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Tax Considerations in Structuring Initial Coin Offerings

by Jill-Marie Harding, Michael Haun, Noah B. Metz, and Daniel Stellenberg

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In this report, the authors discuss federal income tax considerations for issuers of convertible virtual currencies (better known as initial coin offerings). They analyze the different opportunities for tax deferral under onshore and offshore token sales, as well as considerations for companies that plan to use their own tokens to compensate founders and employees.

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I. Introduction

The last year saw an unprecedented rise in the number of token issuances (also referred to as initial coin offerings (ICOs)) held worldwide. Broadly speaking, companies have two main goals when issuing tokens. First, an ICO theoretically allows a company to raise capital needed to build and expand without issuing true equity or debt.[1] Second, an ICO may be an effective way to widely distribute a company's tokens, which can then be used on the company's platform to purchase goods and services.[2]

For example, Mobius (one of Paul Hastings' clients) created an application programming interface that enables companies to accept a variety of cryptocurrencies, similar to the way Stripe enables websites to accept credit cards. Also, Mobius established an app store for developers to list various applications for sale. Apps listed in the app store must accept Mobius's token (MOBI), and app developers receive MOBI when their apps are accessed or used. MOBI may also be bought or sold on third-party cryptocurrency exchanges. Gladius (another Paul Hastings client) sold tokens that grant holders access to the company's distributed denial-of-service platform. Those with surplus bandwidth and storage earn the tokens, which can be sold on cryptocurrency exchanges or used on the platform.

Some tokens are intended to have utility only as a payment mechanism, such as the right to specific goods or services on a company's platform, or loyalty benefits. Other tokens are not tied to a specific platform (like bitcoin and ether); those tokens are not issued on the promise that they can be redeemed for any particular goods or services. Finally, some tokens have equity-like features, including rights to dividend-like payments based on the issuer's discretion or predefined performance goals. Many tokens can blur the lines between these categories, often containing both payment and security-like features. Some investors buy tokens for their underlying utility (that is, to redeem them on the company's platform), some buy the same tokens on the prospect that they will appreciate in value, and others buy for both reasons.[3]

The customary life cycle of a token can be summarized as follows: Founders develop a business concept and draft a white paper explaining how their business will work, the role that tokens will play in the business, the intended economics of the token sale (including how many tokens will be issued, the price at which they will be sold, and whether any presale discounts will be available), and the intended use of the sale proceeds. Typically, a token presale occurs, followed by a public sale. Tokens are issued, and issuers then generally register their tokens to be traded on various cryptocurrency exchanges. Issuers usually don't offer to redeem the tokens for cash, although some token issuers offer to "burn" tokens in their possession (that is, reduce the supply of tokens) to maintain token valuations.

This report examines the federal income tax consequences of token sales to the issuing company.[4] It does not address any state or non-U.S. tax consequences of the sales. The tax consequences to the token issuer depend largely on whether the token sale occurs domestically or offshore.[5] This report discusses the structures and tax consequences of both an onshore and offshore token sale. The appendix addresses tax considerations of using tokens to compensate a company's founders and employees, which includes a discussion of token forks and migrations. As stressed throughout this report, properly structuring any token issuance requires

[1] Outside the tax context, regulators continue to struggle with whether any or all tokens may be properly considered securities. Accordingly, in many cases, a token issuance may be akin to an equity issuance.

[2] Some companies will initially issue tokens for free to early adopters, in what are known as "air drops."

[3] Partly because of the difficulties in categorizing many tokens and partly because of the nascent state of securities and other regulatory regimes concerning tokens, making determinations like whether a token is a security can be very difficult. Token issuers should consider many important nontax legal issues before holding an ICO, including issues under securities laws, the Bank Secrecy Act, and state money transmitter laws. This report focuses solely on the federal tax issues.

[4] For a discussion of the tax consequences for investors who hold cryptocurrency, see Stevie D. Conlon, Anna Vayser, and Robert Schwaba, "Taxation of Bitcoin, Its Progeny, and Derivatives: Coin Ex Machina," *Tax Notes*, Feb. 19, 2018, p. 1001.

[5] For purposes of this report, an onshore token sale means an issuance of tokens by a U.S. corporation, and an offshore token sale means an issuance of tokens by a non-U.S. corporation. Any reference to a company selling tokens means a company selling its own tokens rather than selling tokens issued by another company.

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a practitioner to understand the facts and circumstances around the token itself and the underlying technical constraints governing the token's generation and redemption.

There is relatively little IRS guidance on the tax treatment of cryptocurrency. Potential changes in tax law and subsequent IRS guidance on the tax treatment of cryptocurrency could significantly affect the tax consequences discussed in this report.

