Release, Reasi, *Blockchain Escrow Platform Reasi Closes First Real Estate Deal* (July 31, 2018), https://www.prnewswire.com/news-releases/blockchain-escrow-platform-reasi-closes-first-real-estate-deal-300689556.html.

[48] *See, e.g., Public Chain for Digital Asset Escrow Whitepaper,* Themis (2018), https://themis.network/assets/Themis%20Whitepaper%20-EN.pdf; *Setting up advertisements to buy and sell Bitcoins,* LocalBitcoins.com, https://localbitcoins.com/guides/how-to-sell-bitcoins-online (last visited Aug. 3, 2020).

[49] *See* Ian Allison, *Paxos, Credit Suisse Claim First Blockchain-Based Settlement of US Equities* (Feb. 20, 2020), https://www.coindesk.com/paxos-credit-suisse-claim-first-blockchain-based-settlement-of-us-equities.

[50] *See CHESS Replacement*, ASX, https://www.asx.com.au/services/chess-replacement.htm (last visited Aug. 3, 2020).

[51] *See* Richard Kastelein, *SEBA Digital Bank To Offer Asset Securitization Services on the Public Corda Network Using DASL (July 15, 2020),* https://www.the-blockchain.com/2020/07/15/seba-digital-bank-to-offer-asset-securitization-services-on-the-public-corda-network-using-dasl/.

[52] *See ING invests in securities lending platform HQLAx,* Finextra (Mar. 9, 2020), https://www.finextra.com/newsarticle/35425/ing-invests-in-securities-lending-platform-hqlax.

[53] *See FIRM TESTS BLOCKCHAIN DEBT ISSUANCE,* J.P.Morgan (Apr. 20, 2018), https://www.jpmorgan.com/country/US/en/detail/1320566740924.

[54] *See* Elliot Hill et al, *AXA drops Ethereum-based flight insurance platform* (Nov. 10, 2019), https://finance.yahoo.com/news/axa-drops-ethereum-based-flight-160027248.html.

- **Rewards Programs.** A number of companies have launched and tested blockchain based loyalty reward programs.[55]
- **Access to an Electronic Marketplace as a Finder.** Some projects may rely on decentralized marketplaces to advertise their blockchain-based goods or services.[56]

As noted above, we do not believe national banks – even with an express declaration from the OCC supporting the bank's the authority to engage in such activities – are likely to directly provide these services to the public. It is more likely national banks will develop and provide Blockchain-based Offerings through a bank subsidiary or in partnership with blockchain technology service providers and brands, each of whom will rely on sponsorship from national banks to operate.

Additional Issues Regarding Blockchain-based Offerings

We raise two additional issues that require clarity with respect to Blockchain-based Offerings, one regarding state privacy laws and another regarding the concept of "finality."

First, emerging state privacy laws may impose more onerous obligations on national banks than federal law and may impede certain Blockchain-based Offerings by national banks. As the OCC has noted, some state law provides "greater consumer protection than is provided under the GLBA privacy provisions."[57] We suspect emerging state law may provide certain protections over personally identifiable information ("**PII**") stored on a distributed ledger, and those protections may be greater than what is provided for in federal law. For instance, if a national bank publishes a hash of PII to a distributed ledger, and state law considers a cryptographic hash of PII to be itself PII, it is not clear whether the national bank would be bound by state law with respect to its publication of the hash.

Second, we respectfully suggest that the OCC provide guidance regarding "finality" of cryptocurrency transactions. Finality in the context of traditional payments is clearly defined: once a payment has made its way through the Fedwire Funds Service and into the books of the Federal Reserve Bank, it is final and cannot be revoked.[58] Determining when a cryptocurrency transaction is "final" is more complicated. Broadly speaking, a cryptocurrency transaction is final when it is included in the blockchain and enough time or transactions have passed to ensure the transaction is no longer at risk of being undone by the later emergence of an alternative "longer" chain that does not include the subject transaction.[59] As with traditional payments, defining "finality" is important to provide legal certainty as to when a cryptocurrency transaction will be irrevocable

[55] *See, e.g., BMW to launch blockchain based rewards program in South Korea.* Ledger Insights (June 2020), https://www.ledgerinsights.com/bmw-blockchain-rewards-program-south-korea/.

