

Review

Tax-free synthetic cash for individuals: A theoretical review of the Swiss case

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Synthetic cash, which is a pure product of financial engineering, can be defined as a combination of financial instruments that provide (before tax) a performance equal to that of a traditional monetary deposit but without the use of a debt or interest payment instrument. This article discusses the taxation of synthetic cash in Switzerland and shows that synthetic cash can generate tax-free income when adequately structured. This also creates a tax incentive for sophisticated private investors to avoid taxes by holding synthetic cash rather than monetary deposits. In addition, the article explores the various defense mechanisms available to the Swiss tax authorities when fighting against synthetic cash. Finally, it examines virtual currencies, which have recently emerged and could constitute the next generation of synthetic cash.

Key words: Taxation, cash management, financial engineering, tax avoidance.

INTRODUCTION

Financial derivatives were initially created to facilitate risk transfers between market participants but may also be used to synthesize the returns of virtually any asset. Because most tax systems do not necessarily treat economically equivalent returns from different instruments in the same manner, synthetic assets often include a different tax treatment than the original asset that they replicate. Using synthetic assets also allows sophisticated investors to choose the timing, character, and/or source of otherwise economically equivalent cash flows. In addition, it opens the door to tax planning activities and creates substantial threats to tax revenues for all states.

In this article, we extensively discuss a specific example of synthetic assets, namely, cash in Switzerland. This choice is motivated by two arguments. First, cash is deemed to be the simplest and safest asset, and it normally generates only fully taxable ordinary income. Let us recall that, in finance, the term “cash” or “traditional cash” represents all types of debt instruments that pay fixed or variable interest on a given amount (nominal value) and have a residual lifetime of less than one year, such as treasury bills, bank deposits, short-term bonds, and loans. Second, Switzerland hosts a large banking industry that caters to wealthy individuals from around the

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world. Swiss banks are also known for their conservative investment approach, with cash as an important component in the portfolios of clients in search of a safe haven during periods of extreme market stress. The tax treatment of cash returns is therefore important.

This paper has three objectives. The first one is to illustrate the weakness of the current Swiss tax code in regard to synthetic cash. For this purpose, several simple synthetic cash products are described in detail and analyzed from a Swiss tax perspective; moreover, it is shown that these products generate legally tax-free income when adequately structured. The second objective is to assess the anti-avoidance mechanisms of the Swiss tax authorities when confronting such synthetic cash constructions. Although theoretically available and effective in other areas, these mechanisms are found to be extremely difficult to use in practice against synthetic cash. Finally, the third objective is to discuss how virtual currencies, which have recently emerged, could constitute the next generation of synthetic cash. Overall, by discussing the concepts and mechanics of synthetic cash, including virtual currencies, the paper provides useful and practical evidence for policymakers interested in stemming aggressive tax planning. It also contributes to the ongoing debate on fundamental tax reforms in Europe and elsewhere.

To the best of the author's knowledge, the present article is the first to focus on using derivatives for tax evasion by *individuals* in Switzerland. Derivative-based tax avoidance is not by any means a new phenomenon. Based on anecdotal evidence, several calls for research on the topic have been issued by both academics and regulators (Shevlin, 2007; Hanlon and Heitzman, 2010; Raskolnikov, 2011; United States Government Accountability Office, 2011; United States Congress Joint Committee on Taxation, 2011). Surprisingly, more than a decade later, such research remains relatively limited. Most investigations in the United States (US) have focused on the corporate side because more disclosures are available from this perspective. In particular, the Statement of Financial Accounting Standards No. 161 requires firms to distinguish between derivatives that are designated as "hedging instruments" from those designated as "non-hedging instruments."

Per the comprehensive research of Donohoe (2011, 2012, 2015a, b), corporations were found to use derivatives as a tool of tax avoidance. Gallemore et al. (2019) confirmed that some banks specialize in assisting corporate clients with tax planning, a role that goes far beyond their traditional one of being a financial intermediary. Similar conclusions were obtained by Sitinjak and Martani (2018) and Devi and Efendi (2018) in Indonesia, by Zeng (2014) in Canada, and by Oktavia et al. (2019) in four member states of the Association of Southeast Asian Nations. However, in regard to wealthy individuals, the literature remains scarce owing to limited

disclosures.

In the US, although Fabozzi (1998) and Keinan (2007) described various strategies using derivatives for tax planning, the corresponding loopholes have been closed by specific anti-abuse rules (Schizer, 2001; Brennan, 2013; Gorella, 2020). In Europe, various policy initiatives such as information exchange treaties, increased control of money flows, or tax amnesties have flourished, but little has been done regarding derivatives and tax planning. Persaud (2014) outlined the main challenges that European countries face when taxing derivatives and provided general recommendations for the way forward. Guter-Sandu et al. (2018) focused on the aggressive tax planning practices of individuals who used financial engineering and, in particular, the deployment of derivatives. Their main conclusion was that various initiatives, such as the Organization for Economic Co-operation and Development's (OECD's) Base Erosion and Profit Shifting initiative and the European Union's Aggressive Tax Planning Indicators, do not focus enough on the opportunities that are created by financial engineering from a tax avoidance perspective. More recently, derivative-based tax avoidance discussions seem to have migrated toward the use of total return swaps by wealthy individuals to avoid paying withholding taxes on dividends (Reinarz and Carelli, 2016; Reinarz, 2017; Buettner et al., 2020) and toward offshore-based tax evasion (European Commission, 2019).

The remainder of this paper is structured as follows. First is an explanation of the tax treatment of traditional cash in Switzerland for different types of taxes (e.g., stamp duty, wealth tax, withholding tax, and income tax), followed by illustration of various approaches for creating synthetic cash using derivatives. Furthermore, a discussion is presented on the tax treatment of synthetic cash in Switzerland leading to the conclusion that synthetic cash is essentially tax free. Additionally, the various defense mechanisms that are available to the Swiss tax authorities when combating synthetic cash constructions are explored, the findings summarized, and the case of Switzerland is briefly compared to that of the US, where a small set of rules explicitly and generically prevent such constructions. Finally, virtual currencies are introduced as the next possible loophole in Switzerland for creating tax-free synthetic cash.

