blockchain: the state of play

INTRODUCTION

Despite recent setbacks in the crypto asset market, blockchain and digital asset use cases continue to expand for accounting and finance professionals. As these technologies take their place in the financial landscape, companies are increasingly turning to CPAs for information and perspective on their impact. Accounting professionals have the technical and business foundation necessary to advise companies on digital asset technologies, and the AICPA and CPA.com are taking key steps to enhance the opportunities. "We are working to help firms build a true commercial practice that focuses on solutions to help their clients navigate digital assets," said Erik Asgeirsson, president and CEO of CPA.com, at the fifth annual AICPA and CPA.com Blockchain Accounting Symposium.

To advance knowledge in this space, the symposium brings together thought leaders, regulators, developers and firms that are subject matter experts in blockchain. Its goals are to:

- Continue to frame and advance blockchain awareness.
- Share updates and information.
- Help inform the profession's blockchain strategy and future initiatives.
- Build a valuable network and community.

This year's symposium presented a clear-eyed view of the future of blockchain technology and digital assets, and the role that CPAs can play in this ecosystem. Amid a tough few months as the crypto asset markets plunged, the focus at the symposium was taking the opportunity to step back and reconsider how crypto asset markets should work and how assets are shared. This reassessment will make it possible to end the overspeculative nature of the market, according to Ron Quaranta, chairman and CEO of the Wall Street Blockchain Alliance (WSBA). "Progress will not be a big bang, but an evolution," he said. "We can learn from the lessons of the current

crypto winter." The WSBA collaborates with the AICPA and CPA.com on the symposiums to define the impact of blockchain technology for the accounting profession and advance the interests of both the public and the profession in this area.

There has certainly been some retrenchment in the market. The total market capitalization of all crypto assets as of the 2022 symposium date was $1.492 trillion, a significant drop of almost 34% from the market capitalization of $2.255 trillion just six months prior. Interestingly, the value at the date of the 2022 Symposium was up about 6.5% from the value in 2021 ($1.395 trillion in 2021 versus the above noted $1.492 trillion in 2022). The number of crypto exchanges, however, grew to 600 from 383 over the one-year period since the last event. In addition, the number of crypto assets grew from a little under 11,000 in 2021 to over 20,600 this year.

"Looking ahead, this can be an evolving and transformative time that offers improved insights into the blockchain ecosystem and how it can develop in the future," Quaranta said.

The total market capitalization of all crypto assets as of the 2022 symposium date

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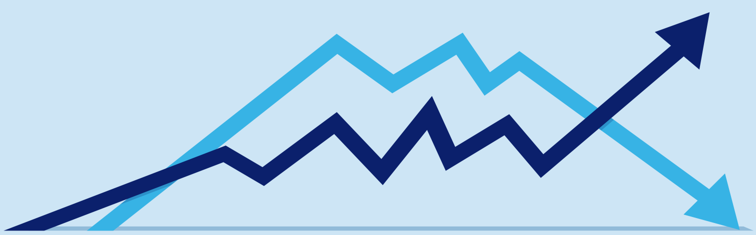

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THE REGULATORY AND LEGISLATIVE LANDSCAPE

As blockchain and digital assets have evolved and the market has grown, they've received increasing attention from regulators. "Regulators are trying to achieve a balance between their investor protection mandate and promoting—or at least not stifling—innovation," said Taylor Harris, CPA, professional practice fellow at the Center for Audit Quality (CAQ).

Who's in charge?

Who has jurisdiction over a rapidly evolving and widely misunderstood market is a key question that has yet to be decided. Categorization of digital assets is one major consideration. At the federal level, establishing that crypto assets are securities would mean that they would be overseen by the U.S. Securities and Exchange Commission (SEC). SEC oversight and enforcement would help prevent their use to traffic illicit goods and services, among other benefits. Other interested stakeholders include:

- The Commodity Futures Trading Commission, which has also brought enforcement asset fraud and manipulation cases in this space and has staff dedicated to this area.
- The Consumer Finance Protection Bureau, which has published information on virtual currencies and addresses consumer complaints related to virtual currency product or service issues.

