Originally Published in Corporate Taxation, a Thomson Reuters Publication

AN UNREGULATED ASSET IN A REGULATED WORLD: PAYING EMPLOYEES IN CRYPTOCURRENCY

PERCY LEE

This article examines the complex legal issues confronting an employer that is considering whether to compensate employees with cryptocurrency, and an employee benefits plan fiduciary's decision to invest plan assets in cryptocurrency.

The 2010s saw the emergence of Bitcoin as a transformative innovation in payment systems. Yet even before the technology has realized its full promise, it has seemingly been eclipsed by its own notoriety as an explosive investment. As its fluctuating prices have dominated headlines, Bitcoin as an investment has solidified its place within mainstream consciousness. Meanwhile, Bitcoin as a technology remains somewhat esoteric, acknowledged but not understood. The technology is admittedly sophisticated, but a bigger impediment for the layperson might be the exaggerated reputation of Bitcoin and other cryptocurrencies for being a domain of unregulated lawlessness and illicit activity. This is the central tension of Bitcoin, and cryptocurrency generally, in 2021: it is cryptic and over-exposed.

The tension is magnified by the regulatory telescope of the employer-employee (and, to a lesser extent, employer-contractor) relationship. Payment, taxation, and deferral of wages are highly regulated processes under state and federal law. Viewed through these lenses, cryptocurrency is rife with complex legal issues, traps for the unwary, and unanswered questions. This paper explores these issues by introducing cryptocurrency technology and then providing an overview of the intersections of cryptocurrency with tax, wage and hour law, executive compensation, securities regulation, and employee benefits.

Introduction to Cryptocurrency Technology

Cryptocurrency and virtual currency. Cryptocurrency grew out of long-standing efforts to create a private, secure payment system free from the regulation of central banks, financial intermediaries, and other third parties. Although Bitcoin is the first and best-known cryptocurrency, thousands of cryptocurrencies now exist.[1]

Cryptocurrency is a subset of virtual (or digital) currency, a form of payment that exists only online and uses no coins or paper bills. Unlike real currency (e.g., the U.S. dollar), virtual currency generally is not issued or guaranteed by a central government or central bank and has no legal tender status in any jurisdiction. This may change if virtual currency becomes more widespread. In 2018, the Marshall

PERCY LEE, *Associate at Ivins, Phillips & Barker, advises clients on a wide range of federal income tax, estate and gift tax, and employee benefits issues. He specializes in developing creative solutions to the challenges of providing benefits to a modern, dynamic workforce while maintaining compliance with applicable labor, tax, and privacy laws and regulations.*

Islands announced that it would issue its own virtual currency and certify it as legal tender.[2] Virtual currency is considered convertible if it has an equivalent value in real currency and can be exchanged for real currency.[3] Cryptocurrency refers to convertible virtual currency that maintains peer-to-peer, decentralized records protected by cryptography.

The double-spending problem and Bitcoin. The use of cryptography in cryptocurrency is intended to solve a central problem of virtual currency known as the double-spending problem. When a customer orders a cup of coffee and presents a $5 bill, the vendor may accept it without questioning whether the customer has already spent the bill in another transaction. The question is a non-issue in most everyday transactions because counterfeiting legal tender is difficult and subject to criminal prosecution. If the customer uses a credit card, the vendor knows the transaction will be recorded in a centralized database by the credit card company to prevent double-spending. The same is not true if the customer seeks to use virtual currency, which may lack the physical and legal anti-counterfeiting features of the $5 bill and the trusted, centralized database of the credit card. For virtual currency to be viable, there must be a mechanism to prevent its users from spending the same money twice.

The first person to solve this problem without the use of a third-party database was Satoshi Nakamoto, the pseudonymous author (or authors) of a 2009 white paper that launched Bitcoin.[4] Bitcoin[5] is a public, permanent ledger of timestamped transaction data that is distributed to all participating computers (called "nodes"). Groups of transactions called "blocks" are recorded on this ledger, also known as a blockchain, using advanced encryption technology. In a process called "mining," nodes expend considerable computing power solving complex mathematical problems used to verify transactions and are eligible to receive bitcoin for the effort. In effect, the process for auditing transactions and securing them from fraud is also the mechanism for the circulation of the currency. As a result, Bitcoin is considered highly resistant to hacking and tampering. A bad actor seeking to reverse past transactions or block new transactions would need to gain control of more than 50% of all the computing power in the network, a cost-prohibitive effort for a network as wide as Bitcoin. However, the limited size of blocks[6] and the time-consuming validation process constrain Bitcoin's transaction processing capacity. As a result, Bitcoin lags Visa, PayPal, and other payment methods in transaction speed and the overall number of transactions per second.[7]

Bitcoin is not fully anonymous but offers its users a considerable degree of privacy. While Bitcoin transactions are public and can be viewed on several websites, the identities of the transactors are not. Instead, transactions are recorded by reference to large numbers called public keys (analogous to a bank account number) that allow users to receive bitcoins, making the transactions pseudonymous. A different, secret large number, called a private key (analogous to a bank account password), is required to send or redeem bitcoins and is stored in a variety of ways ranging from online custodial services to a physical device unconnected to the Internet designed to protect assets from hacking.

Cryptocurrency is treated as property for U.S. federal tax purposes.

