## Testimony of Justin Slaughter, Policy Director of Paradigm House Energy and Commerce Committee Subcommittee on Innovation, Data, and Commerce September 20, 2023

Subcommittee Chair Bilirakis, Subcommittee Ranking Member Schakowsky, Chair McMorris Rodgers, and Ranking Member Pallone, thank you for inviting me to testify this morning on such an important topic.

My name is Justin Slaughter, and I am Policy Director at Paradigm, a research-driven technology investment firm that focuses on crypto and related frontier technologies. Previously, I served in the SEC at the start of the Biden Administration as Director of the Office of Legislative Affairs and Senior Adviser to Acting Chair Allison Herren Lee, and in the CFTC at the end of the Obama Administration as Chief Policy Adviser and Special Counsel to Commissioner Sharon Bowen. I also served as counsel to Senator Ed Markey in both the Senate and here in the House.

As we sit here today, crypto is rapidly forming the foundation for the future of commerce and social coordination—and I believe it can help solve many of the challenges discussed during today's hearing, and more. I am heartened by the work this Committee and others are doing to understand crypto and blockchains.

Jurisdictions around the world, allies and geopolitical adversaries, are further along than America in developing deliberate national strategies for harnessing the power of blockchains and crypto. The EU and the UK are well on their way toward establishing regulatory frameworks.<sup>1</sup> Japan and Singapore have in place a clear structure for companies issuing stablecoins—including those denominated in USD.<sup>2,3</sup> And China is marshaling resources across the government to support blockchain technology as a tool for geostrategic competition.<sup>4</sup> It's not too late for us to catch up, but we have to get our act together, and today's hearing is an important step in that direction.

At base, blockchains are a special type of shared database that enable the creation of unique, non-duplicable digital items. Blockchains do this by maintaining records of digital information ownership and replicating those records across multiple computers called nodes. Fixed rules, known as protocols, define activity, incentives, and updates—with the nodes on the network all having to agree on each addition of information to this shared database. Technological primitives, like cryptography and peer-to-peer messaging, ensure that the entire system functions according to those protocols.

<sup>&</sup>lt;sup>1</sup> <u>https://www.cliffordchance.com/insights/resources/blogs/talking-tech/en/articles/2023/04/the-developing-regulatory-landscape-for-cryptoassets-in-the-eu-a.html</u>

<sup>&</sup>lt;sup>2</sup> <u>https://asia.nikkei.com/Spotlight/Cryptocurrencies/Japanese-banks-prepare-to-launch-stablecoins</u>

<sup>&</sup>lt;sup>3</sup> <u>https://www.morganlewis.com/pubs/2023/08/monetary-authority-of-singapore-finalises-stablecoin-regulatory-framework</u>

<sup>&</sup>lt;sup>4</sup> <u>https://www.stimson.org/2021/blockchain-in-china/</u>

These webs of nodes, protocols, and primitives give rise to systems that can be used for a variety of functions—from the creation of truly digital, peer-to-peer money to the formation of new online communities with their own embedded governance mechanisms. Whereas the laws of physics define scarcity in the world of atoms, the world of bits was previously unconstrained, making it nearly impossible to *trustlessly* enforce digital property rights. While cheap reproduction and distribution is helpful for certain uses, like sharing photographs and written documents, unique items require mechanisms that limit supply. With crypto, it's now possible to own and control scarce digital objects and track their provenance across time and space without the need for a centralized entity. This includes money, art, and digital representations of physical items.

You can see how these characteristics could help solve critical problems in the world of supply chain management, where the inability to trace the origins and authenticity of physical items harms consumers, manufacturers, and more.

For example, counterfeit goods on Amazon erode the value of American brands and impose higher costs on entrepreneurs and the consumers that buy their products.<sup>5</sup> Similarly, manufacturers of complex products like computer hardware—often assembled from hundreds or thousands of component parts—frequently struggle to manage data records across suppliers in different locations. This is not just a consumer or business issue: a core aspect of securing critical infrastructure from adversarial nation-states and other malicious threat actors involves being able to confidently track the movements of component parts.<sup>6</sup> As for the government itself—the US Air Force has a blockchain-based supply chain project called BASECAMP, which helps the Air Force ensure timely and secure manufacturing of its essential equipment, and provide a reliable supply of needed parts for maintenance, supporting the ongoing operations of our military globally.<sup>7</sup>

How can the government therefore continue to play a role in supporting crypto and blockchain technology?

The National Cybersecurity Center of Excellence at NIST, in the Department of Commerce, has already been engaged in research on the use of blockchains for supply chains in manufacturing and infrastructure.<sup>8</sup> We welcome these efforts and think NIST's engagement and research needs to be only the tip of the iceberg. More constructive engagement is needed between the private sector and the government on these topics, especially within the Commerce Department but also more broadly. We also need more expertise within the government on these topics—like many expertises, crypto is not a topic that is easily learned, but determined study yields vast

<sup>&</sup>lt;sup>5</sup> <u>https://www.wsj.com/articles/on-amazon-fake-products-plague-smaller-brands-1532001601</u>

<sup>&</sup>lt;sup>6</sup> <u>https://www.microsoft.com/en-us/security/blog/2020/02/03/guarding-against-supply-chain-attacks-part-2-hardware-risks/</u>

<sup>&</sup>lt;sup>7</sup> <u>https://simbachain.com/case-study/u-s-air-force/</u>

<sup>&</sup>lt;sup>8</sup> https://www.nccoe.nist.gov/projects/manufacturing-supply-chain-traceability-using-blockchain-related-technologies

rewards. Similar to other emerging technologies, crypto and blockchain, and the companies building in the space, need to be appropriately fostered, and given clear rules of the road to operate.

The future that crypto can help build is clear. It can help make our supply chains more resilient while also keeping this nascent technology headquartered here, in America. Crypto can also offer increased economic opportunities for a variety of industries and communities, as well as increase the transparency of and access to our financial system. Thank you, and I look forward to your questions.