

In-Kind Returns Alone Shouldn't Qualify Tokens As Securities

By **Thomas Mack and Jorge Pesok** (July 22, 2020, 5:54 PM EDT)

A major shift is underway in cryptocurrency and distributed ledger technology. Networks using proof-of-stake, or PoS, consensus mechanisms are picking up steam amid concerns over power consumption and scalability issues associated with networks using proof-of-work, or PoW, consensus mechanisms.

Importantly, the Ethereum network, the second largest crypto network by market capitalization, is currently working toward a transition from PoW to PoS.

A key feature of PoS networks for purposes of this discussion is that they typically offer a return in the form of additional tokens for holders that stake^[1] their tokens in connection with block creation or validation on the network. This has brought a new type of arrangement, staking services agreements, or SSAs, into common use.

SSAs are agreements between token holders and service providers pursuant to which service providers employ client tokens in connection with operating a node on a PoS network, generating returns and remitting net profits to the clients.^[2]

These developments are raising novel legal questions, and in the case of the Ethereum network, they have the potential to upset the relatively new consensus that the network's native token, ether, is not a security under U.S. law.^[3] Comments from regulators have made it clear that it is something they are watching closely.

On Nov. 12, 2019, Commodity Futures Trading Commission Chairman Heath Tarbert spoke at a Coindesk conference, and was asked for his thoughts on the consequences of the Ethereum network moving to a PoS model, from its current PoW model.^[4] Specifically, when asked whether the PoS model looks like an investment contract, Tarbert said the CFTC is thinking carefully about this question, and added that the U.S. Securities and Exchange Commission is as well.

Tarbert stated a view that PoW mining is by its very nature more decentralized than validating in PoS networks, and indicated a shift in the Ethereum network to PoS would require ongoing analysis by the CFTC and the SEC.

Legal Overview



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In *SEC v. Howey Co.*,^[5] the U.S. Supreme Court found that "an offering of units of a citrus grove development coupled with a contract for cultivating, marketing and remitting the net proceeds to the investor," constituted an investment contract, and thus a security, for purposes of the Securities Act of 1933.^[6]

As many have rightly noted, particularly in analyzing certain crypto assets, the oranges and the orange groves in *Howey* were not, on their own, securities.^[7] However, when the orange groves were coupled with contracts for certain agriculture-related services and remittance of net profits to purchasers, the overall scheme constituted an investment contract.^[8]

Indeed, courts have found the presence of an investment contract in connection with various schemes combining nonsecurities with investment-related services.^[9]

In the growing class of PoS networks, a fact pattern is developing that could be similar in certain respects. PoS networks typically offer the potential for returns in kind to holders of crypto tokens who undertake certain activities to maintain and secure the network.

A new type of vendor has emerged to undertake these activities on behalf of such token holders and remit net profits. In some cases, the vendor also allows clients to purchase the underlying token via its exchange services, and advertises an estimated annual return to the client, stated as a percentage.

It is unsurprising that the SEC and the CFTC are thinking carefully about the regulatory implications of coupling the sale of tokens with certain agreements intended to generate profits and remit net proceeds to token holder. However, some have also wondered whether the shift to PoS might render a PoS network's token, taken alone, a security.^[10]

We would argue that the potential for in-kind returns — without more — should not alter the status of a PoS token under the securities laws, and that any heightened scrutiny of proof-of-stake ecosystems should instead focus on the manner in which the offer and sale of such tokens may be coupled with additional services or agreements.^[11]

Overview of Consensus Mechanisms, PoS Networks and SSAs

First, a bit of context on consensus mechanisms, PoS networks and SSAs. This is not an exhaustive or technically complete discussion of these topics.

Various SSAs and PoS networks function differently and may use different terms to refer to similar things. Nevertheless, here is a very general overview of some common themes to support the discussion that follows.

Consensus Mechanisms Generally

Consensus mechanisms are a complex topic, but let it suffice to say that any decentralized ledger needs to have a way of ensuring that the network of computers maintaining the ledger can consistently agree to one common version of the ledger. A network's means of addressing this issue is known as its consensus mechanism.