TRADITIONAL CASH FROM A SWISS TAX PERSPECTIVE

In Switzerland, traditional cash instruments are either bonds or monetary securities, as stated in Art. 4, Al. 4 of the Federal Law on Stamp Duty (LSD) dated June 27, 1973. Specifically, the notion of bonds is defined in Art. 4, Al. 3 of the LSD and Art. 15, Al. 1 of the Ordinance on Withholding Tax (OWT) dated December 19, 1966. This

definition, which is wider than those found in the Swiss Law on Securities, is used for federal, cantonal, and communal taxes. It also contains an essential element, to which we will return later, in that a bond can exist only if there is a principal debt in capital. From a tax perspective, monetary securities are defined as bonds of a duration that does not exceed 12 months (Art. 4, Al. 4 of the LSD). Initially, this definition seems similar to that used in finance, which can be misleading. The financial definition of monetary securities considers the current residual duration of the instrument, whereas the tax definition refers to the duration measured from when the debt relationship was initiated. Consequently, some traditional cash instruments are considered to be bonds for tax purposes even though their residual life falls under 12 months. This is, for instance, what occurs in the case of an old long-term bond that is less than one year from reaching maturity.

For certain types of taxes, the borrower's domicile must be considered. A borrower will qualify as "Swiss" if the borrower has residency in Switzerland or in the Principality of Liechtenstein, has registered an office (or legal headquarters) there, or is registered as a company with the Commercial Register (Art. 4, Al. 1 of the LSD). It should be noted that a legal entity whose registered office is in a foreign country but is effectively managed from Switzerland will also qualify as "Swiss" (Art. 9, Al. 1 of the Federal Law on Withholding Tax (LWT) dated October 13, 1965). Moreover, a bond issued by a Swiss borrower will qualify as "Swiss," but a borrower or a bond will qualify as "foreign" if the aforementioned criteria are not met.

Stamp duty

The issue, sale, or purchase of traditional cash is generally not subject to stamp duty. Indeed, the stamp duty on new issues has been abolished since March 1, 2012, for bonds and monetary securities. In addition, the stamp duty on the transfer of securities applies neither to monetary securities (Art. 14, Al. 1, Let. G of the LSD) nor to bonds issued by foreign debtors and denominated in a foreign currency (Art. 14, Al. 1, Let. F of the LSD). However, attention must be given to the aforementioned case of a Swiss bond, or a foreign bond that is denominated in Swiss francs, whose residual life is less than 12 months. From a financial perspective, such a bond is viewed as a monetary security; however, for tax purposes, it is handled like a bond. It is therefore subject to stamp duty when transferred if one of the contracting parties or one of the intermediaries is a securities trader (Art. 13, Al. 3 of the LSD). For securities that are issued by an entity domiciled in Switzerland, the tax rate is 1.5% (0.75% for each contracting party); for securities that are issued by an entity domiciled outside of Switzerland, the

tax rate is 3%. Finally, at maturity, the act of delivering securities to obtain the reimbursement of the principal is not subject to stamp duty (Art. 14 of the LSD).

Wealth tax

Traditional cash instruments must be included in the taxpayer's net taxable assets (Art. 13 of the Federal Law on the Standardization of Direct Cantonal and Communal Taxes (DCT) dated December 14, 1990). When these instruments are listed on an exchange, their current value corresponds to the market price that prevailed at the end of the tax period under consideration (Art. 66, Al. 1 of the DCT). However, when such instruments are not listed, their book value must be estimated. In practice, cantons follow the guidelines contained in Circular 28 of the Swiss Tax Conference, which is entitled "Instructions concerning the estimation of non-listed securities for the purpose of wealth tax" and dated August 28, 2008.

Withholding tax

If they stem from Swiss bonds or from assets with Swiss banks (or Swiss savings banks), interest and returns provided by a traditional cash position are subject to a withholding tax on investment income of 35% (Art. 4, Al. 1, Let. A and D as well as Art. 13, Al. 1, Let. A of the LWT). The notion of banks, as per the LWT, encompasses companies that are not subject to banking regulations but constantly accept funds against some interest. In practice, for tax purposes, any company that includes more than 100 creditors for an outstanding total of more than CHF 5 million is considered a "bank." The notion of returns encompasses all and any remuneration paid by the debtor to the creditor for having made capital available except for amounts that correspond to the repayment of the principal (Art. 14, Al. 1 of the OWT). In the case of Swiss bonds, possible issue discounts or repayment premiums are thus also subject to a withholding tax.

However, there is no withholding tax due in the following cases: (i) fiduciary deposits made (through a Swiss institution) with a foreign bank; (ii) client assets with a bank or savings bank, if the interest amount does not exceed CHF 200 per year (Art. 5, Al. 1, Let. C of the LWT); and (iii) foreign bonds and assets with foreign banks (or foreign savings banks).

Individuals domiciled in Switzerland can also request a reimbursement of the withholding tax in the form of a tax credit against their cantonal and communal taxes (Art. 22 of the LWT; Art. 51, Al. 1 of the OWT). However, the following conditions must be met: (i) such persons must have the right to use the securities that have produced the related taxable returns (Art. 21, Al. 1, Let. A of the

LWT), and (ii) such persons must declare not only the returns that have been subjected to withholding tax but also the principal amounts that have generated these returns in an accurate and spontaneous manner for the purpose of cantonal and communal taxes (Art. 23 of the LWT). Moreover, partial reimbursement for individuals domiciled outside of Switzerland may be available based on a double taxation treaty.

Income tax

For both direct federal taxes (Art. 20, Al. 1, Let. A of the Federal Law on the Direct Federal Tax (LIFD) and cantonal and communal taxes (Art. 7, Al. 1 of the DCT), interest and returns arising from traditional cash generally qualify as income and are taxed accordingly. Here, the notion of returns encompasses any remuneration paid by the debtor to the creditor except for amounts that correspond to the repayment of the principal (Art. 14, Al. 1 of the OWT). In particular, this notion applies to interest from assets held with banks and savings banks and to interest arising from Swiss or foreign bonds.

In the case of a bond that only pays its holders a periodic interest (e.g., coupons or similar payments) and no other form of remuneration, the interest received at maturity is taxed as income to the beneficiary of said interest. Should the instrument be disposed of prior to maturity, the portion of the price that relates to the accrued interest constitutes a capital gain that is tax free for the seller because the accrued interest is not paid out by the bond debtor but by a third party (Art. 16, Al. 3 of the LIFD). However, the accrued interest will be fully taxed to the bond holder at the time when it is paid out by the debtor.

In the case of a bond that only gives its holders a one-time remuneration at maturity, including the form of a spread between the issue price and the repayment price (issue premium, repayment discount), all the realized gains are considered to be revenue from movable property. This includes the cases involving disposal before reaching maturity or repayment.

In the case of mixed bonds that offer both a periodic interest and a one-time remuneration, one must perform an actuarial calculation—at the time and under the conditions of issue—to estimate both components. The larger component will definitively point to the category in which to classify the bond. Even in the case of a bond in which the one-time interest is greater, the periodic interest that is paid out remains taxable according to the ordinary regime.