II. General Principles

The IRS has said that it views convertible virtual currency[6] as property — and not as currency — for tax purposes,[7] and that investors who buy and sell cryptocurrency will generally recognize capital gain or loss on the sale.[8] However, the IRS has not made clear how it views the tax treatment of the cryptocurrency's issuer.

For a token issuer, the question is whether the issuance constitutes a taxable sale of property[9] or a form of prepaid revenue. As discussed below, issuers may be able to temporarily defer recognizing taxable income or gain in some cases. For an onshore token sale, deferral may be available for up to a few years by combining the use of a simple agreement for future tokens (SAFT) with a one-year deferral available in some cases.

Many ICOs are conducted through offshore vehicles with issuances solely to foreign investors, in part to avoid SEC regulatory concerns. Offshore ICOs present additional complexities relative to onshore ICOs, particularly since the enactment of the Tax Cuts and Jobs Act (P.L. 115-97) in December 2017, but they also provide the opportunity to defer and potentially lower the overall rate of tax on income generated from an ICO. This report considers the federal tax treatment of onshore and offshore ICOs and the challenges that taxpayers face in determining the appropriate structure with which to conduct the ICO.

The tax treatment of an onshore token sale differs from that when a domestic company issues its own stock[10] or debt,[11] which is generally not a taxable transaction. Most token sales likely do not qualify for this tax-free treatment because tokens are generally neither stock nor debt within the meaning of the code. Other than dividend-like payments associated with some tokens, most lack indicia of equity: They typically lack voting rights and do not entitle the holder to liquidation proceeds of the company. Similarly, tokens lack most indicia of debt: They are not documented as debt, do not entitle the holder to receive payments of interest or a repayment of principle, and do not have a fixed date of maturity or redemption.

III. Opportunities for Deferring Tax

Although domestic companies that issue tokens generally recognize income in the year of the sale, there are some opportunities to defer tax. As we discuss below, a domestic company can sell a prepaid forward contract (a SAFT) to acquire its tokens, selling the right to receive tokens in the future for cash. Also, a domestic token issuer may be able to delay recognizing income from an ICO for one year to the extent the taxpayer defers the revenue recognition on its (nontax) financial statements.

A. Deferral With a SAFT

Issuers often sell tokens as part of a two-step process: (1) a securities transaction in which buyers prepay a discounted price to acquire tokens in the future (a "private pre-sale"); and (2) a public sale of the actual tokens. In both cases, the sales are typically for a combination of widely traded cryptocurrencies (like bitcoin and ether) and fiat currency (like dollars and euros).
The private pre-sale is often conducted using a SAFT — a prepaid forward contract in which the

[6] The IRS has stated that convertible virtual currency is "virtual currency that has an equivalent value in real currency, or that acts as a substitute for real currency." Notice 2014-21, 2014-16 IRB 938, section 2. The IRS identified bitcoin as an example of a convertible virtual currency but did not clarify whether other forms of cryptocurrency are considered convertible. By contrast, nonconvertible cryptocurrencies are designed for use in a closed domain, and it is unclear whether or how Notice 2014-21 applies to them. This report is limited to a discussion of convertible virtual currency. References to "virtual currency" or "cryptocurrency" are intended to refer to convertible virtual currency within the meaning of Notice 2014-21 unless otherwise specified.

[7] Notice 2014-21, section 4, A-1 and A-2.

[8] Notice 2014-21, section 4, A-7.

[9] Section 1001(a).

[10] Section 1032.

[11] Reg. section 1.61-12(c)(1).

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buyer pays for the right to receive tokens at a future date (at the public sale in step 2).[12] Although the issuing company collects cash (cryptocurrency or fiat currency) when it executes the SAFT, the buyer does not receive tokens at that time. As discussed later, some prepaid forward contracts similar to SAFTs have been held to not give rise to taxable income at the time of the prepayment, but rather at a later date. Thus, a SAFT issuer may take the position that entering into a SAFT does not itself result in taxable gain until the tokens are actually delivered. Although in practice a SAFT is typically settled within a few months, this could in some cases allow a company to defer recognizing gain on the sale of tokens from one tax year until the next.

The Supreme Court has held that when a prepaid forward contract remains executory (that is, not yet fully performed or carried out), the receipt of the prepayment is not taxable income to the recipient until the contract is no longer executory.[13] The case involved a taxpayer who issued a call option to sell land on December 27, 1916. The purchaser of the option notified the taxpayer on December 30, 1916, of its intent to exercise the option, and the taxpayer did not transfer title or possession of the land until the purchaser paid for the property on January 5, 1917. The Supreme Court held that the transaction was taxable in 1917 because the sales contract remained executory at the end of 1916.

