



March 3, 2023

By email to: DARD-FTAC-RFI@nitrd.gov

Ms. Rachel A. Wallace
Deputy General Counsel
Office of Science and Technology Policy
Executive Office of the President
Eisenhower Executive Office Building
1650 Pennsylvania Avenue, NW
Washington, DC 20504

RE: Request for Information; Digital Assets Research and Development

Dear Ms. Wallace:

On behalf of the North American Securities Administrators Association, Inc. (“NASAA”),¹ I am writing in response to the *Request for Information; Digital Assets Research and Development* (the “RFI”) posted in the Federal Register by the Office of Science and Technology Policy (“OSTP”). We appreciate the opportunity to provide public comment regarding digital asset research and development priorities.² NASAA is committed to protecting investors from fraud and abuse, a commitment that can be supported by research devoted to technology tools and protocols that make digital assets and the businesses that handle them more secure and compliant with the law.

This letter focuses on the RFI’s solicitation of comments involving “goals, sectors, or applications where digital assets might introduce risks or harms.”³ Our concerns rest on vulnerabilities and risks in the digital asset ecosystem that have not been fully appreciated by government research and attention. We recommend that the OSTP devote efforts into areas where owners and traders of digital assets are victimized, and accordingly develop tools for customers, regulators and law enforcement agencies to combat these abuses.

¹ Organized in 1919, NASAA is the oldest international organization devoted to investor protection. NASAA’s membership consists of the securities administrators in the 50 states, the District of Columbia, Canada, Mexico, Puerto Rico, and the U.S. Virgin Islands. NASAA is the voice of securities agencies responsible for grass-roots investor protection and efficient capital formation.

² The RFI is available at <https://www.federalregister.gov/documents/2023/01/26/2023-01534/request-for-information-digital-assets-research-and-development>.

³ RFI at 5045.

I. Improving Market Manipulation Detection and Monitoring

There is still insufficient data and insight into various components of the digital asset ecosystem, which prevents regulators and law enforcement agencies from being able to perform effective analyses of potential threats to customers. A more detailed examination into the full life cycles of various forms of digital assets and digital asset-based business models, the activities of the various actors along those life cycles, and particularly how those actors monetize various aspects of digital asset enterprises would be worthwhile to help regulators and law enforcement agencies detect fraud and other regulatory violations. Studies show that fraud and abuse exist within the digital assets markets, and state and federal securities regulators are actively bringing cases to combat digital asset-based frauds and regulatory violations.⁴ Further research would provide greater clarity as to where the potential for misconduct exists. NASAA welcomes research and development efforts that would help regulators and law enforcement agencies improve detection and monitoring practices.

For example, academic research investigating occurrences of pump and dump schemes and coin washing on cryptocurrency exchanges demonstrates that significant misconduct occurs in digital asset trading. Studies involving pump and dump schemes show that self-organized groups arrange frauds on digital platforms such as Telegram, Reddit and Discord.⁵ According to these studies, the operators announce a target token to members of a group and communicate buy signals once the highest-ranking members have purchased the token at relatively low prices.⁶ A rise in

⁴ See, e.g., Press Release, NASAA, *NASAA and SEC Announce \$45 Million Settlement with NEXO Capital Over Interest Bearing Accounts* (Jan. 19, 2023), <https://www.nasaa.org/67039/nasaa-and-sec-announce-45-million-settlement-with-nexo-capital-over-interest-bearing-account/?qoid=newsroom>; Press Release, Alabama Securities Commission, *Sand Vegas Casino Club Located in the Metaverse is Soliciting Investors to Invest Real Money in Un-Registered Investments* (Apr. 13, 2022), https://www.asc.alabama.gov/News/2022%20News/4-13-2022_Sand_Vegas.pdf; and Press Release, NASAA, *NASAA and SEC Announce \$100 Million Settlement with BlockFi Lending, LLC* (Feb. 14, 2022), <https://www.nasaa.org/62000/nasaa-and-sec-announce-100-million-settlement-with-blockfi-lending-llc/?qoid=newsroom>. NASAA emphasizes that the role of state securities regulators has been critical to customer protection, and therefore any effort to preempt the reach of state securities regulators over digital asset enterprises would directly imperil efforts to protect customers from theft, fraud and regulatory violations. To the extent that the OSTP's work extends to policy considerations, NASAA encourages OSTP to review our *Core Principles for Evaluating Federal Legislation Relating to Digital Assets*. See Letter from Melanie Lubin, NASAA President, to Senator Sherrod Brown and Representative Patrick Toomey (Jan. 28, 2022), <https://www.nasaa.org/wp-content/uploads/2022/01/NASAA-Letter-to-SBC-HFSC-Leadership-re-NASAA-Core-Principles-for-Evaluating-Federal-Legislation-Relating-to-Digital-Assets.pdf>.