Proliferation of and innovation in cryptocurrencies. Bitcoin is the first of thousands of cryptocurrencies in circulation, but accounts for more than half of the $1.7 trillion global cryptocurrency market capitalization.[8] Ethereum, the second-most valuable cryptocurrency, is closely associated with self-executing decentralized applications that automate business transactions known as "smart contracts." Ethereum is transitioning from a mathematical validation process similar to Bitcoin (known as "proof of work") to a "proof-of-stake" process that will allow users to stake their Ether as collateral to validate transactions.[9] The

1 "All Cryptocurrencies," Investing.com, https://www.investing.com/crypto/currencies (last visited March 31, 2021).

2 Das, "No More USD? Marshall Islands Approves Official 'Sovereign' Cryptocurrency in 2018 With ICO," CCN (Feb. 28, 2018), https://www.ccn.com/marshall-islands-plans-official-sovereign-cryptocurrency-2018/.

3 Non-convertible currency cannot be exchanged for real currency and is typically intended to be used within a closed system. Examples of non-convertible currency include frequent flyer miles, nonrefundable store credit, and video game currency.

4 Nakamoto, "Bitcoin: A Peer-to-Peer Electronic Cash System," Oct. 31, 2008, https://bitcoin.org/bitcoin.pdf.

5 Bitcoin (capitalized) refers to the network; bitcoin is a unit of currency on the Bitcoin network.

6 Each block is limited to 1 megabyte and on average is created every 10 minutes.

7 Raul, "Transactions Speeds: How Do Cryptocurrencies Stack Up To Visa or PayPal?," Jan. 10, 2018, https://howmuch.net/articles/crypto-transaction-speeds-compared.

8 "Today's Cryptocurrency Prices by Market Cap," CoinMarketCap, https://coinmarketcap.com/ (last visited March 31, 2021).

9 Foxley & Kim, "Valid Points: Ethereum's Proof-of-Stake May Happen Sooner Than You Think," Coindesk, March 17, 2021, https://www.coindesk.com/ethereum-proof-of-stake-sooner-than-you-think.

goal of a proof-of-stake process is to increase the transaction processing capacity of the currency network and to reduce the consumption of electricity. Sometimes, new cryptocurrencies are created in a process called a "hard fork," in which a blockchain permanently diverges into two blockchains as a result of changes to a blockchain code often intended to address security issues, add new functionalities, or reverse fraudulent transactions. Several prominent cryptocurrencies in circulation, such as Bitcoin Cash and Bitcoin Gold, were created from hard forks of Bitcoin.

U.S. Income Tax

IRS guidance on tax treatment of cryptocurrency transactions. The Internal Revenue Service (IRS) issued guidance on cryptocurrency in 2014 and 2019. In Notice 2014-21, the IRS announced that convertible virtual currency (including cryptocurrency) is considered intangible personal property for tax purposes, similar to stocks, bonds, and intellectual property.[10] In 2019, the IRS issued Rev. Rul. 2019-24 addressing the income tax consequences of hard forks, which creates a new cryptocurrency, and airdrops, which distributes units of a cryptocurrency after a hard fork.[11] Additionally, frequently asked questions regarding the valuation and reporting of cryptocurrency transactions, among other topics, were posted on the IRS website.[12] These pieces of guidance provide considerable insight into the tax consequences of cryptocurrency as remuneration, but also leave unresolved issues.

Cryptocurrency as property and consequences for crypto payroll. Cryptocurrency is treated as property for U.S. federal tax purposes.[13] As a result, a U.S. employee or independent contractor who receives cryptocurrency as remuneration for services must report as ordinary income the fair market value of the cryptocurrency received, measured at the time of receipt, in U.S. dollars. In addition, because federal tax law treats cryptocurrency as property rather than currency, employees and independent contractors must generally recognize capital gains and losses when cryptocurrency is used to purchase goods or services or exchanged for real currency or other cryptocurrency.[14] Such gains are taxed at more favorable long-term capital gains tax rates if the cryptocurrency was held for more than one year before being spent or exchanged.

Just as employees must recognize gains (or losses) when purchasing services with cryptocurrency, so too must employers when compensating employees or independent contractors with cryptocurrency.[15] Employers may be able to avoid a recognition event by paying in U.S. currency and then allowing the recipient to elect to convert a portion of the compensation into cryptocurrency.[16] Employers must also withhold federal and state income taxes and payroll taxes on the fair market value of cryptocurrency payments to employees.[17] The fair market value of cryptocurrency payments must be reported on Forms W-2 to employees and Forms 1099-NEC to independent contractors.

The federal tax treatment of cryptocurrency as property leads to unusual attributes. Unlike real currency, cryptocurrency has a tax basis that is used to calculate gains and losses upon a recognition event. Units of cryptocurrency that may be fungible in value can have different tax bases and may be demarcated based on a unique public key or address, or based on their storage in a single wallet, with proper documentation of the transaction information. Taxpayers are permitted to select units for recognition to the extent such units can be specifically identified. In particular, the taxpayer must document the date and time each unique unit was acquired, the basis and fair market value in each unit at the time of acquisition, the date and time of disposition, and the fair market value of each unit at the time of disposition and the value of property received for

[10] https://www.irs.gov/irb/2014-16_IRB#NOT-2014-21.

[11] https://www.irs.gov/pub/irs-drop/rr-19-24.pdf.

[12] *Frequently Asked Questions on Virtual Currency Transactions,* IRS, https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions (last visited March 31, 2021).

[13] Notice 2014-21.