In determining whether a sales contract is executory, some courts have focused on whether legal title to the underlying goods passes.[14] Other courts have interpreted the Supreme Court's "executory" standard to mean that a transaction is complete (and thus taxable) for tax purposes only when the buyer's and the seller's rights shift from the rights in their original property to the rights in the counterparty's property *and* neither the buyer nor the seller has a right to unilaterally reverse the transaction.[15] This test is more naturally applied to property that exists when the contract is entered into. However, when a company executes a SAFT, often neither the tokens nor the infrastructure for issuing them exist yet. In some cases, there can even be substantial "execution risk" — uncertainty whether a company will ever get to the point at which it is able to issue tokens.

Some courts have held that substantial conditions after a transaction may prevent an executed contract from being treated as a completed and taxable sale at the time of execution, even if equitable or actual title has already passed. One example would be if a contract requires the parties to seek government approval of a contemplated merger.[16] Similarly, if, when a SAFT is executed, it is substantially uncertain whether the tokens will ever be issued, this may constitute an adequate condition after the transaction to defer recognition of gain on the SAFT payment until the tokens are delivered.

The Tax Court decided a case involving a raisin seller that entered into a partially prepaid forward contract to sell its fruit.[17] The court focused on the time at which the title passed to determine when the transaction was taxable, holding that title passed when the goods "in a deliverable state" reached an agreed location. Because this hadn't happened when the prepayment was made, the sale did not occur for tax purposes until a later date. This case may be particularly applicable to SAFTs because companies typically issue a SAFT to raise funds while they continue to build the token platform; the tokens are usually not "in a deliverable state" when the SAFT is executed (or even if they are, the platform is typically not yet fully built).

The IRS has ruled that a sale does not occur for tax purposes under a prepaid forward contract until the title to and possession of the underlying property sold is transferred.[18] The IRS has also

[12] SAFTs evolved from a similar prepaid forward contract known as a SAFE (simple agreement for future equity).

[13] *Lucas v. North Texas Lumber Co.*, 281 U.S. 11 (1930).

[14] *Commissioner v. Segall*, 114 F.2d 706 (6th Cir. 1940) (holding that "there are no hard and fast rules of thumb that can be used in determining, for taxation purposes, when a sale was consummated, and no single factor is controlling," but that "passage of title is perhaps the most conclusive circumstance").

[15] *Fordyce v. Helvering*, 76 F.2d 431 (D.C. Cir. 1935). *See also* Alex Raskolnikov, "Contextual Analysis of Tax Ownership," 85 *B.U. L. Rev.* 429, 456 (2005).

[16] *International Paper Co. v. United States*, 33 Fed. Cl. 384 (1995).

[17] *Modesto Dry Yard v. Commissioner*, 14 T.C. 374 (1950).

[18] *See, e.g.*, Rev. Rul. 69-93, 1969-1 C.B. 139; Rev. Rul. 70-459, 1970-2 C.B. 22; and Rev. Rul. 73-369, 1973-2 C.B. 155.

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ruled that a commodity futures contract is an executory contract.[19] Thus, if a particular SAFT were properly characterized as a commodity futures contract, it may be possible to show that payment received when a SAFT is entered into is not taxable until the tokens are delivered, based on the Supreme Court's executory rule. The IRS has not said whether it views cryptocurrencies as commodities, but it might take that position for situations in which the tokens are traded on major cryptocurrency exchanges.[20]

Based on judicial and administrative guidance, SAFT issuers may argue that prepayments received when SAFTs are entered into are not taxable to the issuer until the tokens are actually delivered. Because SAFTs entered into in a token presale are by definition structured to transfer the underlying tokens at a later date (when the public token sale occurs), courts looking solely at mere legal title transfers would likely conclude that a SAFT does not transfer legal title to the underlying token. Further, the typical SAFT is likely executory (that is, not yet fully performed or carried out) when it is entered into. Although the token buyer does not have to do anything under a SAFT to receive tokens in the future, often the issuing company may not have a fully developed token platform when the SAFT is entered into (meaning the tokens may not have their full or even partial functionality at that time). Thus, the tokens may in some cases not be in a deliverable state, and the payment made upon executing the SAFT may therefore not be taxable income to the issuer until the tokens are actually issued.

B. One-Year Deferral if Consistent With Books

Taxpayers may defer recognizing income for one year for some goods and services that are deferred under the taxpayer's method of accounting on its financial statements (or, if the taxpayer does not have financial statements, if the payment is earned in a subsequent year).[21] To qualify for the deferral, the payment must be for specific kinds of goods or services, such as those provided in exchange for a utility token.[22] The deferral does not apply to payments for financial instruments.[23] The IRS has made clear that forward contracts are financial instruments for these purposes, meaning that a SAFT (which is a prepaid forward contract) cannot qualify for the deferral.[24] However, the actual sale of tokens (as distinguished from a SAFT) may qualify for this deferral.

