

Switzerland

By the Same Token: Swiss Tax Questions in the Context of Initial Coin Offerings

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1. Introduction

Switzerland is a main player in the globally discussed blockchain and cryptocurrency space. It has continued to host some of the largest coin or token offerings over the past years and is leading the cryptocurrency market, along with the United States.^[1] The pioneering role of the canton of Zug (also known as “Crypto Valley”), the practical regulatory framework and openness of the regulator and the support of the economic minister of the Swiss government to create a “Crypto Nation Switzerland” are some of the reasons that have contributed to the Swiss role in the cryptocurrency space.

The application possibilities of the blockchain technology by no means end with cryptocurrencies. Particularly interesting are newly created funding types, such as the Initial Coin Offering (ICO), also referred to as a Token Generating Event (TGE) or Initial Token Offering (ITO).^[2] An ICO is a digital form of public capital procurement via the distributed ledger or blockchain technology.^[3] Generally, an ICO can be associated with the term “crowd funding”. In contrast to an Initial Public Offering (IPO), however, an ICO does not take place via a traditional stock exchange platform.

In the following sections, the authors will elaborate on the general aspects of the Swiss regulatory, legal and accounting treatment of digital tokens (section 2.) which forms the basis for the Swiss tax treatment (section 3.).

2. General Aspects

2.1. Economic definition and significance of tokens

Similar to game tokens or vouchers, digital tokens represent a (digital) legal unit or value. Digital tokens may be used as means of payment or exchange or as (speculative) investment. Tokens can be defined as digital information presented as an excerpt of a code, registered in a blockchain and processed via a protocol. Tokens can (or cannot) initiate additional functions that are governed by the software that created the tokens.^[4] That software may also be known as a “smart contract”. Tokens are issued via an ICO and may serve a variety of functions. Typically, tokens have no own or intrinsic value. Rather, their value is subject to the acceptance of the tokens between the trading parties and the tokens’ possibilities of use.

From a commercial point of view, tokens, especially when used as means of payment (typically referred to as cryptocurrencies or “coins”), may be comparable to foreign currencies. In contrast to foreign currencies, however, cryptocurrencies are not issued by national banks or controlled by a monetary authority and they are not processed via the traditional banking system. In essence, tokens are based on a self-administered, decentralized database, which is comparable to a peer-to-peer network. In addition, generally, cryptocurrencies do not qualify as legal tender. Thus, cryptocurrencies may generally be understood as a global currency unit independent of governments. Although the cryptocurrency market is highly volatile, the total market capitalization may currently be estimated somewhere between USD 300–400 billion.^[5] Therefore, the commercial importance of cryptocurrencies – for investment purposes and as a means of settlement – may be expected to become more and more important.

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1. R. Atkins, *Initial Coin Offerings: Switzerland Embraces Cryptocurrency Culture*, Financial Times (25 Jan. 2018).

2. V. Müller & V. Mignon, *La qualification juridique des Token: Aspects Réglementaires*, GesKR 4, p. 488 (2017).

3. CH: Financial Market Authority (FINMA), *Notification on regulatory treatment of Initial Coin Offerings*, 29 Sept. 2017, p. 2 (2017).

4. Müller & Mignon, *supra* n. 2, at p. 488.

5. Market capitalization as of May 2018, available at <https://coinmarketcap.com/charts> (accessed 12 May 2018).

2.2. Regulatory categorization of tokens

2.2.1. FINMA

To date, there is no coherent categorization of tokens, neither in the Swiss literature nor in jurisprudence. Although other categorizations may be used,^[6] the authors will follow the token categorization of the Swiss Financial Market Authority (FINMA). For regulatory purposes, FINMA differentiates “payment tokens”, “utility tokens”, “asset tokens” and “hybrid tokens”.^[7]

2.2.2. Payment tokens

Cryptocurrencies, such as Bitcoin, are categorized as “payment tokens”. These tokens are accepted as a means of payment for the purchase of goods and services or serve as a means of money or value transfer.^[8] Payment tokens do not constitute a claim against the token issuer. FINMA does not consider payment tokens as securities for regulatory purposes in the meaning of the Swiss Stock Exchange Act (*Bundesgesetz über die Börsen und den Effektenhandel*, SR 954.1, 1995, amended 2016) since payment tokens serve as a means of settlement and do not comprise features of traditional securities.

2.2.3. Utility tokens

“Utility tokens” provide access to a digital application or service.^[9] The individual characteristics may vary depending on the utility. The main feature of a utility token is a claim to access a digital application or service. Thus, FINMA generally does not treat utility tokens as securities for regulatory purposes since the nexus to the capital market is missing.

2.2.4. Asset tokens

FINMA qualifies tokens that represent property rights as “asset tokens”. Asset tokens represent assets, such as debt or equity claims against the issuer.^[10] Asset tokens are similar to shares, bonds or derivative financial instruments. Amongst others, they may provide access to participate in future earnings or capital flows (e.g. hybrid instruments such as profit participating loans) and may also be used to trade ownership rights in physical goods on the blockchain (“physical underlying”).^[11] Asset tokens therefore qualify as regulated securities.

2.2.5. Hybrid tokens

The token categories are not mutually exclusive. Tokens may have the characteristics of several token categories at the same time.^[12] In particular, asset or utility tokens may also function as payment tokens.

