

November 23, 2021

By Electronic Submission

The Honorable Rostin Behnam
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U.S. Commodity Futures Trading Commission
1155 21st Street, NW
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The Honorable Gary Gensler
Chair
U.S. Securities and Exchange Commission
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The Honorable Lina Khan
Chair
U.S. Federal Trade Commission
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The Honorable Jerome Powell
Chair
Board of Governors of the Federal Reserve System
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The Honorable Janet Yellen
Secretary
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The Honorable Rohit Chopra
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Michael Hsu
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Office of the Comptroller of the Currency
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The Honorable Jelena McWilliams
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Federal Deposit Insurance Corporation
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The Honorable Kenneth A. Polite, Jr.
Assistant Attorney General
U.S. Department of Justice
Criminal Division
950 Pennsylvania Avenue, NW
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Re: Facebook's Digital Asset Wallet Pilot

Dear Acting Chair Behnam, Director Chopra, Chair Gensler, Acting Comptroller Hsu, Chair Khan, Chair McWilliams, Assistant Attorney General Polite, Chair Powell, and Secretary Yellen:

The Open Markets Institute¹ writes to share our concerns with Facebook’s new digital assets pilot, announced on October 19, 2021 by David Marcus of Facebook Financial. According to Marcus, Facebook’s pilot will be focused on remittances from the United States to Guatemala.² The pilot will be using Paxos’ Pax Dollar as the stablecoin, Novi as the wallet, and Coinbase Custody as the custodian.³ Facebook describes Novi as “a digital wallet from Facebook that helps you send money instantly and securely...When you add money to Novi, we’ll convert it to USDP. On Novi, 1 USDP is equal to 1 US dollar.”⁴

While additional public details are sparse, Facebook has indicated the pilot will initially be free to use.⁵ When a for-profit company’s product is free to consumers, it’s often because the consumers are themselves the product. This has been the case historically with Facebook’s monetization of consumer data to sell targeted advertising. We believe Facebook’s pilot holds the potential for the monetization of consumer’s private financial data in ways that raise numerous concerns about privacy, consumer and investor protection, risk management, concentration of corporate power, and conflicts of interest.

We have documented below what we see as the myriad conflict-of-interest, risk management, and investor and consumer protection, privacy, and corporate concentration concerns raised by Facebook’s digital assets pilot.

Facebook’s Choice of Stablecoin Raises Concerns About High Fees for Users

Facebook has announced that it will be using Paxos’ stablecoin Pax Dollar (“USDP”) for the pilot. The Pax Dollar is built on the Ethereum blockchain and adheres to Ethereum’s ERC20

¹ The Open Markets Institute is a non-profit organization dedicated to promoting fair and competitive markets. It does not accept any funding or donations from for-profit corporations. Its mission is to safeguard our political economy from concentrations of private power that undermine fair competition and threaten liberty, democracy, and prosperity.

² David Marcus (@davidmarcus), TWITTER (Oct. 19, 2021, 9:03 AM), <https://twitter.com/davidmarcus/status/1450447441292001282> (“The 🇺🇸-🇳🇮 remittance corridor is an important one. In Guatemala, 56% of people lack access to financial services, despite nearly 100% having mobile phones. Money sent from family & friends abroad contributes more than 14% of GDP and 90% of those remittances come from the US. 3/8”).

³ *Coinbase to Power Crypto Custody for Facebook’s Novi*, COINBASE BLOG (Oct. 19, 2021), <https://blog.coinbase.com/coinbase-to-power-crypto-custody-for-facebooks-novi-90dc8d3f5830> [hereinafter Facebook Crypto].

⁴ *How it Works*, NOVI, <https://www.novi.com/how-it-works> (last visited Nov. 22, 2021).

⁵ David Marcus (@davidmarcus), TWITTER (Oct. 19, 2021, 9:03 AM), <https://twitter.com/davidmarcus/status/1450447444379013122>. (“Beyond the pilot, our business model is clear. We’re a challenger in payments. We’ll offer free person-to-person payments using Novi. Once we have a solid customer base, we’ll offer cheaper merchant payments and make a profit on merchant services. 6/8”).

token standard, according to the Pax Dollar white paper.⁶ As many reports have made clear, the Ethereum blockchain faces challenges of scalability, congestion, and extremely high fees. The network can only process approximately 30 transactions a second,⁷ and fees on the network often spike to extreme levels when it becomes congested. Ethereum blockchain fees are frequently prohibitively expensive for users with smaller holdings.⁸

The mean Ethereum transaction fee was \$56.45 on November 11, 2021, according to metrics provider Glassnode. Fees to merely transfer a crypto asset from one wallet to another were an estimated \$22 on November 5, 2021 at 6 p.m., and some \$54 on November 11, 2021 at 9:45 p.m.⁹

Etherscan.io's Gas Tracker estimated fee to transfer an ERC20 token from one wallet to another on the Ethereum blockchain:			
Estimated Cost of Transfers & Interactions:			
	Low		
ERC20 Transfer	\$22.06		
Over \$22 on November 5, 2021, 6 p.m. ET.			
View API			
	Low	Average	High
ERC20 Transfer	\$54.78	\$54.78	\$56.96
Over \$54 on November 11, 9:45 p.m. ET.			