CREATING SYNTHETIC CASH: ILLUSTRATIVE TRANSACTIONS

The simplest way of obtaining synthetic cash is to create

a portfolio that combines a risky asset (e.g., a stock) with derivative products that are linked to said asset to eliminate risk. To avoid any type of financial arbitrage, this portfolio should provide investors with a return that matches the so-called risk-free rate, namely, the interest rate paid by traditional cash. Although basic constructive sales strategies based on short selling (e.g., shorting against the box) are one of the most obvious approaches to creating synthetic cash, they may easily be requalified from a tax perspective. Thus, subsequently, without aiming to be comprehensive, we present three examples of synthetic cash realized via derivatives by increasing order of financial complexity. For readers unfamiliar with the various financial instruments employed herein, a detailed description of the instruments can be found in Hull (2009). The key element to remember is that while the three forms seem considerably different, they result in the same economic return.

Synthetic cash with a forward contract (portfolio P1)

A forward contract is a bilateral contract through which two parties commit to buy and/or respectively sell a given quantity of a specific product at a price agreed in advance and on a preset date (maturity). By combining the purchase of a financial asset with the simultaneous sale of a forward contract on the same asset, an investor creates a pretax position that is financially equivalent to a monetary placement, the maturity of which would be the same as that of the forward contract (Hull, 2009).

Example 1: *Suppose we take an interest rate of 3% p.a. and a risky asset as a listed stock trading at CHF 100 while not paying any dividends. The cost-of-carry model (Hull, 2009) indicates that a one-year forward contract on this stock should be traded at CHF 103. Any other price would create financial arbitrage opportunities. Combining the purchase of this stock with the simultaneous sale of a one-year forward contract requires an initial investment of CHF 100, which will definitely be worth CHF 103 one year later regardless of the stock price evolution. Before tax, the return profile is identical to that of a one-year monetary placement.*

In the case of an underlying asset that pays a dividend or an interest that is known in advance, the financial reasoning before tax remains the same. The price of the forward contract will take the distribution into account and will be adjusted accordingly.

Example 2: *Suppose we take an interest rate of 3% p.a. and a risky asset as a listed stock trading at CHF 100 while paying a known dividend of CHF 5 in six months. The cost-of-carry model indicates that a one-year forward contract on this stock should be traded at CHF 97.92.*

Any other price would create arbitrage opportunities. Combining the purchase of this stock with the simultaneous sale of a one-year forward contract requires an initial investment of CHF 100, which will definitely be worth CHF 103 one year later (CHF 97.92 + the dividend of CHF 5 + CHF 0.08 of interest on the dividend during six months) regardless of the stock price evolution. Before tax, the return profile is identical to that of a one-year monetary placement.

Once the forward contract reaches maturity, several scenarios are possible depending on the terms of the contract. There may be a physical delivery of the underlying asset against the payment of the agreed price; in this case, the investor has *de facto* liquidated their entire position in synthetic cash at a price that was known beforehand. Alternatively, there may be a cash settlement of the difference between the agreed price and the value of the underlying asset; here, the investor retains the underlying asset. If the asset has dropped below the agreed price, the investor receives the difference in cash. If the asset has risen above the agreed price, the investor must pay the difference in cash, which may force the investor to sell a portion of the underlying asset if they do not otherwise hold freely available cash.

It is possible to exit from a synthetic cash position at any time before the forward contract reaches maturity. In this case, the investor sells the underlying asset, and the original forward contract is neutralized by the purchase of another forward contract based on the same asset and with the same maturity date.

Synthetic cash through a swap contract (portfolio P2)

A total return swap (TRS) is a bilateral contract whereby one party undertakes to pay the other the increase in value realized by a financial asset over a given period and, where applicable, dividends or interest paid by this asset over the same period. In exchange, the other party agrees to pay the first party a fixed or variable amount, usually expressed as an interest rate applied to a notional amount that is set in the contract, as well as any possible asset value depreciation over the same period. As a rule, payments are made at regular intervals and are usually compensated, with only the net flow actually paid out. Furthermore, because the asset itself does not change hands, there is no physical delivery of the underlying asset.

By holding an underlying asset and entering into a TRS on the same asset, the investor obtains a pretax position that is financially equivalent to a monetary placement, the maturity of which corresponds to that of the swap (Hull, 2009).

Example 3: *Suppose we take an interest rate of 3% p.a.*

and an underlying asset as a listed stock trading at CHF 100 while not paying any dividends. Let us consider a one-year TRS on this stock with a notional amount of CHF 100 and an interest rate of 3% p.a. Combining the purchase of this stock with this TRS requires an initial investment of CHF 100, which will definitely be worth CHF 103 one year later regardless of the stock price evolution. Thus, if the stock price has risen to CHF 110 in one year, the investor must pay a net flow of CHF 7 for the swap. If the share has dropped to CHF 90 in one year, the investor will receive a net flow of CHF 13 for the swap. In all cases, the net value of the swap will be CHF 103. Before tax, the return profile is identical to that of a one-year monetary placement.

The previous comments made on the case of an underlying asset paying a dividend or coupon remains valid. Moreover, it can be observed that a TRS with a single payment date at maturity is financially identical to a forward contract. Here, we come across a well-known notion in finance, according to which a swap is generally nothing more than a portfolio of forward contracts, namely, one forward contract for each payment date. Thus, financially speaking, portfolios P1 and P2 are equivalent. However, an important operational difference exists: a TRS involves interest calculations on notional amounts, whereas a forward contract is treated at a fixed price that is directly expressed in cash.

Synthetic cash with options (portfolio P3)

Options also allow synthetic cash to be created. According to a financial relationship called “put-call parity” (Stoll, 1969), a zero-coupon bond can be replicated by purchasing a financial asset and a put option on said asset while simultaneously selling a call option on the asset. In general, maturities should be identical for the put, the call, and the zero coupon. The put and the call should also include the same exercise price, which is equal to the zero coupon’s final price.

Example 4: *Suppose we take an interest rate of 3% p.a. and an underlying asset as a listed stock trading at CHF 100 while not paying any dividends and bearing a volatility of 20% p.a. According to Black and Scholes’s (1973) model, a call option and a put option on this stock, with a one-year maturity and an exercise price of CHF 100, are worth CHF 9.39 and CHF 6.48, respectively. A one-year zero-coupon bond is worth CHF 97.09. Any other prices would create arbitrage opportunities. Together, the purchase of the stock and put and the sale of the call create a position that requires an initial investment of CHF 97.09 and definitely pays CHF 100 in one year. Before tax, the return profile is identical to that of a one-year monetary placement.*

The earlier comments made on the case of an underlying asset paying a dividend or coupon remain valid. Options can be used with physical delivery or cash settlement. The pretax total economic output is the same, but the cash-flow consequences differ and must be analyzed. Similarly, one may opt to liquidate their position in full before maturity. Note that the aforementioned example only represents the simplest combination of options for creating synthetic cash. Many other optional combinations, also based on put-call parity, exist in practice and would deliver the same economic results.

