

NYSBA Tax Section

Report on Cryptocurrency and Other Fungible Digital Assets

Report No. 1461

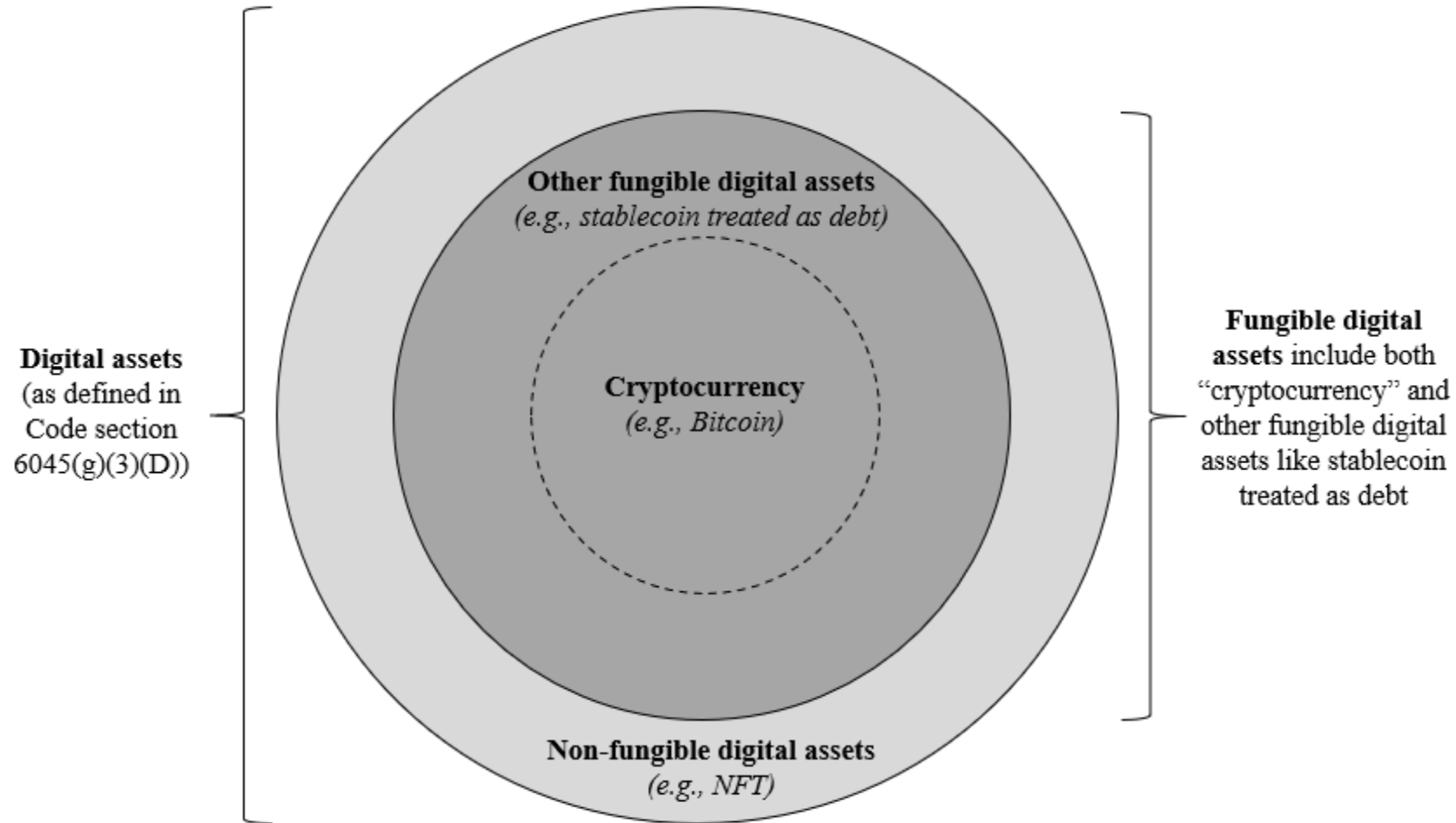
Overview of Topics

- Nomenclature
- General characterization of cryptocurrency
- Application of the commodities trading safe harbors to cryptocurrency
- Application of MTM provisions for commodities to cryptocurrency
- Cryptocurrency lending
- “Wrapping”
- Tax characterization of certain USD-pegged stablecoins
- Staking rewards