2.3. Qualification of tokens from a civil law perspective

2.3.1. Payment tokens

From the perspective of Swiss civil law, payment tokens may generally be treated as objects (disposable goods with commercial value). Although the law does not define the term “object”, the traditional definition includes an element of physical substance (tangibility),^[13] which digital tokens obviously do not fulfil. However, recent literature suggests that the element of tangibility can be neglected.^[14] The treatment of payment tokens as objects is particularly suitable for payment tokens that provide no further rights than being digital payment units.^[15]

2.3.2. Utility tokens

Generally, utility tokens may be understood as being similar to vouchers. Pure utility tokens are of a consumable nature. The reissuance or reuse of utility tokens should not harm this qualification. It is the underlying contractual – and transferrable – relation that is paramount. Depending on the respective feature, utility tokens may e.g. qualify as agency contracts or licensing agreements.

2.3.3. Asset tokens

Asset tokens can be shares, bonds or derivatives. They may also be mere participation rights (profit or participation certificates). The legal qualification of asset tokens follows the respective civil law regulation by analogy.

6. Müller & Mignon, *supra* n. 2, at p. 486.

7. CH: FINMA, *Notification on guidelines for inquiries regarding the regulatory framework for Initial Coin Offerings (ICOs)*, p. 3 (2018).

8. Id.

9. Id.

10. Id.

11. Id.

12. Id.

13. W. Wiegand, *Commentary before article 641 et seq. Swiss Civil Code*, sec. 6. (H. Honsell, N.P. Vogt & T. Geiser eds., Helbing Lichtenhahn 2015).

14. T. Linder & S.D. Meyer, *Die steuerliche Behandlung von Bitcoin und anderen Kryptowährungen*, Zürcher Steuerpraxis 3, p. 197 (2017). Conversely, see G. Hauser-Spühler & L. Meisser, *Eigenschaften der Kryptowährung Bitcoin*, digma 1, p. 6 (2018); and F. Piller, *Virtuelle Währungen – Reale Rechtsprobleme?*, AJP 12, p. 1429 (2017).

15. F. Gennari, *Wie deklariert man Bitcoins in der Steuererklärung?*, Die Volkswirtschaft 8/9, p. 34 (2017).

2.3.4. Hybrid tokens

Hybrid tokens will have to be assessed based on their specific features and will need to be analysed on a case-by-case basis in light of their civil law treatment.

2.4. Accounting for tokens

2.4.1. Swiss Code of Obligations

The Swiss Code of Obligations (*Bundesgesetz betreffend die Ergänzung des Schweizerischen Zivilgesetzbuches, Fünfter Teil: Obligationenrecht*, SR 220, 1911, amended 2017) comprises the legal provisions in relation to the statutory accounting for Swiss entities. The following principles only refer to the Swiss local statutory financial reporting and not to international accounting standards, such as the International Financial Reporting Standards (IFRS) or the US Generally Accepted Accounting Principles (GAAP).

Pursuant to article 957 of the Code of Obligations, all legal entities, sole proprietorships and partnerships that have achieved sales revenue of at least CHF 500,000 in the last financial year need to keep accounts and file financial reports in accordance with the Code of Obligations (article 957 et seq.).

2.4.2. Accounting obligations

2.4.2.1. Assets (investors)

The Code of Obligations does not explicitly cover the accounting rules for tokens.^[16] ExpertSuisse, the Swiss association of experts for auditing, taxes and fiduciary services, issued an expert opinion on the accounting treatment of Bitcoin. Pursuant to ExpertSuisse, accounting for Bitcoin is required due the following criteria:^[17]

- they are based on a past transaction (purchase or mining);
- the possibility to transfer the title is embedded in the Private Key (similar to a user password);
- they can result in an actual cash flow via exchange in fiat currency or be used as virtual payment means; and
- there is an active market based on which the value may be reliably expressed in CHF or an alternative accounting currency.

In the view of the authors, the opinion of ExpertSuisse is equally applicable to other payment tokens. In relation to the other tokens, the general accounting rules set forth in the Swiss Handbook of Auditing (SHA), also issued by ExpertSuisse, are applicable.^[18]

2.4.2.2. Liabilities (issuers)

Pursuant to article 959(4) of the Code of Obligations, debt and equity have to be accounted for as liabilities. The obligation to account for tokens as liabilities is particularly relevant in relation to the issuance of asset and utility tokens. As payment tokens do not constitute a claim against the token issuer, accounting for them as liability seems inappropriate.^[19] According to the SHA, liabilities have to be accounted for based on the following principles:^[20]

- they are the result of an event that occurred in the past;
- an outflow of funds is likely; and
- the amount may be estimated with a certain degree of reliability (article 959(5) of the Code of Obligations).

2.4.3. Balance sheet position

2.4.3.1. Assets (investors)

As a general rule, payment tokens should rather be accounted for as short-term assets (current assets), whilst utility tokens can be accounted for as intangible long-term assets (fixed assets).^[21] Asset tokens shall be accounted for depending on the intended holding period.

16. Y. Cardenas & C. Cuttelod, *Investissements bitcoin: un nouveau thème pour les IFRS? Bitcoin-Anlagen: ein neues Thema für die IFRS?*, ExpertFocus 12, pp. 915-916 (2017).

17. CH: ExpertSuisse, *Ausgewählte Fragen und Antworten zum neuen Rechnungslegungsrecht*, p. 49 et seq. (2013, amended 7 Dec. 2017), available at <http://www.expertsuisse.ch> (accessed 12 May 2018).

18. CH: ExpertSuisse, *Schweizer Handbuch der Wirtschaftsprüfung, Buchführung und Rechnungslegung*, sec. II.4.2.1. (2014).

19. ExpertSuisse, *supra* n. 17, at p. 50.

20. ExpertSuisse, *supra* n. 18, at sec. II.4.2.2.

21. Cardenas & Cuttelod, *supra* n. 16.

According to ExpertSuisse, Bitcoin currently may not qualify as “cash and cash equivalents”, since they lack the feature of being legal tender, their volatility is very high and Bitcoin are not (yet) generally accepted as a means of payment.^[22] As of today, this should apply to all other tokens.