[14] Before 2018, exchanges of properties "of a like kind" were eligible for nonrecognition of gain or loss under Section 1031. The IRS issued no official guidance on the eligibility for Section 1031 nonrecognition treatment of exchanges of cryptocurrency for cryptocurrency. In unofficial settings, IRS officials appeared to indicate that they would not, but later reiterated that there is no blanket policy on this issue and that each exchange would be considered based on the facts and circumstances. Versprille, "IRS Walks Back Earlier Comments on Crypto Like-Kind Exchanges," Bloomberg Law, Nov. 15, 2019, https://news.bloomberglaw.com/esg/irs-walks-back-earlier-comments-on-crypto-like-kind-exchanges. The question became moot in 2018, when the Tax Cuts and Jobs Act of 2017 amended Section 1031. The like-kind exchange nonrecognition rule now applies only to exchanges of real property.

[15] IRS, *Frequently Asked Questions on Virtual Currency Transactions*, Q/A-14.

[16] Webster, "Challenges in Compensating Employees in Cryptocurrencies," 39 *Mitchell Hamline L.J. Pub. Pol'y & Prac.* 157, 179 (2018).

[17] IRS, *Frequently Asked Questions on Virtual Currency Transactions*, Q/A-11.

[18] *Id.*, Q/A-39, 40.

each unit.[18] If specific identification is not possible, the taxpayer must dispose of units of cryptocurrency in chronological order, on a first-in-first-out basis.[19] If the cryptocurrency has appreciated over time, specific identification results in better tax outcomes for the taxpayer than the first-in-first-out method.

Valuation issues under federal tax law. The treatment of currency as property by U.S. federal tax law requires taxpayers to determine the fair market value of cryptocurrency each time it is sold, exchanged, or paid as remuneration. Because there is no *de minimis* exception to the recognition and reporting requirement,[20] even small transactions involving cryptocurrency are reportable. This may render the use of cryptocurrency for everyday transactions impractical even as an increasing number of vendors and retailers accept it for payment.

Because the price of cryptocurrency can be volatile and vary depending on the exchange on which it is traded (if it is traded on an exchange at all), valuation of cryptocurrency may pose additional challenges for the taxpayer. Some cryptocurrency transactions are recorded on the blockchain and are known as "on-chain" transactions; "off-chain" transactions, in contrast, are not (at least initially) recorded on the blockchain and may take place with or without the involvement of a brokerage or other third-party business that facilitates cryptocurrency transactions (i.e., an exchange). For an on-chain transaction, taxpayers may report the amount recorded by the exchange for the transaction.[21] An off-chain transaction facilitated by an exchange may be reported using the amount the cryptocurrency was trading for on the exchange at the time and date of the transaction as if it had been an on-chain transaction.[22] A taxpayer who completes a peer-to-peer or other off-chain transaction not facilitated by an exchange may need to look to listings of worldwide cryptocurrency transactions (i.e., a cryptocurrency "explorer") that analyze cryptocurrency indices and calculate the value of a cryptocurrency at a specific date and time. If cryptocurrency is exchanged for goods or services, is not traded on an exchange, and has no published value, the fair market value of the goods or services at the time of the exchange may be used.[23]

Cryptocurrency that stretches the bounds of property. Cryptocurrency has evolved significantly since the IRS categorized convertible virtual currency as property for federal tax purposes in Notice 2014-21. The Service's categorization may be eroded by developing cryptocurrency technology. The IRS stated in the notice that virtual currency lacks legal tender status in any jurisdiction, even if it may operate like real currency in some environments. This may soon cease to be true. As discussed above,[24] the Marshall Islands announced that it will create the Marshallese Sovereign as a new cryptocurrency following a testing phase and adopt it as its legal tender along with the U.S. dollar. As the development of the Marshallese Sovereign continues apace despite concerns expressed by the International Monetary Fund,[25] central banks of China, Sweden, and other countries are pilot testing their own trial virtual currency.[26] It is no longer ironclad to distinguish virtual currency from real currency, as the IRS did in Notice 2014-21, on the grounds that virtual currency lacks legal tender status.

Just as employees must recognize gains (or losses) when purchasing services with cryptocurrency, so too must employers when compensating employees or independent contractors with cryptocurrency.

While the IRS has not addressed virtual currencies that are adopted as legal tender, guidance in other contexts suggests that the use of virtual currencies as a medium of exchange may be relevant in their currency status.[27] In Rev. Rul. 76-214, the IRS concluded that certain bullion gold coins were not currency because although they were issued by foreign governments, they derived their value from their gold content and not from being used as

---

19 *Id.*, Q/A-41.

20 See Agrawal, "Congress takes a step toward a de minimis exemption for everyday cryptocurrency transactions," Coin Center, Jan. 16, 2020, https://www.coincenter.org/congress-takes-a-step-toward-a-de-minimis-exemption-for-everyday-cryptocurrency-transactions/ (describing a proposed bill that would introduce a de minimis exception).

21 *Frequently Asked Questions on Virtual Currency Transactions*, Q/A-26.

22 *Id.*, Q/A-27.

23 *Id.*, Q/A-28.

24 See Note 3, *supra*.

25 Hamacher, "IMF Opposes Marshall Islands Cryptocurrency, but Microstate Presses On," Decrypt.co (May 29, 2020), https://decrypt.co/30558/imf-opposes-marshall-islands-cryptocurrency-but-microstate-presses-on.