This deferral applies only to the extent that it is reasonably expected (either under the taxpayer's method of accounting or in accordance with a study) that the tokens would not be redeemed until at least the following year. The IRS provides an example in which a video arcade operator sells game tokens that cannot be redeemed for cash, are imprinted with the name of the arcade, and are not individually marked for identification.[25] The arcade owner completes a study of the percentage of tokens that are expected to be redeemed in the current and future years and recognizes revenue in its financial statements accordingly. The ruling concludes that the arcade owner may defer recognizing income for one year to the extent the study found certain tokens were not expected to be redeemed in the current year. The ruling also indicates that if the arcade owner completed the study but was not required to maintain financial statements, the study alone would serve as adequate basis to defer income tax recognition for one year for tokens not expected to be redeemed.

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[19] Rev. Rul. 79-294, 1979-2 C.B. 305.

[20] Although other U.S. regulatory bodies have said that cryptocurrencies are commodities, the IRS has not yet issued guidance on this issue. There is probably a strong case to be made that a token is a commodity for these purposes once it is actively traded on an exchange, which by definition does not occur until sometime after the public sale. For a discussion of these issues, see James R. Brown and Franziska Hertel, "Virtual Currencies and the Commodity Trading Safe Harbor," *Tax Notes*, June 18, 2018, p. 1731.

[21] Before the enactment of the TCJA, this was permitted under Rev. Proc. 2004-34, 2004-1 C.B. 991. TCJA section 13221 codified this practice in section 451(c). The IRS has indicated that pending further guidance, taxpayers can continue to rely on Rev. Proc. 2004-34. Notice 2018-35, 2018-18 IRB 520, section 3.

[22] This includes the use of intellectual property; the sale, lease, or license of computer software; and some subscriptions or memberships. Rev. Proc. 2004-34, section 4.01(3).

[23] Section 451(c)(4)(B)(iii).

[24] Rev. Proc. 2004-34, section 4.02(3). Note, however, that an issuer could enter into a SAFT to achieve some degree of tax deferral and then, upon issuing the tokens, defer some of the gain under section 451(c).

[25] Rev. Proc. 2004-34, section 5.03, Example 9. The facts in the example closely resemble many cryptocurrencies, even though the revenue procedure predates the popular rise of cryptocurrencies by several years.

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Based on the above example from the ruling, the specific functions of a token will bear on whether deferral under section 451(c) is appropriate. Token issuers should consider whether their token is best characterized as a utility token (that is, redeemable for goods or services on a digital platform), a "pure" form of convertible virtual currency (akin to bitcoin or ether), some other form of security or commodity, or a mixture of multiple categories. The more the token resembles a utility token, the more likely it is that its sale will be viewed as a prepayment for goods and services and thus not taxed upon issuance. By contrast, the closer the token is to a form of digital currency, security, or commodity, the more likely it is that the issuer will recognize gain or loss upon issuance of the tokens, which would be viewed as a sale of property rather than a stream of revenue.

C. Choice of Entity in an Onshore ICO

Because the TCJA significantly lowered corporate tax rates, new and existing companies are increasingly considering whether corporate form may be appropriate.[26] For token issuers that plan to distribute much of the fundraising proceeds to owners, passthrough form may still be the most tax efficient; but if the plan is to invest the proceeds back into the company, the overall rate of tax may be lower under a corporate structure (in particular, considering the value of tax deferral by delaying when dividends are paid). Potential issuers should model state and federal tax rates under both a corporate and passthrough structure[27] based on their expected amount raised from an ICO and project expected rates of company expenditures and distributions. If the issuing company is a corporation and can meet the standards to be a qualified small business,[28] the potential exemption from gain on the sale of qualified small business stock held for more than five years[29] can make a C corporation[30] extremely tax efficient for some founders and employees.

IV. Tax Considerations for Offshore ICOs

As compared with an onshore ICO, an offshore ICO is more complex and expensive to structure and implement, but it also offers additional opportunities to minimize taxes. This section focuses on offshore ICOs in which the issuing company is a controlled foreign corporation. If the issuer is not a CFC (or if it is but has no direct or indirect U.S. shareholders), it will not be subject to the complexity and limitations of U.S. taxation described below, so it may have greater flexibility regarding the structure it can use.[31]

A. U.S. Taxation of CFC ICO Proceeds

If an ICO issuer has U.S. owners or operations, it will generally use a foreign corporation to issue tokens in an offshore ICO. That entity will be a CFC if its U.S. shareholders hold more than 50 percent of its vote or value on any day of the tax year.[32] U.S. shareholders are U.S. persons[33] who own (directly, indirectly,[34] or constructively[35]) 10

[26] *See, e.g.*, Daniel Halperin, "Choice of Entity — A Conceptual Approach," *Tax Notes*, June 11, 2018, p. 1601.