For Swiss statutory accounting purposes, it appears reasonable to report tokens as “securities” at market price within the current assets if the intended holding period is short and the token trading is not the primary business activity. From the perspective of ExpertSuisse, it is not required that tokens meet the rather narrow definition of a “security” pursuant to article 965 of the Code of Obligations.^[23] For assets with longer holding periods, the position of “financial assets” is more appropriate.

If the business activity continuously and substantially focuses on the trading of tokens, the tokens should be accounted for as “inventory”.^[24]

Since the IFRS tend to require reporting long-term tokens as “intangible assets” (identifiable, non-monetary assets without physical substance) and the Code of Obligations does not exclude this option, ExpertSuisse recommends companies that report under the IFRS to record long-term tokens as “intangible assets” under the IFRS as well as Swiss statutory accounting.^[25] As such, regrouping can be avoided.

2.4.3.2. Liabilities (issuers)

Payment tokens do not constitute a claim against the issuer. Therefore, classification as a liability seems inappropriate.^[26] Utility and asset tokens will have to be reported by the issuer either as debt or equity.

2.4.4. Functional currency

According to article 957a(4) of the Code of Obligations, the functional currency can either be the country’s official currency (in the case of Switzerland, CHF) or another foreign currency significant for the business activity (e.g. USD or EUR). Since cryptocurrencies are not considered (foreign) currencies in light of the Code of Obligations, accounting in cryptocurrency seems to be unacceptable.

2.4.5. Valuation

All tokens may either be accounted for at the acquisition cost/lowest value (article 960a of the Code of Obligations) or, if available, at market price on the asset side (article 960b(1) of the Code of Obligations). This is at the discretion of the respective company.^[27] If tokens are reported at market price, ExpertSuisse recommends to assess the possibility of setting up an equalization reserve in order to take into account the fluctuation (article 690b(2) of the Code of Obligations).^[28]

2.5. Tax basis of tokens

2.5.1. Approach of the SFTA

The Swiss Federal Tax Administration (SFTA) annually publishes the tax basis of currencies (now including certain tokens) and securities as per 31 December of the previous year.^[29] Since 2015, the SFTA uses the average price of five relevant cryptocurrency trading platforms as per year-end to define the CHF exchange rate of Bitcoin.^[30] The highest and lowest values are disregarded.^[31] To date, the SFTA publishes year-end exchange rates of various virtual currencies, such as Bitcoin, Bitcoin Cash, Cardano, Ethereum, IOTA, Litecoin, NEM, Ripple, Stellar Lumens and Tron Coin.^[32]

2.5.2. Approach of the Swiss cantonal tax authorities

The authorities of numerous Swiss cantons have issued statements on the exchange rate of cryptocurrencies. The cantons are basically free to choose their methods of defining the applicable value of a private asset in accordance with article 14(1) of the Direct Tax Harmonization Act (*Bundesgesetz über die Harmonisierung der direkten Steuern der Kantone und Gemeinden*, SR 642.14, 1990, amended 2018). The cantons, however, need to make sure that the chosen method does not lead to a systematic over or undervaluation.^[33] Nevertheless, the cantons that have published guidance in relation to cryptocurrencies generally refer to the year-end rates published by the SFTA. In case there is no rate available for a specific cryptocurrency, the canton of Zug recommends using the exchange rate of the trading platform used for the underlying transaction. If that is not possible either, the acquisition price of the respective currency can be used as an alternative.^[34] According to the canton of Lucerne, a markdown may be justified in such cases due to lack of liquidity.^[35]

22. ExpertSuisse, *supra* n. 17, at p. 50.

23. Id.

24. Id., at p. 51.

25. Id.

26. Id., at p. 50.

27. ExpertSuisse, *supra* n. 18, at sec. IV.2.3.3.2.

28. ExpertSuisse, *supra* n. 17, at p. 51 et seq.

29. Gennari, *supra* n. 15, at p. 34.

30. T.F. Rohner & C. Jaag, *Bitcoin: steuerlicher Umgang mit Kryptowährungen*, NZZ, p. 10 (2017).

31. Piller, *supra* n. 14, at p. 1432.

32. Rates available on the Swiss Federal Tax Administration’s (SFTA’s) webpage, at www.ictax.admin.ch (accessed 12 May 2018).

33. CH: Federal Supreme Court, 29 July 2010, Decision No. 2C_316/2010, sec. 3.1; and CH: Federal Supreme Court, 15 May 2008, Decision No. 134 II 207, sec. 3.6.

34. CH: Zug, *Information sheet on cryptocurrencies* (2017). See also CH: Nidwalden, *Information sheet on cryptocurrencies* (2018).

35. CH: Lucerne, *Newsletter Steuern Luzern*, 20/2017 (2017).

2.5.3. Problems

The year-end rates published by the SFTA are based on an average of a few trading platforms. The method does not specifically take into account that common tokens, such as Bitcoin, are available on an indefinite number of trading platforms, which may at times show high price differences. Thus, the value of the tokens in the personal wallet may differ from the one defined by the SFTA. In addition, due to the high price volatility of the tokens, it may be justified, in the view of the authors, to use the annual average rate for the valuation of the tokens.

Moreover, in light of article 17(1) of the Direct Tax Harmonization Act, the year-end rate is in particular relevant for personal net wealth tax purposes. For personal income tax purposes, the exchange rate in CHF for salary payments or fringe benefits paid in cryptocurrencies should be determined at the time of vesting.^[36] Due to the high volatility of cryptocurrencies, it might be more appropriate to use the annual average rate also for periodic payments.