26 Tung, "RBA Eyes Digital Wave of Sovereign Currencies," InnovationAus (Nov. 27, 2020), https://www.scmp.com/business/banking-finance/article/3108093/peoples-bank-china-early-stage-digital-currency-pilot-even.

27 Herzfeld, Holbrook & Daily, "Cryptocurrency as Foreign Currency—Potential Application ofSection 988," Ivins, Phillips & Barker Chartered, https://www.ipbtax.com/assets/htmldocuments/Cryptocurrency%20as%20Foreign%20Policy.pdf (last visited March 31, 2021).

a medium of exchange. In 2013, the Financial Crimes Enforcement Network of the U.S. Department of the Treasury defined real currency as legal tender that circulates and is customarily used and accepted as a medium of exchange in the country of issuance[28]—a definition adopted by the IRS in Notice 2014-21. More recently, Justice Stephen Breyer of the U.S. Supreme Court hinted at the possibility that cryptocurrency could be used as employee compensation and as a medium of exchange. The case concerned the specific question of whether a railroad employee's taxable compensation includes stock options. The majority opinion ruled that it did not, textually interpreting the Railroad Retirement Tax Act's definition of compensation as "money remuneration";[29] in his dissent, Justice Breyer argued that society's understanding of money may be shaped by changing media of exchange:

> "What we view as money has changed over time. Cowrie shells once were such a medium but no longer are; our currency originally included gold coins and bullion, but, after 1934, gold could not be used as a medium of exchange; perhaps one day employees will be paid in Bitcoin or some other type of cryptocurrency."[30]

Cryptocurrency has evolved significantly since the IRS categorized convertible virtual currency as property for federal tax purposes in Notice 2014-21. The Service's categorization may be eroded by developing cryptocurrency technology.

The days of (partial) cryptocurrency payroll are already here for some employers, but it is far from certain whether cryptocurrency can be considered a medium of exchange. The answer may depend on the cryptocurrency in question and may change as acceptance and use of cryptocurrency becomes more widespread. The volatility in the value of bitcoin and its deficiency as a store of value (except in the long term) may hamper its usefulness as a medium of exchange.[31] Eventually, a cryptocurrency that is adopted by a foreign government as legal tender and whose supply is not artificially limited like bitcoin's may extend beyond the bounds of pseudo-currency and into the realm of real currency. Such cryptocurrency may be considered a "nonfunctional currency" subject to foreign currency gain or loss treatment under Section 988.[32]

Wage and Hour Laws

Employers are required under the Fair Labor Standards Act (FLSA) to pay nonexempt employees a minimum wage and overtime compensation in "cash or negotiable instrument."[33] Although the Department of Labor has indicated that employers might be able to pay employees in foreign currency to meet FLSA minimum wage or minimum salary requirements,[34] the Labor Department has made no indication of extending this principle to cryptocurrency payments. Even if cryptocurrency payroll were permitted under federal law, heavy fluctuations in the price of cryptocurrency would require employers to monitor the exchange rate so that the U.S. dollar value of wages paid to nonexempt employees do not fall below applicable minimum wage and overtime payments.

State employment laws may introduce additional thorny issues. Some state employment laws explicitly require payment of wages in U.S. currency.[35] Many states also require wages to be paid without costs, fees, or encumbrances to employees. These laws often address the fees that may be charged when an employee is paid by payroll debit card,[36] but more general prohibitions against impermissible deductions may be implicated if the employer benefits from charges assessed against employees for receiving or converting cryptocurrency wages.[37] Most employers currently paying wages in cryptocurrency are themselves cryptocurrency creators.[38] A cryptocurrency payroll that requires employees to pay transaction fees for employer-provided digital wallets or to use an employer-operated exchange may invite scrutiny under these laws.[39]

An employer could overcome some of the FLSA and state law issues by paying employees a blended compensation package that includes

[28] *Application of FinCEN's Regulations to Persons Administering, Exchanging, or Using Virtual Currencies*, U.S. Treasury Financial Crimes Enforcement Network (March 18, 2013), https://www.fincen.gov/resources/statutes-regulations/guidance/application-fincens-regulations-persons-administering.

[29] *Wisc. Central Ltd.*, 138 S. Ct. 2067, 121 AFTR2d 2018-2102 (2018).

[30] *Id.* at 2076 (Breyer, J., dissenting).

[31] Baur & Dimpfl, "The volatility of Bitcoin and its role as a medium of exchange and a store of value," *Empirical Econ.* (Jan. 5, 2021), https://doi.org/10.1007/s00181-020-01990-5.

[32] Herzfeld, et al.

[33] 29 C.F.R. section 531.27(a).

[34] Compliance Assistance Bulletin FLSA2006-17, U.S. Dep't of Labor (May 23, 2006), https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/2006_05_23_17_FLSA.pdf; *US Labor Department Investigation Reveals Silicon Valley Employer Significantly Underpaid Workers from Mexico*, U.S. Dep't of Labor (Feb. 4, 2013), https://www.dol.gov/newsroom/releases/whd/whd20130204.

[35] E.g., Md. Lab. & Emp. Code section 3-502(c); Mich. Comp. Laws Serv. section 408.476(1); Pa. Stat. section 260.3(a).

[36] E.g., Ariz. Rev. Stat. section 23-351.

[37] E.g., N.Y.C.L.S. section 193(3).