[27] Ideally, that analysis would consider the extent to which, under a passthrough structure, the owners would be expected to be eligible for the new 20 percent dividend under section 199A and whether the entity would have to make tax distributions to the owners to cover the potentially large tax bill in the year of the token sale.

[28] Particular attention should be paid to whether the company meets the active business requirement under section 1202(e) in light of the significant influx of cash that can accompany an ICO.

[29] Section 1202(a)(1).

[30] Note that stock originally issued by an S corporation is not qualified small business stock. Section 1202(c)(1).

[31] Note, however, that a foreign corporation that issues tokens may be a passive foreign investment company to the U.S. investors because it may have a significant influx of passive assets in the year of issuance. This can have adverse tax consequences for any U.S. persons who own an interest in the foreign corporation.

[32] Section 957(a).

[33] A U.S. person is generally defined as any domestic corporation, domestic partnership, domestic trust or estate, or U.S. individual citizen or resident. Sections 957(c) and 7701(a)(30).

[34] Section 958(a) provides indirect ownership rules that treat stock owned by a foreign corporation as proportionately owned by its shareholders.

[35] Section 958(b) generally applies section 318 attribution rules with slight modifications. Stock owned by a corporation is usually treated as proportionately owned by 10-percent-or-more shareholders (section 958(b)(3)), although any stock owned by a 50-percent-or-more shareholder is completely attributed to the corporation (section 958(b)(2)). The TCJA modified those rules, causing U.S. persons to constructively own specified stock held by non-U.S. persons (TCJA section 14213(a)(1) repealed former section 958(b)(4)). Thus, a foreign subsidiary of a foreign-parented group will be a CFC if there are U.S. subsidiaries in the group.

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percent or more of the vote or value of a foreign corporation.[36]

If a CFC issues tokens, the proceeds may constitute subpart F income or global intangible low-taxed income includable in the U.S. taxable income of any direct or indirect U.S. shareholder, regardless of whether the proceeds are distributed to those U.S. shareholders.[37] In some circumstances ICO proceeds may not be taxed in the United States, either because the proceeds are subject to a high rate of tax in one or more non-U.S. jurisdictions[38] or because the CFC is not directly or indirectly owned by a U.S. shareholder.[39] For this reason, when structuring an ICO in a low-tax jurisdiction, it can be extremely useful to structure the transaction so that the entity is not a CFC or to try to use an ownership structure of the issuer that prevents it from being directly or indirectly owned by U.S. shareholders. The remainder of this section discusses the consequences to a company that issues tokens from a CFC (or its subsidiary) that has U.S. shareholders.

B. ICO Proceeds as Subpart F Income

ICO proceeds may be subpart F income to U.S. shareholders (or GILTI, as we discuss below). Determining whether and the extent to which those regimes apply is necessary in determining whether an offshore ICO makes more sense than an onshore ICO. Subpart F income includes foreign personal holding company income (FPHCI),[40] which itself includes dividends; interest; rents; royalties; commodities gains; and some other gains from the sale of property, including gains from property that gives rise to passive income and gains from property that does not give rise to income.[41] As discussed earlier, the IRS has provided limited guidance on the tax treatment of tokens, concluding only that they are property and not currency. However, the IRS has not provided guidance on just what kind of property a cryptocurrency token is for income tax purposes (whether it is stock, a security, a commodity, or something else). Therefore, practitioners must use general tax principles and the facts and circumstances surrounding the token to determine whether the ICO proceeds are likely a form of FPHCI and thus subpart F income.

For example, tokens issued with equity-like features granting investors the right to a return based on the earnings of the CFC may be viewed as property that gives rise to dividends, similar to stock. In those circumstances, ICO proceeds earned by the CFC may be treated as gains from the sale of property giving rise to dividends and therefore be treated as FPHCI. Similarly, the tokens may have debt-like features, which can also cause the token sale to be viewed as the sale of property giving rise to interest, similar to debt, and therefore be treated as FPHCI. Finally, if a token is a commodity for tax purposes (that is not subject to an exception for specific kinds of commodities[42]), the sale of the token may be FPHCI to the issuer. The definition of commodity for these purposes is unclear,[43] and practitioners should take care to apply the facts surrounding the token at issue to the subpart F income analysis.

Even if a token does not give rise to interest or dividends or constitute a commodity, a token sale may still constitute FPHCI if it is considered "property that does not give rise to income" — a concept applied to all property that does not meet one or more exceptions.[44] Those exceptions are (1) dealer property;[45] (2) inventory and similar property;[46] (3) property giving rise to active rents and royalties;[47] (4) active banking, finance,

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[36] Section 951(b). In determining whether a person is a U.S. shareholder, indirect and constructive ownership are taken into account. Section 951(b) and section 958(a) and (b).