⁵ See, e.g., Massimo La Morgia et al., *The Doge of Wall Street: Analysis and Detection of Pump and Dump Cryptocurrency Manipulation* at 2-5 (May 3, 2021), <https://arxiv.org/pdf/2105.00733.pdf>; Friedhelm Victor et al., *Cryptocurrency Pump and Dump Schemes: Quantification and Detection* at 2 (Nov. 22, 2019), https://www.researchgate.net/publication/337442475_Cryptocurrency_Pump_and_Dump_Schemes_Quantification_and_Detection; and Tao Li et al., *Cryptocurrency Pump-and-Dump Schemes* at 1-2 (Jan. 2019), https://www.researchgate.net/publication/329132134_Cryptocurrency_Pump-and-Dump_Schemes.

⁶ Felix Eigelshoven et al., *Cryptocurrency Market Manipulation – A Systemic Literature Review* at 9 (2021), available at https://www.researchgate.net/publication/354995772_Cryptocurrency_Market_Manipulation_A_Systematic_Literature_Review.

the price spurs non-members to invest in the token and, when the price reaches a peak, members sell their tokens for a profit while non-members are left with a much less valuable asset.⁷ Coin washing is another digital asset scheme where traders simultaneously buy and sell the same asset to create artificial market activity to distort the price and entice unknowing investors to trade.⁸ These examples demonstrate some of the varied ways that digital assets can be subjected to manipulation when left without proper oversight.

The pseudonymous nature of digital assets renders the ecosystem vulnerable to fraudulent misconduct. These same features also make market manipulation difficult to detect and address when it occurs. For regulators and law enforcement agencies to better prevent the types of schemes discussed above, greater analysis that leads to the development of better detection and monitoring tools is needed. Specifically, research and development materials should include analyses that help improve the ability to detect and monitor incipient abnormal trading activities.

II. Securing Digital Assets Held by Intermediaries from Theft

NASAA would also encourage research into how customer digital assets are stolen when they are in the custody of intermediaries, such as exchanges. A custodial wallet is a digital wallet where a customer's private keys are held by a third party.⁹ These keys allow access to the underlying digital assets. Many customers who participate in digital exchanges use exchange-provided custodial wallets to allow the exchanges to trade the assets. But, if an exchange suffers a cybersecurity breach hackers can steal both the private keys and customer assets. Just one example of such a theft involved Mt. Gox, a Bitcoin exchange where over \$450 million in customer assets were lost when the exchange was hacked.¹⁰

It is crucial that research is conducted into understanding what vulnerabilities allow for these incidents to occur. Understanding the vulnerabilities of intermediaries to the loss of customer wallets and assets could lead to the development of enhanced custody controls or to the recommendation of enhanced cybersecurity controls tailored to the needs of digital asset businesses and their customers. Increased research and development could also lead to policy prescriptions, including disclosure and auditing requirements, to ensure that such intermediaries have both appropriate policies and procedures and the means to make customers whole. Greater security in the digital assets marketplace would improve both customer confidence and economic growth.

⁷ *Id.*

⁸ Lin William Cong et al., *Crypto Wash Trading* at 2 (July 2021), available at <https://arxiv.org/ftp/arxiv/papers/2108/2108.10984.pdf>.

⁹ See Konstantinos Chalkias et al., *Proofs of Solvency in Blockchain Custodial Wallets and Exchanges* at 1 (Mar. 17, 2022), available at <https://eprint.iacr.org/2022/043>.

¹⁰ *Id.*

Rachel A. Wallace

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Page 4 of 4

III. Conclusion

For the reasons expressed above, NASAA supports the OSTP's desire to prioritize research and development related to digital assets. Trading digital assets introduces risks for customers, and further research would better identify those risks. Identification of these risks would also provide the foundation to develop tools that regulators and law enforcement agencies can use to prevent these harms from occurring. We ask OSTP to focus on threats in the digital asset space that pose the greatest risks to customers, including manipulative trading practices and security of digital wallets held by intermediaries.

Sincerely,

A handwritten signature in cursive script that reads "Andrew Hartnett".

Andrew Hartnett
NASAA President and
Deputy Commissioner,
Iowa Insurance Division