3. Swiss Tax Treatment

In the following sections, the Swiss tax consequences are set forth for both the token issuer and the token investor. Where applicable, the tax consequences are addressed for further participants, such as traders and miners. Finally, the Swiss social security treatment is discussed.

3.1. Corporate income tax

3.1.1. Issuers

To assess the tax consequences for the issuers, the civil law perspective of the token in question has to be taken into account. The issuance of asset tokens with equity character (equity tokens) should qualify as a tax-neutral capital contribution in accordance with article 60(a) of the Federal Direct Tax Act (*Bundesgesetz über die direkte Bundessteuer*, SR 642.11, 1990, amended 2018) and article 24(2)(a) of the Direct Tax Harmonization Act. The issuance of asset tokens with debt character (debt tokens) does not impact the income and will thus also be tax neutral. Potential interest payments on debt tokens qualify as deductible expenses.

One could argue that the cash inflow resulting from the sale of utility tokens (and, depending on the particular circumstances, the sale of asset tokens with a physical underlying) should generally be subject to corporate income tax. However, since, at the moment of the token offering, the promised service or application cannot be provided or is not yet completed, a corresponding provision should be booked (article 960e(2) of the Code of Obligations).^[37] The provision serves as accrual for the work still to be performed.^[38] Based on the development progress and the milestones reached, the provision can be released step by step. This mechanism prevents the situation that the whole cash inflow is taxable in the year of the ICO without being in a position to be offset against the expenses to be incurred in the following years, specifically since Swiss tax law does not provide for a loss carryback.^[39]

In relation to potential gains or losses resulting from the sale of payment tokens that have been received in return for the issuance of own tokens, e.g. to finance current expenses, the difference between the sales price and the purchase price (value at ICO) or the lower market price, respectively, is taxable.

The issuance of tokens have often been and are still made by Swiss foundations, e.g. Tezos and Ethereum. Amongst other reasons, this may be explained by the fact that contributions to the capital of foundations are not subject to Swiss income tax (article 66(1) of the Federal Direct Tax Act and article 26(1) of the Direct Tax Harmonization Act). Whether the legal form of the foundation is the most appropriate form needs to be decided while taking into consideration all the actual facts and circumstances of the case at hand. A foundation may be inflexible for business purposes and subject to additional regulatory supervision. Moreover, the purpose of a foundation may limit its scope of activities and not allow it to react quickly in a rapidly changing environment. In the authors' experience, there seems to be the general perception that the issuance of tokens being made by foundations pursuing a "benevolent" purpose could be tax exempt.^[40] Empirical evidence, however, seems to indicate that – if at all – there may be very few foundations that might qualify for tax-exempt status. The setup generally involves at least two legal entities, i.e. the foundation that issues the tokens and an operating entity (subsidiary) where the activities are performed. It may also be argued that the tax rates applicable to foundations are lower (article 71 of the Federal Direct Tax Act and, e.g. section 66(4) of the Tax Law of the Canton of Zug (*Steuergesetz*, BGS 632.1, 2000, amended 2012)). This argument, however, at least during the first years, may not be of relevance, as practical experience indicates that the foundations generally do not realize substantial income. In any case, there seems to be a trend to move away from foundations and use alternative setups, primarily in the form of corporations, such as limited liability companies (article 772 et seq. of the Code of Obligations), or a company limited by shares (article 620 et seq. of the Code of Obligations).

Donations to legal entities are not subject to corporate income tax pursuant to article 60(c) of the Federal Direct Tax Act and article 24(2) (c) of the Direct Tax Harmonization Act.

36. CH: Zug, *Steuerbuch Kanton Zug*, sec. 8.9, available at <https://www.zg.ch/behoerden/finanzdirektion/steuerverwaltung/steuerbuch-zug> (accessed 12 May 2018).

37. M.R. Jung, *Initial Token Offerings im Schweizer Steuerrecht: Darstellung und Analyse der Steuerpraxis*, FRORIEP, p. 8 (2018), available at <https://www.froriep.com/en/publications/overview.html> (accessed 12 May 2018).

38. ExpertSuisse, *supra* n. 18, at sec. IV.2.24.1.

39. D. Nazareno, *Initial Coin Offering und die damit verbundenen Steuerfolgen*, ExpertFocus 3, p. 200 et seq. (2018).

40. On Swiss foundations as a legal form for ICOs, see the analysis of A. Naskar & B. Pasquier, *The Tale of Swiss ICO Foundations: Advantages and Limitation in the Choice of the Adequate Legal Form*, AJP 1, p. 92 et seq. (2018).

3.1.2. Investors

Dividends, interest and other income from tokens are subject to corporate income tax based on the authoritative principle, i.e. that the accounting treatment basically determines the tax treatment. In the view of the authors, dividends received from equity tokens should benefit from the participation relief in accordance with article 69 et seq. of the Federal Direct Tax Act and article 28(1) et seq. of the Direct Tax Harmonization Act, if the respective conditions are fulfilled. The term “participation income” does not only comprise dividends stemming from stocks in the strict sense of the word, but also income arising in other forms from net income and reserves. However, for a crowd-funding instrument such as an ICO, meeting the condition of having 10% in the issuer or holding participation rights representing a fair market value of CHF 1 million is likely only to be met by potential institutional investors.

The gain resulting from trading with tokens is subject to corporate income tax. The deductible expenses are defined in accordance with article 59 of the Federal Direct Tax Act. If tokens are held for a longer period, it would have to be assessed as to how far participation relief on the capital gain could be applied in accordance with article 70(4) of the Federal Direct Tax Act and article 28(1)bis of the Direct Tax Harmonization Act. The conditions are holding a participation of at least 10% or representing a fair market value of CHF 1 million and a holding period of at least 1 year.

