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Cryptocurrency Trading Risks and Risk Mitigation Strategies for ERISA Plan Investors







By: John J. Sohn, Esq, Mark Greenstein, Esq. and Marcia S. Wagner, Esq.*

The Wagner Law Group

Boston, MA

*John J. Sohn is a partner with The Wagner

Law Group and has over 25 years of experience advising financial institutions and benefit plan investors with respect to investment management matters. His expertise includes ERISA and the areas of securities and banking laws relating to investment fiduciaries.

Mark Greenstein is of counsel with The Wagner Law Group. He was the principal author of the ERISA §404(c) regulations and was formerly the Acting Chief of the Division of Fiduciary Interpretations at the Employee Benefits Security Administration.

Marcia S. Wagner is the founder of The Wagner Law Group, a certified woman-owned and operated business and one of the nation's largest and most highly regarded boutique law firms, specializing in ERISA, employee benefits, executive compensation, employment, labor, human resources and investment management law.

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Exchange-traded cryptocurrencies have been in existence for little more than a decade. Based on this limited history, economists and researchers have preliminarily concluded that cryptocurrencies can be useful for portfolio diversification purposes, in spite of their high risks. Given their emerging role as a potential investable asset class, cryptocurrencies have drawn interest from institutional investors, including retirement plans subject to the Employee Retirement Income Security Act of 1974, as amended (ERISA). But numerous questions have arisen in regard to whether and how ERISA plan investors may properly invest in cryptocurrencies. This article will discuss the regulatory issues and related fiduciary risks associated with cryptocurrency trading and how professional and in-house ERISA fiduciaries may manage them.

³Pub. L. No. 93-406.



¹ Bitcoin, which is widely viewed as the first decentralized cryptocurrency of its kind, was founded in 2009 and began trading on cryptocurrency exchanges in 2010.

²See Mazzanec, Jaroslav, Portfolio Optimization in Digital Currency Market, Journal of Risk and Financial Management 14: 160 (2021), which also includes a detailed literature review.

While not exhaustive, the article provides substantial background information regarding cryptocurrencies. This could provide useful as plan fiduciaries should be able to demonstrate an understanding of how the related markets function, and their risks, prior to considering any such investment.

OVERVIEW OF CRYPTOCURRENCIES AND THEIR TYPES

Cryptocurrencies are customarily used as a medium of exchange and can be traded on numerous cryptocurrency trading platforms (Exchanges). They are digital representations of value, utilizing cryptography to record ownership, and transfers of ownership, securely. These records are maintained on a decentralized database commonly referred to as a digital ledger (Distributed Ledger). The Distributed Ledger for a given cryptocurrency is replicated and maintained across an underlying network of computer systems or "nodes," eliminating the need for records to be maintained centrally by a single party. Subject to a few exceptions, cryptocurrencies do not have the satus of government-issued legal tender (i.e., fiat currency).⁴

⁴ As of September 7, 2021, El Salvador adopted Bitcoin as legal tender, becoming its official currency alongside the U.S. dollar. On April 26, 2022, the Central African Republic announced its adoption of Bitcoin as legal tender, becoming its official currency alongside the Central African CFA franc.

Although there is no universally accepted terminology for cryptocurrency types, for discussion purposes, they may be categorized as follows:

- (a) traditional, nonstable cryptocurrencies (Crypto Coins) whose value is determined by supply and demand and without regard to any reference asset,
- (b) stablecoins (Stablecoins) whose value is designed to be pegged to a reference asset,
- (c) utility tokens (Utility Coins) that may be redeemed to purchase goods and services from the issuer or the "ecosystem" supported by such issuer.

Crypto Coins (e.g., Bitcoin) are not guaranteed or otherwise backed by any party. Accordingly, they do not have an intrinsic value, and the market price of Crypto Coins may be highly volatile.