SYNTHETIC CASH FROM A SWISS TAX PERSPECTIVE

Let us consider the case of an investor who creates synthetic cash by combining various financial products. This implicitly assumes that the investor possesses sufficient capital and financial knowledge to execute the required transactions.

Choosing the underlying asset and the tax consequences thereof

As shown in the previous section, the creation of synthetic cash implies holding an asset and covering related risks by one or more derivatives. To achieve a risk-free return, capturing all of the underlying asset's gross performance, whether positive or negative, is essential. To do so, choosing an underlying asset that meets the following characteristics is preferable: (i) an asset that is liquid and of a financial nature to avoid storage, transportation, insurance costs, etc.; (ii) an asset whose possible increase in value during the course of the holding period will not be treated as revenue from taxable movable property but as non-taxable capital gain (Art. 16, Al. 3 of the LIFD; Art. 7, Al. 4, Let B of the DCT); and (iii) an asset without distribution (e.g., dividend, coupon, and interest) during the holding period, as it might be subject to withholding tax and/or income tax. In particular, these characteristics exclude all commodity-type assets, including precious metals (e.g., gold and platinum) as well as all bond-type assets and currencies with an interest rate greater than zero. One asset that features all the desired characteristics is a Swiss share (or a basket of Swiss shares) that pays no dividend. For the sake of simplicity, in the remainder of this article, unless otherwise stated, we will assume that a Swiss share without dividend has been selected as the underlying asset. Nevertheless, we will briefly discuss the case of other underlying assets.

Using an underlying asset that makes distributions would render the creation of synthetic cash considerably, and unnecessarily, more complicated. For example,

using a share of a Swiss company that pays a dividend creates three problems:

- i) The *anticipated* dividend, on which the pricing of the derivatives is based, may differ from the actual dividend received; thus, the final return on synthetic cash can no longer be guaranteed.
- ii) For a Swiss investor, the actual dividend will normally be subject to (non-recoverable) income tax, thereby lowering the return delivered by synthetic cash.
- iii) The actual dividend may be subject to a Swiss withholding tax, which the investor may seek to recover; however, this is not always possible.

The last problem—recovering the withholding tax on a dividend—raises the issue of beneficial ownership. For a Swiss company's share, the actual beneficial owner of the dividend is the only one who is entitled to file a withholding tax refund (Art. 21, Al. 1, Let. A of the LWT). For a foreign company's share, the withholding tax refund, in part or in full, is only possible if a double taxation agreement (DTC) is in place between Switzerland and the foreign country. Some DTCs explicitly include a clause on actual beneficial ownership, whereas others do not. However, many authors (Mäusli-Allenspach, 1993; Matteotti, 2005; Danon, 2007) have stated that it is implicit.

Since the synthetic cash holder has economically transferred the performance of the underlying asset (including dividends) to their counterparty through derivatives, is the holder still the actual beneficial owner thereof? In the case of Swiss equities, both scholars (Baumgartner, 2010) and recent decisions of the Swiss Federal Administrative Court have answered in the affirmative, pointing to the absence of contractual or *de facto* interdependence between the receipt of dividends and the obligation to make a payment of an equivalent amount. The acquisition of the underlying security depends solely on the investor's willingness to hedge against the risks inherent in their derivatives' position. In all cases, the investor is obliged to honor their commitment to the derivatives even if they have not received the dividends or if those are unavailable (e.g., in the case of seizure, legal restrictions, or *force majeure*). Hence, the investor should not be regarded as a mere agent or delegate but as the actual beneficial owner of the dividend; consequently, they should be entitled to file a withholding tax refund. In the case of non-Swiss equities, the situation is less clear and depends on the meaning given by the country sourcing the dividends to the term "beneficial owner." This remains a greatly debated international tax issue (Du Toit, 2010; Verdoner et al., 2010a, b; Desax and Busenhart, 2012; De Broe and Von Frenckell, 2013; Danon et al., 2014; Reinartz and Carelli, 2016; Reinartz, 2017; Buettner et al., 2020). Thus, by default, one should conservatively assume that the

refund of the foreign withholding tax is not guaranteed.

Note that because the performance of the underlying share does not matter (since it is fully hedged), manufacturing a Swiss share with no dividend is theoretically possible. Given an initial share, this would require selling it just before it pays its dividend for the year, replacing it by a share that has already paid it, and adjusting the derivatives position to reflect the change in the underlying asset. This would *a priori* involve higher transaction costs as well as possible tax consequences, in particular, stamp duty. However, such consequences should be studied thoroughly. Finally, a more complex underlying asset, also bearing all the desired characteristics, is a derivative product. One example is a forward oil contract, which by definition does not pay out any distributions and includes no storage costs. In addition, further derivatives can be built upon a derivative product, with the latter acting, in turn, as the underlying asset (for example, the options on forward oil contracts). Let us now review how synthetic cash is treated from a Swiss tax perspective.

Stamp duty

When creating synthetic cash, one must buy an underlying stock and handle the various derivatives according to the selected portfolio. A stock purchase is subject to stamp duty (a securities trading tax) if the counterparty is a Swiss security trader trading on the Swiss stock exchange. However, this can be avoided by dealing exclusively with foreign members of the Swiss stock exchange (that is, remote members). Since July 1, 2010, remote members are no longer considered security traders (further to the deletion of Art. 13, Al. 3, Let. E of the LSD) and are therefore no longer subject to stamp duty on the trading of securities. Additionally, the issuing and trading of derivatives are exempt from stamp duty (neither securities issuing tax nor securities trading tax are applied).

If a synthetic cash position is held up to maturity, it may lead to executing a forward contract (portfolio P1), having a swap reach maturity (portfolio P2), or exercising an option (portfolio P3). Thus, distinguishing the derivatives with a cash settlement from the derivatives with a physical delivery of the underlying asset becomes necessary. In the case of a cash settlement, stamp duty does not apply because there is no costly transfer of a taxable document (Art. 13, Al. 1 of the LSD *a contrario*). However, the investor may be forced to sell a portion of their underlying asset for cash flow reasons; in this case, the tax treatment on the sale is identical to that of the purchase (see above). Moreover, the investor always retains ownership of all or part of the underlying asset. If they wish to renew their synthetic cash position, no stamp duty will apply, which is an advantage. If they do not wish

to renew their position, they must sell the underlying asset and eventually pay the stamp duty. In the case of a physical delivery, the stamp duty must be paid when the transaction leads to acquiring a taxable document, which occurs if the underlying asset is a Swiss stock. The stamp duty is then calculated on the equivalent countervalue that was agreed to during the transaction's completion (Art. 16 (1) of the LSD).