[38] Naworny, "Paying Employees in Cryptocurrency Is Risky for Workers," SHRM (Oct. 17, 2019), https://www.shrm.org/resourcesandtools/legal-and-compliance/employment-law/pages/global-paying-employees-in-cryptocurrency.aspx.

[39] Webster, at 177; *Matter of Aguello v. Labor Ready, Inc.*, 7 N.Y.3d 579, 585-86 (2006).

a portion of wages in U.S. currency to the extent required to satisfy FLSA and a portion of wages in cryptocurrency. Another possibility is to pay wages fully in U.S. currency and allow employees to convert a portion of their post-withholding paycheck to cryptocurrency. However, these alternatives would still introduce administrative complexities for the employer and tax reporting obligations for the employee. These new burdens should be weighed against the benefits.

Executive Compensation

Employers may wish to compensate executives, directors, employees, and other service providers, and promote their retention, with a future payment of cryptocurrency that is conditioned upon continued service or achievement of performance targets. Payments subject to these conditions, or vesting restrictions, are known as restricted grants. Restricted grants of cryptocurrency are sometimes paired with issuance of new cryptocurrency for public investment (i.e., an initial coin offering), particularly during the early stages of a digital start-up company. In general, a service provider is taxed on the fair market value of a restricted grant (minus the amount paid by the service provider, if any) at ordinary income tax rates when it vests. This rule allows service providers to defer taxation on restricted grants until vesting.

However, a service provider may choose to accelerate taxation by filing an election under Section 83(b) within 30 days of receiving a restricted grant.[40] In so doing, the service provider immediately recognizes the fair market value of the restricted grant (minus the amount paid by the service provider, if any) as ordinary income and starts the clock for capital gains treatment on post-grant gains. This may result in significant tax savings for the service provider if the restricted grant appreciates during the vesting period. However, the opposite is true if the grant depreciates or is forfeited. Therefore, a service provider should be thoughtful in deciding whether to make a Section 83(b) election, considering the expected appreciation of the grant and the likelihood of forfeiture.

The considerations for and against making the Section 83(b) election generally apply similarly for restricted grants of cryptocurrency and for restricted grants of stock. However, a service provider receiving a restricted grant of cryptocurrency should more seriously consider the possibility that the grant might depreciate. Restricted stock of a start-up business typically has little value, so there is little income recognition upfront. In contrast, cryptocurrency can have considerable value even at early stages.[41]

Securities Regulation

In the past few years, the Securities and Exchange Commission (SEC) has ramped up its enforcement of its securities laws against issuers of cryptocurrency initial coin offerings on the grounds that securities have been offered and sold without a valid registration or exemption from registration.[42] These enforcement actions stake out a fundamental position with which the issuers disagree: that their cryptocurrencies are "investment contracts," making them securities subject to SEC regulation. In a recent example, the SEC prevailed in the U.S. District Court for the Southern District of New York on the investment contract status of Kin, which was marketed as an appreciating asset and in which the developer, Kik, would play an active role by integrating it with other Kik applications.[43] A lawsuit in the same court is ongoing between the SEC and Ripple over the investment contract status of XRP, formerly the third-largest cryptocurrency in the world.[44]

The definition of investment contracts is a well-established test under *SEC v. W.J. Howey Co.*[45] Under the *Howey* test, an investment contract is a "contract, transaction or scheme whereby a person invests his money in a com-

[40] Note that the Section 83(b) election is available only for restricted grants of property; it would not be possible for crypto assets if they were considered currency. "Think Twice Before Paying Employees in Cryptocurrency," Ivins, Phillips & Barker Chartered, Jan. 2021, https://www.ipbtax.com/assets/html documents/Think%20twice%20before%20paying%20 employees%20in%20cryptocurrency.pdf.

[41] Silva, Nardali & Kashefi, "Cryptocurrency Compensation: A Primer on Token-Based Rewards," *Harv. L.S. Forum on Corp. Gov.* (May 19, 2018) https://corpgov.law.harvard.edu/2018/05/19/cryptocurrency-compensation-a-primer-on-token-based-awards/.

[42] Pruden, "*Mainstream Acceptance of Cryptocurrency Magnifies Legal Risk Under Securities Laws*," *Nat'l L. Rev.* (Feb. 16, 2021), https://www.natlawreview.com/article/mainstream-acceptance-cryptocurrency-magnifies-legal-risk-under-securities-laws.

[43] *SEC v. Kik Interactive, Inc.*, 2020 U.S. Dist. LEXIS 181087, at *18-*20 (DC N.Y., 2020).

[44] "SEC Charges Ripple and Two Executives with Conducting $1.3 Billion Unregistered Securities Offering," SEC Press Release, Dec. 22, 2020, https://www.sec.gov/news/press-release/2020-338; Lopatto, "SEC says third-largest cryptocurrency was sold all wrong," *The Verge*, Dec. 22, 2020, https://www.theverge.com/2020/12/22/22196064/ripple-sec-crypto currency-security-currency-xrp.