In the case of Stablecoins, their value is designed to be pegged to a reference asset such as a fiat currency like the U.S. dollar.⁵ As a practical matter, rather than using fiat currency directly to purchase different cryptocurrencies, many traders will exchange fiat currency for a Stablecoin and then use the Stablecoin to purchase the other cryptocurrencies. "Fiat-to-crypto" exchanges (e.g., exchanging U.S. dollars for a Stablecoin) may involve wire transfers that are subject to daily cut-off deadlines as well as manual processes that lengthen settlement periods considerably. But the clearance and settlement of "crypto-to-crypto" exchanges (e.g., exchanging Stablecoin for Crypto Coins) will occur in "real time" through the Distributed Ledger (e.g., 10 minutes), and Exchanges typically support their continuous or "24/7" trading. By way of illustration and as reported for October 2021, more than 75% of all trading on Exchanges occurred between a Stablecoin and another cryptocurrency.⁶

⁶ SEC Chair Gary Gensler, Statement: President's Working Group Report no Stablecoins (Nov. 1, 2021).



⁵ An investment overview of Stablecoins is available from FINRA, *Cryptocurrencies: 3 Things to Know About Stablecoins* (Apr. 17, 2020).

Utility Coins are typically issued by businesses to raise capital through an initial coin offering (ICO). These digital tokens may be redeemed to pay for goods and services offered by the issuer. Numerous Exchanges have issued their own native Utility Coins. For example, Binance Coin (BNB) is a Utility Coin that may be used to pay the fees associated with trading on Binance, one of the largest Exchanges by daily trading volume. Although Utility Coins may have limited "payment utility" outside of the issuer's ecosystem, they may still be desirable from an investment perspective. Utility Coins are often held by investors that do not have any intention of purchasing the issuer's goods and services. Many of the cryptocurrencies traded on Exchanges are Utility Coins issued by Exchanges and other businesses.

OVERVIEW OFCRYPTOCURRENCY EXCHANGES AND WALLETS

Exchanges are digital marketplaces where investors may purchase and sell any of the cryptocurrencies whose trading is supported by the Exchange. Exchanges may be characterized as centralized or decentralized. Centralized Exchanges are managed by a single business, and they customarily support both fiat-to-crypto and crypto-to-crypto exchanges. They may facilitate the clearing of cryptocurrency trades by maintaining digital order books, matching buyers and sellers, and disclosing prevailing market prices to investors. Centralized Exchanges customarily require investors to "deposit" any crypto assets acquired on the Exchange in a cryptocurrency wallet (Wallet) that is maintained or "hosted" by the Exchange (Custodial Wallet).

Wallets are accounts that allow the investor to securely track its cryptocurrency positions as well as confirm amounts released for trading with counterparties. But unlike a physical wallet that can store currency, a Wallet does not actually store cryptocurrency. Ownership records are stored in the Distributed Ledger, and a Wallet merely stores the cryptographic "private keys" for the investor, which are similar to passwords that enable the investor to validate its ownership of cryptocurrency and to enter into transactions securely. If the private keys are lost, the investor's ownership rights are lost. In the case of a Custodial Wallet, the Exchange will maintain storage of the investor's private keys until the cryptocurrencies are "withdrawn" from the Custodial Wallet and transferred to another Wallet outside of the Exchange (Unhosted Wallet).

Decentralized Exchanges are cryptocurrency marketplaces where buyers and sellers may exchange cryptocurrencies with one another without an intermediary. This peer-to-peer trading is made possible through "atomic swaps," where one party's cryptocurrency will be transferred only if the other counterparty's cryptocurrency is transferred at the same time. Atomic swaps are "smart contracts" or computer programs that run on the Distributed Ledger, which are designed to eliminate the need for a centralized intermediary to assist with clearing and settlement. Instead, the trades are designed to clear automatically, minimizing the risk of fraud and other counterparty risk, since the smart contracts will not permit a party to accept payment while defaulting on its payment obligation to the other counterparty.

Since fiat-to-crytpo exchanges cannot be supported by Distributed Ledger technology alone, atomic swaps cannot be utilized for clearance and settlement. Decentralized Exchanges that rely exclusively on atomic swaps for clearing purposes will generally be unable to accommodate fiat-to-crypto



⁷ An overview of Exchanges and Wallets is included in U.S. Government Accountability Office, *Blockchain: Emerging Technology Offers Benefits for Some Applications but Faces Challenges*, GAO-22-104625 (Mar. 23, 2022).

exchanges. Investors will often utilize a centralized Exchange for fiat-to-crypto exchanges, which are customarily facilitated by an escrow arrangement administered by such Exchange. Under the escrow arrangement, the cryptocurrency being traded customarily will not be released to the other party until the related fiat currency transfer has been confirmed.