Nomenclature

- Colloquial terminology:
 - Cryptocurrency / digital currency
 - Stablecoins
 - Utility tokens
 - Security tokens
 - NFTs
- NYSBATS Report nomenclature:
 - Cryptocurrency: Any fungible, blockchain-based digital asset that doesn't fall in an existing FIT category like debt, ownership of an underlying non-cryptocurrency asset, etc.
 - Fungible digital asset:
 - Any cryptocurrency, and
 - Any other fungible, blockchain-based digital asset (e.g., stablecoin treated as debt, utility token treated as partnership interest, security token treated as ownership of an underlying stock or security).
 - Non-fungible digital asset

Nomenclature (cont . . .)



General Characterization of Cryptocurrency

- Notice 2014-21 says “convertible virtual currency” is “property” (and not foreign currency) for FIT purposes . . . but what *kind* of property?
- Commodities?
 - No uniform FIT definition of “commodities.”
 - Rev. Rul. 73-158 and PLR 8540033 suggests CFTC regulation is relevant.
 - CFTC views all “virtual currencies” as commodities.
- Securities?
 - No uniform FIT definition of “securities.”
 - Cryptocurrency generally not a security.
 - Other fungible digital assets may qualify as securities in certain circumstances.
- New category?
 - Infrastructure Bill information reporting rules for “digital assets.”
 - Green Book proposals to expand sections 1058 and 475 to “digital assets.”

General Characterization of Cryptocurrency

- NYSBATS recommendation:
 - Consider treating cryptocurrencies (as defined on slides 3-4) as commodities for all purposes under the Code, unless:
 - Relevant Code provision has specific rules addressing treatment of some or all digital assets (*e.g.*, section 6045).
 - Relevant Code provision defines the term commodity by reference to additional requirements (*e.g.*, “active trading”), if such additional requirements are not satisfied.

Commodities Trading Safe Harbors

- Commodities trading safe harbors in section 864(b)(2)(B) apply only if:
 - The commodities are “of a kind customarily dealt in on an organized commodity exchange,” and
 - The transactions are “of a kind customarily consummated at such a place.”
- What qualifies as “organized commodity exchange”?
 - Futures in Bitcoin and Ether are traded on CFTC-regulated commodity futures exchange.
 - Other popular cryptocurrencies are traded on centralized cryptocurrency exchanges (e.g., Coinbase, Kraken) and decentralized exchanges.
 - Cf. PLR 8850041 (ruling that safe harbor applies to foreign currencies traded only on non-US exchanges not regulated by CFTC).
- What does “customarily consummated” requirement add?
 - Spot transactions? See Rev. Rul. 73-158 (spot sales of raw sugar qualify because futures in raw sugar traded on commodity futures exchange).

Commodities Trading Safe Harbors (cont . . .)

- NYSBATS recommendation:
 - Extend commodities trading safe harbors to trading in cryptocurrencies:
 - Clarify that cryptocurrencies are section 864 “commodities.”
 - Clarify that centralized cryptocurrency exchanges are “organized commodity exchanges.”
- Relevant considerations:
 - If Bitcoin and Ether qualify under existing law, why not other cryptocurrencies?
 - CFTC views all cryptocurrencies as commodities.
 - Extending safe harbors to cryptocurrencies has precedent in 1998 proposed regulations extending safe harbors to derivatives.
 - Policy considerations:
 - Moving trading activity offshore?
 - Promoting transparency?
 - Retaining US leadership role in blockchain tech?

Section 475 Mark-to-Market Rules

- Under section 475, dealers and traders in commodities can elect to use MTM with respect to commodities held as dealer or trader.
- For these purposes, “commodity” is defined as “any commodity which is actively traded” within the meaning of section 1092 (straddle rules).
- Section 1092 does not define “actively traded.”
 - Legislative history suggests expansive definition that does not require trading on a regulated market.
 - Treasury regulations provided that “actively traded” property includes any property for which there is an “established financial market.”
 - Established financial market is defined to include:
 - domestic board of trade designated as a contract market by the CFTC
 - “interdealer market”

Section 475 Mark-to-Market Rules (cont . . .)