What are the tax implications of digital assets?

The Bipartisan Infrastructure Law, passed last year, added new rules for brokers and customers on reporting crypto transactions under Internal Revenue Code Sections 6045 and 6045A. It includes references to digital assets, such as crypto assets and non-fungible tokens (NFTs). It also extends requirements on reporting cash transactions related to digital assets.

The Internal Revenue Service recently released a draft version of the 2022 Form 1040 that includes a question on whether the taxpayer has received or sold, exchanged, gifted or otherwise disposed of a digital asset. Many questions remain unanswered on the tax front, however, and the AICPA has taken a leadership role in calling for greater clarity on digital asset tax regulation. For example, it is advocating for an update of IRS Revenue Ruling 2019-24, on specific gross income considerations with crypto assets, and has made recommendations on a number of issues. Among other concerns, there is uncertainty in this area because IRS FAQs on virtual currency transactions are nonbinding and changing. As a result, there can be confusion on issues such as the taxation of, for example, gifts of virtual currencies. Other questions include how to treat NFTs under tax law, what their underlying basis would be and what constitutes a qualified appraisal of value.

> **The Virtual Currency Tax Fairness Act, recently introduced by Senators Pat Toomey and Kristin Sinema, is aimed at clarifying tax issues to make it easier to use virtual currency for everyday purchases, exempting transactions of under $50.**

What is the status of recent and proposed federal legislation and regulation?

- An executive order from President Biden tasks a variety of government agencies with reporting on certain possible measures related to digital assets, including in areas such as consumer and investor protection; financial stability; illicit finance;

U.S. leadership in the global financial system and economic competitiveness; financial inclusion; and responsible innovation. The Treasury has already taken up that work from a stablecoin perspective.

- The CHIPS and Science Act directs the White House's Office of Science and Technology Policy to create a blockchain and crypto assets advisory specialist position.
- The proposed Lummis-Gillibrand Responsible Financial Innovation Act would establish definitions for terms that would be used by federal agencies; set rules for taxation of digital assets; and address consumer protections, payments and banking innovation, and interagency coordination.
- The proposed Stablecoin TRUST Act would standardize regulation and legal treatment of these assets.
- The proposed Token Taxonomy Act would make changes that include exempting digital tokens from securities laws.

What is happening at the state level and elsewhere?

States have and can be expected to continue to make their own laws governing digital assets. New York State, for instance, has stablecoin guidance that requires monthly audits by CPAs of asset reserves backing these coins.

Wyoming has taken a lead in digital asset legislation, passing laws defining digital assets, recognizing decentralized autonomous organizations (DAOs), allowing banks to provide blockchain-based and traditional bank service, and clarifying the treatment of digital assets under the Uniform Commercial Code.

It's likely that consumer protection will be a key consideration in future state regulations. The recent crypto asset market crash has also been a call to arms to global regulators to consider how best to oversee this area. At the moment, though, there is virtually no harmonization across jurisdictions.

How are legal cases shaping the conversation?

Much of crypto asset's future may also be written by the courts, based on cases brought by regulators and in private litigation. For example, the U.S. Attorney for the Southern District of New York recently indicted employees of Coinbase Global in what he called the first-ever insider trading case involving crypto asset markets. In addition, securities class actions lawsuits involving crypto assets were heading toward an all-time high in the first half of 2022, according to a survey by Cornerstone Research and the Stanford Law School Securities Class Action Clearinghouse. Court decisions may ultimately clarify liability risks and accepted practices in many areas and could have an impact on how the market is conducted going forward.

AICPA resources on new SEC guidance

SEC Staff Accounting Bulletin No. 121 (SAB No. 121) is aimed at entities that have obligations to safeguard crypto assets for platform users. It requires organizations to:

- Recognize a safeguarding liability with a corresponding indemnification asset. They should both be measured initially at the fair value of the crypto asset.
- Disclose qualitative and quantitative information about the safeguarding obligation.
- Provide disclosures within and outside the financial statement.