[45] 328 U.S. 293 (1946).

mon enterprise and is led to expect profits solely from the efforts of the promoter or a third party."[46] Often, investment contract status turns on whether an investor reasonably expects profits derived from efforts of others. Although the test is concise, it is difficult to apply because it is highly fact-specific. The SEC has published a framework for the *Howey* test that offers a series of factors that weigh in favor of investment contract status and a few factors that weigh against it.[47] In general, fully developed, decentralized cryptocurrencies are less likely to be considered investment contracts. This may be easier to show for Bitcoin and Ethereum, well-established and relatively mature cryptocurrencies. In fact, an SEC official has informally commented that they are not securities.[48] However, it may be more difficult for sales of other cryptocurrencies to avoid investment contract status. The risk of securities regulation has had a chilling effect on initial coin offerings in the U.S.[49] The uncertainty of whether a cryptocurrency might later be classified as a security might also discourage institutional investors.[50]

Employee Benefits

The retirement world's reticence to invest in cryptocurrency. Given the volatility and regulatory uncertainty surrounding cryptocurrency, it is not surprising that large and institutional investors have been more circumspect than private investors about investing in bitcoin and other cryptocurrencies. That has started to change in recent years, particularly among university endowments and family offices—two types of investors with relatively larger appetites for risk and innovation.[51] Industry insiders took notice when two Fairfax, Virginia-based pension funds invested in Morgan Creek Digital, a venture capital fund with holdings in blockchain industry equities and crypto assets.[52] Has this opened crypto floodgates to the U.S. retirement system, which had assets of $35 trillion in 2020?[53] The answer so far is no. In addition to the regulatory uncertainties discussed above, an important reason for the reticence, at least among private-sector plans, is the standard of fiduciary obligations created by the Employee Retirement Income Security Act of 1974 (ERISA).

ERISA fiduciary status. ERISA imposes specific obligations, known as fiduciary duties, on persons and entities it defines as fiduciaries. In addition to any person or entity identified as the "named fiduciary" in a plan document, an ERISA fiduciary is defined as those who exercise discretionary authority over the management of a plan or exercise authority over the management or disposition of plan assets; who provide investment advice regarding plan assets for a fee; or who have discretionary authority over plan administration.[54] Under this definition, plan fiduciaries generally include plan sponsors, plan administrators, trustees, committee members, and investment advisors. Fiduciaries may be personally liable if they fail to discharge their duties.

Fiduciary duties of loyalty, prudence, and diversification. Plan fiduciaries are generally responsible for acting solely in the best interest of participants and beneficiaries with the exclusive purpose of providing benefits to them and defraying reasonable administrative expenses.[55] Fiduciaries must also act with the same care, skill, prudence, and diligence under the circumstances that a prudent fiduciary acting in a similar capacity and familiar with these matters would use in a similar plan with like aims.[56] This duty of prudence generally entails the responsibility to monitor the fees

---

46 *Id.* at 298-99.

47 *Framework for "Investment Contract" Analysis of Digital Assets*, SEC (April 3, 2019), https://www.sec.gov/files/dlt-framework.pdf; see *Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934:The DAO*, SEC Release No. 81207 (July 25, 2017), https://www.sec.gov/litigation/investreport/34-81207.pdf.

48 Hinman, "Digital Asset Transactions: When Howey Met Gary (Plastic)," June 14, 2018, https://www.sec.gov/news/speech/speech-hinman-061418.

49 Dwyer, "The SEC, Cryptocurrencies and Securities," Am. Inst. for Econ. Research, Jan. 8, 2021, https://www.aier.org/article/the-sec-cryptocurrencies-and-securities/.

50 Blachman & Steffen, "Cryptocurrency and Your Retirement Plan: What's in Your (Crypto) Wallet?," 26 *J. Pen. Ben.* 4, 3-4 (2019), https://www.icemiller.com/MediaLibraries/icemiller.com/IceMiller/PDFs/CHICAGO-1383711-v1-Article_-_Cryptocurrency_and_Your_Retirement_Plan__W.pdf.

51 Amoils, "Family Offices Have Been Investing In Digital Assets Longer Than Institutions," *Forbes*, Dec. 22, 2020, https://www.forbes.com/sites/nisaamoils/2020/12/22/family-offices-have-been-investing-in-digital-assets-longer-than-institutions/; Allison, "Harvard, Yale, Brown Endowments Have Been Buying Bitcoin for at Least a Year: Sources," Coindesk, Jan. 25, 2021, https://www.coindesk.com/harvard-yale-brown-endowments-have-been-buying-bitcoin-for-at-least-a-year-sources.

52 Marsh, "First U.S. Pension Funds Take the Plunge on Crypto Investing," Bloomberg, Feb. 12, 2019, https://www.bloomberg.com/news/articles/2019-02-12/first-u-s-pension-funds-take-the-plunge-on-crypto-investing.

53 The U.S. retirement system had assets of $34.9 trillion as of December 31, 2020. "Retirement Assets Total $34.9 Trillion in Fourth Quarter 2020," Investment Company Institute (March 18, 2021), https://www.ici.org/research/stats/retirement/ret_20_q4.

54 29 U.S.C. section 1002(21).

55 29 U.S.C. section 1104(a)(1)(A).

56 29 U.S.C. section 1104(a)(1)(B).