This implies that the pilot project will be subsidizing the mining fees to execute transactions logging the transfer of USDP from wallet to wallet.

Potential for Predatory Pricing

Facebook Financial's Marcus claims that the pilot will "offer free person-to-person payments using Novi." It is entirely unclear, however, how long Facebook would continue to do so. This sort of predatory pricing has been utilized in the past by technology firms aiming to increase its user base quickly with below-market fees. Then once the platform gains sufficient market

⁶ Charles Cascarilla, *Whitepaper: Pax Dollar*, PAXOS (Aug. 24, 2021), <https://insights.paxos.com/hubfs/USDP-whitepaper.pdf>.

⁷ Luke Conway, *What Is Ethereum 2.0?*, STREET (Oct. 27, 2021), <https://www.thestreet.com/crypto/ethereum/ethereum-2-upgrade-what-you-need-to-know>.

⁸ See Liesl Eichholz, *Avalanche: The New DeFi Blockchain Explained*, GLASSNODE (Feb. 10, 2021), <https://insights.glassnode.com/avalanche-the-new-defi-blockchain-explained/> ("With the price of ETH on the rise, even basic token swaps on Ethereum are becoming prohibitively expensive for entry-level players, while interactions with more complex DeFi contracts can come attached with fees exceeding 0.1 ETH (over \$170 at the time of writing)."). See also Nivesh Rustgi, *Ethereum Miners Earn Record \$110M Amid ETH Crash*, CRYPTO BRIEFING (May 21, 2021), <https://cryptobriefing.com/ethereum-miners-earn-record-110-million-amid-eth-crash/> ("The gas fees essentially rendered the [Ethereum] network unusable for users with smaller holdings, while those trying to save their loans or enter new positions suffered longer wait times due to the surge in activity").

⁹ *Ethereum Gas Tracker*, ETHERSCAN, <https://etherscan.io/gastracker> (last visited Nov. 11, 2021, 6:00 PM).

dominance, it shifts to charging far higher prices.¹⁰ For example, Amazon resorted to below-cost sales of diapers in response to competition from Diapers.com,¹¹ while Uber and Lyft undercharged for rides in order to outcompete taxi companies, only to later hike prices amid a driver shortage.¹²

One way to understand these subsidies is that Facebook, in this pilot project, plans to pay the mining fees to execute transactions logging the transfer of Pax Dollar from wallet to wallet.

Should Facebook end the subsidies for Ethereum miner fees and begin passing those fees onto users, it will be in for an abrupt surprise down the line. Fees on the Ethereum blockchain often spike highest at points of greatest volatility,¹³ when it may be most important for users to move their crypto assets. This raises challenges and questions about Facebook's stated goals of financial inclusion.¹⁴

Further, the fact that Ethereum's fees are not fixed – and indeed are constantly changing – raises the prospect that this system can be designed to essentially extort cash from users through the exploitation of the platform's knowledge of the particular behaviors and momentary needs of individual customers.

Potential Loss of the Pax Dollar's Peg

Stablecoins are always at risk of losing their alleged peg to the U.S. dollar or other currency. Should the Pax Dollar lose its peg, for instance, nearly all users will be left holding an asset that has suddenly lost a significant portion of its value – perhaps its entire value.

¹⁰ See generally Christopher R. Leslie, *Predatory Pricing and Recoupment*, 113 COLUM. L. REV. 1695 (2013), <https://www.law.uci.edu/faculty/full-time/leslie/PredatoryPricing.pdf>.

¹¹ Sandeep Vaheesan, *Much of Antitrust Law Today Is Based on Unsupported or Demonstrably False Economic Theories. Will Economists Take Heed?*, PROMARKET (May 13, 2020), <https://promarket.org/2020/05/13/much-of-antitrust-law-today-is-based-on-unsupported-or-demonstrably-false-economic-theories-will-economists-take-heed/>.

¹² Will Oremus, *A Classic Silicon Valley Tactic — Losing Money to Crush Rivals — Comes in for Scrutiny*, WASH. POST (July 6, 2021), <https://www.washingtonpost.com/technology/2021/07/06/facebook-bulletin-antitrust/>.

¹³ Samuel Haig, *Fallout: Ethereum Fees Skyrocketed as Traders Raced to Unwind Leveraged Positions*, COINTELEGRAPH (May 20, 2021), <https://cointelegraph.com/news/fallout-ethereum-fees-skyrocketed-as-traders-raced-to-unwind-leveraged-positions>.