PoW Networks

PoW is one type of consensus mechanism, currently in use by the Bitcoin and Ethereum networks. PoW requires so-called miners to solve computationally difficult problems, thereby imposing the costs of power consumption and specialized hardware.

These costs are an intended feature of PoW networks — they incentivize stewardship of the network and punish bad actors, because malfeasance or misfeasance incurs these costs without generating the reward for creation of blocks that are ultimately agreed to by the rest of the network.[12]

However, the computationally difficult nature of mining on PoW networks has drawbacks — the Bitcoin network, known for its massive energy consumption, used as much energy as the nation of Switzerland in 2019.[13]

PoS Networks

PoS[14] is a different type of consensus mechanism, emerging as perhaps the most promising alternative to PoW. PoS consensus mechanisms use token holdings to incentivize proper block creation and validation — essentially by allowing those with greater interest in the network's success, as a function of their holdings in the network's native token, to play a greater role in its maintenance and development.

This reduced reliance on the costs associated with power consumption and specialized hardware relative to PoW could play a role in resolving scalability and power consumption issues commonly associated with public blockchains.[15]

Networks using a PoS consensus mechanism typically require that node operators stake tokens in connection with creating or validating blocks on the network. Where the operator properly validates or creates blocks, it is rewarded with in-kind payments of more of the PoS token. Where the node is operated improperly, the operator may forfeit some or all of its staked tokens or face other penalties.[16]

Generally, the larger a node operator's stake, the greater its ability to generate returns from creating or validating blocks on a PoS network. You might think of it like mining on the Bitcoin network, but instead of needing, among other things, powerful computers and lots of low-cost power, you need, among other things, large holdings in the PoS token and the technical ability to operate the node.

Whether this leads to more centralized networks, as suggested by Tarbert, could conceivably depend in part on whether a small number of service providers become the dominant means by which blocks are created and validated on PoS networks — as opposed to a diffuse body of PoS token holders participating individually in the process of block creation and validation on PoS networks.[17]

Staking Services Agreements

SSAs take many forms depending on the service provider and the PoS token being staked, but some common elements are:

- The service provider may or may not take custody of the client's PoS tokens. Some networks allow for delegation, or something similar by a different name, whereby the client maintains custody of their tokens while delegating the tokens to a service provider. In other cases, the

network or the service provider's business model may require the node operator to have custody of the PoS tokens being used.

- Once tokens are delegated to or in the custody of the service provider, the service provider operates its node, with the benefit of larger token holdings pooled from clients.
- The service provider generates rewards from the PoS network through its node operation, and distributes pro rata proceeds, net of costs associated with running the node, to clients that have deposited or delegated PoS tokens.
- Some service providers offering SSAs are also operating crypto exchanges, and thus may be the platform on which purchasers acquire the PoS tokens prior to entering into the SSA.

In addition to the above, service providers often advertise an estimated annual rate of return for would-be clients, based on past performance.

PoS Tokens and SSAs as Investment Contracts

As Tarbert noted in November, PoS can raise difficult questions, and in some cases, it further complicates already difficult questions. However, applying the factors from *Howey* to PoS tokens and SSAs, one can argue that PoS tokens are not made more security-like on account of the potential for in-kind returns, and that a more appropriate focus of regulatory scrutiny in the PoS ecosystem may be the coupling of PoS tokens with contracts for staking services and remitting of net profits.

First, we would argue that in many instances a network's use of a PoS or PoW consensus mechanism should have little effect on whether its tokens constitute an investment contract. While the in-kind returns offered by PoS networks may be thought to resemble interest or dividends associated with certain securities, these returns also — and perhaps more clearly — resemble certain commodities.

Importantly, PoS networks generally do not offer returns simply for holding a PoS token in the way an interest bearing security or equity instrument might. Rather, the PoS token grants the holder the potential to generate more of the PoS token if and only if the holder undertakes certain additional activities — perhaps by running a node with their tokens staked, or delegating those tokens to a service provider to run the node.