[37] Sections 951(a) and 951A(a).

[38] *See* sections 954(b)(4) and 951A(b)(2)(A)(i)(III).

[39] Note that the attribution rules governing whether an entity is in the first instance a CFC are broader than those governing whether a U.S. person is a U.S. shareholder for purposes of whether that person owes U.S. taxes for subpart F income or GILTI.

[40] Sections 952(a)(2) and 954(a).

[41] Section 954(c).

[42] Section 954(c)(1)(C) and section 1221(a)(1), (2), and (8).

[43] Reg. section 1.954-2(f)(2)(i) defines commodity only as a term that "includes tangible personal property of a kind that is actively traded or with respect to which contractual interests are actively traded," thus implying but not making clear that intangible personal property is not included in the term "commodity" for purposes of the definition of FPHCI.

[44] Reg. section 1.954-2(e)(3).

[45] Section 954(c)(2)(C).

[46] Section 954(c)(1)(B).

[47] Reg. section 1.954-2(e)(1)(ii)(C).

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securities, and insurance income;[48] (5) trade or business property;[49] and (6) specified intangible property (which includes intangibles like know-how, programs, and technical data) held in a trade or business.[50] So if, for example, a token can be properly characterized as inventory, it will not be "property that does not give rise to income" under the FPHCI rules. That token thus will not be FPHCI unless one of the other FPHCI rules applies (such as if the token gives rise to dividends or interest).

The specific features of a token may or may not cause its sale to be treated as FPHCI and thus as subpart F income to the U.S. shareholders of an issuing CFC. However, even if a token sale is not expected to result in subpart F income to the U.S. shareholders of the issuing CFC, it will still cause them to recognize taxable income to the extent the sale proceeds constitute GILTI. Note that subpart F income is tested before GILTI (that is, income that is subpart F income is not included in the GILTI calculation).[51]

C. Treatment of ICO Proceeds and GILTI

Under the TCJA, U.S. shareholders of CFCs must include in U.S. taxable income their annual pro rata share of GILTI.[52] Thus, as with the subpart F income, practitioners should estimate the amount of GILTI a CFC is expected to produce in a token sale to model the tax consequences of an offshore token sale as compared with an onshore sale. GILTI is generally the income of a CFC attributable to a U.S. shareholder, less an amount of deemed tangible income, which is determined annually by multiplying the adjusted tax basis of specified tangible assets (namely, property, plant, and equipment) by 10 percent.[53] A U.S. shareholder's allocable GILTI is subject to U.S. tax at a rate of 21 percent, which may be offset by foreign tax credits allocable to the GILTI, subject to certain foreign tax credit limitation rules.[54] U.S. shareholders may reduce their GILTI inclusion by a deduction amount of up to 50 percent, thereby lowering the effective rate of tax on GILTI to 10.5 percent.[55]

A CFC issuing tokens often will not hold significant amounts of tangible property, so most, if not all, ICO proceeds are usually intangible income includable in the U.S. shareholder's income as GILTI. As noted, if the U.S. shareholder is a domestic corporation, it will be entitled to a deduction equal to 50 percent of its GILTI inclusion, lowering the effective rate of tax on GILTI from 21 percent to 10.5 percent.[56] However, that deduction is reduced (or eliminated) to the extent the U.S. shareholder either generates current-year losses or uses loss carryforwards to reduce U.S. taxable income.[57]

V. Conclusion

Structuring a company in anticipation of a token sale can be a complex exercise. Advisers must first help the company weigh the pros and cons of an onshore or offshore sale. Generally, this comes down to whether there is much benefit to an offshore structure (which often depends on whether the company's operations are wholly domestic or multinational, whether any foreign operations are conducted in high-tax jurisdictions, and the extent of U.S. ownership in the company) and whether those benefits outweigh the additional time, cost, and complexity of implementing the structure. When a company holds its sale onshore, it must decide whether to operate in passthrough or corporate form and whether to try to temporarily defer taxes on the token sale through the use of a SAFT or section 451(c). In all events, as discussed in the appendix, a token issuer should carefully decide whether and how it intends to use its own tokens

[48] Section 954(h) and (i).

[49] *See* H.R. Rep. No. 99-841, at II-615 (1986) ("This provision also is not intended to apply to gain on the sale of land, buildings, or equipment used by the seller in an active trade or business of the seller at the time of the sale.").

[50] Reg. section 1.954-2(e)(3). This exception includes a broad catch-all category of "any other item the value or potential value of which is not attributable to tangible property or the services of any individual." Section 936(h)(3)(B)(viii).

[51] Section 951A(c)(2)(A)(i)(II) and (III).

[52] Section 951A(a).

[53] Section 951A(b)(1).

[54] Section 904.

[55] Section 250.