¹⁴ David Marcus (@davidmarcus), TWITTER (Oct. 19, 2021, 9:03 AM), <https://twitter.com/davidmarcus/status/1450447439341580293> (“Remittances are a critical way to achieve financial inclusion. Today, we’re rolling out a small pilot of the @Novi digital wallet app in two countries — the US and Guatemala. People can send and receive money instantly, securely, and with no fees. 1/8”).

Further, any such sudden change in value will also lead most users to try to trade out of Pax Dollars for their local currency at the same time. Such a run would increase Ethereum network congestion and drive up fees.

It is unclear from Facebook Financial's public statements what its plan would be in the event that the Pax Dollar were to lose its peg. Would Facebook ensure payment transfer and processing at a time when fees on the Ethereum blockchain spike drastically? Or would Facebook decide instead to simply temporarily disable transfers between Novi wallets or out of the Novi wallet, rather than pay extremely high Ethereum fees at moments of peak volatility? The answer is unclear.

Cryptoassets have unique custodial concerns, including risks of exploits, loss of keys

By utilizing payments via a stablecoin, rather than via U.S. dollars, Facebook is introducing multiple kinds of counterparty risk. One of these is custody risk: failing to deliver Pax Dollar due to hacks or exploits, loss of private keys, or insolvency. Facebook has said that Coinbase will handle custody for the pilot project, through Coinbase Custody Trust Company. There is potential for Coinbase Custody to be compromised or exploited by hackers, or by an employee who falls prey to a phishing scam, as recently occurred at the decentralized finance platform Bzx (described below). Such an attack could lead to the loss of the Pax Dollars Coinbase custody is meant to secure. Other risks include the potential insolvency of Coinbase Custody, or an inability of it to fully reimburse users in the wake of a breach.

Custody arrangements in digital assets are non-trivial, and there have been many historical custody failures:

- Digital asset custodian Fireblocks (used by many significant crypto market participants, including Genesis Trading, Galaxy Digital, and Crypto.com¹⁵) allegedly lost the private keys for the decentralized finance (“DeFi”) platform StakeHound, leading to a \$75 million loss.¹⁶ As a result, Stakehound sued Fireblocks for negligence.¹⁷

¹⁵ *Digital Asset Custody Firm Fireblocks Raises \$310m at \$2 Billion Valuation*, LEDGER INSIGHT (July 27, 2021),

<https://www.ledgerinsights.com/digital-asset-custody-firm-fireblocks-raises-310m-at-2-billion-valuation/>.

¹⁶ Meir Orbach, *Cryptocurrency Security Company Fireblocks Sued for Losing \$75 Million Worth of ETH*, CTECH (June 21, 2021), <https://www.calcalistech.com/ctech/articles/0,7340,L-3910671,00.html>

(“According to the lawsuit, negligence by a Fireblocks employee led to the crypto assets being lost without any backup being available. ‘This is a human error committed by an employee of the defendants, who worked in an unsuitable work environment, did not protect or back up the defendant’s private keys needed to open the relevant digital wallet, and for no apparent reason, the keys were deleted, preventing the plaintiff’s digital assets from being accessed.’”).

¹⁷ Aislinn Keely, *Staking Company Serves Fireblocks With a Lawsuit Over Private Keys to Over \$75 Million in ETH*, BLOCK (June 23, 2021),

<https://www.theblockcrypto.com/post/109277/staking-company-serves-fireblocks-with-a-lawsuit-over-private-keys-to-over-75-million-in-eth>.

- On November 5, 2021, the cryptocurrency protocol bZx (which powers the Fulcrum exchange) had its private key compromised due to a phishing scam targeted at a member of its development team.¹⁸ As of this writing, \$55 million in crypto assets have been lost, with the potential of more losses to come.

In its blog post announcing the custody arrangement, Coinbase mentioned it has a “\$320 million commercial crime policy” via a Coinbase Custody insurance program.¹⁹ Coinbase has not disclosed the terms of this custody arrangement, and there are few publicly available details about Coinbase Custody beyond the blog post and its marketing materials.²⁰ It’s unclear what types of loss of funds this insurance program would cover, and whether it would include loss of private keys (including social engineering scams leading to handing over private keys willingly), exploits using flash loans or other hacks, or theft of users’ assets by an employee of Coinbase custody (as occurred in the Canadian cryptocurrency exchange Quadriga²¹).

Potential Conflicts of Interest and Market Harms

Cryptocurrency markets broadly have a number of conflict-of-interest and ethical wall concerns between cryptocurrency exchanges and proprietary crypto trading firms. For example, the CEO of the exchange FTX, Sam Bankman-Fried, also holds 90% of a proprietary cryptocurrency trading firm, Alameda Research.²² Venture capitalists like Andreessen Horowitz (a16z) and Paradigm are a significant presence in cryptocurrency markets and appear to hold considerable

¹⁸ *bZx - REKT*, REKT NEWS (Nov. 6, 2021), <https://rekt.news/bzx-rekt/>.