- Are cryptocurrencies “actively traded”?
 - Bitcoin and Ether are “actively traded” because Bitcoin and Ether futures are traded on CFTC-regulated commodity futures exchange.
 - Other cryptocurrencies traded on centralized cryptocurrency exchanges (e.g., Coinbase) likely also qualify as “actively traded.”
 - Definition of “interdealer market” is broad:
 - “[A] system of general circulation (including a computer listing disseminated to subscribing brokers, dealers, or traders) that provides a reasonable basis to determine fair market value by disseminating either recent price quotations (including rates, yields, or other pricing information) of one or more identified brokers, dealers, or traders or actual prices (including rates, yields, or other pricing information) of recent transactions.”
- Are cryptocurrencies section 475 “commodities”?
 - Section 475(e)(2)(A) defines the term “commodity” to include “any commodity which is actively traded (within the meaning of section 1092(d)(1)).”

Section 475 Mark-to-Market Rules (*cont . . .*)

- NYSBATS recommendation:
 - Clarify that fungible digital assets traded on centralized cryptocurrency exchanges are “actively traded” for purposes of section 1092.
 - Clarify that cryptocurrencies are “commodities” for purposes of section 475 as long as they are “actively traded.”
- Green Book proposes to extend section 475 MTM elections to “digital assets” as a new, separate asset category.

Cryptocurrency Lending

- Volume of digital asset loans in 2021 was more than \$130 billion.
 - Nearly six-fold increase over digital asset lending volume in 2020.
 - Reasons for crypto lending?
 - Non-traditional source of financing.
 - Traders may borrow crypto to short it.
 - Retail investors may lend their crypto to earn fixed income.
- As yet, there is no industry standard documentation for digital asset loans.
- Many digital asset loans are made without traditional legal documentation through “DeFi” arrangements (smart contracts).

Cryptocurrency Lending (cont . . .)

- Section 1058(a) provides that no gain or loss is recognized on a loan of “securities” that meets certain requirements:
 - Lender will receive identical securities at maturity,
 - Lender will receive substitute payments, and
 - Loan does not reduce lender’s risk of loss or opportunity for gain.
- Section 1058 does not apply to cryptocurrency because it is not a “security.”
 - Should similar principles apply to cryptocurrency loans?
 - Section 1058 principles are embedded in pre-1058 authorities whose reasoning is not limited to securities loans. See, e.g., GCM 36948.
 - Section 1058 was intended to eliminate uncertainty about securities loans (not preempt preexisting authorities).
 - Green Book proposes to extend section 1058 to digital assets.

Cryptocurrency Lending (cont . . .)

- Would cryptocurrency loans satisfy Section 1058 requirements?
 - Can units of cryptocurrency be “identical” given their unique blockchain history?
 - Is it feasible to make substitute payments?
 - Digital assets received in airdrops may not be supported by exchanges or custodians.
- NYSBATS recommendation:
 - IRS should issue guidance clarifying that cryptocurrency loans meeting section 1058-like requirements do not give rise to realization event.
 - Only material airdrops and hard forks should be required to be passed through.
 - Objective test (e.g., trading volume, market capitalization).
 - Catch-all for any airdrops or hard forks requested by lender.
- Green Book proposal:
 - Requires all airdrops and hard forks to be passed through unless otherwise provided by Treasury.

“Wrapping”

- Cryptocurrencies can be “wrapped” to use them on a different blockchain.
 - In its native form, Bitcoin cannot be used on the Ethereum blockchain (just like cash cannot be used on the Ethereum blockchain).
- For example, Bitcoin can be “wrapped” into wBTC, an ERC-20 token that is compatible with the Ethereum blockchain.
 - Holder deposits Bitcoin with custodian to “mint” a number of wBTC units equal to the Bitcoin deposited.
 - Custodian holds Bitcoin in segregated wallet that can be verified by public and agrees not to transfer Bitcoin.
 - Holder of wBTC can “unwrap” (convert) wBTC back into Bitcoin at any time on demand.

“Wrapping” (cont . . .)