[56] Section 250(a)(1)(B)(i). Note that the deduction available to U.S. corporate shareholders falls to 37.5 percent for tax years beginning after 2025. Section 250(a)(3)(B). Thus, the effective rate of tax on GILTI earned by corporations rises to 13.125 percent for tax years beginning after 2025.

[57] Section 250(a)(2).

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to compensate founders and employees, and how the structure of that compensation can affect short- and long-term tax consequences for both the company and the token recipient.

VI. Appendix: Paying Tokens to Employees

The IRS views the transfer of convertible virtual currency from an issuer to an employee as payment of wages in the form of a transfer of property.[58] As a result, the tax consequences of issuing convertible tokens to employees as compensation should be similar to those of other property issuances. Thus, convertible token awards should be treated similarly to awards of restricted stock, restricted stock units, and nonqualified stock options for federal income tax purposes.

A. Restricted Tokens

The issuance of restricted tokens to employees should have tax consequences similar to those for the issuance of restricted stock. As vested tokens are transferred to an employee, the tax consequences are the same as if the employee had been paid an equivalent amount of wages as a bonus (based on the fair market value of the tokens).[59] This means that (1) the employee recognizes ordinary income equal to the FMV of the transferred tokens;[60] (2) there is a related employer withholding obligation (for both income and employment taxes);[61] (3) the employer has payroll tax liability (for example, for the employer-paid portion of Social Security and Medicare taxes); and (4) the employer is entitled to compensation deductions.[62]

If tokens are subject to vesting, such as a requirement that the employee provide continued services for a specified period, tax liability should be delayed until the tokens vest, with liability determined based on the value of the tokens at the time of vesting.[63] Alternatively, an individual who receives unvested tokens may elect to have tax consequences apply upon initial transfer of the tokens instead of upon vesting by filing an election under section 83(b) with the IRS within 30 days of the transfer of tokens.[64] If an employee files a section 83(b) election, the IRS will ignore vesting as a taxable event and treat the transferred tokens as if they were fully vested at the time of initial transfer. Any additional gain or loss on a later sale or transfer of tokens by the employee will be capital gain or loss (assuming the tokens are recognized as capital assets) and will be long-term gain or loss if the tokens have been held for more than 12 months.[65]

The foregoing analysis assumes that a transfer of tokens occurs. The IRS has not issued guidance indicating what is required to demonstrate a transfer of tokens. We suggest that although the related infrastructure implementing all the utilities of a token need not be complete, sufficient infrastructure should be in place so that the transfer of tokens to the employee is reflected in the blockchain. That minimal infrastructure will allow the employee to prove the ownership of the token in his digital wallet. If that minimal infrastructure is not yet in place, the issuance of the token likely will be taxed as a future right to receive a token with implementation of the applicable minimal infrastructure being treated as a vesting and settlement condition.

B. Restricted Token Units

An employer may provide an employee the contractual right to receive tokens in the future, typically once specified vesting criteria are satisfied. In that case, the tax consequences are similar to those of restricted stock units. There are no tax consequences upon grant, and no ordinary income recognition upon vesting.[66] Rather, employees recognize ordinary income equal to the FMV of the tokens when the tokens are

[58] Notice 2014-21, section 4, A-1. It is unclear whether, as a practical matter, there are any circumstances under which employers would want to compensate employees with nonconvertible tokens, but we note that the IRS has not yet issued guidance addressing the treatment of nonconvertible cryptocurrency. Thus, the discussion in this section is limited to compensation by convertible tokens.

[59] Notice 2014-21, section 4, A-11.

[60] *Id.* at A-3.

[61] *Id.* at A-11.

[62] Section 162(A)(1).

[63] Section 83(a).

[64] Section 83(b).

[65] Notice 2014-21, section 4, A-7; and section 1222(3) and (4).

[66] Under reg. section 1.83-3(e), for section 83 purposes, the term "property" does not include "an unfunded and unsecured promise to pay money or property in the future," such as a restricted stock unit.

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transferred to them in settlement of vested restricted token units (that is, in settlement of the contractual right to receive tokens).[67] There is a related employer income tax withholding obligation, and the employer is entitled to compensation deductions.[68]

Whereas vesting is ignored for income tax purposes, it is a tax event for employment tax purposes. As restricted token units vest, the employer has payroll tax liability and a withholding obligation for employee-paid employment taxes. Settlement of vested token units can be delayed until a section 409A permissible payment event,[69] providing an opportunity for additional income tax deferral subject to section 409A deferral election timing rules.