¹⁹ Facebook Crypto, *supra* note 3.

²⁰ *Introduction to Coinbase Custody*, COINBASE, <https://custody.coinbase.com/Introduction-to-Coinbase-Custody.pdf> (last visited Nov. 19, 2021).

²¹ Bill Chappell, *Crypto Mystery: Quadriga's Wallets Are Empty, Putting Fate Of \$137 Million In Doubt*, NPR (Mar. 6, 2019), <https://www.npr.org/2019/03/06/700651500/crypto-mystery-quadrigas-wallets-are-empty-putting-fate-of-137-million-in-doubt>.

²² Roger Parloff, *Portrait of a 29-year-old billionaire: Can Sam Bankman-Fried make his risky crypto business work?*, YAHOO NEWS (Aug. 12, 2021), <https://news.yahoo.com/ftx-ceo-sam-bankman-fried-profile-085444366.html> (“Bankman-Fried also still owns 90% of Alameda Research, he says. Alameda’s digital wallet at FTX (which is not its only store of assets) contained over \$10 billion in digital coins in mid-July, according to a screengrab he sent me. (More than \$5 billion of that was ‘locked,’ however—not yet eligible for conversion to conventional money—and another \$4 billion was in FTT, a digital coin issued by FTX.)”).

market power.²³ A16z launched a \$2.2 billion cryptocurrency fund this summer,²⁴ and among Paradigm and a16z are both investors in Diem, Facebook’s other, long-delayed cryptocurrency pilot.²⁵ Meanwhile, the venture capital firm Paradigm One has raised even more: \$2.5 billion to invest in cryptocurrency firms.²⁶ It is unclear if any of the members of the Facebook pilot also have connections to proprietary crypto trading desks, or if venture capital investors in Diem will exercise any element of control over the project, and what, if any, ethics rules Facebook will have in place to prevent any conflicts.

In addition, several exchanges charge users lower fees to purchase assets that the exchange itself has a profit interest in. For example:

- FTX CEO Bankman-Fried and FTX itself have multiple investments in the Solana blockchain ecosystem, from creating Project Serum²⁷ to multimillion dollar investments to bring video games to Solana.²⁸ FTX.US subsidizes user fees to withdraw tokens using the Solana blockchain standard (called “SPL”), but charges users fees to withdraw tokens using other blockchains (Ethereum, Omni, and Bitcoin).²⁹

²³ *Demystifying Crypto: Digital Assets and the Role of Government Before the U.S. Congress Joint Econ. Comm.* (2021) (written testimony of Alexis Goldstein), https://www.jec.senate.gov/public/_cache/files/aa387917-9456-4b1f-a948-f086594c4d15/alexis-goldstein-jec-crypto-hearing-testimony.pdf.

²⁴ Kate Rooney, *Andreessen Horowitz Launches \$2.2 Billion Crypto Fund and is ‘Radically Optimistic’ Despite Price Fluctuations*, CNBC (June 24, 2021), <https://www.cnbc.com/2021/06/24/andreessen-horowitz-launches-2point2-billion-crypto-fund.html>.

²⁵ *Portfolio*, PARADIGM, <https://www.paradigm.xyz/portfolio/> (last visited Nov. 19, 2021). *See also Portfolio*, A16Z, <https://a16z.com/portfolio/#crypto> (last visited Nov. 19, 2021).

²⁶ Miles Kruppa, *Coinbase Co-founder Launches Biggest VC Fund in Crypto*, FIN. TIMES (Nov. 15, 2021), <https://www.ft.com/content/b07d9777-8ac7-47ac-a358-12924711f2c8>.

²⁷ Muyao Shen, *Serum Token Becomes Latest Project in Bankman-Fried Empire to Turn Heads*, COINDESK (April 28, 2021), <https://www.coindesk.com/markets/2021/04/28/serum-token-becomes-latest-project-in-bankman-fried-empire-to-turn-heads/> (“decentralized exchange Serum, which is built on top of the Solana blockchain, and championed by Sam Bankman-Fried of the FTX crypto exchange and Alameda Research trading firm”).

²⁸ Eli Tan, *FTX, Lightspeed, Solana Ventures to Invest \$100M in Web 3 Gaming*, COINDESK (Nov. 5, 2021), <https://www.coindesk.com/business/2021/11/05/ftx-lightspeed-solana-ventures-to-invest-100m-in-web3-gaming/>.

²⁹ *Crypto Deposits and Withdrawals*, FTX US, <https://help.ftx.us/hc/en-us/articles/360043065054-Crypto-Deposits-and-Withdrawals> (last visited Nov. 19, 2021).

- Coinbase has a revenue sharing agreement with Circle, the issuer of the USDC stablecoin.³⁰ Coinbase charges users fees to buy and sell non-USDC stablecoins, while buying or selling USDC is free.