[56] *See, e.g., Marketplaces,* defiprime.com, https://defiprime.com/decentralized_marketplaces (last visited Aug. 3, 2020).

[57] *See Privacy Rule, Small Bank Compliance Guide,* Office of the Comptroller of the Currency at *14 (Dec. 2001), https://www.occ.gov/news-issuances/news-releases/2001/nr-ia-2001-101a.pdf.

[58] *Fedwire Funds Services*, Board of Governors of the Federal Reserve System, https://www.federalreserve.gov/paymentsystems/fedfunds_about.htm (last updated Feb. 19, 2014).

[59] *See* Raphael Auer, *Beyond the doomsday economics of "proof-of-work" in cryptocurrencies,* BIS Working Papers (January 2019), https://www.bis.org/publ/work765.pdf.

even if one of the parties were to become insolvent after the initiation of a transaction but before the cryptocurrency transaction has been deemed final on the blockchain. Banks may find themselves in need of such clarification during periods of network congestion[60] and contentious hard forks.[61] We ask the OCC to provide guidance or interpretation defining "finality" in the context of cryptocurrency transactions custodied with a national bank. We note that Wyoming allows state banks to defer to contract law to determine finality in cryptocurrency custody relationships.[62]

3. Codification of Custody Letter

The OCC has historically codified prior guidance into 12 C.F.R. Part 7, Subpart E.[63] We respectfully propose that the OCC codify the Custody Letter by including cryptocurrency safekeeping and custody services in the nonexclusive, illustrative list of permissible activities in 12 C.F.R. § 7.5002(a).

4. National Banks Can Effectively Manage the Risk of Blockchain-based Offerings

As noted in the Custody Letter, "[a] national bank . . . engaging in new activities should develop and implement those activities consistent with sound risk management practices and align them with the bank's overall business plans and strategies."[64] National banks have ample resources available to help them identify the risks relevant to Blockchain-based Offerings, isolate or mitigate those risks, and monitor them.

Advocates of blockchain technology have long been concerned about a range of financial services risk related to Blockchain-based Offerings.[65] Currently, various transaction monitoring services[66] exist to assist regulated financial institutions with their anti-money laundering ("**AML**") and know your customer ("**KYC**") compliance obligations under the Bank Secrecy Act ("**BSA**").[67] Further, cryptocurrency exchanges often create or acquire proprietary transaction monitoring systems that allow for tracking of suspicious transactions that often go above and beyond the

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[60] *See, e.g.,* Alyssa Hertig, *Loveable Digital Kittens Are Clogging Ethereum's Blockchain* (Dec. 4, 2017), https://www.coindesk.com/loveable-digital-kittens-clogging-ethereums-blockchain.

[61] *See, e.g.,* Vitalik Buterin, *Hard Fork Completed* (July 10, 2016), https://blog.ethereum.org/2016/07/20/hard-fork-completed/.

[62] Wyo. Admin. Code 021.0002.19. § 5(h) ("To promote legal certainty and greater predictability of digital asset transactions, a bank and a customer may define in writing the terms of settlement finality for all transactions.").

[63] *See, e.g.*, 67 Fed. Reg. 34992, 34999-35000 ("Proposed § 7.5006(a) codified OCC interpretations confirming that a national bank may collect, process, transcribe, analyze, and store banking, financial, and economic data for itself and its customers as part of the business of banking.").

[64] Custody Letter, 9.