- Tax treatment of “wrapping” and “unwrapping”
 - Does “wrapping” result in transfer of tax ownership?
 - If custodian has no right to transfer underlying cryptocurrency? Cf. ADR rulings (e.g., Rev. Rul. 65-218).
 - If custodian can transfer underlying cryptocurrency?
 - If so, is “wrapping” a realization event?
- NYSBATS recommendation:
 - Issue guidance providing that holder of wrapped cryptocurrency is treated as tax owner of underlying cryptocurrency as long as custodian has no right to transfer the underlying cryptocurrency and holder has the right to “unwrap” at any time.
 - For wrapping arrangements that do not meet these requirements, analysis should be governed by section 1001, similar to cryptocurrency loans.

Stablecoins

- US dollar-pegged stablecoins saw explosive growth in 2021, with a combined circulating supply of nearly \$130 billion as of September 2021 (reflecting a year-over-year increase of more than 500 percent).
- US-dollar pegged stablecoins are typically tied to the value of USD through off-blockchain arrangement in which a sponsoring legal entity permits holders to convert each stablecoin into one USD.
 - Sponsor may hold reserve assets to ensure repayment of stablecoin.
 - Nature and extent of such reserves, and information provided by sponsor about its reserves, can vary considerably by sponsor.
 - Legal rights of a holder of stablecoin against the sponsor or any reserve assets vary widely by sponsor; holder may not have an enforceable right to repayment.

Stablecoins (*cont . . .*)

- Possible US tax characterizations:
 - Indebtedness of sponsor
 - Ownership of pro rata share of sponsor's reserve assets
 - Ownership of USD
 - Miscellaneous property
- NYSBATS recommendation:
 - Issue guidance clarifying that:
 - Sponsored USD stablecoins with certain features (*e.g.*, legal enforceability, collateralization with high-quality debt) are debt for FIT purposes.
 - Sponsored USD stablecoins that are not debt should be treated as property other than debt (and not as ownership of reserve assets or USD).

Staking Rewards - Background

- Staking rewards are paid by cryptocurrency protocols that use a “proof of stake” consensus mechanism (e.g., Cardano, Solana, Tezos).
- A “consensus mechanism” is a tamper-resistant process of agreement by which a decentralized P2P network can agree on one “true” dataset of ownership and transaction history to record on its blockchain.
- Historically, the most popular cryptocurrencies (Bitcoin and Ether) used a “proof of work” consensus mechanism.
- Because proof of work consumes an enormous amount of energy, proof of stake has developed as an energy-efficient alternative intended to offer comparable blockchain security.
 - Ethereum blockchain is expected to migrate to proof-of-stake later this year.

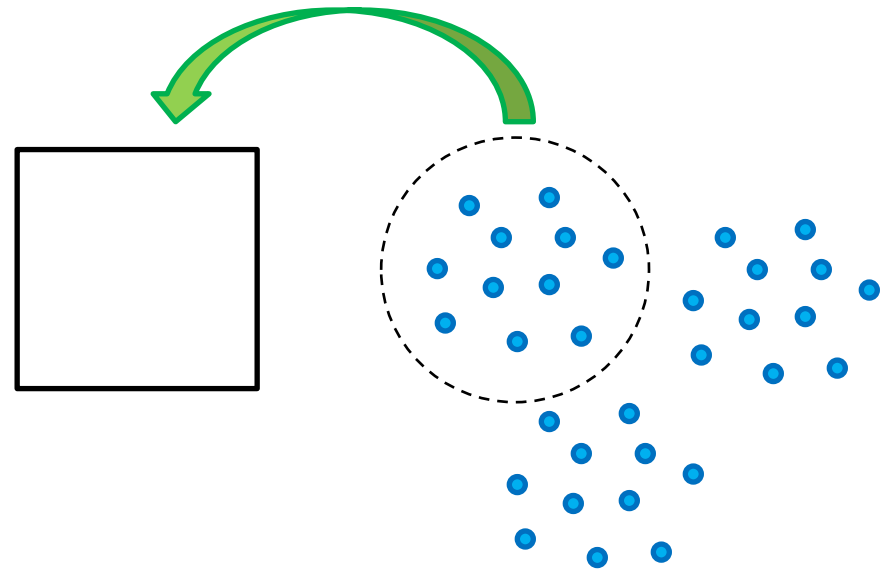
Staking Rewards - Background (cont . . .)