There are concerns that similar potential conflicts of interest may exist within the Facebook pilot. Given that Coinbase Ventures is both an investor in Paxos,³¹ and Coinbase Custody is providing Facebook with custody services for a pilot involving Pax Dollars, it seems possible that Coinbase will offer the same discounted fees for Coinbase users purchasing Pax Dollars as it does for USDC – while charging far higher fees for competing stablecoins.

Logistical questions and difficulties using stablecoins as payments

It remains an open question as to whether or not users of Facebook’s pilot will be able to buy anything with their Pax Dollars. Currently, stablecoins are primarily used for speculation, not purchasing goods and services.³² Because stablecoins are not utilized for payments, users of the Facebook pilot will still require a bank account to convert their Pax Dollars back to U.S. dollars or the Guatemalan quetzal in order to actually pay for goods and services. The only alternative to leveraging the existing banking system is if Facebook is planning to work with the government of Guatemala to change the laws of that sovereign nation to mandate the acceptance of Pax Dollars as legal tender. (In neighboring El Salvador, the government’s move to obligate small

³⁰ Concord Acquisition Corp. 8-K Exhibit 99.2 Conference Call Transcript on Concord Acquisition Corp & Circle Internet Financial Audio NetRoadshow (2021) (Jeremy Fox-Geen, CFO of Circle, stated “We share a portion of this revenue on a direct pass-through basis with Coinbase, our partner in the Centre consortium who acts as a significant distributor of USDC.”), https://www.sec.gov/Archives/edgar/data/0001824301/000121390021036070/ea143875ex99-2_concorda cq.htm.

³¹ *Paxos Adds Bank of America, Coinbase Ventures, Founders Fund & FTX to Series D Funding Round*, PAXOS (July 29, 2021), <https://paxos.com/2021/07/29/paxos-adds-bank-of-america-coinbase-ventures-founders-fund-ftx-to-series-d-funding-round/>.

³² PRESIDENT’S WORKING GROUP ON FIN. MARKETS, THE FED. DEPOSIT INS. CORP. (FDIC), AND THE OFFICE OF THE COMPTROLLER OF THE CURRENCY (OCC), REPORT ON STABLE COINS (2021), https://home.treasury.gov/system/files/136/StableCoinReport_Nov1_508.pdf (“Stablecoins facilitate a large and growing volume of digital asset trading by allowing market participants to quickly convert volatile digital assets into a digital asset with more perceived stability, and vice versa; providing a digital asset with more perceived stability to transfer across platforms without the use of national currencies and reducing the need for traditional financial institutions; and serving as a source of collateral against which market participants can borrow to fund additional activity, sometimes using extremely high leverage. Market participants also use stablecoins to earn yield by transferring stablecoins into digital asset trading platforms, or by using stablecoins to serve as collateral for loans and margined transactions, in exchange for interest or returns.”) [hereinafter STABLE COINS REPORT].

businesses to accept Bitcoin has led to protests against what many view as an undue, unfair, and unsupportable burden.³³

A notice on Novi's website to "Learn More" about the pilot states that users can "add money to their account with a debit card" and they can withdraw funds by "picking up cash at a nearby location or transferring it to their bank account".³⁴ These details make it clear that Facebook understands the users of its pilot will need to already have a bank, and will likely need to pay wire fees in some cases to withdraw their funds. This means that the Facebook pilot will not help the unbanked and underbanked, nor drive any new financial inclusion. Further, by utilizing banks as on- and off-ramps for the Pax Dollar, Facebook's pilot will be free riding off the existing rails of the banking system.

Potential legal and regulatory implications for Facebook's pilot

There are several legal and regulatory implications for Facebook's pilot that warrant particular attention by the agencies. The stablecoins sold by Facebook to Novi customers may be debt instruments and investment contracts that are "securities" for purposes of the federal securities laws and thus may be subject to regulation by the Securities and Exchange Commission. In addition, Facebook may be engaged in the business of receiving deposits through Novi because Facebook agrees to hold stablecoins purchased by its customers and to allow those customers to transfer their stablecoins to others. Facebook represents that the stablecoins it sells to customers will maintain a one-for-one parity with the U.S. dollar. Court decisions since *Marine Bank v. Weaver*, 455 U.S. 551 (1982), establishes that financial offerings like Novi are both "securities" and "deposits" unless they are issued by FDIC-insured depository institutions or foreign banks that are subject to equivalent regulatory regimes.

The Biden administration's recent report on stablecoins noted that "Relevant authorities, including the Department of Justice, may consider whether or how section 21(a)(2) of the Glass-Steagall Act may apply to certain stablecoin arrangements."³⁵ Facebook's Novi is a stablecoin arrangement that appears to provide deposit services (including safekeeping and payments) to its customers. Thus, through Novi, Facebook may be unlawfully engaged in the offering of unregistered securities, and they may also be in the illegal business of receiving deposits without a bank charter.