3.2. Personal income tax

3.2.1. Capital gains arising on the disposal of tokens

Generally, capital gains on private assets are tax exempt, based on article 16(3) of the Federal Direct Tax Act and article 7(4) of the Direct Tax Harmonization Act. However, if the purchase and sale goes beyond the mere investment in private assets and takes place in a professional manner to achieve gains, the resulting income may no longer be exempt.^[41]

To differentiate between tax-exempt capital gains (private assets) and self-employment (business assets), the authors suggest an analogous application of the tax authorities' practice in relation to the so-called “professional securities dealing” (as defined in the SFTA's Circular Letter No. 36 dated 27 July 2012) to the professional trading of tokens.^[42] The term “securities” as per the mentioned circular also comprises non-documented rights having the same function as securities (value rights).^[43]

In a preliminary assessment, a safe harbour rule can be applied to exclude that an activity is qualified as professional securities trading and thus a gainful business activity.^[44] For that to apply, the following five criteria have to be met cumulatively:

- there is a holding period of at least 6 months;
- the sum of all purchase and sales prices per calendar year amounts in total to no more than five times the amount at the beginning of the respective tax year;
- achieving capital gains from securities trading does not form a necessity in light of covering the living costs of an individual (this is normally the case if the capital gains amount to less than 50% of the total income achieved during a tax period);
- the investments are not leveraged or the income from the investments exceeds the proportional interest payments; and
- the purchase and sale of derivatives is limited to hedging own security positions.

If not all criteria are met, it has to be assessed on a case-by-case basis, taking into account all circumstances, whether the activity still qualifies as a mere investment into private assets or self-employment.

Should the tokens be considered part of the business assets (self-employment), business expenses and incurred losses are generally tax deductible. If the tokens are asset tokens with the characteristics of bonds or derivatives and are considered to be private assets, the SFTA's Circular Letter No. 15, dated 3 October 2017, must be consulted.

3.2.2. Income from tokens

From the perspective of the investors, it has to be assessed based on the criteria named above (see [section 3.2.1.](#)) whether the tokens qualify as private or business assets. For private assets, it has to be considered that only the capital gain resulting from sale of the respective asset is tax exempt. Interest, dividends and other income stemming from the assets should be subject to personal income tax (article 20 of the Federal Direct Tax Act and article 7(1) of the Direct Tax Harmonization Act). For business assets, the accounting treatment basically determines the tax treatment.

The special case of the so-called “hard fork” should be mentioned here. A hard fork is a permanent divergence in the blockchain. A soft fork, in contrast, is only a temporary divergence. One part of the bifurcation of a hard fork is based on new rules of consensus.^[45] This happened, for example, in 2017 to the payment token Bitcoin. The protocol that provides the basis for Bitcoin was amended in order to

41. CH: Federal Supreme Court, 8 Jan. 1999, Decision No. BGE 125 II 113, sec. E. 3c. See also the detailed analysis of Linder & Meyer, *supra* n. 14, at p. 203.

42. CH: Nidwalden, *Information sheet on cryptocurrencies* (2018); and Linder & Meyer, *supra* n. 14, at p. 203.

43. CH: SFTA, Circular Letter No. 36, sec. 4 (2012).

44. Id., at sec. 3.

45. See “hard fork” in the Bitcoin Glossary (2018), available at <https://bitcoin.org/en/glossary/hard-fork> (accessed 12 May 2018).

reach a higher scaling effect, and the new payment token “Bitcoin Cash” was distributed. A similar process took place when “Bitcoin Gold” was created in 2017. All Bitcoin holders who were in possession of the private key at the moment of the hard fork received the same amount in Bitcoin Cash. Since Bitcoin Cash was basically created out of nothing and – at least for one split second – no consideration was paid in return by the investors, the value of Bitcoin Cash at the moment of the hard fork was zero. Thus, there is no need at this point to assess whether the receipt of Bitcoin Cash should fall under the general definition of income for personal income tax purposes (article 16(1) of the Federal Direct Tax Act and article 7(1) of the Direct Tax Harmonization Act). The subsequent increase in the value of Bitcoin Cash tokens held as private assets is to be qualified as a tax exempt capital gain at the moment of realization or disposal of the asset.

3.2.3. Income from crypto funds

There is an increasing trend in investing in cryptocurrencies and blockchain companies via indirect investment structures, such as funds. As cryptocurrencies are scattered across different wallets and trading between currencies can be a complicated process, investment via a fund structure – also in light of diversification aspects – can serve as an alternative to a direct investment.

Based on article 8 et seq. of the Swiss Collective Investment Scheme Act (*Bundesgesetz über die kollektiven Kapitalanlagen*, SR 951.31, 2006, amended 2016), there are four different Swiss legal forms based on which funds (collective investment schemes) can be established:

- open-ended collective investment schemes, which may be in the form of:
 - contractual funds (*fonds communs de placement*); or
 - *société d’investissement à capital variable* (SICAV), i.e. an investment company with variable capital; and
- closed-ended collective investment schemes, which may be in the form of:
 - a limited partnership for collective capital investments; or
 - *société d’investissement à capital fixe* (SICAF), i.e. an investment company with fixed capital.

For Swiss income tax purposes, all forms – except for the SICAF and fund income from real estate investments – are generally regarded as transparent. As a consequence of this transparency, the Swiss resident fund investor is treated as if the underlying assets are held directly. Thus, the same tax rules as stated above basically apply (see sections 3.2.1. and 3.2.2.). The relevant tax amounts are to be published on the SFTA’s official bulletin (*Kursliste*).^[46] In the case of an opaque investment structure (i.e. a SICAF), proceeds received from the fund are treated as taxable dividends in accordance with article 20(1)(c) of the Federal Direct Tax Act and article 7(1) of the Direct Tax Harmonization Act.