57 29 C.F.R. section 2550.404a-1(b)(2).

and performance of plan service providers. With respect to plan investments, fiduciaries are not required to guarantee success, but are required to consider the relevant facts to determine that an investment is reasonably designed, taking into account the risk of loss, opportunity for gain, the extent of the portfolio's diversification, the portfolio's liquidity, and the investment's projected return.[57]

This duty of prudence is closely related to the duty to diversify plan investments to minimize the risk of large losses.[58] For plans with participant-directed investments, such as 401(k) plans, fiduciaries are relieved of certain liability for participant investment decisions if, among other requirements, the plan offers at least three diversified investment alternatives and enables participants to make informed decisions by providing them with investment information.[59] However, fiduciaries are still responsible for prudently monitoring and selecting plan investments and service providers.[60]

Highly active plaintiff bar in ERISA fiduciary litigation. ERISA fiduciary compliance is an actively litigated area of the law. Since 2015, some 200 lawsuits have been filed against defined contribution plan fiduciaries alleging excess investment or administrative fees or imprudent selection or monitoring of investments.[61] Some plaintiffs have challenged the inclusion of undiversified investment options such as single company stock and sector funds.[62] As the pace of lawsuits accelerates, fiduciaries can expect continued scrutiny of the selection and monitoring of defined contribution plan investments and service providers.

There is also significant litigation activity for defined benefit plans, but the most successful cases against them have alleged the use of outdated actuarial factors that cause participants to be underpaid. Meanwhile, cases alleging poor investment selections or similar fiduciary violations are less likely to succeed against defined benefit plan fiduciaries. In 2020, the U.S. Supreme Court ruled in *Thole v. U.S. Bank N.A.* that defined benefit plan participants and beneficiaries do not have standing to sue for alleged fiduciary violations if, regardless of the outcome of the lawsuit, they would continue to receive the benefits to which they are entitled.[63] Because employers bear the responsibility of funding benefits under a defined benefit plan, participants are unlikely to be able to show their entitlement to receive benefits would be affected.

Fiduciary considerations in cryptocurrency fund selection. In general, the fiduciary prudence of plan investment selection is determined based on the facts and circumstances. As the Department of Labor noted in the preamble to 1979 regulations relating to the investment duties of an ERISA fiduciary, "the risk level of an investment does not alone make the investment *per se* prudent or *per se* imprudent."[64] Cases have tended to follow the facts-and-circumstances approach and examined the diversification of the plan as a whole,[65] but at least one circuit may disagree, at least with respect to non-employer single stock funds.[66]

As news headlines report on the sharp rises and falls in the price of bitcoin, plans might expect more interest in cryptocurrency as an investment option among participants with varying levels of financial knowledge. Although it is sometimes reported that bitcoin might be useful as a portfolio diversifier because its price changes are uncorrelated with price changes in stocks and bonds, the extreme volatility may limit its usefulness in that role.[67] Plan fiduciaries should proceed with caution when considering the appropriateness of cryptocurrencies as a plan investment alternative. A highly volatile asset like bitcoin might be less appropriate for some plans than others, depending on participants' long-term investment objectives, levels of retirement preparedness based on assets outside the plan, and appetite for and understanding of high-risk investments. Bitcoin and other cryptocurrencies will tend to have shorter performance histories and

The days of (partial) cryptocurrency payroll are already here for some employers, but it is far from certain whether cryptocurrency can be considered a medium of exchange.

58 29 U.S.C. section 1104(a)(1)(C).

59 29 U.S.C. section 1104(c).

60 29 C.F.R. section 2550.404c-1(d)(2)(iv).

61 *Exposing Excess Fee Litigation Against America's Defined Contribution Plans*, Euclid Specialty (Dec. 2020), page 11, https://euclidspecialty.com/wp-content/uploads/2020/11/Euclid-Specialty-Exposing-Excessive-Fee-Litigation-12012020.pdf.

62 "Boeing Lands a Deal in 401(k) Lawsuit," Nat'l Ass'n of Plan Advisors, Aug. 28, 2015, https://www.napa-net.org/news-info/daily-news/boeing-lands-deal-401k-lawsuit; *Wilson v. Fidelity Mgmt. Trust. Co.*, 755 Fed. App'x 697, 698 (CA-9, 2019).

63 140 S. Ct. 1615, 1621-22 (2020).

64 44 Fed. Reg. 37,221, 37,222.

65 *Young v. Gen'l Motors*, 325 F. App'x 31, 33 (CA-2, 2009); *Schweitzer v. Inv. Comm. of Phillips 66 Sav. Plan*, 960 F.3d 190, 197-98 (CA-5, 2020).

66 *Stegemann v. Gannett Co.*, 970 F.3d 465, 475-76 (CA-4, 2020).

67 Baur & Dimpfl.

fewer, if any, viable peer groups or benchmarks than stocks, bonds, and even most alternative investments, making meaningful comparisons elusive. These challenges will persist even with a well-coordinated participant communication and education effort.

Fiduciary considerations in cryptocurrency security. The risk of loss and theft has bedeviled cryptocurrency since inception. Lost or stolen cryptocurrency is usually impossible to recover. Analysis cited by the *Wall Street Journal* suggests that by 2018, a fifth of then-existing bitcoins had already been lost and were unlikely to return to circulation.[68] Crypto thefts, hacks, and fraud totaled $1.9 billion in 2020.[69] These risks sharpen the fiduciary obligation to protect and secure plan assets. If storage is outsourced, fiduciaries would need to expend effort to select a solution that is secure, cost-effective, and appropriate for the liquidity needs of the plan. Because cryptocurrency and its application in retirement investing are relatively new, fiduciaries may be unable to meaningfully compare different providers' track records. Cold storage (i.e., storage in hardware that is not connected to the Internet) is likely the securest option, subject to the physical security of the hardware and potential vulnerability that may be introduced each time stored assets are accessed. Assets in hot storage can be accessed and transferred more conveniently, but are less secure and have been targeted in high-profile digital thefts.[70] As cryptocurrency service providers seek to make headway in the retirement plan world, they may bundle investment, recordkeeping, and storage services or may require the use of affiliated or partner providers.[71] These arrangements might offer some convenience, but might introduce revenue-sharing arrangements that impede efforts by fiduciaries to evaluate each investment manager or service provider on its own merits.