³³ David Gerard, *El Salvador's Bitcoin Law Is a Farce*, FOREIGN POL'Y (Sept. 17, 2021), <https://foreignpolicy.com/2021/09/17/el-salvador-bitcoin-law-farce/>.

³⁴ David Marcus, *Pilot Version of Novi Now Available*, NOVI (Oct. 19, 2021), https://scontent-iad3-2.xx.fbcdn.net/v/t39.2365-6/245645778_229514682497390_5814575696636412345_n.pdf?nc_cat=102&ccb=1-5&nc_sid=ad8a9d&nc_ohc=BHjKH4OpBuwAX87uHOs&nc_ht=scontent-iad3-2.xx&oh=6e9445151d084b19c77eaf0d916fc56c&oe=619DCED6.

³⁵ STABLE COINS REPORT, *supra* note 32.

Liquidity and reputational risks

The Pax Dollar is currently one of the smaller stablecoins, with far less liquidity and usage than the top five stablecoins. According to the crypto metrics website CoinGecko.com, Pax Dollar has a market cap of a little over \$969 million as of November 11, 2021³⁶. This is smaller than the market cap of the “Magic Internet Money” stablecoin, which has a market cap of more than \$2.5 billion, according to CoinGecko:

#	Coin	Price	24h Volume	Exchanges	Market Capitalization
☆ 1	 Tether USDT	\$1.00	\$76,161,666,989	419	\$74,990,748,549
☆ 2	 USD Coin USDC	\$1.00	\$3,375,942,704	282	\$34,533,569,852
☆ 3	 Binance USD BUSD	\$1.00	\$6,074,647,871	100	\$12,892,233,727
☆ 4	 Dai DAI	\$1.00	\$541,547,288	216	\$8,559,411,364
☆ 5	 TerraUSD UST	\$1.01	\$80,186,947	17	\$3,787,646,641
☆ 6	 Magic Internet Money MIM	\$1.00	\$141,285,109	10	\$2,553,933,745
☆ 7	 TrueUSD TUSD	\$1.00	\$113,438,457	155	\$1,203,181,440
☆ 8	 Pax Dollar USDP	\$1.00	\$3,936,001	89	\$969,617,698
☆ 9	 Frax FRAX	\$1.00	\$30,274,523	12	\$850,452,680

CoinGecko.com list of stablecoins ranked by Market Capitalization, as of November 11, 2021.

Paxos also runs Binance’s stablecoin BUSD. Facebook’s partnership with Paxos involves a degree of reputational risk due to Paxos’ involvement with Binance, as Binance has been subject

³⁶ *Stablecoins by Market Capitalization*, COINGECKO, <https://www.coingecko.com/en/categories/stablecoins> (last visited Nov. 11, 2021).

to regulatory actions by Germany's BaFin,³⁷ Japan's Financial Services Agency,³⁸ Malaysia,³⁹ Hong Kong⁴⁰, and the UK's FCA.⁴¹

Ransomware Concerns

Ransomware attacks are increasing in number, and cryptocurrency assets are often used to layer and obscure ransomware payments. An October 2021 FinCEN report found that cryptocurrency Exchanges with lax Know Your Customer/Anti-Money Laundering ("KYC/AML") compliance are the preferred cash-out points for ransomware payments.⁴² Case in point, a recent Department of Justice arrest of two foreign nationals over ransomware attacks⁴³ included a warrant posted showing that up to \$13 million was held by one of the foreign nationals at the cryptocurrency exchange FTX.⁴⁴

The October FinCEN report also found that "Ransomware-related payments are being converted to other types of [cryptocurrency] through decentralized exchanges or other DeFi applications."⁴⁵ Data by Glassnode shows that over 65% of the Pax Dollar supply is locked into smart contracts

³⁷ *Germany's Financial Watchdog Warns Crypto Exchange Binance Over 'Stock Tokens'*, REUTERS (April 29, 2021), <https://www.reuters.com/technology/germanys-financial-watchdog-warns-crypto-exchange-binance-over-stock-tokens-2021-04-29/>.

³⁸ FIN. SERVS. AGENCY, ABOUT THOSE WHO DO CRYPTO ASSET EXCHANGE BUSINESS WITHOUT REGISTRATION (BINANCE HOLDINGS LIMITED) (June 25, 2021), https://www.fsa.go.jp/policy/virtual_currency02/Binance2_keikokushilyo.pdf.

³⁹ *Restricting of Product Offerings in Malaysia*, BINANCE (Aug. 13, 2021), <https://www.binance.com/en/support/announcement/ab37eace9146494d990293d60423a34e>.

⁴⁰ *Cryptocurrency Binance to Stop Hong Kong Users Trading Derivatives*, REUTERS (Aug. 6, 2021), <https://www.reuters.com/technology/cryptocurrency-binance-stop-hong-kong-users-trading-derivatives-2021-08-06/>.