ROLE OF PLAN'S NAMED FIDUCIARY AND INVESTMENT MANAGERS

Under ERISA, the plan's governing document must designate a "named fiduciary" with ultimate responsibility for the management and operation of the plan.⁸ For example, the employer sponsoring a pension plan is commonly designated as the Named Fiduciary under the applicable plan document. Since the Named Fiduciary typically is not a professional asset manager, it is also customary for the Named Fiduciary to delegate management responsibility for the plan's investment portfolio to one or more "investment managers." The investment manager must be either a registered investment adviser under applicable law, a bank or an insurance company, and it must meet certain other fiduciary requirements under ERISA.¹⁰

⁸ERISA §402(a)(1) states that the plan's written instrument "shall provide for one or more named fiduciaries who jointly or severally will have the authority to control and manage the operation and administration of the plan."

⁹ERISA §402(c) states that a Named Fiduciary may appoint investment manager(s) for the plan's assets.

¹⁰ Under ERISA §3(38), an "investment manager" must also be a fiduciary that (i) has the power to manage, acquire or sell plan assets, and (ii) has acknowledged in writing that it is a plan fiduciary.

The Named Fiduciary is subject to a duty to select an investment manager prudently¹¹ and to perform ongoing monitoring of the investment manager.¹² Both the Named Fiduciary and its appointed investment managers are subject to the "prudent man standard of care" under ERISA.¹³ This standard requires, in part, that a fiduciary act solely in the interest of plan participants, and with the care, skill, prudence, and diligence that a prudent person acting in a like capacity and familiar with such matters would use.¹⁴ Furthermore, plan fiduciaries should give appropriate consideration to all relevant facts and circumstances that the fiduciary knows or should know are relevant to a proposed investment or a proposed investment course of action.¹⁵

¹³ERISA §404(a)(1).

¹⁴29 C.F.R. § 2550.404a-1(a).

¹⁵29 C.F.R. § 2550.404a-1(b).

Given the interest in cryptocurrencies as an investable asset class, numerous Named Fiduciaries and Investment Managers are exploring (or being asked to explore) the potential advantages and disadvantages of investing their respective plan's assets in cryptocurrencies. When evaluating the prudence of investing plan assets in cryptocurrencies, such plan fiduciaries should consider the related regulatory risks and how these risks may be mitigated as further discussed below.



¹¹See, e.g., Whitfield v. Cohen, 682 F. Supp. 188, 196 (S.D.N.Y. 1988). See alsoHarris Trust and Savings Bank v. Salomon Bros, Inc., 832 F. Supp. 1169, 1177 (N.D. III.1993).

¹²See, e.g., Coyne & Delany Co. v. Selman, 98 F.3d 1457, 1465 (4th Cir. 1996) (quoting Ed Miniat, Inc. v. Globe Life Ins. Grp., Inc., 805 F.2d 732, 736 (7th Cir. 1986), and Leigh v. Engle, 727 F.2d 113, 135 (7th Cir. 1984)). See also 29 C.F.R. §2509.75-8, FR-17.

ERISA RISKS UNDER U.S. INDICIA OF OWNERSHIP RULE

Under ERISA §404(b), no plan fiduciary may maintain the evidence or "indicia" of ownership of the plan's assets outside the jurisdiction of U.S. district courts, except as authorized under U.S. Department of Labor (DOL) regulations. ¹⁶ Although there are exceptions for foreign currencies, the DOL regulations do not provide an exception for cryptocurrencies. Based on this analysis, the evidence of ownership for an ERISA plan's cryptocurrency holdings will need to be maintained in the United States. Since an investor's private keys are likely to be viewed as such evidence, ERISA plan investors generally will need to confirm with their Wallet provider that their private key information is being stored within the United States.

¹⁶29 C.F.R. § 2550.404b-1.