The AICPA has added Q&As on SAB No. 121 in Appendix B of its practice aid, Accounting for and Auditing of Digital Assets. The AICPA regularly updates the practice aid with new digital asset-related guidance.

TOP TAKEAWAYS: A FIRESIDE CHAT WITH SEC COMMISSIONER HESTER PEIRCE

The symposium featured a conversation with U.S. Securities and Exchange Commissioner Hester Peirce. (Note that Peirce's views as expressed were her own and not those of the SEC or its commissioners.)

Top takeaways from the discussion included:

- Developers of new technologies, such as crypto assets, should not assume that they are exempt from securities laws. However, Peirce advocated a timelier and more user-friendly regulatory process than is now in place. Her concern is that the financial regulatory structure is inflexible and not able to accommodate innovation. She also noted that negative reactions to the recent crypto market declines might obscure their value in traditional financial markets in speeding settlements, for example, or making it easier to automate collateral management.
- Under Peirce's Token Safe Harbor Proposal 2.0, network developers would be exempt from the registration provisions of the federal securities laws during a three-year grace period. That would allow time for development of a functional or decentralized network.
- The timeline for regulatory change is uncertain. It will include considerations such as which agency has jurisdiction over the market.
- In a discussion of legislative activity, she praised the holistic approach of the proposed Lummis-Gillibrand Responsible Financial Innovation Act.
- Peirce believes it is possible to maintain existing rules without redefining terms such as "security" to encompass new technologies. Some areas may need to be updated, however, such as transfer agent rules. There's room to carve out a space where people who acknowledge the risks involved can trade without intermediaries, she said.
- After the market shakeout, those involved in crypto assets have an opportunity to shape the message about this market. "The industry can explain the value proposition, and the risks, and target crypto assets to those in a sophisticated audience who can decide if they want to take those risks," Peirce said.
- Currently the risk of crypto assets having a negative impact on the overall system is small, but the recent market decline has offered some valuable lessons on current crypto market vulnerabilities, she said.
- Decentralizing finance enhances market resilience. Spreading risk is good for the financial system, she said.
- If a central bank digital currency is adopted in the United States, privacy concerns surrounding financial information will be an issue.

ACCOUNTING AND AUDITING CONSIDERATIONS

Two-thirds of audit partners report that crypto assets are not a priority for most public companies, according to the 2022 Center for Audit Quality Audit Partner Pulse Survey. However, financial services organizations and technology, telecommunications, media and entertainment companies appear to be the early adopters and are more likely to be considering or preparing to accept crypto assets as a form of payment.

However, "innovation is driving change in audit and accounting," said Markus Veith, CPA, partner and Digital Asset practice leader at Grant Thornton LLP. Finance teams and CPA firms are already dealing with a range of issues related to accounting and auditing of digital assets.

Accounting

Although the Financial Accounting Standards Board has a project underway, for the time being, U.S. generally accepted accounting principles (GAAP) don't specifically address digital assets. Instead, these digital assets are typically accounted for as intangible assets with indefinite lives, similar to the treatment of a trademark or goodwill. That can create a disconnect, because the assets are used by organizations as financial instruments, which are exchangeable and tradeable. CPAs will have to consider issues such as recognizing or derecognizing the asset, impairment and the settlement and verification of transactions.

As a result, CPAs may be called on to provide information that a company can use for its own internal strategic planning or offer as background to its auditors explaining the disconnect and providing perspective on the actual economic impact of the crypto assets, said Rahul Gupta, CPA, partner in Grant Thornton LLP's National Professional Standards Group. For his firm, clients in this space include native crypto asset companies and crypto exchanges, custodians and crypto buying and lending services. He also sees traditional companies investigating the area because, for example, they are considering offering crypto assets in their rewards or loyalty programs.