The above tax rules are applied by analogy to Swiss investors in foreign funds. The basis for qualification of foreign funds is the decision tree reflected in annex 6 of the SFTA’s Circular Letter No. 24, dated 20 November 2017.

3.2.4. Income from mining

The provision of computing power to verify transactions and build blockchains is reimbursed either through fiat currencies or cryptocurrencies, usually payment tokens. In the view of the authors, professional mining, e.g. performed within a mining pool, could fall under the definition of self-employment, since own resources (computing power and electricity) are invested in order to pursue a gainful activity. This is not the case if the mining is performed merely as hobby and to a limited extent.^[47]

3.2.5. Income from staking

Different to mining, which serves to verify transactions by solving exceptionally difficult math problems (proof of work, PoW), staking provides a so-called proof of stake (PoS). The staker helps to build the blockchain via publication of own tokens in a public wallet and may – depending on the market development – earn tokens in return.^[48] For PoS purposes, the more tokens a staker owns, the more blocks he can build. Thus, the computing power and the necessary infrastructure and electricity are saved. Additionally, PoS tends to be faster than PoW. Since PoW requires a serious amount of computing and electricity power, there is a tendency to switch to the PoS concept.^[49] However, there are certain security considerations involved due to the fact that a staker, who owns a great number of tokens, will have significant power and be able to control the development of a token. Although staking requires less investment in resources than mining, the economic function of staking is similar to mining and thus the same tax consequences should apply (see section 3.2.4).

3.2.6. Salary payments in tokens

The (partial) payment of a salary through payment tokens is to be qualified as salary payment in kind (article 322(2) of the Code of Obligations) or gratification (article 322d of the Code of Obligations).^[50] Thus, the payment in tokens qualifies as taxable income from

46. Available on the SFTA’s webpage at www.ictax.admin.ch (accessed 12 May 2018).

47. Gennari, *supra* n. 15, at p. 34.

48. W. Pielke, *Besteuerung digitaler Währungen: Steuerliche Aspekte von Bitcoin und anderen blockchainbasierten Zahlungsmitteln*, IWB 6, p. 237 (2018).

49. E.g. Ethereum is planning to switch from a proof-of-work consensus mechanism to a proof-of-stake system; see <https://www.ethnews.com/proof-of-work-vs-proof-of-stake-explained> (accessed 12 May 2018).

50. Piller, *supra* n. 14, at p. 1432.

employment.^[51] However, if employees receive a part of their salary in the form of equity tokens, the rules on employee participations in accordance with article 17a(2) of the Federal Direct Tax Act and article 7e of the Direct Tax Harmonization Act should apply. In the view of the authors, such tokens can be qualified as “synthetic shares”, pursuant to section 2.3.2 of the SFTA’s Circular Letter No. 37, dated 22 July 2013.

3.3. Annual capital tax for corporations and net wealth tax for individuals

3.3.1. Issuers

In most cases, tokens will be issued by legal entities. The issuance of equity tokens or the respective cash inflow will be subject to capital tax pursuant to article 29 of the Direct Tax Harmonization Act. This does not apply to debt tokens. The cash inflow resulting from the sale of utility tokens will have to be declared as profit or retained earnings – independently from a potential corresponding provision (see [section 3.1.1.](#)) – and therefore be subject to annual capital tax (article 29(2)(1) of the Direct Tax Harmonization Act). Hence, the taxable capital for legal entities is to be assessed on a gross basis.

3.3.2. Investors

For individuals and foundations (article 29(2)(c) of the Direct Tax Harmonization Act), the entire net assets will be subject to wealth or capital tax, respectively, pursuant to article 13(1) of the Direct Tax Harmonization Act. Taxable assets are basically all rights of monetary value in goods, receivables and participations.^[52] Independent from the civil law qualification of the respective token in question, a token will, in general, be considered an asset of monetary value. However, in the view of the authors, a token may exceptionally qualify as a non-taxable contingent remainder. Such remainder can be defined as a more or less vague expectation in a future title.^[53] In particular, for utility tokens, it is not unusual that the future fulfilment of the promised service is not guaranteed and remains uncertain until, e.g. the development of a project is completed or the service becomes available. In such a case, the tokens may not qualify as taxable assets until the tokens become of value or use.

3.3.3. Declaration in the tax return

Although from a civil law perspective, tokens would usually not qualify as securities (see [section 2.3.](#)), most cantons recommend that individuals declare their tokens within the inventory of securities and deposits as “other deposits”.^[54] This is most likely for practical reasons in order to enable a uniform practice by the respective tax inspectors.^[55] It is important to note that basically non-taxable contingent remainders should also be declared *pro memoria* in the tax return. In relation to the tax value of tokens, reference is made to the [section 2.5.](#) Corporations will declare their tokens in the commercial or tax balance sheet based on the principles set out in [section 2.4.](#)