- Proof of work:
 - Validation rights allocated based on ability to solve arbitrary computer puzzles (“mining”).
 - Miners incentivized to validate transactions accurately because:
 - They incur uncompensated energy and hardware costs if they propose an invalid block (the stick).
 - The protocol distributes mining rewards for accurate validation (the carrot).
- Proof of stake:
 - Validation rights allocated based on units of the native cryptocurrency deposited (“staked”) with the protocol.
 - Stakers are incentivized to validate transactions accurately because:
 - Their staked cryptocurrency will be reduced (“slashed”) for inaccurate validation (the stick).
 - The protocol distributes staking rewards for accurate validation (the carrot).

Staking Rewards - Background (cont . . .)

Validation

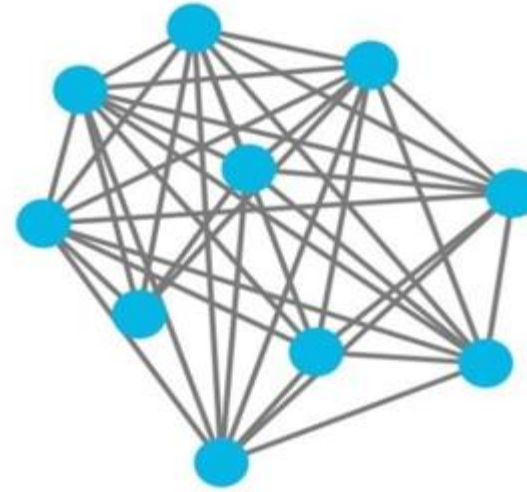
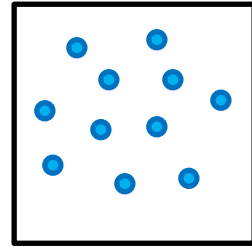
1. Validation right allocated to miner (for solving puzzle) or staker (for staking cryptocurrency).
2. Validator selects and validates batch of new transactions from protocol's pending transaction pool to form a new block.



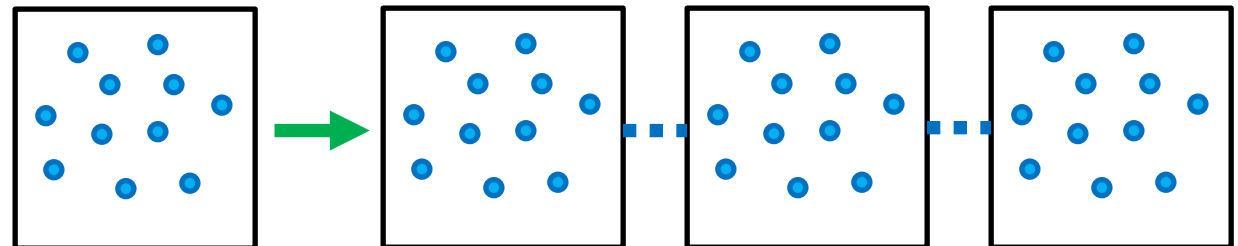
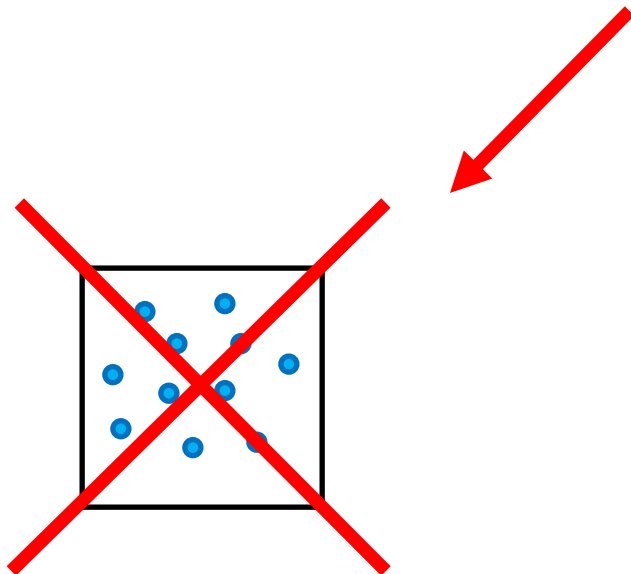
Staking Rewards - Background (cont . . .)