In this way, a PoS token more clearly resembles an orange or other commodity that can generate returns in kind if and only if its seeds are planted and cultivated. One could argue that adding this potential for in-kind accretions in value to a token like Ethereum should not make it an investment contract any more than the potential for orange tree cultivation makes oranges securities.

To put the point in terms of the *Howey* factors, such potential accretions in value — whether referred to as interest or something else — should not, without more, be seen as creating an expectation of profits based on the efforts of others.^[18] On the Tezos network, for instance, token holders can and do operate nodes — known as bakers — individually to generate in-kind returns. It would seem odd if this potential for value accretion using one's own efforts rendered something a security.

To extend the analogy of the oranges, one might say these token holders are akin to a person who plants and cultivates the orange seeds in their own backyard, not depending on the efforts of others for the in-kind accretion in value that comes in the form of oranges.

Second, however, even where the underlying PoS token is not an investment contract, there may be an investment contract when the token is coupled with an SSA, under certain conditions. Where a party offers clients the ability to purchase a PoS token, coupled with an SSA for use of the token in block validation and creation, with net profits to be remitted back to clients, such a scheme may draw the attention of U.S. regulators.

However, SSAs take many different forms and there may be key differences in the underlying networks or the manner in which vendors structure their SSA offerings, which may drive different legal answers in different cases.

For instance, some PoS networks allow token holders to delegate their tokens to another party without that party taking custody of the tokens.[19] This may allow for a vendor offering SSAs to generate returns for a client utilizing the client's tokens, without taking custody of those tokens, or otherwise pooling assets, profits and risks in a single enterprise.[20] On networks not allowing for delegation, SSA vendors would likely have to take custody of the client's tokens.

Another potential key difference is that, even on networks allowing for delegation, in some cases an SSA vendor will be required to custody rewards prior to remitting pro rata proceeds to delegators, while in other cases a network may allow rewards to distribute directly into delegators' custody.

Perhaps these types of factors in SSA arrangements that are coupled with PoS tokens will prove salient as regulators scrutinize these arrangements and ultimately deliver clarity moving forward.

Conclusion

PoS may play an important role in resolving the scalability and energy efficiency issues facing various forms of blockchain and decentralized ledger technology. But like all things blockchain, it raises challenging legal questions with potentially serious repercussions.

For networks with an otherwise clean bill of health legally — e.g., Ethereum — it seems wrong to suggest that use of a PoS consensus mechanism, without more, makes the token more likely to be an investment contract.

That said, where service providers offer the purchase of PoS tokens coupled with SSAs providing for the remittance of net proceeds to clients, one can understand why this would draw the attention of U.S. regulators. We would argue for a continued clean bill of health for such a PoS token, with further discussion instead focusing on SSAs and other arrangements coupled with the token.

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[1] Staking takes different forms on different networks, but typically consists of staked tokens becoming

associated with a node on the PoS network - where more tokens are staked to a particular node, that node earns greater rewards in connection with supporting the operations of the network.

[2] Some refer to this type of arrangement as "staking-as-a-service," or "StaaS."

[3] Other questions raised by the technology but not discussed here include the tax treatment for staking rewards (see "Proposed Tax Treatment of Earning Proof of Stake Rewards," available at https://drive.google.com/file/d/1L_Tfrc5Eb44B5z3xfQpxHgJr7Gn9mF-U/view), and money transmission issues (see Blockchain and Cryptocurrency Regulation 2020: The potential legal implications of securing proof-of-stake based networks, available at <https://www.globallegalinsights.com/practice-areas/blockchain-laws-and-regulations/12-the-potential-legal-implications-of-securing-proof-of-stake-based-networks>).

[4] Available at <https://jwp.io/s/R70bTk1z>.

[5] SEC v. W.J. Howey Co., 328 U.S. 293 (1946). We assume the reader's general familiarity with Howey, and will highlight only certain relevant aspects here and in the discussion that follows.

[6] Id., at 293-94. See also 15 U.S.C. § 77b(a)(1).