3.4. Withholding tax

3.4.1. Issuers

From the perspective of the issuers, there will be no Swiss local withholding tax due on the issuance of equity tokens, but on potential dividend payments. Pursuant to article 14 of the Swiss Withholding Tax Act (*Bundesgesetz über die Verrechnungssteuer*, SR 642.21, 1965, amended 2017), the burden of the withholding tax needs to be shifted to the recipient of the taxable payment. For dividends in kind (depending on the setup, e.g. bonus tokens), withholding tax will either have to be grossed up, i.e. the payment received represents 65% of the total benefit to the beneficiary and the basis for the 35% withholding tax is 100% of the total benefit. Alternatively, in most likely very few cases, the withholding requirement may be satisfied through the notification procedure in accordance with article 24(1)(c) of the Swiss Withholding Tax Ordinance (*Verordnung über die Verrechnungssteuer*, 642.211, 1966, amended 2017), provided that the recipient of the dividend in kind would be entitled to a full reclaim (article 24(2) of the Swiss Withholding Tax Ordinance) and the number of beneficiaries does not exceed 20. The notification procedure also applies in cases of qualifying participations in accordance with article 26a of the Swiss Withholding Tax Ordinance. The respective participation requirement of 20% may, however, be of little practical relevance in light of ICOs as “crowd funding” instruments. Dividends from capital contribution reserves are not subject to Swiss withholding tax, provided that the formal accounting and notification requirements are fulfilled.^[56] It depends on the individual case whether payments from other types of tokens are subject to withholding tax or not. This is particularly relevant in relation to utility tokens, which promise a future participation in profit or revenue.

Similarly, there should be no Swiss local withholding tax due on the issuance of debt tokens, but on the related interest payments. This is the case whenever debt tokens qualify as bonds or bank deposits pursuant to article 4(1)(a) and (d) of the Withholding Tax Act. Further guidance is addressed in the SFTA’s Circular Letter No. 34, dated 26 July 2011.

51. CH: Zug, *Steuerbuch Kanton Zug*, sec. 8.9, available at <https://www.zg.ch/behoerden/finanzdirektion/steuerverwaltung/steuerbuch-zug> (accessed 12 May 2018).

52. D. Dzamko-Locher & H. Teuscher, *Commentary on article 13 Direct Tax Harmonization Act*, sec. 4 (M. Zweifel & M. Beusch eds., Helbing Lichtenhahn 2017).

53. Id., at secs. 5 and 46.

54. CH: Nidwalden, *Information sheet on cryptocurrencies*, sec. 1 (2018); CH: Lucerne, *Newsletter Steuern Luzern*, 20/2017 (2017); and CH: Zug, *Information sheet on cryptocurrencies*, sec. 2 (2017).

55. Zug, id.

56. CH: SFTA, Circular Letter No. 29a (2015).

3.4.2. Investors

As long as Swiss-resident investors are properly declaring their income, the withholding tax should be fully refunded (article 21 et seq. of the Withholding Tax Act) or credited against the income tax liability. The refund or potential credit of Swiss withholding tax for foreign-resident investors will be subject to the applicable double tax treaty.

3.5. One-time capital duty

3.5.1. Issuers

Swiss-resident corporations and cooperatives are subject to a one-time capital duty according to article 4(1) of the Stamp Duty Act (*Bundesgesetz über die Stempelabgaben*, SR 641.10, 1973, amended 2018). Amongst others, a one-time capital duty is due on the issuance and increase in value of participation rights in domestic corporations and cooperatives (article 5 of the Stamp Duty Act). It is to be assumed that only equity tokens should be subject to the one-time capital duty.^[57] The Swiss one-time capital duty qualifies as a legal transaction tax, and can therefore only be due if formal participation rights are issued or the capital is increased. Hence, the legal setup and the applicable accounting treatment have to be assessed on a case-by-case basis. Further, it should be noted that according to article 6(1)(b) and (h) of the Stamp Duty Act, the issuance and increase of capital up to CHF 1 million is exempt from the one-time capital duty.

3.5.2. Investors

As a general rule, a one-time capital duty is paid by the issuer. It is nevertheless possible to shift the one-time capital duty to the investor. This is, however, not the common practice.

3.6. Securities transfer tax

3.6.1. Issuers

Swiss securities transfer tax is due on the transfer of ownership in taxable securities against remuneration if a Swiss securities dealer is involved either as a contracting party or a mere intermediary. The one-time capital duty and securities transfer tax are mutually exclusive for the same taxable event. Hence, in relation to the token issuance or ICO (primary market transaction), reference is made to the explanations in [section 3.5.1](#).

3.6.2. Investors

In relation to the trade of tokens (secondary market transaction), it has to be assessed whether the tokens qualify as “taxable securities”. Securities issued by domestic corporations are generally assessed from a formal legal perspective. In contrast, foreign securities are assessed from an economic perspective (article 13(2)(b) of the Stamp Duty Act). Generally, bonds, participation rights and fund units qualify as taxable securities (article 13(2)(a) of the Stamp Duty Act). Asset tokens that qualify as securities for regulatory purposes (see [section 2.2.4.](#)) may similarly qualify as taxable securities for securities transfer tax purposes. However, it should be assessed for each case individually whether these tokens – depending on the underlying value – qualify as non-taxable derivatives.^[58]

According to FINMA, payment and utility tokens as a general rule do not qualify as regulated securities in accordance with the Swiss Stock Exchange Act (see [sections 2.2.2.](#) and [2.2.3.](#)). The same qualification should basically be applied for Swiss securities transfer tax. Pure means of payment, such as payment tokens, should thus not qualify as taxable securities. Although utility tokens may be considered a form of security or certification, the underlying value usually does not refer to a taxable security, but rather to a utility or service (see [section 2.2.3.](#)).^[59]

If the tokens in question qualify as taxable securities, various exemptions may apply in accordance with articles 14, 17a and 19 of the Stamp Duty Act. Contrary to the withholding tax, there is no duty by law to shift the securities transfer tax to the investor, although the securities dealer usually does so.