[65] *See, e.g.,* Angela Walch, *The Bitcoin Blockchain as Financial Market Infrastructure: A Consideration of Operational Risk,* 18 New York University Journal of Legislation and Public Policy 837 *(2015);* and Dong He et al, *Virtual Currencies and Beyond: Initial Considerations,* International Monetary Fund Staff Discussion Note (Jan. 2016), https://www.imf.org/~/media/Websites/IMF/imported-full-text-pdf/external/pubs/ft/sdn/2016/_sdn1603.ashx.

[66] *See, e.g.,* Chainalysis, https://www.chainalysis.com/ (last visited Aug. 3, 2020); Ciphertrace, https://ciphertrace.com/ (last visited Aug. 3, 2020); and Elliptic, https://www.elliptic.co/ (last visited Aug. 3, 2020).

[67] 31 U.S.C. § 5311 et seq.

exchange's compliance obligations.[68] With respect to many Blockchain-based Offerings, cryptocurrency exchanges,[69] investors,[70] regulatory authorities,[71] and non-governmental independent bodies[72] have expended countless hours identifying the risks involved in such offerings developing a common taxonomy for discussion of those risks,[73] and proposing solutions to manage the risk.[74] National banks have a wealth of resources available to them regarding risk mitigation for Blockchain-based Offerings.

5. Business Opportunities Within the Stablecoin Economy[75]

Briefly, we note that the emergence of stablecoins, "a type of cryptocurrency that is backed by an asset, such as a fiat currency or a commodity,"[76] presents the potential for unique efficiency gains that may create business opportunities for national banks. For example, complex revenue-sharing agreements involving various parties, such as some real estate investment trusts ("**REITs**"), involve a range of parties, including a trust company, a money transmitter, a broker, and a custodian of the REIT's investment funds, with each relationship subject to unrelated and non-standardized agreement terms, and involving an entire network of financial institutions. A national bank authorized to provide processing of investment payments, account reconciliation, settlement, and payout services via electronic means using stablecoins could play a central coordinating role in the REIT lifecycle, a role not possible today because legacy banking applications would require extensive and costly customization to accommodate the myriad relationships among the parties.

6. National Bank Charters for Payments and for Lending[77]

Moving our discussion away from blockchain and towards financial technology generally, we touch on financial technology companies focused on payments and lending.

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[68] *See, e.g.,* Varun Srinivasan, *Welcoming Neutrino to Coinbase* (Feb. 19, 2019), https://blog.coinbase.com/welcoming-neutrino-to-coinbase-b3f56171850d.

[69] *See, e.g.,* Chang Peng Zhao, *CZ on Regulations, Exchanges & Privacy* (Dec. 19, 2019). https://www.binance.com/en/blog/414733786553217024/CZ-on-Regulations-Exchanges--Privacy.

[70] *See, e.g.,* Scott Kupor, *On Crypto and Its Implications for American Technology Innovation* (July 2019), https://a16z.com/2019/06/19/crypto-and-american-innovation-policy-testimony-july-2018/.

[71] *See, e.g.,* Barbara D. Underwood, *Virtual Markets Integrity Initiative Report,* Office of the New York State Attorney General (Sep. 18, 2018), https://ag.ny.gov/sites/default/files/vmii_report.pdf?mod=article_inline.

[72] *See, e.g., Chamber's Congressional Briefing Provides Insight into Blockchain & AML Challenges & Opportunities,* Chamber of Digital Commerce (Oct. 23, 2019), https://digitalchamber.org/aml-congressional-briefing/.

[73] *See Code of Conduct Taxonomy for Cryptographic Assets,* Global Digital Finance (Oct. 2, 2019), https://www.gdf.io/wp-content/uploads/2019/10/0010_GDF_VIII-Principles-for-KYC-AML_Digital_171019.pdf/

[74] *See, e.g.,* Prakash Santhana et al., *Blockchain risk management* (2017), https://www2.deloitte.com/content/dam/Deloitte/us/Documents/financial-services/us-fsi-blockchain-risk-management.pdf.