[7] See, e.g., Peter Van Valkenburgh, No, Ether is Not a Security, available at <https://coincenter.org/entry/no-ether-is-not-a-security> (discussing the difference between token pre-sale instruments and tokens, noting that "the oranges [in Howey] would never have been found to be securities").

[8] See 328 U.S. at 300 ("[t]he investment contracts in this instance take the form of land sales contracts, warranty deeds and service contracts which respondents offer to prospective investors").

[9] See, e.g., S.E.C. v. Joiner Corp., 320 U.S. 344 (1943) (finding an investment contract where leasehold rights were combined with other services and marketed as an investment); Glen-Arden Commodities, Inc. v. Costantino, 493 F.2d 1027 (2d Cir. 1974) (affirming order granting preliminary injunction finding an investment contract where interests in aging whiskeys were sold to purchasers and coupled with promoters' expertise in selecting whiskeys and promises to buy back whiskey in the future).

[10] See, e.g., <https://www.coindesk.com/what-the-cftc-chairman-actually-said-about-ether-futures-and-ethereum-2-0>.

[11] To be clear, this is not to say we think such arrangements (sales plus staking services agreements) should necessarily be viewed as investment contracts. There may also be good arguments for why these arrangements might not be investment contracts. We also note that there is significant variation in the functionality of proof of stake networks, as well as the manner in which staking services agreements are structured, which may yield divergent legal conclusions across different networks and service providers.

[12] For a more detailed and technical discussion of bitcoin's PoW consensus mechanism, see the Bitcoin whitepaper, available at <https://bitcoin.org/bitcoin.pdf>.

[13] Chris Baraniuk, Bitcoin's energy consumption 'equals that of Switzerland', BBC News (Jul. 3, 2019) <https://www.bbc.com/news/technology-48853230>.

[14] For a more in-depth discussion of PoW and PoS consensus mechanisms, see, e.g., <https://www.bitdegree.org/tutorials/proof-of-work-vs-proof-of-stake/>.

[15] This is not to suggest that PoW and PoS are the only types of consensus mechanisms in use. There are a variety of other types of consensus mechanisms under development or currently in use, including proof of elapsed time, proof of authority, and proof of capacity.

[16] These penalties are referred to as "slashing" on some PoS networks.

[17] Although, where SSA providers allow token holders to participate in governance decisions or otherwise avail themselves individually of offerings on a PoS network, this could undercut certain concerns over centralization of block production pursuant to SSAs. We note also that the past several years have shown that PoW networks may be no better at promoting decentralization, at least in geographic terms. Nearly 81% of all mining activity on the bitcoin network takes place in China; less than 1% takes place in the United States. Internal Revenue Service, Cyber Crimes, Tax Notes 2019-25765, p. 55 of 181 https://s3.amazonaws.com/pdfs.taxnotes.com/2019/2019-25765_TNTDocs_CI-Cyber-Crimes_PDFONLY.pdf.

[18] See generally, William Hinman, Digital Asset Transactions: When Howey Met Gary (Plastic), available at <https://www.sec.gov/news/speech/speech-hinman-061418> ("the economic substance of the transaction always determines the legal analysis, not the labels"), citing *Howey*, 328 U.S. at 299; *United Housing Foundation, Inc. v. Forman*, 421 U.S. 837 (1975).

[19] This may be referred to as "delegated proof of stake." Prominent delegated proof of stake networks include Tezos and Cosmos.

[20] See generally, *SEC v. Infinity Group Co.*, 212 F.3d 180 (3d Cir. 2000) (applying a horizontal commonality test); *SEC v. Koscot Inter., Inc.*, 497 F.2d 473 (5th Cir. 1974) (applying a broad vertical commonality test); *SEC v. Glenn W. Turner Enters.*, 474 F.2d 476, 482 n.7 (9th Cir. 1973) (applying a narrow vertical commonality test). But see, *In re Barkate*, 57 S.E.C. 488, 496 n. 13 (Apr. 8, 2004) (stating the view that the presence of a common enterprise is not a "distinct requirement for an investment contract under [Howey]").