⁴¹ *Consumer Warning on Binance Markets Limited and the Binance Group*, FIN. CONDUCT AUTH. (June 26, 2021), <https://www.fca.org.uk/news/news-stories/consumer-warning-binance-markets-limited-and-binance-group>.

⁴² *FinCEN Issues Report on Ransomware Trends in Bank Secrecy Act Data*, FINCEN (Oct. 15, 2021), <https://www.fincen.gov/news/news-releases/fincen-issues-report-ransomware-trends-bank-secrecy-act-data> [hereinafter FinCen Report].

⁴³ *Ukrainian Arrested and Charged with Ransomware Attack on Kaseya*, U.S. DEP'T JUST. (Nov. 8, 2021), <https://www.justice.gov/opa/pr/ukrainian-arrested-and-charged-ransomware-attack-kaseya>.

⁴⁴ Warrant to Seize Property Subject to Forfeiture, In the Matter of the Seizure of All funds up to \$13 million in the FTX Trading Limited account in the name of "Evegnii Igorevich Polianin" and/or "Evgeniy Igorevich Polyanin" (2021) (No. 3-21MJ-888BT), <https://www.justice.gov/opa/press-release/file/1447131/download>.

⁴⁵ FinCen Report, *supra* note 42 ("Ransomware-related payments are being converted to other types of [Convertible Virtual Currencies] through decentralized exchanges or other DeFi applications. Some DeFi applications allow for automated peer-to-peer transactions without the need for an account or custodial relationship. FinCEN analysis of transactions on the BTC blockchain identified ransomware-related funds sent indirectly to addresses associated with open protocols for use on DeFi applications.").

on DeFi projects. (Smart contracts are code stored on a blockchain that automatically executes when certain conditions are met.⁴⁶ Examples of smart contracts are those that allow users to deposit crypto assets into liquidity pools or lending arrangements on DeFi in order to speculate.)

As there are virtually no KYC/AML checks in DeFi applications, and a plurality of the current supply of Pax Dollar is locked into DeFi (over 65% of the USDP supply as of November 11, 2021⁴⁷), some Pax Dollars may be utilized to convert ransomware payments from one crypto asset to another.

It is unclear if the Pax Dollars used in the Facebook pilot will be newly minted Pax Dollar, or pulled from the current, circulating supply. Facebook should make clear what protections Paxos will be utilizing to ensure the Pax Dollars in the Facebook pilot haven't previously been used for ransomware payment conversion. Facebook should also specify how they plan to prevent sanctioned persons from exploiting their pilot to evade sanctions and undermine U.S. foreign policy and national security interests. Guidance from the Treasury Department's Office of Foreign Assets Control (OFAC) clarified this October that "all companies in the virtual currency industry" are expected to be compliant with sanctions.⁴⁸

Potential Monetization of User Behavior and Financial Transaction Data

In its Privacy Policy, Novi states "your Novi account is separate from your Facebook account" and "Novi does not share your financial information with Facebook for Facebook's own advertising purposes".⁴⁹

But Facebook has historically not been a trustworthy steward of customer data. For example, in November 2011, Facebook entered into a [Consent Decree](#) with the Federal Trade Commission to settle charges that it deceived consumers by failing to keep privacy promises. In 2019, Facebook violated this consent decree and was fined \$5 billion.⁵⁰

⁴⁶ *What are smart contracts on blockchain?*, IBM, <https://www.ibm.com/topics/smart-contracts> (last visited Nov. 19, 2021).

⁴⁷ *Pax Dollar: Percent of Supply in Smart Contracts*, GLASSNODE, <https://studio.glassnode.com/metrics?a=USDP&category=Supply&m=distribution.SupplyContracts&modal=loginForm> (last visited Nov. 11, 2021) (Showing 65.89% of the Pax Dollar supply is locked into smart contracts).

⁴⁸ OFF. FOREIGN ASSETS CONTROL, SANCTIONS COMPLIANCE GUIDANCE FOR THE VIRTUAL CURRENCY INDUSTRY (2021), https://home.treasury.gov/system/files/126/virtual_currency_guidance_brochure.pdf.

⁴⁹ Marcus, *supra* note 34.

⁵⁰ *FTC Imposes \$5 Billion Penalty and Sweeping New Privacy Restrictions on Facebook*, FED. TRADE COMM'N (July 24, 2019), <https://www.ftc.gov/news-events/press-releases/2019/07/ftc-imposes-5-billion-penalty-sweeping-new-privacy-restrictions>.

This lack of confidence in Facebook’s word is also based on two additional factors.