If a synthetic cash position is liquidated before its derivatives reach maturity, the considerations for the creation of the position apply *mutatis mutandis*. The investor may liquidate only the derivative products, if they wish, and then reinstate a new derivatives position with a longer maturity, which is financially equivalent to extending the maturity of their synthetic cash.

Wealth tax

Both the underlying security and the derivatives used must be included in the taxpayer's taxable net wealth (Art. 13 of the DCT). The valuation criteria are the same as those mentioned for traditional cash.

Withholding tax

Withholding tax is charged on some types of capital returns and benefits, as detailed by law. Moreover, the gains from a synthetic cash position with an underlying asset making no distributions are not subject to withholding tax (Art. 4 (1) of the LWT *a contrario*).

Income tax

Here, we discuss the key advantages of synthetic cash. If synthetic cash is well structured, an increase in its value is potentially considered—not as an interest payment but as a capital gain. In the case of dividend-free shares, realized private capital gains are exempt from income tax (Art. 16, Al. 3 of the LIFD; Art. 7, Al. 4, Let. B of the DCT).

How do certain aspects work for derivatives? In the Swiss Tax Law, the notion of interest only applies if there is a capital debt. However, none of the P1, P2 or P3 portfolios contain an instrument that is linked to a capital debt. In regard to an underlying stock, there is a transfer of capital, but it does not qualify as a debt. In the case of a forward or options contract, there is no underlying debt. In the case of a TRS, even if an interest rate is applied to a hypothetical (notional) amount to determine the amount due, the cash payments do not correspond in any way to remuneration for the capital loaned (Oberson, 1993). Consequently, the Swiss doctrine agrees that returns on forward contracts, options, and swaps qualify as capital gains. However, the activity generating the gain must

occur on an occasional basis rather than as part of self-employment pursuits.

One exception to this rule is that of derivatives or swaps financed in advance wherein there would be a one-time, upfront capital payment that would then be somehow reimbursed in the future. In such a case, Swiss practice varies depending on the duration of the derivative. If its duration is under 12 months, a product is referred to as a “typical derivative,” and its interest component is ignored. If it has a longer term, it may be requalified as a “hybrid product” (that is, a bond with interest plus derivatives). Given that our definition of cash is limited to a one-year time horizon, this situation does not concern us. In view of the above, it therefore appears that an increase in value of synthetic cash constitutes a private capital gain that is exempt from income tax for individuals.

DEFENSE MECHANISMS AVAILABLE TO THE TAX AUTHORITIES

To collect taxes on synthetic cash, the Swiss tax authorities essentially have three weapons at their disposal: using traditional approaches for taxing hybrid products, invoking the notion of quasi-professional securities trading, and claiming a tax evasion

Traditional methods for hybrid products

In Switzerland, hybrid products regroup financial instruments issued by banks that combine a bond with some derivative positions. Examples include capital guaranteed notes and reverse convertibles. The Swiss tax authorities have historically used a pragmatic approach to handle them, as described in the Circular number 15 (“AFC15”) of the Swiss Federal Tax Authorities (2018). If the components behind a hybrid product have been explicitly disclosed by the issuer or analytically identified ex-post by the tax authorities, the product is said to be “transparent,” and each component must be taxed separately. This is the case, for example, of a reverse convertible, the yield of which can easily be broken down into a bond-sourced component (that is, a coupon, which is taxed as an income) and an option-sourced component (that is, a put option sale, which is a tax-free capital gain). In all other cases, the hybrid product is said to be “non-transparent” and is essentially taxed as a bond. In particular, all its coupons, as well as the price difference between the purchase price and the final reimbursement price, are treated as taxable income.

This approach has been effective against tax evasion related to hybrid products, particularly attempts to convert taxable coupons into tax-free capital gains. Unfortunately for the Swiss tax authorities, this principle does not apply

to synthetic cash for two reasons. First, synthetic cash is generally not issued as a hybrid product but simply as a series of financial assets (see, for instance, portfolios P1, P2, or P3). Synthetic cash is therefore *de facto* transparent, and the tax authorities have no legal basis to arbitrarily select certain financial assets in an investor portfolio, package them, and then unbundle the package to end up with an economically equivalent set of other assets. Second, even if synthetic cash is offered as a hybrid product, the issuer can easily disclose the underlying components (see, for instance, portfolios P1, P2, or P3), with each of them only generating non-taxable private capital gains. Therefore, the Swiss tax authorities can only requalify the financial construction as generating taxable income in the presence of non-transparent synthetic cash.

Quasi-professional securities trading

The principle of exemption for private capital gains is clearly anchored in Swiss tax laws (e.g., Art. 16, Al. 3 of the LIFD; Art. 7, Al. 4, Let. B of the DCT). However, per the Federal Court’s jurisprudence, the only gains to be considered private capital gains are those obtained by an individual in a fortuitous manner or in the simple administration of their private wealth. In addition, as soon as one leaves this framework and the activity of the taxpayer is geared toward income generation, the existence of an independent profit-making activity, known as “quasi-professional securities trading,” cannot be excluded. Capital gains from such an activity represent taxable income at both the federal and cantonal levels (Art. 18 of the LIFD; Art. 8, Al. 1 of the DCT) and are subject to social contributions. In the presence of synthetic cash, tax authorities may therefore attempt to demonstrate that the taxpayer is a quasi-professional securities trader.

The distinction between simple private asset management and quasi-professional securities trading has been the subject of considerable jurisprudence, which essentially recommends a case-by-case analysis. To guarantee legal certainty to taxpayers, the Swiss Federal Tax Authorities (2012) outlined the criteria and indications that can be applied in this regard in the Circular no 36 (“AFC36”). The first five elements are the preliminary criteria that, if met cumulatively, make it possible to admit that it is a case of the simple administration of private wealth and that, therefore, the capital gains exemption applies. These criteria are as follows: (i) that positions are held for at least six months; (ii) that the total volume of trades does not exceed, over any calendar year, five times the amount of securities and assets held at the beginning of the tax period; (iii) that capital gains arising from securities transactions are not required to replace missing or discontinued income

and maintain the taxpayer's living standards—in practice, this is the case if the realized capital gains represent less than 50% of the net revenue for the tax period under consideration; (iv) that investments are not financed by borrowed funds; and (v) that purchases and sales of derivatives are limited to hedging the taxpayer's security positions.