In the case of centralized Exchanges that require ERISA plan investors to store their private key information in their Custodial Wallets, the plan will similarly need to confirm that such information is being stored within the United States. As a practical matter, this requirement may effectively result in the plan's selection of a centralized Exchange that is U.S. based, since an offshore Exchange is likely to be storing such information beyond the borders of the United States. To confirm a centralized Exchange's compliance with ERISA §404(b), ERISA plans may request a written representation in the applicable service agreement or a side letter.

CRYPTO RISKS FROM LIMITED REGULATORY OVERSIGHT

Unlike commodity futures contracts or securities, cryptocurrencies are not subject to the comprehensive regulatory oversight of the Commodity Futures Trading Commission (the "CFTC") or the U.S. Securities and Exchange Commission (the "SEC"). The SEC is generally responsible for enforcing federal securities laws, so it only has the authority to regulate a particular cryptocurrency if it is deemed to be a "security." The CFTC regulates commodity futures as well as commodity options and swaps, but its authority over commodities themselves is limited to prohibiting fraud and market manipulation. In a 2016 enforcement action, the CFTC confirmed its view that cryptocurrencies are commodities. Under such view, its crypto-related enforcement activity is limited to taking action in the event of fraud or market manipulation.

If an ERISA plan investor is seeking exposure to cryptocurrencies, it may wish to consider obtaining such exposure through cryptocurrency futures or SEC-registered funds, such as exchange-traded funds (ETFs), that invest in cryptocurrency futures. With limited exceptions, all trading for commodity futures, including cryptocurrency futures, must be executed on commodity futures exchanges regulated by the CFTC. With regard to ETFs investing in crypto futures, in addition to enjoying such CFTC protections, ETF investors would also be protected by the valuation, custody and other safeguards under the Investment Company Act of 1940. As of the date of this article, the SEC has yet



¹⁷ In *SEC v. W.J. Howev*, 328 U.S. 293 (1946), the Supreme Court held that a "security" exists when money is invested in a common enterprise with a reasonable expectation of profits to be derived from the efforts of others.

¹⁸ See *CFTC Rules 180.1* and 180.2 adopted pursuant to §753 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203.

¹⁹ In re BFXNA INC. d/b/a BITFINEX, CFTC Docket No. 16-19 (June 2, 2016).

to approve a registered fund's application to invest in "spot" cryptocurrencies (i.e., actual cryptocurrencies as opposed to futures). In the relevant denial letters, the SEC implied that the applicable proposals for funds investing in spot cryptocurrencies were not sufficiently "designed to prevent fraudulent and manipulative acts and practices."²²

EXCHANGE-RELATED RISKS: CYBERSECURITY, CREDIT AND AML/KYC

When trading cryptocurrencies, ERISA plan investors should consider the risk that the relevant centralized or decentralized Exchange might be hacked, resulting in monetary losses for the Exchange and investors as well as the loss of the investors' ability to timely access their crypto assets. As discussed above, centralized Exchanges customarily require investors to deposit their crypto assets in the Exchange's Custodial Wallet, which in turn hold the private keys of all investors trading on the Exchange. This practice has made centralized Exchanges a potential target for hackers. For example, BitMart reported a large-scale security breach on December 4, 2021, resulting in a self-reported loss of Bitcoin in the amount of roughly \$150 million.²³ Unfortunately, decentralized Exchanges have also been vulnerable to cyber attacks, typically launched by hackers who were able to exploit "bugs" in the underlying smart contracts. In certain instances, hackers have attempted to sell or dump their stolen cryptocurrencies immediately after the hack, causing their market price to tumble. For these reasons, Exchanges may temporarily suspend trading once a security breach has been discovered. In certain instances, the impacted Exchanges have offered to compensate investors for losses.⁵⁵

ERISA plan investors that trade cryptocurrencies on centralized Exchanges should also consider the credit risks associated with the relevant Exchange potentially becoming insolvent. The application of federal bankruptcy law to Exchanges doing business in the United States is somewhat unclear, but it has been acknowledged that the cryptocurrencies on "deposit" in a Custodial Wallet could potentially be considered the property of the bankruptcy estate. ²⁴ For example, Coinbase Global, a centralized Exchange and a publicly-traded U.S. company, regularly reports in its Form 10-Q filings with the SEC that the crypto assets held in their custody could be subject to bankruptcy proceedings and that their customers could be treated as general unsecured creditors of the Exchange. ²⁵

²⁵ Coinbase Global, Inc. first disclosed these risks in its Form 10-Q dated May 10, 2022. Crypto risk disclosures are generally required under SEC Staff Accounting Bulletin, SAB 121, when a firm holds crypto assets for its clients.