First is Facebook founder and CEO Mark Zuckerberg’s long-held desire to get into various segments of the payment and financial industries. In October 2012, for instance, Zuckerberg discussed his competitive rationale for a payments product for users of Facebook’s mobile apps. He said that if they were to layer in a payments service with the Facebook login, “that’s a pretty awesome combo and a good reason for people to use FB platform” and it would make it “more acceptable for us to charge them quite a bit more for using [our] platform.”⁵¹

Second is Facebook’s size, power, and business model, and the now-long list of instances in which Facebook has taken advantage of these in ways that have sometimes caused severe harm to users. Facebook occupies a dominant role in American life and indeed the lives of people around the world, with over 1 billion users for four of its services, including Facebook, Instagram, Messenger, and WhatsApp. Facebook is also a giant in the advertising space, with their 2020 advertising revenue close to \$84.2 billion dollars — nearly \$1.6 billion each week.⁵²

Given Zuckerberg’s past comments, Facebook’s track record of violating user privacy, and Facebook’s ongoing need to find new profit centers,⁵³ there is absolutely no reason to believe its promises today that it will not find a way to monetize its digital assets pilot project. If anything, an effort to monetize the data of users who take part in this project seems not merely plausible, but likely.

Facebook’s Choice of Stablecoin Raises Climate Concerns

The Ethereum blockchain currently uses “Proof of Work” to validate transactions. Proof of Work crypto mining creates a number of extensive climate harms, which include annual energy consumption akin to that of entire nations⁵⁴, 30,700 tons of electronic waste (computer hardware is notoriously difficult to recycle⁵⁵) annually, higher electricity bills for residents of states with

⁵¹ *Libra Basics: What Is Facebook’s Currency Project?*, OPEN MARKETS INST. (July 2019), https://static1.squarespace.com/static/5e449c8c3ef68d752f3e70dc/t/5ea9f7c14ee16c394b6e9bc3/1588197336617/190716_LibraBasicsReport_v2.pdf. See also Note by Damian Collins MP, Chair of the DCMS Committee, Summary of key issues from the Six4Three files (2013), <https://www.parliament.uk/documents/commons-committees/culture-media-and-sport/Note-by-Chair-and-selected-documents-ordered-from-Six4Three.pdf>.

⁵² *Facebook’s Annual Revenue from 2009 to 2020, by Segment*, STATISTA (Jan. 2021), <https://www.statista.com/statistics/267031/facebooks-annual-revenue-by-segment/>.

⁵³ Daniel A. Hanley, *The FTC Created Facebook—It Has the Power to Take it Down*, COMMON DREAMS (Nov. 8, 2021), <https://www.commondreams.org/views/2021/11/08/ftc-created-facebook-it-has-power-take-it-down>.

⁵⁴ Cristina Criddle, *Bitcoin Consumes ‘More Electricity Than Argentina’*, BBC (Feb. 10, 2021), <https://www.bbc.com/news/technology-56012952>.

⁵⁵ *Global E-Waste Surging: Up 21% in 5 Years*, UNITED NATIONS U. (July 2, 2020), <https://unu.edu/media-relations/releases/global-e-waste-surging-up-21-in-5-years.html>.

crypto mining⁵⁶, and quality of life issues⁵⁷. More than 70 climate, economic, racial justice, business and local organizations recently wrote to Congress, asking them to mitigate the considerable contribution portions of the cryptocurrency markets are making to climate change.⁵⁸

In addition, Proof of Work cryptocurrency mining has been exacerbating the shortages of semiconductors.⁵⁹ Senators Maggie Hassan and Joni Ernst recently introduced a bill calling on the Treasury Department to compile a report on how cryptocurrency mining operations are impacting semiconductor supply chains.

Conclusion

Facebook's digital assets pilot raises a host of concerns for the market and prudential regulators, the Federal Trade Commission, and the Department of Justice. We urge you to use your current, diverse authorities to mitigate the conflict-of-interest, risk management, and investor and consumer protection, privacy, and corporate concentration concerns the pilot raises.

Sincerely,

Open Markets Institute

⁵⁶ Laura Counts, *Power-Hungry Cryptominers Push Up Electricity Costs for Locals*, BERKLEY HAAS (Aug 3, 2021), <https://newsroom.haas.berkeley.edu/research/power-hungry-cryptominers-push-up-electricity-costs-for-locals/>.

⁵⁷ Jeff Keeling, *Bitcoin Mine Spokesman Says Dealing With Noise Issue "Our Number One Priority"*, WJHL (July 16, 2021), <https://www.wjhl.com/news/local/noisy-bitcoin-mines-neighbors-hope-monday-meeting-yields-answers-from-power-provider/>.

⁵⁸ *Large Coalition of Public Interest and Environmental Groups Come Together to Urge Leaders to Address Climate Damages of Crypto*, OPEN MARKETS INST. (Oct. 7, 2021), <https://www.openmarketsinstitute.org/publications/large-coalition-of-public-interest-and-environmental-groups-come-together-to-urge-leaders-to-address-climate-damages-of-crypto>.

⁵⁹ *Crypto-Miners are Probably to Blame for the Graphics-Chip Shortage*, ECONOMIST (June 19, 2021), <https://www.economist.com/graphic-detail/2021/06/19/crypto-miners-are-probably-to-blame-for-the-graphics-chip-shortage>.