Verification & Rewards

3. Validated block is broadcast to network for verification.



4. If block is verified, it is added to blockchain and validator receives rewards.



Staking Rewards - Background (cont . . .)

- Composition of rewards
 - Newly minted units of the protocol's native cryptocurrency.
 - Transaction fees paid by parties whose transactions are validated.
 - Value of transaction fee component of rewards is variable and depends on network usage.
- Proof-of-stake delegation
 - Holders of proof-of-stake cryptocurrencies may not have know-how or desire to validate transactions or interface directly with blockchain.
 - Accordingly, they can generally delegate their validation rights to third-party validators.
 - Validators may charge an agreed percentage of the staking rewards earned (typically 5-10%).

Staking Rewards – Gross Income?

- Are staking rewards gross income when received?
 - Notice 2014-21: mining rewards are gross income when received.
 - IRS has not provided specific guidance with respect to staking rewards.
 - Difficult to identify a strong basis to treat staking rewards different than mining rewards.
- Self-created property?
 - Argument doesn't work for transaction fees and may not work for delegated validation.
 - Income under *Glenshaw Glass*.
 - Property includable in income when there is an “undeniable accession[] to wealth, clearly realized, and over which the taxpayers have complete dominion.”
 - Analogy to manufactured property?
 - There are specific rules for certain created property, such as manufactured goods and crops, that defer recognition of income until property is sold (e.g., Treasury regulations sections 1.61-3, -4).
 - Newly minted staking rewards are not “created” by validator; rather, validator takes certain actions on behalf of protocol, which delivers the rewards.

Staking Rewards – Gross Income? (cont . . .)

- No accretion to wealth (dilution)?
 - Argument doesn't work for transaction fees (not dilutive).
 - With respect to newly-minted rewards, there generally is an accretion to wealth:
 - Participation in staking is not universal, varies by protocol and changes over time.
 - No rewards received (and tokens may be slashed) if validation is performed incorrectly.
 - Analogy to stock dividends is not persuasive.
 - Neither pro rata cash dividends nor pro rata stock dividends result in economic accretion to wealth, yet former is taxable and latter is not (section 305).
 - Legislative history of section 305 suggests that for pro rata stock dividends, Congress focused on the lack of any change in the rights of the shareholder vis-à-vis the distributing corporation's assets and earnings (rather than accretion to wealth).
 - Not clear that this rationale translates to the context of staking rewards issued by a cryptocurrency protocol.

Staking Rewards – Gross Income? (*cont . . .*)

- NYSBATS recommendation:
 - Issue specific guidance clarifying that staking reward are includable in gross income when received at their fair market value at such time.

Staking Rewards – Sourcing?

- How should staking rewards be sourced?
 - Services income?
 - Income from services sourced to location where services are “performed.”
 - Validation is principally an automated computational process performed by software on servers. Requires some human support personnel.
 - Is validation “performed” at location of servers? Location of support personnel?
 - Passive income like interest/royalties?
 - Interest sourced to jurisdiction of payor.
 - Royalties sourced to location where intangible property is “used.”
 - Both are indeterminable in case of cryptocurrency protocol.

Staking Rewards – Sourcing? (cont . . .)

- Does delegation change sourcing?
 - Could view delegation as a license, such that amounts received from third-party validator are a royalty sourced to location where intangible is “used” by validator.
 - Could view delegation as services agreement or subcontract under which third-party validator performs services on behalf of beneficial owner, in which case rewards are sourced to location where validator “performs” the services.

Staking Rewards – Sourcing? (cont . . .)

- NYSBATS recommendation:
 - Source of staking rewards is unclear under current law.
 - Results in uncertainty and taxpayer electivity.
 - Foreign persons may already stake through foreign validators to avoid US withholding.
 - IRS could consider a recipient-based sourcing rule under which the source of staking rewards, and any amounts transferred in respect of rewards under a delegation arrangement, is determined by reference to tax residence of recipient.
 - Legal and factual uncertainty regarding source of staking rewards is comparable to uncertainty that historically existed for FX gain/loss on financial instruments and swap payments.
 - In both contexts, Congress or Treasury adopted a recipient-based sourcing rule.

QUESTIONS?