Banks and credit unions, in particular, may be seeking advice in this area, said Veith. That is at least in part because they are feeling pressure from Gen Z customers—generally considered those born between 1997 through 2012—who may want to invest and perhaps make transactions in crypto assets. To avoid losing their business, banks are actively working to understand and enter the crypto space. A total of 51% of audit partners with clients in the financial services industry sector said they were either preparing to accept crypto asset payments (28%) or considering doing so (23%), according to the CAQ audit partner survey.

Auditing

The disconnects between accounting guidance and the actual economic use of digital assets will certainly have an impact on audits, as well. Other issues to consider include:

- Audit evidence is a critical factor because in a digital asset transaction, the auditor is not performing traditional steps such as observing inventory or checking an invoice for an expense. Indeed, "certain coins have privacy features that leave them with no audit trail," Veith noted. In each new situation, "we need to perform due diligence on whether the digital asset can be audited." These concerns will also be important to finance teams at companies being audited.
- Auditors and finance team leaders will also have to consider whether companies have the appropriate levels of internal controls, including the quality of controls surrounding custody. Auditors will need to investigate companies' relationships with third parties involved with their digital assets. While this is the case in any audit area, "blockchain technology adds a new layer and requires a different mindset," Harris said. He also recommended that auditors gain an understanding of a company's overall objectives in engaging with digital assets and then dig into the nuances of the related transactions.

POSITIONING FIRMS & COMPANIES FOR NEW ADVISORY OPPORTUNITIES

The digital asset landscape is fluid and will continue to change, noted the CAQ's Harris. "CPAs will have to monitor if and how changes in the market could impact clients who are engaged in digital assets or thinking about getting in," he said.

And even though many companies may now have no involvement in the blockchain space, now is the time for them to begin investigating what it may mean for an organization. There will be a growing urgency to maintain a competitive foothold in this area. "If companies don't understand how to incorporate this technology into their businesses, competitors that are digital crypto natives will blow existing businesses out of the water," said Kirk Phillips, CPA, managing director of Global Crypto Advisors. His eight-person firm exclusively serves crypto natives. Not only do his clients function exclusively in the crypto ecosystem, some don't deal in fiat currencies at all. The firm offers virtual accounting services, dealing with both legacy and crypto systems, packaged around a monthly subscription, as well as consulting on other areas as needed.

While the most common application of blockchain today is in the crypto asset market, its use is expected to broaden. Blockchain can offer great value in tasks such as intercompany reconciliations, as well as in shipping, logistics, elections and consumer goods identification and authentication. "It's much larger than crypto assets," Veith said.

For CPAs in firms and companies, the best way to learn is by jumping in and getting a firsthand introduction. Phillips recommended learning by experience to see how it works. Start by creating at least one centralized exchange account and one self-hosted wallet, including a Web3 wallet to interface with decentralized exchanges, he suggested. Then try, for example, buying bitcoin or ether on the centralized exchange, send it to the self-hosted wallet and make an exchange on a decentralized exchange. “You have to be well versed to provide a service line,” he said.

Companies and firms that want to be involved in this space should also consider creating an in-house blockchain or digital asset working group to identify how the technology applies to their business and its potential uses. Some large organizations have gone as far as creating executive roles such as a chief metaverse officer or a chief NFT brand ambassador that oversee maintenance of the public image around NFTs.

As they begin considering how best to introduce a digital asset practice area, CPA firms can categorize clients into tiers based on the company's level of knowledge about blockchain and digital assets—from complete novices to more sophisticated and experienced users. They can then

Digital Asset Practice Tiers

CPA.com formed a commercial task force, in collaboration with the WSBA, to help to define and create a roadmap of building a crypto practice. Through this effort, the task force is developing a 3-tier digital asset practice matrix centered on client activities and the resulting service offerings across tax, accounting, advisory and audit. The matrix and a coordinating session will be delivered at the Digital CPA Conference in December 2022.

decide which tiers provide the best opportunities for the firm to add value.