Cryptocurrency insurance is an emerging area. Although coverage is available, industry views are mixed on whether the supply of coverage has kept up with demand.[72] Major players in the insurance industry have been slow to enter the unregulated, volatile cryptocurrency market.[73] Traditional cyber insurance offerings may leave gaps in coverage, offering protection against costs of breach and damage to networks but not providing indemnification for the lost digital assets.[74]

Fiduciary considerations in valuation and liquidity. Retirement plans, particularly those with participant-directed investments, have a host of valuation and liquidity needs that a plan fiduciary should consider when evaluating cryptocurrency investments. Defined contribution plans with employee deferrals present particularly acute recordkeeping challenges as funds are remitted to the trust every payroll period and invested according to employee elections. Plans must be able to buy, sell, and value their cryptocurrencies to measure investment gains and losses, fulfill reporting and disclosure obligations, process distributions and loans, and calculate and pay fees. However, the decentralized, unregulated exchanges on which cryptocurrency is traded might not always meet plans' liquidity needs or provide reliable valuation.

The issues of valuation and liquidity are not unique to cryptocurrencies. Plan fiduci-

An employer could overcome some of the FLSA and state law issues by paying employees a blended compensation package that includes a portion of wages in U.S. currency to the extent required to satisfy FLSA and a portion of wages in cryptocurrency.

[68] Krause, *A Fifth of All Bitcoin Is Missing. These Crypto Hunters Can Help*, *Wall St. J.*, July 5, 2018, https://www.wsj.com/articles/a-fifth-of-all-bitcoin-is-missing-these-crypto-hunters-can-help-1530798731.

[69] *Cryptocurrency Crime and Anti-Money Laundering Report, February 2021*, CipherTrace, https://ciphertrace.com/2020-year-end-cryptocurrency-crime-and-anti-money-laundering-report/ (last visited March 31, 2021).

[70] Bloomberg, "How to Steal $500 Million in Cryptocurrency," *Fortune*, Jan. 31, 2018, https://fortune.com/2018/01/31/coincheck-hack-how/; Hui & Zhao, "Over $280M Drained in KuCoin Crypto Exchange Hack," Coindesk, Sept. 26, 2020, https://www.coindesk.com/hackers-drain-kucoin-crypto-exchanges-funds.

[71] Redman, "Crypto Retirement: US Investment Firm Launches Employer-Sponsored Bitcoin 401(k) Plan," Bitcoin.com, Nov. 23, 2020, https://news.bitcoin.com/crypto-retirement-us-investment-firm-launches-employer-sponsored-bitcoin-401k-plan/.

[72] Morris, "AON says supply exceeds demand for cryptocurrency insurance," *Ledger Insights*, https://www.ledgerinsights.com/cryptocurrency-insurance-digital-assets-aon-supply/ (last visited Mar. 31, 2021); O'Connell, "2021 Insurance for Cryptocurrency Outlook," Insurance Quotes, Jan. 27, 2021, https://www.insurancequotes.com/insurance-for-cryptocurrency-report.

[73] Grensing, "Cryptocurrency Insurance Market Shows Promise Despite Cautious Approach by Major Insurers," American Express, https://www.americanexpress.com/us/foreign-exchange/articles/cryptocurrency-insurance-market-shows-promise-with-caution/ (last visited Mar. 31, 2021).

[74] Zuckerman, "Bitcoin Insurance? The Emerging Market for Digital Asset Insurance," *PLUS Journal* 12 (June 19, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3603432.

aries and investment managers have long sought Department of Labor guidance on whether and how defined contribution plans may prudently add private equity, private debt, real estate, and other alternative investments as plan investments. In a small but encouraging step for proponents of alternative investments in defined contribution plans, the Labor Department has stated that a diversified fund with a private equity component may prudently be added to a defined contribution investment menu—with features designed to alleviate the liquidity and valuation concerns of private equity investments.[75] These features include mandatory dilution of the private equity component, independent valuation of the private equity component, and additional information disclosures. However, the Labor Department did not address standalone private equity investments or other alternative investments and it appears unlikely that the Labor Department would opine in the foreseeable future about the fiduciary prudence of financial products that include cryptocurrency.

Conclusion

Numerous legal issues complicate an employer's decision to pay compensation in cryptocurrency or a plan fiduciary's decision to invest plan assets in cryptocurrency. The irony is that although Bitcoin was created to facilitate seamless transactions free from governmental and third-party interference, payroll transactions and plan investments of Bitcoin and other cryptocurrencies impose heightened tax reporting and oversight obligations on employers, employees, and fiduciaries. What remains to be seen is whether future developments in crypto and blockchain technology will help address or deepen these issues. The likely answer is that they will do both, as blockchain technology has the potential to transform payroll and plan recordkeeping, among many areas of business operations. The notoriety of Bitcoin as an investment might have eclipsed the promise of Bitcoin technology, but the moment might prove to be as fleeting as a real solar eclipse. ■

[75] Info. Letter 06-03-2020, Dep't of Labor Employee Benefits Security Administration, https://www.dol.gov/agencies/ebsa/about-ebsa/our-activities/resource-center/information-letters/06-03-2020.