C. Options for Tokens

An option for a token would give an employee the right to purchase a specified number of tokens at a fixed price for a limited period of time. As with stock options, the right to exercise the option could be subject to vesting, and the option could expire shortly after termination of employment. Employees would recognize ordinary income upon the exercise of the option in an amount equal to the excess of the FMV of the purchased tokens over the price paid, the employer would have withholding and payroll tax obligations, and the employer would receive compensation deductions.[70]

Options covering service recipient stock are exempt from some of the requirements of section 409A (most notably, the requirements for payment timing, thus permitting the option-holding employee to exercise an option at any time, subject to the specific terms and conditions of the option).[71] In the absence of IRS guidance, it would be hard to argue that tokens are service recipient stock. As a result, options for tokens must be designed to comply with the requirements of section 409A. Significantly, the option must automatically exercise upon the occurrence of at least one section 409A-permissible payment event,[72] thereby denying the employee the power to control when to exercise the option.

Our experience is that token issuers prefer to avoid token options because of this limitation on employee control and that they instead tend to issue restricted token and restricted token units to employees. However, if token options are issued, the option-holding employee would recognize ordinary income on the automatic exercise of the option equal to the excess of the FMV of the purchased tokens over the purchase (exercise) price paid, the employer would have withholding obligations (for employment and income taxes) and payroll tax liability, and the employer would be entitled to compensation deductions.[73]

D. Valuation Considerations

Perhaps the most interesting component of the compensatory tax analysis is the question of how much income is recognized — in other words, what is the FMV of a token? The IRS has provided limited guidance, indicating only the following:

> If a virtual currency is listed on an exchange and the exchange rate is established by market supply and demand, the fair market value of the virtual currency is determined by converting the virtual currency into U.S. dollars (or into another real currency which in turn can be converted into U.S. dollars) at the exchange rate, in a reasonable manner that is consistently applied.[74]

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[67] Rev. Rul. 78-185, 1978-1 C.B. 304 (concluding that "the excess of the fair market value of the stock on the date of the crediting of such stock to the employee's account over the amount of the employee's contribution is 'wages' for purposes of FICA, FUTA, and income tax withholding"); and reg. section 31.3121(v)(2)-1(e)(1).

[68] Reg. section 31.3402(a)-1(b) ("employer is required to collect the tax by deducting and withholding the amount thereof from the employee's wages as and when paid, either actively or constructively"); and section 162(A)(1).

[69] Permissible payment events under section 409A include, for example, a separation from service (but potentially subject to an additional six-month delay), some change-in-control transactions, and a specified future date. Reg. section 1.409A-3(a)(1)-(6).

[70] Reg. section 1.83-7(a); reg. section 31.3402(a)-1(b) ("employer is required to collect the tax by deducting and withholding the amount thereof from the employee's wages as and when paid, either actively or constructively"); section 162(A)(1); and Rev. Rul. 78-185.

[71] *See* reg. section 1.409A-1(b)(5)(i)(A).

[72] Or upon vesting, in compliance with the section 409A short-term deferral rules.

[73] *See supra* note 71.

[74] Notice 2014-21, section 4, A-5.

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The guidance fails to explain how taxpayers should value tokens that are not listed on an exchange with an established exchange rate (or if tokens are listed on multiple exchanges at significantly different prices).

As token issuances become increasingly common, we expect to see an independent token valuation industry continue to emerge, similar to the numerous valuation experts who provide independent appraisals of private company common stock. Obviously, the value of a token will be lower before all the utility has been implemented. As a token issuer approaches a public sale, the value of the tokens issued to employees should approach the anticipated public sales price. Taking this analysis to its logical conclusion, a company may wish to issue tokens to employees as soon as the minimal infrastructure to demonstrate the transfer of a token is in place. Because no utility has been implemented, the value of the transferred tokens will be low, resulting in minimal income recognition and minimal employment tax liability if tokens are granted as fully vested or if the employee makes a section 83(b) election for unvested tokens.

E. Impact of a Migration or Fork

Once issued, a token typically has immutable characteristics, such as the total number of tokens that can exist and rules governing how it can be exchanged and used. When a token issuer wishes to change those rules, it typically does so in a way that causes a fork in the blockchain.

Alternatively, some token issuers may cause users to swap an "old" token for a "new" one in a transaction known as a "migration."[75] As will be discussed in a coming report on the subject, there is considerable uncertainty in how such transactions should be characterized for federal income tax purposes.[76] ■

[75] Brady Dale, "Kik Might Just Move Its ICO Tokens to a New Blockchain," coindesk, Nov. 16, 2017.

[76] Although the IRS has not provided any direct guidance on this issue, see American Bar Association Section of Taxation, "Tax Treatment of Cryptocurrency Hard Forks for Taxable Year 2017" (Mar. 19, 2018); Lee A. Sheppard, "Nerds and Cops, Part 2: IRS CI Looking for a Few Good Cases," *Tax Notes*, Apr. 30, 2018, p. 595; and Conlon, Vayser, and Schwaba, *supra* note 4.

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