[75] This section and the next are responsive to Question 7 in the ANPR: "What new payments technologies and processes should the OCC be aware of and what are the potential implications of these technologies and processes for the banking industry? How are new payments technologies and processes facilitated or hindered by existing regulatory frameworks?"

[76] Custody Letter, 2.

[77] This section responds to Question 10 in the ANPR: "What other changes to the development and delivery of banking products and services for consumers, businesses and communities should the OCC be aware of and consider?"

First, we note that the "marketplace payments" industry, which often operates nationwide, may benefit from a payments-specific national bank charter. An entity wishing to offer marketplace payments services must often become a money transmitter in most states, partner with an acquiring bank, and leverage that partnership when negotiating with the major card networks. This regime adds cost, operational complexity, and other administrative burdens that would be streamlined by a national bank charter limited to the provision of payments services. Such a charter would allow for payments intermediaries that operate nationwide to directly join major credit card networks, instead of relying on partnerships with other banks. It would also promote the OCC's general interest in nationwide uniformity, as state money transmitter law as it stands today requires a patchwork approach to licensing, and often has not taken into consideration innovations in payments (such as cryptocurrencies).

Second, we note that lenders focused on specific market verticals (e.g., residential landlords, 1099 contractors) may benefit from a lending-specific national bank charter. Currently, many banks partner with technology providers to advance innovative lending platforms, often outsourcing the compliance, underwriting, servicing, and other core lending functions. The banks themselves, as a result, may be issuing loans in an innovative manner to a broader range of consumers, but the risk that flows back is bank-wide, meaning that failure in the bank's lending line of business has the potential to harm the bank's customers who have may not even have knowledge of the bank's heavily outsourced lending activity. A lending-specific national bank charter that allows lending-only activity could limit risk exposure from nationwide innovations in lending to just those national banks with the specialized lending charter, would provide the national bank with the lending charter with deeper market knowledge on consumer borrowing habits because it would be more likely to *directly* offer innovative lending services and not outsource those functions, and ultimately, may result in less costly loans for end users.

7. Impact of COVID-19[78]

The global pandemic has accelerated the development of—and highlighted the need for—purely digital banking operations, from customer onboarding to direct deposit to peer-to-peer payments. For many unbanked and underbanked Americans, mobile phones have become literal lifelines, providing an array of digital products and services unimaginable only 10 years ago. In comparison, visiting a bank branch to receive even the most basic financial services is a time-consuming, costly, and in today's climate, an increasingly unsafe rarity. The Community Reinvestment Act's branch banking requirements impose significant costs on national banks but have not resulted in the delivery of improved financial services to those who most need it. Meanwhile, so-called "neo-banks" have arisen to fill the void in left by national banks. Upon closer examination, however, these products and services are nothing more than traditional payment card products dressed up as "bank accounts", and are completely beholden to only two proprietary payment card networks for not only their most innovative features, but the fundamental economics of their business models. What remains is a thin veneer of competition where market entrants

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[78] This section responds to Question 11 in the ANPR: "Are there issues the OCC should consider in light of changes in the banking system that have occurred in response to the COVID-19 pandemic, such as social distancing?"

compete for handfuls of basis points doled out by the payment networks to survive. National banks should be encouraged to develop digital banking services unfettered by the payment card network duopoly to permit accountholders to avail themselves of the ease of digital banking from the safety of their own homes. With the stewardship and resources of national banks, blockchain technology has great potential to reduce transaction costs, increase security, and foster a more open banking system using technologically advanced payment rails.

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Ketsal thanks the OCC for initiating this dialogue with the industry, and we appreciate the opportunity to comment.
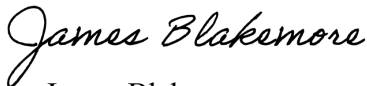

Sincerely,

Josh Garcia
Principal

Jenny Leung
Associate

James Blakemore
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