3.7. VAT

3.7.1. Token issuance and trade

Currently, there is no explicit regulation addressing the treatment of tokens from a Swiss VAT perspective. Although Switzerland is not an EU Member State, EU VAT legislation and jurisprudence may influence Switzerland’s VAT practice. In its preliminary ruling in *Hedqvist*,^[60] the Court of Justice of the European Union (ECJ) held that revenue following the exchange of conventional currencies into payment token Bitcoin (and vice versa) basically qualifies as a supply subject to VAT in accordance with the EU VAT Directive.^[61] However, in EU terminology, this service falls under tax exemption concerning currency, bank notes and coins used as legal tender in accordance with

^{57.} Similarly, see Jung, *supra* n. 37, at p. 9.

^{58.} CH: SFTA, Circular Letter No. 15 (2017); and CH: SFTA, Circular Letter No. 12 (2011).

^{59.} See also the exception to the commercial paper in accordance with CH: Stamp Duty Act, art. 4(5), read in conjunction with art. 14(1)(g) (2018).

^{60.} SE: ECJ, 22 Oct. 2015, *Case C-264/14, Skatteverket v. David Hedqvist*, sec. 53 et seq., ECJ Case Law IBFD.

^{61.} Council Directive 2006/112/EC of 28 November 2006 on the Common System of Value Added Tax, OJ L 347 (2006), EU Law IBFD (as amended).

article 135(1)(e) of the VAT Directive. The remuneration in question is the difference between the purchase and sales price. Since the SFTA has not yet published its practice in this regard, the analogous application of the ECJ's reasoning to Swiss VAT law remains uncertain.

The *Hedqvist* case is particularly relevant in connection with payment tokens. The treatment of utility tokens might lead to a different conclusion. In particular, it appears inherent to qualify the respective revenues in accordance with the nature of the underlying supply as either service or delivery. Depending on the qualification, one may analyse additional aspects, in particular the taxability and place of supply. However, as mentioned, the publication of official practical guidance by the SFTA is still pending.

In the view of the authors, the revenues in relation to payment and asset tokens should be VAT exempt in accordance with article 21(2) (19) of the Swiss VAT Act (*Bundesgesetz über die Mehrwertsteuer*, SR 641.20, 2009, amended 2018). Although payment tokens do not qualify as legal tender (article 21(2)(19)(d) of the VAT Act), they should – like asset tokens – benefit from the exception applicable to securities, value rights and derivatives (article 21(2)(19)(e) of the VAT Act). This has to be seen in general against the background that Swiss VAT applies only to commercially usable assets (article 3(c) of the VAT Act).^[62] In the view of the authors, utility tokens of which the usability is still pending, as the promised service or application cannot yet be provided or is not yet complete, should be treated similarly to payment or asset tokens.^[63] However, from a practical perspective, the place of supply will often be decisive in respect of foreign investors (articles 7 and 8 of the VAT Act). If the revenue in relation to tokens is not subject to Swiss VAT, the input tax deduction is not available. It is not possible to opt in voluntarily in accordance with article 22(2)(a) of the VAT Act.

3.7.2. Mining

It is questionable whether mining activities (i.e. the provision of computation power to verify transactions and build blockchains) are relevant for VAT purposes, and if so, whether they would qualify as a delivery or service. The SFTA has not yet published guidance in this regard. The German Federal Ministry of Finance, however, does not consider the activities relevant for VAT purposes, since they lack a direct link between the supply and consideration.^[64] This conclusion is based on the assumption that the potential transaction cost is paid on a voluntary basis to the miners.^[65] Swiss VAT law also requires a direct and intrinsic relationship between the supply and consideration (article 3(c) of the VAT Act). Against this background, the German reasoning might also be applicable for Swiss VAT purposes in relation to mining – and similarly, staking – subject to the SFTA's confirmation.

3.8. Social security contributions

In Switzerland, social security includes in particular old age and survivors' insurance, disability insurance and unemployment insurance. For employees, the respective salary is subject to social security contributions pursuant to article 5(1) of the Old Age and Survivors Insurance Act (*Bundesgesetz über die Alters- und Hinterlassenenversicherung*, SR 831.10, 1946, amended 2018). The relevant salary includes any remuneration for employment, irrespective of the duration of the employment (article 5(2) of the Old Age and Survivors Insurance Act). This would also apply to the (partial) salary payment in tokens.

For self-employment, after the applicable deductions, all income from professional activities that is not a salary from employment for which the above mentioned is applicable is subject to social security contributions (article 9 of the Old Age and Survivors Insurance Act). Thus, capital gains and losses of professional token traders (see [section 3.2.1.](#)) and income from professional mining and staking (see [sections 3.2.4.](#) and [3.2.5.](#)) will be subject to social security contributions.

4. Conclusion

ICOs have enriched the possibilities of financing enterprises by introducing a new, digital technology. Although the opinion exists that ICOs and tokens are generally out of reach of any regulation, the foregoing analysis has shown that the general principles of Swiss regulatory, civil, commercial, tax and social security law still apply. Swiss law is technology-neutral and rule-based. Due to the variety of token features, every case has to be assessed individually, but "by the same token", i.e. by the applicable general legal provisions. From a tax perspective, it appears to be wise to clarify the tax consequences prior to an ICO in an advance tax ruling with the competent tax authorities.

^{62.} C.R. Meier & L. Meisser, *Bitcoin und Mehrwertsteuer: Mehrwertsteuerfragen für EU und Schweiz geklärt*, ExpertFocus 3, p. 186 (2016).

^{63.} Linder & Meyer, *supra* n. 14, at p. 209.

^{64.} Similarly, for German tax law, see Pielke, *supra* n. 48, at p. 236.

^{65.} DE: Federal Ministry of Finance, BMF Letter No. 2018-163969 (2018).