Risk considerations

As clients increasingly turn to CPAs for help in this space, CPAs will need to be well versed in the risks involved. "You enter a whole new realm of risk in the digital, crypto asset and blockchain space that didn't exist before," said Phillips. While this space eliminates some legacy threats, such as counterparty risk, it introduces new ones, such as programming or smart contract risk. While existing software may have glitches, those bugs don't usually have a potential impact on the existence of assets. Deals also may be based on unaudited smart contracts worth millions of dollars. Even when smart contract auditors are involved, only a sampling of code is audited. Something can slip through crack or there could be a hack and the funds are drained.

Creating new strategies

One positive aspect of a crypto winter is the chance to rebuild, focusing on the technology's positive aspects and eliminating those that are negative or less worthwhile. "We are creating tools to help firms build practice strategies and methodologies for providing services," said Asgeirsson.

CPAs can prepare for dealing with digital asset issues by making the best use of the wide range of information and guidance available (see more information in the box on page 12). Among other steps, CPAs can undertake research with specific clients in mind to gain a better understanding on the company's involvement and potential challenges in accounting and auditing.

"There's a golden opportunity here, because CPAs are the most trusted professionals," Phillips said. "This is a once in lifetime chance for the profession."

Emerging technology solutions

To ensure CPAs have access to the latest resources in the blockchain ecosystem, the AICPA and CPA.com are committed to monitoring new tools created specifically for this space. More than a dozen emerging technology solution providers participated in the symposium, including demos from:

Lukka. A CPA.com partner that provides CPA firms with an advanced virtual currency tax preparation platform – LukkaTax for Professionals. This intuitive software is built specifically for the accounting professional to deliver accurate crypto tax calculations and is exclusively available as part of CPA.com's preferred tax solutions.

Gilded. This company, which has participated in the AICPA and CPA.com Startup Accelerator program, has developed the only digital asset accounting solution created by and for CPAs.

S&P Cryptocurrency Indices. These indices follow a selection of crypto assets listed on recognized, open exchanges that meet set liquidity and market capitalization criteria.

MONITORING KEY DEVELOPMENTS IN CRITICAL AREAS

The AICPA and CPA.com have developed working groups to monitor hot topics in the blockchain and digital asset ecosystem.

Digital Assets Working Group/ accounting subgroup

Recently published topics in the Practice Aid, Accounting for and Auditing of Digital Assets:

- Derivatives and embedded derivatives.
- Crypto lending, from the standpoint of lender and borrower.
- Mining, including transaction fees, block rewards, individuals and pools.

The group is also keeping an eye on the need for guidance for the broker-dealer and not-for-profit industries.

Digital Assets Working Group/ auditing subgroup

Agenda items at recent meetings:

- SOC report considerations for user auditors.
- Q&As on consideration under various topics including:
  - Reliability of information obtained from a blockchain.
  - Accessing information recorded on a blockchain.
  - Responding to risks of material misstatement related to existence, rights and obligations assertions when digital assets are self-custodied or are held by a third-party custodian.
  - Third-party confirmation considerations.

This group is monitoring:

- Crypto lending and borrowing considerations.
- Valuation.
- Updates for conforming changes to the auditing standards

Note: Find out more information on the AICPA Auditing Digital Assets webcast, which covers topics that have been published in the Digital Assets Practice Aid including: client acceptance; risk assessment processes and controls; laws, regulations, and related parties.

Proof of Reserves Working Group

Proof of reserves is a term that describes the means by which and entity proves to a counterparty (or other stakeholder) that customer claims are less than or equal to the assets the entity holds to fulfill redemption of those claims. Proof of reserves is particularly relevant in cases where the claims, the assets, or both, are in the form of digital assets. The group was formed to address and potentially create deliverables related to the need for greater transparency for stakeholders of digital assets.

Its goals include developing a framework to address assurance needs for fiat-backed stablecoins which includes:

- Consistent criteria against which information can be measured and evaluated.