In our case, two criteria may prove problematic. First, criterion (iii) may not be met in the case of a wealthy taxpayer who nevertheless has a low level of income. Capital gains related to synthetic cash and, more generally, capital gains related to their wealth, could therefore be required to maintain their living standards. For such a taxpayer, there remains the option to invoke the argument of the prohibition of confiscatory taxation (Article 26 of the Federal Constitution) and have recourse to the tax shield, if applicable, for their cantonal and communal taxes. Further, criterion (v) is perfectly fulfilled in the case of our examples of synthetic cash using a forward contract (P1) or a TRS (P2) since the related derivative is used for the sole purpose of hedging the taxpayer's positions. Conversely, in the case of synthetic cash using put-call parity (P3), the sale of a call, if considered in isolation, is not truly a hedging operation.

If the aforementioned criteria are not cumulatively met, the existence of professional securities trading cannot be ruled out. It is then necessary to move on to an examination *in concreto*. Based on the 2C_868 / 2008 ruling of October 23, 2009, the AFC36 restates the priority order to be applied among the criteria laid down by the jurisprudence. Three primary criteria (that is, a high transaction frequency/short holding duration, the use of foreign funds, and the use of derivatives) can lead to characterizing an activity as "professional securities trading." Secondary criteria, such as a close relationship with the taxpayer's professional occupation, the use of specific knowledge, and a systematic and planned manner of conducting certain activities, add to the above but cannot alone lead to a professional securities trading characterization. These aspects merely corroborate such characterization when a main criterion is met.

The mention of derivatives in the primary criteria may pose a problem for synthetic cash holders. Note that this criterion is *not* included in the 2C_868 / 2008 ruling of October 23, 2009 upon which the AFC36 is based. Nevertheless, the jurisprudence seems to confirm that the use of derivatives, insofar as it is limited to hedging a taxpayer's securities positions, is acceptable. Again, portfolios P1 and P2 appear to be safe, while portfolio P3 is more debatable because it is linked to the sale of a call.

Despite the apparent legal certainty, the synthetic cash holder must keep in mind that the AFC36 is only an administrative directive that does not have the force of law. Under the principle of good faith, this circular binds the tax administration but not the courts. In a ruling that

was issued post-AFC36, the Federal Court made it clear that the circular was not aimed at dealing with the most complex cases but was primarily intended to quickly resolve clear cases as part of an effort to "mass administer" these matters. More importantly, the Federal Court has deviated substantially from the AFC36 by placing the primary and secondary criteria on the same level and by adding new criteria such as "the systematic and/or planned nature of operations," "the taxpayer's training and/or main occupation," "the use of expert knowledge," or "the reinvestment of earnings." The Federal Court's jurisprudence also stated that the notion of "independent lucrative activity" is to be interpreted in a broad sense and that such a characterization may be justified, depending on the case, even in the absence of a recognizable activity in the eyes of a third party and even if the activity is only carried out on an occasional basis. In any event, for the Federal Court, the concrete circumstances of the case must be decisive. Therefore, the security of synthetic cash and that of its holder remain relative. However, there is some risk that the apparent protection offered by the AFC36 may be shattered before the courts. As a reminder, this was the case with the previous circular of 2005 on the same topic.

Possible recharacterization as tax evasion

In Switzerland, tax evasion refers to a situation wherein a taxpayer uses civil law institutions to avoid a tax burden while attaining their ultimate economic objective (Glauser, 2007). The Federal Court has characterized tax evasion as the use of a legal form that is "unusual, inappropriate or strange, in any case unsuitable for the economic goal pursued," which is chosen "solely for the purpose of saving taxes that would be owed if the legal relationships were adapted in an appropriate manner," and that effectively results in "substantial tax savings, in as far as the tax authorities would accept it." When these three conditions are met, the Federal Court's jurisprudence has admitted that taxation must not be based on the form chosen by the taxpayer but on "the situation that should have appropriately expressed the economic goal pursued by those concerned."

Does the holding of synthetic cash constitute a form of tax evasion? It is difficult to answer this question in general terms. On one hand, all the criteria retained by the Federal Court seem to be well tested. Although the economic nature of the performance of synthetic cash corresponds closely to that of an interest payment, the sole purpose of synthetic cash is to have it fiscally passed off as tax-free private capital gains. To respect the principle of equal treatment of taxpayers, we must correct the situation and discourage other taxpayers from taking this route. Literally, "slyness must not triumph over law" (*Die Schlaueit darf nicht über das Recht*

triumphieren) (Vetsch, 1917). On the other hand, at which point does the decision of a taxpayer to hedge a position that they hold, which *de facto* creates synthetic cash, become tax evasion? Is it necessary to systematically requalify any hedged position as tax evasion? Should it only be done if such a position is held longer than a certain period of time, if a large amount is involved, or if it has been renewed several times? In this regard, we are not far from arbitrariness.

To make matters worse, the transactions carried out are *a priori* economically justified and not simulated by the counterparties of the synthetic cash holder. It is therefore impossible to requalify these transactions from a tax perspective but possible to leave their combination in the hands of the taxpayer. This can lead to an undesirable legal situation in which bilateral transactions between two taxpayers can be fiscally accepted for the first party but fiscally requalified for the second party depending on the composition of the remainder of their portfolios.

DISCUSSION

The Swiss tax system proceeds by determining the legal form of a transaction before taxing this legal form rather than by seeking the economic substance of a transaction and taxing by referencing this substance. Together with the absence of taxes on capital gains for individuals, this provides an ideal framework for the creation of tax-free synthetic cash. In addition, by combining no income-distributing risky assets with the appropriate derivative hedges, one can create a package that delivers cash-like returns but is not legally subject to any income tax.

In my opinion, the Swiss tax authorities are underequipped to fight this problem. There is a clear mismatch, in terms of expertise and in numbers, between the advisors of wealthy taxpayers and the employees of the tax authorities. This adds to the first mover advantage of the taxpayer, who can choose the combination of derivatives to be used and can to a considerable extent elect the tax treatment. The ability to recharacterize a synthetic cash construction as tax evasion is powerful, but it requires full disclosure of the underlying positions and, more importantly, the technical financial ability to rebuild the hidden economic substance. Again, this requires time, resources, and financial expertise.