²⁰ For additional background, see *CFTC/SEC Investor Alert: Funds Trading in Bitcoin Futures*.

²¹ Commodity Exchange Act as codified at 7. U.S.C. § 1, et seq.

²²See, e.g., SEC Release No. 34-93700; File No. SR-CboeBZX-2021-024 (Dec. 1, 2021).

²³ As reported on December 4, 2021, by BitMart on its website. The media has reported the loss value as approximately \$196 million.

⁵⁵ For example, BitMart reported on December 6, 2021, on its website that it would be using its own funds to compensate affected users from the security breach reported on December 4, 2021.

²⁴11 U.S.C §541(a)(1) of the bankruptcy code broadly defines "property of the estate" to include "all legal or equitable interests of the debtor in property as of the commencement of the case."

Given the potential disruption that may arise from an Exchange's violation of U.S. anti-money laundering and "know your customer" (AML/KYC) laws, ERISA plan investors should consider these risks before trading on any Exchange doing business in the United States. Such Exchanges are fully subject to the AML/KYC requirements under federal and state law. These rules are designed to prevent money laundering and other financial crimes, requiring Exchanges to properly identify their clients and report suspicious activity. As a matter of federal law, the Bank Secrecy Act (the "BSA") traditionally requires nonbank firms that "transmit" fiat currencies to register as money service businesses (MSBs) with the Financial Crimes Enforcement Network (FinCEN).²⁶ The BSA was amended by the Anti-Money Laundering Act of 2020 to also bring cryptocurrencies within its regulatory scope, generally requiring Exchanges to also register as MSBs with FinCEN.²⁷ Various states (e.g., New York) have imposed similar MSB or "money transmitter" licensing requirements on Exchanges.²⁸ FinCEN has the authority to impose civil penalties and to bring civil actions to enjoin violations,²⁹ and the relevant state regulators have similar authority. In principle, an Exchange that violates these AML/ KYC requirements could face sanctions that disrupt its operation or even threaten its solvency.

²⁶18 U.S.C. §1960.

As noted above, investors that trade cryptocurrencies on Exchanges face certain cybersecurity risks, credit risks and regulatory risks relating to AML/KYC requirements. ERISA plan investors should give appropriate consideration to these risks. When performing their due diligence reviews of Exchanges, ERISA plan investors may wish to obtain information on (i) their cybersecurity policies and how they protect against hackers and compensate investors for related losses, (ii) the financial condition of the Exchange and its insurance liability coverage, and (iii) its status as a duly licensed money services business (MSB) and its AML/KYC policies.

STABLECOIN RISKS

Generally speaking, Stablecoins may be categorized as either "Reserves-Backed Stablecoin" or "Algorithmic Stablecoin." With Reserves-Backed Stablecoins, the issuer of the Stablecoin will seek to hold sufficient assets in reserve (Reserve Assets) to back its target value. Algorithmic Stablecoins will rely on smart contracts to maintain parity with its reference value by dynamically increasing or decreasing the supply of Stablecoin automatically.

Unfortunately, investors have encountered issues with both Algorithmic Stablecoins and Reserves-Backed Stablecoins. For example, TerraUSD is an Algorithmic Stablecoin pegged to the U.S. dollar that had lost substantially all of its value during May and early June 2022. And possibly as a result of "market contagion" during this same period, Tether which is a Reserves-Backed Stablecoin pegged to the value of a U.S. dollar temporarily "broke the buck" and its market price sank to as low as \$0.95 on certain Exchanges on May 12, 2022. On a related note, Tether had been the subject of a fraud investigation in 2021 by New York's Office of the Attorney General (OAG). The New York OAG ultimately concluded that Tether's issuer had misled investors in making claims that Tether was fully

²⁷ As amended, 31 U.S.C. §5312 defines a covered "financial institution" to include a business in the exchange of currency, funds, or "value that substitutes for currency or funds" (i.e., cyrptocurrency).