- Application guidance for attestation guidance addressing procedures and reports.

Wall Street Blockchain Alliance Accounting Working Group

The group's aim is to disseminate thought leadership and analysis of topics at the intersection of blockchain, crypto assets and accounting. Activities include:

- Monthly podcasts on YouTube.
- Commenting on FASB's invitation to comment including digital asset reporting in its research agenda.
- Creating a primer on NFTs.

Activities in progress include:

- Proof of reserves white paper or primer
- Valuation of thinly traded crypto assets and tokens.
- An Algo stablecoin analysis.

WHAT CPAS NEED TO KNOW ABOUT THE NFT ECOSYSTEM

As CPAs and organizations navigate digital assets that are held on blockchain, they should recognize the differences among them. Non-fungible tokens (NFTs), for example, are digital assets, but unlike crypto assets they are not purely financial assets. While crypto assets such as bitcoin or ether are interchangeable—or fungible—NFTs are not. NFTs typically represent and convey ownership of art, collectibles or other unique assets. They can't be exchanged for other NFTs, divided into shares or used as a means of exchange. Among other benefits they allow artists to sell their pieces directly to the public without going through a dealer or auction house.

In the corporate sector, it is largely sports or entertainment companies that are involved in this space, according to Kenneth Goodwin, director of regulatory and institutional affairs at the Blockchain Intelligence Group. As an example, a company like Disney can use NFTs as a reward for their consumer base, thus better engaging its customers. Athletes, too, can offer NFTs with their image to solidify their fan base.

There are threats in this approach, however. The biggest risk is fraudulent theft of the underlying asset—the NFT image—and illegal duplication and sale of that image on multiple exchanges. In addition, NFT exchanges can be exploited by money launderers, who might create an NFT and then buy it back anonymously on a blockchain using crypto assets purchased with laundered funds. The money launderer could then recognize the proceeds of the sale as a legitimate gain, essentially laundering the funds.

Potential solutions to these threats may include changes in the Uniform Commercial Codes, which cover intellectual property and cross border and cross state transactions for commerce. That's a way to help bring regulatory oversight to this area.

Regulatory and legal uncertainties mean that there are both challenges and opportunities for CPAs in this area. Given the tax complexities and uncertainties related to NFTs, CPAs can create value by determining if company owners, individual clients or even their children have received them as a gift.

CPAs may also be called on to help clients or companies track the potential definition of their NFTs throughout their lifecycle, Goodwin noted. They may start out as property, but if they are sold they may later qualify as a security, for example. In each case, they may be subject to different regulations as rulemaking evolves. Ideally, continuous monitoring of NFTs can make it possible to identify, measure and report on NFTs for tax or other regulatory purposes. It will also help minimize fraud, Goodwin said. His own company's NFT Explorer, a graphical analytics tool, makes it possible to track multiple tokens and crypto assets.

RELATED RESOURCES

The AICPA, CPA.com, WSBA and our partners have developed a number of tools and resources to help you dive deeper into the last emerging tech news, insights and skills you need, including:

Accounting for and auditing of Digital Assets practice aid

Accounting for Bitcoin and other cryptocurrencies

Blockchain and Digital Assets

Virtual currency tax guidance and resources

Crypto Asset Solutions

Webcast: Demystifying Blockchain & Cryptocurrency

FASB Adds Digital Assets Accounting To Its Technical Agenda | Lukka

Suzanne Morsfield on Valuation of Crypto Assets | Lukka

Identifying Principal Markets for Crypto-Assets | Lukka

Beyond Bitcoin: Challenges to applying a standardized Digital Asset Classification System | Lukka

Beyond Bitcoin, Part 2: Increasing Accessibility Through a Digital Assets Classification System | Lukka

Stablecoins: A Primer for the Accounting Professional

Non-Fungible Tokens: An NFT Primer for Accounting Professionals

Decentralized Finance: A Primer for Accounting Professionals