By comparison, many other countries are not as welcoming to synthetic cash. For instance, the tax system in the US relies on familiar cubbyholes, such as debt and equity, ownership, and non-ownership, which can easily be gamed using derivatives. However, the complex straddle rules of the Internal Revenue Code (IRC § 1092) focus on preventing tax avoidance by combining offsetting positions that consist of a publicly traded stock vs. a derivative or one equity derivative vs. another equity

derivative. The Treasury Regulation Secs. 1.1092(d)-2(a) and 1.246-5(c) also contain complex rules for applying these principles to baskets of stocks that are offset, for example, by equity index futures or option contracts. These rules are directly applicable to fight synthetic cash. Thus, Swiss lawmakers are encouraged to cease confronting yesterday's battles and become more proactive in this area.

OTHER FORMS OF SYNTHETIC CASH

More recently, the emergence of virtual currencies has opened new possibilities in terms of creating synthetic cash. In this section, the European Borrowing Unit (EBU), which is a virtual currency based on a long/short basket of currencies, and Bitcoin, which is a new dematerialized currency that is decentralized from the banking system, are discussed.

Synthetic cash through a synthetic currency: The EBU

The EBU was the first synthetic currency in the world. Introduced by Barclays on September 27, 2007, the EBU is a long/short basket of G10 currency forward contracts. It is rebalanced monthly and optimized to obtain a 0% borrowing interest rate and a minimal exchange rate volatility against the euro. In addition, the EBU is a non-deliverable currency that can only be converted into euros for amounts exceeding 20 million euros. Initially, the EBU specifically targeted European borrowers who had historically been financing themselves in yen to minimize their borrowing rates. Owing to the EBU, these borrowers could reduce their borrowing costs to zero while controlling their exchange rate risks.

Can the EBU be considered by an investor as a possible form of synthetic cash? In my opinion, the answer is no. Admittedly, by construction, an investor holding EBUs receives no interest payments in the end, and the only possible yield would result from a variation in the exchange rate of the EBU, which should be considered a "tax-free capital gain." However, several problems arise.

The exchange rate variation against the EBU is not known in advance. The EBU is certainly optimized by accounting for the historical volatility and correlations between its component currencies, but this is no guarantee of future results. Before its launch, on a simulated basis, the EBU had depreciated against the euro (while it was worth 100 euros in January 2000, it traded at 112.3 at official inception). If this tendency had continued, European borrowers of the EBU would have combined a 0% borrowing interest rate and a foreign exchange gain. Meanwhile, investors in the EBU would

have combined a 0% borrowing interest rate and a foreign exchange loss. Moreover, the optimization is made only in relation to the euro, not in relation to the Swiss franc. In other words, the Swiss investor in the EBU cannot exclude a foreign exchange loss.

An EBU investor always has a traditional cash problem. The creation of a long/short basket of forward contracts only requires collateral and no investment. The amount invested in the EBU must therefore be placed in traditional cash, where it will earn interest. In theory, before tax, the interest received should be equal to the expected foreign exchange loss on the long/short portfolio of forward contracts. However, in practice, the tax treatment of these two amounts differs. Specifically, the former is taxable as income, while the latter is nondeductible for a private investor. The net flow is therefore negative, which means an expected loss for the Swiss private investor.

After an initial phase during which it attracted strong interest, the EBU was gradually abandoned and practically disappeared in the aftermath of the financial crisis of 2007–2008.

Synthetic cash through a virtual currency: The Bitcoin example

Introduced in 2009, Bitcoin (*bit* for binary information unit and *coin*) is a virtual accounting unit stored on an electronic medium that can be used as a means of payment on a peer-to-peer Internet network. Bitcoin allows for money to be exchanged without going through the conventional banking system. In simple terms, Bitcoin can be described as a type of digital token, which can either be acquired for free in return for one's participation in the operational functioning of the Bitcoin management system, or bought or sold against "traditional" money. The latter case is the one that interests us here. Specifically, can a private investor use Bitcoin as synthetic cash; if so, how would the resulting gains be dealt with from a tax perspective?

Until now, Bitcoin deposits were distinct in that they offered no remuneration. Therefore, the value expressed in Bitcoins has remained constant over time. However, their value expressed in a traditional currency (e.g., the US dollar and the Swiss franc) has varied upwards and downwards and has historically displayed an extremely high volatility and large drawdowns. Thus, we are far from the steady and stable growth offered by synthetic cash. Consequently, Bitcoin deposits cannot replace the synthetic cash position unless the cash amount used by the taxpayer to value their fortune is in Bitcoins, which is a situation that the tax authorities are unlikely to recognize. This would imply that (i) Bitcoins be taxed and recognized as a foreign currency; (ii) the notion of functional currency, as introduced in Art. 958d, Al. 3 in the Swiss Code of Obligations, be applicable to a private

taxpayer; and (iii) the taxpayer be authorized to prepare their tax return in Bitcoins.

However, a taxpayer with a positive outlook for the future value of Bitcoins expressed in Swiss francs could decide to temporarily convert their Swiss francs into Bitcoins and resell them later, hopefully at a profit. It is thus no longer a deposit whose future value in Swiss francs would be guaranteed but a risky investment owing to exchange rate movements.

The first Bitcoin deposits to pay interest (in Bitcoins) have been recently launched, coinciding with the first financial analysis of what should be the equilibrium level of the Bitcoin interest rate (Wesner, 2014). Therefore, we can logically expect the broadening of Bitcoin deposit remuneration, meaning that a gain in Bitcoins be in addition to the potential foreign exchange gain discussed above. However, the tax treatment of these two potential gains will mainly depend on the legal nature given to Bitcoin, which, in turn, will determine the tax plan to which they should be connected. More specifically, should Bitcoin be considered a currency, an asset, an accounting unit, or a payment service?

Before turning to the case of Switzerland, let us quickly examine the international situation. Although Bitcoin can be used to purchase goods and services or stored as an investment, it is not a *fiat* currency and has no legal value in most countries. Currently, its use is prohibited in Russia, Bolivia, Iceland, and Thailand. In China, individuals may use Bitcoins at their own risk, but financial institutions are prohibited from offering any Bitcoin-related services. In Europe, Bitcoin does not match the definition of electronic money provided in Directive 2009/11/EC73 (that is, Bitcoin is not issued as a receivable on the issuer), while the European Banking Authority has issued a considerably negative opinion regarding its use (European Banking Authority, 2014).