²⁸ For example, in 2015, the NY Department of Financial Services issued virtual currency regulations under the New York Financial Services Law, requiring MSBs that deal with virtual currencies to obtain a "BitLicense."

²⁹31 C.F.R. §1022.380; 18 U.S.C. §1960.

backed by U.S. currency, when this was not in fact the case.³¹

In light of these recent developments, ERISA plan investors should be wary of Algorithmic Stablecoins and the fact that algorithmic trading alone may not be sufficient to stabilize the market price in certain circumstances. When considering a Reserves-Backed Stablecoin, they should consider performing enhanced due diligence on the issuer's financial condition, including the nature of its reserve assets and whether audited financial statements are available.

UTILITY COIN RISKS

The vast majority of the SEC's crypto-related enforcement actions involve fraudulent offerings of Utility Coins that were deemed to be unregistered offerings of securities. ³² As discussed above, the SEC only has the authority to regulate cryptocurrencies to the limited extent that a cryptocurrency is deemed to be a "security," and the SEC will not otherwise intervene in a fraudulent ICO. If a Utility Coin is not a security under the *Howey* test, ³³ the protections for investors under federal securities law would not apply to the Utility Coin's ICO or any related trading in the secondary markets (i.e., on the Exchanges).

In light of the limited regulatory oversight of Utility Coins and the high risks associated with them including but not limited to fraud risks, ERISA plan investors should be cautious when considering the purchase of Utility Coins. They should be wary of ICOs generally, and they should not trade in Utility Coins on Exchanges unless, at a minimum, the reviewing fiduciary is comfortable that the information supplied by the issuer is sufficient and reliable.

CONCLUSION

Given the limited historical data for cryptocurrencies and their high risks, the "jury may still be out" on whether they should be treated and accepted as a new investable asset class. But given their potential usefulness for portfolio diversification, ERISA plan investors may wish to consider investing in them for diversification purposes, if they are comfortable that they have sufficient expertise and knowledge from a fiduciary perspective. Because a plan's Named Fiduciary and its appointed investment managers are subject to the "prudent man standard of care" under ERISA, they should give appropriate consideration to the regulatory issues and related fiduciary risks associated with cryptocurrency trading.

In particular, they should give appropriate consideration to ERISA's U.S. indicia of ownership requirements, the limited regulatory oversight of cryptocurrencies, exchange-related risks, Stablecoin risks, and Utility Coin risks as discussed above. They should also consider risk mitigation strategies such as the following:



³⁰ As of June 15, 2022, TerraUSD was trading at less than \$.01.

³¹ The NY OAG Settlement Agreement relating to Tether and its issuer was effective February 18, 2021, and it involved other parties and findings.

³² The SEC publishes a list of its crypto assets and cyber enforcement actions on its website.

³³ W.J. Howey Co., 328 U.S. 293.

- Confirm with the plan's Wallet provider (including any Exchange requiring storage in its custodial wallet) that the private key information will be stored within the Unit.
- Consider obtaining investment exposure through cryptocurrency futures or ETFs that invest in cryptocurrency futures, rather than investing in cryptocurrencies directly.
- Before selecting any Exchange for crypto trading, obtain due diligence information on (i) its cybersecurity policies and how it protects against hackers and compensates investors for related losses, (ii) the financial condition of the Exchange and its insurance liability coverage, and (iii) its status as a duly licensed MSB and its AML/KYC policies.
- Be wary of Algorithmic Stablecoins, and only use a Reserves-Backed Stablecoin after performing appropriate due diligence on the issuer's financial condition, including the nature of its reserve assets and whether audited financial statements are available.
- With regard to Utility Coins, be wary of ICOs and only trade in the secondary markets if the issuer has made sufficient information available to investors (e.g., audited financials).