Some countries have nevertheless adopted a more pragmatic approach toward Bitcoin, with regulatory and tax developments first observed in 2014. The following are some examples:

i) In Canada, Bitcoin has been recognized as a currency since June 19, 2014. Any gain in Bitcoins is therefore taxed as if it were a foreign currency gain. Any company dealing with Bitcoin-related transactions must be registered with the Financial Transactions and Reports Analysis Centre of Canada, keep records of transactions, report suspicious activities, implement an anti-money-laundering program, etc.

ii) In the US, Bitcoin has been recognized by the Internal Revenue Service (IRS) as an asset ("property"), rather than as a currency, since March 25, 2014. Thus, a taxpayer who makes a profit by selling Bitcoins (or by trading them for another asset) will be taxed on realized profits as measured by the difference between the dollar value on the acquisition date and the dollar value on the

date of sale. If the taxpayer has held their Bitcoins for more than a year, the reduced rate on long-term capital income will apply.

iii) Since August 2013, Germany has considered Bitcoin an accounting unit (*Rechnungseinheiten*), namely, a private currency (*privates Geld*). Consequently, capital gains resulting from a sale in Bitcoins will be subject to a tax of 25% but will be exempt from tax if the holding period exceeds one year, which is a similar tax treatment to that for real estate gains. This also opens the door to applying value-added tax (VAT) on the commercial sale of Bitcoins.

iv) On July 11, 2014, France expressed its position in an administrative commentary wherein it defined Bitcoin as an accounting unit rather than a currency. Bitcoin-related earnings are subject to income tax in the non-commercial-profits category if they are occasional and in the industrial-and-commercial-profits category if they are customary. They are also subject to social levies on property income. Moreover, Bitcoin holdings are included in the solidarity tax base (*impôt de solidarité*), as defined in Article 885 E of the French Tax Code (*code général des impôts*), and are subject to duties on the free transfer of assets (*droits de mutation à titre gratuit*).

v) Great Britain originally announced that it recognized Bitcoin as an exchange currency (voucher) subject to VAT. However, after the bankruptcy of the MtGox Bitcoin exchange platform, Great Britain revised its position in a preliminary notice issued in March 2014. It now taxes Bitcoin-based capital gains and losses in the same way as foreign exchange gains and losses but without giving Bitcoin currency status.

Clearly, the international regulatory and tax situation is evolving. Many countries are in a waiting mode, particularly in Europe, where a certain harmonization should occur. However, what is happening in Switzerland? On June 25, 2014, the Federal Council published a report on virtual currencies. In a relatively moderate stance, the report noted that “the economic importance of virtual currencies as a means of payment is currently insignificant” and “is not expected to increase in the near future.” Consequently, it suggested “not to legislate in the immediate future.” However, the report described the main principles governing the legal treatment of virtual currencies from the perspective of private law, criminal law, and financial market law. In particular, it stated that Bitcoin is not a security paper, warrant, financial contract, or a derivative but that it should be considered a “means of payment.” It also mentioned that Bitcoin deposits are allowed; however, these deposits should be treated as deposits within the meaning of the banking legislation and should therefore be regulated accordingly. In a factsheet published on

June 25, 2014, the Swiss Financial Market Supervisory Authority (FINMA) confirmed Bitcoin as a means of payment and that Bitcoin deposits should be treated as bank deposits, with everything such deposits imply in terms of prior authorizations. Concurrently, the FINMA authorized the Swiss Bitcoin Exchange to become the first Bitcoin trader in Switzerland.

Furthermore, the report of the Federal Council has no force of law, but it can be considered an indication of governmental will. To date, only metal coins issued by the Confederation, banknotes of the Swiss National Bank (SNB), and demand deposits in Swiss francs at the SNB constitute legal means of payment in Switzerland (Federal Law on Currency and Payment Instruments). In this regard, electronic currencies, such as Bitcoin, are not a legal means of payment. Moreover, such currencies are not included in the SNB’s currency monopoly. Nevertheless, if Bitcoin was officially recognized in Switzerland as a legal means of payment, this would help clarify its tax situation, particularly with respect to the following.

- Bitcoin would be excluded from the scope of VAT (Art. 21, Al. 19, Let. D of the Federal Act on Value Added Tax).
- Entities providing payment services or taking Bitcoin deposits would need to be licensed and regulated.
- Gains arising from the sale of Bitcoins should be exempt from tax, both at the federal and cantonal levels, unless such gains are part of the taxpayer’s commercial wealth.
- Bitcoin-related revenues (e.g., interest on Bitcoin deposits) could then be considered revenue from movable property and taxed accordingly.

Like its European neighbors, Switzerland faces the need for uniform regulations for Bitcoin and, more generally, for virtual currencies. Bitcoin contracts for difference (equivalent to Bitcoin forward contracts) are already traded on several virtual exchanges, and Bitcoin futures and options are traded on the Chicago Mercantile Exchange. The strategies described to create synthetic cash could therefore use Bitcoins as underlying assets. Here, again, the US has moved quickly regarding this aspect (Brito et al., 2014). The IRS applies general tax principles to transactions in virtual currencies (Notice 2014-21, Q&A-1) including the tax straddle rules to offsetting positions. Therefore, leaving these instruments in a gray area, from both a regulatory and a tax perspective, is undesirable for Switzerland because it would likely create another loophole.

CONCLUSION

The synthetic replication of the economic characteristics

of a given asset by a portfolio comprised of derivatives is a basic activity of financial engineering. It has engendered many regulatory and tax inconsistencies, particularly when the legal form used differs considerably from the economic substance obtained. The examples of synthetic cash discussed herein illustrate this issue well. Indeed, under certain conditions, it is possible for a Swiss investor to create a bond-type economic substance that adopts the fiscal form of a tax-exempt capital gain and is thus exempt from income tax. The Swiss tax authorities may threaten to requalify such doing as “quasi-professional securities trading” or as “tax evasion.” However, this would open the door to considerable legal uncertainty since practically any hedging transaction can suffer a similar fate. The approach taken by the US to prevent the abuse of such synthetic cash constructions seems more robust, with specific rules targeting a broad range of transactions that substantially eliminate the risk of loss and the opportunity for gain for a taxpayer. In particular, consider the straddles (IRC Section 1092) and constructive sales (IRC Section 1259) rules, as discussed by Schizer (2001), Brennan (2013), and Gorella (2020).

Given that interest rates are currently at record-low levels, synthetic cash is not particularly attractive at present. It also requires establishing a technically complicated solution to ultimately achieve a substantially low, albeit tax-free, remuneration. However, should interest rates rise, synthetic cash could rapidly develop as a trade, which in turn could become a serious concern for tax authorities. Therefore, the latter should urgently examine the taxation of synthetic cash, and more generally review the taxation of portfolios containing new financial instruments such as derivatives, synthetic products, and virtual currencies. The increasing use of such instruments has directly invalidated a series of major historical distinctions (equity vs. bond, interest vs. dividend, owner vs. beneficiary, own funds vs. foreign funds, etc.), which a large part of several tax systems still rely on today.

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CONFLICT OF INTERESTS

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